

UNION UTILITIES

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SAFETY

There is never a time that safety is not paramount. Our focus, our dedication and commitment to doing things the safe way only improves our effectiveness and our efficiency of delivery to our customers. I view every one of our teammates as safety monitors. It is job one for everyone on our team. Ideas, suggestions and brainstorming is always encouraged and listened to!

IMPORTANT DATES

Celebrating Work Anniversaries are Jennifer Price 20 years...
Reggie Young 11 years and Cody Adkins 1 year

Employees celebrating Birthdays Clarence Auton (Big Daddy) will be 55, Cory Scott, Olin Brock and Jimmy Davis

Budgets and their Importance

This is the time of year where every superintendent and every leader in our city thinks about the budget. There are fewer important things than the budget which is a roadmap for, in many cases, not only the next year but perhaps the next 5 or 10.

Every department is aware of new technology, equipment or processes that would improve our efficiency, effectiveness and delivery methods of our services to our customers but therein lies the rub. We are entrusted by our mayor, council and citizens to recommend those improvement that make sense to us, our utility and our customers.

How do we make that decision? It is a tough one. My boss when I worked at the Department of Defense instructed me to make sure that we get as much out of every tax payer penny that we possibly can. It was imperative to him, and therefore me, that we maximize savings when we could and invest in those things that would most impact our customers.

I feel the same way here. My question is most every process is "What is best for the customer?". Usually that answer determines where we should invest. It is our duty to get this right and we will.

Quality water... for life.

WATER PLANT Update

During the month of November, we r 1 year of service on Nov 29, 2019. We continued in December on our Aqua Lane pump station project.

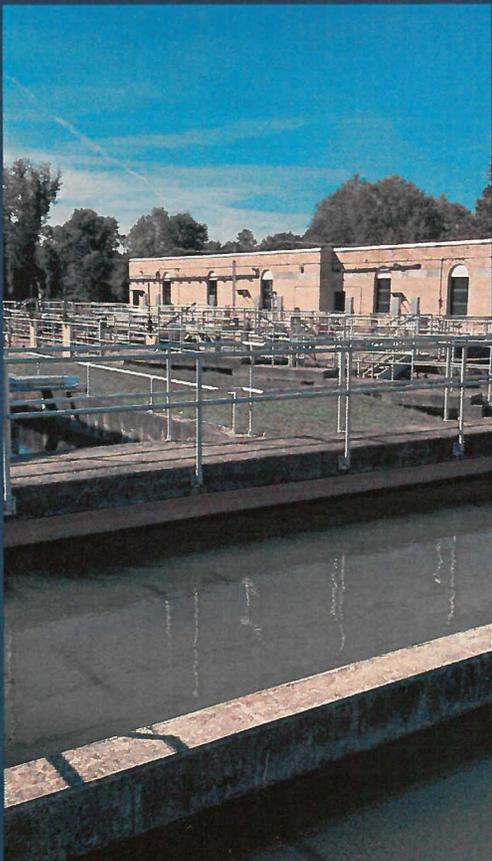
We put Oak grove tank in service while we replaced main cut off valve at Aqau Lane pump station.

We also replaced power supply on our SCADA PLC. We're continuing to prepare to put our new turbidimeters in as they should be here soon.

We are still getting proposals for the spraying of our flocculators and sedimentation basins

We shut the Water Plant down in early December for a few hours to do our yearly cleaning of the front end of the plant.

Below, see a pic of our basins. We will be receiving proposals to repair the extreme pitting in these basins at the end of January.



The City of Union Tosches Creek Wastewater Plant events that took place the Month of December. Over the course of the month we treated 43.39million gallons of wastewater. We also registered 6.90"of rain for the month, which I am sure added to the total wastewater received. 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 visited the Camden water plants sodium hypochlorite system as we are looking at other systems for the best options for our hypochlorite system.

John Kingsmore celebrates his 25th anniversary with the City of Union on January 3rd, 2020. John has been at the wastewater plant since October of 1996.



Warehouse Report!

A couple of Pretty cool finds as we were cleaning up that we will be donating to the Lineman Museum in Shelby NC

TJ is holding a pair of old Hot Cutters and we also found a Butterfly Reel.



Left=influent=wastewater as we receive it Middle=activated sludge= microbes breaking down organic material Right=effluent=wastewater returned to receiving stream after treatment



Our Wastewater Plant

The City of Union Wastewater Treatment Plant is responsible for treating the water that is received from the City of Union's sanitary sewer system. The wastewater plant is permitted to receive 6 million gallons per day. The average daily flow is 1 million gallons per day +/- . We receive water, not only from the sanitary sewer, but also from the septic tank pump trucks (aka.honey wagons) in the county. The Republic Landfill also contributes leachate water to our wastewater facility via tractor trailer tanker loads (6500 gallons per tanker load). The City of Union's wastewater treatment facility was constructed in 1970/1971, originally. The facility is an Activated sludge (extended aeration) plant design. There have been several upgrades to the plant since then. The latest(2012) was the renovation of the head works (drum screen and vortex grit removal system) and one of the aeration basins, where one of our aeration basins has been converted to fine bubble diffused air aeration. We currently have two (2) HSI high

speed blowers that supply air into the aeration basin for our microbes and to mix the sludge. There are (2) 90 foot circular clarifiers. These act as a separation mechanism between the sludge and water. The sludge settles to the bottom of the clarifiers where it is returned to the aeration basin for further decomposition. The clear water is advanced to our chlorine contact chambers for disinfection. After disinfection, the water flows to the Fairforest creek via 36" pipeline.



Save A Tree Update

Everything in the mapping world is becoming digital and we need to keep up w/ the changes.

I'm looking into a large format all-in-one printer, copier, and scanner to preserve older maps. This will free up space, providing more room for recent drawings. If we digitize them, they can be linked to ArcGIS Online. It will allow the crews to see the drawings on their iPads in the field; reducing the drive time in search of a drawing.

We currently have drawings as far back as the 1920's. They can't be discarded as useless to make room for the updated drawings. Even with their age they have valuable information for older infrastructure. When looking into lines that have not been updated they can give us information long forgotten. If they are just removed and stored somewhere without a digital copy, it will require more time and effort when needed.

We have an index of the drawers up to 42, but they're filled to capacity. Also, I have drawings in digital format, to be linked providing more information saving time.

A more functional mapping system needs to be created. I won't live forever, neither will anyone else. When we retire or absent for any reason; anyone should have the drawings at their fingertips.

Joe/Mark and the City of Union Electric Team

Thanks for the assistance that you provided the City of Clinton yesterday. Your crew worked professionally and safely while on our jobsites. Please convey my thanks to them and as always if we can ever assist you in anyway, please let me know.

Joey Meadors
Director of Utilities and Public Works





Water/Sewer Update

December was a busy month for the water crew. We changed a 8 inch valve on Catherine st., A 6 inch valve on Lakeview Heights, a 6 inch valve on N. Church st., a 10inch valve on Pine st., a 6inch valve on White Oak,a 6inch valve on Toney rd, and we also changed two 2inch valves at General Lee and Pineview intersection. Installed a 16inch valve at Aqua Lane. We also changed a hydrant on S.Pickney and added a hydrant valve to it. And we installed a 6 inch hydrastop valve on S. Mountain st.

We also made 2 taps, had 9 leaks and cleared 8 sewer blockages. We replaced 5 service lines to removed galvanized pipe from the system. We had to repair 5 air valves that blew out on our 24 inch main line coming from the river.

Jared Anderson, one of our heavy equipment operators, passed his D certification in water distribution.

Natural Gas Update

Despite the weather and holidays – gas construction continues.... We completed the installation of 12 service lines. We continue to work on the annual atmospheric corrosion survey and making sure our gas valves are functioning properly as the annual gas valve maintenance continues.

We are currently completing a new gas line behind GES-crap. This is a long and fairly deep bore/trench that will improve our service.

We also had an emergency gas leak repair on New Year's Eve/New Years day. Many thanks to the crew and the contractor who assisted in continuing to keep our gas system safe and dependable!

ELECTRIFIED UPDATE

The City of Union Electric crew continues to be busy. A rash of utility poles were hit and damaged by drivers. It is amazing how these seem to come in bunches. Our holidays were spent with our families both at home and performing these emergency services.

Of course, after the holidays, we were busy assisting with the removal of our Christmas decorations for another year. We are pleased to assist.

We assisted the City of Clinton with their utility damages after a windstorm. I am very proud of our team, their response and our willingness and preparation to help our neighbors.

This week, we visited the Sewer Equipment company in Dixon Illinois to view their sewer/hydroexcavation truck. This piece of equipment has the potential to help the water/ sewer, electric, natural gas and street crews.

