



## MEMORANDUM

**To:** Mayor and City Council  
**From:** Kim Tiehen, Assistant Director of Finance  
**Via:** Jennifer Miller, Director of Finance  
**Date:** March 9, 2021  
**Reference:** Discussion regarding increasing block rate structure for residential and irrigation meters, and reduction in residential sewer cap.  
**2040:** Foundation: Sustainable Government

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### Introduction:

At the Council retreat on January 30, 2021, staff presented the idea of an increasing block rate structure for residential customers. During that discussion, Council requested staff also consider an increasing block rate structure for irrigation meters. Staff provided additional information to WillDan, the City's rate study consultant, so that an increasing block rate structure could be developed for irrigation meters. WillDan developed an increasing block rate structure for both residential and irrigation meter accounts.

WillDan also included decreasing the residential sewer cap by 1,000 gallons each year until it is reduced to a 9,000 gallon cap. 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 incrementally over the next five years to 9,000 gallons.

The water and sewer rate structures were developed to be revenue neutral, as rate increases are not necessary for fiscal year 2021.

### Analysis:

An increasing block rate structure 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.

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 for both residential and irrigation meters provided WillDan:

<u>Usage</u>	<u>Cost/1,000 gallons</u>	<u>Usage</u>	<u>Cost/1,000 gallons</u>
<u>Residential:</u>		<u>Irrigation:</u>	
1,001 - 15,000	\$3.05		
15,001 - 25,000	\$3.82	up to 25,000	\$3.34
25,001 - above	\$4.78	25,001 - above	\$4.78

Currently, the City has a conservation rate that is effective June 1 through October 31. The conservation rate is \$3.94/1,000 gallons of usage over 25,000 gallons. The increasing block rate structure for irrigation is similar to the current conservation rate but adds another tier and uses rates meant to encourage conservation. The residential increasing block rate structure is consistent with what was previously presented to Council.

Both residential and commercial 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.

The phased in approach to reducing the residential sewer cap rather than moving directly to a winter averaging method was recommended for the following reasons:

- The City is in the middle of a new utility billing software implementation with a go live date projected to be in December 2021 or January 2022. The software company's implementation team has advised that we should not change our sewer method until after the City has moved to the new system. The current system does not use winter averaging, so the conversion and testing would be more complicated and require a change order which in turn will increase the cost of the project and may push out the "go live" date past the December/January timeframe.
- Based on the software implementation timeline and the software company's recommendation, the first opportunity to implement winter averaging, if that is the direction given by Council, would be April 2023 which would use the months of November 2022 through February 2023 to determine the winter average for each customer. This also provides an opportunity to notify customers in advance of the winter averaging time period, so they can manage their usage.
- It is also important to note that the Water and Sewer Fund's only revenue source is from the rates charged for water and sewer services provided. Therefore, the revenue generated from the water and sewer rates must cover the cost to operate the system, maintain the systems infrastructure, and cover the principal and interest payments on the outstanding bonds. Our consultant has cautioned that cities should be very careful about making abrupt changes to rate designs as there may be unintended consequences since the same amount of revenue needs to be generated no matter what rate structure methodology is utilized. For example, if the City were to immediately go from billing based on a cap of 14,000 gallons per month to a winter average, the result is likely to be that low volume customers may see the biggest proportionate increase. This is because since the number of sewer billing units would drastically decrease under a winter average methodology, the unit rate per 1,000 gallons and/or the base rate would need to increase to ensure the City recovers the equivalent amount of revenue. So if the cost per 1,000 gallons goes up, then those residents who use only 2-3,000 gallons per month are likely to see an increase in the cost per billing unit, while high volume water users could see a decrease in cost per billing unit.

The above reasons are why the idea of gradually reducing the cap from 14,000 gallons to 9,000 gallons was recommended. It results in a gradual implementation of a new rate plan over time. When the cap reaches 9,000 gallons, the disruption from changing to a 6,000-7,000 gallon based winter average will be minimal for all users, including low-volume users. Therefore, the idea is to spend the next several years gradually adjusting the cap, so that by the time it reaches 9,000 gallons, the City has the option to convert to a winter average with minimal disruption.

City staff requests direction concerning Council's desire to move from the current residential rate structure to a new increasing block rate structure for residential and irrigation meter accounts and to reduce the residential sewer cap from 14,000 gallons to 13,000 gallons this fiscal year.

**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.