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.