Acton Water District

WINTER 2012

Water Words Notice

The summer of 2012 was an active one for us here at the Acton Water District. We completed the pilot testing of filtration technologies for our South Acton groundwater sources, and will be moving rapidly through the bidding and construction process. A comprehensive master planning and financing initiative was begun to catalog, prioritize, and fund our infrastructure improvements and upgrades. Finally, our efforts to reach out to the community and educate them on our water system and conservation efforts continued.

The winter of 2011–2012 was mild and relatively devoid of snow. This lack of snow pack caused us to move into a dry spring and early summer with a diminishing groundwater table. During the summer, we put our system of supply, treatment, distribution, and storage through the paces. During certain periods we even saw our storage volume depleting rapidly due to significant demand for outdoor water. Concurrent to these periods, we also observed significant non-compliance with our calendar triggered outdoor water use program. This program is a requirement of our Water Management Act Permit issued by the Massachusetts Department of Environmental Protection (Mass DEP), our regulatory primacy agency. Our sincere appreciation goes to those customers who implement water conservation measures in their day-to-day lives in addition to adhering to our outdoor water use program. This is of critical importance to our sustainability and responsible operation of the water system.

With about 130 miles of water pipes under the streets of Acton, some of which are a century old, we must remain vigilant in prioritizing infrastructure improvements amidst all of our other responsibilities. Filtration of our sources to remove contaminants is a high priority, but without the ability to reliably get that product to your tap we fail at our primary mission, providing potable, palatable water to all water takers. With a perennial article for the procurement of funds to improve the pipes that provide that transmission conduit, we are set upon the appropriate path. With that, we are confident that in the not too distant future we will enact a proactive program for system improvements to keep the integrity of our distribution system intact and operating at a high level of reliability.

Respectfully submitted,

Chris Allen
District Manager

Changing Face of the Acton Water District

In the past two years, we have reported the retirement of two long-term water operators, Bob Koch in 2011 after 30 years and Paul McGovern in 2012 after 24 years. The District Manager and Senior Operations staff reviewed the needs and skills for a new water operator during the past several months and we are pleased to welcome Matthew Walsh to the Water District.

Matt comes to us from the Town of Pepperell Water Department and brings almost 20 years of experience in water supply operations. He credits entering this line of work to his father, who served as the Superintendent for the Groton Water Department. His career started with the Littleton Water Department and has included both public and private sector work. Matt currently holds grade two Treatment and Distribution Licenses for Drinking Water Facilities in addition to a Backflow Inspector License.

Matt and his wife currently live in Pepperell, MA where they have horses and enjoy gardening. He looks forward to the winter months when he can enjoy snowmobiling. Hopefully Matt will bring a good winter snowpack with him to Acton! If you see him out and about Town be sure to say hello.

Matthew Walsh has recently joined the Acton Water District.

South Acton Water Treatment Plant

The long awaited completion of the filtration pilot study for South Acton has been achieved. We contracted with Blueleaf Incorporated to test two membrane filtration technologies, similar to that of the North Acton Water Treatment Plant, manufactured by General Electric and Pall Corporation. Both systems performed admirably, and we now must decide which will provide the most sustainable filtration scheme based on the upfront and ongoing capital costs, operation and maintenance costs, and existing and emerging regulations. This project is predicted to cost $12 million, and, thusly, required our governance to implement changes in our billing. We applied for, and received approval for a 2% fixed interest loan through the Massachusetts Water Pollution Abatement Trust State Revolving Fund. This will provide some relief to our rate payers, saving approximately $1.8 million over the life of the 20-year debt.

The Board of Water Commissioners approved, upon recommendation of the Finance Committee, the implementation of a "Bond Debt Fee" that will be seen by customers beginning with the January 2013 water bills. The fee, which will be $14.75 per unit served, per quarter, will pay for the debt payments for the North Acton Water Treatment Plant, currently costing $472,500 per year. This fee will pay only for the bonded debt and will rise and fall as the debt increases or decreases. As the South Acton debt is incurred, customers may see this fee rise to around $50 per unit, per quarter until that debt begins to be paid down.

Your water bill will now be made up of three distinct charges:

Service Fee—currently $15 per unit, per quarter to cover the actual cost of reading your meter and producing a quarterly bill.

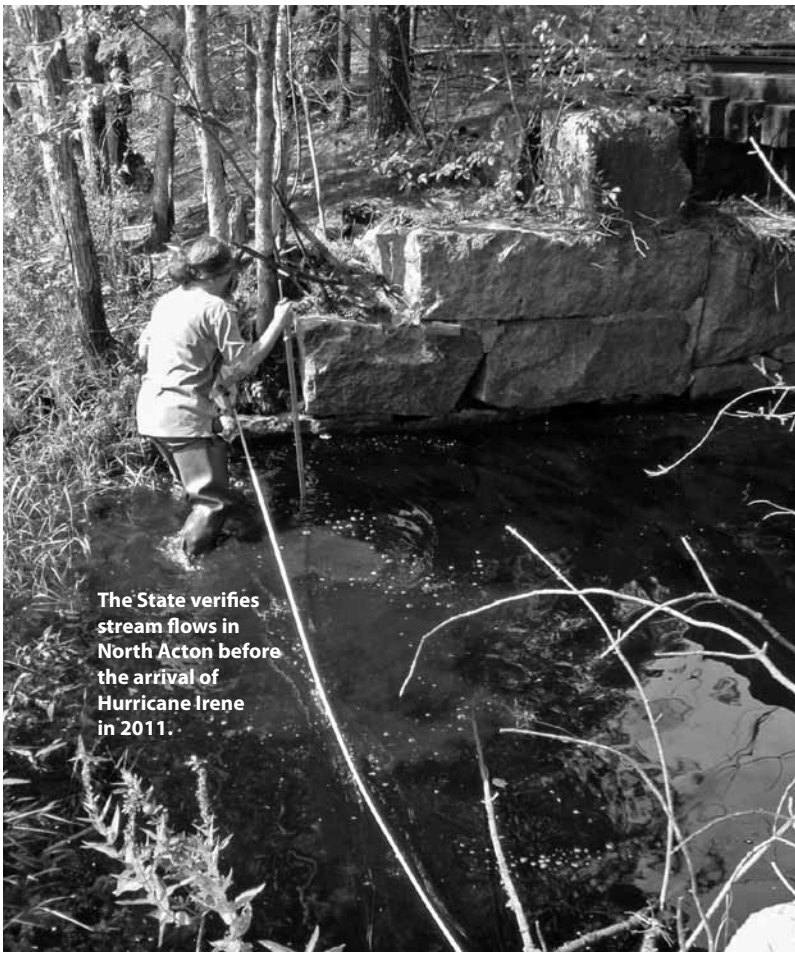
Bond Debt Fee—a variable amount per unit, per quarter based on current annual debt payments.

Water Use—water rate based on the actual water used by a customer in accordance with our seasonal inclining block rates.

Our Precious Natural Resources

In the early spring it looked as though we would be entering a long, dry summer. This caused us to take pause and acknowledge our position in the natural water cycle. With little snow fall, and therefore little spring recharge to our aquifers, we began to observe June groundwater levels as early as April. Fortunately, conditions have improved but it is a good talking point with our customers, to discuss the need for water efficiency and conservation. Our conservation and efficiency initiatives have evolved over the years since the early 1980's depending on the most pressing needs of the time. Along the way, loss of sources to contamination, regulations, permit requirements, increased irrigation, and a host of other things have compelled us to use our water wisely. As we continue forward as a community, we should consider the place of our own individual water use habits in the context of our natural world.

For a community the size of Acton, it is unique in both its natural and engineered water systems. All of our water is drawn from groundwater wells located within the Town of Acton. It is true that the aquifers that supply these wells cross many communities, but our ability to access these aquifers is local. In disposing of our wastewater, most of this is returned to our aquifers or local water bodies through septic systems, clustered wastewater plants, and the sewered portions of South Acton and Kelly's Corner. This is in contrast to many nearby communities or ones that we may have moved from



The State verifies stream flows in North Acton before the arrival of Hurricane Irene in 2011.

or grown up in. Water is usually shipped in or shipped out, sometimes even both, creating the potential for a serious alteration of the natural water cycle. Here in Acton, we do not import or export our water, which means we have more control, and therefore greater responsibility, to address our water and wastewater systems. We all need to be mindful of what we dispose of down our drains, how much water we use during the summer months when it is least plentiful, and increasingly, how we deal with our storm water and balance aquifer recharge and protection needs with new and existing development.

For more information, please visit our website *www.actonwater.com* to view presentations made during our Centennial Celebration on May 5th. The presenters were your friends and neighbors who happen to be experts on various water related topics, including the important concepts outlined here. You can also track local hydrologic conditions on the United States Geological Survey (USGS) website at *http://ma.water.usgs.gov*. The USGS maintains a groundwater monitoring well (**422812071244401**) at the intersection of Route 2 and Wetherbee Street and has a stream gauge (**01097300**) on Nashoba Brook at the end of Wheeler Lane.

Consumer Information Resources

Massachusetts Department of Environmental Protection
http://www.mass.gov/dep/water/wastewater/septicsy.htm
http://www.mass.gov/dep/water/drinking/donts.htm

Home Water Works (Alliance for Water Efficiency)
http://www.home-water-works.org

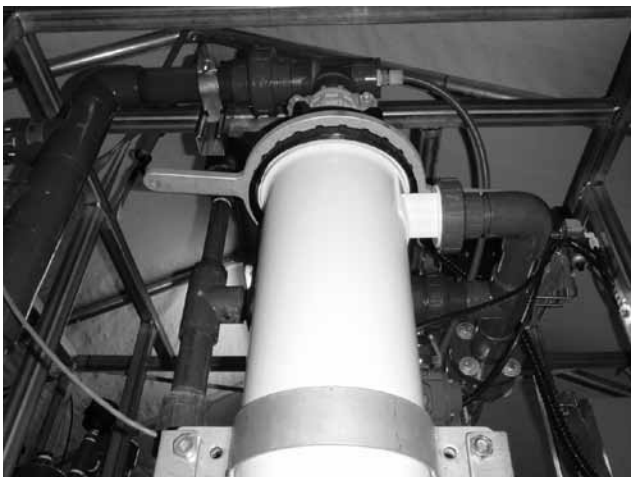
United States Environmental Protection Agency
http://water.epa.gov/drink/info/index.cfm

Encroaching on Public Land

Managers of public land in Acton have competing goals and challenges. One common management issue between these interests is encroachment onto public lands. Common examples of encroachment include dumping of construction materials, old electronics, and other large items on conservation land and water supply protection land. Also observed in Acton is all terrain vehicle use that causes erosion and plant damage, dumping of lawn and landscape debris, as well as overgrown trees and shrubs in roadways, utility easements, and sidewalks. Other more intrusive instances of encroachment include extending fences, out buildings, and manicured landscaping onto public property. No matter the size or type of encroachment, it inhibits our public land manager's ability to properly protect, manage and maintain the public's land, your land. Encroachments also remove or impede the land from public use.

As a customer, you may wonder why the Water District is writing about this topic and why you should care. The simple answer is, because it impacts your collective interest in public space and more importantly your public water supply. All of these activities can have a financial impact through legal fees, clean up, disposal, and restoration costs, staff and police time, and monitoring of activities. In the case of public water supply land, it can also harm water quality and jeopardize regulatory compliance.

During the course of the past two years, the District has been taking steps to resolve a major instance of encroachment on our land surrounding two of our wells by a neighboring business. In March 2012, the Massachusetts Department of Environmental Protection (MassDEP) issued a Notice of Non-Compliance (NON) to the District for this land encroachment. As our customers, you have the right to know about this situation and the steps we are taking to remedy it. To date, we have delineated the property bounds, tried working with the neighbor, initiated legal proceedings, instituted monitoring of the encroachment, and have been working with MassDEP. We will continue to update our customers as needed until the issue is resolved.



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*.

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

District Manager
Chris Allen
Editor
Matthew Mostoller

Commissioners
Leonard Phillips
Stephen Stuntz
Ronald Parenti

Design & Production
David Gerratt
NonProfitDesign.com

Printed on Recycled Paper

P.O. Box 953
Acton, MA 01720

Adopt a Hydrant

The Acton Water District and the Acton Fire Department ask that all residents consider "adopting" a fire hydrant this upcoming winter. If there is a fire hydrant close to your home please consider taking a few minutes to clear away any snow from it so that it is easily accessible in case of a fire emergency. Clearing a path to the hydrant and a three foot radius around the hydrant insures full access during a fire. This could save precious minutes in critical fire situations; your family's and neighbor's safety could depend on it. When plowing or shoveling, avoid piling snow in front of or on hydrants as this may damage the hydrant. Your cooperation is greatly appreciated!