



**Study Briefing:  
Water and Sewer Rate & Connection Fees  
Public Works and Transportation Committee**

**Lake County, Illinois**

April 26, 2023

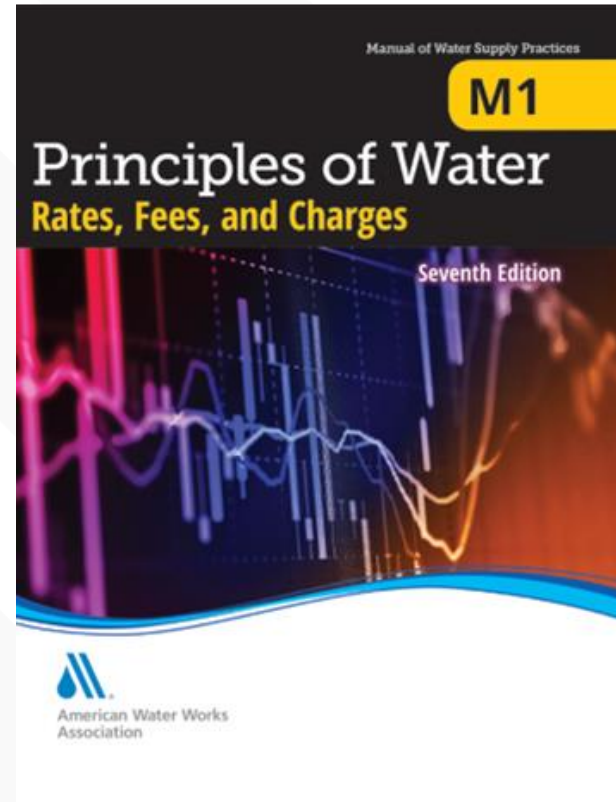
# Agenda

## Water & Sewer Rates

- ▶ Background Information & Industry Trends
- ▶ Study Approach & Recommendations

## Water & Sewer Connection Fees

- ▶ Approach
- ▶ Fee Comparisons & Recommendations



# **Background Information & Industry Perspective**

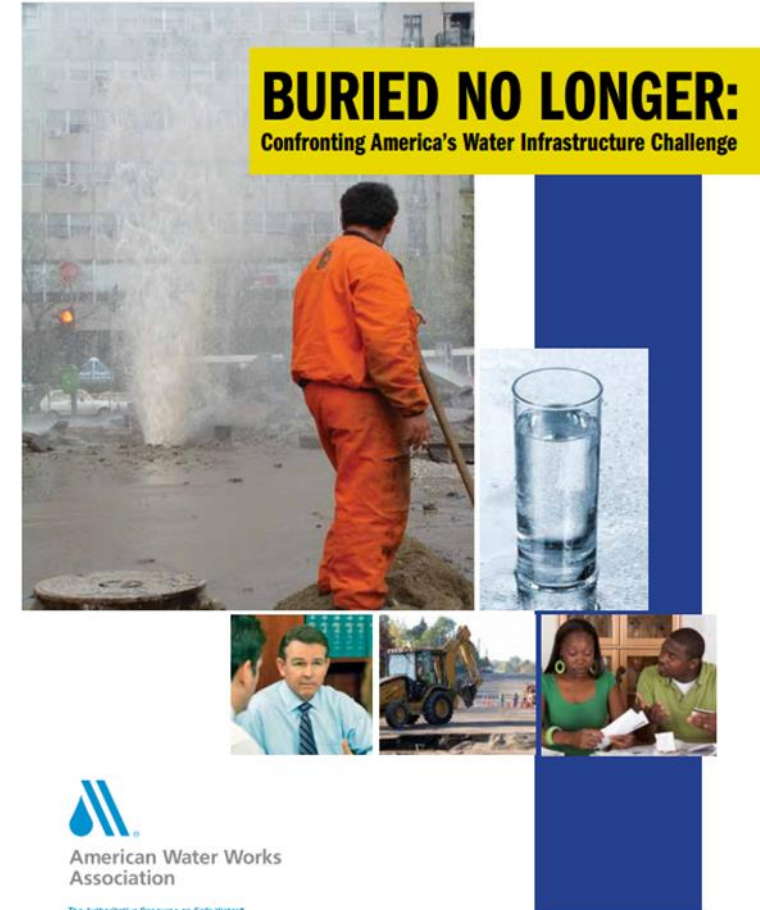
# Nationally, Utility Rate Increases are Outpacing Inflation

Survey or Publication	Period	Historical Increase per Year
Water and Sewer Index, BLS	2000-2022	4.7%
AWWA Rate Survey - Water	1996-2018	5.1%
AWWA Rate Survey - Sewer	1996-2018	5.6%
NACWA Cost of Clean Water	1986-2021	4.8%
CPI-U - General Inflation	2000-2022	2.4%

- ▶ Since 2000, water and sewer rates are increasing about twice as much as general inflation, nationally

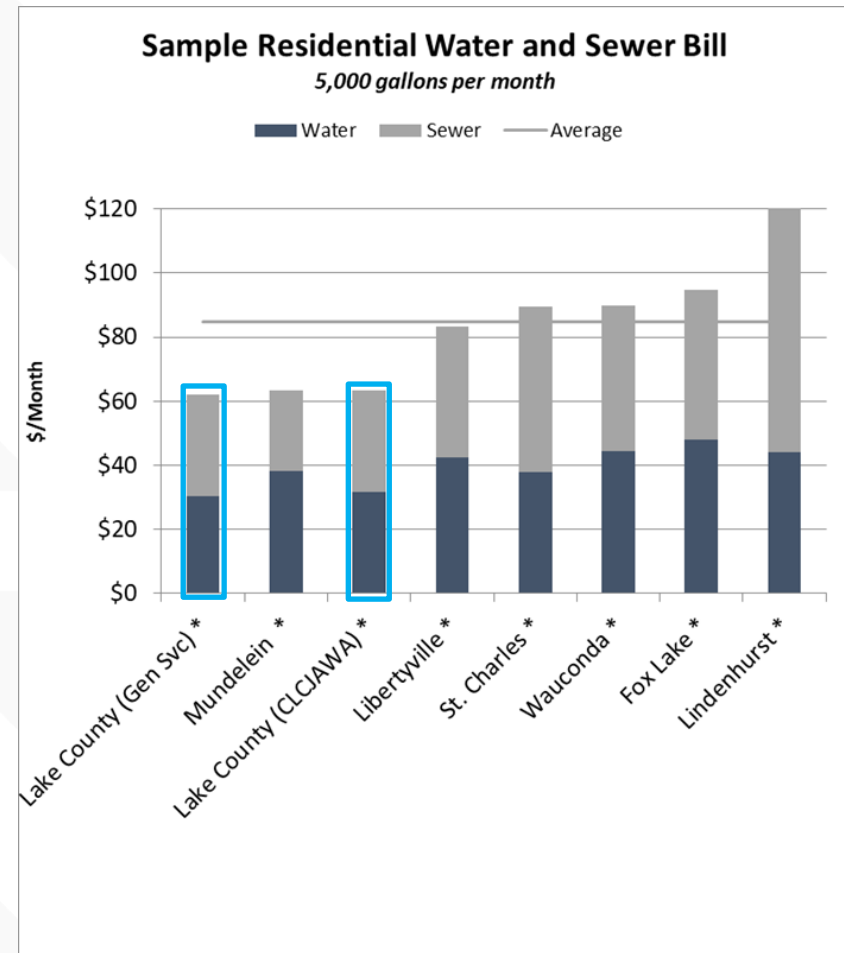
# Common Factors Contributing to Utility Rates Increases

- ▶ General trend in lower use per account can pressure variable revenue streams
- ▶ Inflation on operating and capital/construction costs
- ▶ More stringent water quality regulations
- ▶ Aging infrastructure requires renewal and replacement

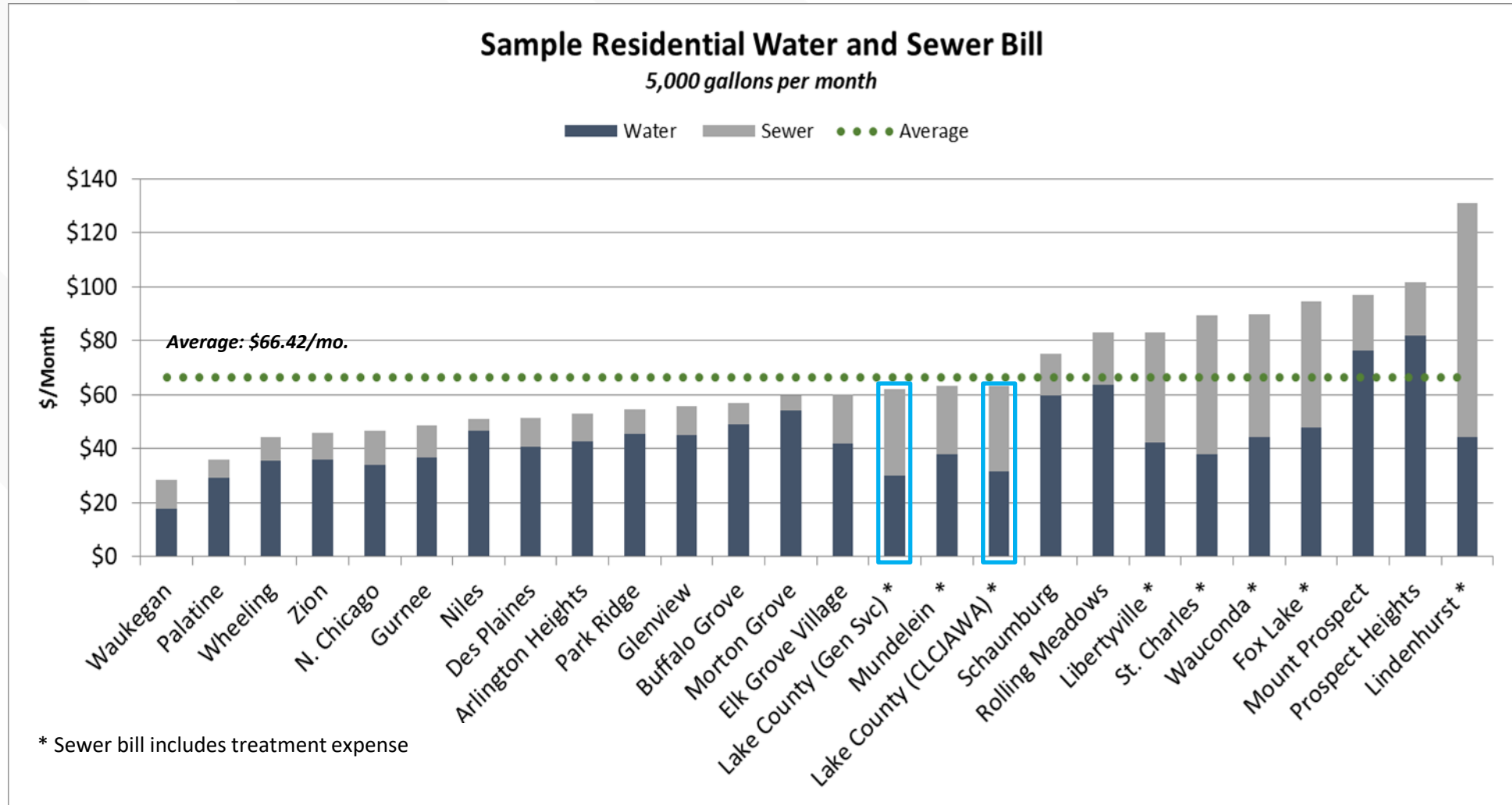


# Regional Bill Comparison – Existing rates

- ▶ Survey compares Lake County bills under existing rates to regional peers with their own sewer treatment service
- ▶ In the Chicagoland area, some sewer utilities:
  - Provide collection service only, with sewer treatment billed separately
  - Recover treatment costs through taxes
- ▶ This is a static snapshot of current rates
  - Nationally, utility rates are increasing on average 5% per year
  - While circumstances vary for individual utilities, expect utility bills to increase over time



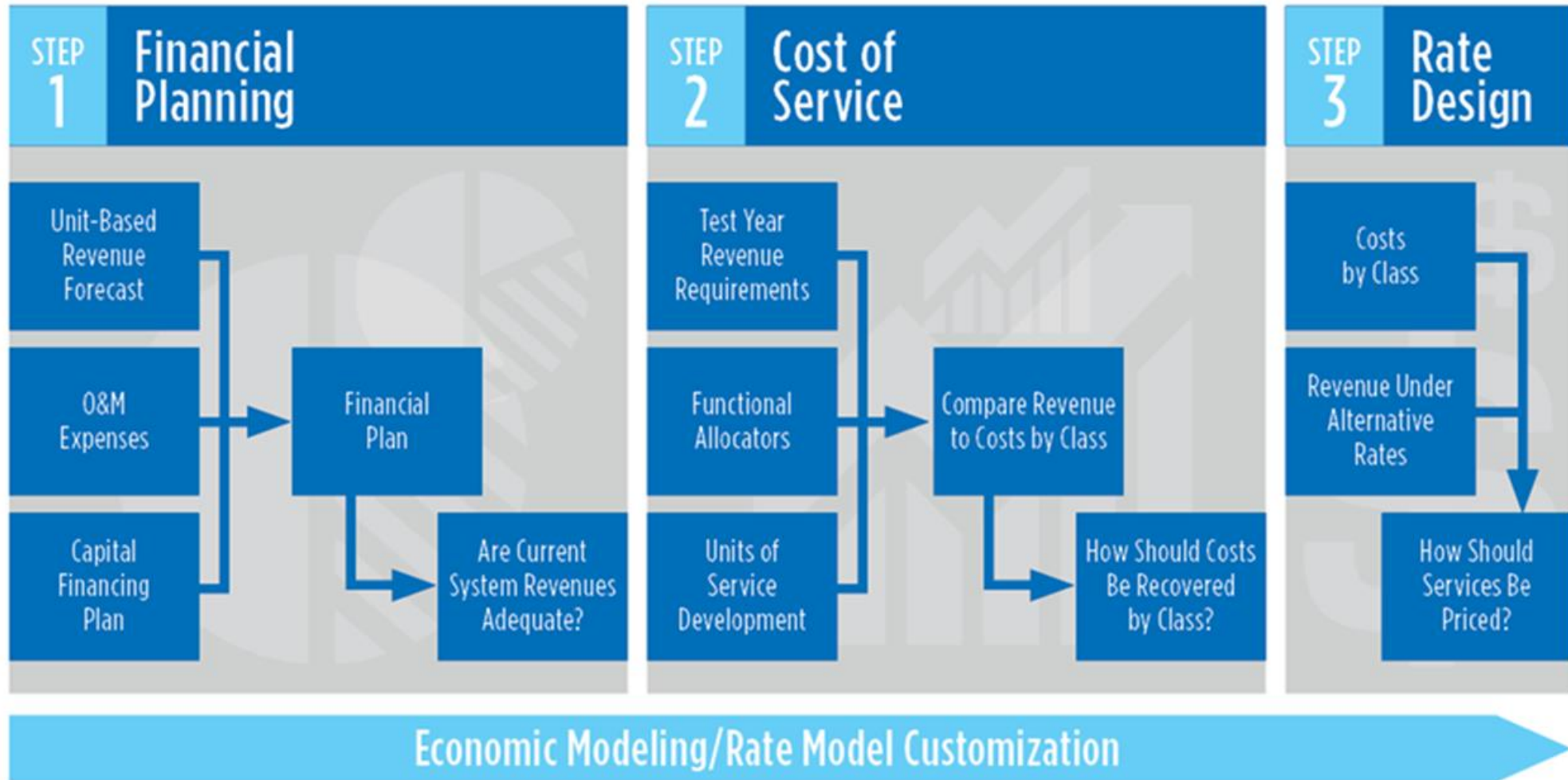
# Broader Regional Bill Comparison – Existing Rates



# **Rate Study Approach & Recommendations**



# Rate Study Process



# Financial Planning Guiding Principles

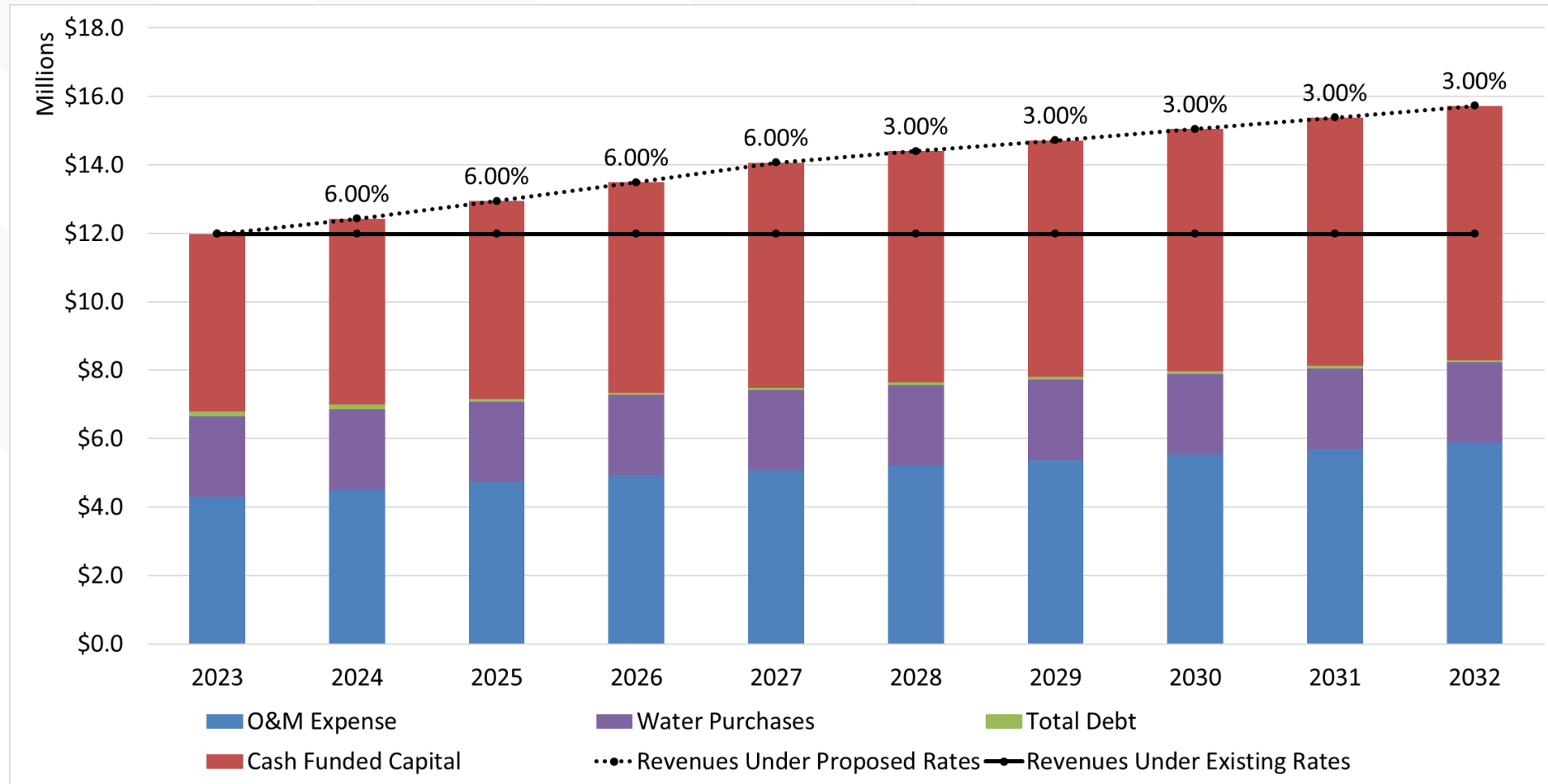
- ▶ Evaluate water and sewer as self-sufficient utilities
- ▶ Cash based capital plan while maintaining:
  - Target debt service coverage of 1.5x
  - Sustain minimum reserves of at least 25% of O&M
- ▶ Mitigate rate shock
- ▶ Limited use of debt



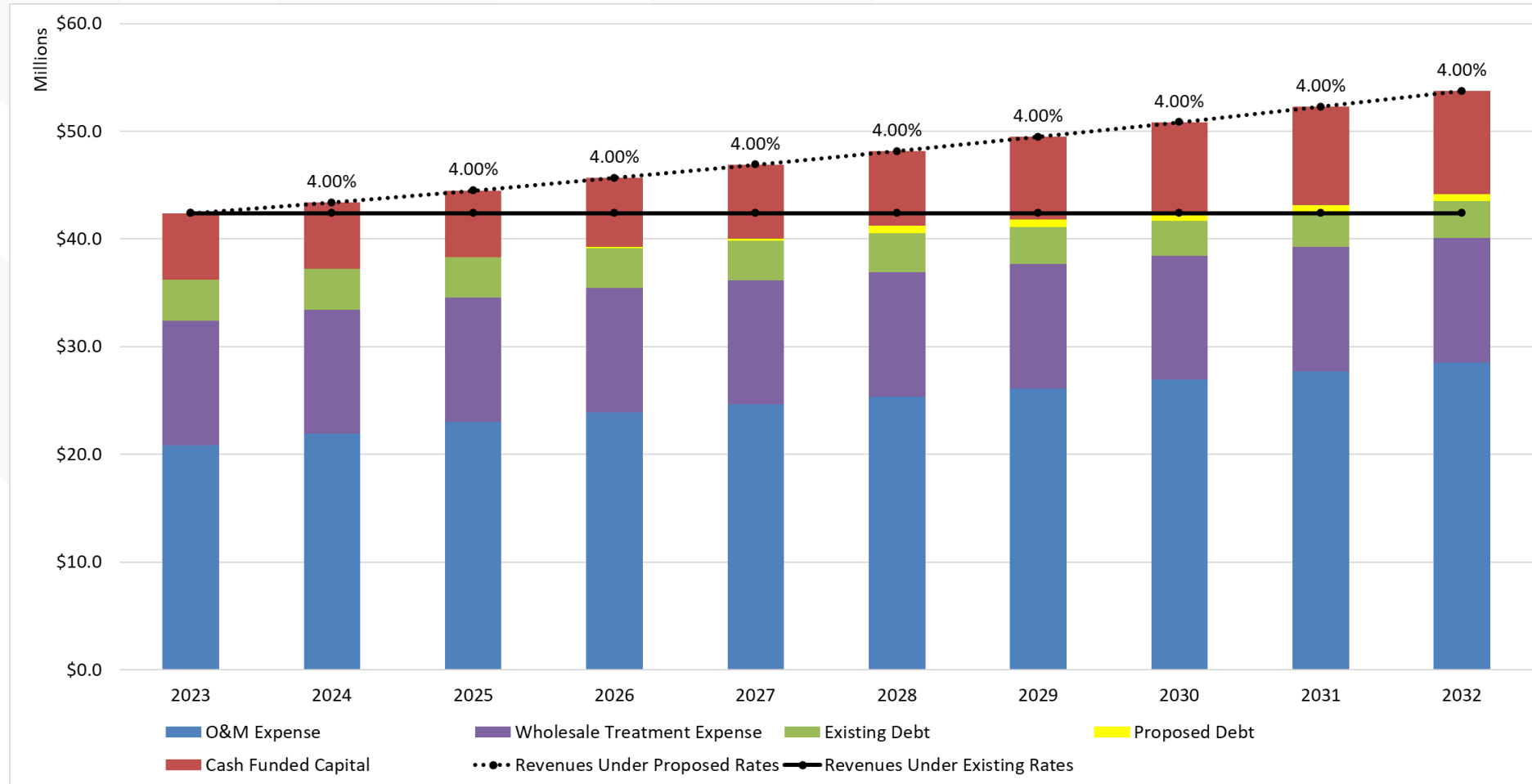
# Key Assumptions

- ▶ Stable revenue streams
- ▶ Elevated inflation on operating costs for the next 3 years
  - 5% in 2024 & 2025, 4% in 2026, 3% thereafter
- ▶ Nearly \$71M in water capital improvements and \$100M in sewer capital improvements 2023-2032
- ▶ Prudent use of debt of \$10M in 2026, \$15M in 2032

# Summary of Water Utility Financial Plan



# Summary of Sewer Utility Financial Plan



# Proposed Revenue Adjustments

Year	Water	Sewer	Combined
	<u>System Increase</u>	<u>System Increase</u>	<u>System Increase</u>
2024	6.0%	4.0%	4.5%
2025	6.0%	4.0%	4.5%
2026	6.0%	4.0%	4.5%
2027	6.0%	4.0%	4.5%
2028	3.0%	4.0%	3.8%
2029	3.0%	4.0%	3.8%
2030	3.0%	4.0%	3.8%
2031	3.0%	4.0%	3.8%
2032	3.0%	4.0%	3.8%

Note: These are total proposed revenue increases per year, and are not directly tied to changes in CPI

# Proposed Impact to Residential Water Bills

Residential					
Meter Size inches	Monthly Water Use kgal			Difference \$	
		Total Monthly Bill	Total Monthly Bill		
<b>General Service Areas</b>					
1"	2	\$11.86	\$12.58	\$0.72	
1"	5	\$30.25	\$32.08	\$1.83	
1"	10	\$63.34	\$67.14	\$3.80	
<b>CLCJAWA Service Areas</b>					
1"	2	\$13.30	\$13.90	\$0.60	
1"	5	\$31.57	\$32.95	\$1.38	
1"	10	\$65.22	\$68.10	\$2.88	
<b>Hawthorn Woods Service Areas</b>					
1"	2	\$20.64	\$21.26	\$0.62	
1"	5	\$50.10	\$51.56	\$1.46	
1"	10	\$103.72	\$106.86	\$3.14	

- ▶ Existing rate structure is maintained
- ▶ All Lake County water rates are proposed to increase 6%
- ▶ Typical resident will see monthly bill increases of \$1.38 to \$1.83 depending on water source

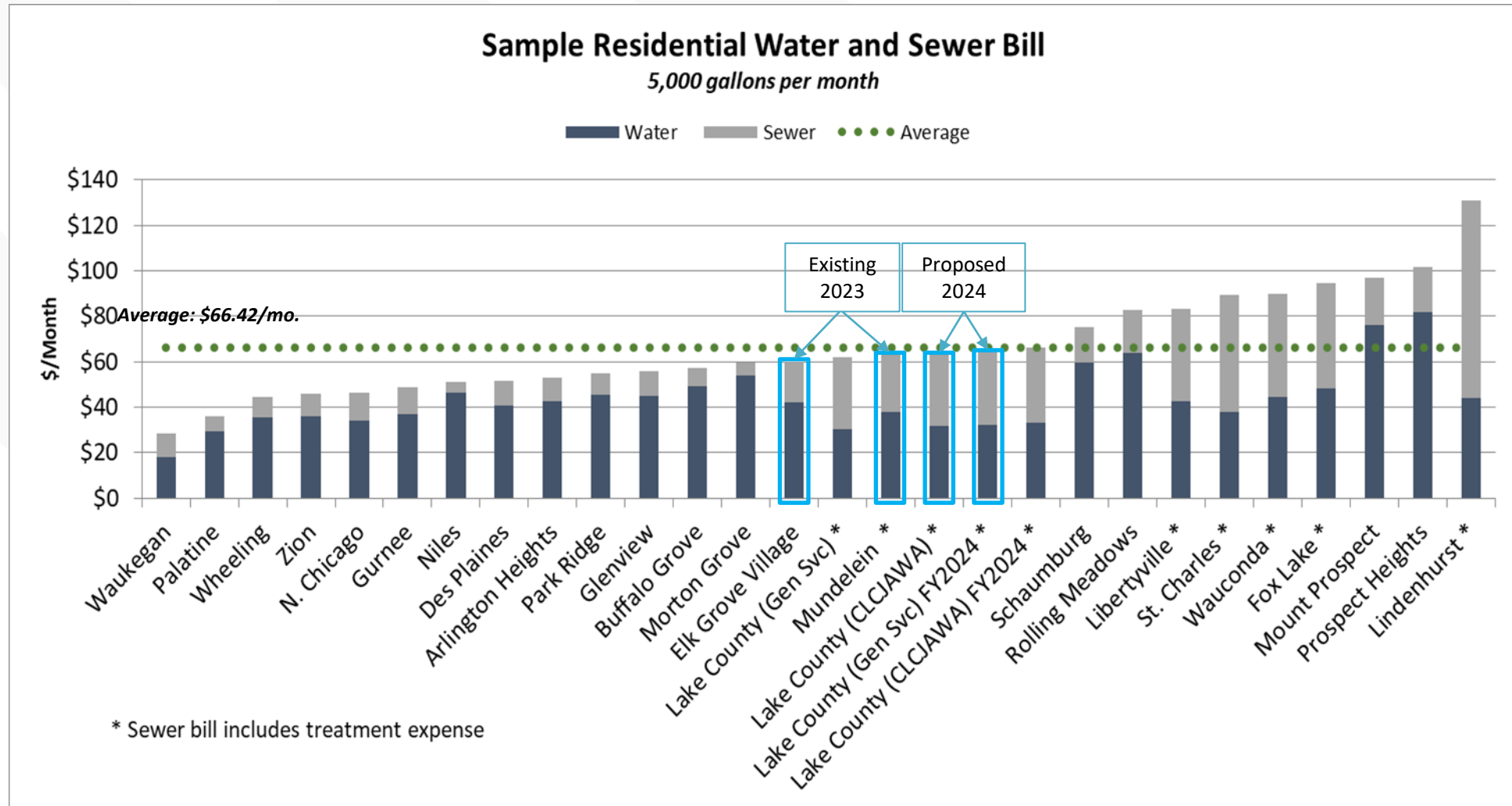
# Proposed Impact to Residential Sewer Bills

Residential					
Meter Size	Monthly Water Use	2023 Current Rates	2024 Proposed Rates	Difference	
inches	kgal	\$/mo	\$/mo	\$	
<b>General Service Areas</b>					
1"	2	\$12.76	\$13.28	\$0.52	
1"	5	\$31.90	\$33.20	\$1.30	
1"	10	\$63.80	\$66.40	\$2.60	
<b>Southeast Central - Libertyville, Countryside Manor, North Libertyville Estates, Terre Faire</b>					
1"	2	\$15.59	\$15.74	\$0.15	
1"	5	\$38.98	\$39.36	\$0.38	
1"	10	\$77.95	\$78.71	\$0.76	
<b>Northeast Central - NSWRD Wildwood</b>					
1"	2	\$17.69	\$18.17	\$0.48	
1"	5	\$44.23	\$45.43	\$1.20	
1"	10	\$88.46	\$90.85	\$2.39	
<b>Northeast Central - NSWRD Arbor Vista</b>					
1"	2	\$9.15	\$9.34	\$0.19	
1"	5	\$22.87	\$23.35	\$0.48	
1"	10	\$45.74	\$46.70	\$0.96	

- ▶ Existing rate structure is maintained
- ▶ All Lake County sewer rates are proposed to increase 4%
- ▶ Typical resident will see monthly bill increases of \$0.38 to \$1.30 depending on service area



# Proposed 2024 Rate Increases Do Not Change Lake County's Competitive Position



# Proposed System Increases Compared to Prior Study

Water Rate Increase Projection		
Year	Previous Study	Current Study
2024	11.6%	6.0%
2025	11.6%	6.0%
2026	11.6%	6.0%
2027	2.1%	6.0%
2028	2.1%	3.0%
2029	2.1%	3.0%

Sewer Rate Increase Projection		
Year	Previous Study	Current Study
2024	2.1%	4.0%
2025	2.1%	4.0%
2026	2.1%	4.0%
2027	2.1%	4.0%
2028	2.1%	4.0%
2029	2.1%	4.0%

Combined Rate Increase Projection		
Year	Previous Study	Current Study
2024	4.3%	4.5%
2025	4.4%	4.5%
2026	4.5%	4.5%
2027	2.1%	4.5%
2028	2.1%	3.8%
2029	2.1%	3.8%

## ▶ Factors Lowering Rate Increases

- ARPA Funding
- Revenues favorable to prior forecast
- Small debt issuance

## ▶ Factors Raising Rate Increases

- Higher inflationary environment & uncertainty on duration
- Increased capital investment

▶ In 2024 through 2026, these factors largely offset for the total system

▶ Current forecasted increases are slightly higher starting in 2027, but may change depending on inflation trends

# In Summary

- ▶ Proposed rate adjustments
  - Provide funding to sustain operations and improve the systems
  - Are total system increases, not based on CPI “plus” methodology
  - Minimize rate shock through levelized increases
  - Achieve targeted reserves and debt service coverage
  
- ▶ Beyond 2024, monitor cost structure for impact of inflation

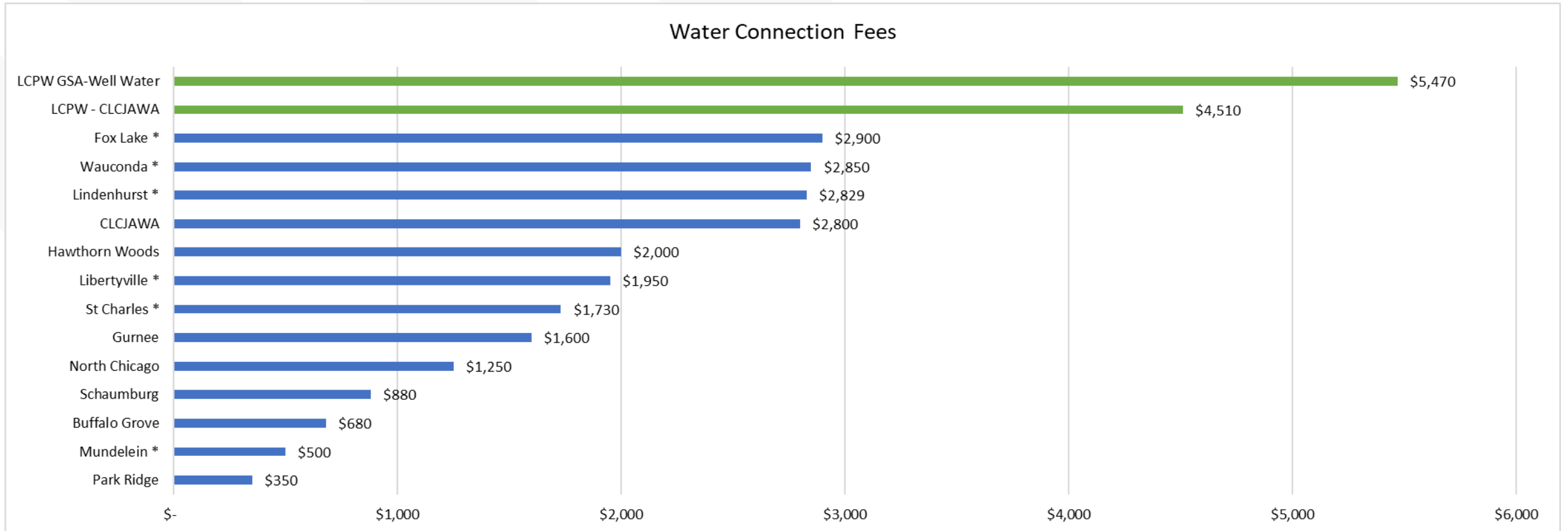
# Connection Fees

# Approach to Connection Fee Development



- ▶ Methodology consistent with prior studies
- ▶ Calculated fees represent the maximum potential fee
- ▶ Most connection fees are indicating a basis for an increase
  - Asset values have increased from 2018 to 2022
  - System capacity is relatively consistent with prior study

# Existing Regional Water Connection Fee Comparison



\* Communities with water treatment facilities

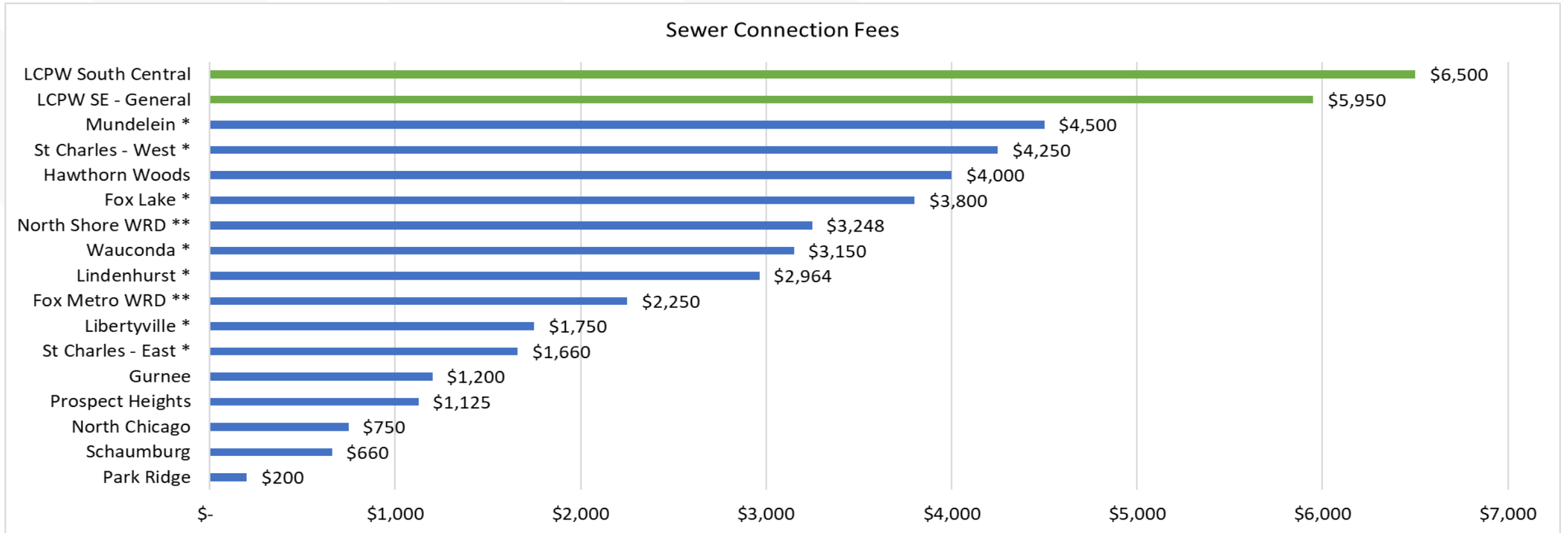
- ▶ Connection fees can vary based on policies differences for recovery of growth costs, methodology, and services provided (i.e. treatment and transmission, or transmission only).

# Calculated Potential Water Connection Fee

	Existing <u>2023</u>	Calculated Maximum <u>Potential</u>	Percent <u>Difference</u>
General Service Areas (CLCJAWA)	\$ 4,510	\$ 5,830	29.3%
General Service Areas (Well Water)	\$ 5,470	\$ 7,050	28.9%

- ▶ Analysis indicates fees could increase up to 29% over existing connection fees
- ▶ Based on the results of the regional survey, we recommend leaving existing water connection fees unchanged

# Existing Regional Sewer Connection Fee Comparison



\* Utilities with sewer treatment facilities and conveyance.

\*\* Utilities with treatment and conveyance but not local mains.

- ▶ Connection fees can vary based on policies differences for recovery of growth costs, methodology, and services provided (i.e. collection and treatment, or collection only).

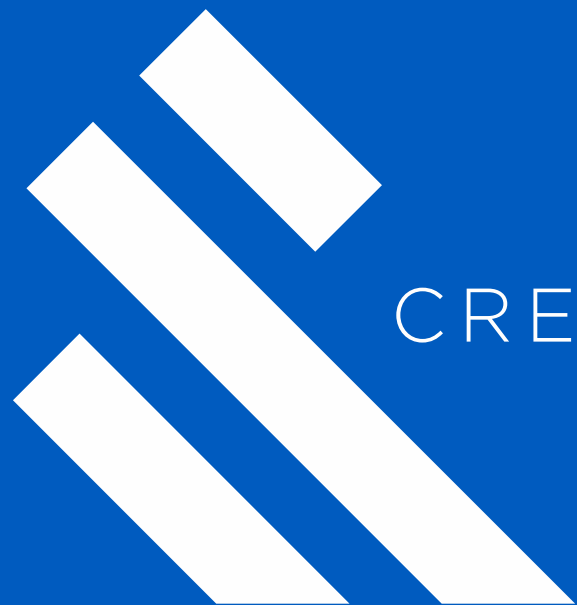


# Calculated Potential Sewer Connection Fee

	Existing <u>2023</u>	Proposed <u>Maximum</u>	<u>% Change</u>
<u>Wastewater Connection Fees</u>			
Diamond-Sylvan Lake	\$ 8,760	\$ 10,290	17%
Northeast	\$ 7,730	\$ 9,080	17%
Northeast Central			
Highland Lake, Avon & Warren Townships, Village of Third Lake	\$ 3,580	\$ 4,210	18%
Grayslake, Gurnee, Hainesville and Waukegan	\$ 2,040	\$ 2,400	18%
Northwest			
Fox Lake Hills, Petite Lake and Stanton Bay [1]	\$ 3,080	\$ 3,620	18%
Wholesale [1]	\$ 1,540	\$ 1,810	18%
Round Lake/ Trunk Sewer Recapture Fee	\$ 431		
South Central	\$ 6,500	\$ 7,630	17%
Southeast			
Portwine	\$ 8,220	\$ 9,660	18%
Buffalo Grove, Riverwoods	\$ 5,950	\$ 6,900	16%
Kildeer	\$ 7,490	\$ 8,710	16%
Ela	\$ 10,210	\$ 11,910	17%
Lake Zurich, Lincolnshire	\$ 4,030	\$ 4,730	17%
Southeast Central			
Countryside Manor, Terre Faire, North Libertyville Estates [1]	\$ 3,120	\$ 3,670	18%
Green Oaks & Libertyville [1]	\$ 1,580	\$ 1,860	18%
Libertyville [1]	\$ 1,580	\$ 1,860	18%

- ▶ Analysis indicates fees could increase up to 16-18% over existing connection fees
- ▶ Based on the results of the regional survey, we recommend leaving existing sewer connection fees unchanged

[1] LCPW portion only. Excludes Fox Lake in Northwest Area and Libertyville in the Southeast Central Area.



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