

Maritime Provinces Water & Wastewater

REPOR

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NOTE FROM THE CHAIR



When I was elected chairperson for the MPWWA, I was excited for two reasons.

First being that Arthur Bell, one of the founding fathers of our association, came from Woodstock. It is an honour to be the chairperson of the association that he helped develop years ago. Although he has passed on, his name is still well known in our area. Secondly, I was excited about the energy that has been rekindled at our executive meetings.

Training, which is our primary focus, will be stepped up a notch this year and next. Todd Richard from Windsor, NS, is our new education chairperson. He and the education committee have discussed some great ideas to improve and enhance how workshops will be presented. If you have any comments and requests please feel free to contact him at todd.richard@town.windsor.ns.ca or (902) 798-8000.

Interested in learning more about upcoming workshops and events? Check out: www.mpwwa.ca. Rick Larlee has been working on a new look, so stop by and take a peek at what we have to offer.

Finally, I want to take this time to thank two people that have done a lot for the MPWWA. Judy Carr had been the registrar for us for many years. She took on duties that went beyond what she had to do. It is to her credit that this association has been successful. Thanks Judy for all that you have done for us. I also want to thank Sandra Melanson for stepping up while we have searched for a new registrar. The time and effort you have contributed has been greatly appreciated.

As we near the end of our search for a registrar, we look forward to welcoming a motivated individual to help move our organization forward as we approach 800 members. Watch for this appointment to be announced on our website in the near future and in your next information package.

Andrew Garnett Chair of the MPWWA



File Phot

MPWWA members had an opportunity to view the latest technology and speak with industry leaders during the equipment display.

Training seminar draws record crowd

By Stephen Clare

t was a record-breaking year for the 28th Annual MPWWA Training Seminar in Halifax, says conference chair Chuck Muise. The seminar, entitled "New Technologies", saw members from across Atlantic Canada converge upon the Westin Nova Scotian from April 20 to 23 for a host of industry-related events. Jody Comeau, recent chair of the MPWWA, was more than pleased with the turnout of 300 plus people.

Comeau, who works for the Public Works Department in the Municipality of Clare, believes that the diverse agenda, along with a lively list of guest speakers were the main reasons for the strong showing this year.

"There was a bit of everything here for everyone in the industry," says Comeau, who handed over the chair reins to Woodstock's Andrew Garnett at the annual seminar. "We had a lot of big local and regional players on board."

Things got underway with an executive committee meeting, followed by a meet and greet session hosted by Halifax Water. Carl Yates, Halifax Water's general manager, opened the conference with a talk on the new national wastewater standards — a hot topic that was on everyone's minds as it will impact every municipality in the region. An afternoon equipment display allowed buyers and sellers

to partake in some fast track networking, while pouring over the latest in new gear from over 50 suppliers.

"It was a great opportunity for our members to see what is new in the marketplace," says Comeau.

Over the next several days, members took in workshops, tutorial classes, strategy sessions, round table discussions and industry updates.

"The various workshops were the real focus for most delegates," he says. "They were able to attend sessions on a wide variety of industry-related topics including well regeneration, horizontal drilling, zone metering and geo tubes."

A highlight was the guided tours of the Halifax Wastewater Treatment Plant and the Lake Major Water Treatment Plant.

"Halifax Water is considered to be a leader in our industry in the Atlantic region," says Comeau. "The tour gave our delegates a firsthand look at one of the most innovative projects in recent times."

Things weren't all "shop talk", however, as members reacquainted themselves with provincial counterparts over meals and health breaks. There was also a mid-conference banquet with entertainment provided by Fiddles and Feet, a group of young musicians and dancers from central Nova Scotia.

In addition, a companion program was set up for the participants' partners and families and included luncheons, shopping excursions, a gift exchange and a tour of Farmer's Dairy in Hammonds Plains.

A farewell luncheon featured guest speaker Mark Parent, Nova Scotia's Minister of Environment and Labour, and was a last chance for all to say goodbye until next year's event in Prince Edward Island.

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MPWWR In the News



Communications New Brunswick

The new uranium exploration and mining regulations, announced by Natural Resources Minister Donald Arsenault (above) and Environment Minister Roland Haché, better protect drinking water supplies.

- This past spring, Kingston, NS, was facing close to an \$8,000 repair bill after vandalism at its wastewater treatment facility. At the village commission's April 9 meeting, wastewater commissioner David Lowe detailed damage to the aerator unit that occurred when one or more large pieces of wood were thrown into the clarifier. "Whatever was thrown in there jammed up the arm on the unit and caused the gears to smash. It made a huge mess," reported Lowe. The village has had similar problems with garbage being tossed into the facility and constructed a 12-foot fence around the area to discourage such activity. At the commission meeting, Lowe suggested covering the pond with netting as an added precaution. — Nancy Kelly, Kings County Register/Transcontinental Media
- In New Brunswick, new uranium exploration and mining regulations to better protect drinking water supplies and improve the claims-staking process for property owners were announced by Natural Resources Minister Donald Arsenault and Environment Minister Roland Haché. "Our government heard the concerns of the people of New Brunswick and we have responded," said Arseneault. "These changes are consistent with New Brunswick's public policy approach of being proactive in protecting designated drinking water supplies and they address the issues of access to private landowners' property." One key regulation specifies that uranium exploration and extraction in designated watersheds and well fields, as well as in villages, towns and cities, is now prohibited.
- Residents in Middle River, NS, now have a cleaned-up area at the site of the former Crowdis Mountain septage facility. The Department of Environment released its final report to the community liaison committee on April 9. "The department committed to remove the solids and liquids, implement a ground-water and surface-water monitoring program, and site reclamation," says Mark Parent, Minister of Environment. "I am pleased to say we've accomplished that." The site clean-up was completed in late November. About 4,250 tonnes of material were disposed of at approved composting facilities. Surface and ground water testing done throughout the cleanup concluded that there was no impact on MacDonald Brook. — MPWWR Staff
- Several communities in PEI that are slated to receive funding under cost-shared infrastructure programs are now making plans for major improvements. One of these communities is Crapaud. This village of close to 400 people in the central part of the province has been identified as a priority under the new Building Canada infrastructure agreement signed recently between the federal and provincial governments. Kathy Nicholson, chief administrative officer, says the community plans to replace its lagoon system. "The entire community is serviced by a sewer system but our lagoon is over 30 years old," she says. "We want to ensure the system is adequate to meet our future

Rate hikes in store for Greenwood and Aylesford

By Nancy Kelly Kings County Register/ Transcontinental Media

ustomers of the Greenwood Water Utility will see their rates go up following a decision by the Nova Scotia Utility and Review Board.

The water utility, which provides water service to 567 customers in the Village of Greenwood and 15 in the Sandy Court area of Aylesford, applied to the URB to raise its rates over a three-year period after conducting a study in August 2007. A public hearing was held in Greenwood on the application December 19, attended by 15 people — most of whom were there on behalf of the URB and Municipality of the County of Kings. Only two members of the public, representing the Greenwood Village Commission and the Central Annapolis Valley Chamber of Commerce, made presentations. Neither supported the proposed increases.

Approved increases for residential customers for each of the three years, assuming an average quarterly consumption of 11,721 gallons, are 13.1 per cent, 13.1 per cent and 3.1 per cent respectively. After the adjustments are phased in, the monthly residential base charge (meter and consumption) will increase between \$27.11 and

For all other metered services, the proposed

increases, based upon average consumption for each meter size, range from 14.4 per cent to 17.3 per cent in 2008/2009, 14.8 per cent to 17.3 per cent in 2009/2010 and 3.1 per cent for all meter sizes in 2010/2011.

Kings County chief administrative officer Brian Smith reported the utility was asked for clarification relevant to its operations plan and schedule of capital improvements at the December hearing

ing.

"The information provided satisfied the board and supported the utility's application," confirmed Smith after the approved rate increase was announced.

The utility's supply for the Village of Greenwood is groundwater from two wells, treated with chlorine for disinfection and caustic soda for pH adjustment prior to entering one of two reservoirs, each with a capacity of 350,000 imperial gallons. The Aylesford system consists of a single well, pressure tank, chlorine for disinfection and caustic soda system for pH adjustment.

The capital work identified for the Greenwood system includes upgrades to the wells, reservoirs and water treatment. The Aylesford recommendations include a new production well and treatment building. The utility has also initiated a long-term maintenance and replacement program of water mains. The costs associated with all of these projects are included in the rate study.

Pumping money into Digby's drinking water system

By Jeanne Whitehead

Digby Courier/Transcontinental Media

The town of Digby is undertaking \$918,000 worth of improvements to its drinking water system. The upgrades are underway and will be completed by the end of the summer to comply with provincial drinking water guidelines that took effect April 1.

Cost of the work will be split equally between the town, the province, and the federal government.

Unlike many coastal communities that draw a drinking supply from surface water, Digby has nine deep artesian wells, most of them in the Mount Pleasant area.

Four or five of the older well chambers will have ladders replaced by stairs, says town clerk Tom Ossinger.

"It's really a safety issue for the person who has to go into the well."

Flow meters, measuring the amount of water being pumped, are being installed in seven of the town's wells.

Supervisory control and data acquisition systems will provide a central computer with information about which wells are pumping and their production status. The system is already in place but will upgraded to give more information.

New units to analyze water will be positioned at four or five points in the system and will determine the chlorine residue and send this information to the central computer.

Ossinger says that all of Digby's wells have well-head protection and alarm systems, but additional protection will ensure wells are not accessible by unauthorized people.

"This one is really an anti-terrorism measure," he

A water main on Warrick Street will also be replaced as part of the water system upgrade.

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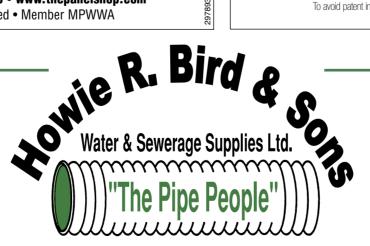
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MPWWA Profile:

Every issue, the MPWWR shines a spotlight on an MPWWA member making a difference in the industry. Harold Boomer is the focus of our July issue.



By Stephen Clare

ife is never dull for Harold Boomer. The 42-year-old foreman of the Woodstock Water and Sewer Department says "things ■are pretty busy for us year round". And although he'd also cherish a little vacation time, fishing with his eight-year-old son, Boomer says he likes the fast pace and has always welcomed a new challenge.

After graduating from community college in 1989, Boomer was hired by the City of Woodstock to manage the town's large woodlot. Over the next decade, he fulfilled various roles, including driving a salt truck and working with the sidewalk crews, while studying to attain his Class 2 license in wastewater management. Boomer signed on with the city's public works department in 1999 and took over as foreman when his predecessor retired a few years later.

"I guess I just happened to be in the right place at the right time," he jests.

Of the city's 15-member public works department, there are three (including Boomer) that focus on water and sewer treatment.

'We have a lot of different responsibilities," he says, "including checking our gear, doing the meter readings, testing for levels of chlorine or other chemicals, lab work and so forth. And every day there seems to be some kind of repair work that needs to be done

in our municipal buildings. The older infrastructure always needs

Boomer says that his current position definitely has its share of challenges.

"First and foremost, I'd say, would have to be the crazy New Brunswick weather," he says. "A lot of what we do up here takes place outdoors and we just never know what to expect. In a single day we could see rain, sunshine, fog, snow, sleet, and hail. We really have to be prepared for anything. And winters can get mighty cold up this way too, especially when we are 'knee deep' in icy water or

Boomer adds that the public's perception of his position has been skewed at times as well.

"Sometimes I think that very few people have an idea of what it is that we actually do," he laughs. "They see us taking off into the woods in the truck and just presume that we are going fishing or hunting. The reality of it is that many of our facilities are in remote

Despite having to deal with often temperamental conditions, Boomer says that there are many rewards to his job.

'I'm doing it because I really enjoy it," he says. "Every once in a while I will get a real nice compliment from someone that will remind me that we are making a difference in our community. That is the stuff that makes it all worthwhile."

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North shore pushes for central water system By Andy Walker An area known locally as the "Stanhope Peninsula" is experiencing significant growth in both summer and permanent residents. Located within the P.E.I. National Park, it includes a pop-

ular beach, a campground, a major hotel, and hundreds of cot-The area is serviced entirely by private wells, and unfortunately, says Jim Lee (chair of the North Shore Community Council),

there are growing reports of contamination. "People are finding salt and other chemicals in their wells and are being forced to dig deeper and deeper," says Lee.

As a proactive measure, the council has obtained \$5,000 under the Canada - P.E.I. Gas Tax Agreement to look into the feasibility of establishing a central water system for the area. Lee says the option of a sewer system is not being looked at right now.

The community is now in negotiations with Parks Canada to drill an exploratory well on park land. Lee says they would like to negotiate for five acres — enough land to construct service and

"It is something we, as a council, have been talking about for about five years," he says. "It has been a slow process."

They are hopeful the exploratory well can be drilled before the end of this year. After that, the focus will be on setting up a water utility under the jurisdiction of the Island Regulatory and Appeals Commission. Some preliminary work has already been done to identify funding sources from the federal and provincial

Lee says they don't have a specific timetable in mind for the service to be in place. He adds "We are starting right from scratch and there is quite a bit of red tape involved."



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Editor: Barb McCay Cashin Designer: David Schaffner Sales Executive: Naster Tracz Circulation: Bonnie Marchand

Traffic: Gorica Kurlic

E-mail: barb.cashin@transcontinental.ca

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Bridgetown searching for way to change sewer rate

The Spectator/Transcontinental Media

The Town of Bridgetown is lowering its tax rate and is looking at ways to introduce a new

John Langmead, chief administrative officer, says the town council agreed to lower its tax rate for both residential and commercial properties at its regular meeting on June 30.

The council has set the 2008-2009 residential tax rate at \$1.80, down .13 from last year, while the commercial rate has been lowered to \$3.52, down from \$3.57.

Councillors also agreed to introduce a cost recovery program this year for its sewer treatment services. This policy will be drafted over the next month and if approved, the new sewer rate will likely be introduced later this year.

Langmead says the council is leaning

on water consumption, rather than a flat rate

In user-based systems residents can better control their costs, saving money whenever they conserve water. Those households using higher volumes of water will pay higher sewer

"We're trying to make this as easy as we can," he says. "The council will consider the proposal as early as August, and then if approved, public meetings will be held."

He says that prior to any changes, notices will be mailed to residents explaining the proposed changes and notifying them of the meeting

Sewer rates are becoming standard charges within many towns and municipalities. The towns of Middleton and Windsor most recently introduced sewer rates with their tax bills.

Free water testing for Harvey area residents in New Brunswick

The Department of Health is offering free testing for uranium in water for homes and businesses in the Village of Harvey, NB, and along Route 3 to York Mills, until July 21. Water test results will be reported to individual homeowners and business owners.

Free testing was announced in May after the Department of Health became aware that the results of a 1981 study to identify levels of uranium in water may not have been reported to individuals in the Harvey area who participated in the study.

To date, 108 water samples have been tested for uranium, selenium and arsenic, as the same laboratory procedure is used to detect all three elements. The results were immediately reported to the homeowners via telephone and registered mail.

Of the 108 samples, 22 exceeded the

acceptable level of 20 micrograms per litre for uranium in drinking water. Forty-one samples exceeded the acceptable level of 10 micrograms per litre for arsenic.

Dr. Scott Giffin, acting medical officer of health for Region 3, said that the results for uranium are similar to those found in the 1981 study.

The Harvey area has a history of elevated levels of naturally occurring arsenic. A study of arsenic in well waters in southern York County in 1992 found a total of 26 of 191 water samples exceeded the then guideline of 25 micrograms per litre. The majority of samples in excess of the guideline were found in the Harvey Station area and the area's residents were notified of the

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Attending the Stewiacke/Bible Hill funding announcement were: Robert Wrye, President of the Union of Nova Scotia Municipalities; Jamie Muir, Minister of Service Nova Scotia and Municipal Relations; Senator Gerald Comeau; Christine Blair, Chair of the Village of Bible Hill; Dereck Rhoddy, Mayor of the Town of Stewiacke.

Stewiacke, Bible Hill receive funding for water upgrades

By Colin MacLean

The Truro Daily News/

The Village of Bible Hill and the Town of Stewiacke received good news this spring with the announcement of \$2.1 million heading their way for water infrastructure improvements. Service Nova Scotia and Municipal Relations Minister Jamie Muir made the announcement at the Nova Scotia Agricultural College in mid

The federal and provincial governments are each contributing more than \$538,000 toward a project in Stewiacke and nearly \$168,000 toward a project in Bible Hill, or one third of the costs. The Village of Bible Hill and the Town of Stewiacke will each fund one third of the costs of the projects for their respective communities.

The money will be used to extend the municipal water system further into Bible Hill and to significantly increase the capacity of Stewiacke's reservoir.

This funding is going to help solve a lot of problems and may even present some new opportunities, says Bible Hill chairwoman Christine Blair.

"It's a very positive move for the village to extend this water — we need it," she says. "We still have a few homes that have nitrate contamination. This will also provide a direct waterline into our fire hall with a hydrant for the trucks. We'll also have the potential to work with the provincial exhibition.'

The new 1.1-kilometre water vein will extend

from the corner of Pictou Road, along Main Street, up Ryland Avenue to Vimy Road. The vein will effect 80 homes and several businesses, along with providing 19 new fire hydrants for the community. The new vein is stage three in a five-stage project with the ultimate goal being to provide Bible Hill residents with the option of sharing a water system.

Stewiacke mayor Dereck Rhoddy is hoping the work on his town's new water tower is completed by next year. It's going to be more than triple the size of the existing tower with a new steel-welded reservoir. Now that the money is in place, things are starting to move ahead, says Rhoddy.

'Small municipalities like ours really don't have the resources to fund a project 100 per cent. But with the federal and provincial government putting in their share, it makes things possible.'

These investments are part of the \$133-million, six-year Canada - Nova Scotia Municipal Rural Infrastructure Fund, which is administered by ACOA and Service Nova Scotia and Municipal Relations. Enterprise Cape Breton Corporation and the Union of Nova Scotia Municipalities are also members of the program management committee.

"The governments of Canada, Nova Scotia and the municipalities are responding to infrastructure needs to build strong, healthy communities, which will encourage economic opportunities," says Robert Wrye, president of the Union of Nova Scotia Municipalities.

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Balsor-Eaglecrest water project now in motion

The Advertiser/Transcontinental Media

ne resident says it has been a four-year struggle, but it's great that Kings County councillors lived up to their obligation and did what they had to do by approving the Balsor-Eaglecrest central water

Eaglecrest subdivision resident Carson Greencorn, who spoke on behalf of affected residents at the April 15 committee of the whole session, said residents have been wondering if they can even take a shower with well water containing arsenic. This is an issue for several residents in the subdivisions, located roughly to the southwest of New Minas.

Engineering and public works director Richard Lloyd said a March report to council on the tender results for the project identified a shortfall of \$168,087 within funding estimates, which would result in the cost per resident increasing to \$11,200. Council's direction was to delay the award of the contract to allow staff to advise senior government partners of the financial situation, review project costs and communicate the revised costs to residents.

Even though the provincial contribution was to be spent by the end of March, Service Nova Scotia and Municipal Relations Minister Jamie Muir issued a cheque for the Provincial Capital Assistance Program (PCAP) contribution on the condition that the funds are used exclusively for the project. The project cost estimate was reviewed to find areas to reduce the per-resident cost and make it closer to the November 2007 estimate of \$9,000. Total savings of \$183,300 were identified.

Rise In Cost Per Resident

Initially, the required 40 per cent of residents wishing to hook into the new water system at the estimated cost of \$9,000 were onside. However, Lloyd said, even with the project savings identified, the cost per resident would have to be increased above the initial estimate.

The Extension of Central Water Distribution Systems policy specifies that if the tendered price of the project is above the estimated cost per property, all property owners that signed the consent form must be notified to see if they are still in favour of connecting to the service. Lloyd said staff understands that there now may be as many as 10 residents of Ward Avenue interested in participating in the project.

The revised cost of the project as of April was \$2,464,000, or a per-resident cost of \$9,600.

At the request of councillor Chris Parker, warden Fred Whalen allowed one resident 10 minutes to speak on the issue. Eaglecrest subdivision resident Carson Greencorn said it's time for council to let the project proceed and there is federal gas tax funding available.

"All we're asking for is safe drinking water," he said, pointing out that the project costs would definitely increase if it was allowed to go back out to tender."

Vacant lot owners and people who don't live in the community have a say and their answer is "no", said Greencorn. "It doesn't make sense to me."

Had A Contract

Parker said council had a contract with the residents for a per-resident project cost of \$9,000 and pointed out that the county has helped out in other areas, paying more than their fair share for other projects in the past. He called on his colleagues to defeat the motion on the floor that would have recommended a per-resident cost of \$9,600.

Instead, Parker said the motion should be for the earlier estimate of \$9,000 and the county should make up the difference from other sources, considering the increased project cost estimate.

"This won't go through if it goes back to the public," he said, pointing out that Lloyd has applied for more PCAP funding for the project. Lloyd said council's direction was to request an additional \$200,000 from the province, which he has done.

Councillor Madonna Spinazola drew attention to a child in the gallery and said she hates the idea of babies having to bathe in water with arsenic in it.

"Let these people go home today knowing we're letting the water go through," she said.

Councillor Janet Newton said council shouldn't be begging the province for more money because the county has the money

"This has dragged on long enough," she said. "Our own bylaw has us hamstrung."

Council defeated the motion that included a per-resident cost of \$9,600 and voted instead in favour of recommending approval of a per-resident cost of \$9,000, the initial

Council decided to hold a special session to approve the recommended per resident cost of \$9,000. Council approved awarding the contract for the project to ACL Construction for the total price of \$2,047,600 plus HST. Applause went up from affected residents gathered in the gallery.



On hand for the Balmoral funding announcement were: Donald Arseneault, Minister of Natural Resources; Hébert D. Arseneault, Mayor of Balmoral; Mike Allen, Member of Parliament for Tobique-Mactaquac.

Balmoral residents to benefit from wastewater treatment upgrades

More than 700 Balmoral households will soon enjoy improvements to their local wastewater treatment system thanks to an investment from the Canada - New Brunswick Municipal Rural Infrastructure Fund.

Funding for the project was announced April 21 by Mike Allen (Member of Parliament for Tobique-Mactaquac), Donald Arseneault (Minister of Natural Resources) and Hébert D. Arseneault (Mayor of Balmoral).

"Our investment to upgrade Balmoral's wastewater services will help sustain a strong and healthy community and improve the quality of life of residents," said Allen on behalf of Peter MacKay, Minister of National Defence and Minister of the Atlantic Canada Opportunities Agency (ACOA).

Mayor Arsenault added that the Village of Balmoral is pleased with the way the federal, provincial, and municipal governments have come together to help upgrade the wastewater treatment lagoon.

"After four years of work and studies, we will finally be able to provide better service to our current and future clients, as well as minimize the impact on the environment," he said.

The \$2.5-million project involves increasing the capacity of the existing wastewater treatment system by 90 per cent and improving its outlet control system. The work will connect an additional 100 households to the municipal system, while 600 households will benefit from improved levels of wastewater treatment.

The Government of Canada (through ACOA), the Province of New Brunswick and the Village of Balmoral each contributed \$834,692 toward the total project costs.



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Improved drinking water for Cape Breton communities

esidents of seven communities on Cape Breton Island will soon have access to better quality drinking water. The governments of Canada, Nova Scotia and three municipalities are working together to make this possi-

Upgrades to the drinking water systems in Port Hawkesbury, Inverness, Port Hood, Mabou, Judique, Whycocomagh and Little Narrows are

being funded under the Municipal Rural Infrastructure Fund (MRIF). The \$5.7-million investment was announced on April 13 in Port Hood by Peter MacKay, Minister of National Defence and Narrows are receiving upgrades Minister of the Atlantic

Canada Opportunities Agency (ACOA), and Premier Rodney MacDonald.

"The Government of Canada recognizes the important role that infrastructure plays and that is why we are making the largest investment in infrastructure in Canada in more than half a century," said MacKay. "Our government is pleased to invest almost \$1.9 million in federal funding for projects that will ensure safe, clean drinking water for the residents of these seven Cape Breton communities."

The Municipal Rural Infrastructure Program supports community infrastructure improvements such as water, wastewater and solid-waste management.

The federal and provincial governments are each contributing one third of the costs of these projects, or \$1,873,423 each. The Town of Port

Hawkesbury and municipalities of Inverness and Victoria counties will fund one third of the costs of the projects for their respective communities, which respond to municipal and MRIF program pri-

The investment is part of the \$133-million, six-year Canada - Nova Scotia Municipal Rural Infrastructure Fund, which is administered by the Atlantic Canada Opportunities Agency and Service Nova Scotia and Municipal Relations. Enterprise Cape Breton Corporation and the Union of Nova Scotia Municipalities are active members of the program management commit-



Photo courtesy of Canada - Nova Scotia Infrastructure Si

On hand for the \$5.7-million investment announcement were: Wayne Budge, Warden of the County of Victoria; Duart MacAulay, Warden of the County of Inverness; Peter MacKay, Minister of National Defence and Minister of the Atlantic Canada Opportunities Agency; Rodney MacDonald, Premier of Nova Scotia.

Environmental cooperation deal signed

The government of Canada and the Atlantic provinces entered into a memorandum of understanding on environmental cooperation, on June 6, at the conclusion of the two-day Atlantic Council of Environment Ministers meeting in Wolfville.

The agreement was signed by: John Baird, Canada's Environment Minister; Mark Parent, Nova Scotia Minister of the Environment; Roland Haché, New Brunswick Minister of the Environment; George Webster, Prince Edward Island Minister of the Environment, Energy and Forestry; Charlene Johnson, Newfoundland and Labrador Minister of Environment and Conservation.

"The government of Canada and our four partners in Atlantic Canada share the goal of attaining the highest possible level of environmental quality in the Atlantic provinces," said Baird. "By signing this agreement, both levels of government are formally demonstrating their commitment to preserve, protect and enhance the environment in the Atlantic region for present and future generations."

The five-government agreement contains a broad set of environmental management principles of cooperation. The memorandum helps the governments to work together to achieve shared environmental objectives and will help create multilateral or bilateral agreements. The first will be focused on surface and ground water.

"We aim to make Nova Scotia one of the cleanest, most sustainable environments in the world by 2020," said Parent. "Cooperating with our Atlantic and federal partners will help bring us closer to that

Prince Edward Island's minister of Environment, Energy and Forestry also noted the importance of regional cooperation.

"The two main aims for any government working on environmental questions in this region should be the best protection of our shared natural wealth and the best use of taxpayers' dollars to achieve that protection," said Webster. "By setting down a framework for intergovernmental cooperation, this memorandum of understanding ensures environmental work in Atlantic Canada is delivered effectively, and that it is delivered by the government best positioned to respond to a given

FOUR KEY BENEFITS

1) The memorandum of understanding will create a regional steering committee of senior officials from Environment Canada and the environment departments in the Atlantic provinces, which will allow for easier and more effective discussion and collaboration on environmental issues.

- 2) It will facilitate a consistent, efficient and transparent collaborative approach to environmental protection and conservation in the Atlantic provinces.
- 3) It will strengthen federal/provincial cooperation to address a national environmental priority (e.g. water quantity and quality) in an integrated and coordinated way.
- 4) It will pave the way for other more detailed multilateral or bilateral agreements.

Digby sewer alarm sought by federal officials to alleviate issues

Drinking water systems

in Port Hawkesbury, Inverness,

Port Hood, Mabou, Judique,

Whycocomagh and Little

By John DeMings

Digby Courier/Transcontinental Media

Federal officials have reportedly warned that the Annapolis Basin could be permanently closed to shellfish harvesting if Digby doesn't install an electronic alarm at its sewage treat-

Part of the Annapolis Basin was closed again to shellfish harvesting on June 17 and the beaches nearest Digby were shut down on May 17 because of bacteriological contamination.

The alarm system, which Mayor Frank Mackintosh has said could cost as much as \$300,000, would not prevent sewage spills and contamination of the Annapolis Basin. Instead, the alarm would simply send immediate notification to federal officials in Halifax.

Partial closures of the basin since May 17 have been blamed on a series of sewage spills from Digby, but Mackintosh has questioned whether federal officials have monitored sewage treatment facilities as far upstream as Greenwood.

On June 20, town and federal officials met to discuss Ottawa's requirements. Officials from the Canadian Food Inspection Agency reportedly want the town's signature on an agreement to install the alert system.

Without that agreement, officials are believed to have warned that the whole of the Annapolis Basin could be closed year-round to shellfish harvesting. The town has hired extra personnel to monitor the south end sewage treatment plant and report any overflow of untreated sewage to Halifax.

Along with the clam industry, which was just getting underway when the May 17 closure took effect, a shutdown of the basin would also affect the scallop industry that fishes in its waters in



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Attending the Lawrencetown and Middleton funding announcement were: Senator Gerald Comeau; Lynette Gilks, Chair of the Village of Lawrencetown; Vera Errington, Deputy Mayor of the Town of Middleton; Minister of Environment Mark Parent

Water funding "on tap" for Lawrencetown and Middleton

By Lawrence Powell

The Spectator/Transcontinental Media

mproved drinking water is on the horizon for residents of Lawrencetown and Middleton as a result of almost \$800,000 in funding support through the Municipal Rural Infrastructure Fund (MRIF).

The Village of Lawrencetown will receive \$550,755 to help replace existing wells, while Middleton is getting \$223,407 to purchase chlorinating equipment.

"These projects will give 1,100 families improved drinking water — water that will meet the new provincial guidelines which are based on the best drinking water standards in the country," said Nova Scotia's Environment Minister Mark Parent who made the funding announcement April 21 in Lawrencetown on behalf of Jamie Muir, Minister of Service Nova Scotia and Municipal Relations.

The provincial contribution is just over \$250,000 with the town and the village paying one third of their respective projects.

"Federal, provincial, and municipal governments have been working together to address drinking water and water treatment issues not only here, but right across Nova Scotia," said Senator Gerald Comeau on behalf of Peter MacKay, Minister of National Defence and Minister of the Atlantic Canada Opportunities Agency.

The safety and quality of our drinking water is a definite concern for all Canadians, noted Vera Errington, deputy mayor of Middleton.

"We take our water for granted. We turn on the tap and it's there. We rarely think about the technology that is required to make sure our municipal water supply is safe."

Errington said it can be daunting for a small town to find the capital required for infrastructure, adding that the Municipal Rural Infrastructure Fund plays a critical role.

"Along with an investment by the town, this money will be used to install a chlorine contact chamber at our pump station," she said, explaining that the new equipment will allow water from town wells to have longer contact with the chlorine before it enters homes hooked into the system.

The town will also purchase a computerized water monitoring system to replace the existing outdated manual one, enabling staff to monitor the water and make adjustments to the supply remotely by computer.

Amherst takes steps to protect wellfield

By Darrell Cole

The Amherst Daily News/ Transcontinental Media

Amherst is moving to designate its six properties within the Tyndal Wellfield area as "Protected Wilderness" areas under the Wilderness Protection Act.

"Designation of these lands as a Protected Wilderness area would have a number of benefits to the town including an additional layer of protection for our water supply," says councillor Dale Fawthrop. "It would bring out provincial enforcement of the wilderness designation, eliminate pressure for forestry operations and return the area to a more natural state."

Fawthrop says the designation would also show leadership in the preservation of valu-

able wilderness lands in the area. The designation includes 973 hectares of land.

The town has included two five-year terms at the end of which it may opt out of the designation. Also, the town is retaining the right to operate the water supply as it sees fit. This includes expanding facilities and infrastructure there.

The properties are already protected from development because of the presence of the town's water supply. However, that hasn't stopped some forestry operations from taking place there and it hasn't prevented the area from being used by all-terrain vehicle

The town will retain the ability to use motorized vehicles and ATVs on existing or future roadways to maintain and protect the wellfield property.

Montague looks forward to providing full-service water and sewer

By Andy Walker

The largest town in eastern Prince Edward Island is now on the verge of being able to offer water and sewer services to all of its 2,000 plus residents.

Montague has been designated for priority funding under the \$270-million Building Canada infrastructure agreement signed recently by the federal and provincial governments.

Andy Dagett, the town's chief administrative officer, says the municipality hasn't submitted a funding application under the program yet, but does have specific projects earmarked for the funding.

The community wants to complete its three-phase plan to offer water and sewer services to every residence and business. Currently, the water system serves approximately 85 per cent of the community. The unserviced areas are spread throughout the town.

Dagett says there haven't been any problems with contamination to speak of and

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there will undoubtedly be some residents that choose to stay with their private wells. However, "we intend to make sure everybody has the option of getting the service."

It will likely be this fall or next spring before the funding is in place and the work begins.

"We really don't have a firm timetable at

"We really don't have a firm timetable at this point," he says. "We're not sure how long the application process will take since Building Canada is a new program."

On another front, the chief administrative officer says negotiations are underway with the neighbouring community of Brudenell to extend the sewer system. He explains there are several contaminated properties in that community that could be developed if a sewer system was in place.

The town sewer system has a capacity of 800,000 gallons per day and currently operates at approximately 25 per cent capacity, so there is plenty of room to handle extra customers.

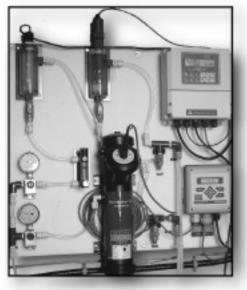
"Right now, we are just working on a formula to make it happen," says Dagett.

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Attending the Oromocto water tower funding announcement were: Greg Byrne, Minister of Business New Brunswick; Fay Tidd, Mayor of Oromocto; Greg Thompson, Minister of Veterans Affairs and Regional Minister for

Funding pours in for Oromocto water tower

ore than 1,400 households in Oromocto will soon benefit from improved water services thanks to an investment through the Canada - New Brunswick Municipal Rural Infrastructure Fund..

On April 11, Greg Thompson (Minister of Veterans Affairs and Regional Minister for New Brunswick), Greg Byrne (Minister of Business New Brunswick), and Fay Tidd (Mayor of Oromocto) gathered to announce funding of almost \$2 million for the project.

"Our government is proud to work with the Province of New Brunswick and our communities to strengthen our infrastructure and build sustainable, competitive and diversified local economies," said Thompson. "With our contribution, we are helping to construct a new water tower that will improve water services for 1,400 households and support new residential and commercial development in the Town of Oromocto.'

Minister Thompson spoke on behalf of Peter MacKay, Minister of National Defence and Minister of the Atlantic Canada Opportunities Agency.

"Investing in important infrastructure projects will improve the quality of life for the residents of Oromocto, which will help us work toward our goal of self-sufficiency for New Brunswick by 2026," added Byrne, who spoke on behalf of Environment Minister Roland Haché.

Recent and rapid development in Oromocto has created the need for this new tower. The project involves the construction of a 500,000 gallon structure to meet current and projected water distribution needs. The tower will be 32 metres high and connect to an existing water

Of the total project costs, the Government of Canada, the Province of New Brunswick and the Town of Oromocto have each contributed

St. Peter's and Sampsonville ready for new water system

By Nancy King

The Cape Breton Post/ Transcontinental Media

The provincial regulator has approved a new water utility for the communities of Sampsonville and St. Peter's and a rate structure that will see rates for residents of the village of St. Peter's rise for the first time in 20 years.

The St. Peter's - Sampsonville and Area Water Utility had applied to the Nova Scotia Utility and Review Board for approval to establish a new water utility and for approval of its schedule of rates and charges. The St. Peter's utility already existed, providing water services to that village. The new body will be created through an expansion of the St. Peter's utility to serve the Sampsonville area of the Municipality of Richmond County.

"I think what that will mean is longterm sustainability for our water utility," says Warden John Boudreau. "The thing, in my opinion, that we were not totally guarding against was the depreciation of the old infrastructure that we had in the ground and, of course, that at some time we were going to have to replace that. The new plan will accommodate all that."

At the time of the application, Boudreau noted the application revolved around fire protection rates being adsorbed now by the water utility as opposed to being absorbed by the general rate.

Construction is underway on a \$7-million water system for the communities of St. Peter's and Sampsonville. The project was jointly undertaken by the Municipality of Richmond and the St. Peter's Village Commission, and received provincial and federal government funding.

It includes development of a ground water supply in Sampsonville, installation of a new water main in both communities and a new water storage tank. It is the largest capital infrastructure project ever undertaken by the Municipality of Richmond. The project is intended to bring improved drinking water to the 395 households currently on the St. Peter's supply and add another 130 households, as well as support future growth.

Using his own bill as an example, Boudreau has said he expects in the first year of the new arrangement to pay about \$8 more for the year. By the end of the implementation period, the difference will be about 20 per cent or about \$36 a year more for his household.

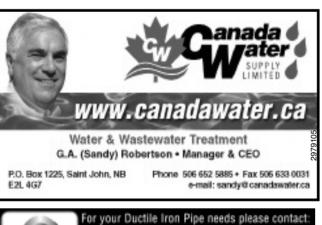
He says he hasn't heard many comments from county residents regarding the new rate schedule, but notes they will likely come when they take effect in January.

'Whenever rates go up, we will have some concerns and we have to be prepared to address those concerns but, in the long run, people have to understand that what we are doing is protecting their long-term interests — being able to provide them with potable, safe drinking water in the future," Boudreau says.

Currently, Sampsonville is served by a private water system which was installed by some residents. This source of supply is no longer capable of providing potable water.

A few area residents commented on the proposal during the review process. A customer of the St. Peter's utility noted the lake supply source had served the utility well for a long time and added that anyone on a fixed income will have difficulty paying the proposed rates. Another customer questioned the reliability of projected consumption levels.

Other comments included two customers questioning why the customers of the St. Peter's utility would see a rate increase prior to being hooked up to the new system, as well as questioning why St. Peter's is paying for the capital costs associated with the expansion to include Sampsonville.





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Attending the ribbon-cutting for Campbellton's new water treatment system were: Mike Allen, Member of Parliament for Tobique-Mactaquac; Mark Ramsay, Mayor of Campbellton; Roy Boudreau, MLA for Campbellton

Campbellton welcomes new water treatment system

he people of Campbellton are benefiting from a higher quality and more secure water supply thanks to a new water treatment plant funded by the federal, provincial and municipal governments.

On April 21, Mike Allen, Member of Parliament for Tobique-Mactaquac, and Roy Boudreau, MLA for Campbellton Restigouche-Centre, joined representatives from the City of Campbellton to celebrate the grand opening of the new water treatment facil-

"Our government is committed to helping communities like Campbellton invest in modern, efficient and secure infrastructure to improve their long-term prosperity," said Allen on behalf of Peter MacKay, Minister of National Defence and Minister of the Atlantic Canada Opportunities Agency (ACOA). "Through the Government of Canada's investment of close to \$1.5 million, we are helping to ensure a safer water supply for more than 3,500 households and improve the quality of life for the entire

Boudreau said the water treatment plant was a fine example of what can happen when all three levels of government work together.

"Investing in important infrastructure projects will help us achieve a sustainable environment while we work toward becoming a selfsufficient province," he said.

The \$4.5-million project was undertaken in two phases. Under the Canada - New Brunswick Infrastructure Program, the City Campbellton improved its water source and distribution systems which involved the addition of a largescale water reservoir and ultraviolet disinfection equipment. Under the Municipal Rural Infrastructure Fund, the city installed an underground power line to the water treatment plant, ensuring a secure, efficient power supply for the disinfection system.

The Government of Canada (through ACOA), the Government of New Brunswick and the City of Campbellton each contributed \$1,483,333 towards the total project costs.

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Margaretsville group tackles water woes:

Lessons learned could help other communities

By Heather Killen

The Spectator/Transcontinental Media

An Annapolis County woman is hoping to use lessons learned from her community's water woes to inspire other communities to use less.

The Margaretsville Water Supply Committee was formed last fall to serve as a link between the community and the Municipality of Annapolis.

Amy Skelton, one of the volunteer committee members, said that a serious problem became apparent in mid-September when water shortages forced the Municipality of Annapolis to impose water consumption restrictions on Margaretsville residents.

"Heels were dug in on both sides," she says. "There was a serious lack of cooperation."

The water supply committee was formed by a group of residents to raise awareness in the community about the water supply and to help avoid future water shortages.

"We were busy this past winter educating ourselves about the water system," says Skelton. "First we toured the water plant and learned about the supply and treatment process."

Residents met again with municipal engineer Laurie Emms in February and went over the data that was taken to monitor user consumption and water conditions.

The municipality changed the system's primary water supply and is using the pond as a secondary source. Skelton said that this change should increase the amount of water that is available to residents and it provides a better storage system than in previous years.

Skelton adds that the committee members have a better understanding of the conditions that limit the community's ability to find new water sources, and that the key to ensuring supply is to curb user consumption.

"We were very impressed with the records they've kept," she says. "If we get another year like the last one, even with the new primary supply, we'll be close to the line."

The committee will be working over the coming months to keep residents informed about the status of the water supply, so that no one will be caught off guard again.

The members are also working to develop water conservation programs for the community, to help preserve the supply.

Skelton adds that even though most Margaretsville residents are conservative by most people's standards in their water usage, there are still a number of ways to reduce the amount of water being wasted.

"I'm looking into ways to retrofit the community with super-energy efficient, low-flow toilets and shower heads," she says. "I'm trying to access grant money to help offset the cost."

The community also applied for funding to hire a summer student from Acadia University to survey residents to find out what types of appliances and devices could be most beneficial in reducing water consumption.

"I think we're all a bit guilty of wasting water," she says. "I know last year I had a leaky faucet that I ignored, until I realized how much water was being wasted."

Skelton added that in the future, conserving water will be of paramount concern to everyone and she hopes that her community can make some progress now and lead the way for other communities.

"We're going to try and make this public, really spread the word," she says. "Maybe we can do



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System needed to pay for water treatment

Bv Chris Shannon

The Cape Breton Post/

s outlying neighbourhoods grow in number and the demand for expansion to the water system increases, the ability to pay for water system infrastructure is at the heart of the debate the Cape Breton Regional Municipality is currently faced with

"Where is the right focus?" CBRM utilities manager Mike MacKeigan told members of the water utility committee in early April. "Is the right focus to keep expanding regardless of what the future costs are going to be or is the right focus to address your resources on existing infrastructure that you already have an obligation to maintain. Or is it a mixture of both?

"I suggest it's a mixture, but the mixture has to be supported by some other means, not just the water rates. If it's based on the water rates what will end up happening here is the \$400 (per residential homeowner a year) water rates we're talking about, will become \$800 before you know it."

Under provincial legislation enacted in 2002, the government gave municipalities six years to meet the guidelines of the Nova Scotia Water Protection Strategy — measures put in place following the deaths of seven people in Walkerton, Ontario, in 2000 after drinking water was contaminated with E. coli bacteria

The CBRM passed an aggressive \$54-million capital spending program in 2004 to build water treatment plants in communities across the municipality to ensure everyone in urban regions had access to fully treated water. The deadline set by the province was reached in April, with several municipalities, including CBRM, unable to meet it. However, the last water treatment plant in CBRM is expected to be complete in North

Sydney by the summer of 2009.

MacKeigan told the committee that without a policy guiding council on possible water system expansion, the municipality could find itself in a serious financial

"If you establish some criteria then you can start to look at whether or not this is reasonable or unreasonable to do. Is the water poor, is the water untreatable, or is the water a health issue?" he said.

And even in the case of provincial or federal contributions, MacKeigan said council shouldn't consider expanding the existing water infrastructure system unless the funding adds up to at least 75 per cent of the total cost of any project.

Although councillor Kevin Saccary noted there may be instances where expansion of the water system should be considered, even if a cost-share agreement means the CBRM must bear up to half the cost of a major project.

"I'm not looking to get water extended to any individual just because their water is dirty," he said. "I've got a whole series of possible extension areas where people have absolutely no water whatsoever for the months of August and September. There has to be some small option for expansion."

The committee followed recommendations by staff to continue focusing capital spending on regulatory requirements, replacing substandard infrastructure and improving operational efficiency. However, the committee also included a provision that will permit council to look at requests for service expansion only if capital funds are available and that's in addition to funding from other levels of government.

"It means we'll entertain requests. It doesn't mean we'll approve them," councillor Gordon MacLeod reiterated. "Some may be reasonable, others may not."



Photo courtesy of Indian and Northern Affairs Canad

Chuck Strahl (Minister of Indian Affairs and Northern Development and Federal Interlocutor for Métis and Non-Status Indians) and Steven Fletcher (Parliamentary Secretary) recently announced a multi-million dollar investment in a First Nations Water and Wastewater Action Plan.

First Nations: A step closer to clean, safe water for all

On April 15, the Government of Canada announced the next steps in its plan to improve the delivery of clean, safe drinking water in First Nations communities. The announcement builds on the significant progress made since the government first launched its Plan of Action in March 2006, which has resulted in 108 of the total 193 First Nation water systems being removed from the high-risk category. In the Maritimes, two First Nation communities remain works in progress: Tobique First Nation and Pabineau First Nation (both are in New Brunswick).

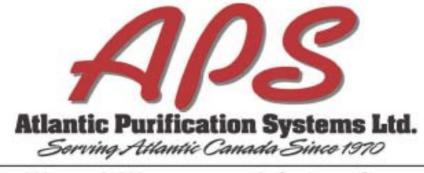
Chuck Strahl (Minister of Indian Affairs and Northern Development and Federal Interlocutor for Métis and Non-Status Indians) and Steven Fletcher (Parliamentary Secretary), on behalf of Minister of Health Tony Clement, announced a \$330-million, two-year investment in a First Nations Water and Wastewater Action Plan. In addition, a Drinking Water Advisory Toolkit was announced by Steven Fletcher.

"Our government launched a water action plan in 2006 because conditions were unacceptable and, as a result, we have seen more than half of high-risk systems removed from the high-risk list," said Strahl. "The work is not yet done, and today I'm proud to announce the next steps to ensure First Nation communities have the clean, safe water they deserve."

As its next steps, the Government of Canada will commit to:

- Nearly double the number of trainers in the Circuit Rider Training Program, which provides training to First Nation water operators;
- Conduct a national assessment of water and wastewater systems in all First Nations communities to help establish a future, long-term investment strategy;
- Set clear standards to guide First Nations in the planning, design and operations of water and wastewater systems, as well as small facilities including wells and septic systems;
- Consult with First Nation communities, regional First Nation organizations and provincial/territorial governments on the creation of a federal legislative framework for drinking water and wastewater on reserves.

The Government of Canada's distribution of the Drinking Water Advisory Toolkit will further increase public awareness of drinking water quality issues for First Nation leaders and community members. This kit, which includes public service announcements, print advertisements, posters and door hangers, has been designed to make it easier and faster for community leaders to communicate essential information to residents about the quality and importance of their water supply. It will be distributed to environmental health officers, chiefs and councils.



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Innovative products making waves in industry





Wonderware IndustryPack for Water & Wastewater

Wonderware, a business unit of Invensys, has announced the release of the Wonderware IndustryPack for Water & Wastewater designed to enhance overall productivity in facility operations for the water and wastewater industry. This is the first in a series of IndustryPacks to be introduced by Wonderware that will focus on specific vertical market segments. Wonderware is providing a single unified software platform for integrating real-time information with business critical applications.

The Wonderware water and wastewater IndustryPack, which is available to download for customer support members, is a pre-configured set of application templates and graphics specifically built for use by water and wastewater companies and municipalities. Pre-configured content enables system engineers to minimize the overall cost and complexities associated with creating and managing water and wastewater systems. In addition, it addresses critical issues facing this industry such as workforce attrition, regulatory requirements, business factors, source water supply and aging infrastructure.

Targeting municipal water and wastewater operations as well as industrial water and waste treatment, the Wonderware IndustryPack leverages ArchestrA technology for greater productivity and ease of use. The unified ArchestrA software architecture simplifies the reporting and management functions performed by operations personnel, enabling them to build systems that are easy to replicate at multiple industry sites.

"Wonderware offers a different alternative to traditional SCADA system solutions by adding industry specific content and applications on top of the Wonderware System Platform 3.0 software built on ArchestrA technology," says Rob McGreevy, director of the Wonderware industry marketing group. "This technology enables the integration of applications across all departments and functions to create a comprehensive real-time operations management environment built for the modern municipality."

For manufacturing environments, synchronization of water treatment systems with overall manufacturing operations provides greater operations efficiency and regulatory compliance. Wonderware software can integrate almost any data source and transform raw data and events into meaningful information that helps reduce operations costs, identifies hidden inefficiencies and enables more cost-effective operations. Extensive flexibility and scalability enables users to expand operations or change work processes as their operational requirements change.

Visit http://us.wonderware.com for more information



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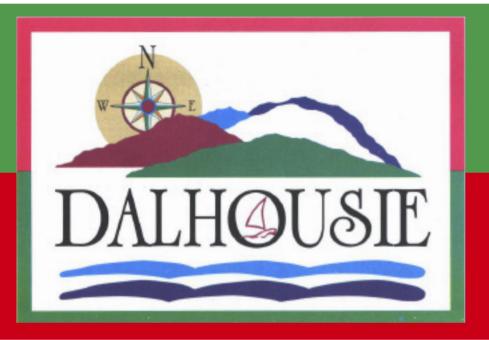
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DALHOUSIE WTP



A dissolved air flotation tank is lifted into place at the Dalhousie Water Treatment Plant during construction in April 2008.

Photo courtesy of Stantec



New era in water treatment

By Stephen Clare

Residents in Dalhousie will soon have safer drinking water as construction of the municipality's new water treatment plant is scheduled for completion this September.

"After enduring several boil orders over the past few years, we are very pleased to see the construction of this new water system," says Dalhousie's Mayor Carl Tremblay. "I am very satisfied with the way this has all come together here for us."

In January of 2007, the governments of Canada and New Brunswick announced major infrastructure funding for the Town of Dalhousie's water system. A total of \$5,005,280 was budgeted for the upgrade through the Canada - New Brunswick Municipal Rural Infrastructure Fund, with the federal, provincial and municipal govern-

ments each covering one third of the necessary expenditures.

The project involves the construction of a new chlorination and filtration plant to treat and filter the town's potable water, which had previously been obtained from a surface water source for several decades.

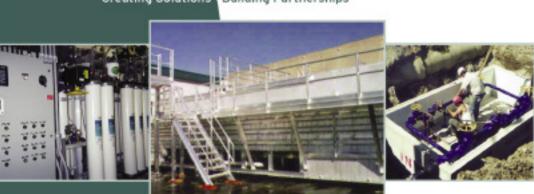
The municipality opted for a dissolved air flotation (DAF) system to treat the water. Stantec of Fredericton has overseen the design and installation of the system from the initial concept and financial feasibility studies in late 2006 through to the different phases of construction. Stantec has provided professional design and consulting services in planning, engineering, architecture, surveying, economics, and project management for several New Brunswick communities in the past.

Continued on page 13



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About the Municipal Rural Infrastructure Fund in New Brunswick:

Project support — \$118 million:

The Canada-New Brunswick Municipal Rural Infrastructure Fund Agreement (MRIF) will invest \$99 million in communities across New Brunswick over five years. The Governments of Canada and New Brunswick are each investing approximately \$39 million. The remaining \$39 million will come from local governments whose projects win MRIF support.

The need

The need for this fund is clear. Municipal leaders consistently identify infrastructure as their most pressing issue. Many municipalities must repair or replace roads, water and sewage systems that were put in place decades ago. In highgrowth areas, transportation routes are growing congested and municipal services are straining to keep up with demand

Through MRIF and other infrastructure programs, the governments of Canada and New Brunswick enable municipalities to get going now on projects that otherwise might remain stalled for years.

Cleaner Air and Water:

The MRIF includes a strong "green" element. At least 70 per cent of the fund will support projects that lead to cleaner air and water. These can include improvements to local systems for water, wastewater, solid waste, and environmental energy improvements to municipal buildings. Public transit projects also count as "green", as they help reduce greenhouse gas emissions from cars. The fund will also invest in local roads, better internet connections, and infrastructure projects that promote local culture, recreation and tourism.

Source: www.gnb.ca/environment

DALHOUSIE WTP

Maintaining water of life

By Stephen Clare

alhousie's new water treatment plant is going to have a major impact on the future of the community, say many of the town's

"We have been waiting for this upgrade for a long time," admits the town's mayor Clem Tremblay. "This is just one piece of the puzzle that we have identified as essential to our future."

The new facility is expected to bring better water quality to hundreds of homes across the Dalhousie area and is part of the municipality's ongoing efforts to make the area more attractive to current and potential residents and workers.

"Having safer drinking water is vital if we are going to remain competitive with other towns across New Brunswick and Atlantic Canada," says Betty Ann Mercier, executive director of Enterprise Restigouche, the region's economic development agency.

Mercier says that many of the town's young people have been leaving for greener pastures in recent years.

"It's tragic," she says. "We just cannot afford to keep watching our children move to other parts of the country. If having safe, fresh drinking water is one of the ways that we can make this a better place to live and work, then it just might give them one more reason to stay here at home in the coming years.

Charles Landry agrees. The 62-year-old small business owner has spent his entire life in Dalhousie and has witnessed the community's fortunes rise and fall on more than one occasion.

"This entire area has been hit hard with closures over the last while," he says. "The young people all say that they are better off going out west or down south. But we have a lot to offer

Tremblay echoes the sentiment.

"You won't find a more beautiful part of the province to live in," he says. "Our rivers and forests offer our residents many wonderful opportunities to experience the best that outdoor living has to offer. The Gulf of Chaleur is a great place for swimming, sailing, kayaking or fishing. And we are located just a short distance from major centres in Quebec, the U.S and other parts of Atlantic Canada.

"Upgrading our water treatment plant is just one of the many ways that we are improving the quality of life for our citizens. It is a necessary step if we are going to grow as a community."

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DID YOU KNOW - DALHOUSIE FAST FACTS

Dalhousie is New Brunswick's most northerly community. It is situated at the mouth of the great Restigouche River as it flows into the Bay of Chaleur at Inch Arran

The town is ideally located as an entry point to the Maritimes. It is easily accessible by air (Charlo Airport), water (a port and ferry service), and land (highway 11) or by train (VIA). With Dalhousie bordering Quebec at the north and the United States border less than two hours west, the town appeals to Maritime visitors as well as visitors from Quebec and the U.S.

Dalhousie is a culturally rich and a diverse community. Its population is made up of three main culture groups: the Micmacs, Acadian and Celtic. Just across the river is the Gaspé Peninsula of the province of Québec. The region's history and culture is well preserved in several museums in Restigouche

Facts & Figures:

Population Of Dalhousie			
Servicing An Area Of20,000			
Area Coverage13.25 sq.km. (5.1 sq. mi.)			
Language Distribution English 50%; French 50%			
Community Health Care Centre1			
High Schools2			
Elementary and Middle Schools3			
Learning Centers1			
Source: www.dalhousienb.com			

New era in water treatment

Continued from page 12

"Our main concern was to find the most efficient and cost effective way to get the job done properly," says project manager Royal MacDonald. "In the end, DAF seemed to be a perfect fit for this scenario." DAF is a water treatment process that clarifies

water through the removal of suspended matter such as oil or solids. This is achieved by dissolving air in the water under pressure and then releasing it at atmospheric pressure in a floatation tank or basin. The released air forms tiny bubbles which adhere to the suspended matter causing it to float to the surface of the water where it is removed by a skimming device.

with the system installation, Stanted redesigned and built the facility's new pump house.

"The old one was 35 years old and in pretty bad shape," says MacDonald.

The overall project was a success, but was not without its challenges.

"There were several issues that we have had to contend with since the very start," he admits. "Given both the size of the facility and its proximity to the shoreline, we had difficulties locating and placing a foundation for the new system. There were a number of environmental situations to be cleaned up, including things like the removal of old petroleum pipes."

The extra work slightly delayed the project's completion and increased the final costs to just over \$6 million. But the results have been well worth it.

Stantec contracted much of the foundation, site, mechanical and electrical work out to area compa-

"We are very happy with the way people have cooperated on this particular job," says MacDonald. "Everyone has been on the same page since day one and this has made the entire process run quite





We are proud to have lent our expertise of mechanical contractor for the construction of the water treatment plant in the town of Dalhousie, N.B.

MINTO WWTP

Fast Facts about Minto:

- The village was born on a spring day in 1904, named Minto in honour of the then Governor-General of Canada, Gilbert Elliot, 4th Earl of Minto.
- Minto has more to offer than most towns five times its size, including an arena, golf course, lighted and unlighted ball parks, two family parks, two schools with French Immersion and more.
- The village is located just a few kilometers from Grand Lake, the largest lake in New Brunswick. It is a spectacular place for water activities such as boating, canoeing, swimming, fishing and water skiing.
- Minto boasts a superb walking trail which follows the beautiful Newcastle Stream. The trail features shelters, boardwalks, covered bridges and stairs and platforms to make the trek a pleasure.
- The University of New Brunswick and St. Thomas University in Fredericton are only 50 kilometres away from the Minto area.
- Part of the village's many pronged plan to diversify its economy includes attracting retirees to live there where they will enjoy a relaxing, outdoor lifestyle and low cost of living (tax rate is only \$1.23 per \$100 of assessment). Housing and land is very affordable with the average bungalow going for between \$50,000 and \$60,000.

Source: www.village.minto.nb.ca



The Minto project involved the replacement of the existing mechanical sewage treatment plant with an aerated lagoon system including ultraviolet disinfection.

Out with the old, in with the new

By Stephen Clare

Minto's new wastewater treatment plant is humming along nicely, says the town's Mayor Eric Barnett.

"The upgrade was long overdue," he says. "Everyone here agrees that it was a worthwhile investment."

In August of 2005, it was announced that the town would

receive \$2,634,494 under the Canada - New Brunswick Municipal Rural Infrastructure Fund (CNBMRIF) for the upgrade of the municipality's wastewater infrastructure. Each level of government contributed one third of the funding necessary for the improvements. At least 70 per cent of CNBMRIF funding has been designated to support "green" projects in the province that

are designed to lead to cleaner air and water, such as improvements to local water and sewer

The Minto project involved the replacement of the existing mechanical sewage treatment plant with an aerated lagoon system including ultraviolet disinfection.

"The cost of maintaining the older system was proving to be more expensive than installing a brand new facility," says Barnett.

ADI Limited of Fredericton was commissioned to replace the nearly 40-year-old system shortly after the funding announcement was made.

"We began preliminary design in the winter of 2005 -2006," says Richard Smith P.Eng., manager of water and wastewater services for ADI Limited. "Within five months, we had the plans laid out for development.'

Construction of the new system began in May and was completed within three months.

Continued on page 15

VILLAGE OF MINTO

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Photo courtesy of ADI Limited

The new lagoon system is low-cost and low-maintenance and can be easily managed on-site.

Plant benefits from innovative aerated lagoon

By Stephen Clare

verything went according to plan," says Sansom Equipment's Limited Dale Mallais of the new wastewater treatment facility in Minto.

Fredericton-based Sansom, which has been engaged in the business of selling industrial, municipal, environmental, marine and construction equipment since 1964, joined ADI Limited in the replacement of the municipality's 36-year-old mechanical sewage

"This was a routine installation for our people and the entire process went very smoothly," he says. "We set up all of the aeration equipment which included the fine-bubble diffuser assemblies, the floating laterals in the lagoon and the baffle curtains to separate the cells. We also installed the stainless steel gates, as well as the aeration blowers that went in the main building that function to supply the air to the diffuser system."

Mallais noted that aerated lagoons are common in small com-

"These systems use aerators to mix the contents of the pond and add oxygen to the wastewater. They are sometimes referred to as partial-mix or complete-mix lagoons depending on the extent of

With the exception of wind-driven designs, most aerators require energy to operate. However, energy costs are almost always considerably less than those for other mechanical treatment systems.

"Aeration makes treatment more efficient, which offsets energy

costs in some cases," he says, "and aerated lagoons require less land area and shorter detention times."

The exact dimensions of lagoons vary depending on the type of processes they use for treatment, the amount of wastewater that needs to be treated, the climate, and whether other lagoons or other types of treatment are also being used.

"Lagoons generally require about one acre for every 50 homes or every 200 people they serve," says Mallais. "However, with aerated lagoons treating wastewater more efficiently, they tend to require anywhere from one third to one tenth less land than facultative lagoons."

There are several aspects of this particular unit that make it unique and advantageous.

"The ease of product installation, system integrity and operating performance are all well above average," he says. "Because this is a fine-bubble system, the operating efficiency is vital. And using smaller blowers has proven to be much more cost effective in the long run than utilizing the bigger systems."

The new system was chosen by the town for reasons of both affordability and convenience.

"These are low-cost and low-maintenance units that can be easily

managed on-site," says Mallais. The cost of the EDI flex-air magnum diffuser system was estimated at \$50,000, with close to another \$70,000 for related parts and assembly.

Out with the old, in with the new

Continued from page 14

"This was a medium-sized project for us," says Smith, whose firm has handled many similar initiatives for communities across the province of New Brunswick.

He says the only real challenges the company faced revolved around budget.

"Smaller towns often have to rely on government funding to undertake projects of this size and scope. Our goal here was to bring it in on time and on budget, which we were able to do."

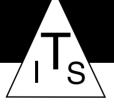
The aerated lagoon system installed as part of the project uses ponds to treat wastewater. Algae grow within the lagoons and utilize sunlight to produce oxygen which is, in turn, used by microorganisms in the lagoon to break down organic material in the wastewater. Wastewater solids then settle in the lagoon, resulting in effluent that is relatively well treated.

Smith says that lagoons like the one installed in Minto must be individually designed to fit a specific site and use.

"Designs are based on such factors as type of soil, amount of land area available, and climate," he says. "Other important design considerations for lagoons include the amount and type of wastewater to be treated and the level of treatment required by regulations. Wastewater leaving a lagoon may also require additional treatment to remove disease-causing organisms or nutrients from the wastewater before it can be returned to the environment."

With this innovative new wastewater treatment plant, Mayor Barnett believes the municipality is now set for the years ahead.

"This new system is easy to use and maintain and should last us for at least another 50 to 100 years," he says. "And because it has a higher functional capacity, it can be expanded as the need arises."



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Minto's Wastewater Treatment Facility designed by ADI was completed on time/under budget, and will meet community needs for years to come. The design provides for a safe, reliable and simple-to-operate system. The lagoons provide long-term storage, an improvement over the former mechanical plant. Disinfection of the effluent is simplified using ultra-violet disinfection. The construction of the aerated lagoon has relieved pressure on the village's wastewater infrastructure and extends wastewater collection services to previously unserviced areas.

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Conference recognizes leading-edge water technologies

bution to addressing global water scarcity received special recognition at a conference hosted this past spring in London by the International Desalination Association and Global Water Intelligence.

The conference entitled "Water, Finance and Sustainability 2008: New Directions for a Thirsty Planet" examined the technological progress being made in creating a road map to a sustainable water future.

A panel of experts studied approximately 30 new technologies selected by conference organizers and voted for those deemed to be the most promising in bringing down the cost of developing new water resources.

When the votes were counted, the result was a dead heat between three technologies aimed at reducing the cost of making drinking water from the sea:

- NanoH20, a membrane that uses nanotechnology to separate pure water from seawater at a lower energy cost than existing reverse osmosis membranes.
- Axial Piston Pressure Exchanger Pump (from Ocean Pacific Technologies), a combined pump and energy recovery device that cuts the amount of energy required in the desalination
- Water Science, a new approach to separating freshwater from seawater based on trapping water molecules in carbon dioxide molecules as clathrates. Unlike conventional desalination, the energy consumption required in the process is lowered due to the thermodynamics of salt solutions.

The judging panel also named two runners up:

- EarthWater Global, a means of detecting large-scale renewable groundwater resources that promises to increase the estimated volume of globally accessible, renewable groundwater resources.
- NanoClear (from Dais Analytic), a new method of desalination that combines both membrane and vapor compression technology to draw freshwater from seawater.

The judging panel for the event consisted of panel chairman Tom Pankratz, a director of the International Desalination Association and editor of the Water Desalination Report; John Tonner of Water Consultants International; venture capitalist Lydia Whyatt of Foursome Investments; Errol Grimes, CEO of the



File Photo

The International Desalination Association and Global Water Intelligence shined a spotlight on three technologies designed to reduce the cost of making drinking water from the sea.

Water and Sewerage Authority of Trinidad and Tobago.

Speaking on behalf of the International Desalination Association, Tom Pankratz commented, "The International Desalination Association strongly supports the advancement of technologies that reduce energy requirements associated with developing new water sources. We applaud the work of companies recognized at this conference whose technological achievements show great promise in making new water sources more

affordable in a world that is grappling with a growing water supply issue."

The International Desalination Association is a non-profit association of over 2,000 members in 58 countries. The membership is comprised of scientists, end-users, engineers, consultants and researchers from governments, corporations and academia. IDA is associated with the United Nations as part of a growing international network of nongovernmental organizations (NGOs)

Water line bill for Communities in Bloom project shocks Stellarton

By Sean Kelly

The News/Transcontinental Media

Stellarton's Communities in Bloom committee and town council were recently slapped with a \$22,000 water bill. It's for work that apparently went ahead without council's knowledge. The revelation came to the town's attention in early June

at its committee of the whole meeting.

Councillor Denise Taylor, also a member of Communities in Bloom, calls the bill a result of a miscommunication between town engineer, Tony Addis, and the volunteer group.

Communities in Bloom had put aside \$2,000 to install a one-half inch line to run a garden hose in Allen Park during the summer months. Instead, a

four-inch line that spanned Acadia Avenue was installed at a cost of \$22,000.

Addis proceeded with the project early in the year with the understanding that Communities in Bloom was hoping to have the park completed by Stellarton's Homecoming festival. Getting the water into the park was a matter of logistics. As it turned out, the best way to get the water into the

park was from Acadia Avenue

"We put the water line in, as cheaply and economically as we could, and I presented the figures to the town clerk for her consideration," he said. "And that brings us to present day."

Council is covering the excess cost, with the Communities in Bloom committee chipping in the \$2,000 it had budgeted.



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Office Locations:

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N1H 4E9 Canada
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