#### Water Fund Status



Darrell A. King
Water Production Bureau Chief

September 12, 2023



## Water Fund Projection (Water Plant & Distribution System)



\$4M Recommended Balance



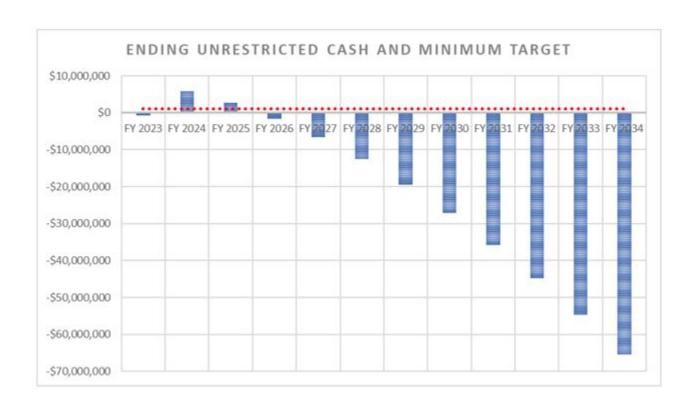
### **Water Plant Only**



\$3M Recommended Minimum Balance



#### **Distribution System Only**



\$1M Recommended Balance



#### City of Evanston Water Distribution Mains (as of December 31, 2022) 1800 Water Main Age (in years) (156 miles total) 1600 >100 (50.2 miles) - 32.1% 80-100 (32.3 miles) - 20.7% 60-79 (10.5 miles) - 6.7% < 60 (63.1 miles) - 40.4% Main Road 1000 Local Street 900 Railroad 800 Water 700 600 City Boundary Evanston<sup>\*</sup> 1 inch = 0.5 mile 1:31,680 03/28/2023 WaterMalnAge.mxd This map is provided "as is" without warranties of any kind. See www.cityofevanston.org/map



#### Lead Service Line Replacement

- The Lead Service Line Replacement and Notification Act adopted by the State of Illinois went into effect on January 1, 2022.
- This act had an immediate impact on the Water Fund by requiring the replacement of any damaged lead service lines and the full replacement of lead service lines during the installation of new water mains.
- The act will have a significant long term impact to the Water Fund as well because it requires the replacement of all 11,000+ lead service lines throughout the City over a twenty year period beginning in 2027.



#### Water Main Replacement Program

Average Cost Per LF Prior to LSLR Program (2019 to 2021)	\$648
Average Cost Per LF Since LSLR Program (2022 To 2023)	\$912
Average Percent Increase in Cost Since 2019 to 2023	41%

TABLE 4 - 2019 to 2023 Water Main per lineal foot (LF) Cost Increases



#### Water Main Replacement Program

- The distribution system consists of approximately 150 miles of water main of which 99% is 18" diameter and smaller and serves only the Evanston retail customers.
- The life expectancy of a water main is generally 100 to 120 years.



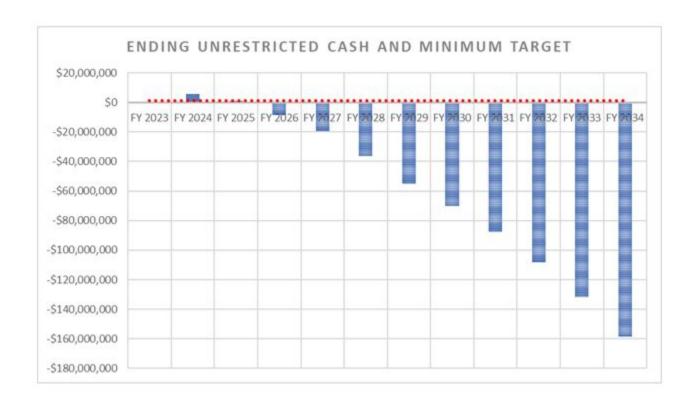
#### Water Main Replacement Program

	Miles of Pipe in Each Age Category					
	60 and			101 to	121 and	
<u>Scenario</u>	Younger	61 to 80	81 to 100	120	Older	
2022	60.1	10.6	34.6	49.6	1.1	
2042, No Annual Replacements	47.8	12.3	10.6	34.6	50.7	
2042, 1.5 Miles Annual Replacements	77.8	12.3	7.6	31.6	26.7	
2042, 2.0 Miles Annual Replacements	87.8	12.3	6.6	30.6	18.7	
2042, 3.2 Miles Annual Replacements	111.8	12.3	4.2	27.7	0.0	
2042, 4.8 Miles Annual Replacements	143.8	12.3	0.0	0.0	0.0	
2042, 5.5 Miles Annual Replacements	156.0	0.0	0.0	0.0	0.0	

Miles of Pipe in Each Age Category (By Year 2042



#### **Distribution System Only**



\$1M Recommended Balance



#### **Future Financial Goals**

Staff recommends that the future financial goals of the water fund be modified to:

- a) maintain a minimum cash balance of \$3,000,000 for plant capital projects / operations and \$1,000,000 for distribution capital projects / operations,
- b) keep debt service expenses associated with the distribution system to less than twenty-five percent of the operating capital,
- c) maintain the water treatment plant in good operating condition and
- d) replace or rehabilitate approximately two percent (3.2 miles) of the water distribution system annually.



# Proposed Rate Increases for Distribution Improvements

Year	Water Rate Increase	Previously Scheduled Rate Increases	Total Rate Increase	% Debt to Revenue	Reserves
2023	558	5.0%1	5.0%	49.5%	\$6.25M
2024	13.1%	4.0%1	17.1%	47.3%	\$4.51M
2025	13.1%	9.8%²	22.9%	40.1%	\$3.52M
2026	13.1%	0.0%	13.1%	38.1%	\$1.02M
2027	13.1%	0.0%	13.1%	35.6%	\$1.05M
2028	13.1%	0.0%	13.1%	32.2%	\$1.05M
2029	13.1%	0.0%	13.1%	27.9%	\$1.08M
2030	2.9%	0.0%	2.9%	27.5%	\$0.96M
2031	2.9%	0.0%	2.9%	26.1%	\$1.00M
2032	2.9%	0.0%	2.9%	25.4%	\$1.03M
2033	2.9%	0.0%	2.9%	23.7%	\$1.01M
2034	2.9%	0.0%	2.9%	22.3%	\$1.02M



#### **Utility Cost Impact of Rate Increases**

Year	Total Rate Increase	Water Rate (cost / CCF) (cost / kgal)	Sewer Rate (cost / CCF) (cost / kgal)	Combined Rate (cost / CCF) (cost / kgal)	Annual Utility Cost (Water and Sewer)	Cost Per Bi-Monthly Utility Bill <sup>2</sup>	Annual Increase
2023	5.0%	\$3.33 \$4.45	\$3.08 \$4.12	\$6.41 \$8.57	\$769.20	\$128.20	
2024	17.1%	\$3.90 \$5.21	\$3.08 \$4.12	\$6.98 \$9.33	\$837.48	\$139.58	\$68.28
2025	22.9%	\$4.79 \$6.40	\$2.77 \$3.70	\$7.56 \$10.11	\$907.46	\$151.24	\$69.98
2026	13.1%	\$5.42 \$7.25	\$2.77 \$3.70	\$8.19 \$10.95	\$982.72	\$163.79	\$75.26
2027	13.1%	\$6.13 \$8.20	\$2.77 \$3.70	\$8.90 \$11.90	\$1,067.83	\$177.97	\$85.11
2028	13.1%	\$6.93 \$9.26	\$2.77 \$3.70	\$9.70 \$12.97	\$1,164.07	\$194.01	\$96.25
2029	13.1%	\$7.84 \$10.48	\$2.77 \$3.70	\$10.61 \$14.18	\$1,272.92	\$212.15	\$108.84
2030	2.9%	\$8.06 \$10.78	\$2.77 \$3.70	\$10.83 \$14.48	\$1,300.12	\$216.69	\$27.21
2031	2.9%	\$8.30 \$11.10	\$2.77 \$3.70	\$11.07 \$14.80	\$1,328.12	\$221.35	\$27.99
2032	2.9%	\$8.54 \$11.42	\$2.77 \$3.70	\$11.31 \$15.12	\$1,356.92	\$226.15	\$28.80
2033	2.9%	\$8.78 \$11.74	\$2.77 \$3.70	\$11.55 \$15.44	\$1,386.56	\$231.09	\$29.64
2034	2.9%	\$9.04 \$12.09	\$2.77 \$3.07	\$11.81 \$15.79	\$1,417.05	\$236.18	\$30.49

CCF= 100 Cubic Feet, kgal = 1,000 Gallons



#### **Utility Cost Impact of Rate Increases**

- This data indicates that the average retail customer will experience a 66% increase in their annual water/sewer bill from 2023 to 2029 when the last 13% proposed rate increase is implemented. The bi-monthly bill will increase from \$128.20 to \$212.15 and the annual payment will increase from \$769.20 to \$1,272.92.
- Community members that qualify for the affordable water and sewer rate will not be impacted by the proposed utility rate increases summarized above.
   The affordable rate will be reviewed every three years to ensure that the rate remains affordable.

