



Homer City Hall
491 E. Pioneer Avenue
Homer, Alaska 99603
www.cityofhomer-ak.gov

City of Homer Agenda

City Council Worksession

Monday, August 10, 2020 at 4:00 PM

City Hall Cowles Council Chambers via Zoom Webinar

Dial: (669) 900 6833 or (253) 215 8782 or Toll Free (888) 788 0099 or (877) 853 5247

Webinar ID: 953 097 829 Password: 234969

CALL TO ORDER, 4:00 P.M.

AGENDA APPROVAL (Only those matters on the noticed agenda may be considered, pursuant to City Council's Operating Manual, pg. 6)

DISCUSSION TOPIC(S)

- a. Water and Sewer Rate Review

COMMENTS OF THE AUDIENCE (3 minutes)

ADJOURNMENT NO LATER THAN 4:50 P.M.

Next Regular Meeting is Monday, August 24, 2020 at 6:00 p.m., Committee of the Whole at 5:00 p.m. All meetings scheduled to be held virtually in the City Hall Cowles Council Chambers located at 491 E. Pioneer Avenue, Homer, Alaska.



City of Homer

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Finance Department

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Memorandum 20-115

TO: Mayor Castner and Homer City Council
THROUGH: Rick Abboud, Acting City Manager
FROM: Elizabeth Walton, Finance Director
DATE: July 25, 2020
SUBJECT: Water and Sewer Rate Model

The purpose of this memo is to provide an overview of the model used to generate the water and sewer rates.

Introduction:

The basic principles and assumptions of this model were developed by the most recent Water and Sewer Task Force. The purpose of this model is to generate a utility rate that is a product of budget assumptions and the backing out of fixed fee components. The intent was to provide the City with a mechanism that connected the water and sewer rates to the actual costs to maintain the infrastructure.

The format of the rate model has changed from the one the Water and Sewer Task Force generated, but the basic principles and assumptions remain the same. These changes were made to more accurately reflect the City's budget structure.

Water Rate Model:

This model generates a rate based on water revenues and consumption.

Revenues

The total revenue required is pulled directly out of the current year's budget (as this is current model formula, but it might be worth discussing a change in methodology now that we utilize a biannual budget). To be more transparent with the budgeting of the transfer to reserves, the transfer has been backed out of the revenue amount and is now listed in its own line on this model.

The reserve requirement is currently set at 15% of the total revenue required. This percentage was derived by conversations with the Water and Sewer Superintendent, our three year average transfer and by industry standard research. The City has to work diligently towards maintaining the extensive water and sewer infrastructure. The infrastructure is aging and the City needs to be prepared for upcoming maintenance expenses.

The model backs out three fixed fee components. The first fixed fee is related to the overhead costs assigned to the fund. These costs cover a portion of the administrative costs associated with the processing of utility payments. This fee is backed out because the Monthly Fee amount is used to cover such expenses. The second fee is Hydrant Rents and it is related to the costs associated with maintaining the water hydrants. This cost is budgeted at 10% of total water revenue required and the costs are shared 50/50 between the General Fund and the Water/Sewer Fund. The final fixed fee references Bulk Water Sales. This amount is determined by applying the bulk surcharge (0.004/gallon) to the prior year total gallons consumed by bulk users. This is backed out because these expenses are captured by the separate rate for bulk users.

Consumption

The water consumption line is determined by prior years gross meters water sales (in gallons). The water usage at the Sewer Treatment Plant has been backed out of this figure, as it has been determined to be an operational cost. The model rounds up to the nearest million for ease of reporting.

Rates

The water rates are broken into three categories. The commodity rate (per gallon) is generated by dividing the total revenue required by the estimated water sales. This ensures that the whole population of water users are contributing to an equal share of costs. The bulk rate (per gallon) is applying a surcharge of 0.004 per gallon to the set commodity rate. The monthly fees is determined by dividing the budgeted administrative costs by the current number of water meters. As of the March 2020 billing, there were a total of 1,808 meters.

Compared with the rates set for 2020, the model is recommending a rate increase for both residential and bulk users. The model was not used for rate setting in 2020, as council opted to keep rates flat between 2019 and 2020. Had the model been used, the rates would be decreasing for 2021. The included rate comparison sheet illustrates the proposed rate change between 2020 and 2021.

Sewer Rate Model:

This model generates a rate based on sewer revenues and usage.

Revenues

The total revenue required is pulled directly out of the current year's budget (as this is current model formula, but it might be worth discussing a change in methodology now that we utilize a biannual budget). To be more transparent with the budgeting of the transfer to reserves, the transfer has been backed out of the revenue amount and is now listed in its own line on this model.

The reserve requirement is currently set at 15% of the total revenue required. This percentage was derived by conversations with the Water and Sewer Superintendent, our three year average transfer and by industry standard research. The City has to work diligently towards maintaining the extensive water and sewer infrastructure. The infrastructure is aging and the City needs to be prepared for upcoming maintenance expenses.

The model backs out four fixed fee components. The first fixed fee is related to costs associated with the lift station. These costs are pulled straight from the current budget and have a built in inflation cost of 2% (could be worth discussing a change now that we issue a biannual budget). These costs are backed out because the users on the lift station bear the complete costs associated with maintaining this infrastructure. The second fixed fee is the pumping fee for Kachemak City users. The City RFP's the pumping contract every three years and the costs of the contract is divided up amongst the number of users in this LID. As of March 2020 billing, there are currently 134 users. The third fixed fee is the dumping station fee and that comes directly from the previous year's budget. This fee has been determined to be an operational cost and, as such the fee is not forwarded along to customers. The final fixed cost is a set rate assigned to only multi-units and Kachemak City meters. This is an additional fee charged to help offset added costs associated with maintaining such infrastructure.

Usage

The sewer usage is determined by the by the number of gallons actually billed for in the prior fiscal year. The model rounds up to the nearest million for ease of reporting.

Rates

The sewer rate is broken into two categories (non-lift and lift station). The non-lift rate is generated by dividing the total revenue required by the projected billable volume for non-lift. The lift station rate is generated by dividing the total revenue required by the projected billable volume for only the lift zone.

Compared with the rates set for 2020, the model is recommending a rate increase for both lift and non-lift customers. The model was not used for rate setting in 2020, as council opted to keep rates flat between 2019 and 2020. Had the model been used, the rates would be decreasing for 2021, with the exception of non-lift as this rate still showed an increase. The included rate comparison sheet illustrates the proposed rate change between 2020 and 2021.

Recommendation:

Review the model and approve the rates set forth.

Revenues & Expenses - Utility Fund

	<u>FY 19 Budget</u>	<u>FY 19 Actual</u> ¹	<u>FY 20 Budget</u>
Water			
Meter Sales	1,959,352	2,135,044	1,953,016
Other Revenue	56,949	160,683	65,435
Hydrant Transfer	100,350	100,350	99,629
Water Fund - Total Revenue	2,116,651	2,396,077	2,118,081
Salaries, Wages & Benefits ²	936,692	938,111	989,587
Maintenance & Operations ³	1,068,645	923,713	1,029,312
Transfers to:			
Reserves	84,252	84,252	81,240
Other	27,062	27,062	17,942
HAWSP per ORD 19-58		1,550,541	
Water Fund - Total Expenses	2,116,651	3,523,679	2,118,081
Revenues over Expenses	-	(1,127,602)	-
Revenues over Expenses (w/o HAWSP transfer)	-	422,939	-
Sewer			
Meter Sales	1,681,475	1,721,738	1,610,830
Other Revenue	40,539	34,257	31,426
Sewer Fund - Total Revenue	1,722,014	1,755,995	1,642,256
Salaries, Wages & Benefits ²	765,138	754,822	809,377
Maintenance & Operations ³	768,805	617,146	799,490
Transfers to:			
Reserves	155,164	294,667	14,856
Other	32,907	25,531	18,533
HAWSP per ORD 19-58		1,550,541	
Sewer Fund - Total Expenses	1,722,014	3,242,707	1,642,256
Revenues over Expenses	-	(1,486,712)	-
Revenues over Expenses (w/o HAWSP transfer)	-	63,829	-
Utility Fund Total	0	(2,614,313)	0
Utility Fund Total (w/o HAWSP transfer)	0	486,769	0

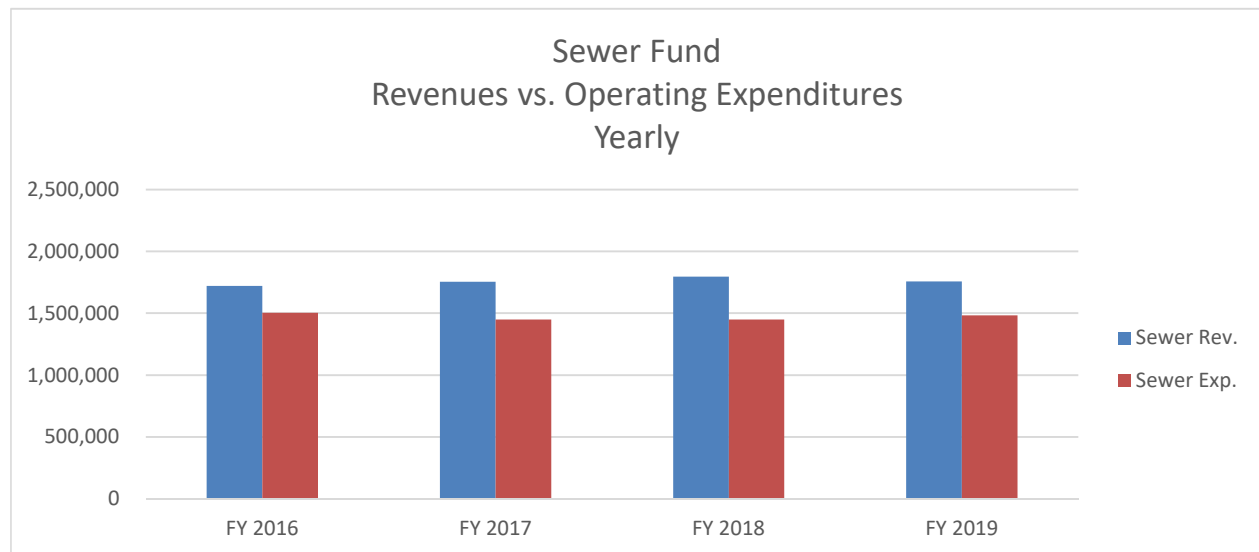
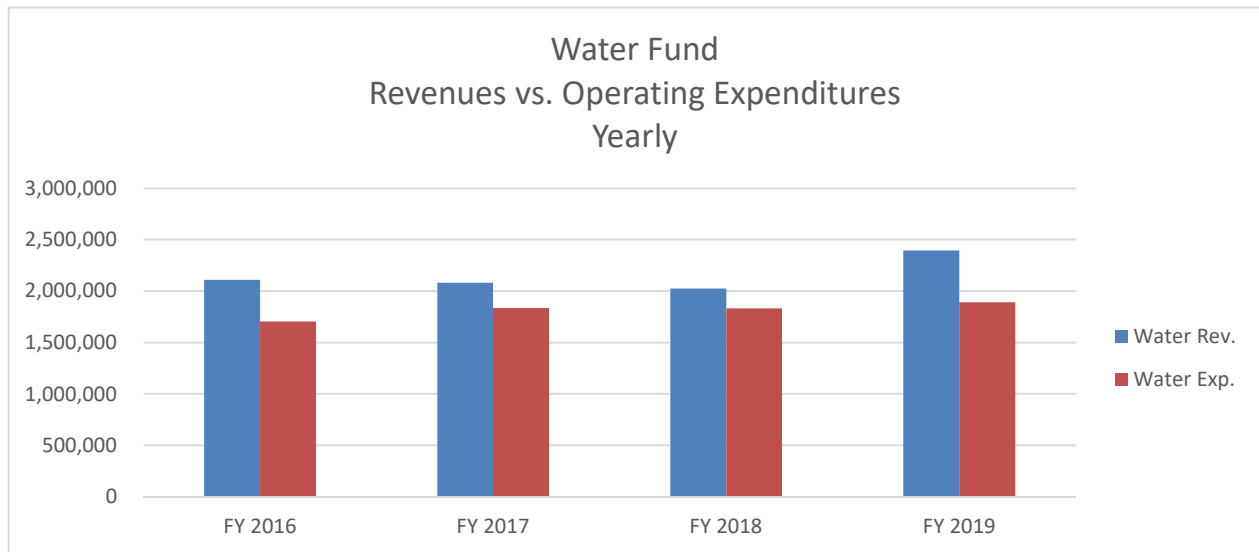
¹ Unaudited (Independent Audit will be finalized by the end of December 2020)

² Includes leave cash out

³ Includes GF admin fees (overhead costs)

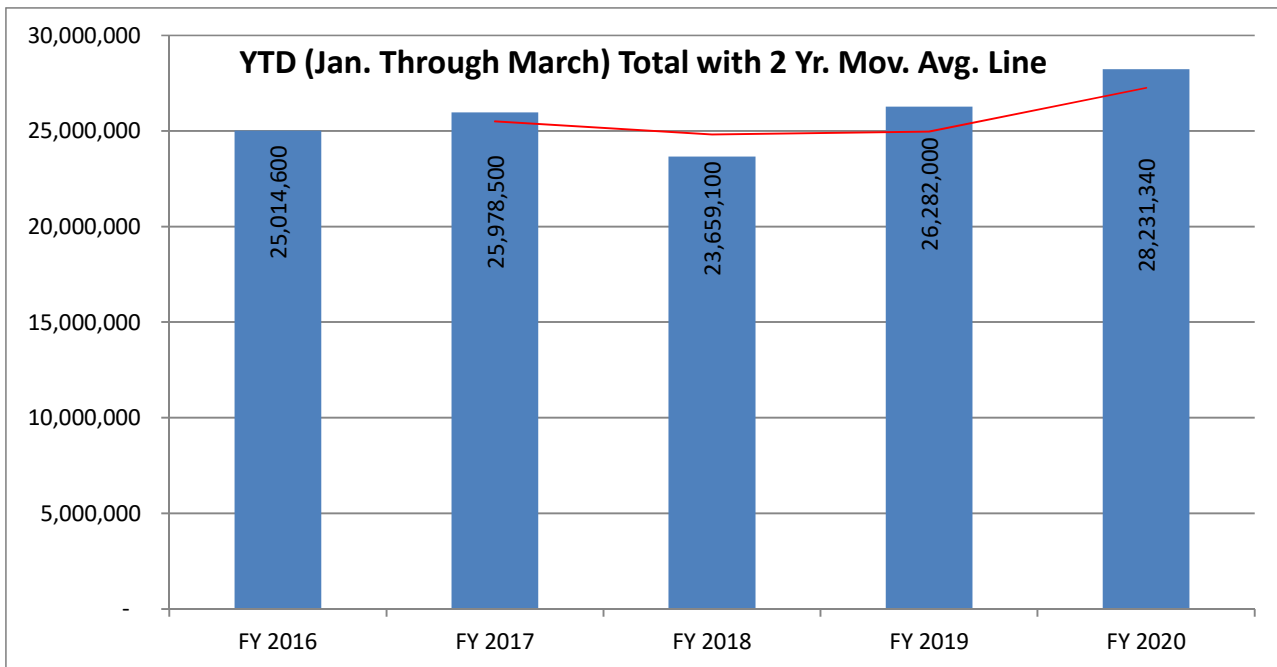
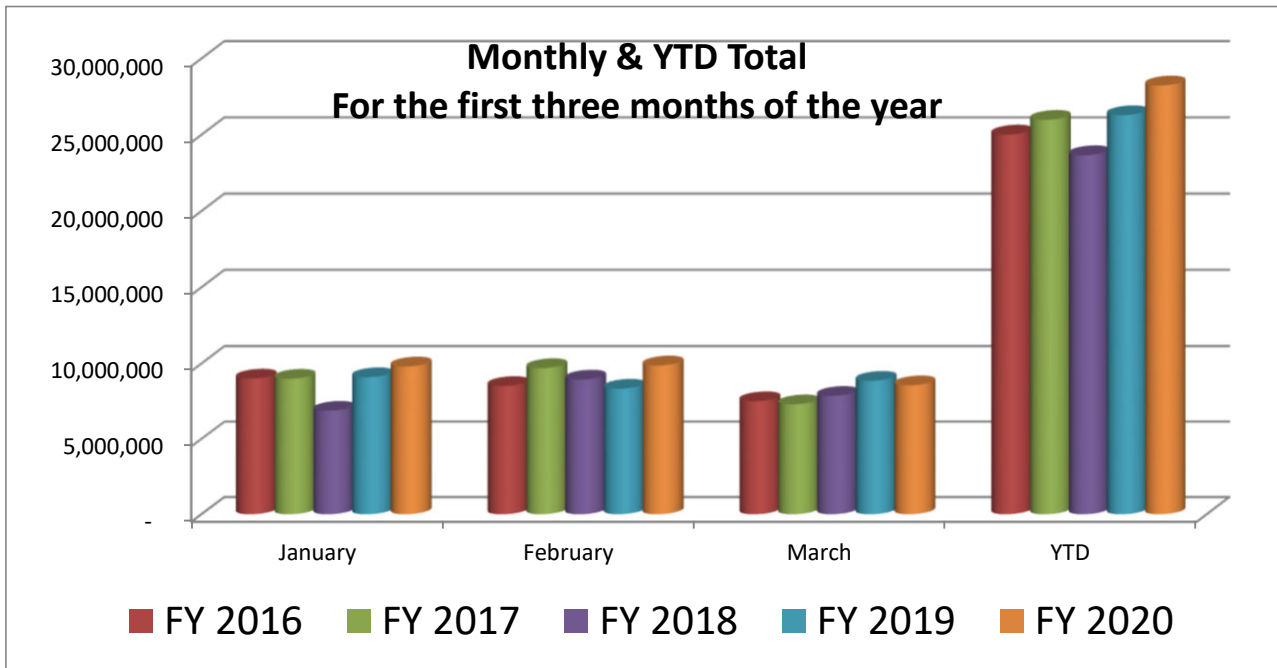
Yearly Comparison: Revenues vs. Expenditures (Unaudited)

	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>
Water Fund Revenues	2,108,835	2,081,823	2,025,795	2,396,077
Water Fund Expenditures (excluding transfer to reserves)	1,704,623	1,835,757	1,832,747	1,891,719
<u>Water: Revenues over (Under) Expenditures</u>	404,212	246,067	193,048	504,359
Sewer Fund Revenues	1,719,555	1,753,457	1,796,253	1,755,995
Sewer Fund Expenditures (excluding transfer to reserves)	1,503,397	1,447,921	1,449,638	1,482,179
<u>Sewer: Revenues over (Under) Expenditures</u>	216,158	305,536	346,614	273,816
<u>Water & Sewer: Total Revenues Over (Under) Expenditures</u>	620,370	551,602	539,663	778,175



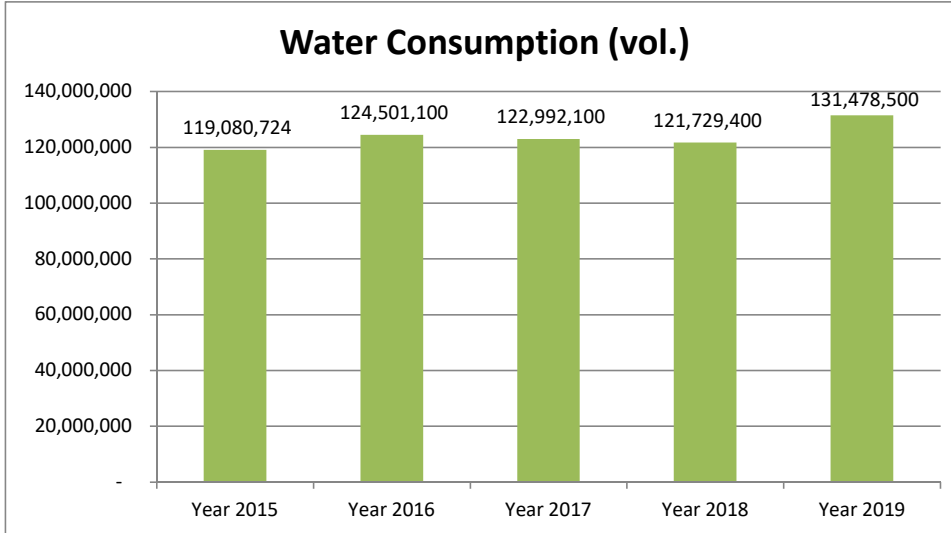
Water Consumption (Gallons)

<u>Yr.\Mo.</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>YTD</u>
FY 2016	9,005,200	8,511,100	7,498,300	25,014,600
FY 2017	8,991,000	9,692,600	7,294,900	25,978,500
FY 2018	6,868,000	8,937,000	7,854,100	23,659,100
FY 2019	9,094,800	8,332,000	8,855,200	26,282,000
FY 2020	9,804,800	9,870,840	8,555,700	28,231,340

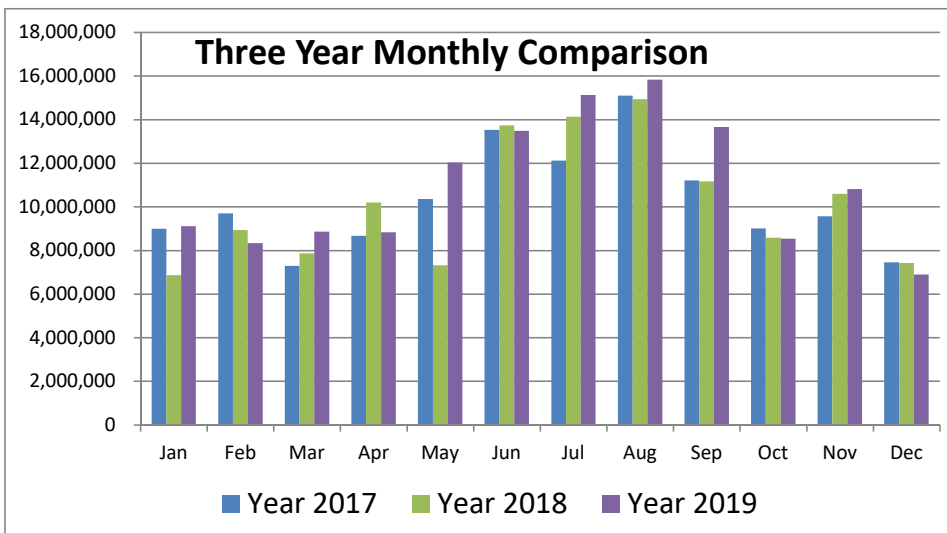


Water Consumption

By Year	<u>Year 2015</u>	<u>Year 2016</u>	<u>Year 2017</u>	<u>Year 2018</u>	<u>Year 2019</u>
Water (vol.)	132,291,300	131,119,200	133,502,000	132,695,300	139,429,700
Operational Adj.	(13,210,576)	(6,618,100)	(10,509,900)	(10,965,900)	(7,951,200)
Water (vol.) after adj.	119,080,724	124,501,100	122,992,100	121,729,400	131,478,500

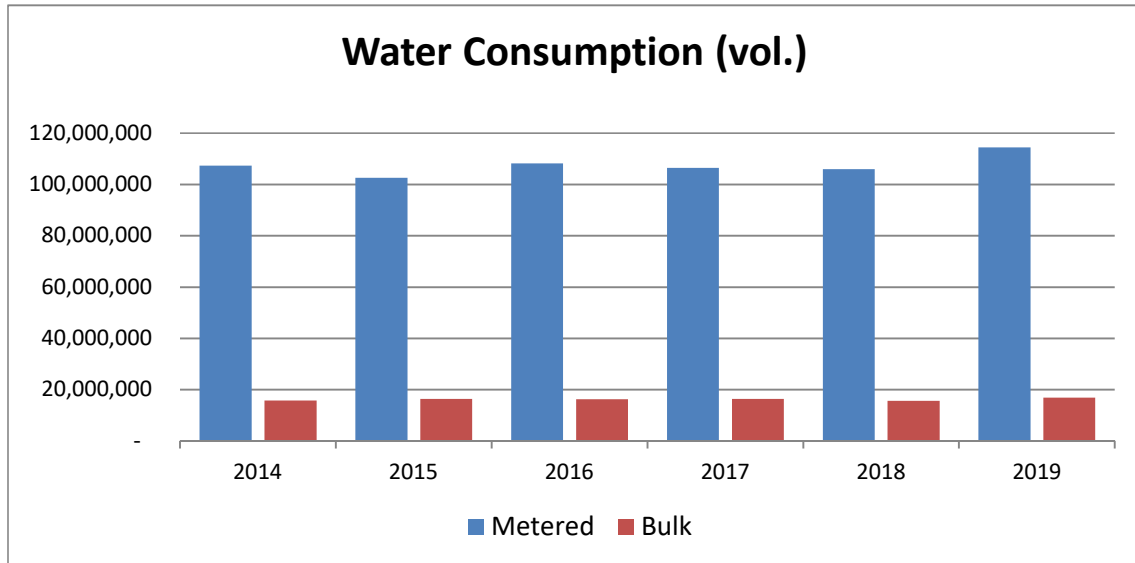


<u>Month\Year</u>	<u>Year 2017</u>	<u>Year 2018</u>	<u>Year 2019</u>
Jan	8,991,000	6,868,000	9,103,200
Feb	9,692,600	8,937,000	8,332,000
Mar	7,294,900	7,854,100	8,855,200
Apr	8,675,000	10,193,800	8,824,900
May	10,350,500	7,316,900	12,032,800
Jun	13,528,300	13,734,900	13,484,800
Jul	12,119,600	14,120,300	15,128,900
Aug	15,091,400	14,931,500	15,826,800
Sep	11,213,400	11,169,500	13,661,900
Oct	9,010,900	8,587,200	8,532,500
Nov	9,569,500	10,593,700	10,804,200
Dec	7,455,000	7,422,500	6,891,300
	<u>122,992,100</u>	<u>121,729,400</u>	<u>131,478,500</u>
	-1.2%	-1.0%	8.0%



	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
Metered	107,403,206	102,688,524	108,248,600	106,566,800	106,018,000	114,529,600
Bulk	15,815,000	16,392,200	16,252,500	16,425,300	15,711,400	16,948,900
Total Consumption*	123,218,206	119,080,724	124,501,100	122,992,100	121,729,400	131,478,500
Bulk as % of Total Volume	12.83%	13.77%	13.05%	13.35%	12.91%	12.89%

*Includes Operational Adjustment



Rate Calculations

WATER Rate Model	
Revenues	
2020 Total Revenue Required - Water	\$ 1,911,348
15% Reserve Requirement	286,702
Deduct Portion Collected through Service Fee	(286,547)
Hydrant Rents (10% of Total)	(95,567)
Surplus Water Sales (Bulk) surcharge only	(67,796)
Revenue Required for Commodity Rate Calculation	\$ 1,748,140
Water Consumption (Gallons)	
Total Estimated Water Sales	131,000,000
Water Rates:	
Commodity Rate (per gal)	\$ 0.0133
Bulk Rate (per gal)	\$ 0.0173
Monthly Fees	\$ 13
Consumption Additional Information:	
FY19 Gross Meters Water Sales (Gallons)	131,478,500
SEWER Rate Model	
Revenues	
2020 Total Operating Revenue Required - Sewer	\$ 1,627,400
15% Reserve Requirement	244,110
Lift Stations Costs	(217,160)
Pumping Fee	(10,050)
Dumping Station Fees	(5,978)
Multi-Units and K-city (\$5/unit/mo.)	(70,320)
Revenue Required for Commodity Rate Calculation	\$ 1,568,002
Sewer Usage (Gallons)	
Projected Billable Volume	78,000,000
Projected Billable Volume - Lift Zone Only	22,000,000
Total Projected Billable Volume	100,000,000
Sewer Rate	
Non-Lift Station Rate	\$ 0.0157
Lift Station Rate	\$ 0.0256
Lift Station Additional Information:	
FY 19 Actually Billed Gallons (Lift Station Zone Only)	21,706,300

City of Homer
Water and Sewer Rate Study

WATER			
Descriptions	Units	Rate	Projected Revenue - for FY 2020
Total Metered Water Sales	131,000,000		
Bulk Water Sales	17,000,000	\$ 0.0173	\$ 294,858
Metered Water Sales (excluding Bulk)	114,000,000	\$ 0.0133	\$ 1,521,282
Service Charges	1,808	\$ 13.00	\$ 282,048
Hydrant Rents			\$ 95,567
Total Projected Revenue			\$ 2,193,756
FY 2020 Projected Water Budget			\$ 2,198,050
			\$ (4,294)

SEWER			
Descriptions	Units	Rate	Projected Revenue - for FY 2020
Projected Total Billable Sewage Discharge (Gal.)	100,000,000		
Billable Volume from Lift-Station Zone (Gal.)	22,000,000	\$ 0.0256	\$ 562,120
Billable Volume from Non-Lift-Station Zone (Gal.)	78,000,000	\$ 0.0157	\$ 1,223,042
Multi-Units (Including K-city)	1,172	\$ 5.00	\$ 70,320
Kachemak City pumping charges	134	\$ 6.25	\$ 10,050
Dumping Station Fees			\$ 5,978
Total Projected Sewer Revenue			\$ 1,871,510
FY 2020 Projected Sewer Budget			\$ 1,871,510
			0