# KAUKAUNA WATER

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## AGENDA

- 1. Water System Study
- 2. Water System Current State
- 3. Main Filter Plant Alternatives
- 4. Treatment Options
- 5. Project Timeline & Community Engagement

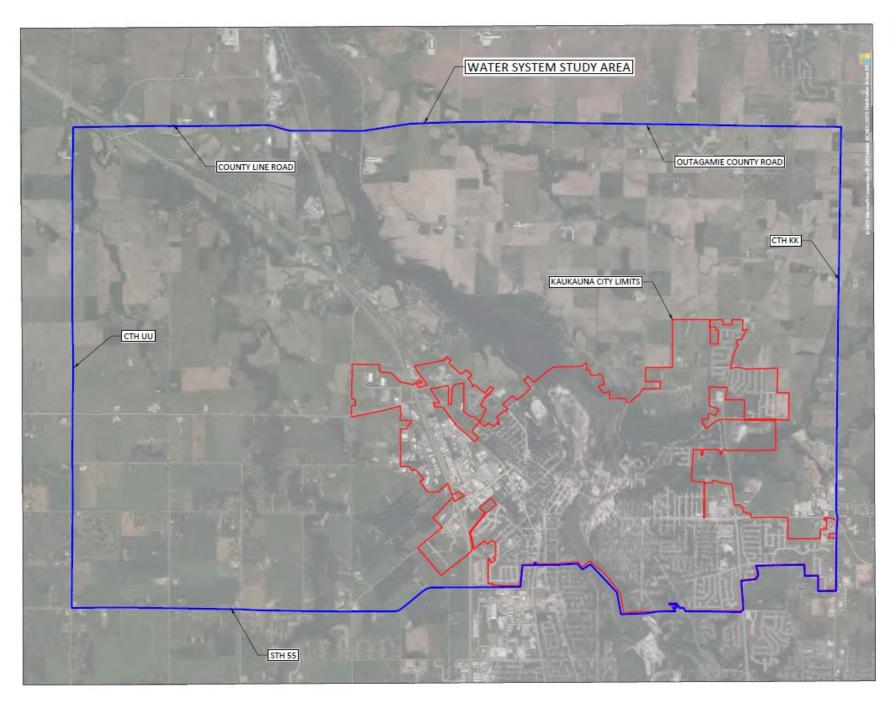
## WATER SYSTEM STUDY

## **STUDY OVERVIEW**

- Water system modeling for expansion and fire flows
- Evaluation of current water supply capacity and storage systems
- Evaluation of condition of existing water treatment plants\*
- Analysis of current and future water demand
- Analysis of Main Filter Plant alternatives\*

- Analysis of water treatment process, including options to reduce water hardness\*
- Water supply sources (groundwater and surface water)
- Asset management plan, including options for aging infrastructure

\*Additions to original scope of study



#### **KAUKAUNA UTILITIES**

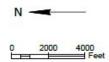


FIGURE 2: WATER STUDY LIMITS



## WATER SYSTEM – CURRENT STATE

## CURRENT TREATMENT METHOD

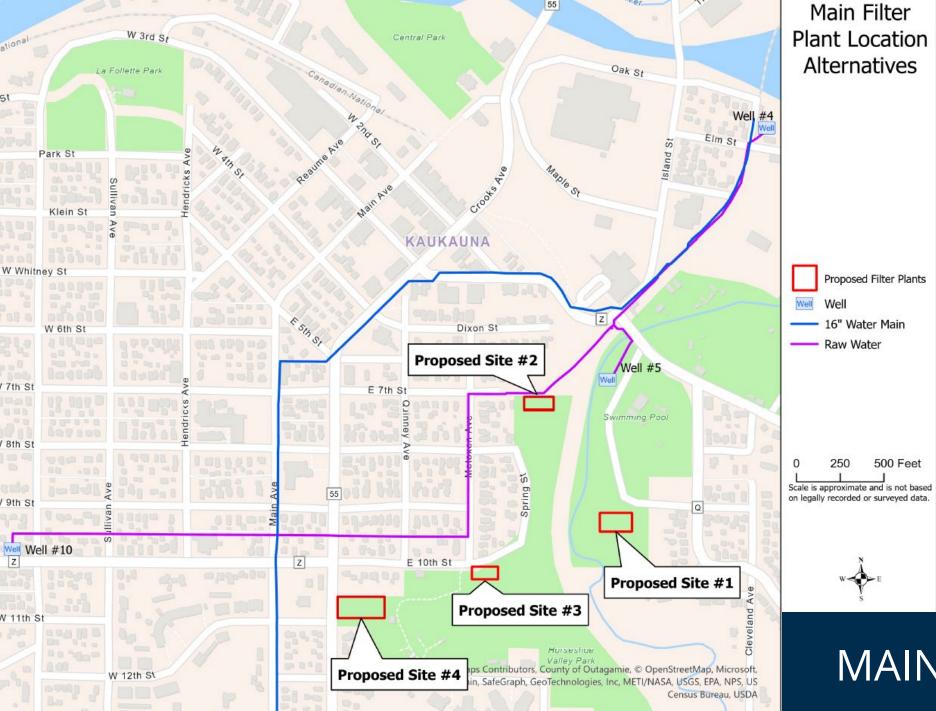
- HMO chemical addition (manganese sulfate and potassium permanganate) for radium removal
- Filtration for iron, manganese, and radionuclide removal
- Poly/Ortho 50/50 blend addition for corrosion control

- Sodium hypochlorite addition for disinfection
- No hardness removal currently. Customers still need to treat for hardness

## MAIN FILTER PLANT ALTERNATIVES

### MAIN FILTER PLANT ALTERNATIVES

- 1. No Changes React When Failure Occurs
- 2. Replace Iron Filter at Current Location
- 3. Rebuild Water Treatment Plant Building and Reservoirs at Current Locations
- 4. New Water Treatment Plant Building at New Location



### MAIN FILTER PLANT

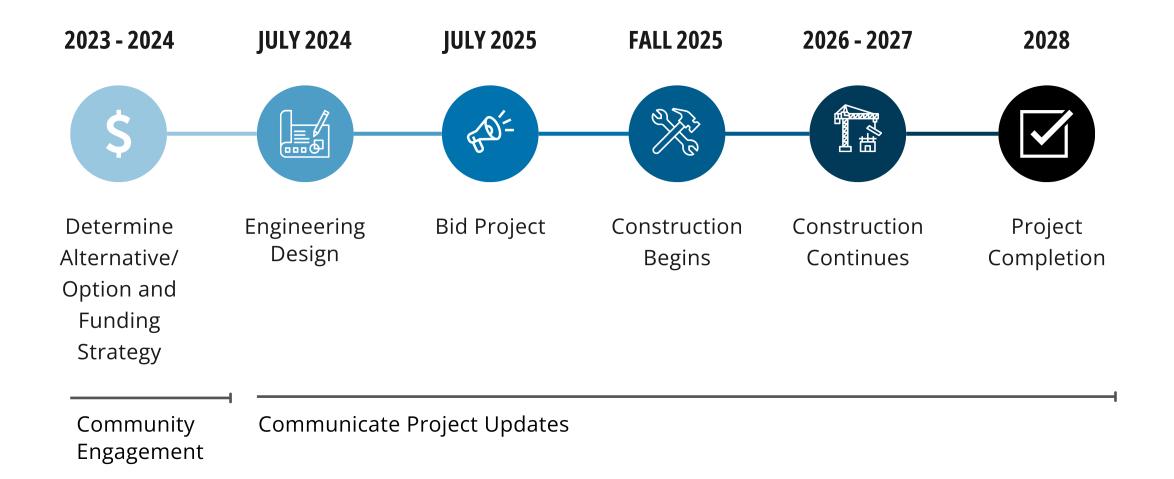
## TREATMENT OPTIONS

## **TREATMENT OPTIONS**

- 1. Iron Filter and Radium Filter Replacements Maintain Status Quo
- 2. Ion Exchange
- 3. Reverse Osmosis (RO) or Nanofiltration
- 4. Purchase Surface Water

# PROJECT TIMELINE & COMMUNITY ENGAGEMENT

### **POTENTIAL PROJECT TIMELINE**



## **COMMUNICATIONS TIMELINE**

#### November 2023

Publish initial press release, noting future community engagement opportunities to come

#### Early 2024

Press release informing customers of engagement opportunities - launch customer feedback survey and announce open house date

### Spring 2024

Host open house at Main Filter Plant to engage with community members and answer questions/concerns

#### June 2024

Potential commission decision on Main Filter Plant Alternatives and Treatment Options

# THANK YOU!

