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Taylors, South Carolina

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PIPELINE AND INFRASTRUCTURE, HYDRANTS

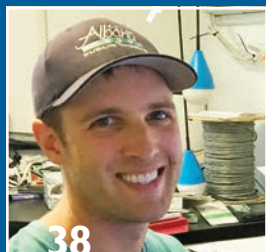


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ON THE COVER: Taylors (South Carolina) Fire and Sewer District Director of Sewer Services Samantha Babb with members of the construction crew locating utility lines on a job site. (Photography by Matthew Franklin Carter)



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COMMITTED TO COLLECTIONS EXCELLENCE

Small South Carolina district's highly trained staff keeps up with growth and change

By Giles Lambertson

Don't let the compact and pastoral nature of the Taylors Fire and Sewer District fool you. The district is driven by technology and run with award-winning efficiency.

"We have a combined 195.5 years of sewer experience on staff," says Samantha Babb, director of sewer services.

The special-purpose fire and sewer district in northeast South Carolina covers just 16 square miles — that is, roughly a 4-by-4-mile section. It is chiefly comprised of the unincorporated town of Taylors and surrounding Greenville County acreage, all of which is considered a suburb of two nearby county seats, Spartanburg and Greenville.

The district has evolved in significant ways since its creation by state legislators in 1958. In the beginning, it was a water and sewer district with additional fire protection responsibilities. The district divested itself of the water distribution component in 1966. Four years later, it sold its sewer treatment plant and trunk lines to a sewer authority now called Renewable Water Resources, thereby becoming solely a sewer collections system.

Even though it's called Taylors Fire and Sewer District, the district's fire protection services are operated separately. Nonetheless, the two departments work closely together. "Most people think we are one agency with two departments," Babb says. Her department and the fire department share four administrative employees and a mechanic. Babb and her co-workers keep busy maintaining the sewer collections system at a high level of efficiency.

(continued)

Sewer technician Jesse Evett keeps watch while construction crew leader Chris Powell excavates for placement of an 8-foot Speed Shore Hydraulic Ditch Box to repair a pipe. (Photography by Matthew Franklin Carter)





“Certainly, a person can never train too much. We try to learn something every day.”

Samantha Babb



Above: Construction crew leader Chris Powell operates a track hoe while sewer technicians (from left) Scott Yarbrough, Philip Bourdess and Jesse Evett locate utility lines on a job site.

Left: Taylors Fire and Sewer District Director of Sewer Services Samantha Babb with members of the construction crew, including (from left) Operations Supervisor Gary Cantrell, sewer technician Evett, crew leader Powell, and sewer technicians Yarbrough and Bourdess.

“When everything is working well, people don’t realize how busy we are,” she says.

High bar

The agency has received multiple awards for its work. In 2019, for the third consecutive year, the district received a Facilities Excellence Award from the South Carolina Department of Health and Environmental Control, a citation for the district’s success in protecting the environment and water sources.

Last year, the Taylors district was awarded the Collection System Operations Award from the Water Environment Association of South Carolina. Only one small collections system and one large system are recognized by the state association each year. “We take our work seriously,” Babb said in accepting the award, “and will continue to set the bar high for our team.”

Her high bar includes public assurances that employees are certified to do the work they’re doing. That is, they have been trained and have tested out as experts in their respective areas.

Including testing sources such as the Manhole Assessment and Certification Program and the Pipeline Assessment and Certification Program through NASSCO, as well as the Municipal Association of South Carolina Trades Certification Program.

“People don’t realize that every employee in the collections system is certified,” Babb says. “We have a certified electrician on staff. We have a maintenance tech for pump stations who is highly certified. All are certified, including myself. Certainly, a person can never train too much. We try to learn something every day.”

The expertise begins with Babb herself, with 24 years as a sewer and water administrator including the last nine years at Taylors. Some other tenured employees at Taylors include Gary Cantrell (28 years), operations supervisor; Michael Townsend, a right-of-way crew leader with 26 years; and Trent Bowles, a pump station maintenance technician closing in on 20 years. It’s an understatement to say that the people monitoring and maintaining the district’s sewer collections system know their business.

The Taylors district team takes a forward-looking approach to growth and improvement, both with personnel and the collections system. A

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PROFILE:

Taylors (South Carolina) Fire and Sewer District

SERVICE AREA:
16 square miles

CUSTOMERS:
Approximately 11,400 parcels
Wastewater volume capacity: 1,200 gpm

WASTEWATER INFRASTRUCTURE:
134 miles of gravity line, 3,719 manholes,
3 pump stations

SEWER DISTRICT EMPLOYEES:
13 (plus 4 shared with fire department)
Annual budget: \$3.7 million

WEBSITE:
www.taylorsdistrict.org/wp



“We are not afraid to try new and inventive ways to do things. If someone has a new idea, we are always open to having them come and show us.”

Samantha Babb



Above: The Taylors Fire and Sewer District CCTV crew includes (from left) Trent Bowles, Seth Townsend, Ray Childs and Michael Jones.

Left: Crew members say the Light Ring LED manhole light is an indispensable piece of equipment for inspection work.

decade ago, the district was faced with the task of aggressively addressing inflow and infiltration and realized that accomplishing this would require more than just rolling up its sleeves. The district had to go digital in a big way, and it did.

Today the district relies on a Cityworks GIS-centric public asset management system to assess, monitor, anticipate and resolve collections infrastructure issues. Data is compiled, viewed and utilized on desktop PCs and tablets in the field. Underground assets are inspected using CUES and RIDGID camera systems. The state's mandatory 811 excavation notifications, which are designed to protect pipes and lines from inadvertent incursion, are automatically processed by the district, freeing up staff for more important tasks.

“We are not afraid to try new and inventive ways to do things,” Babb says of the district's reliance

on digital solutions. “If someone has a new idea, we are always open to having them come and show us. We go to Cityworks conferences and to other conferences and places in search of new ideas to incorporate into our daily work.”

Connecting with customers

As in any commuting suburb, Taylors customers are mostly residential. The community of about 26,000 people is characterized by new subdivisions and some older developments with a few cow farms mixed in, according to Babb. “It is a little bit of a cultural mix.” The mix is growing more residential as housing developments sprout in pastures. “Right now, we have eight housing projects going on simultaneously. About 20 are in some stage of planning and development.” The largest new development ultimately will contain 158 houses.

Home connections are the source of most of the effluent being collected by the district. The only major industry in the community is a specialty chemicals plant, CPJ Technologies, which operates a 70,000-square-foot plant on a 12-acre property. Earlier this year, CPJ called on Taylors district employees for help when it experienced a flow issue.

“Some instruments broke down and this influenced some other stuff, and one problem led to another,” recalls Janneke Maas, CPJ's environment, health and safety analyst. “So I called Samantha. I asked her what we could do about it, what could she allow us to do. She listened and was very understanding. She asked the right questions, and it all worked out in the end.”

Maas suggested a more-than-pleasant conversation was involved. “Samantha knows quite a lot herself and surrounds herself with people who know a whole lot. She has all the technical knowledge she needs at her fingertips.”

Babb allowed the plant to continue production since the chemicals involved posed no environmental threat and soon the industrial flow returned to normal. Communication between the offices continued until normalcy was achieved.

The CPJ analyst notes wryly that she hasn't had a lot to do with the district administration but considers the district office to be an asset. “After all, if we have too much interaction with the district, it would mean we have problems. But I know that if we do have a problem, Samantha and her team are there for us.”

Facing challenges

The ongoing challenge for Taylors Fire and Sewer District is keeping sewage inside the collections lines and groundwater out. The district is nearing completion of a 15-year-long effort to cure I&I and to maintain the integrity of the lines moving forward. The mostly clay lines are under 50 years of age.

(continued)



Sewer technician Paul George retrieves an Enz Bulldog Antiblast nozzle to clean a manhole.

"I&I work never ends," Babb says. "We're always looking for something that might lead to inflow. And then there are the people out there running cable and phone lines and cutting into our sewer pipe."

"We do a lot of stuff in-house instead of contracting it out, so our money can go further."

Samantha Babb

Having gotten infiltration to an acceptable level, the district is systematically inspecting 9 miles of line per year and repairing it as needed. It has crews for each phase of this construction and maintenance — teams dedicated to certain tasks, but also cross-trained for emergency duty — and has the equipment for the crews to do the work.

A 2014 Ford van is home base for the district's CUES camera crew, which also employs RIDGID SeeSnake and other video equipment. The construction team can uncover infrastructure with a 100 hp John Deere 135G excavator, Kobelco SK80 mini-excavator, Caterpillar 289D track loader, and backhoe. The cleaning crew has a Vac-Con hydrovac rig with a 9-yard debris box, as well as a Bulldog trailer jetter (John Bean Jetters). The workers clearing rights-of-way can hop on a Deere 6415

tractor with a boom mower or hook up to an 8-foot Kodiak brush-clearing mower. There's no shortage of equipment.

On a typical workday, Cantrell says he might have a crew working on a point repair job, the CCTV crew out doing inspections, a right-of-way crew clearing property and a paint-and-seal team working on a manhole.

Measuring up

A small, special-purpose sewer district like Taylors doesn't necessarily have smaller challenges. A constant concern for Babb is managing the ad valorem tax and new construction revenue generated annually. She supplements that revenue with grants, which are harder to win for districts like Taylors that are situated adjacent to urban communities. "We do a lot of stuff in-house instead of contracting it out, so our money can go further," she says.

The fruit of Babb's administrative efforts and of dedicated crews in the field can be measured in sanitary sewer overflows. South Carolina health officials dictate that any spill of at least 500 gallons of untreated or partially treated sewage must be reported. If a utility has more than two "significant" spills (5,000 gallons or more) in the 12 months leading up to the new report, the entire system must be officially reevaluated.

By that score, Taylors Fire and Sewer District is doing just fine. Consulting company Blue Heron Engineering Services, which worked recently with the district, put it this way in a report: "With the number of sanitary sewer overflows per 100 miles as the benchmark that all utilities in the country are compared against, the typical well-performing system will see four to six overflows per year per 100 miles. Last year Taylors had three — two of which were attributable to issues in Renewable Water Resources trunk lines, not within Taylors' system — which is exceptional." ♦

MEETING COMMUNITY NEEDS

Taylors (South Carolina) Fire and Sewer District officials have been put on notice that providing timely and cost-efficient service may not be enough to justify the district's continued existence. Consequently, the officials are fighting back against dissolution of the district.

The challenge is coming from Greenville County Council, which is considering a proposal to combine special-purpose sewer districts with a wastewater treatment company, Renewable Water Resources. Sponsors of the legislation believe consolidation will lower bills, increase efficiency and provide funding for future sewer improvements.

Samantha Babb, district sewer services director, has an opposing view. "The community will neither be represented as well nor served as well by a consolidated system. The customers will lose their voice with an appointed commission board that has no oversight. Honestly, they answer to no one and can raise fees and rates as they feel necessary. When small systems are consolidated, people are lucky to get back a phone call when there's a problem. You become a number."

She cites a survey by a County Council

consultant that determined just 2% of residents have a problem with the sewer systems being operated by special-purpose districts. "Yet the consultant recommended that we be unified. They want our revenue." Most of the districts are governed by a locally elected commission, whereas the consolidated system would answer to an appointed board. Thus, local control would be lost. The Taylors district administrative office, for example, would be eliminated.

A *Greenville News* op-ed piece sums up local resistance this way: "Our special-purpose districts are meeting the specific needs of our community — uniquely — with the input of our citizens and with the level of personal service they expect. ... We do not believe that creating a single, consolidated, big-government approach to services is the answer to managing growth," co-wrote Jeff Hannah, a Taylors district commissioner.

The proposal has been referred to a public works committee for further study and public hearings, but Babb says the issue isn't overshadowing her work. "Operations are still going on every day just like they always have, but we're keeping our eyes on it."

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