

# GREATER AUGUSTA UTILITY DISTRICT

## Water Quality Report and Newsletter

### District Gets \$500,000 Sewer Grant

The City of Augusta applied last fall for a Community Development Block Grant (CDBG) on behalf of the Greater Augusta Utility District (the District).

The District can not apply for CDBG money as it is not a municipal entity.

Thanks to the hard work of the City and expedited planning by the District's engineers, the grant was awarded earlier this year.

The grant will pay for a section of sewer pipe that needs to be replaced as part of the upcoming combined sewer overflow (CSO) pro-

ject along Bond Brook.

The CSO project is required by the Clean Water Act which is enforced in Maine by the Maine Department of Environmental Protection.

CSO's occur when it rains and certain pipes overflow raw sewage into streams or the river.

The State of Maine has a low interest loan program that is funded in part by bonds approved by the voters of Maine.

There are very few grant opportunities for a utility that is the size of the District. Smaller utilities have



more opportunities for grants while larger utilities have more customers to absorb debt costs.

The CDBG award is great news and will reduce the total cost of this project which has been estimated at

\$17 million.

This project is already underway. Work is ongoing at the wastewater plant to make sure it complies with more stringent water quality standards in the Kennebec River.

### Your board of trustees

Many people think that the Greater Augusta Utility District is part of the City of Augusta. It isn't.

The District is a standalone quasi-municipal entity. Its roots go back to 1903 when the Augusta Water District was formed from a private water company.

Today, the District is a regional public utility that owns, operates and maintains water, sewer and stormwater infrastructure.

The District is governed by a Board of Trustees as spelled out by the District's charter. The charter is a legal document that was enacted by the Maine State Legislature.

The Board oversees the operation of the District, approves policies, reviews financial performance, sets rates and enables the District to take out loans for projects.

The Board is made up of 9 people. 7 of them have voting rights and 2 of them are "ex-officio" or non-voting members. Each city has one ex-officio representative on the Board.

7 of the Trustees are appointed by the Mayor of the City of Augusta. The other 2 members are appointed by the Mayor of the City of Hallowell. The majority of the city council in each city must also affirm the Mayor's appointment to the Board.

Board members are:

- Dick Bachelder, Hallowell
- John Charest, Augusta (ex-officio)
- Charlene Hamiwka, Treasurer, Augusta
- Ken Knight, Chair, Augusta
- Stephen Roberge, Clerk, Augusta
- Don Roberts, Augusta
- Jim Simpson, Hallowell (ex-officio)
- David Smith, Vice Chair, Augusta
- Thomas Sotir, Augusta

Trustees are appointed to 3 year terms.

The Board meets at least monthly. The date and time of the meeting is published in the legal section of the Kennebec Journal and online at [www.augustawater.org](http://www.augustawater.org).

## Billing Statements Now Online



In late 2007 water and sewer bills were combined to the same document. Since then, customers have asked whether or not they can pay their bills online or with credit cards.

In March, 2010, the District was able to 'push' its billing information from its server to a secure server managed by our software vendor, Northern Data Systems located in Falmouth, Maine.

This allows you to look up account information if you know the account number and the exact location from the billing statement. The statement shows 12 previous transactions on the account, the name and address used to bill the account, the average number of gallons used each day and the cost of service per day.

The District has contracted with a company to provide debit and credit card service. The District will soon be able to accept debit and credit card payments. These payments will be accompanied by a convenience fee of \$3 for residential customers and a 3%

convenience fee for non-residential customers.

The District is exploring other convenient payment options including electronic funds transfer directly from an authorized bank account.

Another method you can do today is have your financial institution write a check from your account to the District. This may be an electronic payment or your bank may send a check to the District on your behalf.

The link to look at billing statements online is:

<http://www.augustawater.org/bill.html>

Enter the information requested exactly as it appears on your printed bill.

Account Number	<input type="text"/>
Location	<input type="text"/>

Email [info@augustawater.org](mailto:info@augustawater.org) with questions or call (207) 622-3701.

## 2008 Lead & Copper Drinking Water Test Results

### Drinking water resources

Greater Augusta Utility  
District  
[www.augustawater.org](http://www.augustawater.org)  
(207) 622-3701

Maine Drinking Water  
Program  
[www.medwp.com](http://www.medwp.com)  
(207) 287-2070

Environmental Protection  
Agency  
[www.epa.gov/ogwdw/](http://www.epa.gov/ogwdw/)  
Hotline: (800) 426-4791

The District collected 30 lead and copper samples in the fall of 2008 in accordance with the Lead and Copper Rule section of the Safe Drinking Water Act.

Lead and copper tests showed levels that were below the regulatory action levels. However, some homeowners found higher than desired levels.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

If you are concerned about lead in your water, you may wish to have your water tested.

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at:

<http://www.epa.gov/safewater/lead/>

### The EPA wants you to know...

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

## Where Does My Drinking Water Come From?

In 2009, your drinking water came from one of the following locations:

- Brookside Well, Augusta
- Triangle Well, Augusta
- South Well, Augusta

In 2009, over 632 million gallons of water were supplied from the three wells.

Sodium hypochlorite is added to reduce the risk of bacteria and viruses in the distribution system. Sodium fluoride is added to help protect teeth. Calciquest 75 / 25 is added to reduce lead and copper levels.

## Source Water Assessment

The sources of drinking water include rivers, lakes, ponds and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material and can pick up substances resulting from human or animal activity. The Maine Drinking Water Program (DWP) has evaluated all public water supplies as part of the Source Water Assessment Program (SWAP). The assessments included geology, hydrology, land uses, water testing information, and the extent of land ownership or protection by local ordinance to see how likely our drinking water source is to being contaminated by human activities in the future. Assessment results are available at public water suppliers, town offices, and the DWP. For more information about the SWAP, please contact the DWP at 287-2070.

## What's In The Water?

All sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

1. *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
2. *Inorganic contaminants*, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

3. *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

4. *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

5. *Radioactive contaminants*, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems.

FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## 2009 Greater Augusta Utility District Drinking Water Quality

Distribution system samples	Monitored Constituent	Maximum Contaminant Level Goal (MCLG)	Maximum Contaminant Level (MCL)	Finished Water Quality			Major Sources in Drinking Water
	Total Coliform Bacteria	0	1 positive sample/ month	0 (zero) positive sample out of 316. 24 - 32 samples collected monthly.			Naturally occurring in the environment.
	Haloacetic acids (ppb)	0	60	total Haloacetic acid <5 ppb			By-product of drinking water chlorination. Data shown represent surface and ground
	Trihalomethanes (ppb)	0	80	total Trihalomethanes 34 ppb			By-product of drinking water chlorination. Data shown represent surface and ground
	Copper, (ppm)	1.3	Action level = 1.3	90 <sup>th</sup> percentile, 0.330 ppm			Corrosion of household plumbing.
	Lead, (ppb) - <b>Note 1</b>	0	Action level = 15	90 <sup>th</sup> percentile, 9.0 ppb			Corrosion of household plumbing.
	Fluoride, ppm - <b>Note 2</b>	4	4	1.55 max/ 1.21 average			Water additive which promotes strong teeth; optimal dose in Maine is 1.20 ppm.
Aesthetic constituents	Monitored Constituent	MCLG	MCL	Brookside Well	Triangle Well	South Well	Interpretation of water quality results
	Color (units)	n/a	15	<5	<5	<5	Color is very low.
	Chloride (ppm)	n/a	250	37	21	41	Chloride is very low.
	Hardness (ppm as Ca <sup>2+</sup> )	n/a	500	118.6	134.5	136	Surface water is soft. Well water is considered moderately hard.
	Iron (ppm)	n/a	0.3	<.025	<.025	<.0250	Iron is typically very low.
	Manganese (ppm)	n/a	0.05	<.0010	<.0010	<.0010	Manganese is typically very low.
	pH	n/a	6.5-8.5	7.8	7.8	7.9	pH is slightly basic.
	Sodium (ppm)	n/a	100	14.6	9.3	13.2	Sodium is very low.
Source Water Samples	Arsenic (ppb)	0	10	4	3	5	Possible sources include erosion of natural deposits and runoff from orchards.
	Mercury (ppb)	2	2	<.0500	<.0500	<.0500	Possible sources include air deposition from factories, runoff from cropland or chemical contamination.
	Nitrate (ppm)	10	10	0.23	0.23	0.23	Sources include fertilizer, septic leaching and erosion of natural deposits.
	Nitrite (ppm)	1	1	<.0100	<.0100	<.0100	Sources include fertilizer, septic leaching and erosion of natural deposits.
	Radon (pCi/l) - <b>Note 3</b>			869	929	1,340	Natural radioactive decay of bedrock
	Herbicides	In 2008, our system was granted a "Synthetic Organics Waiver". This is a three year exemption from the testing/monitoring requirements for pesticides, herbicides, fungicides and other industrial chemicals. This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of the water source.					
	Pesticides						
VOC (Volatile organic compounds)			None Detected	None Detected	None Detected	Contact the District for more information about VOC testing.	

**PPB:** Parts per billion      **PPM:** Parts per million      **pCi/L:** Picocuries per liter.

**Action level:** The concentration of a contaminant which, if exceeded, triggers other requirements which a water system must follow.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

1. Action levels are measured at consumer's tap. 90% of the tests must be equal to or below the action level. Data shown are from 30 samples collected from residential customers in August, 2008.
2. Fluoride levels must be maintained between 1-2 ppm, for those water systems that fluoridate water. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
3. Radon samples were collected on 5/15/2006. Radon is found in the soil and bedrock formations and is a water soluble, gaseous byproduct of uranium. Most radon is released to the air moments after turning on the tap. The State of Maine adopted a Maximum Exposure Guideline (MEG) for radon in drinking water at 4,000 pCi/L, effective 1/1/07. If Radon exceeds the MEG in water, treatment is recommended. It is also advisable to test indoor air for radon. The U.S. EPA is proposing setting federal standards for radon in public drinking water.

## Combined Sewer Overflows (CSO's) in Augusta

A “combined sewer” is a sewer system that carries both human waste (sewer) and rainwater (stormwater). Under certain heavy precipitation or snowmelt events, combined sewers can “overflow” meaning that there isn’t enough room in the pipe to carry the human waste and rainwater. Overflows typically flow into a stream or a river.

In Augusta and Hallowell, there are a total of 24 CSO outfalls. This means that there are 24 different pipes that can discharge human

waste along with rainwater to a river or stream.

In May, 2008, the District began the engineering for the third phase of a four phase project.

Phase 1 involved plant upgrades to accommodate the increased flow from stormwater inputs.

Phase 2 created a massive pipe next to the Rail Trail that slows and stores wastewater for treatment.

Phase 3 engineering is anticipated to take 9 months to a year, followed by a 2 year

construction process.

The Phase 3 project (CSO3) will upgrade a flow control structure underneath the Rail Trail, and improve wastewater plant systems to meet Clean Water Act requirements. This work will be done by the summer of 2010.

Two existing pump stations will be replaced with one new station. This is a major collection system upgrade along Bond Brook that will continue to Mill Park. This project will begin in late 2010 and should be com-

plete by the end of 2012.

The total cost of these projects is expected to be approximately \$17 million. This will depend on the final route of pipes, depth of excavation and cost of materials and labor.

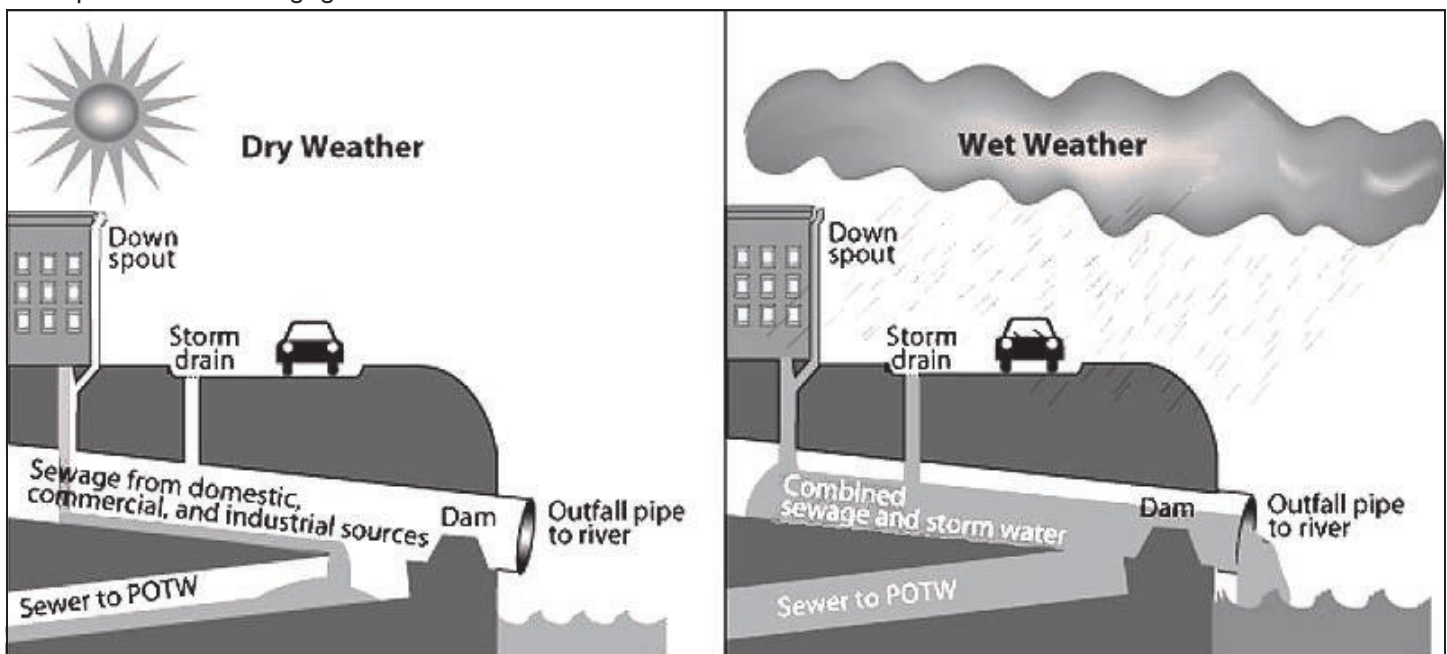
Reduced cost funding for these projects is being obtained via state and federally subsidized loans administered by the Maine Municipal Bond Bank.

## What is a combined sewer overflow?

The drawing below shows how a combined sewer works in both wet and dry weather.

When it’s dry, no water is flowing down the storm drain so the system can handle all the water and send it all to the treatment plant. Wastewater treatment plants are also called “Publicly Owned Treatment Works”, or POTW.

When it rains, you can see that so much water flows into the storm drain that the system can’t take it all, so it flows out to the river instead. When the combined sewer and stormwater overflows, it’s a “combined sewer overflow”. If the sewer didn’t overflow, it could back up into streets or buildings. The new projects seek to treat as much stormwater as possible through the treatment plant before discharging it to the Kennebec River.



## Greater Augusta Utility District

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Augusta, ME 04330

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Email: [info@augustawater.org](mailto:info@augustawater.org)  
[www.augustawater.org](http://www.augustawater.org)



## “My basement is flooded...”

Each year, a handful of people call the District regarding water in their basement. Sometimes a water pipe freezes and breaks and causes the damage. Other times, the sewer backs up into the basement. Regardless of the cause, this is an unwanted hardship.

Depending on how the water got into your basement and whether or not it is wastewater or drinking water, the owner’s insurance or the District’s may cover it. Far too often however, the damage is not covered.

Property owners should contact their insurance agent about endorsement HO 04 95, “Water Back-up and Sump Discharge or Overflow” for loss caused by water or waterborne material that backs up through sewers or

drains or overflows or is discharged from a sump, sump pump or related equipment. Owners that need a sump pump to keep the basement dry or have had sewer backups in the past should consider this protection.

A common cause of flooded basements is a frozen water pipe.

Here are some ways to help reduce the risk of a flooded basement.

- If you take a winter vacation, shut off the water at the meter itself and have someone check your house daily to insure it hasn’t frozen.
- Turn off the valves to toilets that don’t get much use. The most common cause of unwanted water

use is a leaky toilet.

- If you expect a property to be vacant for a long time, consider shutting off the water at the District’s shut-off located at the property line. There is a \$25 fee to turn it back on. Have a plumber help you winterize the structure by completely draining pipes. This eliminates the chance of an outside spigot freezing or a toilet running while the structure is unoccupied.

Most people don’t worry about flooded basements until after it happens. Don’t assume you will be covered and take common sense steps to reduce your risk.