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Todd Richard Chairperson of the MPWWA

THE CHAIR

Greetings everyone! I hope you are enjoying this warm fall. After a very dry, hot summer followed by heavy rains in September, Nova Scotia water and wastewater operators were likely all busy main-taining water quality and/or monitoring and maintaining wastewater systems in preparation for the wet weather.

With heavy rains and flooding, as seen in the Truro area, Maritime operators experienced rapid change in the raw water quality coming into their plants and had to react immediately to ensure the treated water remained safe to drink. Those responsible for wastewater systems had to prevent collection systems from overflowing and maintain

effluent quality from the treatment plants. Many people do not realize the issues we deal with on a daily basis much less the added risks and responsibilities operators have when the weather turns bad. All the extra effort and preventative maintenance to keep essential services in a 'ready state' requires a big commitment in all areas of op-erations. To all the operators who keep the water

erations. To all the operators who keep the water safe to drink and protect our environment by un-dertaking the necessary tasks, by being trained, knowledgeable and certified to perform the work we do, I say "Great Job! Keep up the good work!" Part of being competent and able to react and respond to the challenging situations our profes-sion demands is being properly trained and expe-rienced in the work you do. MPWWA has made it our mission to educate operators and those in-volved in the water and wastewater field. Through volved in the water and wastewater field. Through regular training workshops and seminars we have for you to network with others in your field. In August Alan Benninger and I had the pleas-ure to make presentations at the Circuit Rider

Trainer Professional Associations' annual general meeting in Halifax; I spoke on Maintaining Water Quality in Water Distribution Systems. The MPWWA continues to work with organizations to develop and promote training opportunities. MPWWA has also formally joined the Northeast Biosolids and Residuals Association (NEBRA) and we are working on plans to have a workshop through NEBRA on Biosolids management and regulations for wastewater treatment. Information on the workshop will be available at a later date.

Our training coordinator, Tim Hiltz, has pre-pared the fall training workshops. Check out the website www.mpwwa.ca for details. We will also be meeting in October to continue working on the 2013 Annual Training Seminar being held in Moncton, April 21st to 24th. If there is a workshop you would like to see put on or to present yourself please contact anyone on the board or send in a being active brief outline.

> Todd Richard Chairperson for the MPWWA



Construction workers are in the process of completing work to the screen tank that will receive raw sewage at the municipal wastewater treatment facility in Lower Truro, Nova Scotia. New systems are starting to come online and the entire process is expected to be up and running by December. (See the story on page 8.) (Photo: Harry Sullivan/Truro Daily News)

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McAdam's PW 11 has been rehabilitated

BY HEATHER JONES

PW 11, one of four wells in McAdam, New Brunswick, has been rehabilitated.

"The manganese has been eliminated. Other minerals are now below World Health Organization levels," Mayor Frank Carroll told the Water Report Oct. 1.

Problems in the village's water supply began June 7 when unacceptable levels of turbidity were detected in municipal water lines.

An extensive flushing program was imple-

mented and when water quality issues were co - traced to PW 11, the well was taken off-line.

The mayor explained that the village obtained engineering services and hydrogeological support services from EXP Services Inc. of Fredericton.

On June 13 water tests confirmed that PW 11 had high levels of manganese. A visual survey of the well by EXP and an eight-day BART test were conducted. "The results suggested Well PW 11 had become bio-fouled with iron-related and other types of mineral bacteria," Carroll said in a community bulletin.

NEWS

PW 11's rehabilitation began on July 20. On Aug. 5 there was a rapid drop in the water level in PW 10—another well in the aquifer when the pump was operational.

On Aug. 8 McAdam residents were notified about the shortage of water. Four days later the water level in PW 10 was lower and the pump often sucked air. The water level return was extremely slow and did not meet demands.

On Aug. 13 residences, businesses and unoccupied sites were visited by municipal staff who

PW

examined all water infrastructure (mainlines, connections and valves) for leaks.

EXP also searched for the source of the water problems—including the lack of rain and multiple earthquakes that had occurred in the spring. On Oct. 1 PW 11 was not yet back online.

"We're chlorinating it right now. Then it will be tested," Carroll said.

The well will have to undergo bacterial and inorganic tests, so it will be a couple of weeks before it is online.

Continued on page 7

Work continues on Perth-Andover sewerage lagoon

BY HEATHER JONES

A picnic table, docks, fencing, kid's toys and trees were washed down into Perth-Andover's 2-cell sewerage lagoon, along with gravel from the berm surrounding it, in March when floodwaters devastated the New Brunswick town.

The newer of the two cells was drained in August, Jeff Watters Gray said. While there didn't appear to be any damage to the liner, the Superintendent of Perth-Andover Public Works Department explained that a fair amount of work had to be done just to get equipment in to start repair work. Fencing that had surrounded the lagoon (now entangled with downed trees and debris) had to be removed and the trees had to be cut up and removed before excavators could be used to clean up the cell.

The department has been working at the site for a month, Watters Gray told the Water Report Sept. 24. "It is quite labour intensive because we don't want to damage the liner."

Once the newer cell is in operation, work will begin to remove trees and debris from the older cell and it will be checked for damage.

"There is quite a bit of erosion on that side of the bank," Watters Gray explained. "We'll be putting riprap in there for bank protection."

He said they're hoping to have the new cell online in early October. "If all goes well we should have most of the debris out by October 5. We have to work fairly quickly to get the cell back online and reestablish bacterial levels before freeze up. We will drain the old cell into the new cell to help with the process."

Perth-Andover also "completely lost three lift stations in the flood."

The pumps and electric panels for the damaged lift stations have been replaced.

A local contractor—one of many companies that had been hurt by the flood—built the new panels. The superintendent said the department tries to support local businesses whenever possible.

"The new electrical panels have been mounted 6 feet above the last (March) flood levels," Watters Gray said.

But he is realistic. "After the 1987 flood they said the water would never come up higher. It did. But now it has to come up 6 more feet. Are the panels safe at this level? Who Knows?"



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New wastewater regulations to benefit all Long road ahead for managing solid, water waste

BY CAROLE MORRIS-UNDERHILL HANTS JOURNAL

here will be help coming from the federal government for municipalities struggling to get their wastewater management practices up to snuff. Peter Kent, the federal minister responsible for the environment portfolio, said in an interview Aug. 4 while he was in Falmouth (Nova Scotia) for a Conservative function, that the government is committed to making clean water a priority.

"Wastewater management is an issue for many communities in Nova Scotia and the Maritimes. There are concerns in municipalities that might not have invested as much as they could have in past years as to how they are going to finance the increased management of treatment of wastewater," said Kent.

"The message that I bring is, as the deficit goes down, and as we have in the past invested and supported communities in provinces with wastewater management, we have said that we will do that again going forward into the future once we get into the new infrastructure funding in 2014."

On July 18, Kent announced Canada's first wastewater systems effluent regulations. In his speech, he said

about three-quarters of existing wastewater systems already meet the standards.

"The remainder will need time to plan and budget for upgrades, which is why the regulations are being phased-in over nearly 30 years. Systems representing the highest risks, however, will be expected to move faster, and have until 2020 to meet the new quality standards," he said in the prepared statement.

In the interview with the Hants Journal, Kent said the government's annual gas tax rebate, which amounts to \$2-billion annually, can be used towards making the wastewater improvements.

"Some communities large and small have some significant fiscal challenges to bring their wastewater treatment up to an appropriate level. We understand and we will be there to help," he said, noting any future funding agreements will be a three-way split between the municipality, the province and the federal government.

Kent agreed the cost to upgrade systems is steep, however, he said it must be done to benefit the health of generations to come.

"(Poor) wastewater management is the greatest single threat to clean water in Canada today and we're prepared to help those communities that do have challenges to address, in partnership with the provinces."

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BY GARY KEAN

WESTERN STAR

[Corner Brook, NL] — The challenge of addressing solid waste management in western Newfoundland is tough enough.

New federal wastewater treatment regulations, says Tony Oxford, certainly won't make things any easier for towns and cities trying to come to terms with these environmental challenges.

The Cox's Cove mayor is also chairperson of Municipalities Newfoundland and Labrador's environmental committee. The communities under the MNL umbrella have not discussed the new wastewater regulations much yet, but that will likely be a hot topic when the committee meets again in the fall.

"We have spent very little in coming to terms with the provincial regulations and the solid waste management strategy," said Oxford. "So, there's a fair amount of expense still to be had in that regard ... If they set deadlines for wastewater treatment, then all of that expense is going to be occurring concurrently with the solid waste and the big question is, where is all this money going to come from?"

The wastewater treatment regulations announced

by the federal government last week (July 20) stipulate that municipalities will have to not only provide primary, but also secondary treatment of all wastewater before it is returned to the environment. Depending on the amount of effluent and body of water that receives it post-treatment, municipalities will have to comply by either 2020, 2030 or 2040.

Treating effluent will be a costly venture for any municipality and no federal funding has been announced yet to help out.

"There's no doubt in anybody's mind it's going to be at a tremendous cost to bring the country up to the standards just announced," said Oxford.

In 2009, the provincial government refused to sign off on the new regulations because of the lack of federal funding to support the capital infrastructure required to treat wastewater.

Environment and Conservation Minister Terry French said there are nearly three dozen communities in the province that currently have secondary treatment of wastewater, but he is not sure if they all meet the standards just announced by the federal government. There are another 150 or so more that will definitely have to be brought up to scratch.

Continued on page 10

Meeting new federal regulations will be expensive

illages, towns and cities across the country are concerned that new federal regulations for wastewater treatment facilities will cost billions. To comply the Cape Breton Regional Municipality is looking at spending \$423 million over the next eight years.

Under the new Wastewater Systems Effluent Regulations, all facilities will have to meet minimum secondary wastewater treatment standards by 2040.

The government has not announced any federal programs to financially assist municipalities with upgrade projects.

Next year those municipalities have to provide Ottawa with treatment plant information. The government will then categorize each plant and determine a deadline for upgrades based on their risk value. Wastewater systems posing a high risk must meet the new standards by the end of 2020; medium risk by the end of 2030; and those with low risk by the end of 2040.

New Brunswick has 51 sewage treatment facilities that don't meet the standards: 38 that are medium risk and 13 low risk.

Price tags in NB for upgrades include around \$40 million for Bathurst and upwards of \$120m for Moncton

The Times & Transcript said the Greater Moncton Sewerage Commission will propose a 15-year plan that would increase fees in the city and in Riverview and Dieppe by 2.5% annually. According to the plan by 2027 the upgrade work would be completed and paid for.

Miramichi is not concerned about the new regulations. Its wastewater treatment facilities meet federal standards, Csaba Kazamer told the Miramichi Leader.

The city engineer explained that because of the fishing industry, the level of effluent discharged and dispersed in the Miramichi River had to be of higher quality than other cities. He said Miramichi spent close to \$35m in the 1990s for upgrades. "All of the city's wastewater treatment facilities are aerated lagoons that provide primary and secondary treatment."

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MPWWA

MPWWA PROFILE: Brett Googoo.

Every issue, the MPWWR shines a spotlight on a MPWWA member making a difference in the industry. Brett Googoo is the focus of our October Issue.

Part-time job leads to full time career in water management BY KATHY JOHNSON

A part-time job "helping out around the shop" has led to a career in water management for Aboriginal operator Brett Googoo.

"It's a fun job," said Googoo, assistant water and wastewater operator for the Indian Brook First Nation in Shubenacadie, Nova Scotia. "Some people might not call it that but you're always on the go, keeping busy. That's what I like to do."

In the two years since the 25-year-old Milford resident began working for Indian Brook public works, he has taken courses to further his career, studied online in the evenings and worked full time during the weekdays. This fall he will obtain his wastewater treatment certificate from the Nova Scotia Community College.

"He's a pretty outstanding little worker," said Stephen Knockwood manager of operations, maintenance, and public works for Indian Brook. "He's right into it like a dirty shirt. He takes notes, he listens, he loves coming to work every day. He's a good learner."

Knockwood said Googoo is also someone he "can rely on when I'm not around" to keep things running at the level II wastewater plant and level I water plant that services the Indian Brook community.

As Indian Brook First Nation also has a smaller water treatment plant in New Ross that requires Knockwood's attention, having someone like Googoo on staff is important. "Brett loves doing his stuff," he said.

In addition to operations at the water treatment facilities, Googoo also does water testing at homes in the community on a regular basis. Besides work, Googoo also enjoys time with his family. "I have a little guy who's two and another one on the way that's due in December,"

tle guy who's two and another one on the way that's due in December," he said proudly.



Brett Googoo with his two-year-old son Hunter.

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BY HARRY SULLIVAN

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TRURO DAILY NEWS

rial into the public sewer system.

to the municipality.

[Truro, NS] - An application by a Debert (Nova

Scotia) company seeking permission to dispose of

radioactive waste through the municipal sewage sys-

tem has prompted Colchester County council to re-

view existing bylaws dealing with unwanted

Atlantic Industrial Services (AIS) is currently stor-

ing approximately 4.5 million litres of wastewater

from hydraulic fracturing (fracking) processes that

have occurred outside Colchester County and it has

applied for a permit to treat and discharge the mate-

The material was approved for storage by the De-

The wastewater has been identified to contain nat-

partment of the Environment without prior notice

urally occurring radioactive materials, some of which

Company seeking to dispose of

radioactive waste in public sewer

release limit."

can be exercised.

informing the municipality.

are above Health Canada's "unconditional derived

A number of councillors expressed concern about

releasing the waste into the public sewer system as

well as displeasure that the DoE would permit the

material to be stored within county limits without

"This is not sewage," Councillor Mike Cooper

said, during discussion on Thursday night (Sept. 27).

"Why are we going through all this? Why don't we

Ramesh Ummat, the county's director of public

works, is responsible for determining whether a per-

mit will be granted to AIS but he was instructed by

council that if approval is provided, no discharging

would be allowed until an appropriate appeal period

Council also directed staff to take a look at the

municipality's bylaws with the aim of revising them

to permit a ban of any future unwanted materials.

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just tell them to take this stuff somewhere else?"



Closing arguments CCP-PotashCorp

n Oct. 1, New Brunswick Mining Commissioner Roderick Duguay heard closing arguments from the Concerned Citizens of Penobsquis (CCP) and PotashCorp.

The arguments had been scheduled for Sept. 17 but before the hearing began all but three members of the CCP withdrew their complaint against the company that related to issues of subsidence of land.

Since 2004 CCP had claimed they lost their well water, septic and sewage lines separated, that walls in their homes developed cracks and roofs buckled— all because of PotashCorp's mining operation.

A \$10 million-water system was installed by the province in 2009 and the government charged each of the affected households \$360 to use it.

This June PotashCorp announced it would pay the water bills for the complainants.

The Kings County Record reported that on Sept. 17, mine manager Stewart Brown assured the CCP that in the future there would be open discussions about the company's relationship with Penobinvolved in the organization or the hearings could receive financial assistance for their water from PotashCorp.

CCP representative Beth Nixon told the newspaper the allegations were dropped because there was no point in going ahead with a broken process.

The CCP said it took 8 years of attempts to hold PotashCorp responsible for the water losses in their wells and springs.

The CCP had legal representation when the hearings began two-and-a-half years ago but its funds were soon depleted. Costs prohibited the organization from hiring expert witnesses to testify and from obtaining transcripts of the hearings from the province.

Georgia McCabe, one of the three CCP members who made the closing arguments, said in a press release: "I just spent my 79th birthday spraying bleach under my house because the moving ground has caused the septic lines to sag and pull apart, allowing sewage to leak into the ground."

Water running again in Mclvers

Water problems plagued McIvers this summer. There were scheduled shut-offs in July and in August as the Newfoundland & Labrador town's water supply ran dry.

The problems were unexpected as a new dam and water reservoir had been constructed on Feeder Brook in 2011.

According to the Western Star, last year 222.4 mm of rain fell in McIvers in June and July. But this year the town only received 111 mm and Feeder Brook

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and its tributaries dried up.

In July crews cleared debris, sediment and obstructions from small streams that fed the water supply and within half-an-hour the reservoir was filled.

But in early August water pressure was non-existent and McIvers had to schedule shut-offs again to allow the pressure to rebuild.

Heavy rains in mid-August replenished the reservoir. At that time town officials planned to check over the intake infrastructure.



The water supply servicing the town of McIvers, Newfoundland & Labrador was bone dry until workers removed obstructions preventing water from feeding into the reservoir July 16. (Photo: Submitted to the Western Star)

squis. He said community members who were not

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NEWS

Delbert Reeves hopes to remain active in MPWWA

BY ANDY WALKER

have to step down as Prince Edward Island's representative on the Maritime Provinces Water & Wastewater Association, he hopes to remain active in the organization for some time to come.

"For my money, the MPWWA is one of the most valuable tools the industry has in this region," he said.

Delbert retired Sept. 28 as a water and wastewater technologist with the PEI Department of Environment, Labour and Justice.

He first started with the provincial government in 1980 surveying for shoreline sand removal as a summer job while studying environmental technology at Holland College. After graduation, he went to work as a casual doing surface water monitoring and became a permanent employee in 1982.

Delbert's first full time job was looking after provincially owned utility systems in Georgetown, Rustico, Alberton and at the Acadian Fishermen's Co-op in Abram's Village and the Usen Fisheries plant in Souris. That is when he first got involved with the MPWWA. He became a member in 1993 and has been on the executive since 2002.

"I really started out as an operator even though I was working with the provincial government," he explained. "I have always said that I don't have all the answers but I have found the association is the best way to get them. If you have questions, it's likely somebody within the MPWWA has the answers because there are very few new problems—they are just new to you."

Delbert can't count the times he has heard a problem from an operator or had one himself and

put out an email or made a few phone calls and found the solution.

MPWWA Chair Todd Richard said, "Since Delbert's time on the MPWWA board he has worked extremely hard to promote the goals and ideals of the association. I recall an occasion when we had low attendance for a course in PEI so Delbert starting calling different towns and municipalities and filled the workshop. He has applied this devotion and dedication to his occupation for the past 30 years. Delbert is so devoted that we have convinced him to stay on to help the MPWWA board prepare for our upcoming Training Seminars.

"In 2009 Delbert received the 'Art Bell Award." Always a positive influence and full of optimism towards operators and his peers—he was a top pick for the nomination," Richard noted.

Delbert has been in his current post since 2005. Throughout his 30-year career, he has held a number of posts dealing with just about every issue in the environment including underground petroleum storage and development planning. He has seen his department undergo several name changes but more importantly he's witnessed an increasing awareness of environmental issues on the part of the general public.

"That began to start in the late 1970's here on PEI and it has just grown from there." Delbert said the situation in Walkerton in 2000 proved to be a wake-up call not only for the general public, but also for system operators. He said it is important for operators to recognize their limitations and not be afraid to seek outside help if it is needed.

Delbert has no immediate retirement plans, but doesn't see himself staying idle for long. The first



Delbert Reeves

item on his agenda was a trip to Florida and then "who knows? But I could see myself looking for something in the field—I have really enjoyed my career." As for the MPWWA, he planned to attend a meeting in October, even though it won't be in an official capacity. "I am hoping they might be able to find a job for me."



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NL infrastructure projects funded manville, Hopeall, Benton, Summerford, Winter-

The Newfoundland & Labrador government invested a substantial amount of funding for water and wastewater infrastructure throughout the province this summer.

Projects that received funding included:

Improvements to water and sewer in: Burgeo, Salmon Cove, Garnish, West St. Modeste, Point Learnington, Bay Roberts, Clarke's Beach, Makinsons, Norman's Cove-Long Cove, Grand Le Pierre and Deer Lake.

Work on lift stations in: Comfort Cove-Newstead, Benton, Greenspond, Lamaline, Millertown, Trout River and Hawke's Bay.

Work on pumping stations in: Hearts Content, Benton, Lawn, Point Leamington and Twillingate. Work on water in: Hopedale, Grates Cove, Car-

\$8 million over budget

While not completely built Moncton's Tower Road dam is \$8 over budget.

CBC News reported Oct. 1 that the city blamed new requirements from the New Brunswick government for the rising costs.

The original price of the Turtle Creek dam and

Work on storm sewer systems in: Gander, Mount Pearl and Arnold's Cove

Work on treatment plants in: Robert's Arm and Channel-Port aux Basques

land, Fogo, Change Islands, Petty Harbour-Maddox

Work on chlorination in: St. Bernard's-Jacques Fontaine, Centreville-Wareham-Trinity, Twillingate and Main Brook.

Work on studies and designs in: Salmon Cove, Torbay and the Conception Bay Centre region.

Funding also supported projects in Fortune, Grand Bank, St. Alban's, Bonavista, Mount Pearl, Badger, Englee and Trepassey.

reservoir was \$35 million.

Cove and Makinsons.

But the departments of environment and transportation forced the city to protect an additional 93 hectares of land and increase the thickness of the dam itself to support a road.

McAdam's PW 11 has been rehabilitated

Continued from page 2

The mayor said the water in PW 10 is still not back to original level. "We've seen a wee bit of improvement since we reduced the pumping."

Carroll stressed, "The community has been tremendously co-operative about water conservation and we've been able to reduce pumping quantity a lot."

At press time a final report from EXP about the

problems had not been completed.

Carroll said while he believed the spring earthquakes might be a factor in the equation, the village had not been able to find anyone with enough knowledge of seismological effects to look into the issue.

The mayor said some information might be evident when the EXP video of the wells was compared with former videos.

A cracked box culvert that caused a sinkhole to materialize in Stellarton, Nova Scotia in November 2009 has not been repaired.

The News reported that councillors vented annovance and frustration with the province during the Oct. 1 Committee of the Whole meeting.

"I think they better get off their duff and get something done," said Councillor Bryce Richardson. "This is a serious situation ... There are so many things that can happen

there'

Stellarton Engineer Tony Addis told the meeting that the Department of Transportation and Infrastructure Renewal (TIR) was reworking its specifications for the job and planned to reissue a tender for the work. Bids on the original tender were over and above its

The Town opted to send a letter to the TIR demanding that it make repairs as soon as pos-

lottetown's utilities. In the photograph Miltonvale Park Council Chair Betty Pryor; Prince Edward Island Transportation and Infrastructure Renewal Minister Robert Vessey; Miltonvale Park Councilor Hal Parker, and Senator Mike Duffy view Miltonvale Park's new system. (Photo: Brian Simpson, PEI Provincial Photographer) Sinkhole cause still not repaired

budget

sible.













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Upgrades to wastewater treatment facility nearing end

BY HARRY SULLIVAN

TRURO DAILY NEWS

[Lower Truro, NS] - Residents of Lower Truro (Nova Scotia) and surrounding areas should soon begin to notice improvements in the air.

As construction on a new municipal wastewater treatment facility continues, one of three new sequencing batch reactors (oxygen-fed tanks used to treat wastewater) was brought online last week (Aug. 20). And while it will take a short while to become fully functional, as it and the other two reactors are also put into use, the air-quality should certainly start to improve, an official says.

"Will that dramatically in your opinion reduce the odours?" Colchester County Coun. Bill Masters asked during a recent presentation of the system's progress by public works director Ramesh Ummat.

"This is more efficient, yes," Ummat responded.

Area residents have long complained about noxious odours emanating from the treatment facility, which is undergoing a complete refit, to the tune of more than \$14 million.

"Right now we are in the transition stage where our old equipment is slowly being retired and new equipment is being put on," Ummat said.

The plan is to have the entire new system fully operational by December, though he cautioned there could be some slight delays in the fine-tuning process.

In simple terms, the treatment process uses live, oxygen-feeding bacteria to remove the smell from the waste, which is activated by air being fed into the sequencing batch reactors from the bottom up.

The old system uses a jet air-spray system, which provides a less uniform and therefore less efficient activation process.

The new system, meanwhile, uses a state-of-the-art fine-bubble method, which Ummat said is as good or better than any municipal wastewater facility in the

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Ramesh Ummat Public Works director with the Municipality of Colchester County is shown beside one of the new sequencing batch reactor tanks, part of the upgrades to the municipality's wastewater treatment facility. (Photo: Harry Sullivan/Truro Daily News)

province.

"A fine-bubble system can be likened to opening a bottle of soda. You open a bottle of soda you get fine bubbles rising all over. They're not confined to any one space," he said.

Another issue the municipality has been attempting to address is to determine all industrial wastes that have been feeding into the present system, which can also create noxious smells.

To that end, officials have been meeting with various local industrial representatives who have been receptive to working with the county to improve their outflows, Ummat said.

The bottom line, he said, is there should be a noticeable difference in the air when the whole system is complete.

"And to be fair," Masters added, "most of the residents know that we are going through this process. Heaven help us if we do and we still have odours. I hate to think what the next step is," he said.

"Hopefully it should not be," Ummat said.



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NEWS

Construction underway on Spring Park project

BY ANDY WALKER

Construction is now underway in the Prince Edward Island capital on the first of four phases to divide the remaining portion of the Spring Park combined storm and sanitary sewer system into two separate systems.

"This project is a priority for the City of Charlottetown because of our desire to clean up our harbour, protect the shellfish industry and be a good environmental steward," said Charlottetown Mayor Clifford Lee

Fisheries and the environmental protection was also cited by Transportation and Infrastructure Minister Robert Vessey and National Revenue Minister Gail Shea. The provincial and federal representatives joined the mayor for the groundbreaking ceremony at the start of the project.

Lee said the work follows upgrades to the City's Wastewater Treatment Plant and the separation of the Brighton Combined Sewer. He said the city has invested in excess of \$26 million, including funding from other sources, to improve wastewater manage-

Phase 1 will concentrate on three areas. One is the installation of a 600-mm diameter gravity trunk sewer main along Pownal Street and Water Street. This main will receive sanitary flows pumped from the Spring Park and Brighton sewer sheds, and convey these flows to the existing Navy Quay sewage pumping station. Another component is a new sewer forcemain pipe laid along Brighton Road, and Rochford, Fitzroy, Oueen, Fuston and Pownal streets. The final component will include the installation of a new sewage pumping station in the Desbrisay Park area, and upgrades to the existing Brighton pumping station.

Work for phases 2, 3 and 4 will include the installation of new gravity sewer mains and services throughout the Spring Park sewer shed. The new mains will convey sanitary flows to the new Desbrisay pumping station. Once complete in 2014, sanitary sewage will no longer enter Charlottetown Harbour from the city's wastewater system.

The City of Charlottetown will direct \$2 million of its federal Gas Tax Fund allocation and invest an additional \$4 million to the first



Prince Edward Island Transportation and Infrastructure Renewal Minister Robert Vessey, Minister of National RevenueGail Shea and Charlottetown Mayor Clifford Lee tour construction of the Spring Park sewer separation project. (PEI government photo: Brian Simpson)

Pictou hoping new electronic system will eliminate discoloured water

[Pictou, NS]- Town council in Pictou is hoping to solve the problem of discoloured water in the (Nova Scotia) town by implementing a new, electronically managed water system and is in the application process to secure funding to do it.

The town's chief administrative officer, Scott Conrod, said at a council meeting Monday night (Sept. 17) that the town's wells have higher than normal levels of manganese, an element that discolours water. He added the federal government has deemed manganese an aesthetic problem, not a health one.

The new electronically managed well system called SCADA would help monitor which wells have an excess of manganese and allow the town to easily turn them off from the water supply from a remote electronic location.

In order to afford the electronic well monitoring system, the town has applied to the Green Municipal Fund (GMF), an environmental program through the Federation of Canadian Municipalities. Conrod explained to council what was in the application that was sent to GMF and outlined the benefits of imple-

Engineering and Environmental

menting SCADA for Pictou at Monday's meeting. Conrod said currently Pictou has 13 running wells

pumping water into the town's supply 24 hours a day and they need to be monitored manually.

With SCADA, Conrod explained that the town can control what wells are pumping and find out which ones have leaks by monitoring water production at night when less water is used by Pictou's residents.

Town workers currently travel 11,000 kilometres a year driving to wells to test them, Conrod said. If the

town implements SCADA, those miles and gas emissions would be saved because it allows samples to be taken electronically.

Conrod said 45 to 50 per cent of the town's current production of water could be reduced with the new system because it allows for leaks to be noticed, pinpointed and repaired quicker and the town won't have to flush out manganese from the water system as often if the specific wells with the element are found, taken care of and monitored individually. The News





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Stratford gets rain barrels for pilot project BY RYAN ROSS because many of its houses had their down-

THE GUARDIAN

Stratford (Prince Edward Island) is getting a little help to deal with heavy rains thanks to some free rain barrels from the Insurance Bureau of Canada.

As of Saturday, (Sept 8) 1,000 new barrels will go to Stratford utility customers as part of a yearlong pilot project to see what impact they have on the amount of water that ends up in the town's storm sewers.

Bill Adams, regional vice-president for the Insurance Bureau of Canada (IBC), said one of the top priorities for the insurance bureau is to help people adapt to severe weather.

Rain barrels are an old piece of technology that can help with that, he said.

"They are tried and tested but when re-imagined and put to work on a large scale, they can have a significant impact on property and infrastructure by diverting at peak times when the infrastructure is tasked to its limit."

The IBC is paying for the barrels, which are free to Stratford's utility customers and as of Friday morning (Sept. 7) were sitting in two trailers in the town's parking lot.

Anyone who gets one of the 1,000 barrels will have a \$50 deposit added to their utility bill until the town verifies the barrels are installed properly.

Adams said part of the IBC's reason for doing the pilot project is to help municipalities deal with a growing need for infrastructure improvements.

It won't solve all the problems, but the barrels will hopefully help stop water from backing up into people's homes, which has become a growing problem, Adams said.

"We recognize that those claims are resulting in higher premiums for homeowners. That's not sustainable."

Stratford is the second community to try out the rain barrels for the IBC after Wingham, Ont. took part in the first pilot project.

Robert Tremblay, IBC's director of research, said Wingham's situation was a little different

because many of its houses had their downspouts connected to the community's storm water infrastructure.

Stratford's houses aren't.

Homeowners will place the barrels under their downspouts where rainwater will get filtered through a screen over the opening.

The barrels hold about 200 litres of water. Tremblay said the rain barrels did reduce the amount of water going into Wingham's storm water system by about 30 per cent.

"That was a massive improvement into the performance of their system," he said.

Another thing they learned was a lot of people used rain barrels, but didn't empty them, which led to the inclusion of a valve that slowly releases the water over a 24-hour period, he said. "The storage capacity of a rain barrel, if it is

full, is zero." Tremblay said rain barrels will give Stratford

the capacity to divert about 4.5 million litres of water per summer.

"That's water that, in theory, could be used by the homeowner," he said.

Wingham also didn't get much rain in the first summer of the trial run so the IBC went back for a second year so it could get useable results, he said.

"We need to have a full range of rain events from high intensity to low intensity."

In Stratford, the IBC will set up a weather station to keep track of how much rain falls while the town's storm water system keeps track of how much water goes through it.

Coun. Steve Ogden, chair of Stratford's utility corporation, said the town has separate storm and sewage systems, but if there is enough rain there is a chance the runoff could end up in the sewage lines.

"There is that potential, depending on the severity of the rain event," he said.

Ogden said the project is a win for everyone involved and it will save the town money in the long run by putting less strain on the infrastructure.

"There's no downside," he said...

Long road ahead for managing solid, water waste

Continued from page 3

Even though it may be spread out over a 30-year period, French said the price tag for the province is estimated to be as much as \$5 billion. Then, there's the operational costs of maintaining these systems and the monitoring and reporting the regulations also call for. "This all adds up to significant costs for municipal-

ities and, when it hits municipalities, it hits the provincial government as well," said the minister.

French said the province is in the process of negotiating administrative agreements with the federal government that will identify and generate an inventory of areas that need to be upgraded.

"I believe there is going to be a financial figure attached to that, which is promising, but we are still a long way off in this province," he said, adding something should be in place in early 2013.

Considering some communities have multiple outfalls scattered about or have challenging geographical settings, French said coming up with ways to meet the wastewater regulations is going to be tough.

"I would love to see secondary treatment on every bit of wastewater in the province, but it comes with a price tag that's a big concern for us," he said.



NEWS

Design work to begin for new Granville Drive sewage system we are going to move forward," Mayor Bob Taylor

said.

line.

[Truro, NS] - Approval has been granted by Colchester County Council for the preparation of a detailed design for the Granville Drive sewer project.

Council at its last meeting approved spending \$175,000 (plus taxes) for the design and development of contract drawings and specifications aimed at updating an aging and ineffective sewage system on Granville Drive in Upper Onslow (Nova Scotia).

In the meantime, staff is preparing cost figures for the project to present to an upcoming capital budget meeting at council.

Once the detailed design and specifications are complete, the project can be initiated based on the budget, funding, phasing and timeline to be approved by council.

"We have to have this before we move forward if

Mayor Ernest Simms stands on the shoreline of St. Anthony pond. The Newfoundland & Labrador town recently completed an upgrade to its water in-take system in an effort to prevent frazil ice blockages and increase water pressure. "Christmas Eve, the year before last, we were up there with divers in a boat trying to lift up the in-take, get the ice out of the intake and the screens cleared," Simms told the Northern Pen. "What the boys had to go through was unbelievable. The temperatures, wind blowing a gale and the ice forming faster than it could be cleared out. Eventually it was cleared but we knew there had to be better solutions out there." Engineers designed a system that doubled the size of the in-take pipe to 24 inches, added a Johnson screen and a shield above it, ice deflectors, and a stilling pool to stop wave action and prevent freezing on the surface. (Photo: Adam Randell /Northern Pen)



Council had initially planned to spend \$450,000 to

install a new private sewer line to service the 25 house-

holds on Granville Drive to replace the existing dys-

functional central sewer system, which dates to 1947.

But after municipal staff met with Department of En-

vironment officials, a number of issues were raised

that made the proposed project less desirable from

council's perspective, including that no new connec-

Council then turned its focus on designing a sys-

tem that will be connected to the municipal sewer

tions could be made to the system.

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