

City of Chicago Department of Water Management

Bulent Agar
Deputy Commissioner



Andrea R.H. Cheng, Ph.D., P.E.
Acting Commissioner



Overview of DWM



Lake Michigan

Protect & Conserve

- * Only 2.5% of Earth's water is freshwater - the amount needed for life to survive
- * Lake Michigan is the World's **5th** largest freshwater lake
- * Lake Michigan supplies water for neighborhoods, businesses, recreation, & aquatic habitats
- * Lake Michigan levels fluctuate in response to many factors
 - * Precipitation
 - * Evaporation
 - * Runoff



What we do

- * **Drinking water treatment**

- * Water Quality (Microbiology, Chemistry, and Microscopy) and Water Treatment

- * **Water distribution system maintenance**

- * Water Pumping, Operations and Distribution, Engineering

- * **Combined sewer system maintenance**

- * Operations and Distribution, Engineering

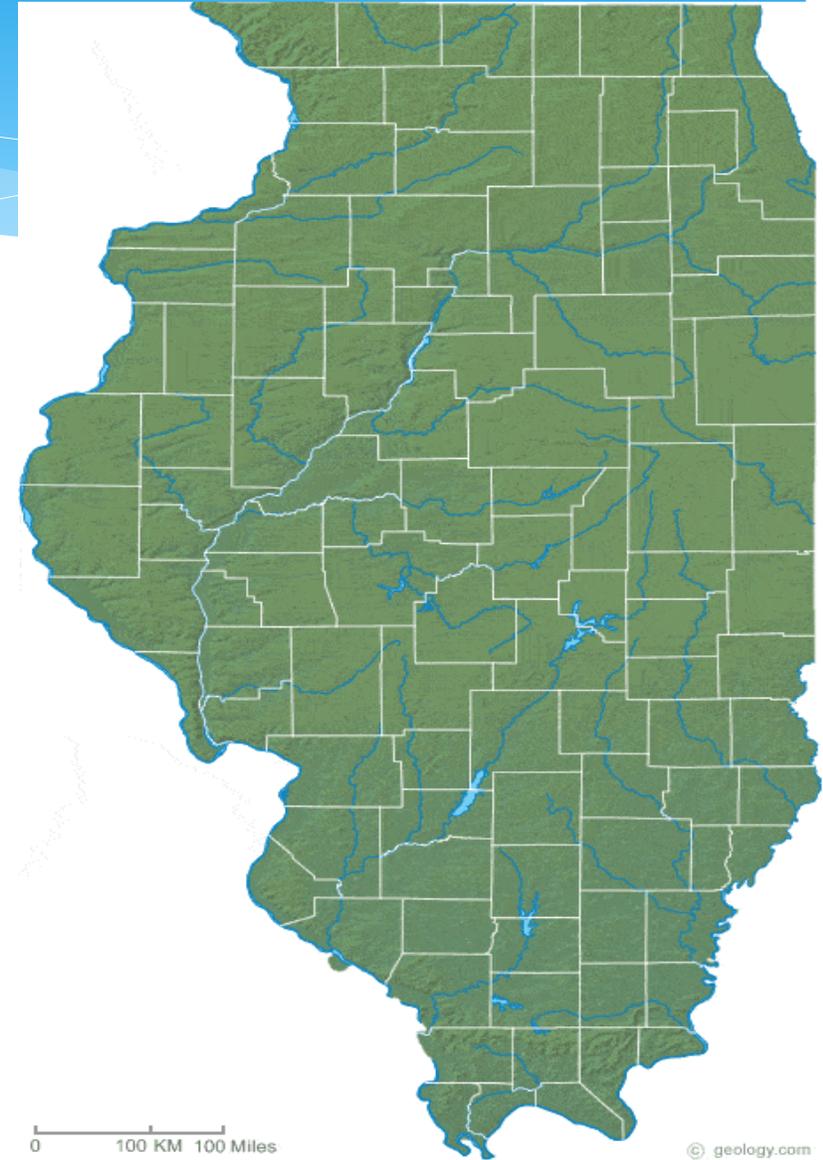
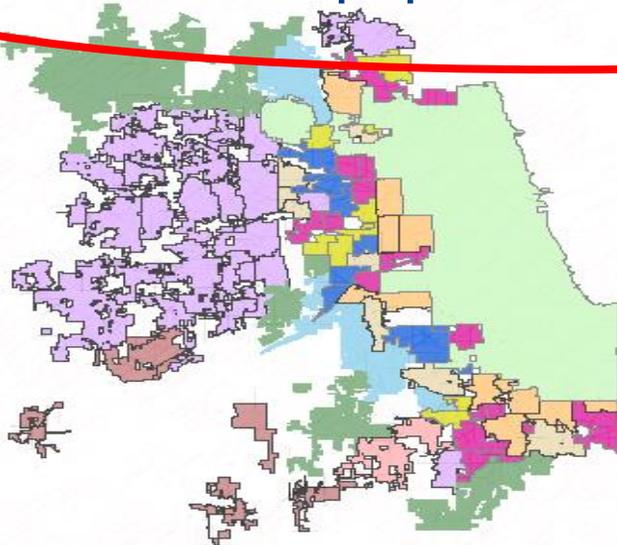
- * **Transmit waste water to the Metropolitan Water Reclamation District of Greater Chicago treats wastewater**

Customers

- * The City of Chicago
- * Suburbs
- * Total population served
 - * More than 5.3 million customers
 - * 42% of the population of Illinois

Legend

	chicago limits
	1909-1920
	1921-1930
	1931-1940
	1941-1950
	1951-1960
	1961-1970
	1971-1980
	1981-1990
	1991-2000
	2001-2004



Chicago Water System

Water Asset Management

- 🔥 **2 Crib Structures**
- 🔥 **2 Largest Water Plants of the Top 10 in the World**
- 🔥 **12 Pumping Stations**
 - 🔥 9 Electric & 3 Steam Powered
 - 🔥 No Elevated Storage -
 - 🔥 Pump “On Demand”
- 🔥 **4,300 Miles of Water Mains**
 - 🔥 6 inches to 16 feet in diameter
- 🔥 **48,500 Existing Water Valves**
- 🔥 **~490,000 Water Accounts**



Chicago Sewer System

- * Combined Sewer System transmits waste & storm water to the MWRDGC
- * 230 square miles of drainage area
- * 4,500 miles of Sewers
 - * 8-inch to 21.5 feet in diameter
- * 350,000 Structures



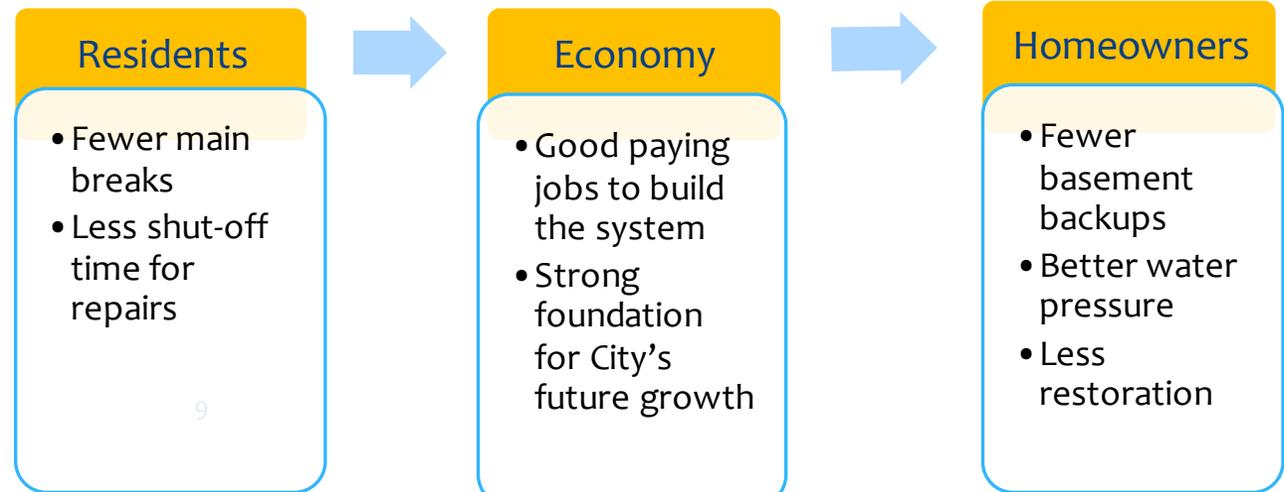
10-Year Capital Improvement Program



10-Year CIP Goals

- 🔥 Replace 880 miles water main
 - 🔥 Completed over 760 miles
- 🔥 Rehab ~700 miles of sewer
 - 🔥 Completed 659 miles
- 🔥 Line 95,000 structures
 - 🔥 Completed 88,575

- 🔥 Design 2 pumping station conversions
 - 🔥 2 Designed
- 🔥 Convert 2 pumping stations
 - 🔥 1 Completed
 - 🔥 1 Under Construction



What's on Tap?



Upcoming Water Contracts

💧 Design Consulting Services

- New Design RFQ
- \$5M / 60 months
- Advertising 2nd Quarter 2021

💧 Western Ave. Pumping Station Conversion

- \$10M/60 months
- Advertising 2nd Quarter 2021

💧 Program Management RFQ

- Planned for 2021



Water and Facilities Improvement Contracts

Upcoming 2021 Contracts

🔥 Topographic survey \$4M

🔥 Sawyer Plant

- Low Lift Pump

Chemical Building Roof Replacement

Building Roof

- Boiler Improvements

🔥 Jardine Plant

- Sediment Force Main

Pumping Stations

🔥 Cermak

- Standby Generators & Switchgear

🔥 Lakeview:

- Electrical & Control Improvements

🔥 Western:

- Convert Steam to Electric



Sewer Improvement Opportunities

IEPA Funded

Geopolymer Rehabilitation

- 💧 \$30-40 Million Total
- 💧 3 Projects
- 💧 Large Diameter

New sewer construction

- 💧 \$50-63 Million total
- 💧 11 projects for bid
- 💧 Various locations



Sewer Improvement Projects

Advertising 2nd Quarter 2021

- ◆ 78th and 76th Sewer Improvement
- ◆ Pershing Rd Sewer Improvement Project
- ◆ Rogers and Greenview Sewer Improvement
- ◆ 58th Street, Parnell and 44th Pl Sewer Improvement
- ◆ Archer Ave Sewer improvement Project
- ◆ Parnell and Halsted St Sewer Improvement Project



Sewer Improvement Projects

Upcoming 2021 Projects

- 🔹 Hegewisch Sewer improvement
- 🔹 Barry and Sheffield Sewer Improvement
- 🔹 Englewood and Greater Grand Crossing Sewer Improvement Project
- 🔹 Lunt and Lakewood Sewer Improvement
- 🔹 Sacramento and 26th Sewer Improvement
- 🔹 3 various locations large diameter sewer lining (greater than 66-inches)



Lead Service Line Replacement

2021 HOMEOWNER-INITIATED LSL REPLACEMENT PROGRAM

For homeowners that want to hire a contractor & remove the existing LSL on their property. Under this program:

- City will waive up to \$3,100 in permit fees
- City will connect the new service line to the water main & install a free water meter

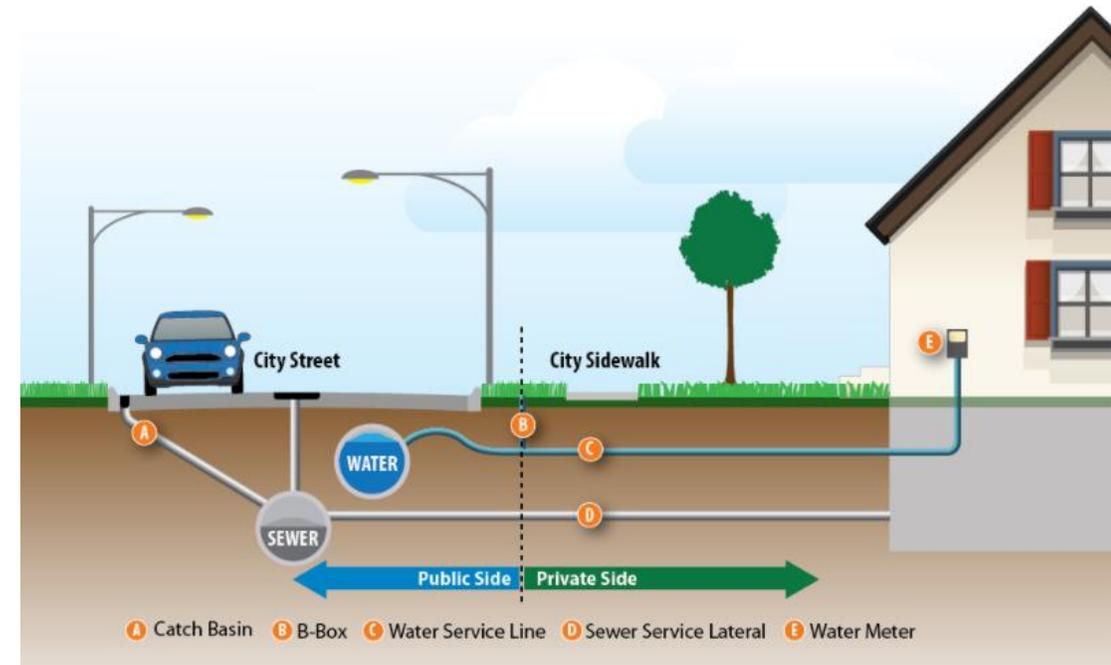
2021 EQUITY LSL REPLACEMENT PROGRAM

Free, full (private + public) LSL replacement for eligible low-income residents if:

- * Own and reside in their home
- * Household income below 80% of area median income (\$72,800 for family of 4) &
- * Have consistent lead concentrations above 15 ppb in their water, as tested by the Department of Water Management.

- **Contract will be issued** to perform Equity LSL replacements in Q2 2021.
- **\$6-\$10 Billion over multiple decades** to remove all 400,000 LSLs. 2021 programs are just Phase 1 of 3. New programs will be announced over time.

TYPICAL WATER SERVICE LINE DIAGRAM



MBE/WBE Participation

Water Subcontracting Opportunities

- 🔥 Land Survey
- 🔥 Electrical
- 🔥 HVAC
- 🔥 Materials Testing
- 🔥 Asphalt Placement
- 🔥 Trucking
- 🔥 Landscaping
- 🔥 Concrete
- 🔥 Pipe Installation

Contract requirements:

26%+ Minority Owned Business

6%+ Women Owned Business

New! Veterans Owned Business

Increased participation through segmentation

Sewer Subcontracting Opportunities

- 🔥 Sewer Construction/Tunneling
- 🔥 Cleaning
- 🔥 Televising
- 🔥 Materials Testing
- 🔥 Asphalt Placement
- 🔥 Trucking
- 🔥 Landscaping
- 🔥 Concrete
- 🔥 Catch Basins

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Questions?