



# **City of Grand Island**

**Tuesday, November 12, 2019**

**Council Session**

## **Item I-2**

### **#2019-348 - Consideration of Approving Wastewater Cost of Service Based Rates**

**Staff Contact: John Collins, P.E. - Public Works Director**

# **Council Agenda Memo**

**From:** Jon Menough PE, Wastewater Plant Engineer  
**Meeting:** November 12, 2019  
**Subject:** Approving Wastewater Cost of Service Based Rates  
**Presenter(s):** John Collins PE, Public Works Director

## **Background**

The Wastewater Division of the Public Works Department is an enterprise fund with no property tax dollars used to support the division. The entire budget comes from wastewater customers through sanitary sewer bills. The sewer bill for a residential customer is based on usage and standard strength for residential sewage. The sewer bill for commercial and industrial customers is based on usage plus an extra strength component. A cost of service based rate study looks at all costs for the operation and allocates those costs of service to the customer classes according to the costs of providing service. Rates are then designed to equitably cover those costs.

The current sanitary sewer rates are based on Resolution No. 2013-331, which was approved by City Council on October 8, 2013.

The cost of service based rate study was performed by Black & Veatch of Kansas City, Missouri.

## **Discussion**

The final waste water cost of service based rate study report is now complete and ready for council approval. The final report includes average recommended rate increases for fiscal years 2020 through 2023.

January 1, 2010- 3.5%  
October 1, 2020- 3.5%  
October 1, 2021- 3.0%  
October 1, 2022- 3.0%  
October 1, 2023- 2.5%

It has been recommended that the first year of rate adjustments will come into effect January 1, 2020 with the future increases commencing on January 1 in the following years, and will be considered by the council.

## **Alternatives**

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve.
2. Refer the issue to a Committee.
3. Postpone the issue to a future date.
4. Take no action on the issue.

## **Recommendation**

City Administration recommends that the Council approve the final wastewater cost of service based rates.

## **Sample Motion**

Move to approve the resolution.



November 12, 2019

# Wastewater Rate Study

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# Agenda



**Purpose of Presentation**



**Background Information**



**Rate Study Process & Results**





# Purpose of Presentation and Background Information

John Collins  
Public Works Director



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# Purpose of Presentation

1. Provide the City Council with background information related to wastewater rates
2. Present the results of the rate study update
3. Respond to questions
4. Gain the City Council's understanding of the proposed rate increases



# Background Information

- Most recent comprehensive wastewater rate study was completed in October 2013
  - Council approved 4 revenue increases (12%, 12%, 6%, 5%) from FY 2014 – FY 2017
- Financial plan was updated in 2014 to reflect revised CIP and SRF funding
  - FY 2014 – FY 2017 CIP increased \$9,432,100
  - Proposed \$37M SRF Loan
  - No change in Council approved revenue increases
- Rates have not been increased since FY 2017
- 2019 comprehensive wastewater rate study develops proposed rates for FY 2020 – FY 2024





# Rate Study Process & Results

Anna White

Principal Consultant / Project Manager



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# Purpose of the Rate Study

Perform independent wastewater rate study that will accomplish the following:



Establish operating and capital financing plans that fully fund activities



Perform a cost of service analysis to determine if cost allocations are fair and equitable among customer classes

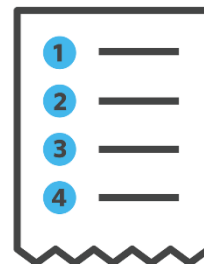


Review the existing rate structure and design proposed rates that provide adequate revenues

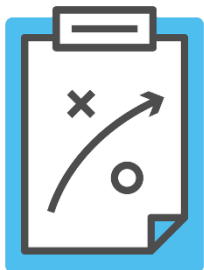
# Industry Financial Planning / Rate Setting Best Practices



What are the Industry's  
Rate Setting Best  
Practices?



Define **financial performance standards** that support financial resiliency



Develop annually a 5 to 10 year **financial plan** to achieve financial performance



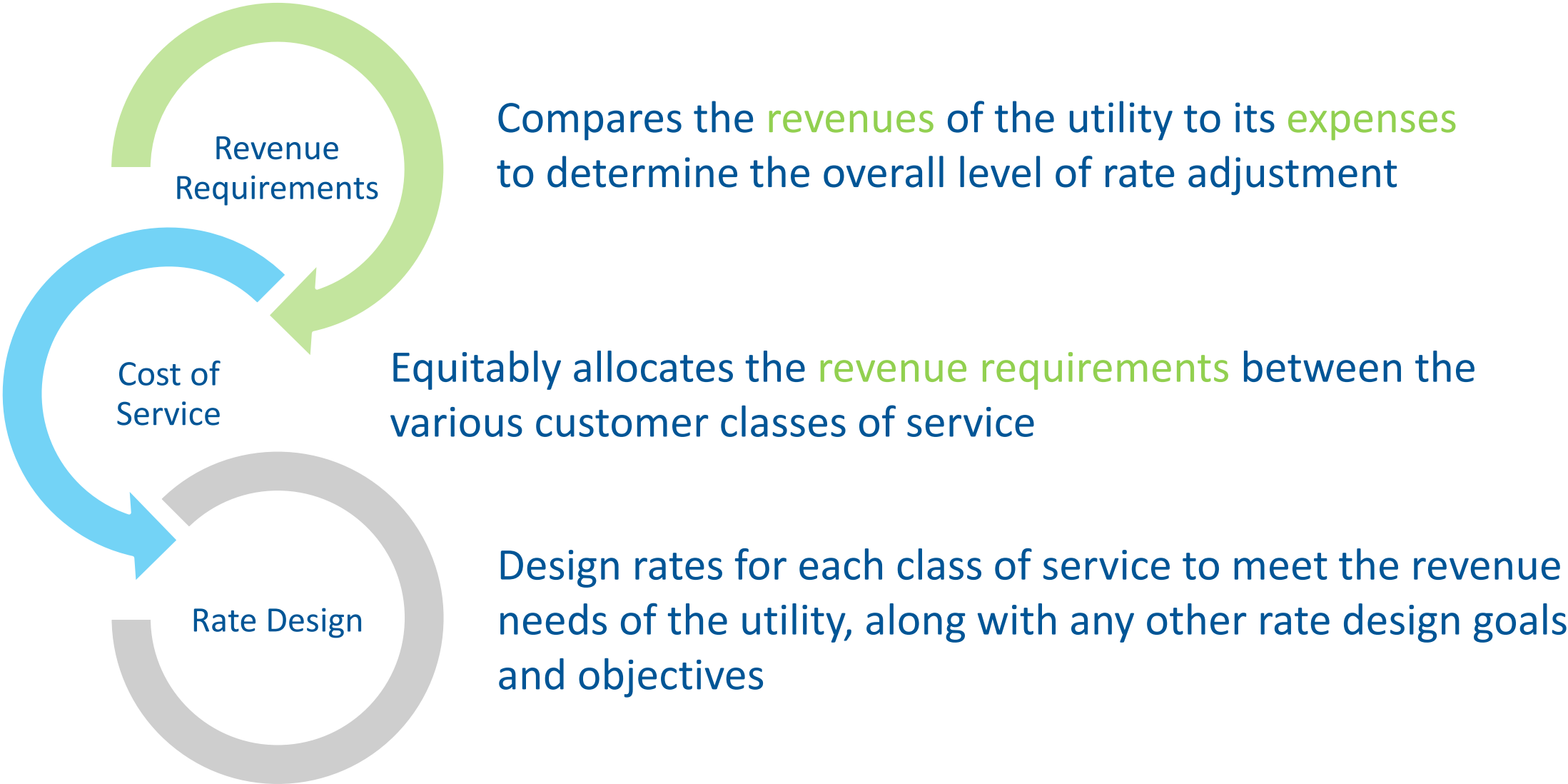
Perform a **cost of service** study review every 3 to 5 years



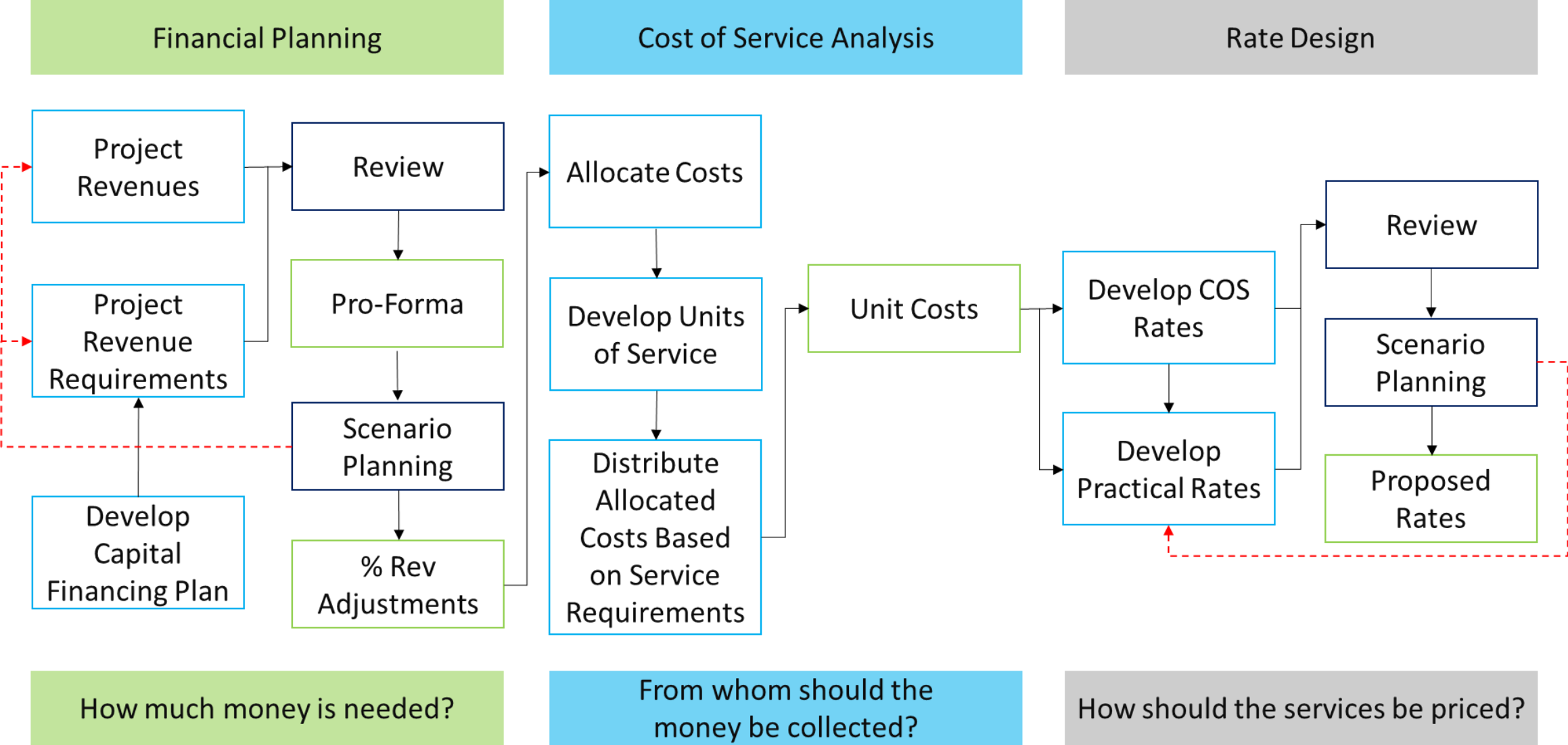
Establish rates to ensure **self-sufficiency** to meet all revenue requirements



# Building Blocks of Rate Setting



# Rate Making Process



# Financial Planning

- **Objective:**

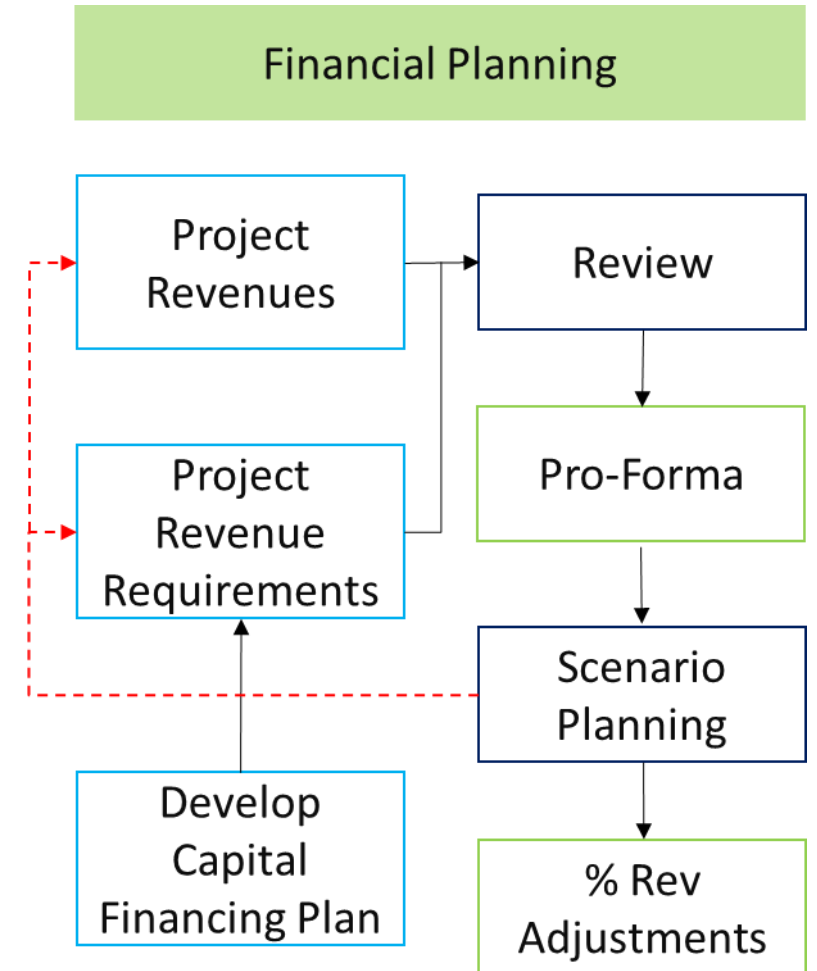
- Provide adequate funding for future utility operating and capital program needs
- Set a path for timely revenue adjustments

- **Considerations:**

- Factors that impact revenue generation
- Factors that impact revenue requirements
- Appropriateness of operating and capital reserves
- Financial performance targets to be achieved

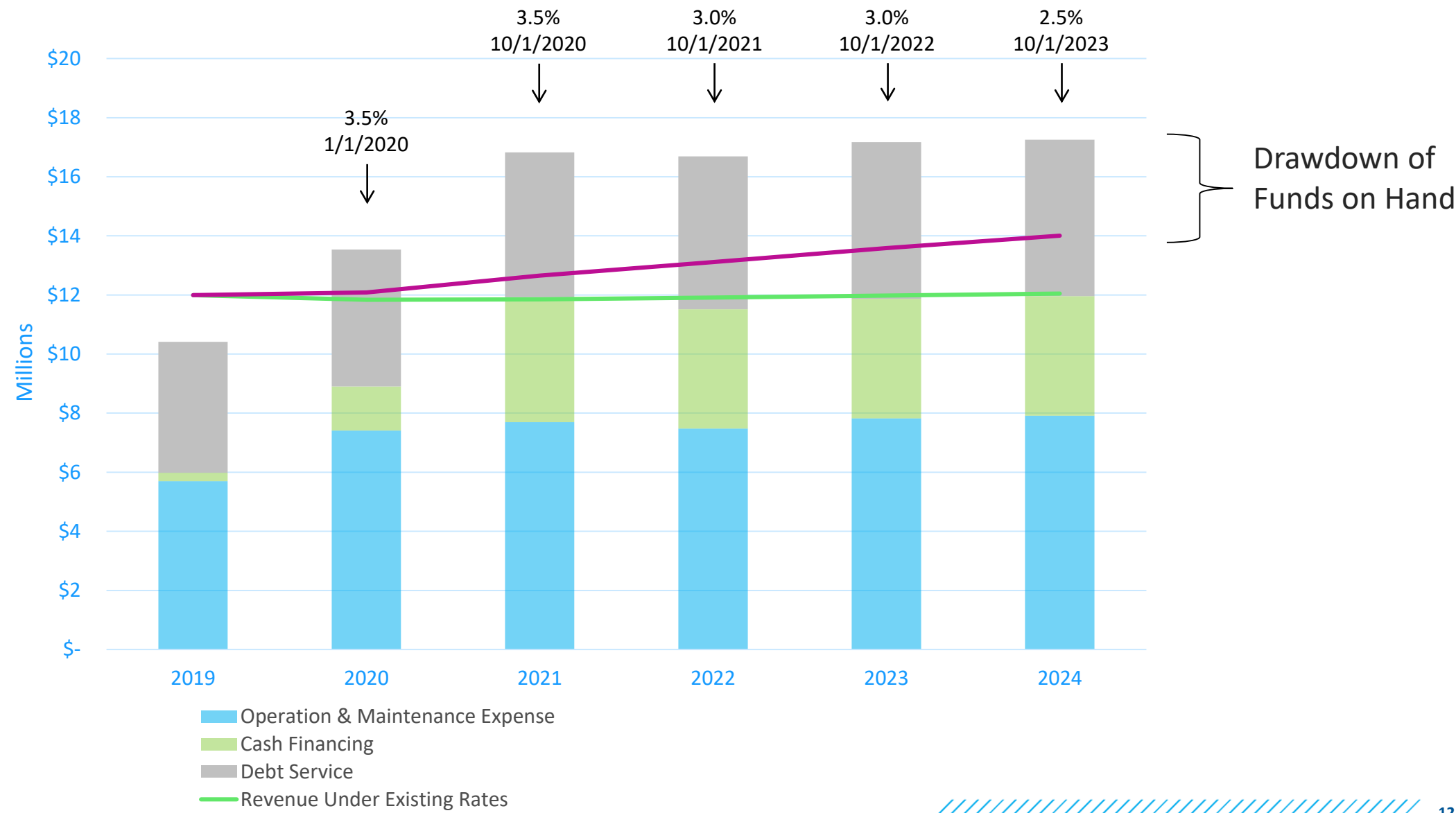


**Benefit to You:** An optimized Financial Plan that allows you to understand the impacts of Operating and Capital Requirements on Existing Rates

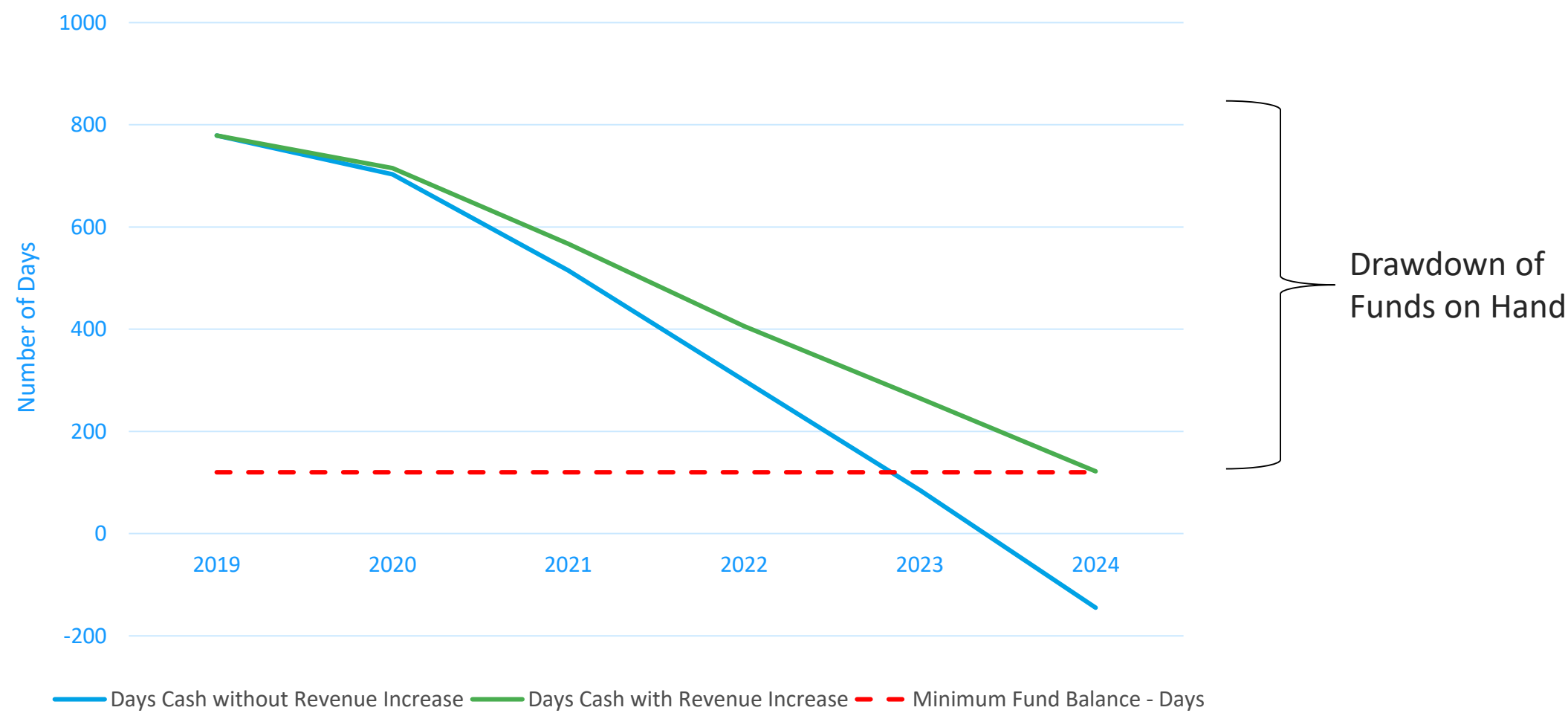




# Revenue and Revenue Requirements



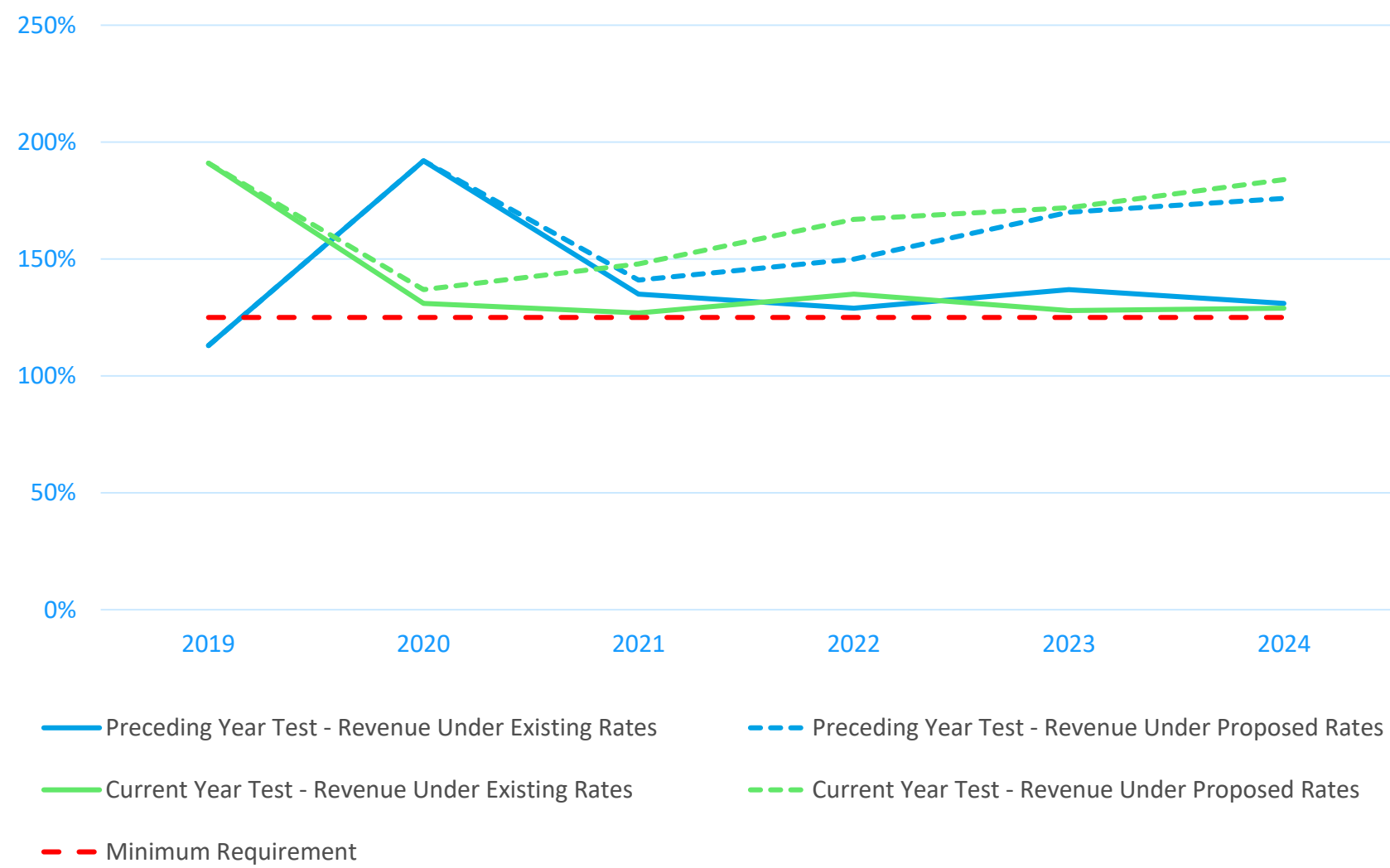
# Wastewater Fund Balance



Assumes 3.5% revenue increases in FY 2020 and FY 2021, 3.0% in FY 2022 and FY 2023 and 2.5% in FY 2024



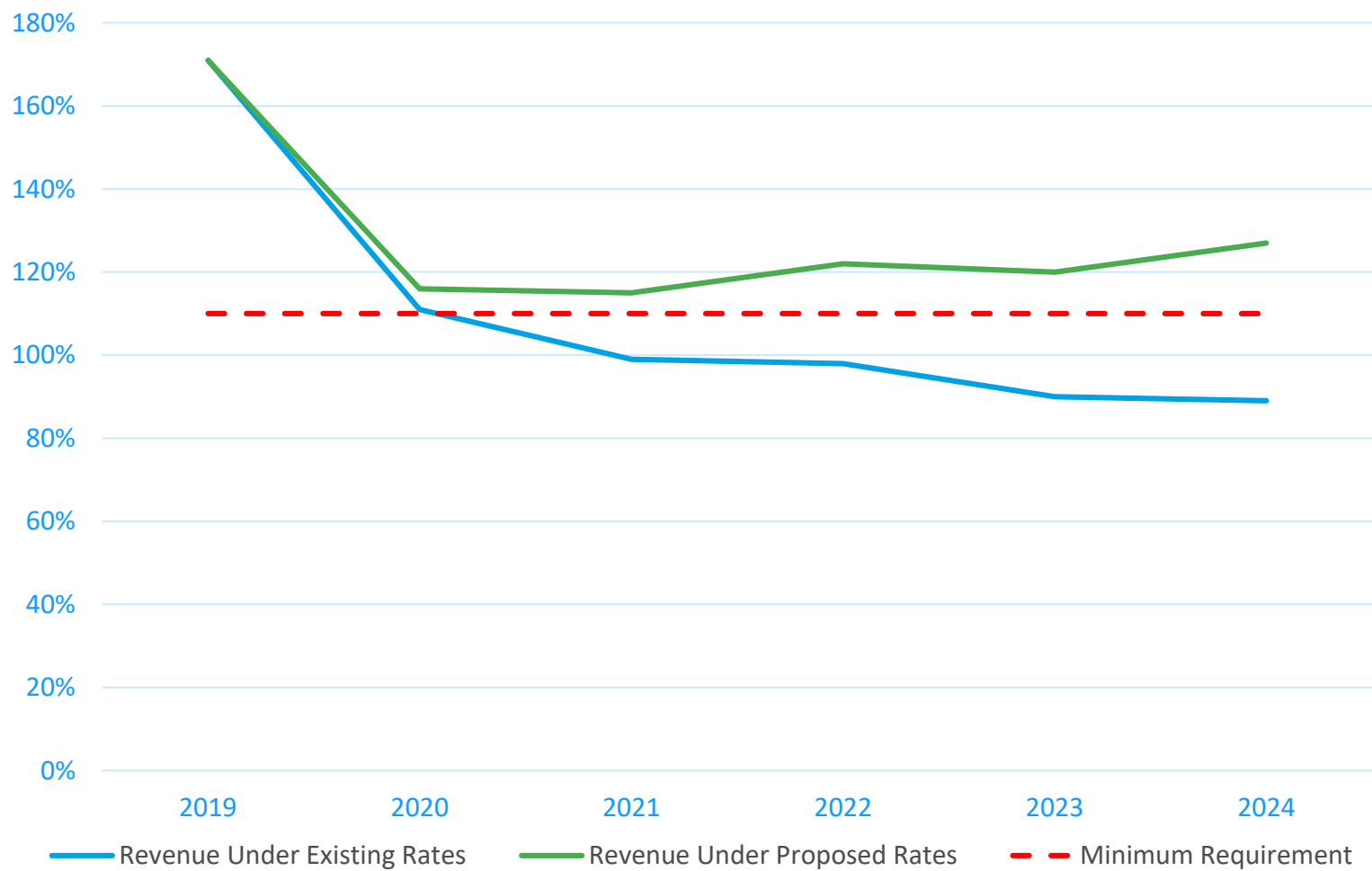
# Debt Service Coverage – Additional Bonds Test



The Utility must comply with one of the Additional Bonds Tests



# Debt Service Coverage – Annual Coverage Test



Revenue under existing rates will not provide sufficient net revenue to meet annual coverage requirements beginning in FY 2021



# Cost of Service Methodology

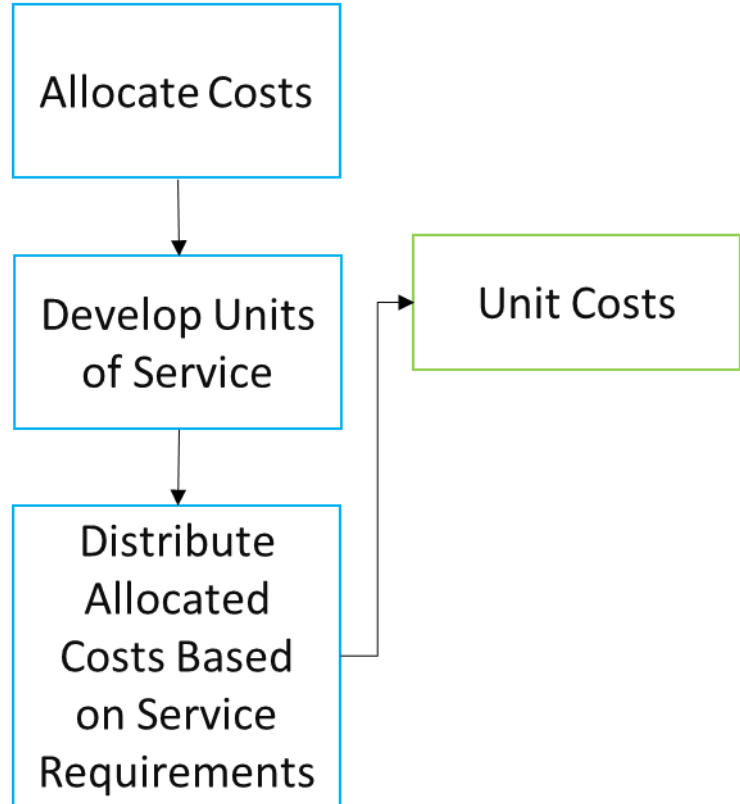
- **Objective:**

- Recognize the cost-of-service responsibility for each customer class

- **Industry Accepted Methodology:**

- Water Environment Federation, Financing and Charges for Wastewater Systems

## Cost of Service Analysis



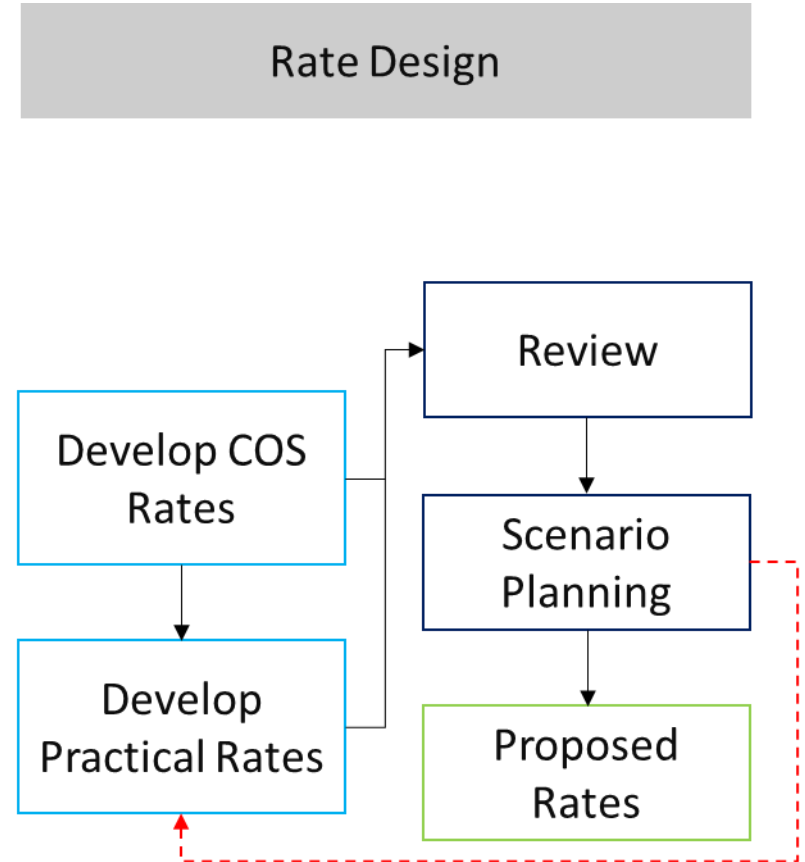
**Benefit to You:** An equitable and defensible approach to allocate costs amongst all customer groups served by you



# Rate Design

- **Rate Setting Principles:**

- Equitability
- Revenue Stability
- Provides Appropriate Price Signals
- Recognizes Customer Usage Patterns & Demands
- Easy to Understand and Administer
- Customer Acceptance
- Consistent with City Policies
- Legally Acceptable / Defensible



**Benefits to You:** A schedule of proposed rates that are defensible, appropriately recover costs, and easy to understand by stakeholders



# Proposed Rates

Rate Component	Existing	Proposed Jan 1, 2020	Proposed Oct 1, 2020	Proposed Oct 1, 2021	Proposed Oct 1, 2022	Proposed Oct 1, 2023
Service Charge - \$/Month	\$8.24	\$8.24	\$8.24	\$8.24	\$8.24	\$8.24
Volume Charge - \$/100 gallons						
Collection System Users	\$3.52	\$3.69	\$3.88	\$4.03	\$4.19	\$4.33
Direct Discharge Users	\$1.18	\$1.19	\$1.20	\$1.21	\$1.22	\$1.23
Low-Strength Industrial Users	\$2.47	\$2.72	\$2.91	\$3.06	\$3.21	\$3.35
Strength Surcharge - \$/lb						
BOD	\$0.3248	\$0.3248	\$0.3248	\$0.3248	\$0.3248	\$0.3248
Suspended Solids	\$0.2177	\$0.2177	\$0.2177	\$0.2177	\$0.2177	\$0.2177
Oil & Grease	\$0.1519	\$0.1908	\$0.1975	\$0.2034	\$0.2095	\$0.2147
TKN	\$0.0395					
Nitrates	\$1.0299					
Total Nitrogen		\$0.8900	\$0.8953	\$0.9222	\$0.9499	\$0.9736



# Typical Bill Comparison

Description	Existing	Proposed Jan 1 , 2020	Proposed Oct 1, 2020	Proposed Oct 1, 2021
Residential				
500 cubic feet	\$25.84	\$26.69	\$27.64	\$28.39
700 cubic feet	\$32.88	\$34.07	\$35.40	\$36.45
1,500 cubic feet	\$61.04	\$63.59	\$66.44	\$68.69
Commercial				
2,500 cubic feet	\$96.24	\$100.49	\$105.24	\$108.99
4,000 cubic feet	\$149.04	\$155.84	\$163.44	\$169.44
7,500 cubic feet	\$272.24	\$284.99	\$299.24	\$310.49
Industrial				
5,000 cubic feet	\$353.23	\$361.73	\$371.23	\$378.73
50,000 cubic feet	\$2,101.35	\$2,189.39	\$2,284.91	\$2,360.37
500,000 cubic feet	\$21,855.57	\$22,796.60	\$23,762.28	\$24,526.08



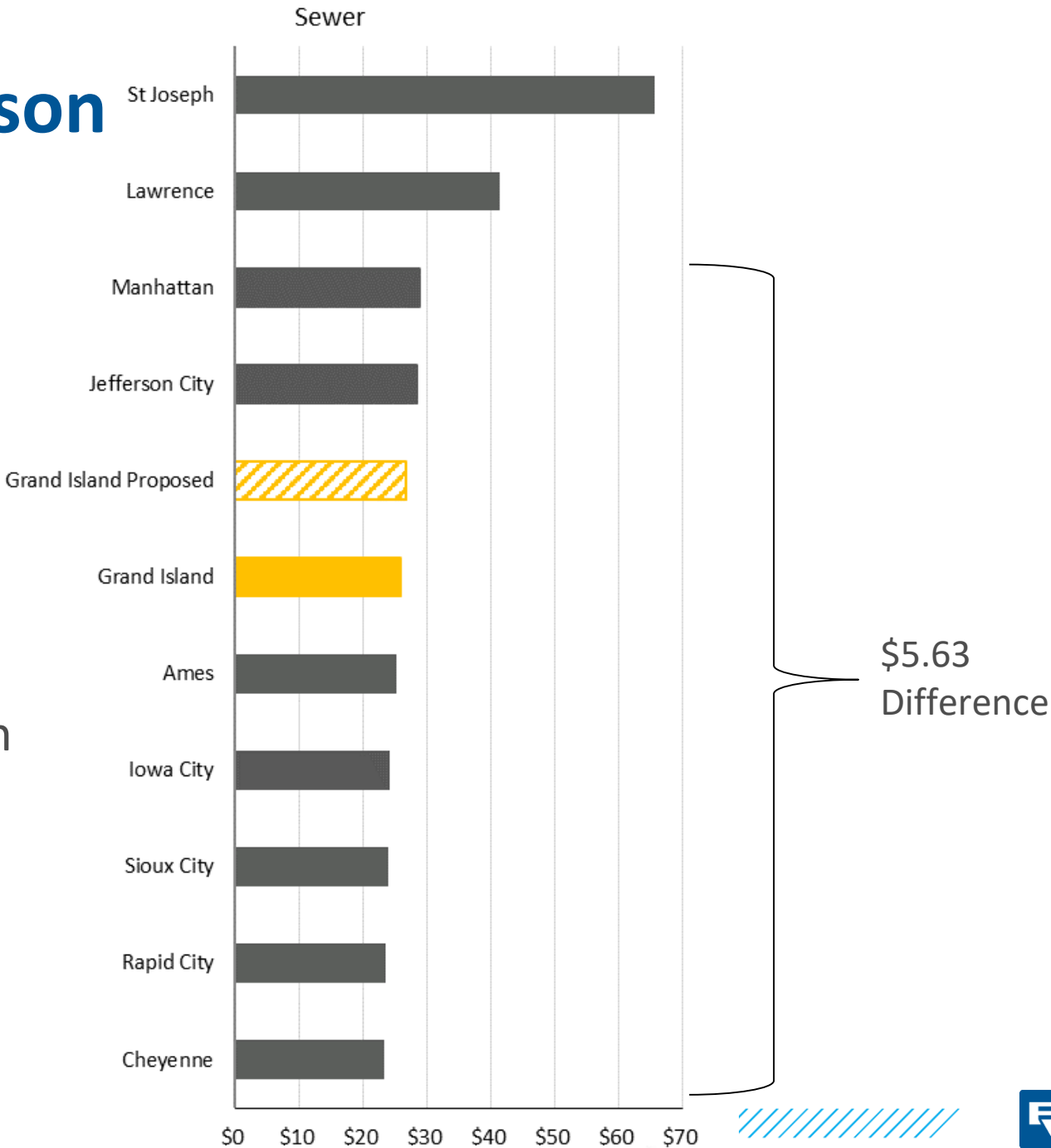
# FY 2020 Typical Bill Comparison 500 cubic feet

Average \$30.62

Grand Island Existing \$25.84

Grand Island Proposed \$26.69

Comparison rates reflects rates currently in effect and not necessary rates that will be in effect in 2020



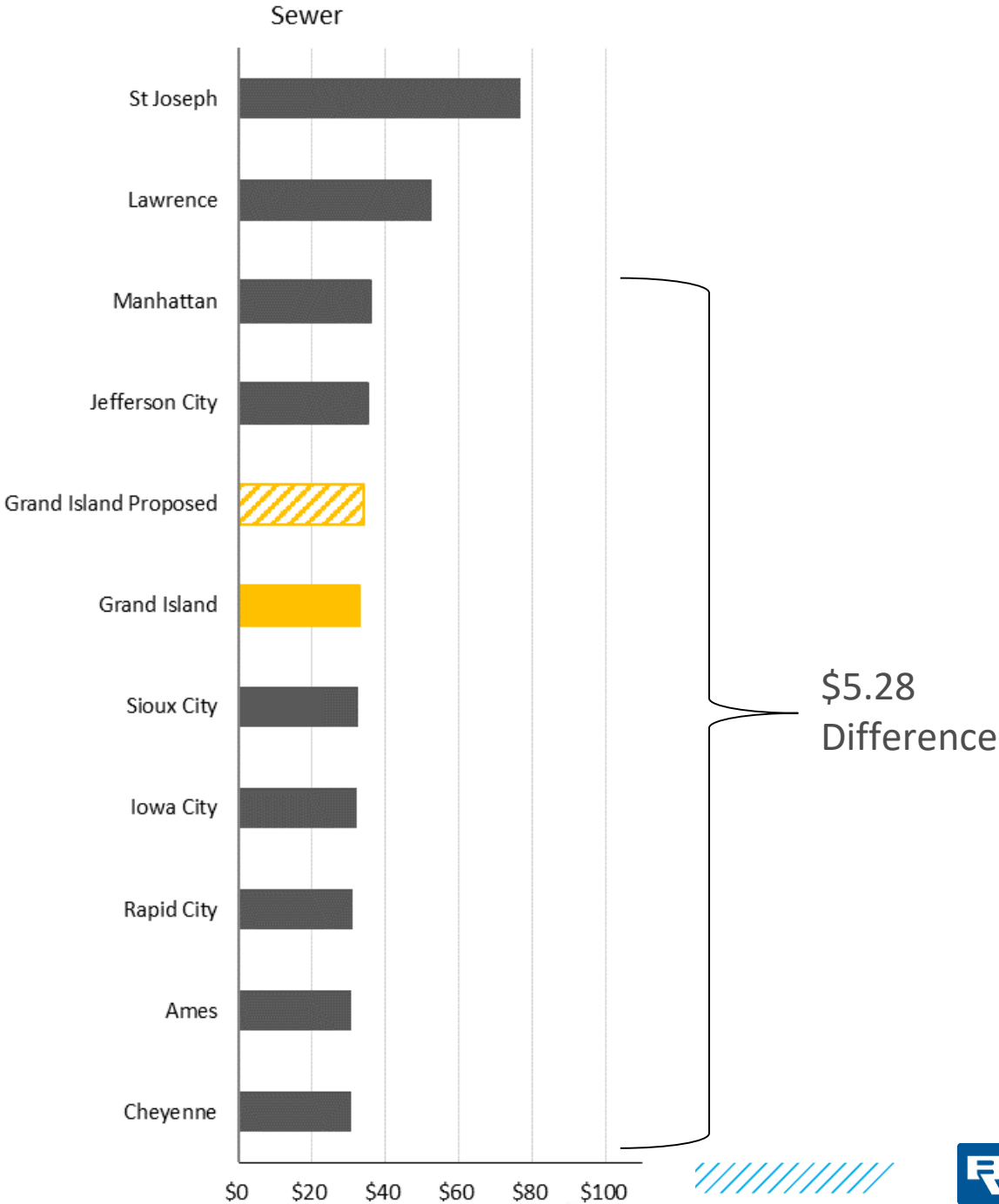
# FY 2020 Typical Bill Comparison 700 cubic feet

Average \$38.56

Grand Island Existing \$32.88

Grand Island Proposed \$34.07

Comparison rates reflects rates currently in effect and not necessary rates that will be in effect in 2020



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**BLACK & VEATCH**

RESOLUTION 2019-348

WHEREAS, at the November 12, 2019 City Council meeting representatives from the engineering consulting firm Black & Veatch Corporation of Kansas City, Missouri presented tables and allocations for a wastewater cost of services based rate study; and

WHEREAS, the final wastewater cost of service based rate study report has been finalized by Black & Veatch and is now complete; and

Whereas, the Fee Schedule has been revised to include such final wastewater cost of service charges.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the final Wastewater Cost Based Rate Study report as prepared by engineering consulting firm Black & Veatch Corporation of Kansas City, Missouri is hereby approved and adopted.

- - -

Adopted by the City Council of the City of Grand Island, Nebraska, November 12, 2019.

\_\_\_\_\_  
Roger G. Steele, Mayor

Attest:

\_\_\_\_\_  
RaNae Edwards, City Clerk

Approved as to Form	☐ _____
November 8, 2019	☐ City Attorney