

Citizens Advisory Council of Prichard (CACP) Meeting Summary

May 16, 2024, 2 P.M. to 4 P.M.

A.J. Cooper Municipal Complex
216 E. Prichard Ave, Prichard, AL 36610

PRESENTERS: John Young, Jr., Court-Appointed Receiver
Prichard Water Works and Sewer Board (PWWSB)

Olivia August, Hazen & Sawyer
Ryan Nagel, Hazen & Sawyer
Shelbie Dashiell, Hazen & Sawyer
Jayson Page, Hazen & Sawyer

ATTENDING: Mayor Gardner, City of Prichard
Jessica James, City of Chickasaw (Representing Mayor's Office)
Severia Morris, United Concerned Citizens of Prichard
Pastor Chris Williams, County Commission
Rusty Murdaugh, District 98
Dr. Beatrice Morse, District 97
Katie Davis, District 2
Clifford Bryant

PUBLIC COMMENT: Paula Blevins
John Johnson, Jr.

MODERATING: Jim Gilliland

ABSENT: Carletta Davis, President, We Matter

Asset Management Evaluation

Hazen presented the asset management evaluation of the PWWSB's water and sewer pipes, water storage tanks, wastewater lift stations, and wastewater treatment plants. A summary of the findings is presented below:

Water Pipes

- Based on factors including age, risk, and modeled fire flow, 70% of water pipes were estimated to be in poor or very poor condition and require replacing in the next 20 years.
- Replacing 70% or 188 miles of pipe over the next 20 years will cost approximately \$240M if completed today or \$332M if spread over the next 20 years.
- Hazen recommends using the results of the ongoing ASTERRA leak detection effort to help validate these results and inform short-term water pipe replacement projects.

Sewer Pipes

- Based on a combination of factors, including age and historical sanitary sewer overflows (SSOs), 32% of sewer pipes were estimated to be in poor or very poor condition and will likely require replacing in the next 20 years.
- Replacing 32% or 46 miles of pipe over the next 20 years will cost approximately \$104M if completed today or \$144M if spread over the next 20 years, due to inflation.
- Hazen recommends conducting condition assessments (e.g., camera inspections) of sewer pipes to ensure that short-term replacement projects address the pipes with the greatest structural defects.
- Additionally, Hazen recommends implementing a program to identify and address areas with significant infiltration and inflow into the sewer system.

A visual inspection of the two wastewater treatment plants, four water storage tanks recommended to remain in service, and twenty-nine lift stations. These inspections help develop a 20-year capital needs projection for each of these facilities.

Wastewater Treatment Plants

- At the Carlos Morris Wastewater Treatment Plant, several treatment and overall site deficiencies were observed, including an inoperable Influent Bar Screen and Degritter 1. Several of these issues are being addressed with the \$5M of wastewater projects recently approved by ADEM for funding.
- At the Stanley Brooks Wastewater Treatment Plant, several treatment and overall site deficiencies were observed, including inoperable degritters and structural defects.
- Replacement costs at the Carlos Morris Plant and Stanley Brooks Plant over the next 20 years are approximately \$34M if completed today or \$45M if spread over the next 20 years due to inflation.

Lift Stations

- Hazen inspected the twenty-nine lift stations and found that fifteen of the lift stations had only one functional pump of two or three total pumps. Additionally, three of the lift stations were completely inoperable and had on-site bypass pumping.
- Due to inflation, the replacement costs for the lift stations over the next 20 years are approximately \$8M if completed today or \$10M if spread over the next 20 years.

Water Storage Tanks

- Hazen inspected four of the five water storage tanks. The Office Tank was not inspected since it is planned to be taken offline and demolished in the near term.
- Hazen found several of the tanks to be in poor condition. However, these tanks will be addressed by \$4M in short-term improvement projects that ADEM has already approved for funding. Additionally, the Lott Road Tank is planned for full replacement with a new, larger tank by 2029.

Water Source Options

Hazen presented the initial findings of their study of the drinking water source options for PWW&SB, including MAWSS, surface water, and groundwater.

Mobile Area Water and Sewer System MAWSS)

- Hazen discussed that PWW&SB currently purchases water from MAWSS at a rate of \$2.75/1000 gallons. Rates are subject to annual increases based on cost-of-service analysis.

Surface Water

- Two surface water options were identified, Big Creek Lake and Eight Mile Creek. MAWSS owns Big Creek Lake capacity and will not be an option. Eight Mile Creek contains pathogens and will not be permitted by ADEM as a drinking water source.
- In addition, the increased cost of surface water treatment plant construction and operation would make this option less economical for PWW&SB.

Groundwater

- Hazen identified the Miocene aquifer as a potential drinking water source.
- Hazen identified multiple concerns regarding the Miocene aquifer, including water quality issues (elevated iron and manganese), limited data (only one test well), and that ADEM will not issue well permits with the current technical, management and financial (TMF) issues that PWW&SB is experiencing.
- Hazen presented multiple treatment options for the groundwater source, including sequestration, aeration followed by filtration, chlorine oxidation followed by filtration, and manganese greensand. Preliminary process flow diagrams were presented for each treatment option.
- Hazen also presented potential locations for well sites that were prioritized by proximity to current MAWSS purchased water connections.

Net Present Value

- Hazen presented 20-year net present values for the groundwater source and compared the values to the current MAWSS rates. The groundwater source is more expensive if the City uses MAWSS for standby capacity but becomes comparable to MAWSS rates if the standby capacity is achieved through redundancy (N+1).

Summary and Recommendations

Hazen recommends that:

- PWW&SB remain on MAWSS water
- PWW&SB perform a pilot test of the Miocene aquifer to confirm yield and water quality assumptions
- PWW&SB reduces water system losses and improve the City's TMF situation over the next decade to achieve conditions allowing drilling permits.
- When appropriate TMF conditions are achieved, reassess the groundwater alternative with improved yield and water quality data and updated purchased water costs

Alternative Analysis Discussion

The Receiver provided an update on the Alternative Analysis matrix that addresses the future ownership, governance, operation, and source of supply for Prichard/Chickasaw. As the evaluation progresses, several of the alternatives have been eliminated from consideration. For example, private/investor-owned ownership will not be considered since the PWWSB financial and asset condition would not be attractive to a private owner.

The operation alternatives have been reduced to “in-house” operation, the concession operator, or a contract operator. Based on the results of the Source of Supply study (Hazen), the short-term system supply will be MAWSS, with groundwater development being considered after TMF Capacity issues are addressed and more information is developed for well yield and water quality. With these restrictions and requirements, a groundwater option is not viable for at least 10 to 15 years. Additionally, the Cities of Prichard and Chickasaw have been requested to provide input on the potential structure and operation based on individual City ownership.

The Alternative Analysis must be filed with ADEM and the Court by July 31, 2024.