



THE PIPELINE

*Fauquier County Water
and Sanitation Authority*

Vol.1, No. 2

Serving Fauquier County since 1964

Spring 2017

By planning ahead, we prepare for the future

In order to meet the growing demand for its services, the FCWSA must plan far ahead on what must be done. Since there are always multiple new projects coming up, this requires establishing priorities, and in turn, setting timetables for research, bid solicitation and construction.

"We look at current demand and developments that are coming online," said Associate General Manager/Operations Cheryl St. Amant.

By figuring out the number of homes in a development at build-out and the timeframe involved, St. Amant can predict what future demand will be. "We add it all up, and then I look at existing supply. If I can't meet the demand, I look at new wells, and when I can bring them on in time."

In a service area as large and spread out as Fauquier County, it is necessary to break down the projects into phases, in order to maintain service and meet expected demands. "You're not going to do a capital improvement plan in a day," St. Amant explained.

"It takes a long time from when you say, 'I need this,' until it comes on line. A seven- to 10-year planning span is what I like to do."



Part of the New Baltimore Regional System, the 760,000-gallon storage tank and pumping system will add a second large tank in Phase I.

As of March 24, 2017, the plans under Phase I of the FCWSA Capital Improvement Projects are the primary focus of the board of directors, and includes extensive work in the New Baltimore and Marshall service areas. Improvements to serve the Bealeton area will follow in Phase II.

New Baltimore projects

It is predicted that over the next six years, total projected demand for FCWSA water in the New Baltimore area will be 524 ERC (equivalent residential connections).

Phase I design work has been com-

pleted for the G-4 Well, a new water source consisting of a groundwater well producing 135 gallons per minute. Construction will include the well, a well house for the pumps, controls and electric service; site work and an 8-inch line to connect the well to the New Baltimore Regional Water System. The cost is \$900,000, with completion by December 2018.

Also in the plans for the New Baltimore system is a second water storage tank to be built next to the

(Continued on page 2)

Projects involve design, financing and securing permits

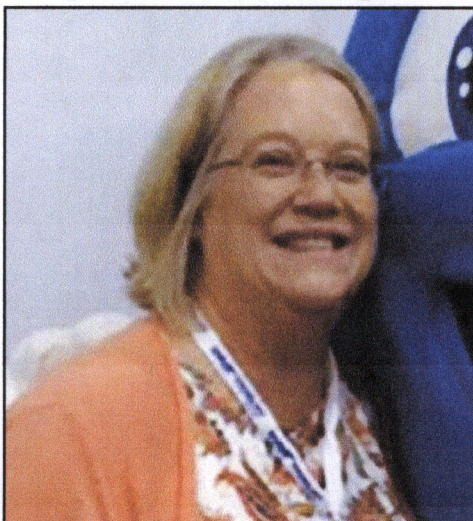
(Continued from page 1)

existing 760,000 gallon tank on Baldwin's Ridge. Involved in this project is the 750,000 gallon tank, a concrete pad, and connection lines to the regional system. This project will cost \$2,300,000. A design/build contract has been issued, with completion also by December 2018.

"While it will be a 750,000-gallon tank, the effective added capacity will be approximately 350,000 gallons until the pump station is built in FY 2019 to allow full tank usage for both tanks," according to the project summary.

St. Amant notes that water capacity and storage are closely regulated by the Virginia Department of Health. "If you reach 90 to 95 percent capacity, whether it is supply or storage, VDH will come and ask us, 'What are you going to do about it?'"

Before this happens, the G-4 Well will be pumping and second storage



CHERYL ST. AMANT
FCWSA VP/Operations

tank project completed.

Although there are already 11 drilled wells on line in the New Baltimore area, there are still concerns about meeting future demands.

"The waterworks is permitted for a design capacity of 1,105,600 gallons per day, due to limited source capacity," according to the summary.

"The most important issue is that there must be continued Phase III-IV hydro-geological work to develop groundwater in New Baltimore." St. Amant adds that new water sources to serve the New Baltimore area will need to be run through treatment.

Marshall water supply

The water supply for Marshall currently consists of seven wells, with four inactive. Effective capacity of the three active wells - which require treatment - is 307,920 gallons per day. Currently, there are 713 connections to the Marshall system.

It is predicted that demand over the next five years will amount to 572 new connections, drawing 228,800 gallons per day. ("Note that a developer will be responsible for 350 ERC, or 140,000 gallons per day,"

according to the report.)

Phase 1 work planned in the Marshall area includes funding to construct one new water source (the Salem 3 well), and to rehabilitate Salem Well 4, an existing water source owned by the Backer family. Salem 3 Well consists of a 125 gallon per minute well, 3,000 feet of pipe, site and supply electric service, pumps and controls.

This will help make up for the other wells taken out of the system due to contamination or an expired lease. Work on Salem 4 Well includes a new well house, 2,000 feet of waterline, pumps, site and supply electric and controls.

Preliminary Engineering Report funding for this project was approved in March 2017. Cost is set at \$3,600,000, and completion by December 2019.

Bealeton in Phase II

Water for the Bealeton Regional Water System comes from five production wells: Mintbrook 2, Mintbrook 4, Meadowbrook 2 and Grace Miller School. The fifth well, Meadowbrook 1, is out-of-service due to arsenic contamination.

As a result, the system, permitted for a design capacity of 569,600 gallons per day, which equates to 1,424 ERC. However, there are already 1,324 connections to the system, leaving only 100 for future use.

In order to meet future demand, contaminated Meadowbrook 1 will be redrilled, and will require a 2,000-foot line linking it to the microfilter treatment facility at Bealeton. This work will be performed in FY 2017/18. Two new wells will be brought on in FY 2020 and FY 2021.

The Pipeline

Fauquier county Water and Sanitation Authority

Phillip "Butch" Farley
General Manager

William Skinker
Associate GM and CFO

Cheryl St. Amant
Associate GM Operations

John T. Toler
Newsletter Editor

Mailing address:
7172 Kennedy Road
Warrenton, VA 20187

Tel. (540) 349-2092
Fax: (540) 347-7689

Online at: www.fcwsa.org

Meet our staff

Debbie Whitley's career has grown along with the Authority

FCWSA Director of Finance Debbie Whitley, of Midland, has worked for the Authority since December 7, 1993, when she was hired by former General manager Dave Binning to fill the position of account technician.

At the time, the FCWSA office was located on Meetze Road in an old feed store "...so we had snakes and mice," Debbie recalls. The operation was much smaller, with just five people on the administrative staff.

Working under Finance Director Dennis Drummond, Debbie's main responsibilities were handling payables and payroll. Back then, "Nothing special was happening," Debbie said. "Just in-house changes, and a tiny lay-off. My job stayed pretty much the same."

That all changed in 2006, when William Skinker, of Marshall, came on board as the Director of Finance. "It was William who really changed everything for me," Debbie notes. "He gave me new duties, and pushed me back into school."

In quick order, FCWSA financial operations were brought up-to-date, using technology to improve customer service and streamline accounting. "When I got here, every meter reading and receipt was hand-entered... now that's all automated," she recalled.

Until then, the billing person couldn't take credit card payments - payments had to be by check, either brought to the office or mailed in, or in cash paid at the office. It was awkward.

Later, on-line bill payment was offered. Ledger-based accounting was also automated, as the staff moved on to use Xcel spreadsheets.



DEBBIE WHITLEY
FCWSA Director of Finance

Attending school at night and taking on-line courses, Debbie earned an associate degree in Business Administration from Lord Fairfax Community College in January 2011, and her bachelor's and master's degrees in Accounting from Southern New Hampshire University in 2017.

Studying for these degrees while taking care of her husband Mark and sons Mathew and Nathan was tough, but it prepared her to take on more responsibilities at the Authority, a goal she shared with her supervisor, now Chief Financial Officer (CFO) Skinker.

The year 2017 saw even more graduations for the Whitley family. In May, Matthew was awarded his bachelor's degree from Old Dominion University, and Nathan his Associate degree from Lord Fairfax.

"We tease our kids because I got it all done - while working full-time - faster than they did," she notes with a chuckle.

But Debbie is not through learning. After taking a break from studies

over this summer, she will begin taking courses to earn her Certified Public Account (CPA) degree. It will be a real challenge, but Debbie acknowledges the encouragement is getting from CFO Skinker, General Manager Butch Farley and FCWSA Director Paul Blackmer Jr.

Expanded roles

As director of finance under CFO Skinker, Debbie's responsibilities have been expanded to include preparing the financial reports each month, reconciling the bank statements and working with the Authority's auditors.

She is also the direct supervisor of the Authority's accounting technician, human resources manager, IT (information technology) manager, and the customer service and billing personnel. "Finance kind of gets a little bit of everything," she explained. "It's all under William, but they report to me."

Debbie is not the only employee to go back to school to learn critical new skills and build a career at the FCWSA. "We really promote education here for everybody," said Debbie. "Currently we have HR going for their letters in human resources, our contract technician for his letters in procurement (VCA), and our IT manager is back in school for his degree in IT."

"I want my people to get all of the education they can, so they can do more, move up in the organization, and be a part of the succession plan."

This philosophy goes hand-in-hand with the Authority's goal of promoting from within when possible. For example, the two latest hires on the administrative staff started in the

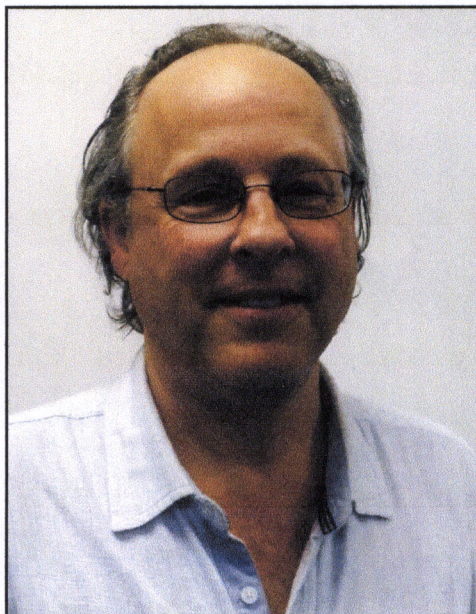
(Continued on page 4)

Our primary focus: making sure you have a safe water supply

What we are trying to do in Marshall is to anticipate both the short-term and long-term problems, so hopefully we can solve them before they happen," said Michael J. Focazio, Marshall District Representative on the FCWSA Board of Directors. "The message we would like to get to our customers is that The FCWSA's primary focus is to make sure they always have a safe water supply."

Focazio breaks the challenge down to the short term, which means taking care of existing customers by providing an ample supply of water as long as they need it, and the long term, which will include the water supply for new homes and businesses that come to the Marshall area.

This leads to the goal of establishing a sustainable source of water



MICHAEL J. FOCAZIO

FCWSA Marshall Dist. Representative

for Marshall that will include all the water needs when the area is fully built out, as outlined in the Fauquier County Comprehensive Plan, as well as maintaining that supply into the future.

Ensuring that existing customers have enough water is complicated by several factors. There are issues regarding access to new wells and other water sources; water quality issues, and the fact that water levels are dropping in the existing wells serving the area.

Things that can be done in the short term include 1) treating water drawn from existing wells that were taken off-line due to contamination; 2) bringing existing wells on-line that are on other properties; 3) drilling new wells; or a combination of all three possible solutions.

"We want to avoid lowering the pumps in existing wells, decreasing the water stored in the tanks, or dropping the water pressure in the system, a firefighting issue," explained Focazio. "But we'll need to start implementing other mea-

sures to avoid doing that."

A "sustainable" water supply can be described as having enough water to meet demands, even in times of a severe drought.

"That will take long-term planning and collaboration with the county, customers, developers and other stakeholders, which is now a focus of the FCWSA," said Focazio. "New customers will want service in the future, and you can't just be sure you have enough water for today."

Being located on high ground in the Piedmont, Marshall is at a disadvantage as the rainfall that recharges the underground aquifers runs downhill, away from the town.

"There's not enough water coming in to meet current demands; it is flowing away from our supply wells due to the natural flow of groundwater in the Marshall area, and possibly because other wells in the area are competing for the same resource," which explains the dropping levels in Marshall's wells.

In addition, the water pumped from some wells has poor water quality.

In addition to protecting new and existing wellheads, one possible solution to the sustainability question is conjunctive use of groundwater and surface water sources, a common practice in this area and the U.S.

However, moving toward conjunctive water use or other long-term measures, "Must be done in context with the county's Comprehensive Plan for full build-out in each service district," added Focazio. "Our elected leaders have to agree on what full build-out means, and we at the FCWSA can help them make sure that there is a sustainable water supply to meet those needs."

A growing career

(Continued from page 3)

FCWSA's Water Department, and have been great additions.

Increasing the size of the staff is only done when it is absolutely necessary. "When I got here, we had 22 employees, and now we have 46, but our in-house staff hasn't grown much," Debbie explained.

"You can't hire a new person for every duty," Debbie added. "With the smaller staff inside, almost everyone has a specialty: one billing person, one in customer service, one HR person, for example. We cross-train so we can back each other up."

To Debbie, it all goes back to the people she works for, and works with. "We have a good group... the staff is top-notch," Debbie concluded. "It's nice place to work."