



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

Lake County, Illinois

April 5, 2023

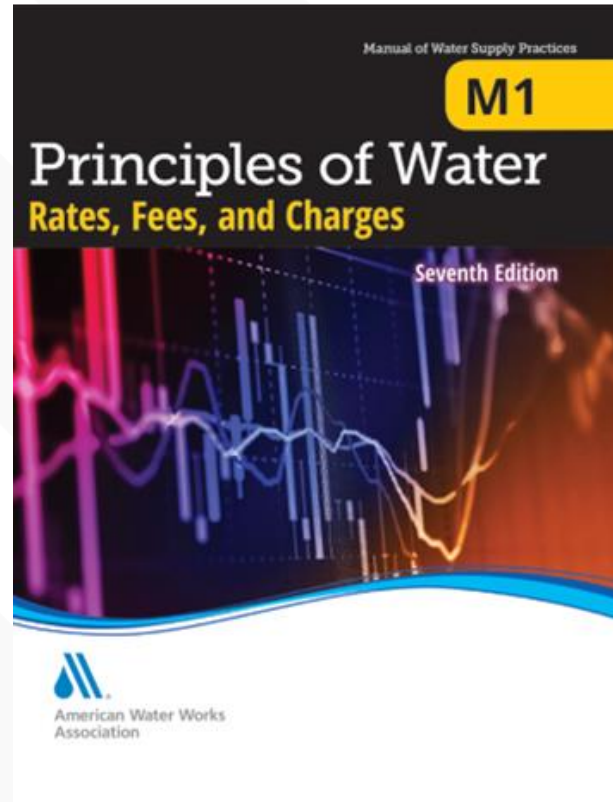
Agenda

Water & Sewer Rates

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

Water & Sewer Connection Fees

- ▶ Approach
- ▶ Fee Comparisons & Recommendations



Background Information & Industry Perspective

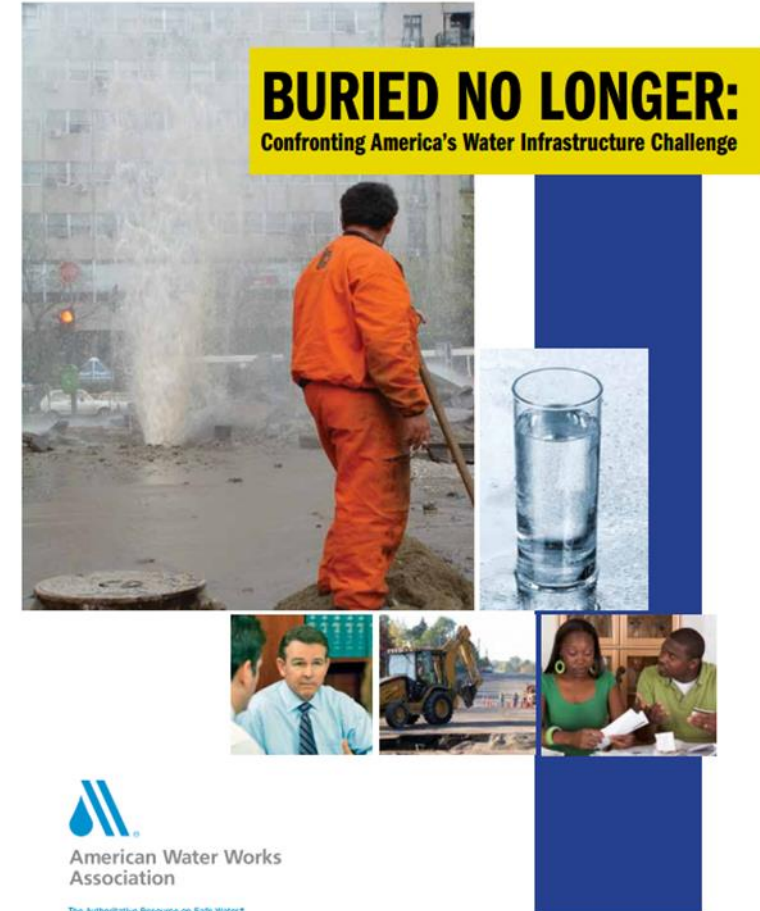
Nationally, Utility Rate Increases are Outpacing Inflation

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

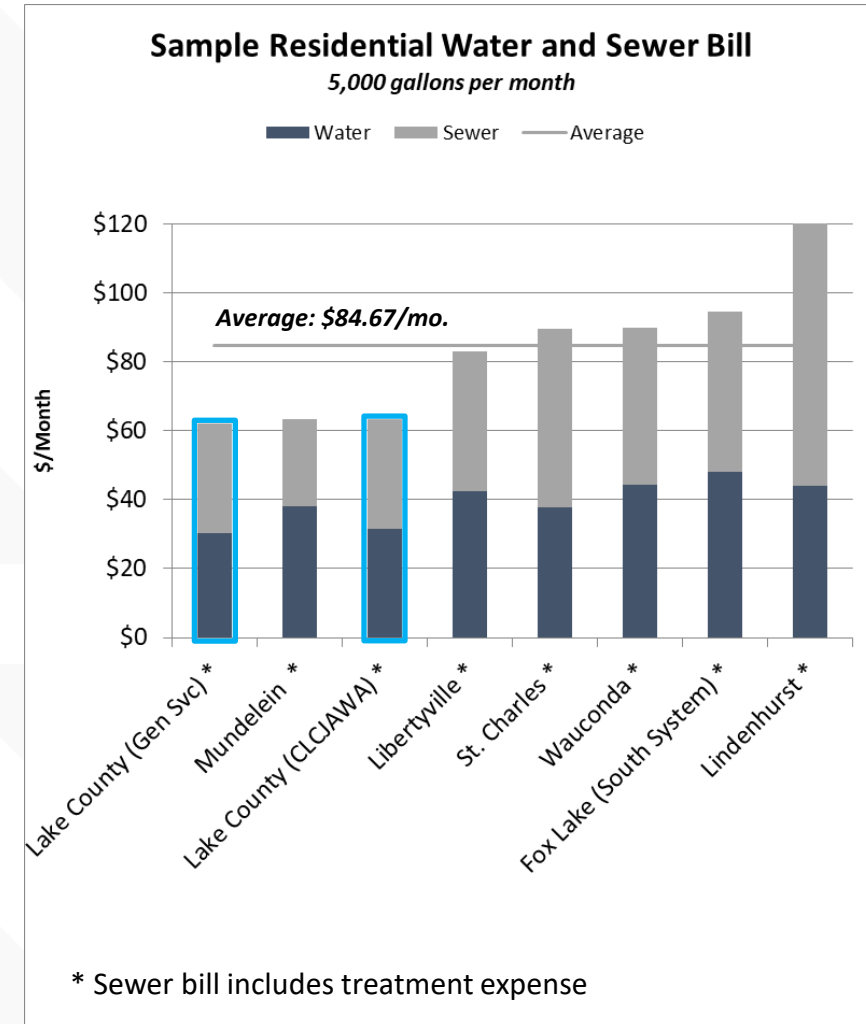
Common Factors Contributing to Utility Rates Increases

- ▶ 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

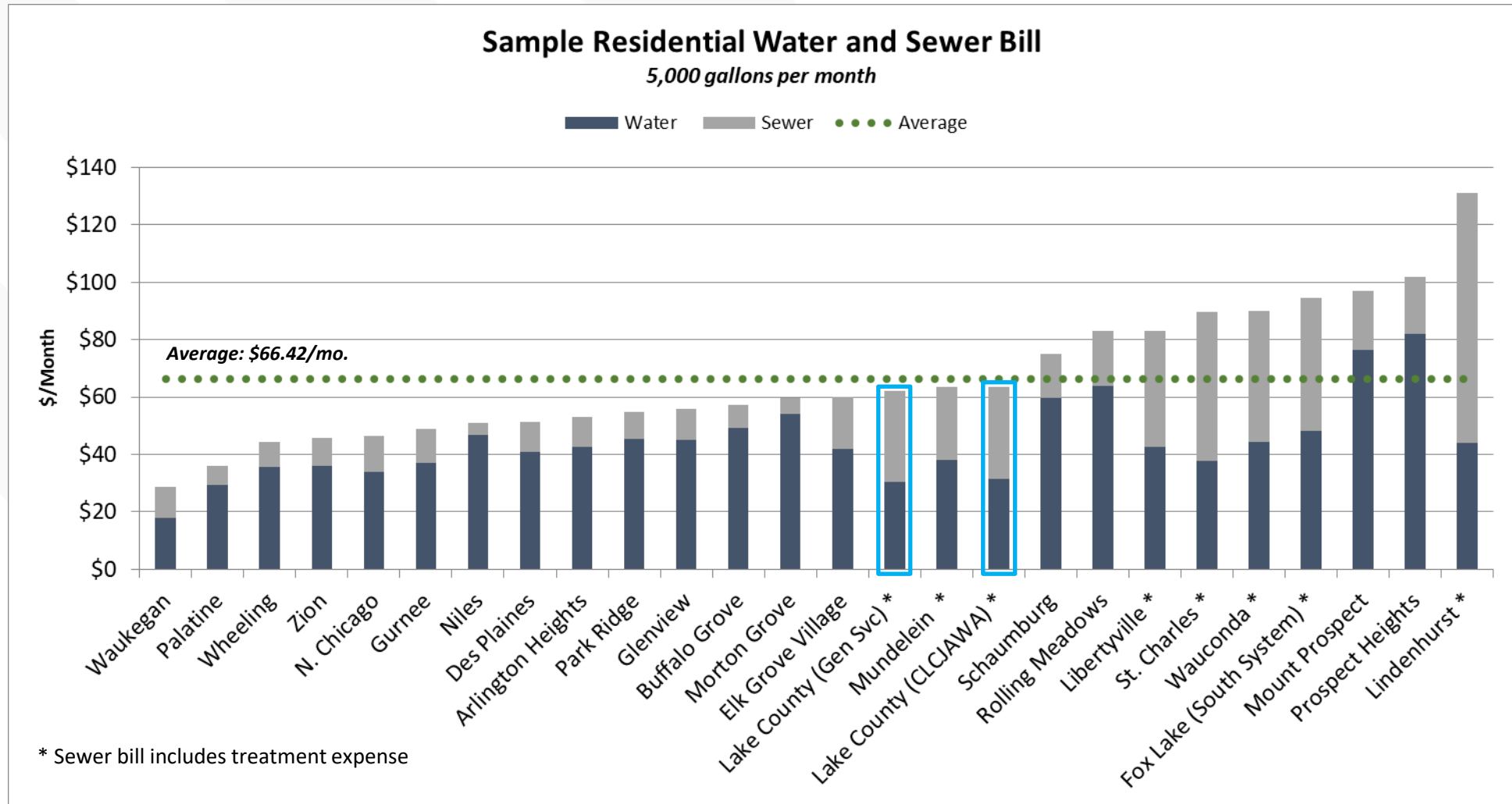


Regional Bill Comparison – Existing rates

- ▶ 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

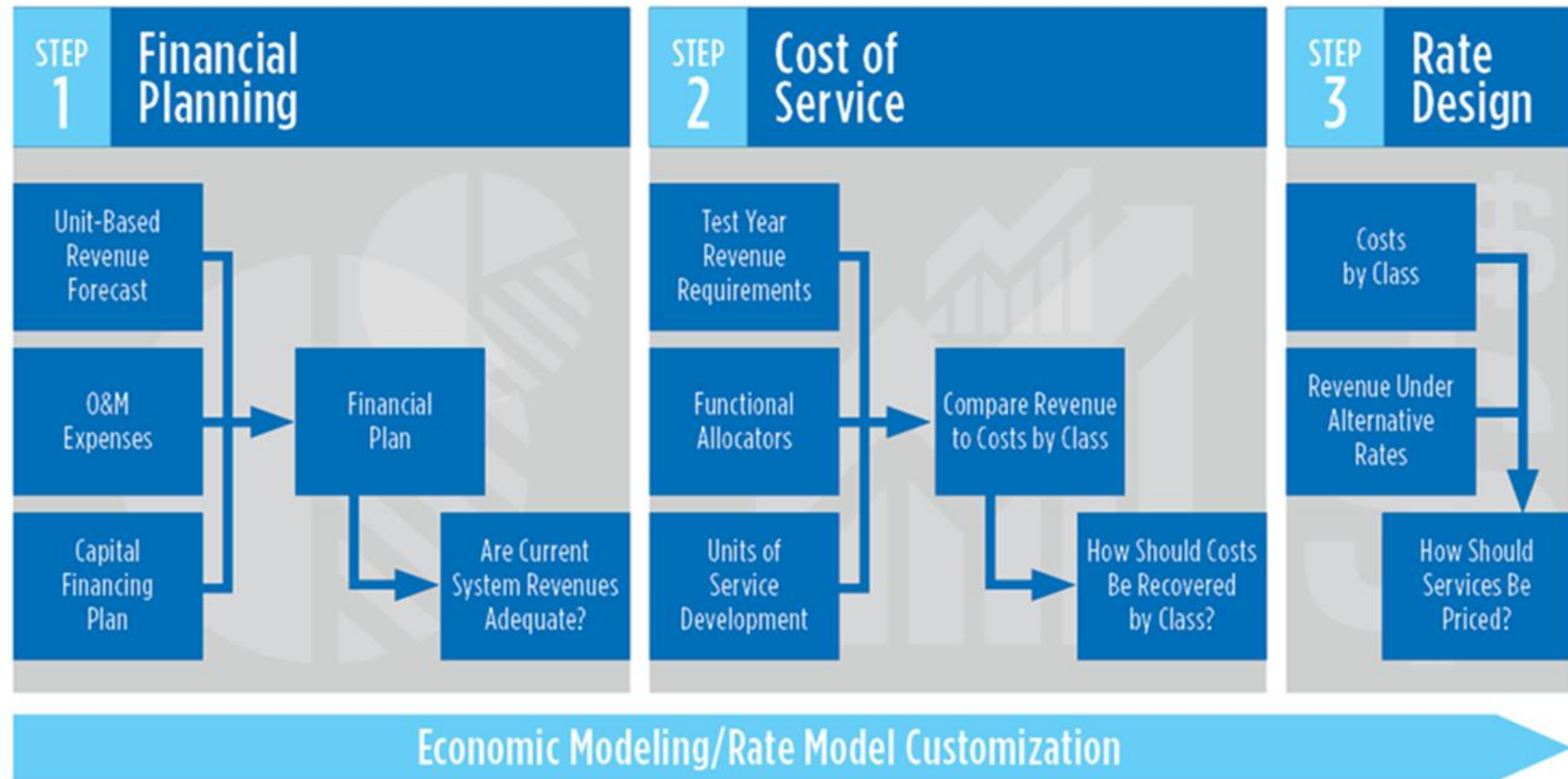


Broader Regional Bill Comparison – Existing Rates



Rate Study Approach & Recommendations

Rate Study Process



Financial Planning Guiding Principles

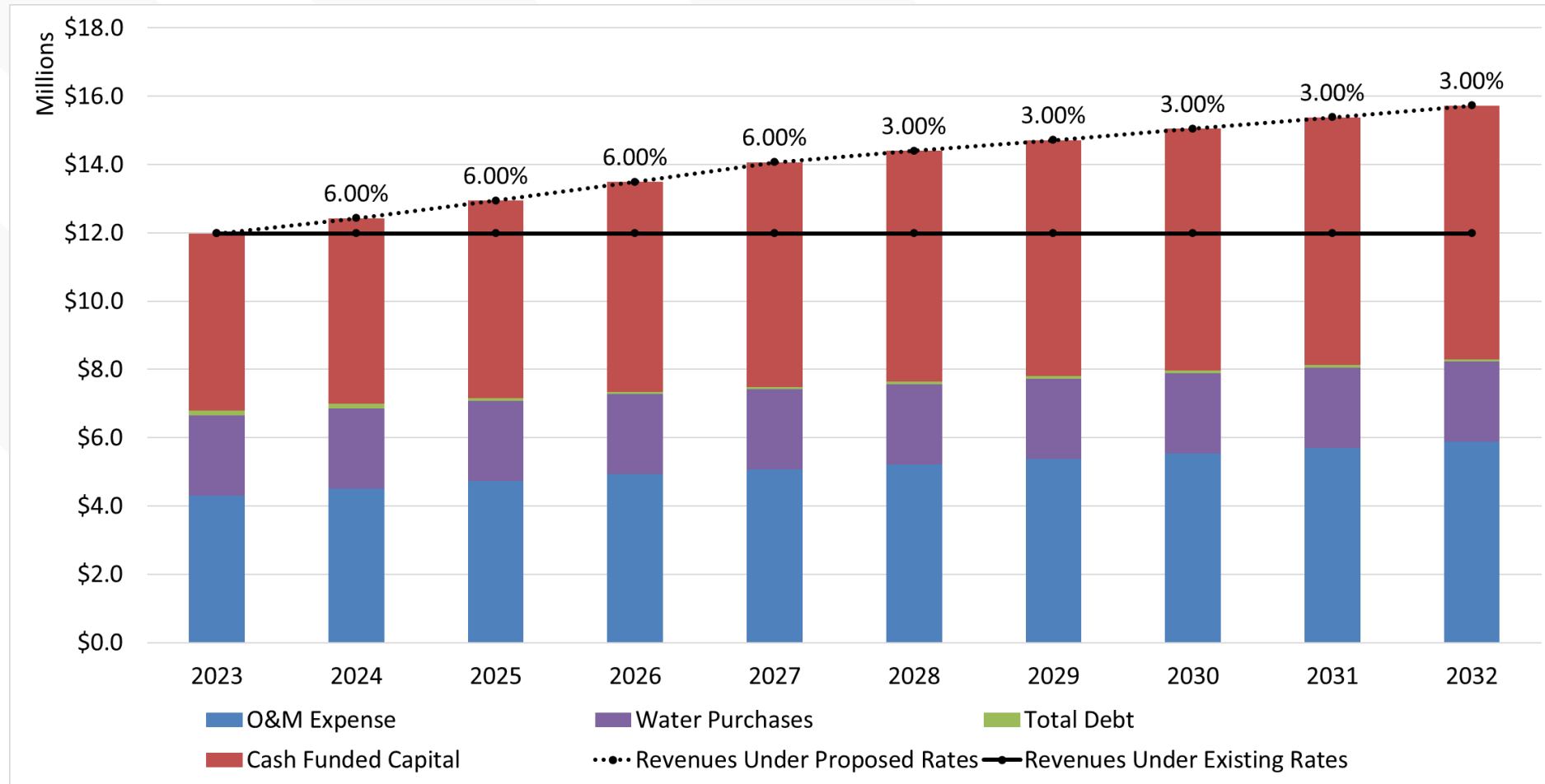
- ▶ Evaluate water and sewer as self-sufficient utilities
- ▶ Cash based capital plan while maintaining:
 - Target debt service coverage of 1.5x
 - Sustain minimum reserves of at least 25% of O&M
- ▶ Mitigate rate shock
- ▶ Limited use of debt



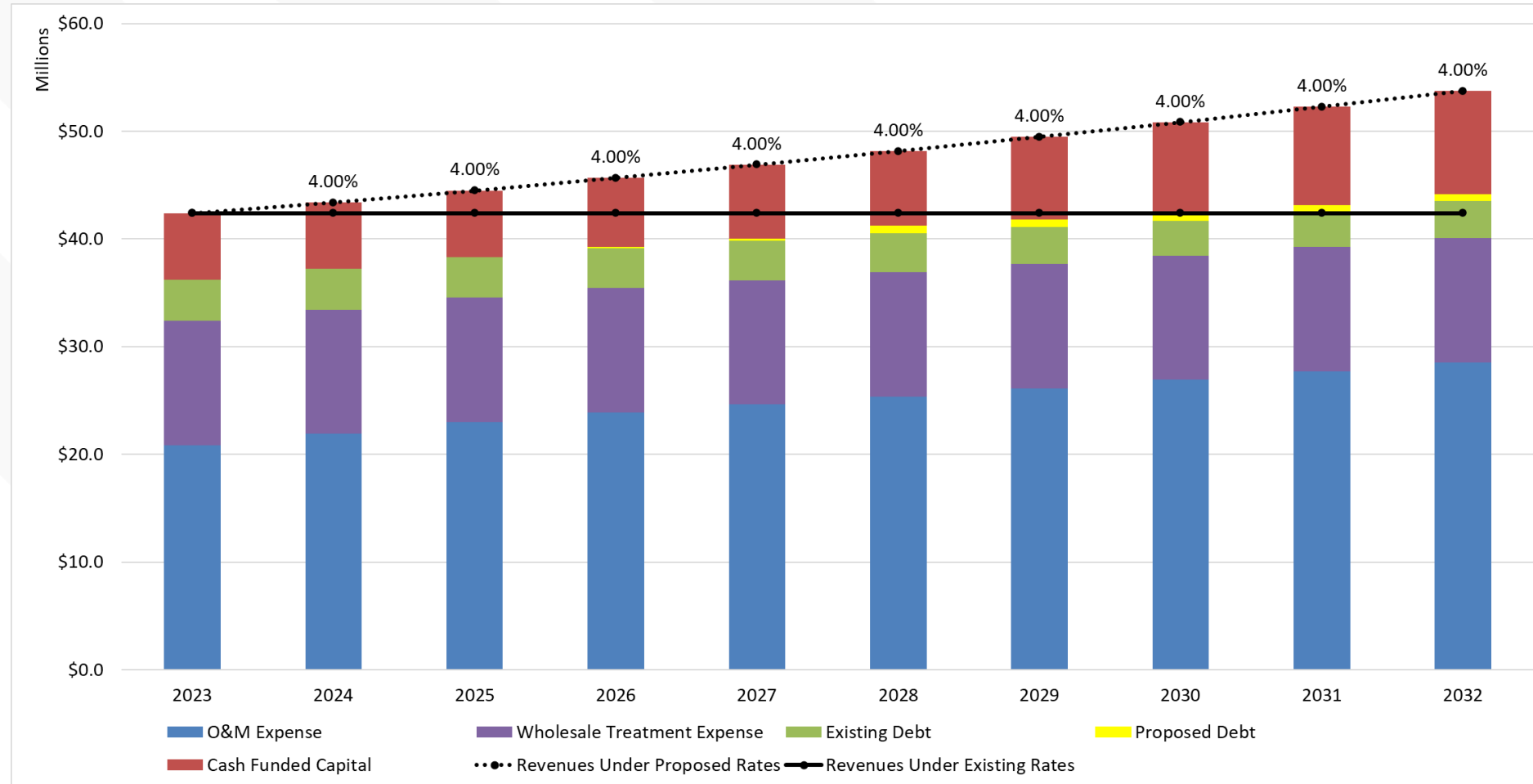
Key Assumptions

- ▶ 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	Total Monthly Bill	Total Monthly Bill	Difference \$
General Service Areas					
	1"	2	\$11.86	\$12.58	\$0.72
	1"	5	\$30.25	\$32.08	\$1.83
	1"	10	\$63.34	\$67.14	\$3.80
CLCJAWA Service Areas					
	1"	2	\$13.30	\$13.90	\$0.60
	1"	5	\$31.57	\$32.95	\$1.38
	1"	10	\$65.22	\$68.10	\$2.88
Hawthorn Woods Service Areas					
	1"	2	\$20.64	\$21.26	\$0.62
	1"	5	\$50.10	\$51.56	\$1.46
	1"	10	\$103.72	\$106.86	\$3.14

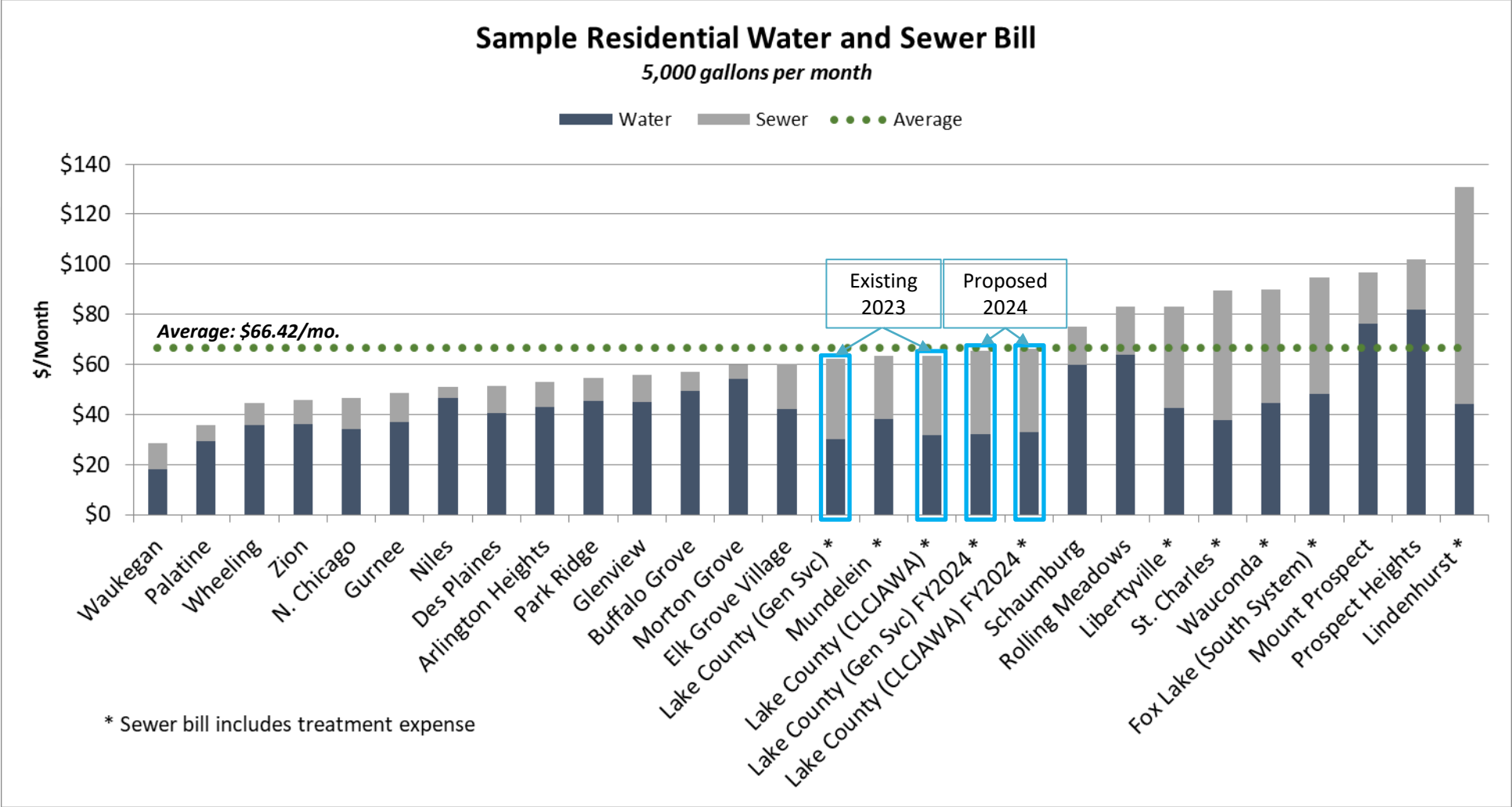
- ▶ Existing rate structure is maintained
- ▶ All Lake County water rates are proposed to increase 6%
- ▶ Typical resident will see monthly bill increases of \$1.38 to \$1.83 depending on water source

Proposed Impact to Residential Sewer Bills

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

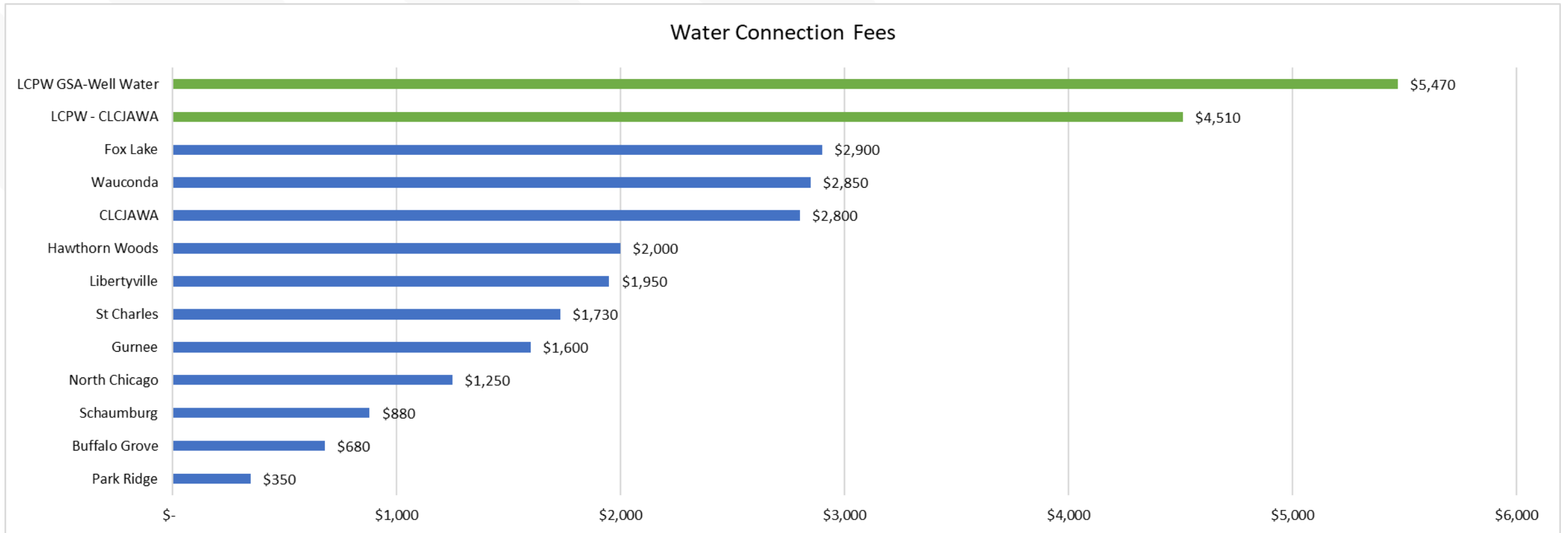
Connection Fees

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



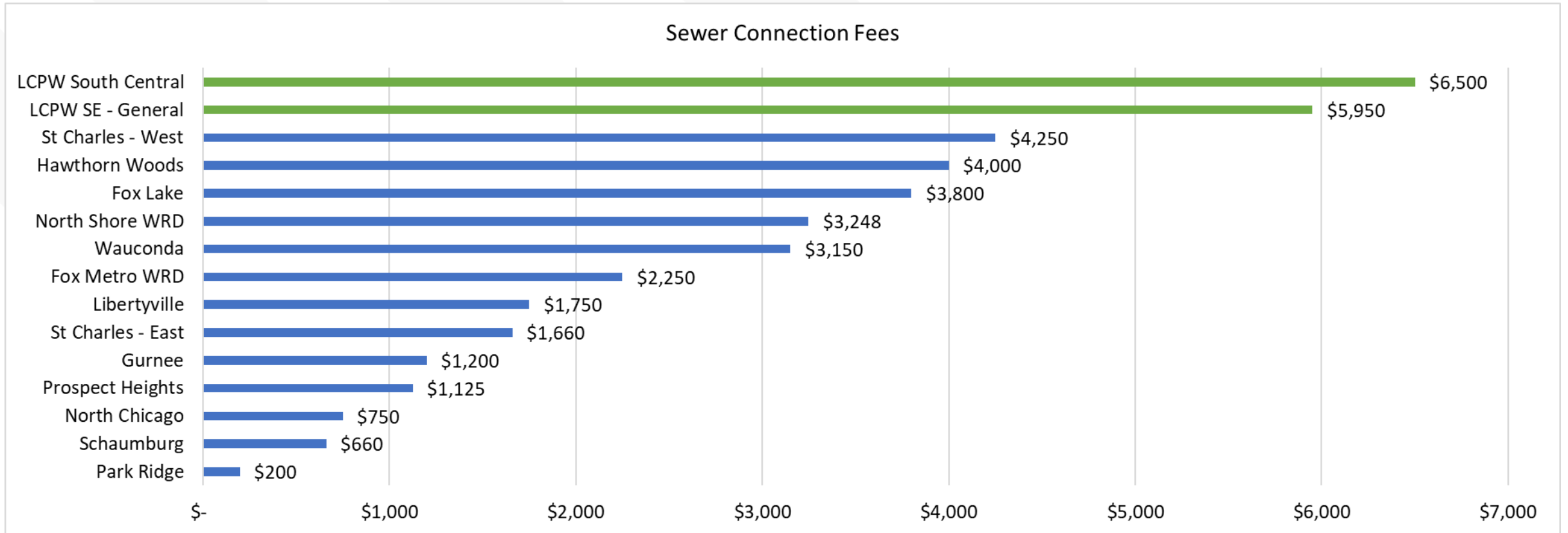
- ▶ Connection fees can vary based on policies differences for recovery of growth costs, methodology, and services provided (i.e. treatment and transmission, or transmission only).

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



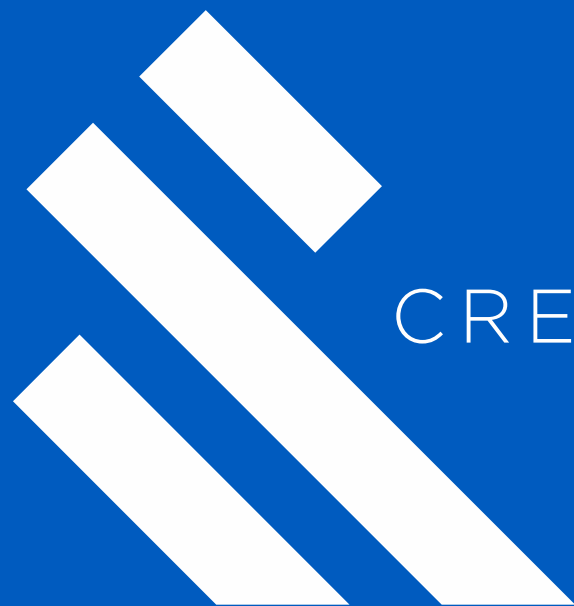
- ▶ Connection fees can vary based on policies differences for recovery of growth costs, methodology, and services provided (i.e. collection and treatment, or collection only).

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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