	STAFF	REPORT	
Date:	August 3, 2021		
Prepared By:	Stephen Larson, Finance Director Chuck Soules, Public Works Director		
Subject:	CWWS Fund, South Sewer Project Financing		
Staff Report:	Finance and Public Works		

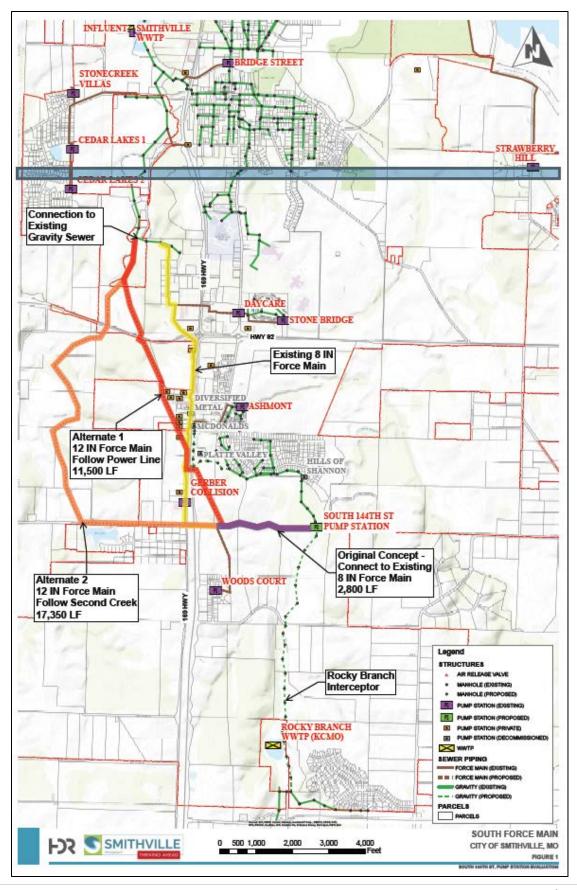
The 2022-2026 Capital Improvement Plan for the CWWS (Combined Water & Wastewater Fund) is a continued strategy to make key water and sewer investments for the City of Smithville. As seen in the grand totals for the CWWS Fund CIP, the next 5 years features water and wastewater projects totaling \$22,075,000 in estimated project cost, 50% of which are slotted in the final outyears of the 5-year plan. These final outyears include a major water plant expansion project and a major wastewater treatment plant expansion project which address the increased need for water production and sewer treatment capacity related to future projected growth in population, housing, and business. As we move closer to these outyears, staff will continue to evaluate the need for these major projects through the growth of the City and limitations on current production and treatment capacity.

In looking at the next 1-2 years of the 2022-2026 CIP, staff is seeking Board direction related to sewer projects on the south end of Smithville, debt issuance and rate increases.

#### South Sewer Project

At the Board of Alderman meeting held May 18, 2021, the Board received a report and update on the status of the 144<sup>th</sup> Street Lift Station and the South Interceptor (also referred to as the Rocky Branch Interceptor and / or Forest Oaks Interceptor). The report noted that the pressure needed for the 144<sup>th</sup> Street Lift station to overcome head and friction losses would cause several small existing lift stations to become inoperable. HDR developed 2 alternatives, which are shown in Figure 1 on the next page:

Continue to Page 2 to view Figure 1 (provided by HDR)



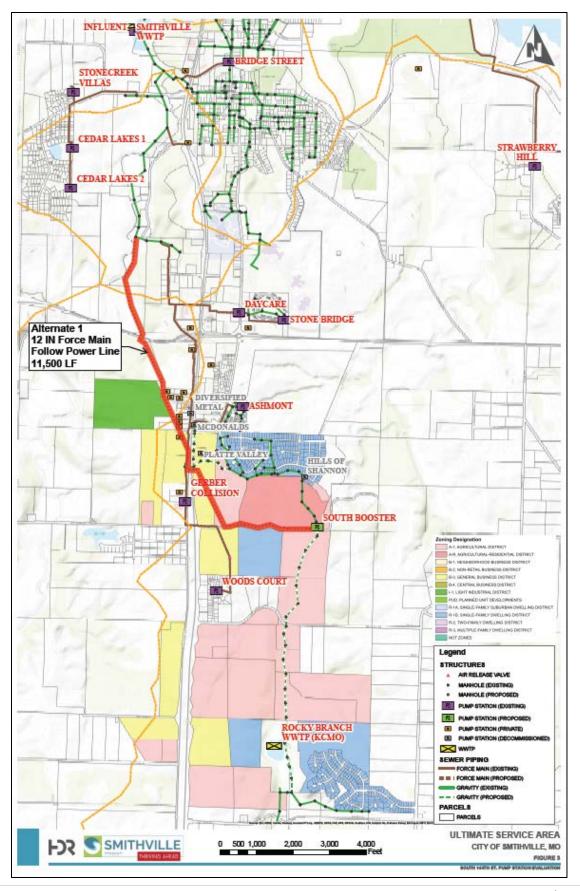
HDR cited two main drivers for the construction of the South Interceptor, which were:

- 1) Replace the aging and substandard existing Hills of Shannon subdivision pump station.
- 2) Allow the wastewater flows from the Forest Oaks Subdivision to be diverted from Kansas City, Missouri's Rocky Branch wastewater treatment plant to Smithville's wastewater treatment plant (which was a more economical solution for Smithville).

After further review of **Alternate #1** and **Alternate #2**, as presented in Figure 1 on Page 2, staff has made the following findings:

- A. The cost to treat the sanitary sewage from Forest Oaks each year is about \$123,458. The monthly payment to treat the sewage is made to Kansas City, MO. The City collects approximately \$89,978 each year from the residents in the Forest Oaks subdivision. The estimated cost for the construction of the South Inceptor is approximately \$1.8 million. The payback for this project, at \$1.8 million, is over 50 years (\$1.8 million / \$33,000 per year = 54 years). While the payback is certainly well in the future, the construction of the south interceptor would pave the road for development in south Smithville. However, the new 144<sup>th</sup> Street Lift Station would cause several other pumps to become inoperable.
- B. Alternate #1 (West Bypass of 144<sup>th</sup> Street Lift Station) would allow the 144<sup>th</sup> Street Lift Station to be constructed. This project would also allow the Hills of Shannon force main to be converted to a gravity sewer line which would eliminate the Hills of Shannon lift station. Alternate #1 will also provide for potential development in south Smithville through the extension of a line south (see green dotted line on Figure 2 on next Page). Some of the alignment of Alternate #1 follows a utility easement. Staff has contacted Evergy and is discussing the City's ability to utilize a portion of the easement to avoid easement acquisition.

Continue onto Page 4 to view Figure 2 (provided by HDR)



C. Alternate #2 (see in Figure 1 on Page 2) follows Second Creek west of Highway 169 in west Smithville. This option is longer, more expensive, and will require significant easement acquisition.

After reviewing these options, staff's recommendation is to proceed with the construction of the 144<sup>th</sup> Street Lift Station and the construction of **Alternate #1** (West Bypass of 144<sup>th</sup> Street Lift Station). The plans are nearly completed for the 144<sup>th</sup> Street Lift Station with an estimated construction cost of \$1.5 million. Alternate #1 is estimated to cost approximately \$2.5 million, which includes engineering, easement/ROW, and construction costs. Staff would also request Board authorization to have HDR prepare an engineering services agreement, project scope, and fee for Alternate #1. This request would be presented to the Board for approval.

Given the recommendation above, the 2022-2026 CIP has undergone edits and changes to projects planned for the 5-year period. In FY2022, the CIP features a budget of **\$500,000** for engineering and easement/right-of-way costs for the West Bypass of 144<sup>th</sup> Street Lift Station. In looking at the upcoming CWWS cashflow graph for FY2022, staff anticipates having the financial capability to pay cash for the engineering/ROW while still retaining a required reserve amount above 20% of the CWWS operating budget.

In FY2023, the CIP features **\$1,500,000** for the construction of the 144<sup>th</sup> Street Lift Station and **\$2,000,000** for the construction of the West Bypass of 144<sup>th</sup> Street Lift Station. Together, the total project cost is \$4 million with engineering of \$500,00 and construction of the bypass and lift station at \$3.5 million. Due to the costs of this project, the City is not projected to be in an appropriate financial position to pay cash for the West Bypass of 144<sup>th</sup> Street Lift Station. As indicated by the CWWS Fund 5-year cashflow model, paying cash (\$3.5 million) for this project would meaning incurring a severe deficit in the fund in FY2023 (nearly \$1.3 million deficit). Staff also discussed the possibility of using sewer impact cash for this project. However, with major plant expansion projects on the horizon, such as the wastewater treatment plant expansion project, staff is proposing to continue to buildup fund balance for sewer impact cash as a strategy to support funding that project.

Staff is seeking Board direction on the desired course of action regarding south sewer improvements.

## Debt Issuance

Funding this project would requiring issuing debt. Debt issuance has been anticipated for the last several years in association with the scope of projects identified. Staff has been working with Piper Sandler, the City's financial advisory services provider, to explore financing options. One conversation involved exploring alternative financing options, such as the State Revolving Fund (SRF), a subsidized low interest loan program which is facilitated through the State. The SRF does offer some advantages, but also has disadvantages. The SRF can offer lower interest rates on the issuance of debt. However, when applicants submit projects for funding through the SRF, all submitted projects are prioritized for available funding and are listed in the annual SRF "Intended Use Plan". The

Department of Natural Resources (DNR) also reviews plans and applications for water and sewer projects, which would further delay the project to completion. This is one primary disadvantage as funding is not guaranteed once an application is submitted due to this prioritization process. In addition, SRF requires voter approved revenue GO Bonds (General Obligation), so the process has this additional burden.

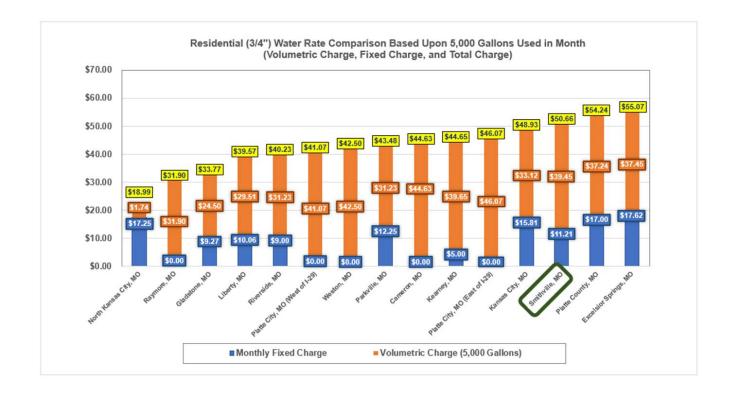
Staff also discussed issuing a COP (Certificate of Participation) to finance the West Bypass of 144<sup>th</sup> Street Lift Station project. This is the recommended financing route. The City issued a COP (Series 2018) for pay for the Wastewater Plant Upgrade and South Interceptor project. While a COP issuance may carry a slightly higher interest rate than a SRF loan, the COP carries much more flexibility and less limitations on the timeline of starting the project. At this point, staff is in the process of developing a debt service (amortization) schedule applicable for project costs of \$3.5 million.

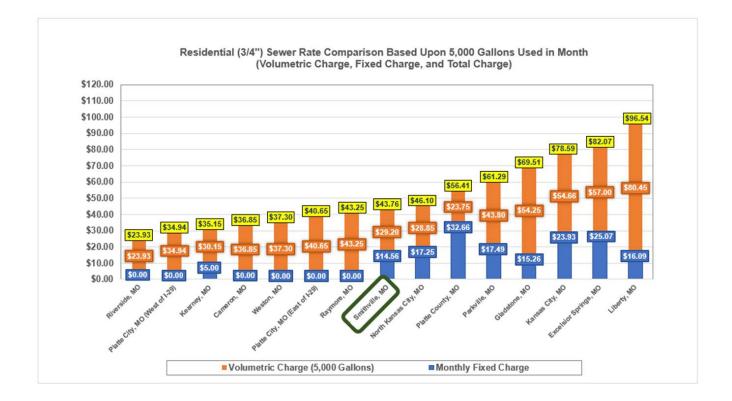
Staff seeks Board direction regarding a preferred financing option or either SRF or issuing a COP.

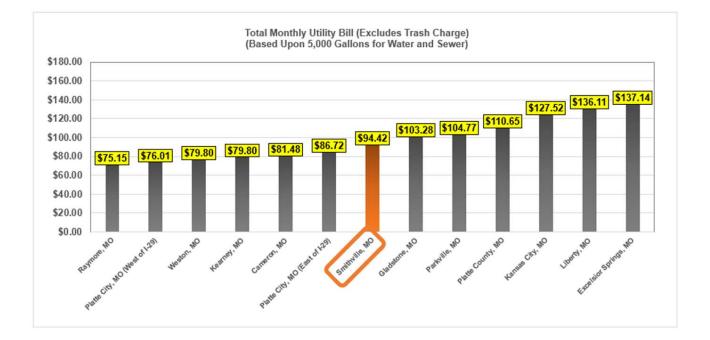
## **Utility Rates**

Once Piper Sandler produces a debt service schedule, staff would be ready to input the debt service schedule into the CWWS Forecast and evaluate revenue needs via utility rate analysis. This process involves updating the utility rate study which forecasts revenues, expenses, and helps staff determine the necessary rate structure to pay for future operating and capital costs. In November 2018, Rafetelis Financial Consultants, LLC presented a utility rate study, which included a five-year plan for recommended water and sewer structure changes and rate increases. The City has continued to implement the recommendations of the rate study which has provided necessary revenue to pay for previous COP issuances (such as the Series 2018).

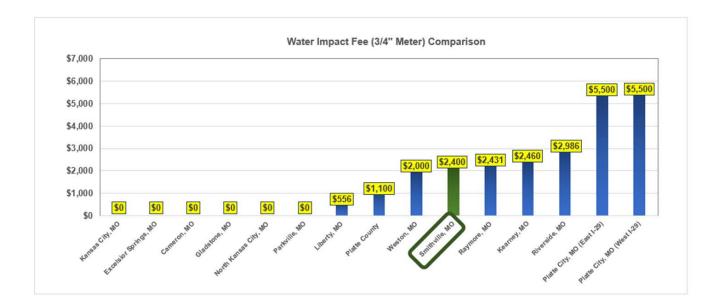
In addition, Finance staff has worked to create utility rate comparison charts for City of Smithville comparable cities. Charts have been completed for water rates, sewer rates, and water/sewer impact fees. Please see next page for those charts:







# Continue onto Page 9 to view more comparison charts





Currently, Finance staff are working on inputting financial data from the proposed FY2022 CWWS Fund budget into the utility rate model. The latest utility rate model features a 5% increase to the water volume and water fixed charges and a 10% increase to wastewater volume and wastewater fixed charges. As staff continues to update the model with the 2022-2026 CIP, account growth trends and operating expenses, proposed rate changes will be presented to the Board.

#### **Requested Action**

Staff seeks Board direction on the preferred alternative to address south sewer needs and preferred financing method (COP or SRF). With this information, staff will work with Piper Sandler to develop the debt schedules and update the rate structure information and will present rate change recommendations to the Board.