

City Council Utility Committee

Meeting Agenda

Friday, July 19, 2019

COUNCIL CHAMBERS, CITY HALL, 2ND FLOOR

1:00 - 3:00 pm

- I. Call to Order
- II. Roll Call
- III. Approval of Agenda
- IV. Approval of Minutes from April 12, 2019
- V. Public Comments on Items Not on the Agenda
- VI. Agenda Items and Date for Next Meeting
 - Advance Agenda & Meeting Dates
- VII. Dashboard
- VIII. Cost of Service
- IX. Preliminary Utility 2020 Rates
- X. Solid Waste
 - General Update
- XI. Update – Water Resources
 - Water Supply Update
 - Windy Gap Firming Project Update
- XII. Upcoming Projects and Council Action
 - CIP Update
 - SCWTP Disinfection CM and Construction – 3rd QTR
 - SCTWP Building Upgrade Construction – 3rd / 4th QTR
 - Outside Water Service Agreement
 - Windy Gap Financing – TBD
- XIII. Adjourn 3:00 pm

Attachments: 4-12-19 Draft Minute

Advance Agenda

Dashboard

Cost of Service

2020 Preliminary Rates

Solid Waste

CIP Update

**City Council
Utility Committee**
Draft - Meeting Minutes
Friday, April 12, 2019
CITY COUNCIL CHAMBERS

I. **Call to Order** – Councilmember Stolzmann called the meeting to order at 1:00 pm.

II. **Roll Call** was taken and the following members were present:

City Council: Mayor Muckle, Councilmember Stolzmann and Councilmember Maloney

Staff Present: Mrs. Davis, Mr. Kowar, Mr. Watson, Mr. Mosley, Mr. Peterson, Mrs. Golden.

Public: N/A

III. **Approval of Agenda**

Councilmember Stolzmann motioned to approve the agenda and Councilmember Maloney seconded the motion. All approved the Agenda.

IV. **Approval of the Minutes**

Councilmember Stolzmann motioned to approve the March 15, 2019 meeting minutes and Councilmember Maloney seconded the motion. All approved the minutes.

V. **PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA**

None

VI. Agenda Items and Date for Next Meeting

Mr. Kowar suggested we go back to quarterly meetings. Work Plan shows every meeting but they will change to read quarterly. Staff agreed to have quarterly meetings.

- Next meeting date is July 19, 2019 at 1:00 p.m.
- Trash Rate Setting
- Preliminary 2020 Rates
- Water Supply Update (Drought Strategy if needed)
- Windy Gap/Financing
- CIP Update
- 3rd Quarter Financial Review (2019)

VII. Utility Dashboard

Mr. Kowar stated these are the same as finance where we show the quarterly financials versus target dates. Energy Use will take some more time to get on a dashboard and we don't have the information yet. Stolzmann went on to ask about the KPI's and suggested we do them on the quarterly work plan so we see how we are doing along the way and if we do that it will be easier for the yearly. Mrs. Davis stated we are doing this but there are some they aren't doing for all measures. Then mentioned we should be sure we are reflecting the measurement in the same way throughout. Mr. Kowar stated that some utilities we won't have quarterly but will be able to reflect annually. Councilmember Maloney suggested we have the KPI's that are the significant ones. He doesn't want to create more work than needed. Committee discussed the KPI's and agreed to look at quarterly. Councilmember Stolzmann asked if we could have a summary print-out to look at for the next meeting. Mr. Peterson agreed.

VIII. Utility Financial Review and Rate Setting Plan

Mr. Peterson explained the patterns of the rate study and budget process. He then went into the cost of service and rate design which feeds into the new defined Financial Policies. He continued with saying if we want to define further we can do that analysis at subsequent meetings. Councilmember Stolzmann clarified that if the Financial Policies change it could change how you calculate your cost of service. Then if your policy changes it could change the rate design. Councilmember Maloney stated we should have the policies that are driving the cost of service articulated so we can look at the policies and say "does this make sense". Mayor Muckle thought the policy was pretty clear in that the goal is to be equitable among our users. Councilmember Stolzmann continued with saying we need to document what the policies are in each of the categories and layout the process that we follow on some 5 year basis or where some things are done annually then we'll have a better documented manual. Then asked what timeline

we are looking at because this is a lot of work to undertake. Mr. Peterson agreed and said that's the discussion we've had. He explained how we did this very high level cost of service which gives us what was done based off the 2014 study where we are still in compliance. Then that would go to what was done in the rate study and what staff has subsequently done this year. Still an acceptable method for cost of service and if so then we can finalize those policies and say this is the way we are doing cost of service and moving forward be done with it. If we want to change how we are doing cost of service then we can go through that process and take as many meetings as needed to develop what those new costs will be and start down that path. Committee was discussing the next agenda item "Cost of Service" so Councilmember Stolzmann suggested moving onto the next agenda item and come back to this one so we can keep our items separate. Committee agreed.

IX. Cost of Services

Mr. Peterson explained the Cost of Service (COS) was based off the 2014 Study where they used the base capacity methodology supported by the AWWA Rate Manual. He went on to say how he took the 2017 data and re-entered that into the COS spreadsheets that were developed as part of the rate study. The categories on page 11 show the process of COS. Mr. Peterson explained how we start with all our revenue requirements and these get split into functional categories (on page 11). This is consistent with what was in the rate study. He continued describing the CIP's and the O&M components pretty much stayed the same except for the CIP has a storage component. Those all get allocated in, as you can see on page 12. Mr. Peterson went on with describing the tables and the Committee discussed the water usage and demand factors in the tables. Councilmember Maloney asked what the description is between Commercial and Irrigation. Mr. Peterson stated the Commercial is the internal use for commercial class and irrigation is everything outside of that. Everything new requires a separate tap. Mr. Peterson continued talking about the next step, water usage or demand by customer class using standard demand factors. Committee talked about the users being Residential, Single Family, Multi-Family, Commercial and Irrigation. Mr. Peterson explained that the Peak Day and Peak Hour demands won't affect the water supply. Committee continued talking about the usage and taps and how it's being charged. Councilmember Stolzmann suggested a couple scenarios could be given and asked if Mr. Peterson could create a couple different ways of looking at these demand factors. Ex. 1) Verify an average of a couple years and if they still match the demand factors, 2) What if we go to one customer class or is it possible? Mr. Kowar said we could run the math but what makes it hard is there are other factors that are lumped in, like tap sizes. Councilmember Stolzmann stated maybe we could do it on a tap basis. Committee continued talking about the different tap sizes and allocations and that's where we need to define these as the policy. Mr. Kowar went on to say at a high level one thing we are working on and we haven't gotten to the finish line yet but the 2013/2014 model is a monster of a spread sheet. We've started on a dynamic coding model that will run the numbers and be able to see these numbers quarterly. Councilmember Maloney referred to page 12, Table 7

saying we could do what if's with this table. Mr. Kowar agreed. Mr. Peterson said on this table Multi-family is underpaying on their cost of service. It's not adding of Multi-family but they are paying in their equity. Councilmember Stolzmann asked if everyone was on the same page as far as scenarios on this table. Mr. Kowar confirmed we will create scenarios that include multiple years that validate demand factor, as is a single class and then possibly at a tap level, then we will break out commercial indoor and commercial irrigation and include total MGDs. Committee moved on to the 2017 water COS and Mr. Peterson explained the breakdown between the accounts. Mayor Muckle asked if the 2017 numbers are correct. Mr. Peterson said they will go back and do the process but there will be some movement. Mr. Kowar continued saying we'll run some bookend math on the different classes then we'll know. The Committee agreed with that.

Utility Financial Review and Rate Setting Plan Steps

1a) Review COS Customer Classes – Councilmember Stolzmann asked what kind of time frame you need to be able to be prepared but give you enough time to set rates. Mr. Kowar said we won't be able to have anything until the July meeting and we would have to set the 2021 rates off of this ruff cost of service. If we got done with our deep dive then plug in the model at the last minute. We are willing to do this if you are. Councilmember Stolzmann summarized what Mr. Kowar said by saying if we finish the COS Policy setting and Rate Policy Setting in enough time to have an impact for the 2020 Rates but if it doesn't, we will have to set our 2020 Rates and we'll use our status quo. She asked if everyone is okay with this and all agreed. Councilmember Maloney asked if we could add "and policies" to Item #2 Rate Design. Councilmember Stolzmann confirmed we are to add "and Policies" to item 1a) and item 2 of the steps listed. She asked if there is anything more on item 1a before we move onto the Rate Design. Are there topics that we want to air about rate design that we need more background on before we bring it to July meeting. Councilmember Maloney asked beyond what Mr. Peterson has already written down to do? Councilmember Stolzmann explained we talked about COS but within the Rate Design if you could just say we have a flat rate you could say that we have a water budget. Mr. Peterson said to backup Rate Design your choices are Flat Rate, Uniform Block Structure, Decrease Block (like they do back east) or Water Budget. Councilmember Stolzmann stated it's like a bulk discount. Committee discussed the scenarios of commercial, residential, etc. Mayor Muckle said he has no interest in changing from an Increasing Block Structure but is okay with tweaking the structure but is concerned about what the cost is between customer class and the rates we are actually charging but the basic structure we are charging the lowest price but giving more water. Staff continued talking about structure and blocks and concluded with Mr. Kowar saying we will run the scenarios.

Proposed Rate Adjustment – Mr. Kowar asked if everyone wanted benchmark information on rates. Ashely said yes and moved to the next agenda item.

X. Preliminary Utility 2020 Rates

Mr. Peterson used the table on Page 14 and explained using the three different scenarios which we haven't moved off of that and the financial snapshot data is from March. Councilmember Maloney confirmed this is just preliminary and not actionable. Mr. Peterson said correct and explained a lot of the effort was COS so this is where we are now and nothing much has changed. Committee briefly discussed and agreed this is good information. Councilmember Stolzmann did say the only big drivers that could change the things is big increase in CIP, project costs, if nobody using water and tap fees disappear. Mr. Kowar said that for every million dollar swing we have its 1%. We'll have more on the Preliminary Rates at the July meeting.

XI. Solid Waste

General Update: Mr. Kowar is working with Republic to set up composting bins and spoke about how Republic is working with A-1 Organics to get equipment out here to set up a mini transfer station at the WWTP. We are working with the State for all the requirements needed to do that. Councilmember Stolzmann stated that one of the committee members will go testify if need be.

Transition Timeline: Mr. Kowar referred to the chart on page 17 and explaining that in May we'll have a utility bill go out describing when Republic will start. Also in May Republic will send out a tri-fold brochure introducing who they are and shared that Republic is scheduled at every event the City is having with a Booth at the Street Fair, Touch-A-Truck and the Drive-In Movie to name a few. Mr. Kowar continued describing the other timelines in the chart. Mr. Kowar said they are also working on transitioning from Western Services at our City events. Mayor Muckle asked if we should deliver to HOA's first. Mr. Kowar will reach out to them. Councilmember Stolzmann asked if we can explain they'll get the carts within a 48 hour window. Mr. Kowar said he will have it included with the 2nd notice that goes out. Mr. Kowar said one thing that's not in this chart is that Republic will be having one neighborhood meeting for each day of the week. So we will have a meeting for the Tuesday people and one for the Wednesday people. Councilmember Maloney asked if they can meet the drivers and Councilmember Stolzmann said you may suggest they bring the drivers to the meetings. Councilmember Maloney commented, if it will help the community then it should be considered. . Mr. Kowar said he'll see what he can do. Mr. Kowar asked if we should charge an additional fee of \$12.75 for an extra can. Councilmember Stolzmann said she's okay with charging additional for an extra can for the trash; that way it may encourage recycling. Councilmember Maloney has a hard time agreeing with charging the full fee. Committee discussed the pricing and agreed to decide on pricing at the July meeting.

Initial Administrative Fee Review: Mr. Kowar said every year we try to set rates to cover cost and went on to discuss the 5 year spread sheet on page 15. Talked about costs for Hazardous Waste and recycling fees. Mr. Kowar continued saying he tries to set the administration fee to recover costs and stated that he and Mr. Watson have a goal to build this fund without having too high of an Administration bill. Mr. Watson stated that we need to be consistent with the allocations. The Committee continued discussing allocation between staff and agreed to defer to the Finance Committee.

XII. Update – Water Resources

- **Water Supply Update** – Mr. Peterson is happy to say everything is good and said things have increased about 4%. At this time drought restriction are not anticipated for 2019.
- **Windy Gap** – Mr. Peterson stated that the parties against us did try to make a motion for adding to the record that they claimed we left things out in our analysis and the courts denied the motion so that brings us into briefs which will be about 5-6 months out. The plan is to prequalify contractors and we'll see more action late summer. The financing will be in 2 options, 1) We would be doing financing in 2020 that will fund everything or 2) If we can't get the financing done and it's more of a 2021 we'll do an interim payment again which would be about \$14,000,000 for the group which is about \$300,000 for us and that is well within the money that we are budgeting for Windy Gap payment and/or the 2,500,000 budgeted so we have it covered.

XIII. Upcoming Projects and Council Action

- SCWTP Disinfection CM and Construction – 3rd QTR
- Windy Gap Financing - TBD

XII. Adjourn

The meeting was adjourned at 4:15 pm.

City of Louisville Colorado Utility Committee Work Plan – July 19th

Topics will be discussed in the quarter which they are listed. Items that are not complete will roll to the next quarter.

Every Meeting:

- Capital Projects Progress
- Enterprise Dashboards: inclusive of KPI progress, water supply update, water use by customer class, revenue and expense by enterprise (and by customer class where appropriate), energy use by enterprise

First Quarter

- ✓ Solid Waste RFP
- ✓ Reclaim Rate
- ✓ Windy Gap Update
- ✓ Discussion of projects with needed budget amendments
- ✓ Solid Waste Rollout Discussion
 - ✓ Communication Plan
 - ✓ EAB
 - ✓ Branch Recycle Improvements/WWTP opportunities

Second Quarter

- ✓ 2020 Rates
- ✓ Initial Administrative Fee (solid waste) review
- ✓ Windy Gap Update
- ✓ Solid Waste Transition Plan Update
 - Spring and Fall Clean-up Plan
 - Customer Service
- ✓ Utility Rate Equity and Cost of Service

Third Quarter

- 2020 Rates
- Utility Rate Equity and Cost of Service
- Utility Rate Design
- Utility Financial Policies
- Instream Flow Update
- SCWTP Upgrades and Disinfection
- Water Loss Audit Report
- Asset Management Software Presentation & Asset Renewal Replacement
- Buildout (Phillip 66) Scenarios
- Administrative Fee (solid waste) review & recommendation

Fourth Quarter

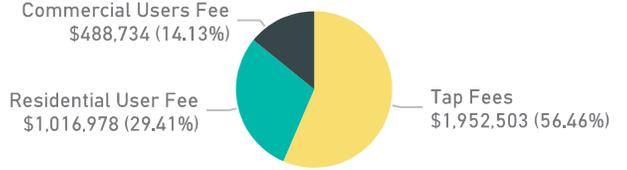
- Finalize 2020 Rates
- Louisville Pipeline Report
- Multi-family and Commercial Recycling Regulation Discussion
- Windy Gap Update and Financing



January 1, 2019 To June 30, 2019

Operating Revenue

Source	Balance	Budget	% Budget
Commercial Users Fee	\$488,734	\$2,394,000	20%
Residential User Fee	\$1,016,978	\$3,306,000	31%
Tap Fees	\$1,952,503	\$3,282,870	59%
Total	\$3,458,214	\$8,982,870	38%



Operating Expenses

Source	Balance	Budget	% Complete
Central Fund-Wide Charges	\$260,682	\$520,330	50%
Raw Water Operations	\$315,907	\$1,001,484	32%
Utility Billing	\$58,955	\$150,300	39%
Water Distribution	\$218,829	\$604,630	36%
Water Plant Operations	\$570,097	\$1,607,750	35%
Water Utility Engineering	\$35,610	\$74,260	48%
WTP Building Maintenance	\$133,556	\$306,620	44%
Total	\$1,593,635	\$4,265,374	37%

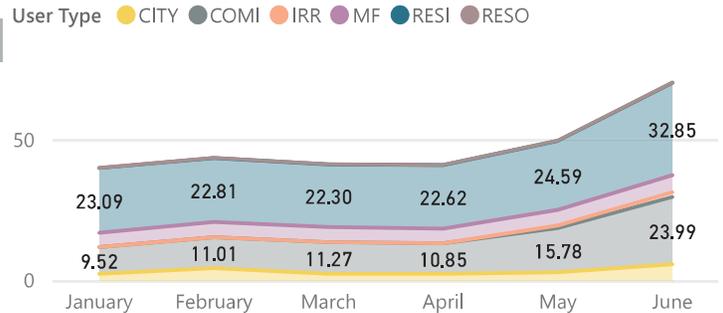
Net Production (MG)

Treatment Plant	January	February	March	April	May	June	Total
HBWTP Net Production	36.55	31.54	16.26	-0.18	0.19	38.64	122.99
SCWTP Net Production	14.13	7.12	26.41	45.93	63.92	70.46	227.96
Total	50.68	38.65	42.66	45.75	64.10	109.10	350.95

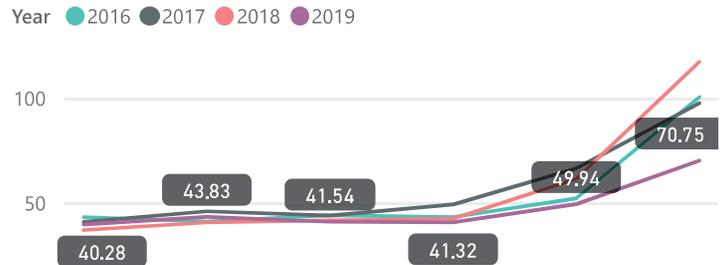
Capital Expenses

Source	Balance	Budget	% Complete
Capital-Public Works	\$38,790	\$608,425	6%
Howard Diversion Upgrades	\$504	\$138,475	0%
Louisville Lateral Ditch Pipin	\$3,011	\$19,586	15%
Lucity Software	\$0	\$1,038	0%
SCWTP Pump Station Improvement	\$62	\$0	
SWSP Eastern Pump Station Impr	\$0	\$0	
Water Plants Disinfection Eval	\$35,213	\$449,326	8%
Replacement Capital-PW	\$383,591	\$1,021,567	38%
Fire Hydrant Painting	\$0	\$0	
Tube Settler Replacement	\$379,750	\$908,967	42%
Water Tank Int Structure Maint	\$3,841	\$112,600	3%
Total	\$422,382	\$1,629,992	26%

Billed Consumption by User Type (MG)

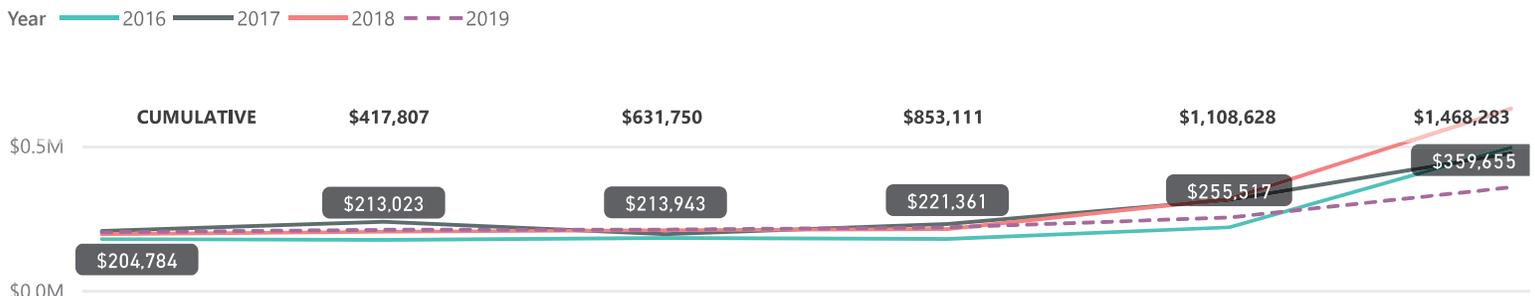


Billed Consumption Year over Year



REPORT PERIOD 1/1/2019 6/30/2019

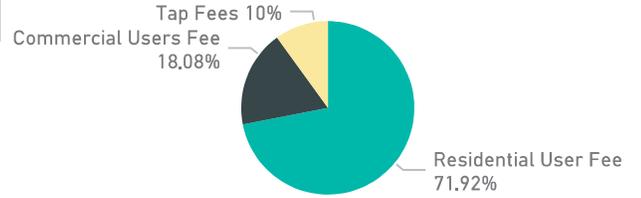
Monthly Revenue Year over Year





Operating Revenue

Source	Balance	Budget	% Budget
Commercial Users Fee	\$326,361	\$932,580	35%
Residential User Fee	\$1,298,002	\$2,521,420	51%
Tap Fees	\$180,400	\$469,800	38%
Total	\$1,804,762	\$3,923,800	46%



Operating Expenses

Source	Balance	Budget	% Budget
Central Fund-Wide Charges	\$209,073	\$365,690	57%
Pretreatment	\$34,451	\$106,567	32%
Utility Billing	\$49,060	\$135,690	36%
Waste Water Util Engineering	\$22,782	\$146,500	16%
Wastewater Treatment Plant Ops	\$414,515	\$983,415	42%
WW Collections	\$112,304	\$279,840	40%
WWTP Building Maintenance	\$121,718	\$455,670	27%
Total	\$963,904	\$2,473,372	39%

Capital Expenses

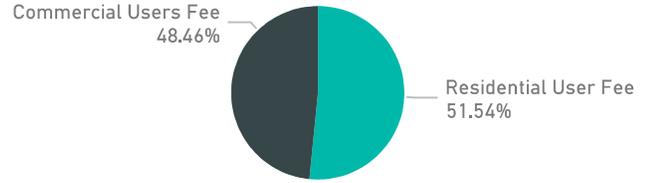
Source	Balance	Budget	% Complete
Capital-Public Works			
Lucity Software	\$0	\$1,038	0%
Replacement Capital-PW			
Reuse System Replacement	\$15,096	\$48,558	31%



January 1, 2019 To June 30, 2019

Operating Revenue

Source	Balance	Budget	% Budget
Commercial Users Fee	\$205,238	\$397,470	52%
Residential User Fee	\$218,274	\$430,600	51%
Total	\$423,512	\$828,070	51%



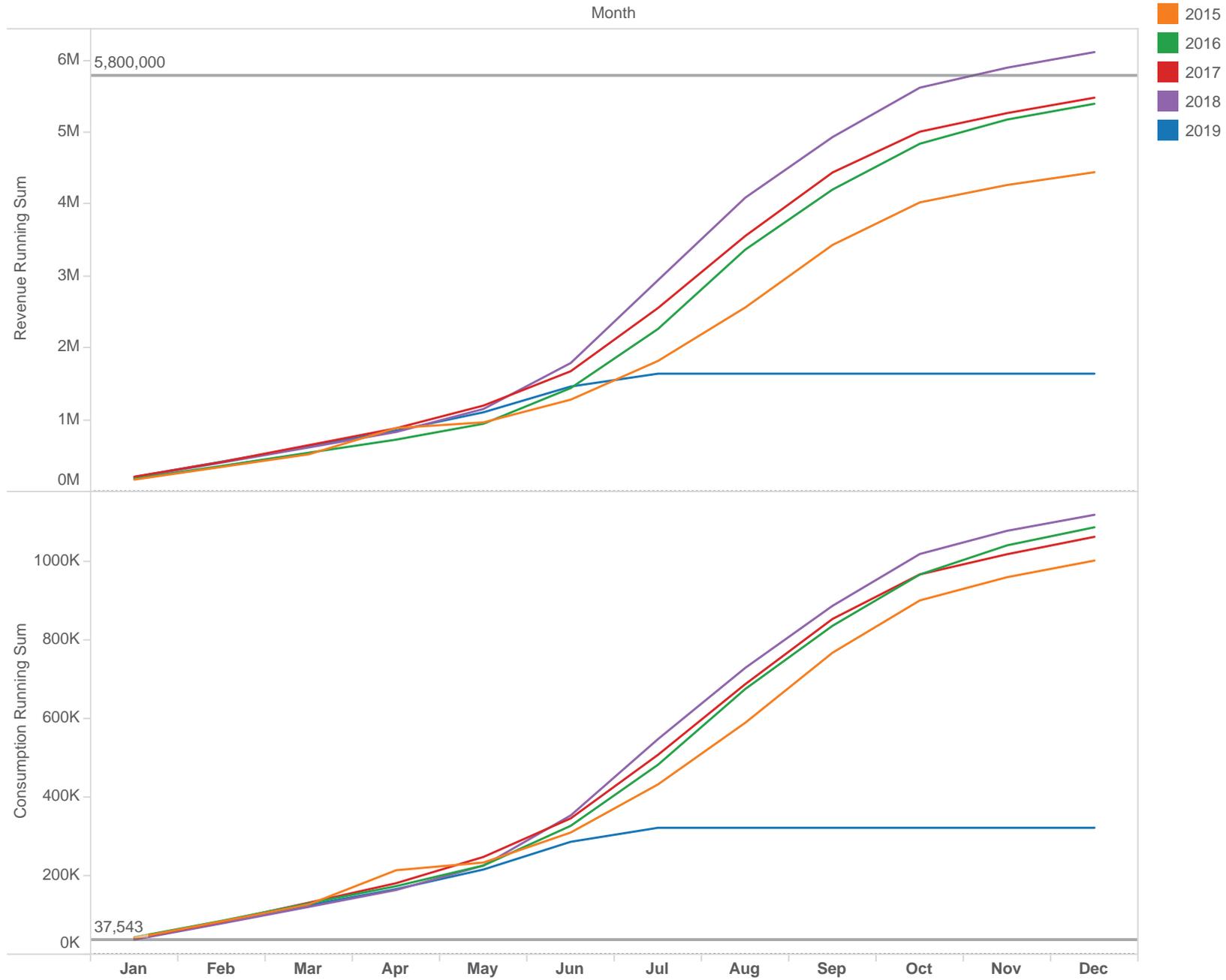
Operating Expenses

Source	Balance	Budget	% Budget
Central Fund-Wide Charges	\$0	\$0	
Storm Water Admin & Operations	\$142,476	\$338,530	42%
Storm Water Util Engineering	\$18,262	\$35,920	51%
Total	\$160,738	\$374,450	43%

Capital Expenses

Source	Balance	Budget	% Complete
Capital-Public Works			
CCS Drainage	\$0	\$0	
Lucity Software	\$0	\$1,038	0%
North Louisville Drainage	\$0	\$0	

YOY Monthly Revenue (3)



The trends of Revenue Running Sum and Consumption Running Sum for Month. Color shows details about Year. The view is filtered on Year, which keeps 2015, 2016, 2017, 2018 and 2019.

TABLE WCOS-1
Water Utility
Revenue Requirements
2017 Test Year

<u>Line No.</u>		<u>Amount</u> (\$)
	OPERATING COSTS	
1	Operation and Maintenance Expense	3,135,134
	CAPITAL COSTS	
2	Capital Improvements	1,906,870
3	Debt Service	<u>976,824</u>
4	Total Capital Costs	2,883,694
5	TOTAL COST OF SERVICE	<u>6,018,828</u>
	Revenue From Non-rate Sources	
6	Miscellaneous Revenue	
7	Interest	
8	Subtotal	<u> </u>
9	Decrease (Increase) in Operating Reserves	
10	Total Revenue from Non-Rate Sources	<u> </u>
11	NET COST OF SERVICE	<u><u>5,756,498</u></u>

TABLE WCOS-2

Water Utility
Units Of Service
2017 Test Year

Line No.	Class	Annual Usage 1,000 gal	Average Daily Usage 1,000 gpd	Maximum Day Requirements			Maximum Hour Requirements			Number of Monthly Bills	Equivalent 3/4-in Meters (meter capacity)	Equivalent 3/4-in Meters (meter cost)
				Demand Factor	Total Demand 1,000 gpd	Extra Demand 1,000 gpd	Demand Factor	Total Demand 1,000 gpd	Extra Demand 1,000 gpd			
1	Single Family	545,814	1,495	200%	2,991	1,495	230%	3,439	449	75,972	77,318	76,635
2	Multifamily	79,354	217	160%	348	130	180%	391	43	2,568	10,643	6,343
3	Commercial	319,854	876	210%	1,840	964	240%	2,103	263	5,664	18,996	10,687
4	Irrigation	16,153	44	260%	115	71	300%	133	18	1,296	2,487	1,883
5	City	101,105	277	230%	637	360	260%	720	83	1,356	5,042	3,198
	Non Revenue City	32,863	90	230%	207	117	260%	234	27	72	1,024	416
6	Public Fire Flow				300	300		3,600	3,300			
7	Total	1,095,143	3,000		6,438	3,438		10,621	4,183	86,928	115,510	99,161

TABLE WCOS-3

Water Utility
Allocation of O&M to Cost Components
2017 Test Year

<u>Line No.</u>	<u>Description</u>	<u>Total</u> (\$)	<u>Base</u> (\$)	<u>Extra Capacity</u>		<u>Customers</u>		
				<u>Max Day</u> (\$)	<u>Max Hour</u> (\$)	<u>Local Dist. Lines</u> (\$)	<u>Billing</u> (\$)	<u>Meters</u> (\$)
OPERATING EXPENSES								
1	Source of Supply	582,729	582,729	-	-	-	-	-
2	Treatment	1,828,771	694,933	1,133,838	-	-	-	-
3	Transmission	279,670	106,274	173,395	-	-	-	-
4	Distribution	279,670	-	-	-	279,670	-	-
	Customer							
5	Billing	82,147	-	-	-	-	82,147	-
6	Meters	82,147	-	-	-	-	-	82,147
7	Total Operating Expenses	3,135,134	1,383,937	1,307,233	-	279,670	82,147	82,147
		100.00%	44.14%	41.70%	0.00%	8.92%	2.62%	2.62%

TABLE WCOS-4
Water Utility
Allocation of Capital to Cost Components
2017 Test Year

Line No.	Description	Existing Assets	Planned Assets	Total	Base	Extra Capacity		Customer		
						Maximum Day	Maximum Hour	Local Distribution Lines	Meters and Services	Billing
						\$	\$	\$	\$	\$
1	Source of Supply / Water Rights	\$29,471,798	\$ 1,671,492	\$31,143,290	\$31,143,290	\$0	\$0	\$0	\$0	\$0
2	Treatment	15,614,989	4,527,891	20,142,880	7,654,295	12,488,586	0	0	0	0
3	Storage	9,297,048	921,110	10,218,158	3,371,992	5,517,805	1,328,361	0	0	0
4	Meters	25,135	199,363	224,498					224,498	
Transmission and Distribution Lines										
5	Constructed Water Lines - Transmission	2,789,852	778,665	3,568,517	1,356,037	2,212,481	0	0	0	0
6	Constructed Water Lines - Distribution	11,893,580	3,319,573	15,213,153	0	0	0	15,213,153	0	0
7	Total Transmission and Distribution Lines	14,683,432	4,098,238	18,781,670	1,356,037	2,212,481	0	15,213,153	0	0
8	Subtotal of All Above	69,092,401	11,418,094	80,510,495	43,525,613	20,218,872	1,328,361	15,213,153	224,498	0
General Plant										
9	Miscellaneous / Admin	762,124	2,694,792	3,456,916	1,868,879	868,147	57,036	653,214	9,639	0
10	Total General Plant	762,124	2,694,792	3,456,916	1,868,879	868,147	57,036	653,214	9,639	0
11	Total Water System Assets	\$69,854,526	\$14,112,886	\$83,967,411	\$45,394,492	\$21,087,019	\$1,385,397	\$15,866,367	\$234,137	\$0
12	<i>Percent of Total</i>			100.00%	54.06%	25.11%	1.65%	18.90%	0.28%	0.00%
13	Annual Capital Costs			\$2,883,694	\$1,558,983	\$724,192	\$47,579	\$544,899	\$8,041	\$0
Allocation of Functions to Service Demand Categories										
14	Source of Supply			100.00%	100.00%	0.00%				
15	Treatment			100.00%	38.00%	62.00%				
16	Storage			100.00%	33.00%	54.00%	13.00%			
Transmission and Distribution Lines										
17	Constructed Water Lines - Transmission			100.00%	38.00%	62.00%				
18	Constructed Water Lines - Distribution			100.00%	0.00%	0.00%	0.00%	100.00%		
19	Fire Protection			100.00%	0.00%					
General Plant										
20	Miscellaneous / Admin			100.00%	54.06%	25.11%	1.65%	18.90%	0.28%	0.00%

TABLE WCOS-5

Water Utility
Unit Cost Of Service
2017 Test Year

Line No.	Description	Total (\$)	Base (\$)	Extra Capacity		Customers		
				Max Day (\$)	Max Hour (\$)	Local Dist. (\$)	Billing (\$)	Meters (\$)
1	Operating Expenses	3,135,134	1,383,937	1,307,233	0	279,670	82,147	82,147
2	Capital Costs	2,883,694	1,558,983	724,192	47,579	544,899	0	8,041
3	Total Revenue Requirements	6,018,828	2,942,920	2,031,425	47,579	824,569	82,147	90,188
4	NET COST OF SERVICE	6,018,828	2,942,920	2,031,425	47,579	824,569	82,147	90,188
			(1,000 gal)	(1,000 gpd)	(1,000 gpd)	(Equiv 3/4-in. meters- meter capacity)	Monthly Bills	(Equiv 3/4-in. meters- meter capacity)
5	UNITS OF SERVICE		1,095,143	3,438	4,183	115,510	86,928	99,161
6	UNIT COST OF SERVICE- \$ per unit		2.6872	590.9218	11.3749	7.1385	0.9450	0.9095
	Adjustment Allocation Factors		58.6%	40.5%	0.9%			

TABLE WCOS-6
Water Utility
Allocation Of Cost Of Service
To Customer Classes
2017 Test Year

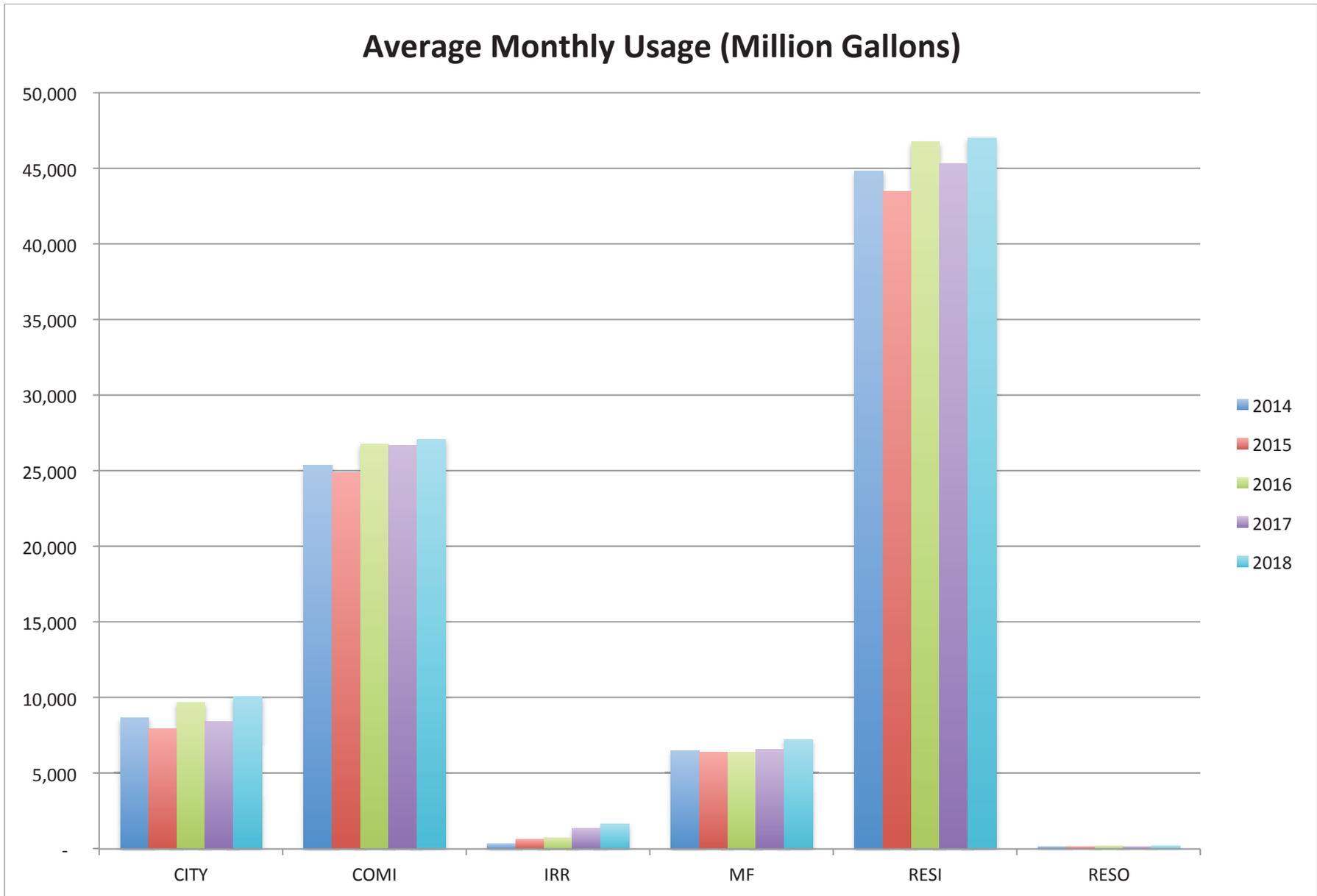
<u>Line No.</u>		<u>Total</u>	<u>Base</u>	<u>Extra Capacity</u>		<u>Customers</u>		
				<u>Max Day</u>	<u>Max Hour</u>	<u>Local Dist.</u>	<u>Billing</u>	<u>Meters</u>
1	ADJUSTED UNIT COSTS OF SERVICE - \$ per unit		2.6872	590.9218	11.3749	7.1385	0.9450	0.9095
	Single Family							
2	Units of Service		545,814	1,495	449	77,318	75,972	76,635
3	Cost of Service - \$	3,048,917	1,466,737	883,653	5,103	551,930	71,794	69,700
	Multifamily							
4	Units of Service		79,354	130	43	10,643	2,568	6,343
5	Cost of Service - \$	374,994	213,244	77,083	495	75,977	2,427	5,769
	Commercial							
6	Units of Service		319,854	964	263	18,996	5,664	10,687
7	Cost of Service - \$	1,582,807	859,527	569,615	2,990	135,603	5,352	9,720
	Irrigation							
8	Units of Service		16,153	71	18	2,487	1,296	1,883
9	Cost of Service - \$	106,144	43,407	41,842	201	17,756	1,225	1,713
	City							
10	Units of Service		101,105	360	83	5,042	1,356	3,198
11	Cost of Service - \$	525,614	271,694	212,791	945	35,994	1,281	2,909
	Non Revenue City							
	Units of Service		32,863	117	27	1,024	72	416
	Cost of Service - \$	165,538	88,311	69,165	307	7,309	68	378
	Fire Protection							
12	Units of Service		-	300	3,300	-	-	-
13	Cost of Service - \$	214,814	-	177,277	37,537	-	-	-
14	TOTAL COST OF SERVICE	6,018,828	2,942,920	2,031,425	47,579	824,569	82,147	90,188

TABLE WCOS-7
Water Utility
Comparison of Costs Of Service
With Revenue by Individual Customer Classes
2017 Test Year

<u>Line No.</u>	<u>Customer Class</u>	Revenue Under Existing Rates \$	Cost of Service Findings			Adjusted Cost of Service Findings				
			Cost of Service \$	Revenue Increase \$	Revenue Increase %	Reallocation of Fire Protection \$	Reallocation of 100% of City COS \$	Adjusted Cost of Service \$	Revenue Increase (\$)	Revenue Increase (%)
1	Single Family	3,387,638	3,048,917	(338,721)	-10.0%	155,286	89,512	3,293,715	(93,923)	-2.8%
2	Multifamily	303,195	374,994	71,798	23.7%	21,376	11,009	407,379	104,184	34.4%
3	Commercial	1,623,747	1,582,807	(40,940)	-2.5%	38,152	46,469	1,667,429	43,681	2.7%
4	Irrigation	72,896	106,144	33,248	45.6%		3,116	109,260	36,364	49.9%
5	City	369,021	525,614	156,593	42.4%		15,431	541,046	172,024	46.6%
6	Non Revenue City	\$0	165,538	165,538			(165,538)	-	-	
7	Fire Protection	\$0	214,814	214,814		(214,814)		-	-	
	Total City	\$5,756,498	\$6,018,828	\$262,330	4.6%	\$0	\$0	\$6,018,828	\$262,330	4.6%

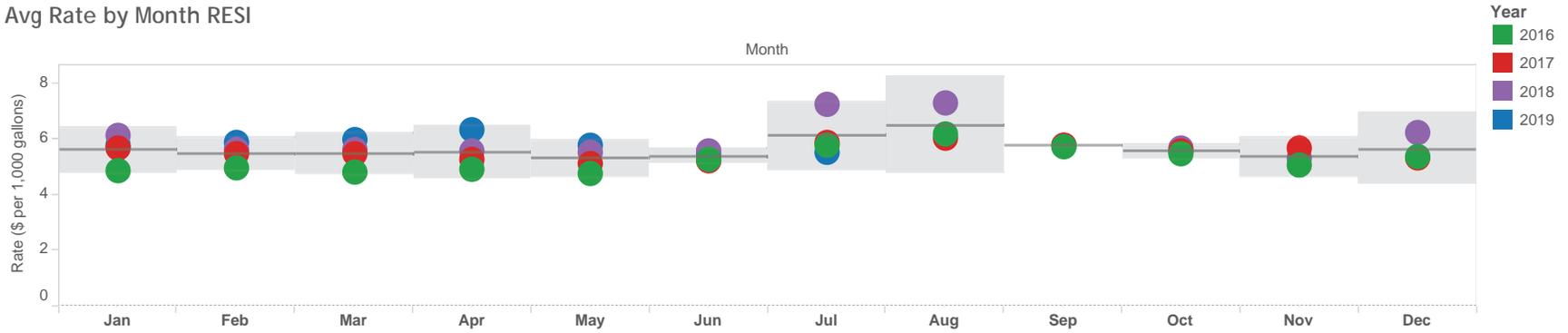
TABLE WCOS-8
Water Utility
Comparison of Costs Of Service
With Revenue Under Existing City Rates
2017 Test Year

<u>Line No.</u>	<u>Customer Class</u>	Revenue Under Existing Rates \$	Cost of Service Findings			Adjusted Cost of Service Findings				
			Cost of Service \$	Revenue Increase \$	Revenue Increase %	Reallocation of Fire Protection \$	Reallocation of 100% of City COS \$	Adjusted Cost of Service \$	Revenue Increase (\$)	Revenue Increase (%)
1	Single Family	3,387,638	3,048,917	(338,721)	-10.0%	155,286	89,512	3,293,715	(93,923)	-2.8%
2	Commercial, MF, Irrig, City	2,368,860	2,589,559	220,699	9.3%	59,528	76,026	2,725,113	356,253	15.0%
	Total City	5,756,498	5,638,476	(118,022)	-2.1%	214,814	165,538	6,018,828	262,330	4.6%

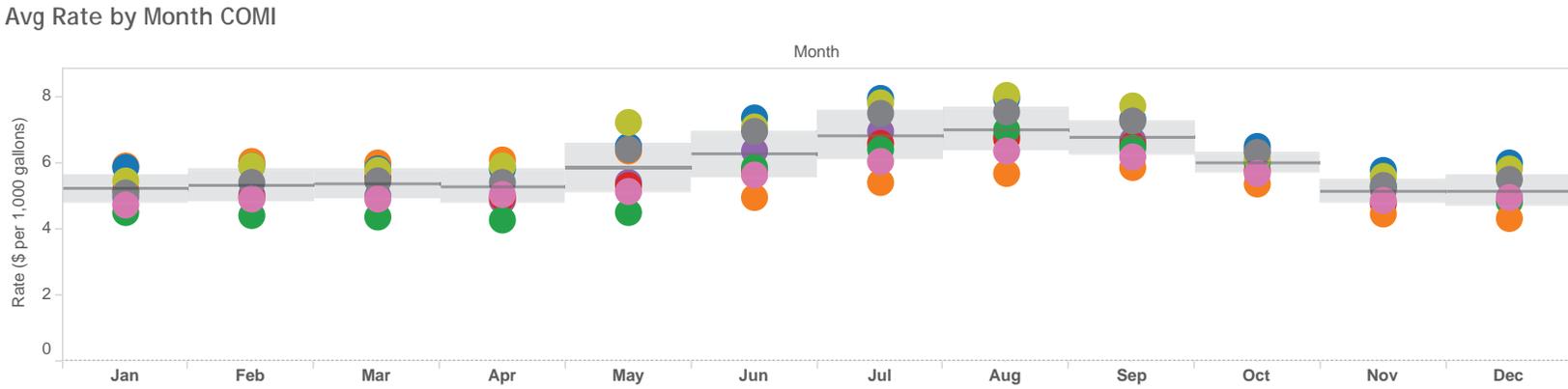


Cost of Service Tables - Utility Committee 7-19-19

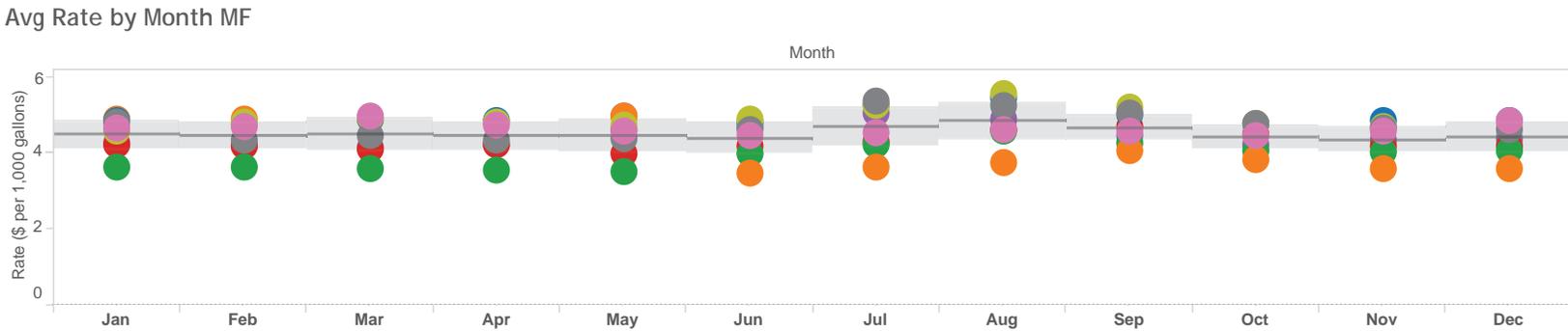
Avg Rate by Month RESI



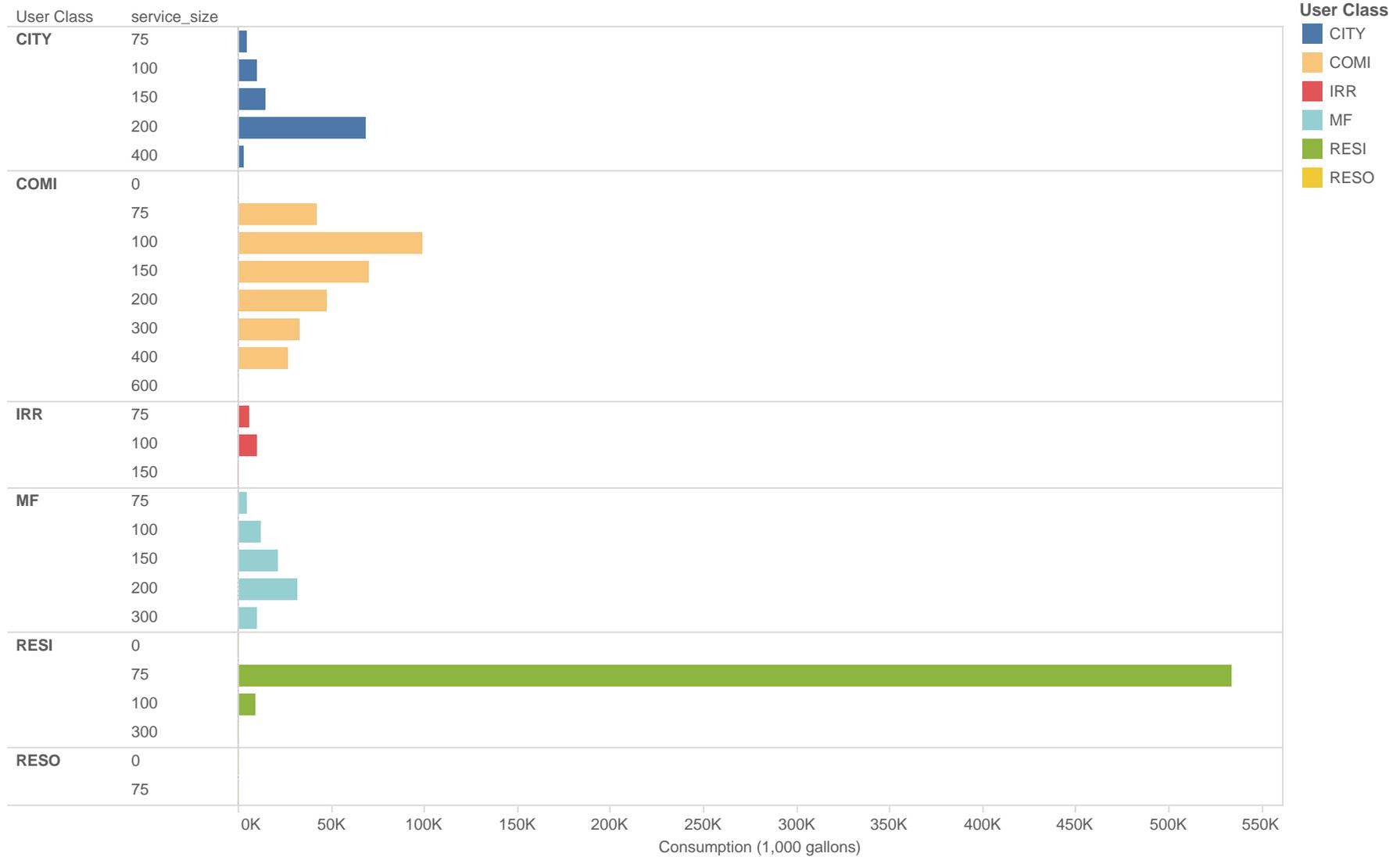
Avg Rate by Month COMI



Avg Rate by Month MF



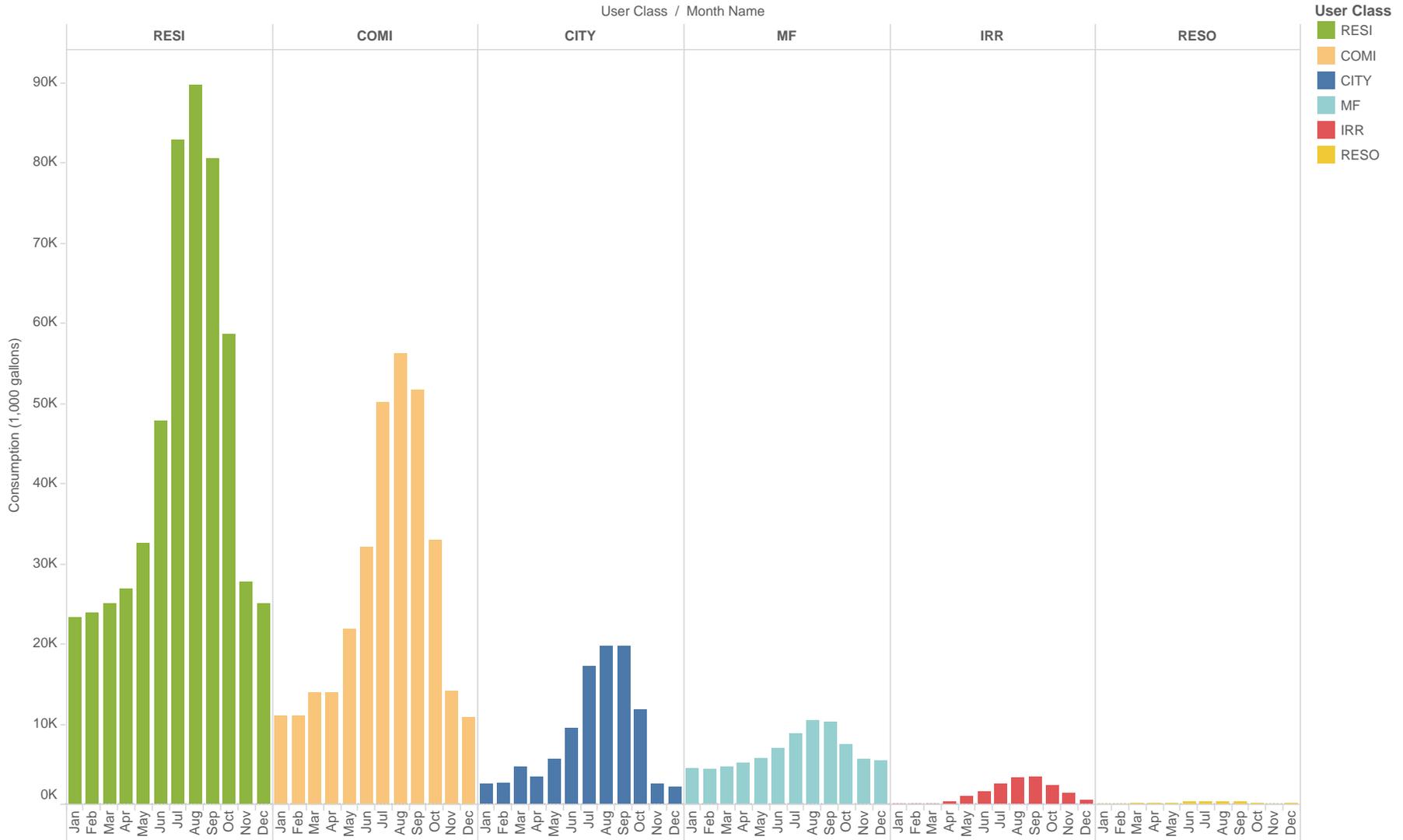
Sheet 16



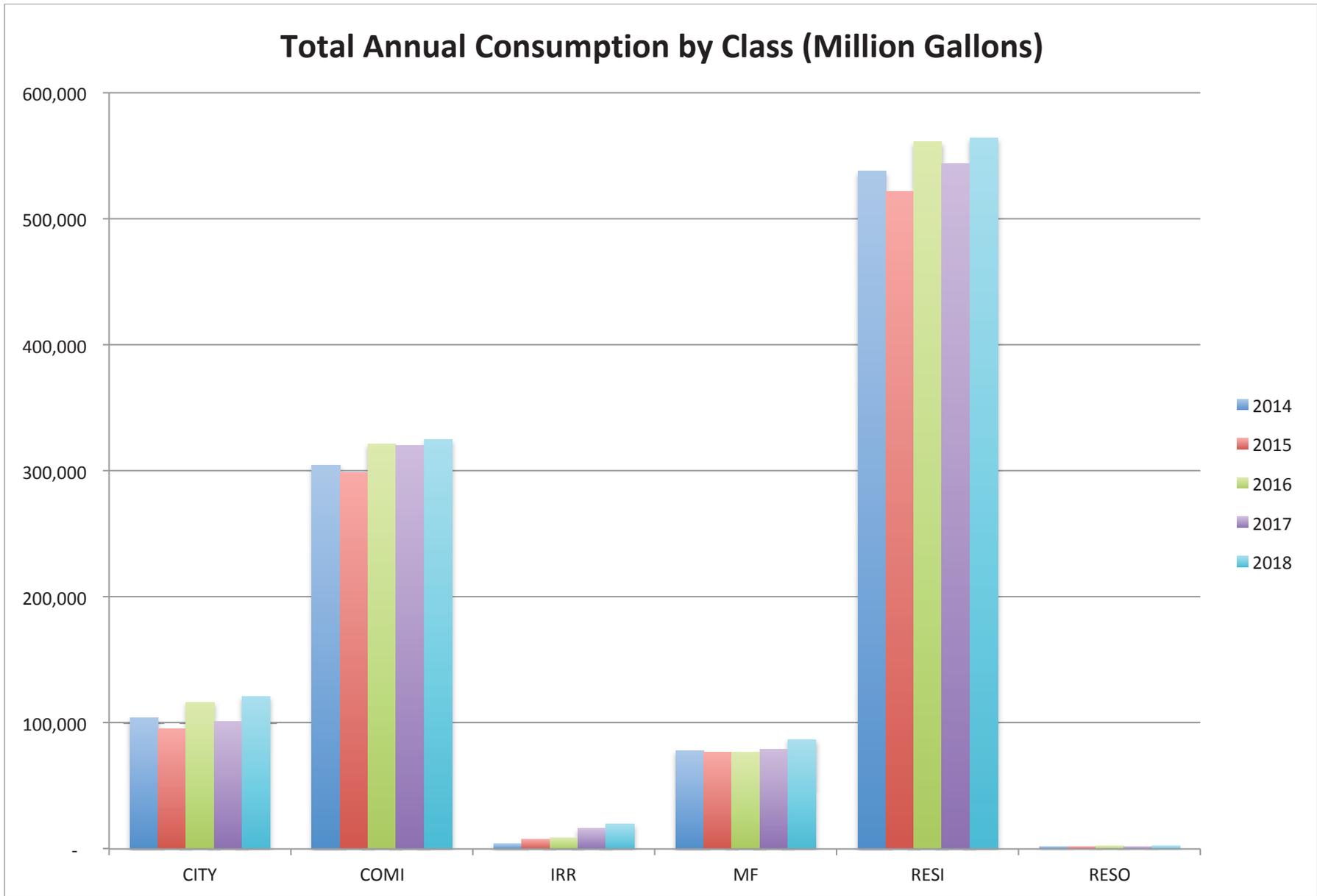
Sum of Consumption (1,000 gallons) for each service_size broken down by User Class. Color shows details about User Class. The data is filtered on Year, which keeps 2017. The view is filtered on User Class, which keeps 8 of 8 members.

Cost of Service Tables - Utility Committee 7-19-19

2017 Class Usage by Month



Sum of Consumption (1,000 gallons) for each Month Name broken down by User Class. Color shows details about User Class. The data is filtered on Year, which keeps 2017.



Cost of Service Tables - Utility Committee 7-19-19

WCOS 2A Water Demand Factors

Total Usage (Million Gallons)

	2014	2015	2016	2017	2018	Average 2012 Report	Avg Variance	2018 Variance
CITY	104,081	95,089	116,440	101,105	120,979	107,539	59,130	61,849
COMI	304,614	298,524	321,275	319,854	324,740	313,801	246,486	78,254
IRR	4,064	7,906	9,050	16,153	19,575	11,350	131,238	(111,663)
MF	78,012	76,617	76,488	79,354	86,618	79,418	86,922	(304)
RESI	537,643	521,738	560,881	543,756	564,218	545,647	670,622	(106,404)
RESO	2,089	1,960	2,467	2,058	2,142	2,143		
	1,030,503	1,001,834	1,086,601	1,062,280	1,118,272			
	3,171	3,083	3,343	3,269	3,441			

Average Monthly Usage (Million Gallons)

	2014	2015	2016	2017	2018	Average 2012 Report	Avg Variance	2018 Variance
CITY	8,673	7,924	9,703	8,425	10,082	8,962	4,928	5,154
COMI	25,385	24,877	26,773	26,655	27,062	26,150	37,362	(10,300)
IRR	339	659	754	1,346	1,631	946	10,937	(9,305)
MF	6,501	6,385	6,374	6,613	7,218	6,618	7,244	(625)
RESI	44,804	43,478	46,740	45,313	47,018	45,471	55,889	(8,870)
RESO	174	163	206	172	179	179		

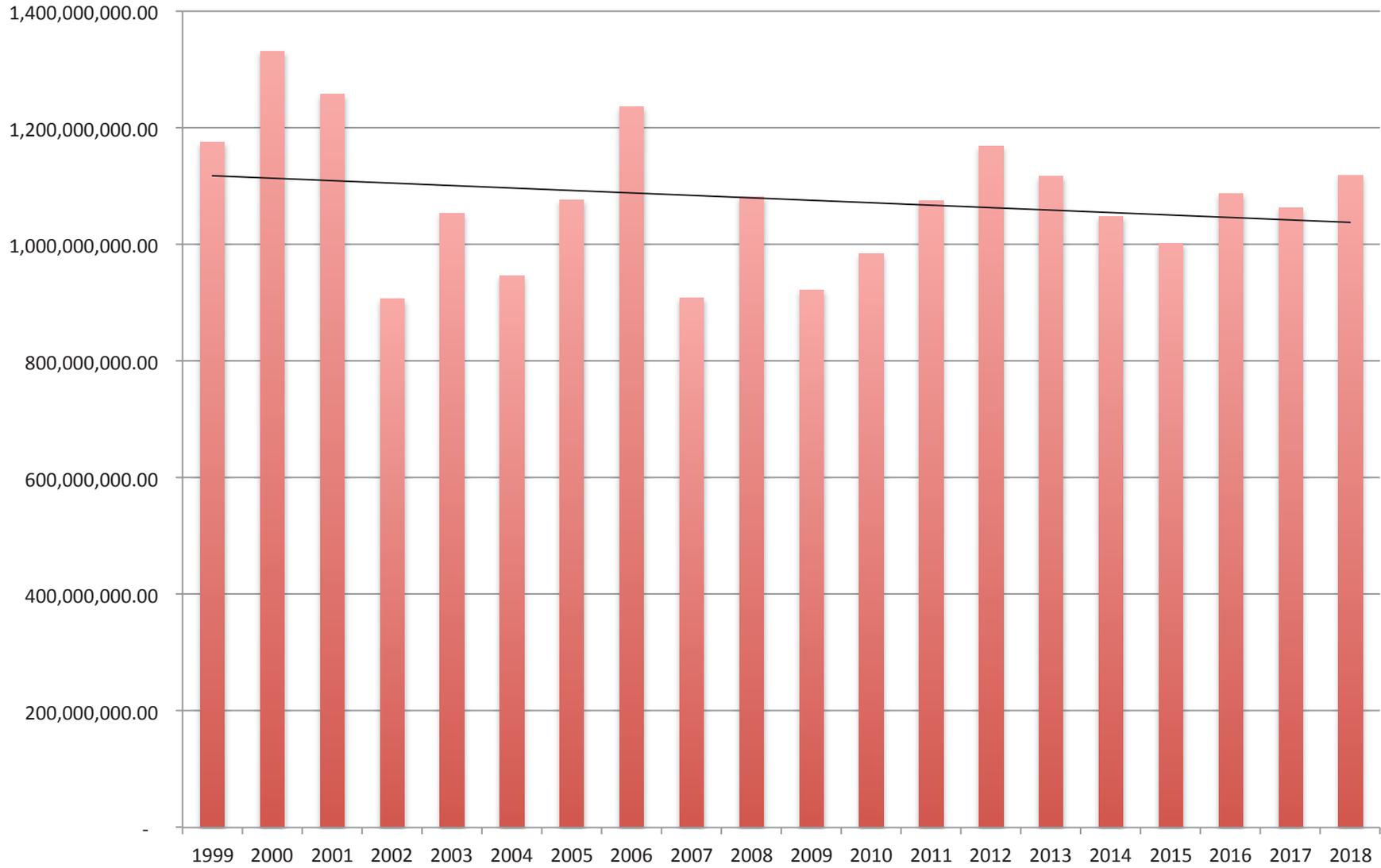
Max Month Usage (Million Gallons)

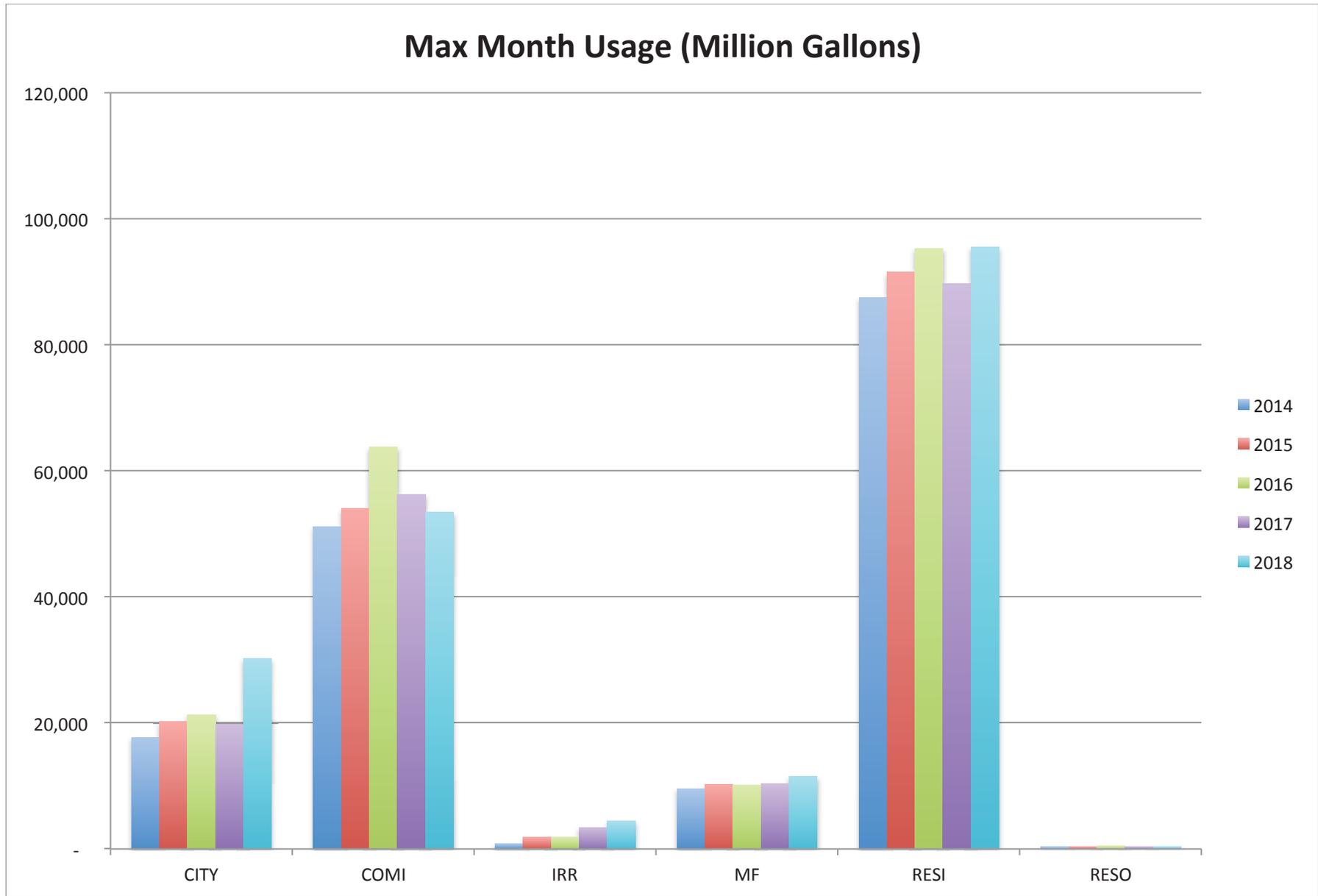
	2014	2015	2016	2017	2018	Average 2012 Report	Avg Variance	2018 Variance
CITY	17,710	20,181	21,238	19,753	30,216	21,820	11,780	18,436
COMI	51,104	54,037	63,758	56,216	53,393	55,702	37,632	15,761
IRR	835	1,827	1,844	3,439	4,431	2,475	28,783	(24,352)
MF	9,552	10,268	10,138	10,388	11,484	10,366	10,982	502
RESI	87,511	91,509	95,247	89,687	95,462	91,883	110,137	(14,675)
RESO	307	378	495	380	362	384		

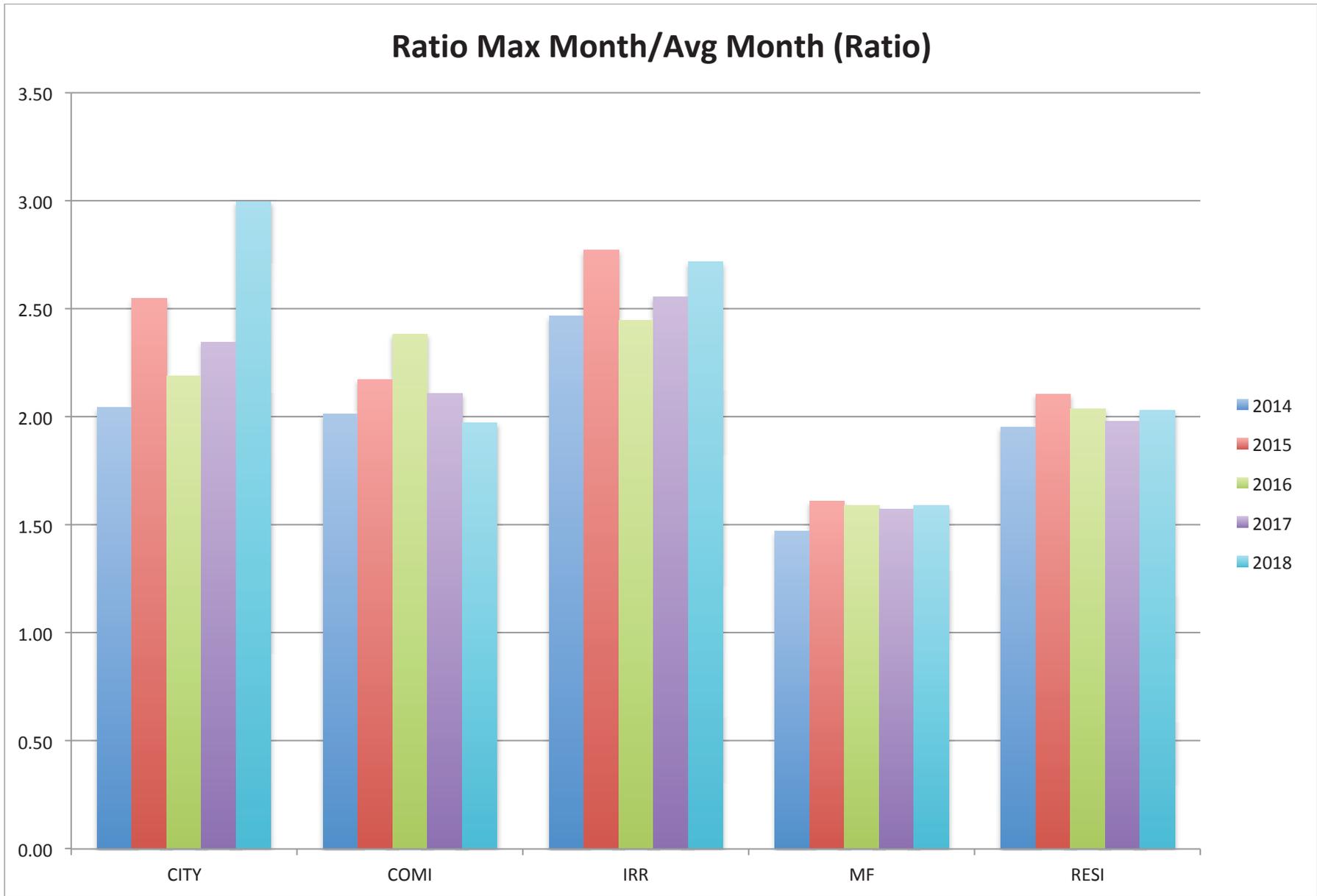
Ratio Max Month to Avg Monthly Usage

	2014	2015	2016	2017	2018	Average 2012 Report	Avg Variance	2018 Variance
CITY	2.04	2.55	2.19	2.34	3.00	2.42	2.39	0.61
COMI	2.01	2.17	2.38	2.11	1.97	2.13	1.83	0.14
IRR	2.47	2.77	2.45	2.55	2.72	2.59	2.63	0.09
MF	1.47	1.61	1.59	1.57	1.59	1.57	1.52	0.07
RESI	1.95	2.10	2.04	1.98	2.03	2.02	1.97	0.06
RESO	1.76	2.31	2.41	2.22	2.03	2.15		

Historical Consumption







Cost of Service Tables - Utility Committee 7-19-19

YOY Class Revenue, Consumption, Avg Rate



Sum of Revenue (\$), sum of Consumption (1,000 gallons) and Rate (\$ per 1,000 gallons) for each User Class broken down by Year. Color shows details about User Class. The view is filtered on User Class and Year. The User Class filter keeps CITY, COMI, IRR, MF and RESI. The Year filter excludes 2010 and 2019.

2020 Preliminary Rate Comparison

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2028
2019 Rate (Approved March 19th Council Meeting)											
WATER	0%	1.2%	1.6%	1.7%	1.8%	1.8%	1.8%	1.9%	1.9%	1.9%	
SEWER	7%	4.0%	4.0%	4.0%	3.5%	3.1%	3.1%	3.1%	3.2%	3.2%	
STORM	18.5%	18.5%	4.0%	4.0%	3.0%	3.0%	3.0%	3.0%	1.7%	1.7%	
PRELIMINARY 2020 RATES (JULY PROJECTION)											
WATER - O&M	1.2%	1.5%	1.8%	1.8%	1.8%	1.8%	1.9%	1.9%	1.9%	2.0%	2.0%
WATER - CIP	0.5%	0.3%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
WATER - TOTAL	1.7%	1.8%	1.9%	2.0%	2.0%						
CHANGE	0.5%	0.2%	0.2%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	
SEWER - O&M	1.9%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
SEWER - CIP	1.6%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	1.7%	1.7%
SEWER - TOTAL	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.2%	3.2%
CHANGE	-0.5%	-0.5%	-0.5%	0.0%	0.4%	0.4%	0.4%	0.4%	0.3%	0.0%	
STORM - O&M	0.5%	0.9%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.9%
STORM - CIP	18.0%	3.1%	3.2%	2.2%	2.2%	2.2%	2.2%	2.2%	0.9%	0.0%	0.0%
STORM - TOTAL	18.5%	4.0%	4.0%	3.0%	3.0%	3.0%	3.0%	3.0%	1.7%	0.8%	0.9%
CHANGE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.9%	
ASSUMPTIONS:											
<ul style="list-style-type: none"> • Cash Reserves of 33% of the Total O&M • Combined funds for debt service coverage ratio • Rate Minimum set to recover annual cost different in O&M (diff adjusted to removed one time increases) • Tap fee revenue delayed by one year • Water CIPs includes an additional placeholder amount of \$3 million above current budget for possible CIP overages 											

Louisville, CO Mailer Website Summary

Type	35 Trash Carts	65 Trash Carts	95 Trash Carts	35 Recycle Carts	65 Recycle Carts	95 Recycle Carts	DND Recycle Cart	35 Compost Carts	65 Compost Carts	95 Compost Carts	DND Compost Carts
Mailer	548	273	57	86	251	531	10	164	326	347	41
WEBSITE	360	162	41	47	180	333	3	109	192	239	23
TOTAL	908	435	98	133	431	864	13	273	518	586	64

CIP UPDATE 7-19-19

PROJECTS	BUDGET	STATUS
WATER		
Replace Tube Settlers	\$380,746	Complete
Raw Water Line Lowering	\$3,000	Complete, processing final payment
WTP Boat and Trailer	\$25,000	Complete
Water Utility Truck	\$80,000	Complete
Watershed Protection Plan	\$10,000	Plan complete, BMP implementation
Water Plants Disinfection	\$407,621	Bidding, construction this Fall into 2020
Howard Diversion	\$128,700	Design, construction this Fall
System Water Loss Audit	\$42,000	Finalizing report
2019 Waterline	\$1,844,000	Construction, 50% complete
HBWTP Upgrades	\$197,220	Punchlist
SCWTP Upgrades	\$27,770	Construction, 95% complete
SCWTP Building Upgrades	\$523,000	Design, bid this Fall
SBR Ditch Lining	\$170,200	Delayed until 2020
SCWTP Lower Recycle Pond	\$86,000	Design, construction budget not defined
Water Tank Maintenance	\$92,600	Bidding next month for Fall construction
Louisville Pipeline Flow Control	\$419,355	Permitting, construction Oct-Nov
Hi Zone Water Loop	\$42,230	Reimbursement for developer performed work
NCWCD-Windy Gap Firming Project	\$2,500,000	Bidding, remaining payment in 2020
NCWCD-SWSP Eastern Pump Station	\$93,000	Delayed until 2020
SWSP Transmission Capacity	\$287,000	Design, bid EOY for construction 2020
Vehicle & Equipment Replacement	\$190,500	One vehicle remaining
PRV Replacement	\$75,000	Bidding this Fall, may delay until 2020
Fluoride Equipment Replacement	\$105,000	Advertising for design
Excavation Shoring Box	\$9,000	Obtaining quotes
Barricades and Trailer	\$5,000	Obtaining quotes
Meter Pilot Programs	\$168,000	Program implementation
Fire Hydrant Painting	\$44,690	In process, 50% complete
SCADA	\$36,000	In process, 60% complete
Utility Trailer	\$4,650	Obtaining quotes
WASTEWATER		
2018 Sewer Line Replacement	\$1,034,070	Punchlist, legal action
Local Limits	\$25,000	Design
Steel Ranch Lift Station	\$50,000	Evaluation process
2019 Sewer Utility Line Replacement	\$498,000	Construction, 40% complete
Sewer Video	\$100,000	Construction, 10% complete
Reuse System Equipment Replacement	\$32,000	Construction, 50% complete
Vehicle & Equipment Replacement	\$62,000	Obtaining quotes
Vibration Monitoring	\$40,000	Rebidding
Digester Control Improvements	\$100,000	Rebidding
Sanitary Sewer Maintenance Equipment	\$260,000	Obtaining quotes
Influent Pump Addition	\$72,000	Contract award, installation over the next month
Asphalt Addition	\$50,000	Included in Streets Recon CIP, scheduled Sept
Digester and Reuse Lighting Improvements	\$40,000	Rebidding
Aeration Basin and Reuse mixers	\$150,000	Rebidding
TSS Probes	\$45,000	Rebidding
Vac Dump Station	\$235,000	Rebidding
Excavation Shoring Box	\$3,000	Obtaining quotes
Portable Lift Station Pump	\$50,000	Obtaining quotes
Barricades and Trailer	\$5,000	Obtaining quotes
Utility Trailer	\$4,650	Obtaining quotes
STORM		
Snow Plow/Dump Truck Replacement	\$56,000	Complete
Detention Pond Maintenance	\$121,500	In process
Drainageway G	\$150,000	Incorporated with RxR Quiet Zones and area development
Stormwater Quality Masterplan	\$100,000	Design award to Council this month
Utility Trailer	\$4,650	Obtaining quotes