

Acton Water District

WINTER 2009

Water Words Notice

In these challenging economic times, consumers contemplate and stress the value of goods and services for which they pay. Providing a public service, we will always strive to give you the best value for your hard earned dollar. As we survey the current landscape, cost escalations in materials and services are being recognized everywhere, and we are not immune. Although these cost increases may be invisible to our customers, we are seeing a substantial rise in cost of the chemicals that we buy and many of the materials that we use. We are currently constructing a water treatment plant to service the Kennedy and Marshall wells in North Acton, and during this process have seen the direct results of suppliers' costs rising. Additionally, our energy costs, like yours, are rising, adding to an even greater cost of doing business. We must weigh the balance of what is priority, and what should wait in order to alleviate potential strain on our current fiscal budget.

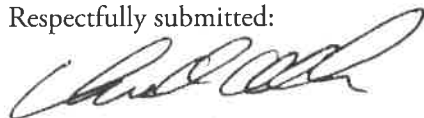
Budgeting for the forthcoming fiscal year has become extremely challenging in this exceedingly volatile market. Predicting what costs will do is nearly impossible. Due to instability in the financial world, we are experiencing challenges in borrowing money. We are evaluating the possibility of bonding projects for short term versus long term due to rising interest rates. With the construction of the Kennedy-Marshall treatment plant, we are taking on the highest rate of debt ever in the history of the Acton Water District. One or two percentage points will make a huge difference to our bond debt load, and financing these projects at the lowest rate possible is paramount as it allows us to keep costs down as much as possible for as long as possible.

We often compare ourselves to others in our industry with communities of like size and demographic. We also look quite closely at the value of our service versus the other utility suppliers, i.e., gas, and/or fuel oil, and electric. From a value standpoint, we feel that the Acton Water District is very competitive. We have neither the highest, nor the lowest water rates in the state. We believe, compared to other utilities whose rates increase with much more frequency, we provide considerable value per unit sold.

While we strive to absorb many of the cost increases inherent to our business, periodic rate increases are "the nature of the beast." In order to continue to pump, treat, and filter our source waters to meet ever increasing regulation, maintain public health and fire protection, and build new treatment plants, future rate increases are inevitable.

I would like to thank all of the employees of the Acton Water District for their support, and the professionalism they demonstrate every day. I would also like to thank all of our customers in North Acton for their patience enduring some persistent aesthetic water quality issues. We look forward to enjoying, with you, the high quality water that will soon be delivered by the new state-of-the-art Kennedy-Marshall treatment plant. I wish all of you a happy, healthy and prosperous New Year.

Respectfully submitted:



Chris Allen

District Manager



The Kennedy-Marshall Treatment Plant required much steel rebar reinforcement. The skyrocketing cost of steel is one of the reasons construction costs have escalated.

North Acton's Kennedy Marshall Treatment plant is on schedule for completion in July of 2009.



Kennedy/Marshall Treatment Plant on Schedule for Completion

The Kennedy and Marshall Wellfields are the main sources supplying public drinking water in North Acton. As many of our customers in this area are aware, we have had persistent occurrences of aesthetic water quality problems—primarily organic color, manganese, and iron—in these sources. After extensive piloting, the treatment technology that was most able to consistently remove the high levels of raw water manganese and color was the Zenon ultrafiltration membrane system. This system is significantly more complex than treatment processes utilized up to this point by the Acton Water District. Although ultrafiltration can remove particles down to 0.01 microns in diameter, it cannot adequately remove the dissolved iron and manganese present in the water in the Kennedy Marshall wellfield, thus additional pre-filtration processes are needed.

The projected cost for the construction of the water treatment plant at the Kennedy-Marshall well site increased dramatically since the first estimates were obtained. The initial proposal from the District's engineering firm, Wright-Pierce, was in the neighborhood of \$3.3 million, whereas the last submittal from that company placed a \$5.3 million price tag on the total project. This significant increase was due to construction and material costs rising considerably. Voters at the Water District's March 19, 2008 annual meeting approved an additional appropriation of \$880,000 for the project to proceed.

The Acton Water District is happy to report that treatment plant construction is proceeding according to schedule, and we are on schedule for a July 19, 2009 start up. This new treatment plant represents a whole new chapter in water treatment for the Water District, and we are gearing up for its opening. Prior to startup, the mains in North Acton will be flushed thoroughly to remove built up iron and manganese sediment so that clean water is not pumped into dirty mains.

We expect that our North Acton customers will be pleased with the improvement in water quality that they experience once the plant is online. Customers seeking more information on the Kennedy Marshall treatment plant can go to www.actonwater.com and click on the "current projects" link.

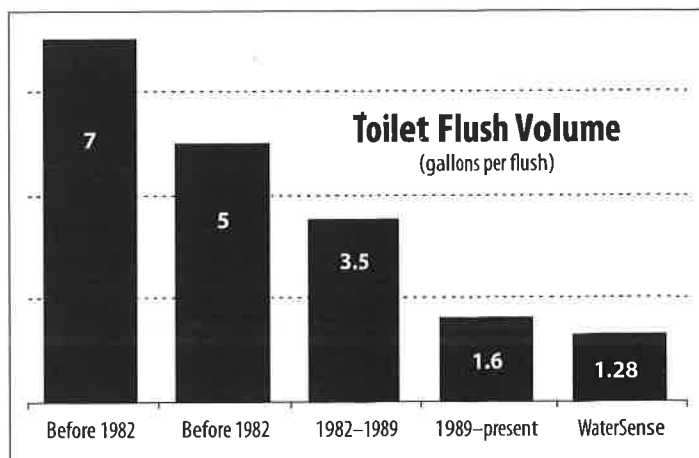
Conservation Rebates Program Launches January 2009

Toilets and clothes washers are generally the top two water-consuming appliances in the home. By replacing older inefficient models with new ones, water customers can save water and shrink their water bills. The Acton Water District is encouraging residents to install water-efficient appliances by offering a \$50 rebate toward the cost of a new WaterSense labeled toilet and \$100 for a water-efficient clothes washer.

Why replace a toilet? According to a study conducted by the American Water Works Association, toilets account for nearly 27% of water used in the home. Toilets installed before 1982 use between five and seven gallons per flush; with models installed during the 1980s using 3.5 gallons. Today's toilets use less than half that amount of water, with EPA WaterSense labeled toilets using no more than 1.28 gallons per flush.

Why replace a clothes washer? Clothes washers are usually the second largest water-consuming appliance in homes, and generally account for more than 20% of indoor water use. By choosing a high-efficiency model, you will save energy, water, and money on your utility bills. Studies have shown that these new washers are also gentler on your clothes. Conventional top-loading washers use a large vertical drum. Most high-efficiency washers load from the front and utilize a horizontal-axis to tumble clothes up and down through a much smaller pool of water.

Two toilet rebates and one washing machine rebate will be allowed per household. To qualify for a rebate, you must be an Acton Water District residential account holder with an account in good standing. **Rebates are good for purchases made from January 1 to May 1, 2009.** To get a toilet rebate, you must be installing an EPA WaterSense labeled toilet. For a washing machine rebate, you must be installing a high-efficiency clothes washer that appears on the Consortium of Energy Efficiency (CEE)



qualifying list at Tier 3. By June 1, 2009, you must submit your rebate application, along with a receipt showing proof of purchase and model numbers, to the Acton Water District. Once approved, your rebate will appear as a credit on your water bill. Rebate application forms, as well as lists of eligible toilets and clothes washers, are available at the Acton Water District office, and at www.actonwater.com on the conservation rebates page.

Did you Know?

Having your home supplied by public water has many benefits, including carefree service, cost-sharing efficiencies, and regulatory and professional oversight. Not many people know that another one of the benefits of public water is that having a functional water hydrant near your home saves you a lot of money on your homeowners insurance.

The availability of a nearby hydrant puts you in a different protection class for homeowners insurance, as it is less likely that the home will be destroyed by a fire. When you apply for homeowners insurance, the insurer will consider the proximity of a fire hydrant to your home. Depending upon the particulars of their residence, if a fire hydrant is nearby, most homeowners will save from \$150 to \$200 each year in insurance costs!

Now that winter is here, please remember to keep any hydrants near your home cleared of snow. It is important that they are readily accessible for any emergencies.



Having an operational fire hydrant near your home reduces your homeowners' insurance premiums.

Reduce your Carbon Footprint— Save Water!

As a greater awareness of global warming develops, many people have been searching for ways to reduce their “carbon footprint” on the planet. A **carbon footprint** is a measure of the impact our activities have on the environment, and in particular climate change. It relates to the amount of greenhouse gases produced in our day-to-day lives through burning fossil fuels for things like electricity, heating and transportation.

While most of us are aware of the need to conserve water for the sake of our water resources, not many people think about the fact that saving water can also do a lot to reduce your carbon footprint.

The energy costs of delivering drinking water to a household can be high, as they involve a myriad of processes that water must undergo, from being pumped from the source, sent through a series of treatment processes, pumped into storage, then delivered (sometimes great distances) to the point of use. Once in the home, a fraction of that water will then be heated, requiring even more energy input. And to be even more complete in our thinking, let's not forget the energy costs of then disposing of the (waste) water. The U.S. Department of Energy states that an estimated 3% of national energy consumption, equivalent to approximately 56 billion kilowatt-hours (kWh) is used for drinking water and wastewater services alone.

Reducing hot water use is a particularly effective way to reduce your carbon footprint. Here are a few simple things you can do that cost very little, yet yield a triple payback by reducing your carbon footprint, your energy *and* water bills!

- The simplest way is to lower the thermostat setting on your water heater. Although some manufacturers set water heater thermostats at 140°F, most households don't require them set any higher than 120°F. For each 10°F reduction in water temperature, you can save between 3%–5% in energy costs. Reducing your water temperature to 120°F also slows mineral buildup and corrosion in your water heater and pipes. This helps your water heater last longer and operate at its maximum efficiency.
- You may be surprised to realize that a family of four, showering just five minutes a day each day with a regular-flow shower head, uses almost 700 gallons of water in one week! That amount can be cut in half if you use a low-flow shower head (available for free at the Acton Water District). Consider that all of those 700 gallons of water had to be heated before it was used, and you'll realize that the savings of 350 gallons per week really adds up!
- Insulate your hot water tank and your hot water pipes. Unless your water heater's storage tank already has a high R-value of insulation (at least R-24) adding insulation to it can reduce standby heat losses by 25%–45%. This will save you around 4%–9% in water heating costs. If you don't know your water heater tank's R-value, touch it. A tank that's warm to the touch needs additional insulation.
- Install water and energy efficient clothes and dishwashers (see preceding conservation rebates article).

Acton Water



District

P.O. Box 953
Acton, MA 01720

Prsrt Std
US Postage
PAID
Permit #134
Acton, MA

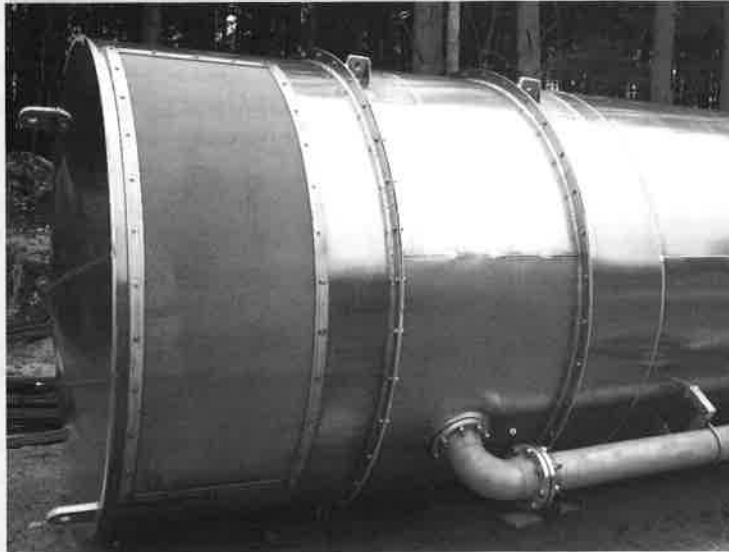
Water Words Notice
is published twice a year
for all customers of the
Acton Water District

District Manager
Chris Allen
Editor
Jane Ceraso

Commissioners
Leonard Phillips
Stephen Stuntz
Ronald Parenti

Design & Production
David Gerratt
Amanda Wait
DG Communications/
NonProfitDesign.com

Printed on Recycled Paper



What is it?

Please email your answers
to webgeek@actonwater.com.
Winners (and the correct answer)
will be posted in the next Water
Words Notice.

What was it?

No one correctly identified the mystery photo from the Summer 2008 Water Words Notice—it was a tricky one! The photo is of the old storm drain basin that had been excavated prior to its replacement with a new and improved Filterra unit, installed near the Kennedy and Marshall wells to provide better filtration and recharge.

