

Quality on Tap

Davidson Water, Inc.

# Davidson Water Inc.

2009 NEWSLETTER

## Quality on Tap

### Source Water Protection

Our planned water plant expansion will help us provide excellent water, but to ensure quality water at a reasonable cost our source water must also be protected. Davidson Water, Inc. will continue to enhance our state approved Source Water Protection Plan. The cleaner our source water, the easier and more economical it is to process at the filtration plant. The Davidson County Commissioners recently approved a new

land management plan that will help to accomplish this. Davidson County Soil and Erosion continues to help improve our water ways and prevent erosion. New farming techniques also help keep our streams clean. Keeping our road ways clean especially close to stream crossings is instrumental in protecting our water. Utilization of our landfills is another help in keeping our water safe. Help us keep our water ways safe and clean.

### Davidson Water, Inc. Scholarship Winners 2009

Davidson Water, Inc. has established a scholarship program in memory of all past board members who volunteered their time, knowledge and expertise to form and operate a water system in order to provide safe and affordable water for present and future generations. Four scholarships of \$1000 each are awarded to deserving high school seniors who plan to enter a four-year degree program.

#### 2009 SCHOLARSHIP WINNERS

**Emily Albright** — Graduated from East Davidson, will be attending Liberty University

**Emily Darr** — Graduated from Ledford, will be attending NC State University

**Matthew Sechler** — Graduated from West Davidson, will be attending Wake Forest University

**Shawn Swing** — Graduated from West Davidson, will be attending UNC Charlotte

Scholarship applications for next year will be available on our website or from your school guidance counselor by January 31, 2010.

### Water Treatment Plant Upgrade

Davidson Water, Inc. celebrated 40 years of providing water to you our members in May of 2009. In 1969 when our system started, we had 2,800 connections and a 2 million gallons a day water plant. Today we have over 58,000 connections and the water plant has been increased to a 20 millions gallon a day plant through several different expansions. Many improvements through the years have been made at our plant and in the distribution system. Growth in certain areas of our system, has dictated the need for new elevated water tanks, transmission lines and pump stations. Generators installed at our plant and key pump stations have been utilized to reduce power bills by load management and to keep customers in water during several major ice storms when power was interrupted for days and even weeks.

The droughts of 1986-1987, 1998-2002 and 2007-2008 have made us realize the need for better intakes on the river that can provide water during low river flows and meet our needs today and in the future.

In 2010 we hope to begin major improvements at our C O Pickle Water Filtration Facility. A new river intake at the lowest level of the river with a network of Johnson Screens keeping flow from the river well below 1/2 feet per second, makes this intake more environmentally friendly and energy efficient. The intake structure would be capable of producing up to 60 million gallons a day, looking at needs into the future. At 30 million gallons a day, the maximum expected need until 2030, the flow will be at only 1/4 feet per second, reducing silt and other components from entering our reservoirs. We will be able

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to backwash our river screens with water or air when needed. Constructed with the river intake will be a pump station built above the 100 year flood plane, capable of pumping 40 mgd and easily expandable in 10 mgd increments. These pumps can feed water directly into any of the three reservoirs if any one is taken out of service. By sequencing the water through each reservoir, we will get the longest detention time and more consistent water quality going to the water plant for treatment. The newer reservoirs are also out of the 100 year flood plane and if flooding occurs they can be utilized directly. We will have a new raw water pump station with pumps that will pull out of either of the reservoirs or directly off the river pumps. With the new reservoir we will have a total of 150 million gallons of storage. If the river becomes contaminated, we can utilize our reservoirs for several days while waiting for contaminants to pass by.

We will be building a new 10 mgd plant next to our existing 20 mgd plant, which will be expandable in increments of 10 mgd. Both plants will be able to utilize the new river intake, river pumps, raw water pumps, reservoirs, as well as new clearwells, rapid mix, sludge equipment, high service

pumps and GAC contactors. The new plant will be a conventional plant with new flash mix, flocculators, enhanced sedimentation basins with Lamella plates track vac's, filters, chemical storage and SCADA. A new 5 mg clearwell, and high service pump stations will also be added. New 30 mgd granular activated carbon contactor filters will be added for taste and odor control, reduction of disinfection by-products and overall water quality improvement. We hope to have our new facilities finished by December 2012. Marziano & McGougan Engineering will provide design and inspection for our new facilities. Allen Hart, Area Specialist for United States Department of Agriculture-Rural Development, is working hard to obtain long term low interest funding for our water treatment plant upgrade.

The Board of Directors, Management and staff are looking forward to making these capital improvements that will assure abundant quality water for generations to come.

## System Flushing

Due to increasing customer complaints relating to "red water issues", Davidson Water, Inc. initiated a unidirectional flushing program in late 2008 and continued in 2009. Utilizing our hydraulic model we determined which hydrants and blow-offs to utilize to produce a five feet per second flow and for what duration to create a scouring effect, cleaning and eliminating any sediment build up in our water pipe distribution system. Our maintenance and construction department supervisors helped in conjunction with several of our crews to complete this process. In November we will begin again with the process in areas we did not cover last year. A door hanger or a 911 call will be used to let our customers know when we will be in their neighborhood, so you will know not to do laundry during that time period. Millions of gallons of water have been used and hundreds of hours of manpower in this process to improve water quality. Because of the past droughts very little flushing was done in order to conserve water. The fire departments were not able to do their annual flow testing of hydrants the past several years, which also helps with cleansing the distribution system. This year the volunteer fire departments have returned to the flow testing of hydrants starting in October.

Our water plant superintendent initiated operational improvements at the C O Pickle Water Plant that will also help to eliminate future red water issues. We apologize for any inconvenience this may have caused.



## Water Rate Increase

Effective January 1, 2010

For more than 40 years Davidson Water, Inc. has provided extraordinary water quality to our customers, and we look forward to meeting the demands of our customers for another 40 years and beyond. To meet the demands of our customers we are continually upgrading the system and expanding our capacity to insure our customers have adequate access to safe reliable water. Davidson Water, Inc. is committed to delivering Quality on Tap at the lowest possible cost to our members. A rate increase effective on January 1, 2010 will be necessary to continue this commitment .

- This increase will be slightly more than \$1 per month for an average residential home.
- The average family water bill will be approximately \$20.00 a month.
- The increase for customers using 2,000 gallons per month or less will be only **\$0.35 per month** or **\$4.20 per year**.

GALLONS USED PER MONTH		CURRENT RATE	NEW RATES
0-2,000	Minimum	\$9.65	\$10.00
2,001-10,000	Per thousand	\$3.55	\$3.85
10,001-50,000	Per thousand	\$4.05	\$4.35
OVER 50,000	Per thousand	\$3.30	\$3.70

## Connection Fee Increase

Effective January 1, 2010

Davidson Water, Inc. is increasing the cost of new connections effective January 1, 2010. Connection fees not only pay for materials and installation costs in making new taps, but also help to pay for improvements to our water system in order to provide the additional capacity needed for these new connections.

CURRENT CONNECTION FEE		NEW CONNECTION FEE	
5/8" x 3/4"	\$1,350	5/8" x 3/4"	\$1,450
1"	\$3,050	1"	\$3,300
1 1/2"	\$5,050	1 1/2"	\$5,550
2"	\$7,050	2"	\$7,550

## Payment Options

Customers have many options when it comes to paying their water bills. In addition to stopping by the office or mailing your payment, we also offer online payment and automatic draft with no additional fee. For a \$2.00 convenience fee the water bill can be paid over the telephone with a debit or credit card. There are also several locations located throughout our service area that accept Davidson Water, Inc. payments. These locations charge a \$1.00 fee for their services. For more information on these locations please see our website at [www.davidsonwater.com](http://www.davidsonwater.com)

## Lawn Irrigation Systems

**EXISTING SYSTEMS:** All lawn irrigation systems connected to the Davidson Water, Inc. system are required to have a backflow preventer installed. Backflow preventers have internal seals, springs, and moving parts that are subject to fouling, wear, or fatigue. These devices must be tested annually to insure they are functioning properly. Visit [www.davidsonwater.com](http://www.davidsonwater.com) for more information on backflow prevention and a list of approved testers.

**NEW SYSTEM:** North Carolina law requires all new lawn irrigation systems must be supplied by a separate meter. All new irrigations systems will be inspected to ensure proper backflow prevention has been installed.