



# RATE & CAPITAL DISCUSSION

ED ANDREWS, WATER DIRECTOR

## Water System - History & Age of the System

City of Bloomington was founded in 1822

### *City's Water System*

First established in 1875 with the Division Street Wells

Lake Bloomington & Water Plant were established in 1929



# Water System - Overview

## Water Sources

- Lake Bloomington
- Lake Evergreen
- Mackinaw River Intake (emergency cases)
- Ongoing Study for Blended Ground Water



## Water Treatment Facility

- 11MGD Avg Day (88 million water bottles)
- 17MGD Peak Day (136 million water bottles)
- 24.5MGD - IEPA rated capacity(196 million water bottles)



## Water Distribution System

- 445 miles of watermain
  - Sizes range from 4-inches to 42-inches
- Serving 32,938 accounts



# Water System - Overview

## Replacement Value?

- Approximate Replacement Value of **\$850M**
  - Plant, Water Mains, Dams....



## Water System – A Positive Investment

- The investment from the late 1800s and early 1900s has served the City well for over a 100 years
- A new investment is now needed to comply with new state and federal mandates and to ensure the quality of our drinking water.
- This long-term generational investment will:
  1. Bring the City into compliance with all applicable standards;
  2. Preserve this invaluable resource; and
  3. Maintaining and enhance our capacity for growth.



# Capital Projects – Water Loss

## Water Loss

- Approximately 33% Production Loss  
- 2019 CDM Smith Master Plan
- Issues
  - Loss of our water resources
  - Financial impact (water used but not read by meters – 6%)



Water Loss	% of Total Production
Distribution System Leakage	17%
Hydrant Leakage	2%
Breaks	2%
Flushing	1%
Water Quality Flushing	2%
Meter Inaccuracy	6%
Unauthorized Use	3%

# The Investment

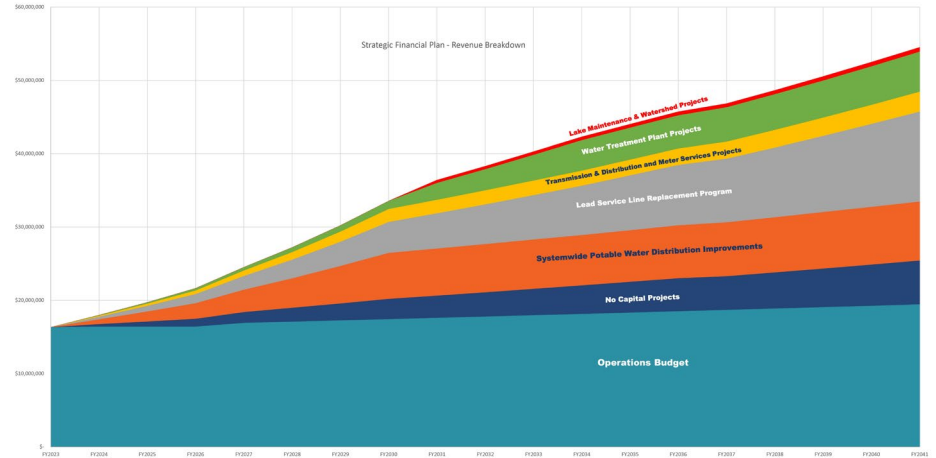
**\$350M - \$400M in Capital Projects over the next 10 Years**

System Wide Distribution  
Est \$75M to \$100M

Lead Service Replacement  
Est \$100M

Water Main Replacement  
Est \$125M

Plant Improvements  
Est \$50M



## Capital Projects – System Wide Improvements

### System Wide Distribution: \$75M to \$100M

- Replace 1929 and 1954 Transmission Mains along Sugar Creek w/ new 36” main to Ft. Jesse
- Retire Ground Storage Tanks at Division Street
  - Includes 10MG from 1906 and 5MG from 1954
  - Replace with 2 new ground storage tanks; and
  - 2 new elevated tanks strategically throughout system
- Construct new booster station

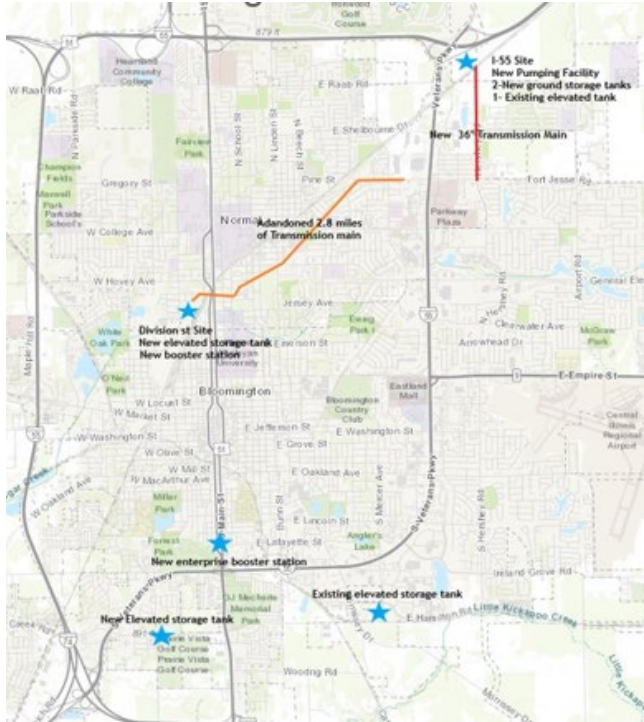


- Brings the City’s water system into compliance with IEPA standards
- Ensures safe drinking water
- Preserve water resources





# Capital Projects – System Wide Improvements



## Key Points

- Put Water Tank (NE Tower – I-55 Tank Farm) into commission and establish 24MGD Pump Station w/ 2-4MG Ground Storage Tanks @ I-55 & Vets
- Retire 2.8mi of 100Yr old 24" Transmission Main along Sugar Creek w/ new 1.3mi of 36" along Hersey for interconnect to system
- Replace 1906 Ground Tank at Division w/ 2MG Elevated WT and new booster station
- Construct new elevated 2MG WT at Prairie Vista Golf Course, reconstruct Enterprise Booster Station to supplement exist Hamilton WT

# Capital Projects – Lead Service Line Replacement

## Lead Service Replacement: \$100M

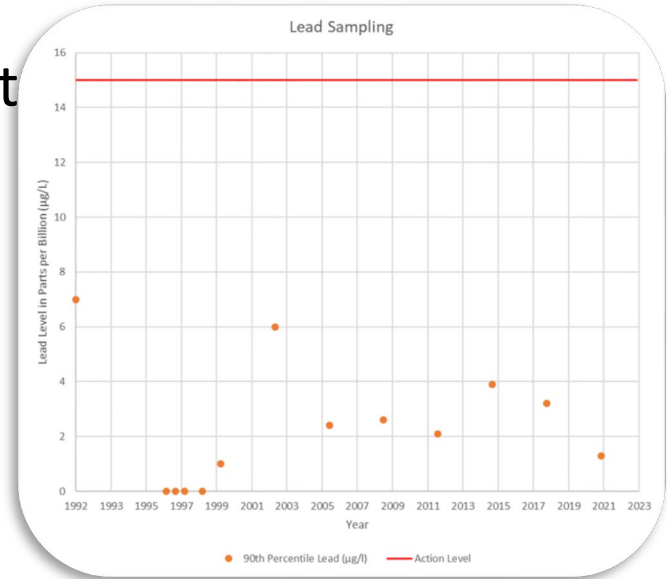
- Estimated 10,000 service lines need replaced
  - Cost for replacement is estimated at \$10,000 each
- Key dates:
  - Application to IEPA for Disadvantaged Community Lead Service Line Assistance – Jan 2024
  - Replacement Plan to IEPA – April 2024



- Mandated by IEPA in 2022
- All communities and water systems must comply

# Capital Projects – Lead Service Line Replacement

Is there lead in our water and is it safe to drink?



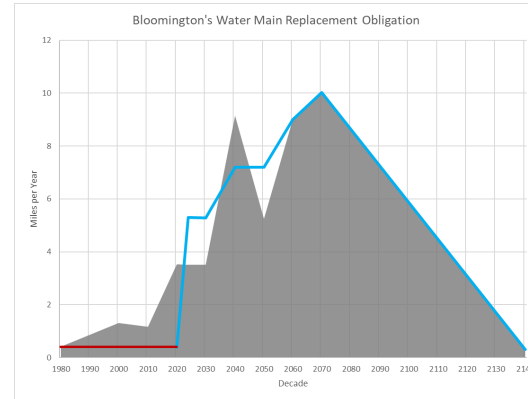
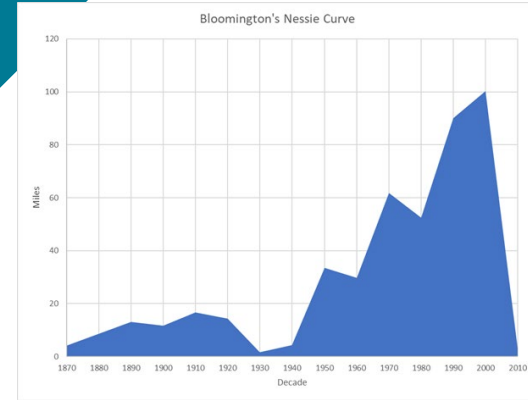
# Capital Projects – Annual Main Replacement

## Water Main Replacement: \$125M

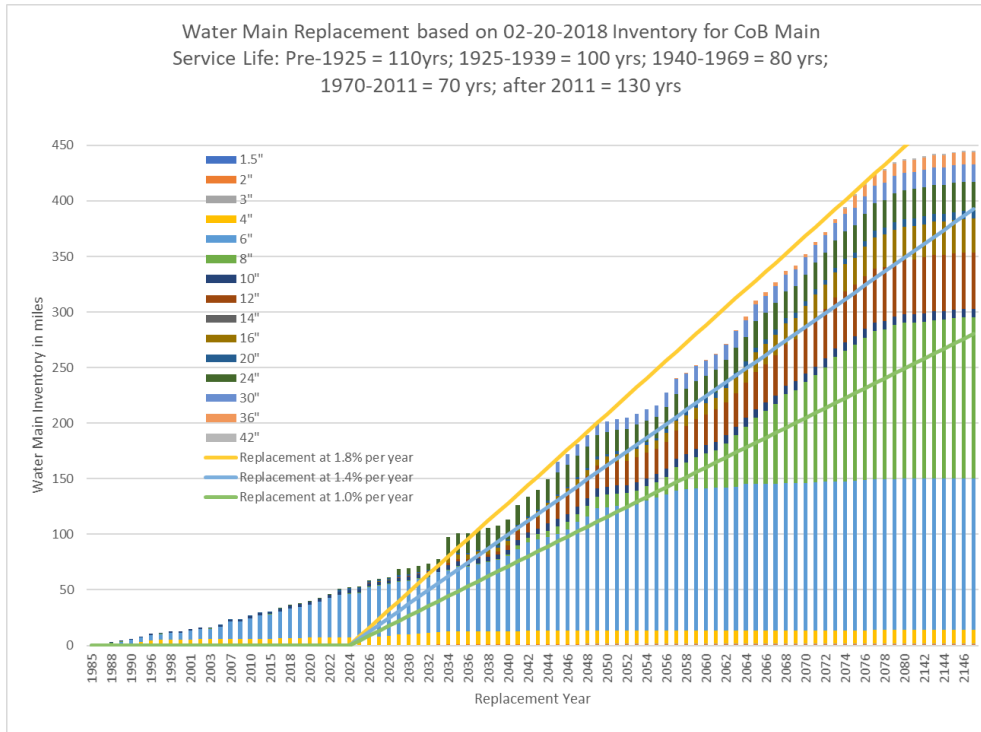
- Historically what has the City been replacing?
  - 0.5% per year of its watermains
    - This equates to 2 miles per year
    - At this rate it would take 200 years to fully replace all watermains
  
- What is the City proposing?
  - 1.4% per year of its watermains
    - This equates to 6 miles per year for the next 10 years
    - Estimated cost is \$400 per linear foot



- Water mains have reached their useful life and need replacement to avoid system issues and water loss



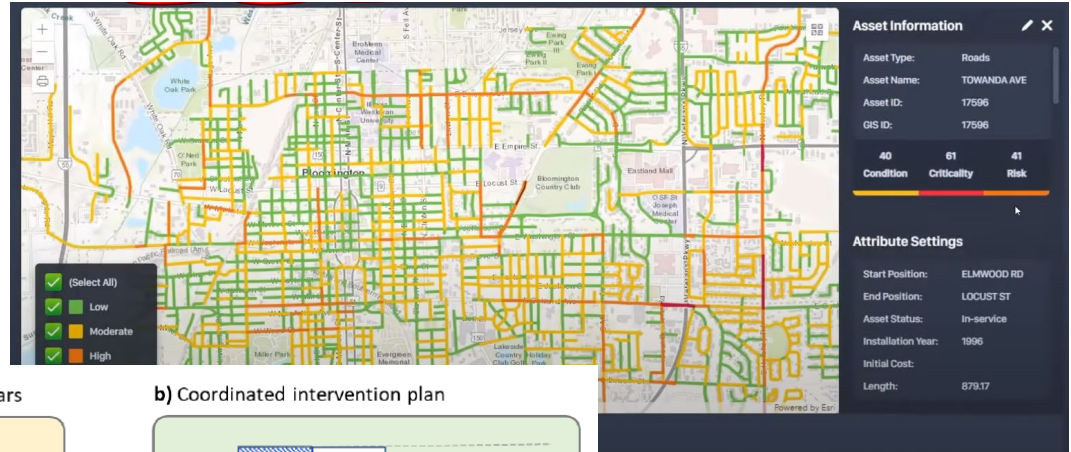
# Capital Projects – Annual Main Replacement



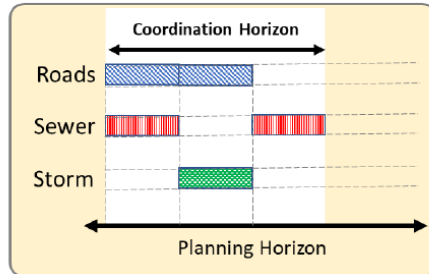
# Capital Projects: Implementation Efficiencies

## Integration of Water & Streets Programs

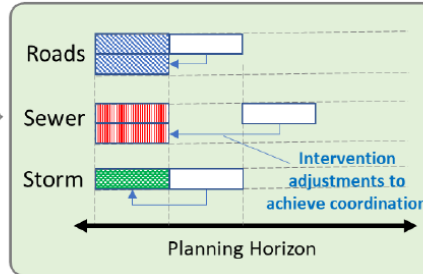
The Water Department will leverage the City's current investment in Decision Optimization Technology (DOT) planning software for roadway programming and add watermain replacement and Lead Service Line Replacement targets to help reduce conflicts.



a) Dispersed activities over the next 3 years



b) Coordinated intervention plan



DOT™ Intervention Coordination Analysis under Mixed-Assets Optimization

## Capital Projects - Plant

### Plant Improvements: \$50M

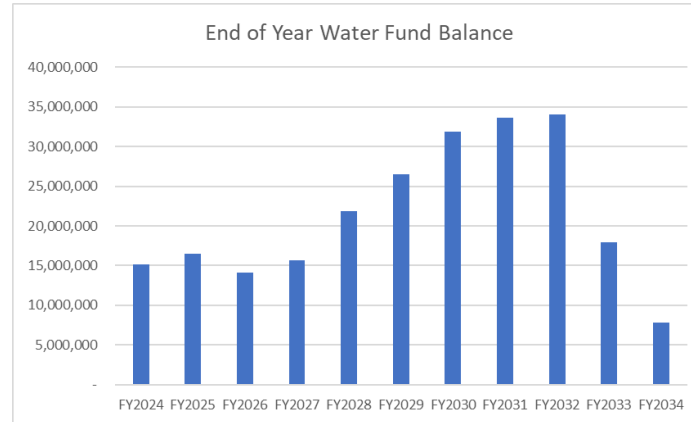
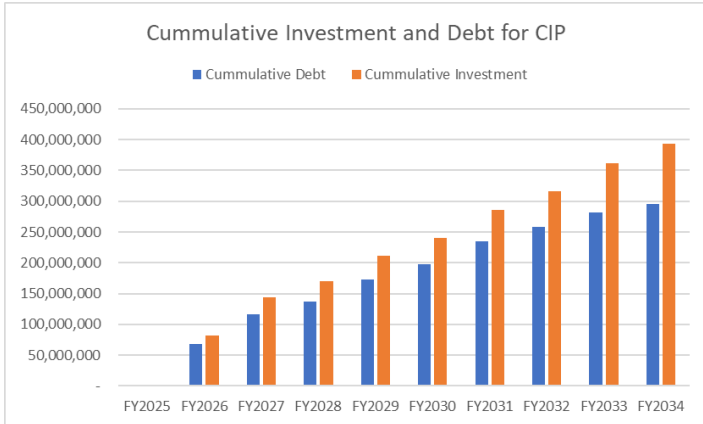
1. Augmentation Wells (Est \$10M)
2. Filter Upgrades (Est \$20M)
3. Chemical Feed Upgrades (Est \$10M)
4. Electrical Upgrades (Est \$10M)



- New IEPA mandates and requirements
- The City's plant is nearly 100 years old
- 2200kV ungrounded is being phased out

# Capital Project: Funding

- Utilization of Federal & State Programs
  - Low Interest Loans
- Water Fund Balance
- Water Rates
  - Have not been raised since 2011





## Water Rates: Residential

There are two primary water rates for residential properties:



### **Smaller Pipe: 5/8 x 1/2**

- Current Minimum: \$5.26
  - Includes \$1.25 fixed fee and \$4.01 per cubic foot
- Current Average: \$13.28
  - Includes \$1.25 fixed fee and \$12.03 per cubic foot

### **Larger Pipe: 5/8 x 3/4**

- Current Minimum: \$9.01
  - Includes \$5.00 fixed fee and \$4.01 per cubic foot
- Current Average: \$13.28
  - Includes \$5.00 fixed fee and \$12.03 per cubic foot



# Water Rates: Median Household Income

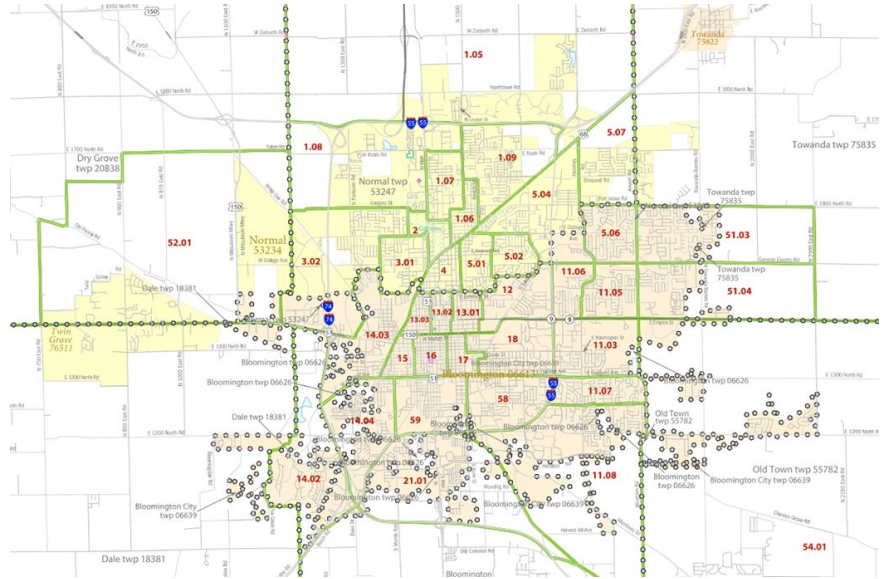
- American Water Works Association suggests 1.5% to 2.5% of the Median Household Income (MHI) for Water.
- Bloomington is currently at:
  - .60% for its average on the small watermain; and
  - .77% for its average on the large watermain.

*The math...*

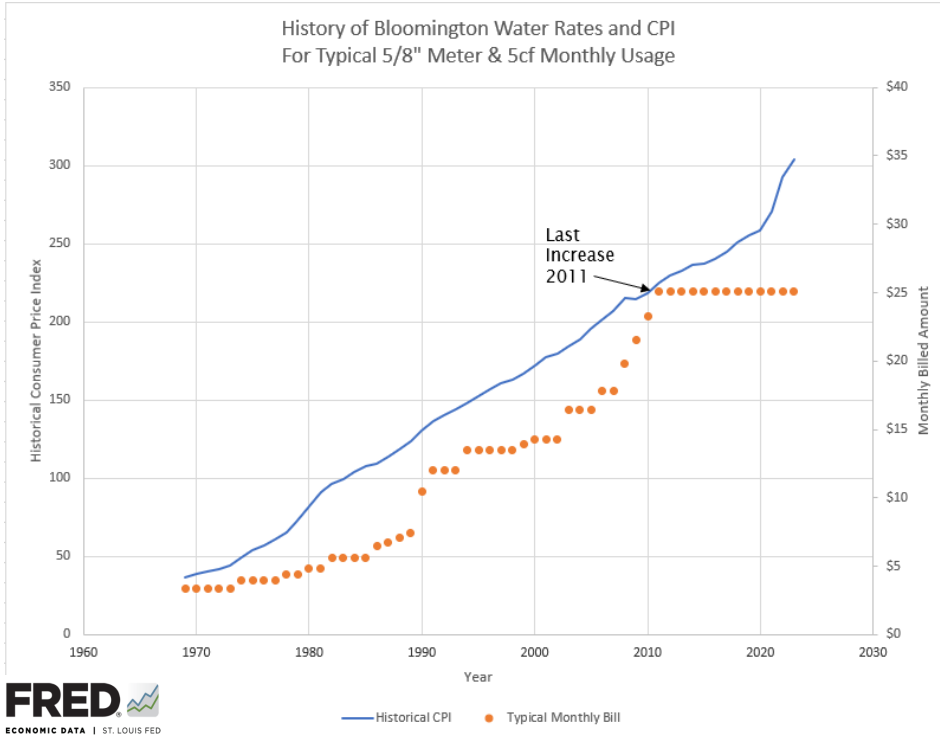
*Bloomington has 22 Census Tracts, with 13 of them below the State's MHI \$72,205. The lowest was \$26,710 in 2021.*

Small Watermain  
 Ex Min: \$ 5.26 is 0.24%  
 Ex Avg: \$13.53 is 0.60%

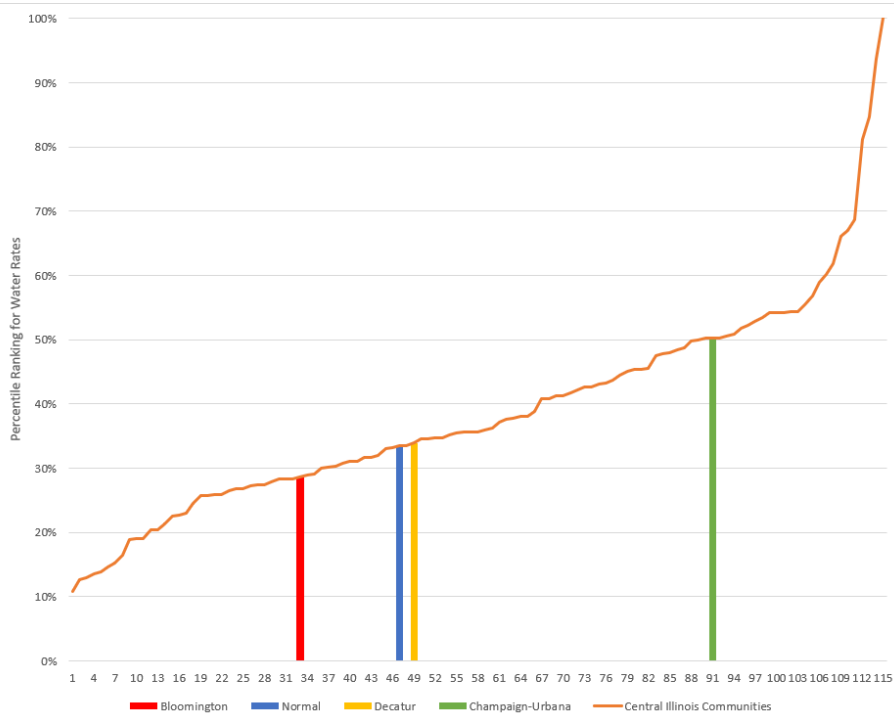
Large Watermain  
 \$9.01 is 0.40%  
 \$17.03 is 0.77%



# Water Rates: No Increase Since 2011



# Water Rates: Current Regional Water Comparison



Forsyth	1	12.44
Momence	2	14.67
Gibson City	3	14.99
Cissna Park	4	15.75
Forrest	5	16
Chebanse	6	16.9
Fithian	7	17.57
Clifton	8	18.95
Paxton	9	21.79
Mansfield	10	22
Rankin	11	22
Hoopston	12	23.6
Gilman	13	23.63
Ogden	14	24.66
White Heath	15	26
Chatsworth	16	26.25
Monticello	17	26.58
Rantoul	18	28.29
Georgetown	19	29.75
Rossville	20	29.75
Thawville	21	30
Watseka	22	30
Onarga	23	30.7
Milford	24	31
Elkhart	25	31.03
Bethany	26	31.6
Thomasboro	27	31.75
Marshall	28	31.77
Blue Mound	29	32.25
Potomac	30	32.82
Downs	31	32.85
Mattoon	32	32.85
<<Bloomington>>	33	33.07
Danforth	34	33.5
Mahomet	35	33.62
Atwood	36	34.66
Chrisman	37	34.95
Farmer City	38	35.08
Gifford	39	35.54
Clinton	40	35.99
Colfax	41	36
Casey	42	36.68
Royal	43	36.69
Maroa	44	37.06
Cerro Gordo	45	38.24
Cattin	46	38.42
Normal	47	38.84
Lexington	48	38.85
Decatur	49	39.28

Belflower	50	40
Roberts	51	40
Tolono	52	40.21
Charleston	53	40.24
Sullivan	54	40.68
Hammond	55	41.13
Villa Grove	56	41.2
Bement	57	41.25
Median	58	41.25
Mt Pulaski	59	41.56
Ivesdale	60	42
Paris	61	43.02
Newman	62	43.45
Assumption	63	43.66
Leroy	64	44.1
Westville	65	44.1
Average	66	44.99
Chenoa	67	47.25
Cisco	68	47.25
Heyworth	69	47.77
Arcola	70	47.81
Tuscola	71	48.25
Arthur	72	48.88
Bismark	73	49.38
Homer	74	49.38
Warrensburg	75	49.88
Ludlow	76	50
Pana	77	50.53
Lovington	78	51.37
Pesotum	79	52.13
Alorton	80	52.5
Loda	81	52.5
Camargo	82	52.76
Lake Iroquois Water	83	55
St Joseph	84	55.35
Deland	85	55.5
Oreana	86	56
Harristown	87	56.38
Savoy	88	57.62
Sidney	89	57.75
Bondville	90	58.19
Champaign & UCSD	91	58.19
Urbana	92	58.23
Sadorus	93	58.42
Fisher	94	58.81
Crescent City	95	60
Fairbury	96	60.53
Seymour	97	61.17
Philo	98	61.77
Danville	99	62.77
Manteno	100	62.77
Tilton	101	62.77
Neoga	102	62.89
Buckley	103	62.98
Oakland	104	64.23
Penfield	105	65.75
Argenta	106	68.25
Hindsboro	107	69.63
Longview	108	71.5
Mt Zion	109	76.4
Oakwood	110	77.6
Chatham	111	79.52
Broadlands	112	94
Dewey	113	97.92
Weldon	114	108.33
DeWitt	115	115.75

## Water Rates: Proposal

Fiscal Year 25	33%
Fiscal Year 26	33%
Fiscal Year 27	33%
Fiscal Year 28 & thereafter	CPI for Water, Sewer, and Trash

# Water Rates: Residential

The proposed increase for the residential smaller pipe (5/8 x 1/2), avg 300 CF

Small Pipe



Minimum	Monthly
Current	\$5.26
FY25	\$7.00
FY26	\$9.30
FY27	\$12.37
Average	Monthly
Current	\$13.28
FY25	\$17.66
FY26	\$23.49
FY27	\$31.24



# Water Rates: Residential Utility Payment Assistance

## Low Income Fee Application

The City offers a discounted rate for refuse collection based on an individual's income. The qualifying criteria for this discount is based on the federal poverty guidelines as provided in the Federal Register issued by the U.S. Department of Health and Human Services each year. In order to receive the discount, an individual or household must provide proof of income that is below the federal poverty guidelines. Applicants must submit this form and proof of the last 30 days of income (see below), with social security number removed or redacted. To submit this form online, fill out the information and press the "Submit" button below. You may also print this form using the print button on the left and submit it using one of the following:

**In Person:** The Hub, 115 E Washington Street, Room 103, Bloomington, IL 61701  
**Mail:** City of Bloomington, Public Works, PO Box 3157, Bloomington, IL 61702  
**E-mail:** [publicworks@cityblm.org](mailto:publicworks@cityblm.org)

I will be submitting the following proof of income (select all that apply):

Payroll Checks  Bank Statement  SSI/SSDI Statement  Social Security Retirement Statement  Pension Statement  Other

To be filled out by applicant and co-applicant (if applicable):	
Utility Account Holder Name *	Utility Account Number *
Applicant Name *	Applicant Phone Number *
Applicant Marital Status *	Is applicant a Head of Household? <input type="checkbox"/> Yes <input type="checkbox"/> No
Applicant Number of Dependents *	Applicant Ages of Dependents *
Monthly Household Income (Including payroll, SSI/SSDI, Social Security retirement, pension, child support, alimony, etc.) *	
Utility Service Address *	E-mail Address (if applicable) *
City *	State *
	Zip Code *

I certify that the above information is accurate to the best of my knowledge and that I have read and agree to the General Provisions listed in this document. I certify that I am the owner(s) and/or occupant(s) of this property. I hereby authorize the City of Bloomington to verify the information contained in the above statements from any source whatsoever and hereby authorize and direct the release of such information.

## Utility Payment Assistance

[Utility Payment Assistance | City of Bloomington, Illinois \(bloomingtonil.gov\)](http://www.bloomingtonil.gov)

The qualifying criteria for this discount is based on the federal poverty guidelines as provided in the Federal Register issued by the U.S. Department of Health and Human Services each year. In order to receive the discount, an individual or household must provide proof of income that is below the federal poverty guidelines. Applicants and/or co-applicants must submit the Low Income Fee Application and proof of the last 30 days of income (see application), with social security number removed or redacted.

Solid Waste Accounts		
Code	Description	Number
401	LOW INCOME 16	37
402	95 GALLON CART SHARED	4
403	65 GALLON CART SHARED	1
435	35 GALLON CARTS	5,892
465	65 GALLON CARTS	6,305
495	95 GALLON CARTS	11,148
	Total Accounts	23,387
	Low Income	0.2%





## Water Rates: Residential Assistance

- In addition to the City's utility assistance program, the ordinance directs the City Manager to put together additional resources and information to assist low-income residents manage the increases.



# Water Rates: Commercial

## Commercial



1-1/2" inch commercial avg 3300CF

Minimum	Monthly
Current	\$14.51
FY25	\$19.30
FY26	\$25.67
FY27	\$34.14
Average	Monthly
Current	\$141.43
FY25	\$188.10
FY26	\$250.18
FY27	\$332.73

2" inch commercial avg 5500CF

Minimum	Monthly
Current	\$25.01
FY25	\$33.26
FY26	\$44.24
FY27	\$58.84
Average	Monthly
Current	\$237.07
FY25	\$315.30
FY26	\$419.35
FY27	\$557.74

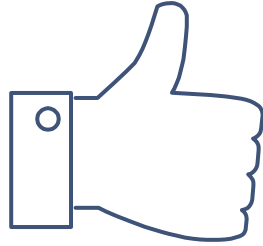
How the City helps...

1. Volume Discounts
2. Metered Pricing
3. Multi-Year Contracts (proposed)
4. Looking into non-potable water possibilities / discounts (irrigation)

## Water Utility Tax - Reduction

- The City charges a utility tax on water consumption at a rate of 3.75% of the gross water receipts.
- To avoid a “double” hit, the ordinance approving the water rate increase will lower this utility tax as follows so that the rate increase is not captured in the utility tax:
  - May 1, 2024: 2.75%
  - May 1, 2025: 2.5%
  - May 1, 2026: 2.25%





# THANKS!

Any questions?  
Ed Andrews, PE  
Water Director