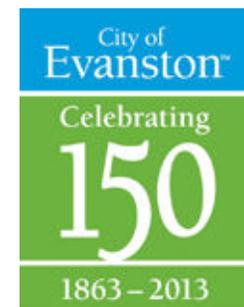


# **UTILITIES DEPARTMENT: STATUS AND GOALS**

**PRESENTATION TO CITY COUNCIL  
SEPTEMBER 30, 2013**



# AGENDA

- **Sewer Fund**
- **Water Fund**
- **Wholesale Water Customers**

# SEWER FUND: MAJOR COSTS

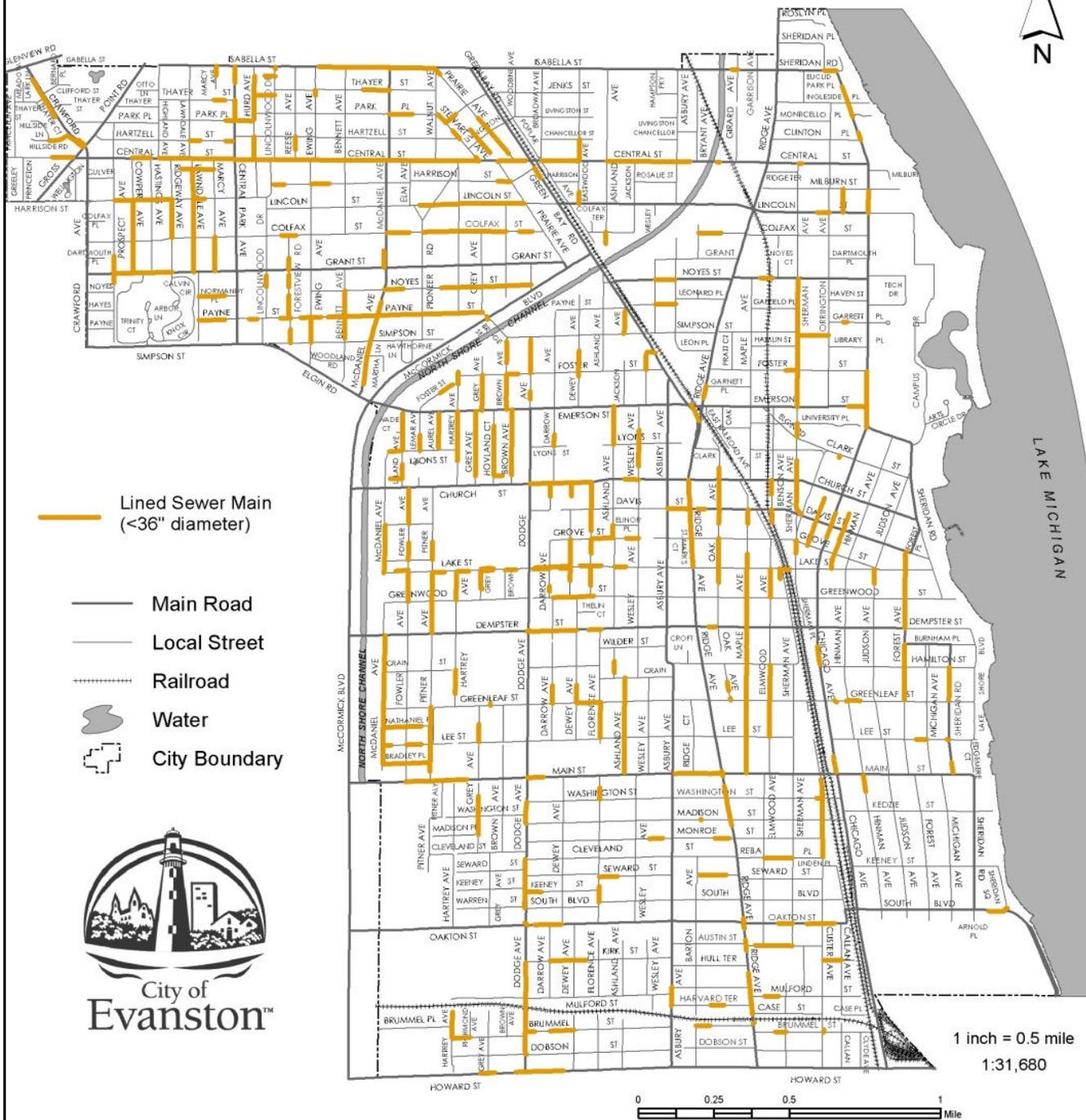
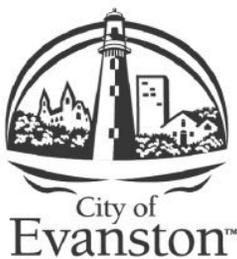
- **Debt Service**
- **Operation and Maintenance**
- **Capital Improvement Program**
  - Sewer Rehabilitation
  - Stormwater Management Improvements
  - Sewer repairs on streets being resurfaced
  - Emergency sewer repairs

# **SEWER FUND: THREE SEWER SYSTEMS**

- **Combined sewer system is 100+ years old, not sized to handle storm flows**
- **Relief sewer system constructed in 1990 – 2010 to convey wet weather flow to MWRD's deep tunnel reservoir system (TARP)**
- **Storm sewer system constructed in 1980s and 1990s to mitigate flooding in isolated areas**

# SMALL DIAMETER SEWER REHABILITATION PROGRAM 1987 – 2013

-  Lined Sewer Main (<36" diameter)
-  Main Road
-  Local Street
-  Railroad
-  Water
-  City Boundary

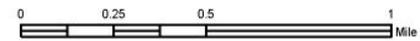
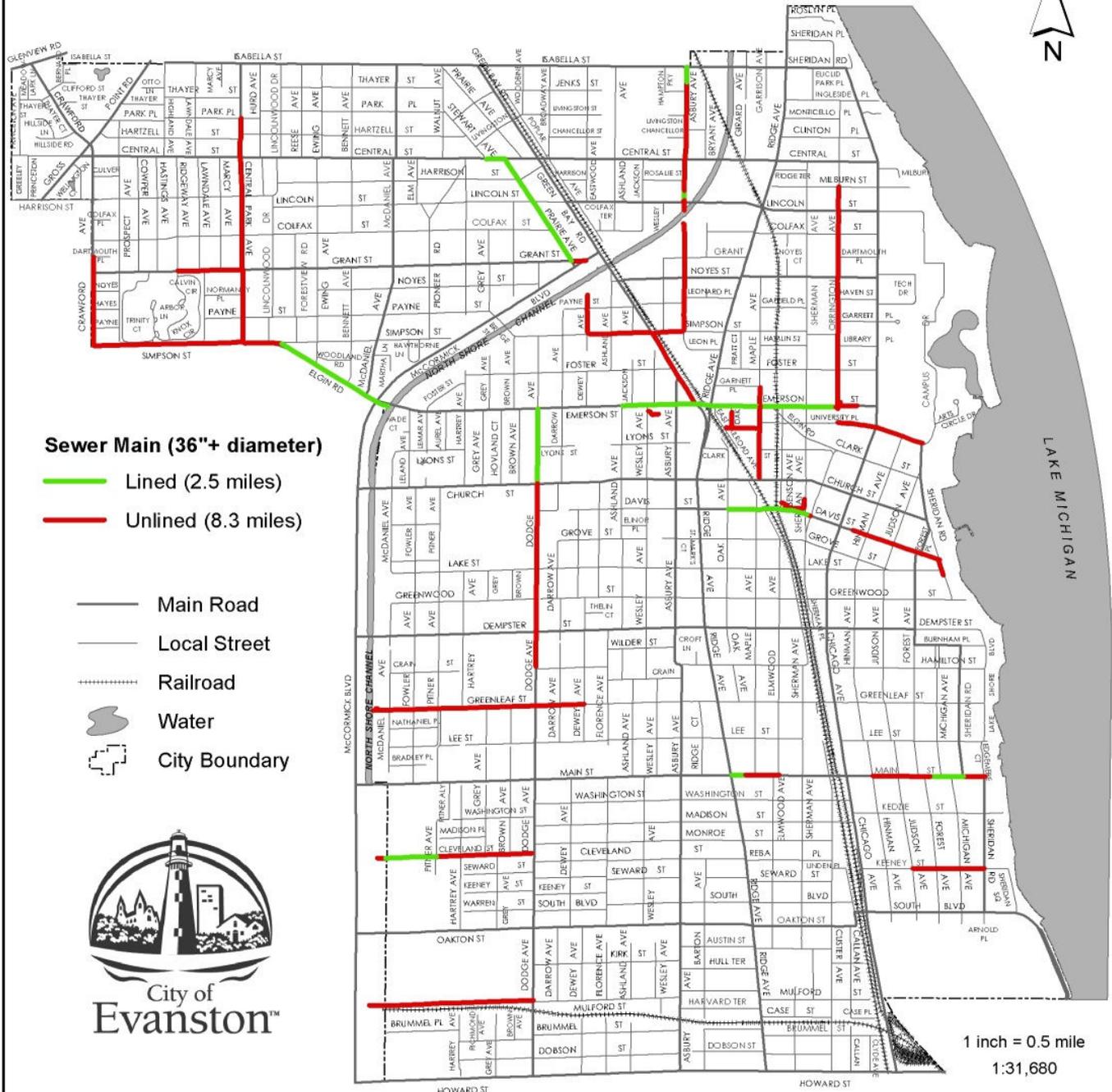


# LARGE DIAMETER SEWER REHABILITATION PROGRAM

## Sewer Main (36"+ diameter)

- Lined (2.5 miles)
- Unlined (8.3 miles)

-  Main Road
-  Local Street
-  Railroad
-  Water
-  City Boundary



1 inch = 0.5 mile  
1:31,680

# RELIEF SEWER SYSTEM

## Main Diameter

— 24" - 60"

— 72" - 120"

— Main Road

— Local Street

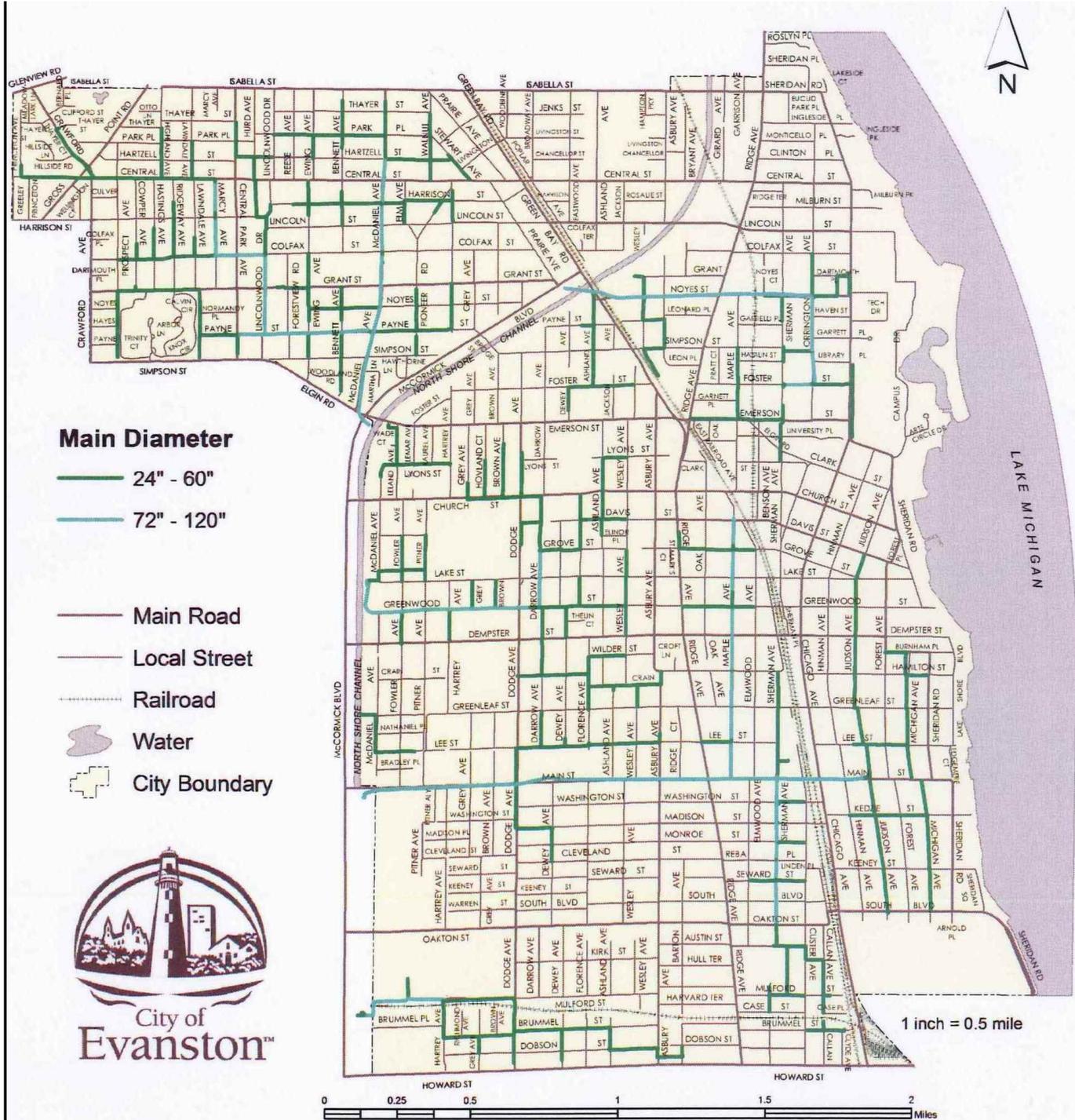
— Railroad

— Water

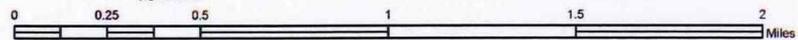
— City Boundary



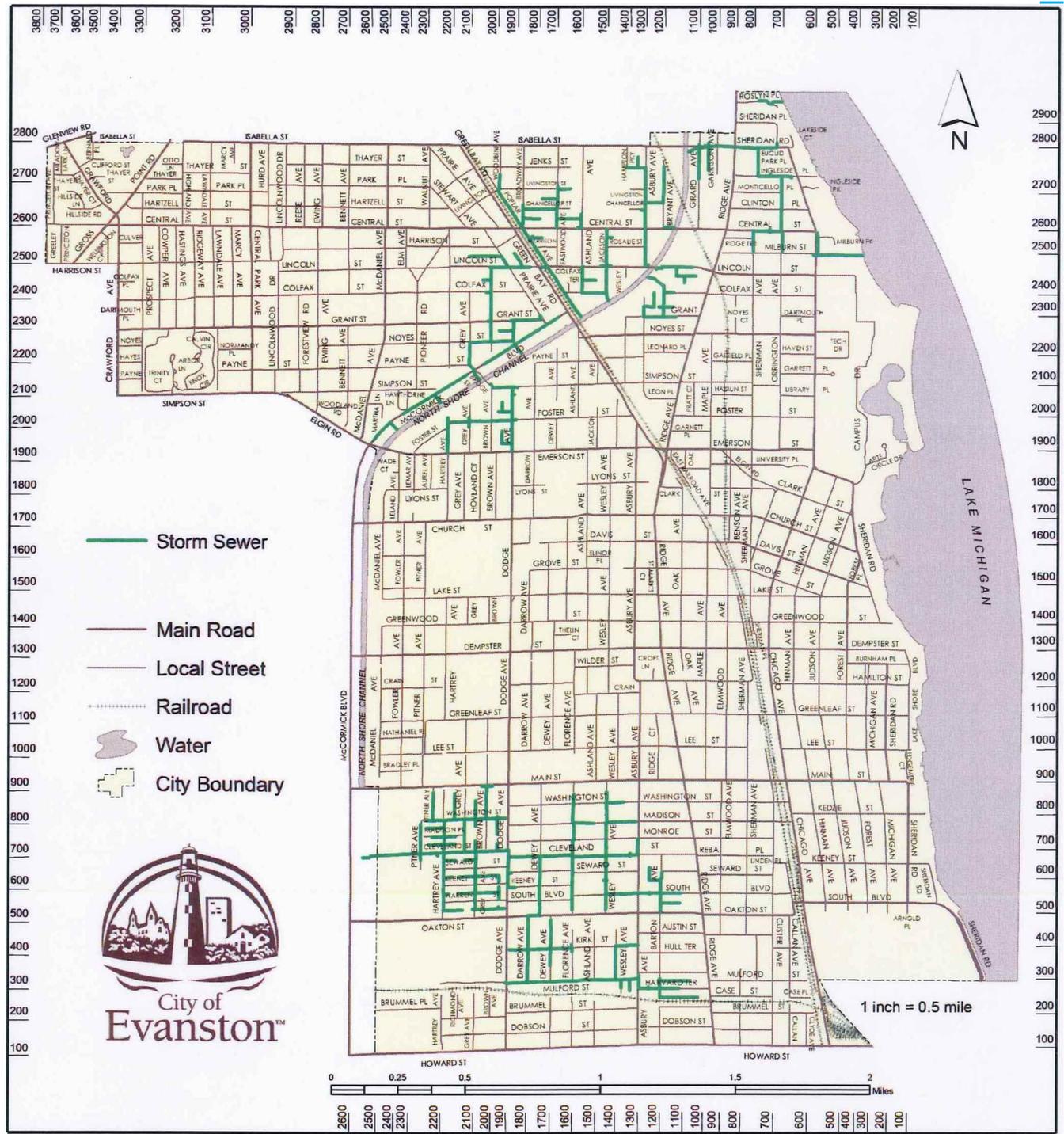
City of Evanston™



1 inch = 0.5 mile



# STORM SEWER SYSTEM



# **SEWER FUND: STORM SEWER SYSTEM**

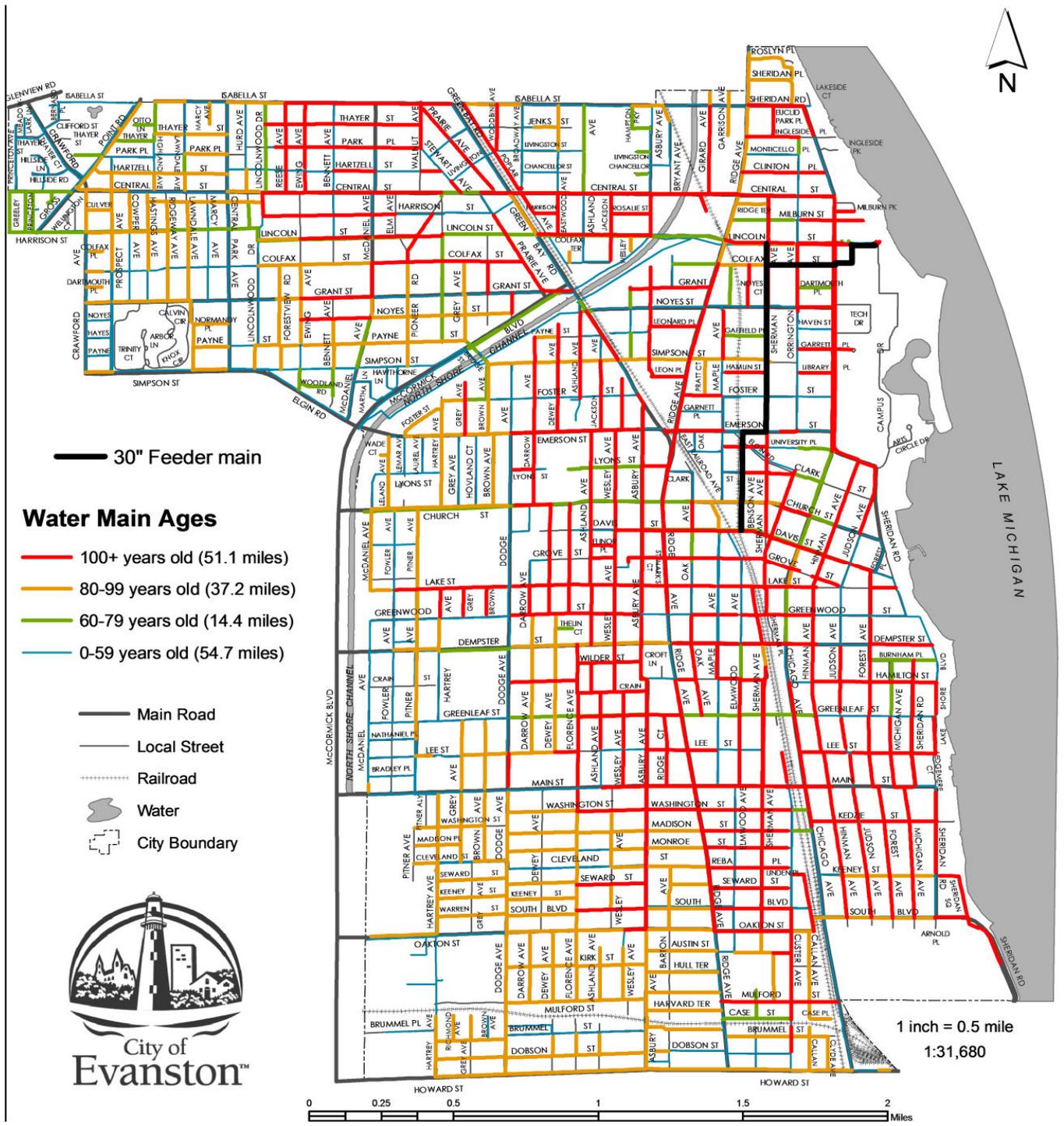
- **Annual Stormwater Management Program will fund “green” components of public improvement projects:**
  - Pervious pavement
  - Bioinfiltration areas
- **Extend the relief sewer system onto streets that currently only have combined sewer.**

# **SEWER FUND: IN-HOUSE INITIATIVES**

**In-house initiatives to maximize reliability:**

- **Drainage structure and pipeline cleaning program – one-third of the City each year**
- **Closed-circuit televising of sewer mains in conjunction with street resurfacing program**
- **Regular maintenance of sewer infrastructure**

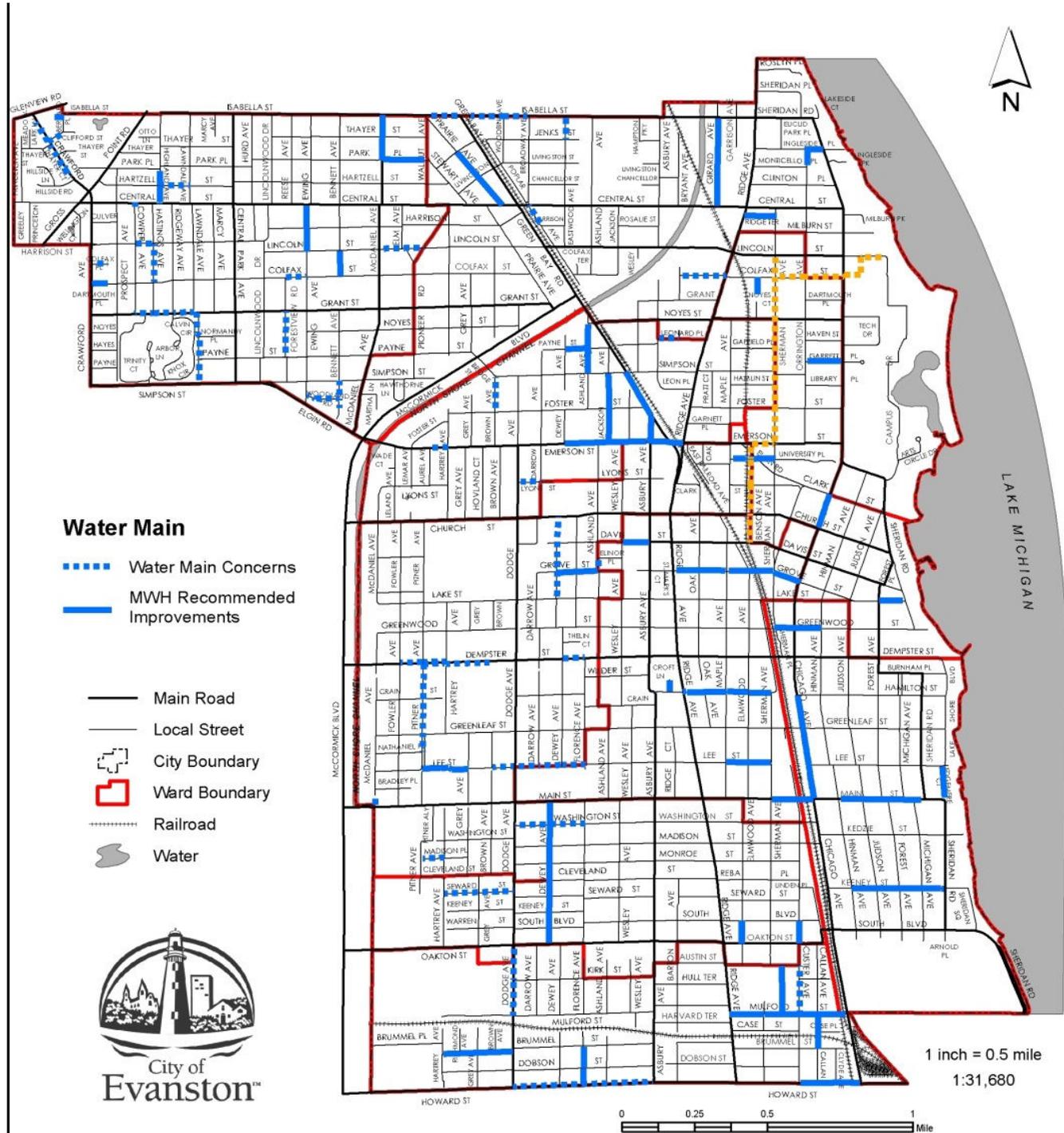
# WATER DISTRIBUTION SYSTEM AGE



# WATER DISTRIBUTION SYSTEM REPLACEMENT PROGRAM 1987 - 2013



# WATER DISTRIBUTION SYSTEM REPLACEMENT NEEDS



# **WATER FUND: DISTRIBUTION SYSTEM**

**In-house initiatives to maximize reliability:**

- **Fire Hydrant Program – 98% of fire hydrants are <50 years old, all hydrants are tested annually**
- **Valve Program – 70% of valves are <50 years old, half of the system is tested each year**
- **Leak Detection Program – Proactively search for water system leaks**
- **Cross Connection Control Program – Preserving water quality and protecting public health**

# **WATER FUND: WATER TREATMENT PLANT**

**The plant is well maintained and functions well, but improvements are needed due to its age:**

- **Plant Reliability Improvements = \$3.1 million**
- **Finished Water Reservoir = \$26.1 million**
- **Intake Improvements = \$2.0 million**
- **Master Meter & Chemical Feed Project = \$1.0 million**

**Other planned improvements:**

- **Meter Reading System = \$2.4 million**
- **Standpipe Painting and Repair = \$2.7 million**

# **WATER FUND: WATER TREATMENT PLANT**

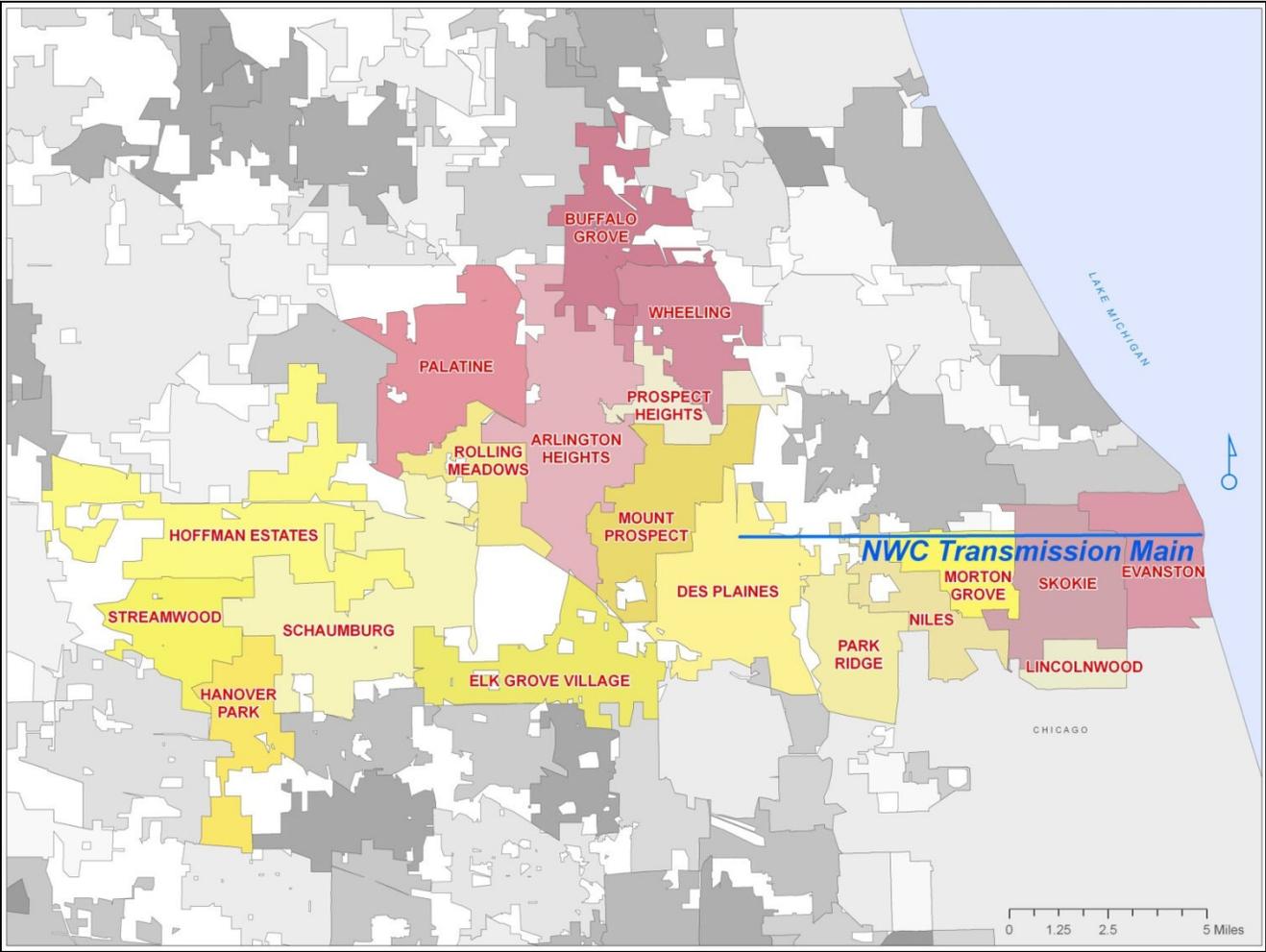
**Major projects in the last 20 years:**

- **Intake reliability improvements to prevent frazil ice and mussel build-up**
- **Asbestos removed from all buildings**
- **Filter improvements to make needed repairs and increase reliability**
- **Replacement of 30-year-old SCADA system with state-of-the-art control system**
- **Chlorine scrubber ensures safety for nearby residents**

# WHOLESALE WATER: EXISTING CUSTOMERS

- **Village of Skokie**
  - Became a wholesale customer in 1944
  - Current agreement runs 1997 – 2017
  - Currently paying \$0.99/1,000 gal
- **Northwest Water Commission**
  - Became a wholesale customer in 1985
  - Current agreement expires in 2035
  - Currently paying on average \$0.60/1,000 gal

# WHOLESALE WATER: POTENTIAL CUSTOMERS



# WHOLESALE WATER: ENGINEERING ANALYSIS

- **Transmission main feasibility study conducted in coordination with Northwest Water Commission and 5 potential wholesale customers:**
  - Lincolnwood
  - Niles
  - Park Ridge
  - Des Plaines
  - North Suburban Municipal Joint Action Water Agency
- **Regional transmission main is technically and financially feasible for all but Lincolnwood.**

# **WHOLESALE WATER: OUTLOOK FOR LINCOLNWOOD**

- **No modifications needed at the Water Plant or in the distribution system.**
- **A dedicated transmission main would be constructed from Evanston's South Standpipe.**
- **City has submitted a proposal to Lincolnwood; negotiations are ongoing.**
- **Would take about one year to design, permit, and construct the transmission main.**

# **WHOLESALE WATER: OUTLOOK**

- **Would require a major water plant expansion from 108 mgd to 132 or 214 mgd.**
- **Meetings continue with Niles, Park Ridge and Des Plaines.**
- **Morton Grove and Glenview have also expressed interest.**
- **The Northwest Water Commission has held meetings with these same communities.**
- **Northwest Suburban Municipal Joint Action Water Agency still expressing an interest.**

# QUESTIONS?

