Utility Rates Working Group Report

WATER AND WASTEWATER RATE STUDY EXECUTIVE SUMMARY

Introduction:

This report presents the background, conclusions, and recommendations as developed by the Utility Working Group. The Group was formed by Mayor Kuhns in January 2019 to develop a recommended rate structure for implementation by the City which would cover anticipated costs for each system for the upcoming years. The Group was made up of four members of the community and three members of the City staff that included cross-discipline educational and work experience in the fields of engineering, finance, accounting, public administration, project planning, and law. It met 16 times since January and reviewed related reports, studies, other community rate structures, and numerous rate study iterations as "homework" between the meetings. The Group built upon work done by the Abrahams Group in November 2018 which had developed cost and revenue projections for the City for the next 12 years (FY2020-FY 2031) for each of the water and wastewater funds. JWF Associates in 1999 completed the last formal Rate Study for the City. Incremental changes to the rates were made in 2000, 2006, 2010, and 2016. Also, a sewer surcharge was established in 2009 and modified each year until 2012. It has remained constant since 2012.

Current Situation:

In addition to the residents of Rehoboth, the City also currently provides water services to North Shores, Dewey Beach (bulk sale thru Sussex County), the Breezewood Community, and other Out-of-Town customers along the Rt 1 corridor. The City also provides wastewater services to Sussex County, Henlopen Acres, and North Shores.

Significant increases in projected expenditures for both the water and wastewater funds are anticipated to outpace projected revenues necessitating an increase to the existing rates. With the existing rate structure (pre-interim rate), the water fund is projected to be $20,000,000 short of the estimated requirements for the water system. The shortfall is attributable to the increased maintenance and rehabilitation needs of the water supply and distribution systems as outlined in the Drinking Water Infrastructure Asset Management Plan prepared in 2017. The wastewater fund is projected to be $25,000,000 below its revenue projection over the same

period of time. The shortfall can be attributed to the large debt repayment associated with the $40,480,000 Outfall loan, approximately $30,000,000 worth of additional repairs needed at the WWTP, and other maintenance and repairs to the system recommended in the 2018 Wastewater Infrastructure Asset Management Plan. Because of these dramatic shortfalls, the Board of Commissioners approved an interim, across the board, rate increase of 30% for the water rates and 60% increase for the wastewater rates while this Group completes its mission.

Utility Working Group Methodology:

The Group began by examining rate structures of other communities in the immediate vicinity and across the entire country. We also evaluated and adopted best practices from the American Water Works Association (AWWA) and the Water Environment Federation (WEF) and received input from the City's engineering consultants on matters such as what capital and operating costs should be assigned to peak or non-peak system usage. Since the beginning of the Water and Sewer Rates Committee's efforts to establish fair and costs-based water and wastewater rates, the Committee has been focused on ensuring that customers that contribute significantly to the City's high water use and wastewater flow (or "peak") pay their fair share of water and wastewater operating and capital costs, and not try to "protect" any particular group or class of user. The Group determined early on that the current rate system was too heavily weighted towards water meter size which is not necessarily reflective of water and wastewater usage. As a result, the Group favored development of a flow-based rate system that more fairly allocates costs to those users who generate the capital and operational expenses that need to be offset.

The City operates the water and wastewater systems year-round and must also ensure that the systems can meet the peak demand of the high season. This requirement bears additional costs. The Group sought to capture these additional costs.

The Group focused on capturing year-round costs (base) and the additional costs (incremental) borne by the high-season requirement (peak season of April thru September; non-peak of October thru March) and has classified them into two cost "buckets" – Fixed Costs and Non-Fixed Costs. These cost "buckets" are defined as follows:

- **Fixed Costs** – Base costs incurred whether there is an increase in flow during the peak season or not. Essentially, year-round costs to manage stable flow not related to the peak season. Most of the City's capital costs for water and wastewater are included.
- **Non-Fixed Costs** – Incremental costs above and beyond the base costs that are incurred due to an increase in flow that occurs because there is a high season. Some of the City's capital costs for water and wastewater are included.

Since the Fixed Costs concept relates to year-round operations, the Group has linked these costs to total flow in a year and calculated the Fixed Costs portion of the rate using total flow. The total flow used to calculate the wastewater rate is 187,000,000 gallons, and total flow used for the water rate is 197,000,000 gallons.

Since the Non-Fixed Costs concept relates to the incremental or additional costs for peak-season operations, the Group has linked these costs to peak flow in a year and calculated the Non-Fixed Costs rate using peak flow. (The Peak period for our analysis runs from April thru September.) Peak flow in the dataset used to calculate the wastewater rate is approximately 140,000,000 gallons, and peak flow used to calculate the water rate is 150,000,000 gallons. Peak flow represents about 75% of the total flow for both water and wastewater.

To determine the water rate and wastewater rate to bill, the Fixed rate and Non-Fixed rate are added together to create one rate to be charged to the customers year-round. The same rate applies during the peak season and non-peak season. The Group has ensured that customers that contribute greatly to the City's peak season pay their fair share of costs by linking the additional or incremental costs for the high season to peak flow.

The Group also evaluated the use of a fixed fee to recoup the administrative costs associated with running the programs. The administrative costs include items such as meter-reading, billing, and utility administration and represent less than 10% of the overall water and wastewater costs and revenue generated under the rates recommended below. The Group elected to use the "equivalent meter" method to allocate the administrative costs as outlined in the AWWA manual. The Group opted to term this the "Ready to Serve" fee and the fee would be calculated on an annual basis and billed proportionally on each customer's bill (quarterly for customers with 1-inch meters and monthly for customers with meters larger than 1 inch).

The Group also wanted to provide a mechanism to develop an appropriate level of "reserves" for both the water and wastewater funds. For the wastewater fund, it was agreed that there should be a $300,000 capital reserve to ensure adequate funds are available to repair or replace equipment if it fails, and a $300,000 operational reserve to ensure adequate operating funds for contingencies and the cyclical nature of wastewater generation in the City. For the water fund, we recommend a $100,000 operational reserve and a $100,000 capital reserve for the same reasons as stated above. The recommended water rates also include a "General Fund Support" component of $700,000 annually, which is consistent with the City's practice.

Recommendations:

To avoid having a rate that changes every year to cover that year's expenses, the Group recommends establishing a rate covering several consecutive years to provide consistency and predictability for the customers. We evaluated multiple options and recommended using a 4-year term. Although this results in larger rate increases in the first year, it prevents a much higher spike in rates in future years, thus "smoothing" the rate increases necessary over a 4-year period. We also recommend reconvening this Group (or a similar one) to evaluate the assumptions used and recommendations made to see if any adjustments are identified.

The Group recommends the rate structure as laid out in the following tables:

			SEWER RATES & BILL CODES (2018/Interim/Proposed) (Includes Sewer Surcharge for 2018 and Interim Rates)										
			Ready to Serve (Per Bill)			Ready to Serve (Annual)			Non-Peak		Peak		Year-Around
	Class Code	Size	2018	Interim	Proposed	2018	Interim	Proposed	2018	Interim	2018	Interim	Proposed
FLOW: (per 1000gal)	S1	ALL							$6.18	$9.89	$9.08	$14.52	$14.70
	61	1" & (-)	$18.14	$29.02	$31.05	$72.54	$116.06	$124.19					
	62	1.5"	$25.35	$40.56	$30.11	$304.20	$486.72	$361.27					
	63	2"	$32.67	$52.27	$37.63	$392.04	$627.26	$451.59					
	64	3"	$52.65	$84.24	$75.26	$631.80	$1,010.88	$903.17					
	65	4" & (+)	$996.45	$1,594.32	$150.53	$11,957.40	$19,131.84	$1,806.34					
	65	6"			$301.06			$3,612.69					

			WATER RATES & BILL CODES (2018/Interim/Proposed)										
			Ready to Serve (Per Bill)			Ready to Serve (Annual)			Non-Peak		Peak		Year-Around
	Class Code	Size	2018	Interim	Proposed	2018	Interim	Proposed	2018	Interim	2018	Interim	Proposed
FLOW: (per 1000gal)	W1	ALL							$2.10	$2.73	$3.10	$4.03	$6.30
	51	1" & (-)	$9.50	$12.35	$10.56	$38.00	$49.40	$42.25					
	52	1.5"	$13.35	$17.36	$10.24	$160.20	$208.26	$122.91					
	53	2"	$17.15	$22.30	$12.80	$205.80	$267.54	$153.64					
	54	3"	$27.55	$35.82	$25.61	$330.60	$429.78	$307.28					
	55	4" & (+)	$104.25	$135.53	$51.21	$1,251.00	$1,626.30	$614.56					
	55	6"			$102.43			$1,229.12					

Impacts:

The attached spreadsheets depict the impacts for various user groups. They compare the 2018 rate, the interim rate, and the recommended/proposed rates. There is also a comparison of the new rates with nearby communities, some with very similar usage characteristics.