

IN THE PIPE

NEWSLETTER

Spring/Summer 2018



No. 22

WCSA's Galvanized Line Replacement Project: Providing Capacity for Many Years to Come

Beneath the hilly terrain contributing to Washington County's rugged beauty lies a 900-mile-long distribution system spread across 300 square miles — a network of pipe that provides water for WCSA's 22,000 connections, or nearly 50,000 people every day. If this piping were laid end-to-end, its length would stretch all the way from Virginia Beach to St. Louis, Missouri.

A majority of the pipeline was installed years ago without adequate planning or design for future growth. Small-diameter galvanized steel piping is believed to be among the oldest type of pipeline in WCSA's distribution system. As it ages, galvanized steel has a tendency to corrode from the outside, leading to frequent leaks and concerns about water quality. Extensive lengths of smaller lines contribute to pressure problems for customers, greater pumping costs and water outages.

WCSA is in the process of replacing all galvanized water line in its distribution system with new line hydraulically designed to meet existing and future water demand. At the outset of the project, approximately 8,000 of WCSA's 19,500 (at the time) residential connections, or 40 percent, were directly tapped off of galvanized lines, which then accounted for around 22 percent (or 200 miles) of WCSA's water piping. The elimination of galvanized line is expected to free up approximately 15 percent of WCSA's combined treatment capacity and water pumping, storage, transmission and distribution systems.

"Galvanized line has been the number one contributor to customer complaints related to both water quality and hydraulic deficiencies," says WCSA General Manager Robbie Cornett. "It has accounted for 86 percent of all inventoried leaks and



Galvanized Line Replacement Project Phase 2 – Benhams

breaks repaired by WCSA's crews, with an average total annual repair cost of \$270,000."

The Galvanized Line Replacement Project has been broken into three phases. Phase 1 was completed in early 2013, with 211,747 linear feet of new ductile iron (for large-diameter piping) and PVC (for smaller diameters). This phase improved service for the town of Abingdon, the town of Glade Spring, the Abingdon Elementary / Route 19 area, and the Lowry Hills area.

Construction on Phase 2 began in September 2015 and was completed in March 2017, with nearly 242,000 linear feet of new piping installed. Galvanized line was also replaced around Benhams and Reedy Creek; along Wyndale Road and at the northern end of Lee Highway; at Abingdon Elementary, Prices Bridge, DeBusk Mill and Cedar Creek; in areas of Westwood, Emory, Taylors Valley and Fishers Hollow; and in Stonegate Subdivision.

INSIDE

Continued on Page 3

WCSA Project Updates.....	2
Employee News.....	2
Did You Know?.....	3

WCSA Earns Top Ranking.....	4
WCSA Calendar and Board Meeting Schedule.....	4

WCSA Project Updates

To learn more about WCSA projects, visit www.wcsawater.com.

Ongoing Projects:

The **Mill Creek Water Treatment Plant Improvements Project** will provide a new membrane filtration system and additional repairs, replacements and upgrades to the water treatment plant. Construction began in February 2017 and is nearing completion.

The **Exit 13 Phase 3 Sewer Project** will provide sewer service to portions of McCray Drive and the Foxfire subdivision. Construction began in August 2017 and is nearing completion.

The **Route 58 Corridor Water System Improvements Project** will include improvements for the water system serving the Town of Damascus, Alvarado and areas east of South Holston Lake. Installation of water lines in Denton Valley and on Drake Road are nearing completion. Construction of a new water storage tank, which began in October 2017, is expected to be completed in July 2018.



Route 58 Corridor Water System Improvements Project

The **Chip Ridge Water Line Extension Project** will provide water service for new customers along Chip Ridge Road. Construction began in May and is expected to be completed in November.



Route 58 Corridor Water System Improvements Project

Upcoming Projects:

WCSA has received funding for several proposed water line projects. The **Rattle Creek Road, Rich Valley Road and Sugar Cove Road** projects are currently in the design stages, and construction is expected to begin by the summer of 2018.

The **Galvanized Line Replacement — Phase 3 Project** is the third step in a three-phase project to replace all galvanized pipe in WCSA's distribution system over the next several years. The project will be advertised for bids during the summer of 2018. 💧

Employee News

Congratulations!



Chris Howington (left) and Todd Mitchell

Chris Howington and Todd Mitchell were promoted to crew chief earlier this year. Both most recently served as equipment operators and have been with WCSA since 2010.

Trey Burke, Harry Frye, Brian Phillips and Travis Thompson have each been promoted from crew worker to equipment operator. 💧

The final phase of the project, which will be broken into three divisions across Washington County, will be advertised for bids this summer and is currently anticipated to be complete by the end of 2019. Division 1 of Phase 3 will encompass sections between the Rivermont and Damascus areas. Division 2 will include parts around South Holston Lake, Old Saltworks Road, outlying areas of the town of Abingdon, Larwood Acres and Clayman Valley. Division 3 will encompass sections around Smyth Chapel / Tobias, Greenway Creek / Stonybrook, and outlying areas around the town of Glade Spring.

The entire project, expected to cost \$35.45 million, is being supported by low-interest loans from USDA Rural Development, which will be repaid from customer rates.



Galvanized Line Replacement Project Phase 2

The replacement of WCSA's galvanized piping has been accompanied by a great deal of planning for the future. Lines are sized to meet the needs of customers 40 or more years down the road. In addition, galvanized line could not provide fire flow, and the majority of the new lines being installed include new fire hydrants. Since January 2010, WCSA has increased the number of fire hydrants from 1,076 to 1,616.

"Not only do many residents enjoy a more dependable supply of drinking water, but they now have fire protection for the first time, which can also result in lower insurance rates," Cornett says.

While WCSA has undertaken numerous capital improvement projects over the years, the Galvanized Line Replacement Project is one of the most extensive endeavors to date.

"Over the past several years, WCSA has completed a significant number of capital projects to improve and enhance our system, and more are either currently underway or are in the works," Cornett says. "These projects are crucial for maintaining the reliability and integrity of our water and sewer systems. The Galvanized Line Replacement Project is a particularly important upgrade that will allow WCSA to continue providing Washington County residents with a source of safe, potable drinking water that meets or exceeds health standards and requirements for many years to come." 💧

Did You Know? Washington County's Seven Springs

Once located adjacent to Glade Spring, Virginia, The Washington Springs was named for seven local springs whose various types of water were believed to have curative powers. In the late 1830s, Dr. Edmund Longley moved to Washington County from Maine after having heard of the miraculous healing powers of the springs. He soon purchased the 267-acre property, located two miles from Glade Spring off of Plum Creek Road. Over the next 25 years, he built the Washington Springs Hotel, a private resort with many spas, tennis courts, a large lawn and a pool.

Longley named and advertised each of the property's seven springs, which included the George Washington (Old Chalybeate), Augustine Washington (Sulphur), Lawrence Washington (Limestone), Martha Washington (Alum), Mary Washington (Magnesia) and Mount Vernon (Freestone). Professor J. A. Davis of

Emory & Henry College was reported to have analyzed the spring waters at the time, and stated that the results confirmed their "surpassing healing virtues."

The healing waters became so popular, they were bottled and sold in local pharmacies in the latter half of the 1800s by the Seven Springs Iron & Alum Mass Company, which operated a distillery in Abingdon. The company was the commercial enterprise of another, lesser-known resort on the site of the seven springs. This resort, appropriately called the Seven Springs Resort, was located in a community called Tin Bridge Hollow between Glade Spring and Clinchburg. The resort burned around 1935.

While both resorts, the distillery and the seven springs are long gone, sales of the water were very successful for decades throughout Virginia and seven other states. 💧

WCSA Earns Top Ranking in Operations, Performance for Eighth Consecutive Year



For the eighth consecutive year, WCSA has been awarded the highest possible ranking in operations and performance excellence for water utilities by the Virginia Department of Health (VDH).

WCSA received a 2017 Excellence in Waterworks / Operations Performance Award following a 12-month analysis of data by the VDH Office of Drinking Water.

Each year, through Virginia's Optimization Program, the VDH recognizes drinking water plants that perform above and beyond minimum standards by optimizing and running their treatment process efficiently and effectively. The primary purpose of the program is to reduce risks to public health associated with drinking water.

"We are truly honored to have received this top-level performance score for eight years in a row," says

Robbie Cornett, general manager of WCSA. "This award demonstrates WCSA's long-standing commitment to providing safe, potable water for our customers that meets or exceeds the standards set forth by the VDH."

Of the 131 conventional surface water treatment plants evaluated by the VDH during 2017, WCSA was among 35 that received a gold award, while 50 received either silver or bronze awards.

"WCSA has the largest permitted capacity and serves the largest number of service connections in the Mount Rogers Planning District, and has consistently been a top performer in the Virginia Optimization Program," says Eric R. Herold, PE, VDH district engineer for the Mount Rogers Planning District. "Of the 11 conventional surface water plants in our district, WCSA's Middle Fork Drinking Water Plant was one of eight plants to receive a gold award."



WCSA Calendar

WCSA offices will be closed on the following holidays:

Memorial Day **May 28**
Independence Day **July 4**



Board Meetings

UPCOMING BOARD MEETING DATES

May 21, 2018
June 25, 2018
July 23, 2018

Board meetings are held at WCSA in the E.W. Potts Board Room at 6 p.m. The public is welcome to attend.

Actual dates may vary. Please contact our office to confirm meeting schedule.

Customer Contact Information

Should WCSA need to contact you regarding your water service, we generally do so via text message, email or telephone call. If you prefer not to be contacted by one or more of these methods, please contact our office at (276) 628-7151. If you would like to be contacted, but are not sure we have your information, please contact us at (276) 628-7151 or inquiry@wcsa-water.com with that information.

E-CHECK PAYMENTS

WCSA NOW OFFERS A 24/7 E-CHECK METHOD FOR PHONE AND ONLINE PAYMENTS. YOU MAY PAY BY CALLING 276-628-7151 AND CHOOSING OPTION 2, OR BY ACCESSING YOUR ONLINE ACCOUNT. CALL CUSTOMER SERVICE AT 276-628-7151 FOR DETAILS.

WCSA

25122 Regal Drive
Abingdon, VA 24211
P: 276-628-7151
F: 276-628-3594

Email: inquiry@wcsawater.com
www.wcsawater.com