



Water Quality Presentation

MAY 24, 2022

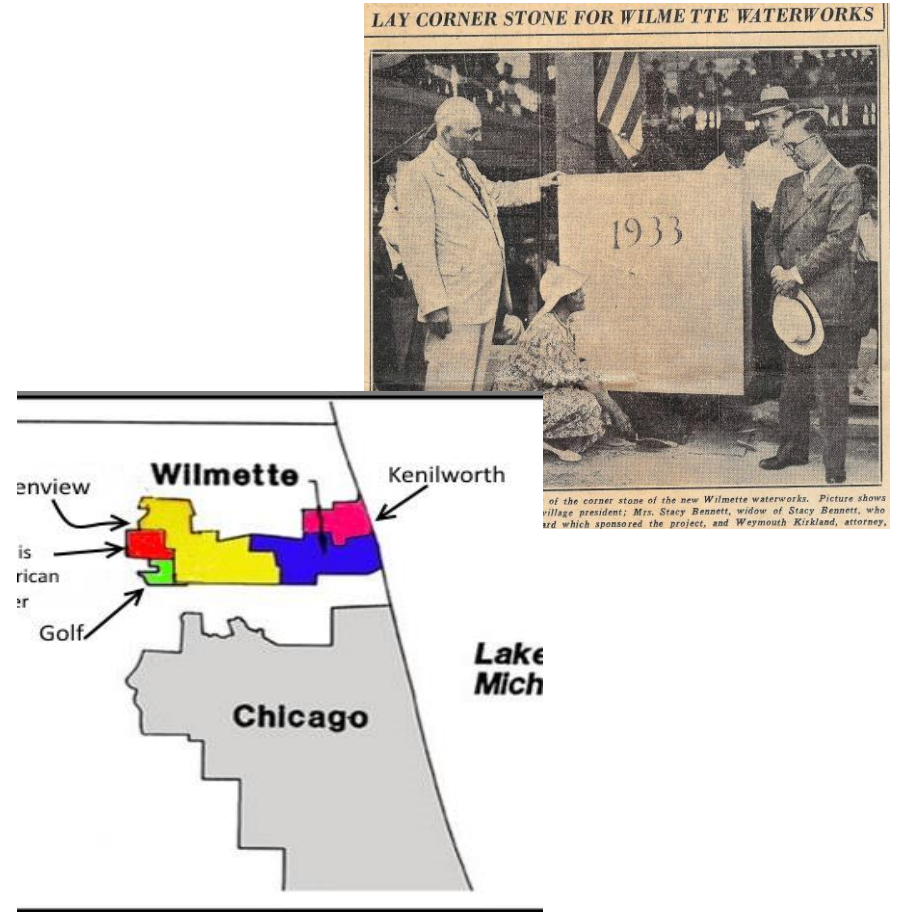
Presentation Overview

- Introduction
- Wilmette water quality overview
- Drinking water regulation overview
- Emerging water quality topics
 - Lead
 - Perfluoroalkyl and Polyfluoroalkyl substances (PFAS)



Introduction

- The Carbon P. Dubbs Water Plant was originally constructed in 1933
 - Expanded in 1956, 1971 and 2003
- Serve approximately 150,000 customers
 - Wilmette, Glenview, Kenilworth, Golf, IAW, and North Maine
 - 75% of production is for wholesale customers
- Current rated capacity 44 million gallons day (MGD)
- Average daily pumpage 14 MGD
- 100 miles of water mains
- Staff of 18 FT employees



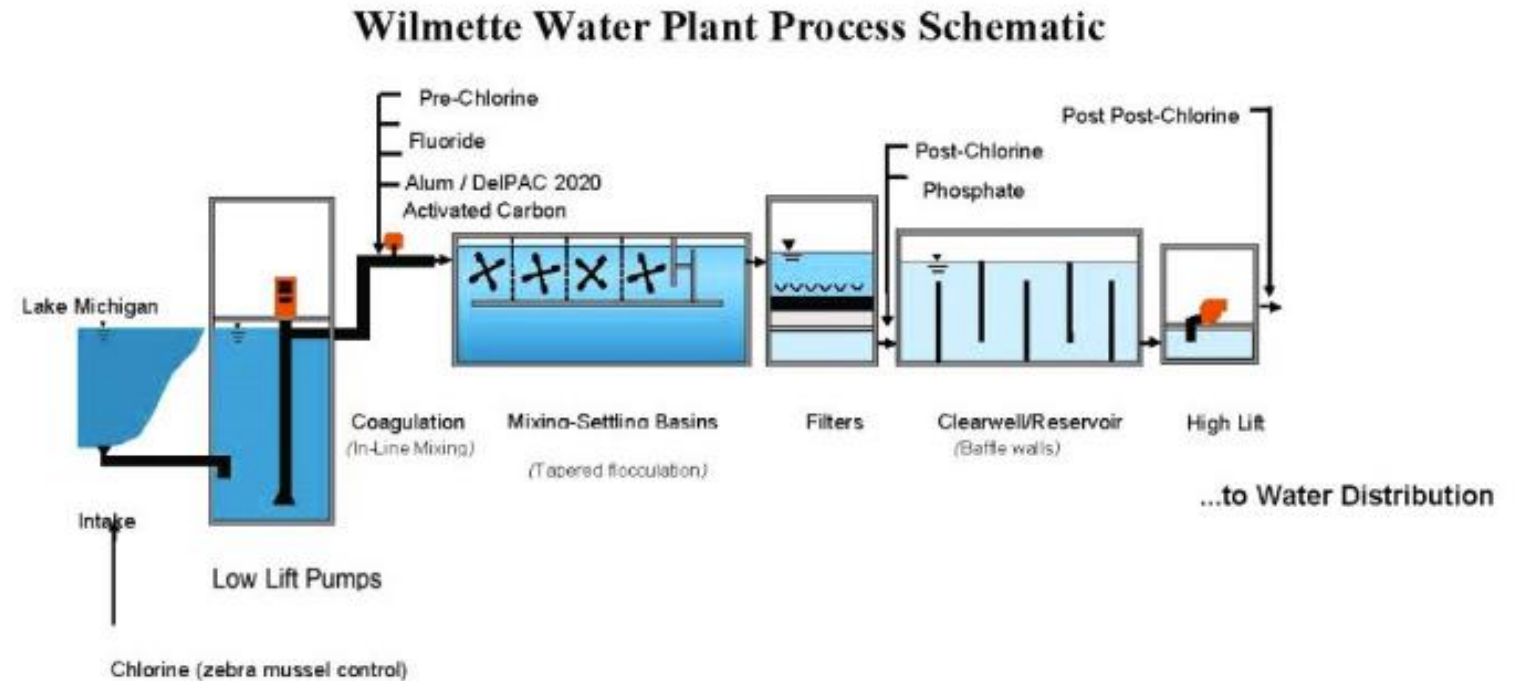
Wilmette Drinking Water Quality

- Commitment to providing a safe and reliable drinking water source
 - Uses a mixture of chemicals, settling basins, and filters to remove contaminants
 - Operators on duty 24 hours to monitor system
 - Illinois Department of Public Health (IDPH) certified laboratory



Wilmette Water Treatment Overview

- Pre-treatment
- Treatment:
 - Chemical
 - Physical
- Post treatment



Wilmette Drinking Water Quality

- Wilmette meets or exceeds all State and Federal regulations
 - Annual Water Quality Report (*available via website*)
 - Testing for over 120 contaminants, all within EPA water quality standards
- Wilmette is member in Partnership for Safe Water
 - Joint voluntary effort of drinking water organizations to provide water that surpasses federal standards
 - Wilmette has achieved the **President's Award**, the highest designation, through this partnership



Drinking Water Regulation Overview

Timeline of selected EPA regulations by year



Approach of Safe Drinking Water Act (SDWA)

Minimum national
standards

Established by the EPA

Enforced and
implemented by states

Water Regulations

Two types of drinking water standards:

- **Primary**
 - Health-based such as cancer
 - Legally enforceable via maximum contaminant levels (MCL)
- **Secondary**
 - Cosmetic or aesthetic based such as taste
 - Non-enforceable guideline

Additional regulations for the process of water treatment to ensure water quality

Emerging Water Quality Topics

LEAD INFORMATION

Lead is a toxic metal that is widespread in the environment and can be absorbed from a variety of sources (paint, food, soil, air and water)

- No lead in our source water, Lake Michigan
- No lead in water as it leaves Water Plant
- Primary lead exposure in water comes from:
 - Lead service lines
 - Galvanized pipes
 - Lead-tin solder joined copper pipes
 - Household faucets and fixtures (brass and bronze)

WILMETTE ACTIONS

Village has had a lead/corrosion control program in place for over 25 years

- Incorporates applying EPA recommended corrosion control treatment at the plant
- Periodic rounds of sampling and testing of lead levels to measure effectiveness
- Maintained compliance with this regulation since its inception



Lead Information

NEW REGULATORY REQUIREMENTS

Illinois

- Lead Service Line Replacement and Notification Act; effective January 2022
 - Final inventory of water service lines due April 2024
 - Develop replacement plan by April 2027
 - Dependent on total lines identified, Village will have to replace all lines by 2044 or 2047
 - No repairs or partial replacements allowed on lead lines

Federal

- Long Term Lead and Copper Rules Revisions; expected late 2022/early 2023
 - Focus on inventory, replacement and new trigger limits for lead

VILLAGE INITIATIVES

Service line identification

- Identified approximately 950 lead service lines at end of 2021
- Inventory survey mailed to residents in April 2022; positive response with over 500 to date

Testing options

- Information available for certified labs on website or call

Proactive replacement

- Replacements on Schiller and Beechwood in association with NSP



Polyfluoroalkyl substances (PFAS)

WHAT ARE THEY?

- PFAS are man-made chemicals used in industrial and consumer products since the 1950's
- Two primary types:
 - Perfluorooctanoic acid (PFOA)
 - Perfluorooctane sulfonate (PFOS)
- Used in non-stick cookware, water-repellant clothing, firefighting foam, and a variety of other products
- Scientists continue to research health effects of PFAS; some studies have shown PFAS associated with variety of health impacts; but no direct causality has been determined

VILLAGE TESTING

2014-15 - Unregulated contaminant study

- Results were all non-detects in each of 4 sampling events over 12 months

2021 IEPA testing

- Result determined that one PFAS was detected just above IEPA Health-based Guidance Level, 2.1 ppt
- Result is **well below** the USEPA Lifetime Health Advisory Level of 70 ppt
- Similar result to other communities along west shore of Lake Michigan at an average of 2 ppt
- Results available on website

PFAS Regulatory Outlook

Nationwide monitoring - ongoing

Establish a National Primary drinking water regulation - ~ fall 2023

Depending on the final toxicology assessment and final maximum contaminant levels (MCL), a change in treatment may be required

Questions?
