

Memo

To: Water and Wastewater Rate Study Advisory Committee
From: Mandy Kellogg, Administrative Services Director
Date: December 22, 2022
Re: Water Usage Comparison by Customer Class

On December 8, 2022, Raftelis presented an updated Water Demand Assumptions that utilized the Fiscal Year 2019 demand as a baseline. The assumptions project a 44% increase in water usage overall from FY 2022 to FY 2023 as follows:

Table 1

- Table shows combined historical demands and near-term projections based on prior slides

Customer Class	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
SFR	202,374	269,976	256,260	160,396	193,172	194,092
MFR	67,878	76,683	69,678	53,210	65,034	65,590
CG	216,846	117,451	98,283	99,214	206,004	206,004
Industrial	101,992	110,300	100,035	88,441	101,865	101,865
Fire	1,211	163	353	184	1,150	1,150
Landscape	11,901	17,177	14,824	9,264	11,306	11,306
Raw	20,247	26,098	15,756	4,411	19,235	19,235
Total Sales (HCF)	622,449	617,848	555,189	415,120	597,766	599,241
Total Sales (AFY)	1,429	1,418	1,275	953	1,372	1,376
Annual % Change	N/A	-1%	-10%	-25%	44%	0%

Table 2

The following table shows the projected percentage increase by customer class from FY 2022 to FY 2023 based on the water demand data presented by Raftelis:

User Class	FY 2022	FY 2023	Percent Increase
Residential	160,396	193,172	20.4%
Multi Family	53,210	65,034	22.2%
Commerical/Government	99,214	206,004	107.6%
Industrial	88,441	101,865	15.2%
Fire Service	184	1,150	525.0%
Landscape Meters	9,264	11,306	22.0%
Raw Water	4,411	19,235	336.1%
Total	415,120	597,766	44.0%

During the December 8th discussion, there concerns were expressed pertaining to the 107.6% increase projected for water use demand in the commercial/government category. An analysis of the year over year water use for each customer class was requested to assist with understanding a reasonable water demand assumption.

Table 3

The following table shows the last 10 fiscal years of water sales per customer class:

Water Usage Comparison by Class

User Class	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Residential	289,307	313,635	271,737	231,759	250,863	280,468	269,389	334,641	291,029	169,868
Multi Family	63,312	70,752	69,860	60,336	66,260	79,175	58,616	69,559	60,925	51,851
Commerical/Government	194,954	212,045	139,512	126,728	133,151	127,123	161,905	164,877	125,702	107,618
Industrial	59,614	87,171	109,797	93,666	106,304	104,882	80,124	88,694	81,329	69,375
Fire Service	101	56	33	228	168	491	3,996	4,464	4,288	3,714
Landscape Meters	11,360	10,855	8,165	6,704	7,361	9,149	23,253	21,913	19,161	19,302
Raw Water	27,102	26,828	18,698	20,345	18,561	22,918	20,084	25,546	15,354	4,379
Total	645,750	721,342	617,802	539,766	582,668	624,206	617,367	709,694	597,788	426,107

Table 4

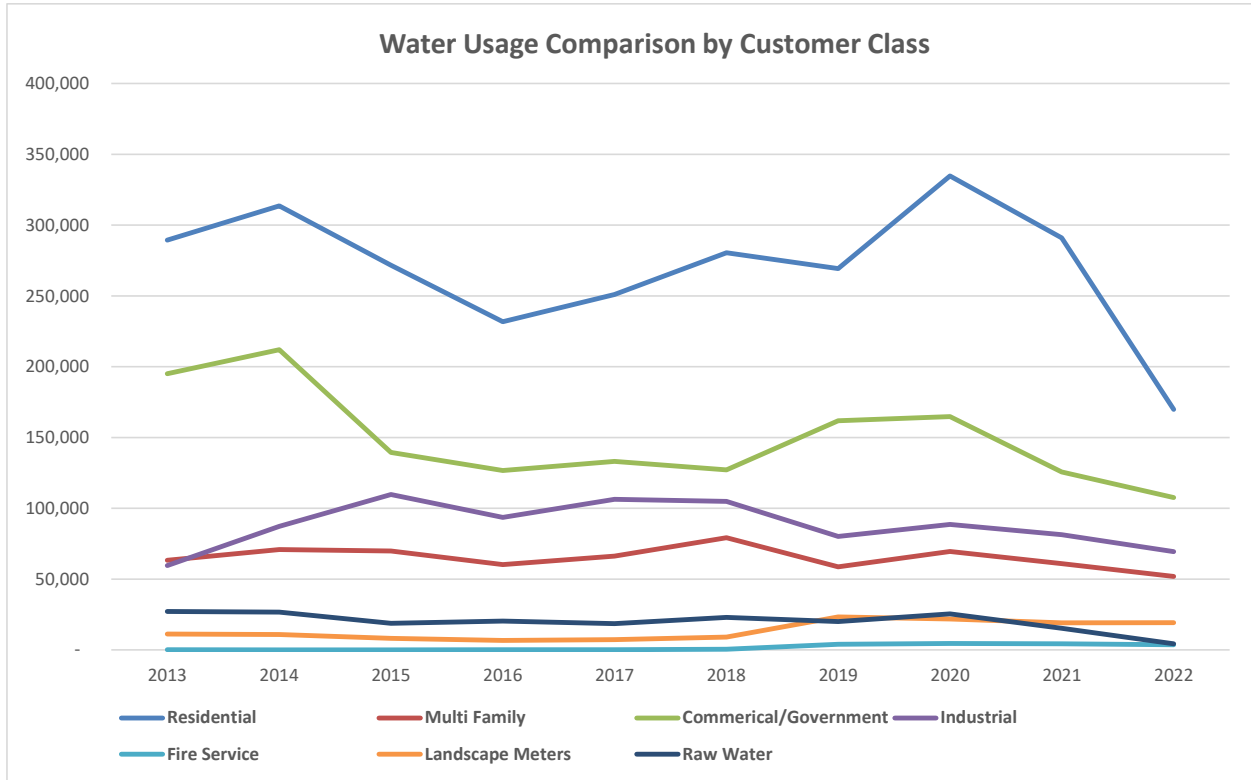
Table 4 shows the percentage increase by customer class year over year:

Year Over Year Comparison

User Class	2014	2015	2016	2017	2018	2019	2020	2021	2022
Residential	8%	-13%	-15%	8%	12%	-4%	24%	-13%	-42%
Multi Family	12%	-1%	-14%	10%	19%	-26%	19%	-12%	-15%
Commerical/Government	9%	-34%	-9%	5%	-5%	27%	2%	-24%	-14%
Industrial	46%	26%	-15%	13%	-1%	-24%	11%	-8%	-15%
Fire Service	-45%	-41%	591%	-26%	192%	714%	12%	-4%	-13%
Landscape Meters	-4%	-25%	-18%	10%	24%	154%	-6%	-13%	1%
Raw Water	-1%	-30%	9%	-9%	23%	-12%	27%	-40%	-71%
Total	12%	-14%	-13%	8%	7%	-1%	15%	-16%	-29%

Graph 1

The following graph shows the fluctuation of water use over the past 10 years between customer classes.



Based on the discussion at the December 8th meeting, Raftelis has reevaluated the water demand per customer classification. This will be discussed during the presentation of the at the December 29th meeting during the Model Inputs and Assumptions review of Item 5.1. Review and provide input and feedback of the Water and Wastewater Rate Study Financial Plan scenarios and assumptions.