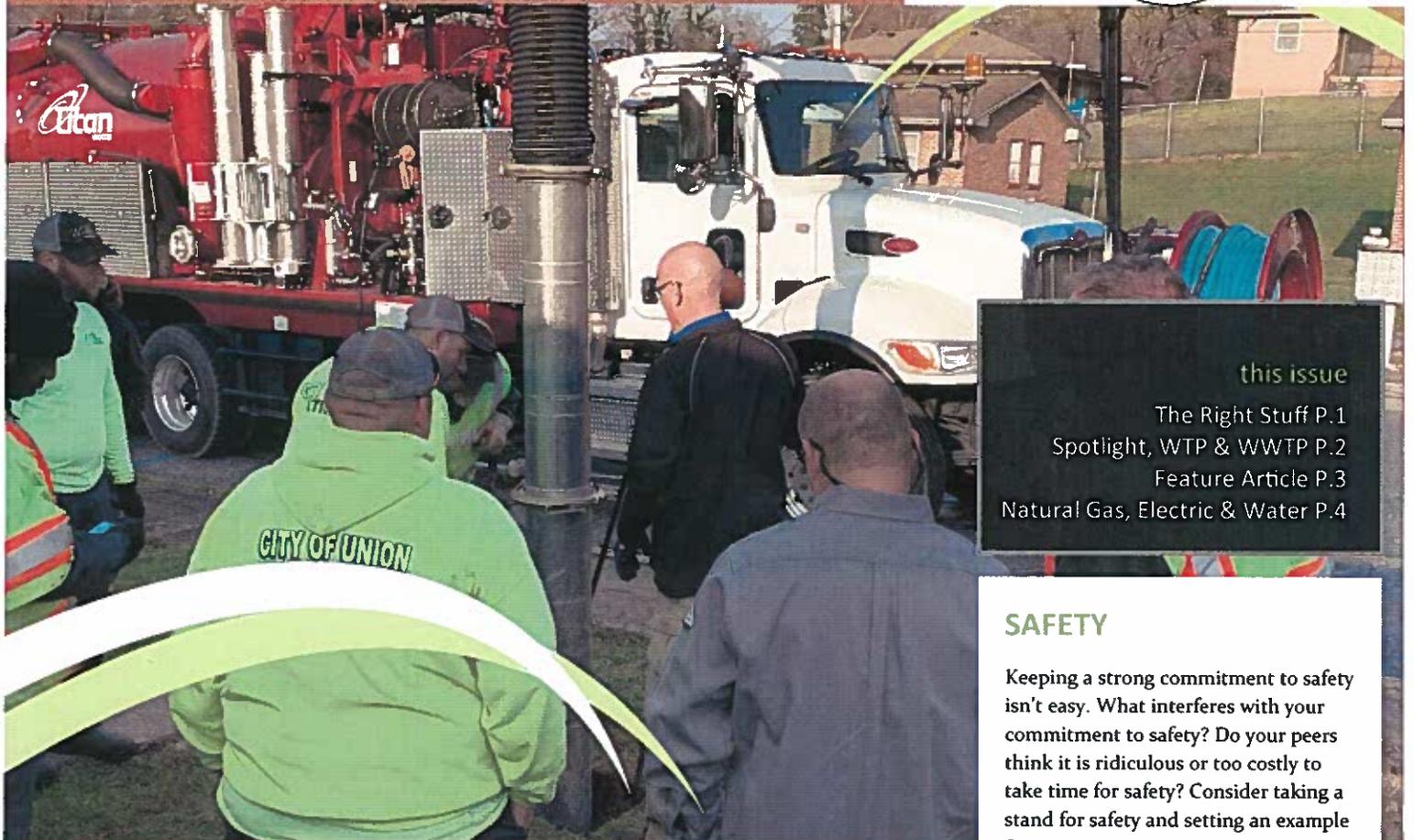


UNION UTILITIES

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ISSUE 3 February 2020



this issue

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Having The RIGHT Equipment

Technology changes every day. New processes, systems and products hit the market every day. About 50 years ago, the Vactor company created the sewer combination truck, which performs multiple tasks that are normally done with 3 separate trucks. Now there is an industry with 5 companies building and selling these trucks.

Last month, we visited the factory of Sewer Equip of America in Dixon, IL. Last week, we had a demo from VAC-CON and this week we had a demo from Sewer Equipment. A demo from Vactor is sure to follow.

I have described this truck as a City's most important piece of emergency equipment. One of the tasks it performs is hydro-excavation which means that in emergency situations, you do not have to worry about other utilities in the ground because hydro-excavation simply sucks out all the earth down to the utility, whether gas, electric, water or sewer, that you need to repair. Safe, quick and used everyday, the sewer combination truck is vital. It will replace our 20 year old jetter and add new services to all of our crews: Electric Water, Sewer, Gas and Street.

SAFETY

Keeping a strong commitment to safety isn't easy. What interferes with your commitment to safety? Do your peers think it is ridiculous or too costly to take time for safety? Consider taking a stand for safety and setting an example for your peers. By committing to safety 100% of the time, you can help reverse the peer pressure that sometimes causes unsafe behavior. By maintaining such exemplary behavior, you may find that the peer pressure to ignore safety has given way to earning the respect of your peers.

IMPORTANT DATES

Mike Weaver on the Gas Crew celebrates 40th Birthday as well as Employment of 7 years, this month.

Other Birthdays are Beverly Carter who turns ??... Jamie Babb (progressing nicely to Depends and we have a toupee on order) Clayton Smith has been weaned from the pacifier J

Olin Brock has been promoted to Warehouse Coordinator / Maintenance Tech

Quality water... for life.

WATER PLANT Update

In January, we continued the Aqua Lane project and are hoping for a spring completion of all items.

We received 6 proposals from companies all over the country on the relining of our basins at the water plant. We are proud to say that we will be recommending a solution to the City Council that will save almost one million dollars off the projected budget!

Other than that, we are continuing repairs on some vital pumps both at the plant and at the river. Scotty has been taking the lead and doing a great job of trouble shooting and repairing problems. He even has found some gremlins that have been messing with us for some time!



The City of Union Tosches Creek Wastewater Plant events that took place the Month of January. Over the course of the month we treated 46.7million gallons of wastewater. We also registered 5.8" of rain for the month. We treated about 12 million gallons of rain water. The operators worked hard at keeping wastewater plant in compliance with the permit issued by SCDHEC. They also checked our 15 sewage pumping stations regularly to make sure they were pumping all they were designed to pump. We were called out several times during the month for power and high water alarms. This is an ongoing battle with inflow and infiltration with our deteriorating sewer collection lines. We also received leachate water from the land-fill and septic trucks brought water from those who have septic tanks from our county.

We will be visiting another facility that uses sodium hypochlorite in February as we try to find best system for our operation.

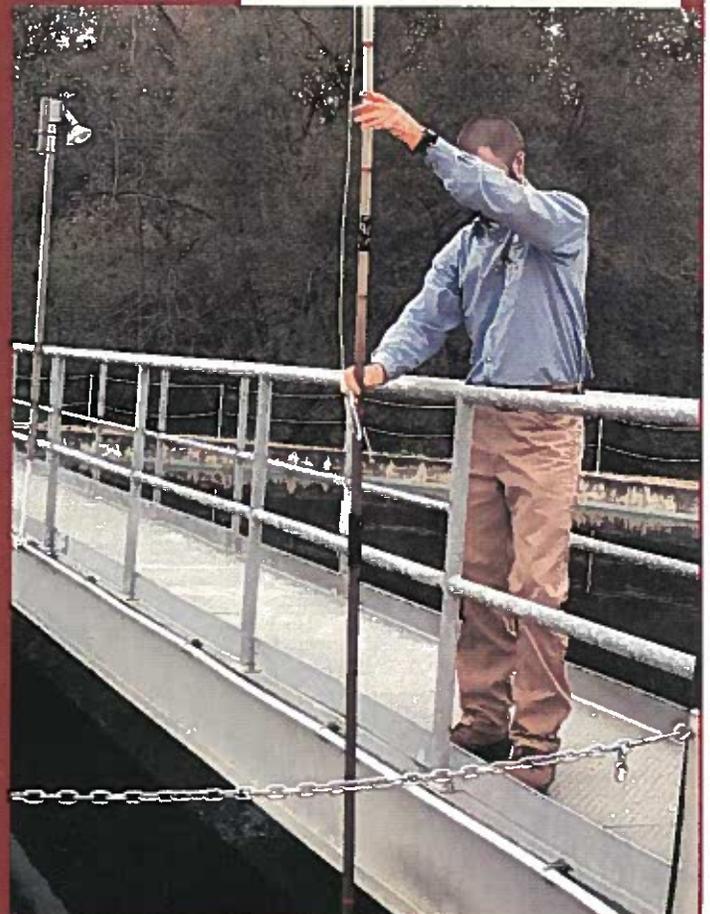
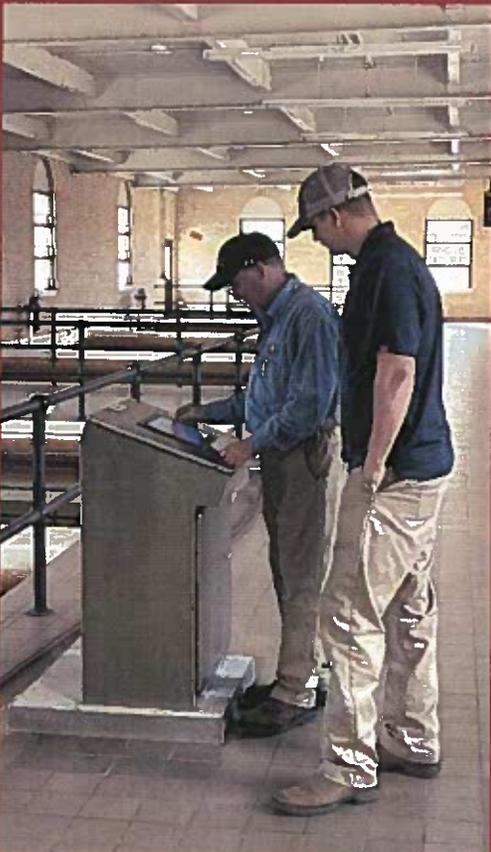
Left=Operations at the water plant.

Right—Daniel checks the depth of the sludge blanket after a rain event.

In the Spotlight

GIS—Information!

On January 30th this year, a group of us went to meet with an engineering company about future projects. At this meeting I began to understand our infrastructure more clearly. Whatever the utility I'm receiving is more than a maze of underground lines leading to my home. They are designed to be efficient. When more customers are added, the lines need better pressure to service all customers. One of the things we are looking into is creating a hydraulic model system for our gas and water systems. This will give us a better understanding of the weaknesses in pressure and future upgrades needed.





Stay tuned for Part two of this exciting article in next month's newsletter!

Who knew history could be so cool?

But it is and it is ours!

Water Plant History—Part One

The AT THE TURN OF THE 20th CENTURY

Works Commission consisting of T.C. Duncan, F.M. Farr, and W.H. Sartor. A brick "Light, Power, and Water" plant was built on North Pinckney Street across from the Old Presbyterian Cemetery.

(When Thompson Boulevard was cut through in the late 1930s, the old building was severely truncated, and used as a warehouse. It was demolished in 1986 to make room for the new Union Oil Mill.) Just north of the power plant, with its tall smokestack, was a low circular water-house containing a 325,000 gallon water basin. Filters were installed in 1900, but in 1905 a regular filtration plant was built just west of the water-house.

The initial sources of city water were wells located about a mile north of town. By 1900 the supply had become inadequate, and the city tapped onto Brown's Creek at the old Harris Mill site some five miles north of Union. The water was pumped to the city water-house with steam-powered

pumps located at the intake, and coal had to be laboriously hauled to Brown's Creek to fuel the boilers. About 1915, however, an electric pumping station was built near the creek, a compact building with fancy columns in the front and resembling the tomb of some wealthy citizen of ancient Rome. In 1919 the water plant and reservoir were relocated to their present site.

Firefighting potential was increased by the expansion of Union's water supply. In 1919 the city again was outgrowing its water system and so, with the aid of a one hundred thousand dollar bond issue, new lines were extended to Brown's Creek, and a three million gallon basin was

built on what came to be known a "Standpipe Hill." The city couldn't afford new filters for its enlarged filtration plant and also bought two used ones from Spartanburg and two more from Hopewell, Virginia munitions plant. Of the wooden-tub type, those filters served until August 1939, at which time a brand new plant went on line. The 1920 water system served 80 percent of the buildings in town, while 75 percent of them were hooked to the city sewage system. Water plant capacity was five hundred thousand gallons per day, of which four hundred thousand was the average consumption.

Mark and the City of Union Utilities Team

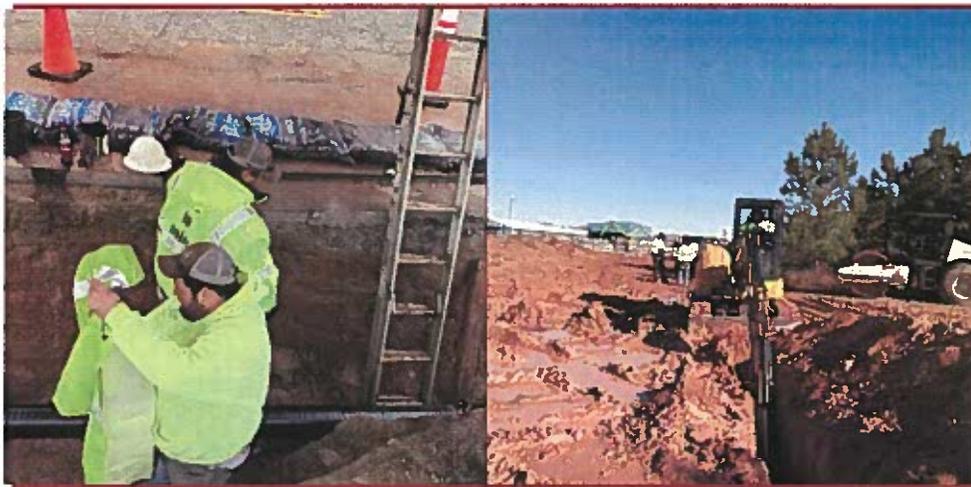
Hello Mark,

Thanks for sending your team out to 119 Cornwell Street to remove the tree limb that was resting on the light post.

Sincerely,

Eric Kershaw





Water/Sewer Update

In the month of January we had to repair some air valves that failed along our important river to water plant pipeline. We had some big leaks on a few 6 inch lines and one on an 8 inch line.

We had to reroute a line on Arthur st. to accommodate our sewer project upgrade. We also had a vac truck demo where they showed us all about hydro excavating. The vac truck would be a great addition to the utility department.

We are also looking forward to hiring a new employee for the water/sewer department. We continue to be busy while we plan for the upcoming year's budget and projects. Preventative maintenance will be the priority of the upcoming budget.

One of our employees ,Jared Anderson, welcomed his first child Maddy Blayke Anderson into the world. Congratulations to him.

Natural Gas Update

We Contracted Appling Boring to assist with South Pinckney Street 6"gas valve repair. It was vital and complicated.

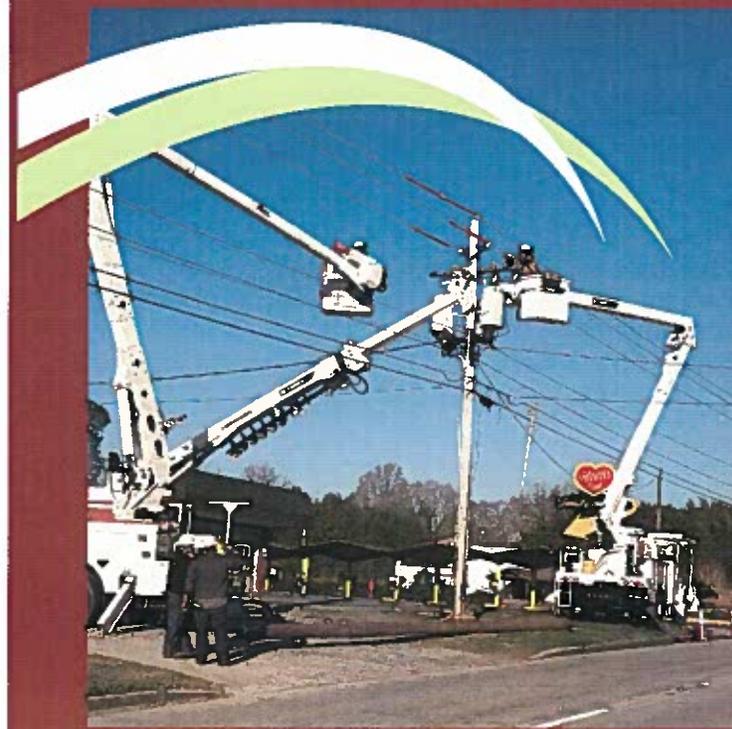
We completed Hazardous Piping Business District Quarterly Survey, the Quarterly Odorant Survey, and the Quarterly Gas Mains Suspended from Bridges Survey.

And we just started working on the 2020 Annual Natural Gas Leak Survey.

Patrick contacted the Blythe Company to assist in repairing/recalibrating industrial customer's gas meter.

We completed the Piedmont Concrete gas service line.

ELECTRIFIED UPDATE



In January another Utility pole fell victim to a car on Thompson Blvd. It has been a blizzard of utility poles victimized by poor driving.

Christmas has ended and the Decorations around town had to be taken down and stored for the 2020 Holiday Season.

We have been going Green when we can, so we upgraded the lighting at the Public Safety Dept to LED.

Getting ahead of the upcoming season of summer storms, we have been clearing Right of ways and removing trees that could potentially damage our Electrical Infrastructure.