



GreenvilleWater

MINUTES OF REGULAR MEETING
COMMISSIONERS OF PUBLIC WORKS
Field Operations Community Room
517 W. Washington Street,
Greenville, South Carolina
February 1, 2022
8:15 a.m.

Commissioners of Public Works in attendance:

Chairman Phillip A. Kilgore, Debra M. Sofield, and Wil Brasington. Absent: Vice-Chairman James W. Bannister, and Mayor Knox H. White. A quorum was present.

Greenville Water Senior Staff in attendance:

Chief Executive Officer David H. Bereskin, Chief Financial Officer Phil Robey, Chief Operations Officer Jeff Boss, Chief Administrative Officer Dr. Bob Schmidt, Director of Water Resources Jeff Phillips, Director of Strategic Initiatives Dr. Jane Arrington, Director of Engineering Mark Hattendorf, Director of Human Resources Richard Posey, Director of I.T. Billy Cooper, Controller Brian Bearfield, Manager of Field Operations Wayne Benson, Public Relations Manager Emerald Clark, Facility Maintenance Manager Allen White, Internal Auditor Jacob Polson, Purchasing Manager David Freeman, and Attorney Adam Bach.

The Regular Meeting of the Commissioners of Public Works was called to order at 8:15 a.m. by Chairman Kilgore.

1. WELCOME

2. PUBLIC COMMENT

No comments were presented.

3. CONSENT AGENDA

Chairman Kilgore asked for questions pertaining to the consent agenda items. There being none, he called for approval of the items of the Consent Agenda which were the meeting minutes of the Regular Commission Meeting January 11, 2022, the Water Resources Report, the Finance Update, New Development, and New Annexations. Commissioner Sofield moved, seconded by Commissioner Brasington, to approve the items of the consent agenda. The motion passed unanimously.

4. LEGISLATIVE UPDATE

Chairman Kilgore recognized Chief Executive Officer David Bereskin to speak on behalf of Greenville Water's Legislative Liaison Bob Knight who was in Columbia meeting with Representative Bruce Bannister regarding the ongoing ARPA legislation. The Senate will meet at 2:00 p.m. to take up its ARPA funding bill.

Mr. Bereskin mentioned two bills of interest. One bill pertains to outside city rates and the other pertains to a push by rural areas to provide water quality reports monthly rather than annually. The water quality report bill is still in committee. Greenville Water does not have

an issue reporting what is in the water because it is very good and all standards are met, but this would cause bill design issues and require extra laboratory work and will increase costs.

5. YEAR END FINANCIAL PRESENTATION

Chairman Kilgore invited Chief Financial Officer Phil Robey to provide an overview of the 2021 financial results. The results were preliminary unaudited numbers. The auditors will be appearing before the Commission in April to present results of the audit.

Mr. Robey reviewed the revenue highlights, expense highlights and measurement of key financial metrics. Development activity in the Greenville Water service area remained strong. One impact to the capacity fee transactions was Greenville Water's new Capacity Fee schedule adopted in June 2019 which significantly lowers developer costs for multi-family construction:

- 1 BR - \$660
- 2 BR - \$1,000
- 3 BR - \$1,320 (same as single family)

This was the second full year of the new capacity fee structure which was developed to create an equitable structure for recovering costs related to development, recognizing the proportional differences in the impact of smaller residential units versus larger residential units. This change provided \$857,840 in savings for developers for 2021:

- 1 BR unit Capacity Fee savings were \$567,600
- 2 BR unit Capacity Fee savings were \$290,240

Mr. Robey stated 2021 is the first full year of data showing the financial impacts of Covid on revenues. The turn on/off charges ran about 170% of pre-Covid. Staff assumes this is an impact from Covid, which is hard to understand with all the financial assistance available from childcare credits, unemployment supplements, utility bill assistance programs. Commissioner Sofield stated this increase is a trend the Commission does not like. Mr. Robey added the workload associated with turn offs is substantial which puts a burden on Field Services staff as well as the customers.

The 2021 financial results demonstrate why Greenville Water continues to maintain its AAA bond rating from Moodys, Standard & Poors, and Fitch. Preliminary information was sent to Fitch for an annual update and in response Staff was informed nothing more was needed. The AAA rating was renewed. Chairman Kilgore asked how long the triple AAA rating had been maintained. Mr. Bereskin responded the rating has been maintained for at least eleven years.

6. BUDGET CARRYOVER

Mr. Robey reviewed the Operating Budget Policy which gives the CEO authority to carryover budgeted amounts unspent at year end and advised the Commission of amounts to be carried over into 2022.

7. VODA ARTIFICIAL INTELLIGENCE PILOT TEST RESULTS

Chairman Kilgore welcomed Chief Operations Officer Jeff Boss to provide pilot test results for the Voda Artificial Intelligence predictive analysis. Mr. Boss took the Commission back to September 2021 when the project was introduced and reviewed the analysis details and how the data would be used.

Service lines were included in the analysis. This is the first time any utility in the United States has tried to predict service line leaks. The majority of Greenville Water's leaks are service lines, so it was very important to have these leaks included. Voda AI was the selected vendor because they were the best fit and is the only company to include service lines in the analysis. The data will be used to deploy leak detection, perform condition assessments in the system and target budgets.

Greenville Water supplied Voda with GIS pipe asset information along with leak and break data from 2003 to 2018. The 2019 data was withheld so the Voda AI system could predict where the 2019 pipe failures occurred. The pilot was successful in providing the following data:

- 289 of 308 main breaks from 2019 predicted = 94%
- 131 of the main breaks were first time failures
- 385 of 663 service line leaks from 2019 were predicted = 58%
- 367 of the service line leaks were first time failures

Mr. Boss reviewed the three-year subscription details for the service listing the six most important modules that will be part of the subscription:

- Likelihood of Failure (LoF) values updated quarterly over 1, 3, 5, 10 and 20-year windows
- Consequence of Failure (CoF) values
- Business Risk Exposure (BRE) values
- Remaining Useful Life (RUL)
- Beta Version of Planner (commercial version upon release)
- Pipeline data QC and optimization

Other subscription advantages include:

- Inclusion of 2019, 2020 and 2021 leaks and breaks into the Artificial Intelligence (AI) for better future predictive failures
- Voda incorporates satellite data for topside vegetation density, soil classifications, and utility proximities to pipelines for electric, gas, and digital cable locations.
- The more analysis runs we complete, the more educated and accurate the model results become
- AI performs trending analysis that humans cannot

Chairman Kilgore stated he saw the benefit of the service from a system reliability standpoint and asked if Voda AI had offered any data for cost savings associated with the subscription.

Mr. Boss explained currently a leak is repaired once water is seen on the ground. If areas are targeted with leak detection and condition assessments, pipes could be repaired that have not surfaced as leaks yet. Planned activities are less expensive than emergency activities. This would be where a lot of the savings would come in to play. Commissioner Brasington asked Mr. Boss to comment on the return on investment. Mr. Boss explained staff had estimated costs of replacing service lines prior to them breaking. Almost two-fold the work could be done for the same price if the work is planned. The estimate recommended \$70,000 savings per year in labor and material if Voda AI only predicted 10% of breaks (94% of breaks were predicted in the pilot) versus the \$44,995 per year cost for the subscription. As service line breaks have been trending up, results should be seen within the first year of the subscription if service line breaks begin to trend down. Commissioner Sofield added it would save customers from unexpectedly losing water service and becoming angry with Greenville Water as well. Mr. Boss stated it is also the next step in being a strategic water utility.

8. EXECUTIVE SESSION

Commissioner Sofield moved, seconded by Commissioner Brasington, to enter Executive Session for the purpose of considering potential litigation and legal issue related to real estate. The motion passed unanimously.

(Executive Session)

Commissioner Brasington moved, seconded by Commissioner Sofield, to go out of Executive Session. The motion carried unanimously. No action was taken.

9. CHIEF EXECUTIVE REPORT

No comments presented.

10. COMMISSION COMMENTS

Commissioner Sofield acknowledged recent retirees and the Commission's appreciation for their years of service.

11. ADJOURNMENT

There being no further business, the meeting was adjourned 8:56 a.m.



Phillip A. Kilgore, Chairman



Kimberly Haulter, Executive Assistant