MEMORANDUM

To: Mayor and City Council

From: Kim Tiehen, Assistant Director of Finance

Via: Jennifer Miller, Director of Finance

Date: January 26, 2021

Reference: Water Sewer Rate Structure Discussion

2040: Foundation: Sustainable Government

Introduction:

During calendar year 2020, the Finance Department requested WILLDAN Financial Services (WILLDAN) to perform a rate study for the Water Sewer Fund. The purpose of the study was to determine if a water and sewer rate increase was necessary and to explore the idea of an increasing block rate structure. Results of the study revealed a rate increase was not necessary for fiscal year 2021. The rate study also provided a proposed change to the current rate structure.

Analysis:

An increasing block rate structure for residential customers establishes rates that increase with water usage. Specifically, the per unit charges for water increases as the amount of water used increases. The first block is charged at one rate, the next block is charged at a higher rate, and so on. The purpose of an increasing block rate structure is to encourage water conservation with the goal being a positive impact on water sustainability. The idea is that encouraging conservation today will reduce the City's need to request Dallas Water Utilities (DWU) to increase the daily water demand level in the future.

The City's daily water demand was 17 million gallons per day (MGD) until August 2011 when it was increased to 18 MGD. In August 2015, it was increased to 18.5 MGD. Several days in July and August 2018 and again in August 2019, demand from customers pushed water needs to the 18.5 MGD level and would have exceeded that level if City staff had not reached out to the community to limit water usage. If the City had not kept its usage at or under 18.5 MGD, a request for an increase in the daily demand would have been necessary. An increase in the daily demand remains for five years according to the City's contract with DWU. Currently, the cost of the right to demand up to 18.5 MGD is approximately $5.4 million or $291,422 per million gallons (18.5 X $291,422 = $5,391,307). Therefore, if the City needed to add one million gallons to its daily demand, the additional cost would be $291,422.

Higher water usage by customers pushes the daily demand up. Implementing an increasing block rate structure distributes the demand cost charged by DWU to customers with the greatest impact on the system. The following is the increasing block rate structure presented by WillDan in October 2020:

Usage	Cost/1,000 gallons
1,001 - 15,000	$3.05
15,001-25,000	$3.82
25,001 -above	$4.78

Currently, the water rate is 3.15/1,000 gallons no matter how much water is used. The increasing block rate structure lowers the rate by ten cents per 1,000 gallons for up to 15,000 gallons. According to the rate study, 71.7% of residential customers use an average of 15,000 gallons or less per month, 14.1% use up to 25,000 gallons, and 14.2% use over 25,000 gallons.

Customers can use the customer portal, a tool rolled out when the City installed the advanced water meter system, to manage their water usage. The customer portal provides customers the ability to view their usage and setup usage alerts. Utilizing the customer portal and establishing water alerts provides customers with control over the water portion of their water bill. For example, customers can see how much water their irrigation system uses and manage that use to prevent moving into the next water usage block.

In addition to the increasing block rate structure for water, a reduction in the wastewater cap was also presented by WillDan during the October 2020 work session. Currently, residential customers pay a volume rate of $2.24 for up to 14,000 gallons of water use. WillDan's rate study proposed reducing the cap by 1,000 gallons each of the next five years to an ultimate level of 9,000 gallons.

Since sewer cannot be metered, a threshold of 14,000 gallons was established as the amount of water flowing into the sewer system. However, a portion of that usage is most likely for irrigation which does not enter the sewer system. WillDan's analysis of residential customer usage determined establishing a new threshold would be appropriate. The rate study recommended that the cap could be reduced over the next five years to 9,000 gallons.

City staff requests direction concerning Council's desire to move from the current residential rate structure to a new increasing block rate structure and reducing the residential sewer cap from 14,000 gallons to 9,000 gallons over the next five years.

Legal Review:

N/A

Fiscal Impact:

Both the current and increasing block rate structure will generate the same level of revenue for the Water and Sewer Fund.

Recommendation:

This item is to receive direction from Council.