# 2021 Rate Studies

July 15, 2021

Public Utilities Advisory Board Review/Feedback



# Water Rate Study



### Items for Review/Discussion



Water rate model (assumptions/methodology)

Capital improvement scenarios

Rate design

# Rate Model Inputs/Assumptions



Factor	Assumption (Year-over-Year Change)		
Union Labor (Salary, Overtime)	4.00%		
Labor (Salary, Overtime)	2.50%		
Benefits (Medical/Dental, Retirement, FICA)	7.50%		
Services (Contracts, Utilities)	3.00%		
Supplies	3.00%		
Equipment and Maintenance	3.00%		
Interest Earned on Investments	1.00%		
Account Growth	0.0 – 0.25%		
Electricity	3.50%		
Springbrook Chemical	10.00%		
Water Demand (Base Year = 2019)	-1.00%		
Purchased Water Unit Cost (DWC)	2.00%		
Non-Revenue Water	13%		
Cash Requirements	30 days of operations		

## Rate Model - Cost of Service Methodology



### Base Plus Capacity Methodology

- Method of cost allocation in which the annual costs of service by functional cost category are allocated to the cost components of base, extra capacity, customer, and direct fire protection costs
- Ensures each user class pays its fair share of costs





Major Business Unit	Scenario 1 Scenario 2 (\$23M annual avg) (\$27M annual avg)		Scenario 3 (\$29M annual avg)	
Wastewater Collections & Pumping	Status quo/existing plan	Status quo/existing plan	Status quo/existing plan	
Water Supply/Distribution	replacement replacement		Expanded watermain replacement (Average: 4.3 miles/year)	
Wastewater Treatment (Springbrook)	Regulatory compliance program	Regulatory compliance program	Regulatory compliance program	

CIP also includes vehicles & chargebacks

## Rate Design: Water Fixed Charges



Meter Size	Existing	
3/4-inch x 5/8-inch	\$7.63	
1-inch	\$12.72	
1 1/2-inch	\$25.44	
2-inch	\$40.71	
3-inch	\$81.42	
4-inch	\$127.22	
6-inch	\$254.44	
8-inch	\$407.11	
10-inch	\$1,068.66	
12-inch	\$1,348.55	

# Rate Design: Water Capital Charges



Meter Size	Existing
3/4-inch x 5/8-inch	\$0
1-inch	\$0
1 1/2inch	\$0
2-inch	\$0
3-inch	\$0
4-inch	\$0
6-inch	\$0
8-inch	\$0
10-inch	\$0
12-inch	\$0

# Rate Design: Sewer Fixed Charges



Meter Size	Existing		
3/4-inch x 5/8-inch	\$9.85		
1-inch	\$16.41		
1 1/2-inch	\$32.82		
2-inch	\$52.5 I		
3-inch	\$105.01		
4-inch	\$164.08		
6-inch	\$328.17		
8-inch	\$525.07		
10-inch	\$1,378.30		





Meter Size	Existing
3/4-inch x 5/8-inch	\$1.80
1-inch	\$3.00
1 1/2-inch	\$6.00
2-inch	\$9.60
3-inch	\$19.20
4-inch	\$30.00
6-inch	\$60.00
8-inch	\$96.00
10-inch	\$252.00
12-inch	\$318.00

**Phosphorus Charge** 

# Rate Design: Volumetric Charges



\$/CCF	Existing		
Water			
Residential	\$2.04		
Non-Residential - Tier 1 (0 -1,000 CCF )	\$1.92		
Non-Residential - Tier 2 (>1,000 CCF)	\$1.13		
Sewer (Based on Winter CCF Average)	\$2.71		
DuPage Wholesale	\$3.72		

# Electric Rate Study



#### Items For Review/Discussion



Rate study assumptions

Capital/operations and maintenance expenditures

Rate components

## Rate Study Assumptions



- 2019 consumption and financials
- Cash reserve target
  - 30 days (City policy)
- Purchased Power Adjustment
  - Revenue neutral over 3 years
- Cost of Service
  - Address subsidization

### Capital/Operations and Maintenance



#### Capital Projects

- Cable injection
- Cable replacement
- Utility relocations
- Undergrounding of aerial assets
- Tollway substation improvements

#### Operations and Maintenance

- Software maintenance
- Infrastructure replacement
- Largely unchanged

### Rate Components



- Customer Charge (Cost of Service)
  - System availability
- Energy Charge
  - Energy delivery and consumption
  - Based upon a fixed energy cost
- Purchased Power Adjustment
  - Adjustment for energy cost fluctuations
  - 6 month rolling average
- Adjustments to be made to all components

# Timeline





### Electric & Water Rate Studies Timeline

	July	August	September	October	November
PUAB	Review		Recommendation		
City Council	2x2's	2x2's		First Reading Rate Ordinance	Second Reading Rate Ordinance
Stakeholders (e.g. Chamber, NDP, NAHC)		Meeting	Meeting		

# Questions?

