

# KAUKAUNA WATER

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December 19<sup>th</sup>, 2023

1/8/2024



# 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

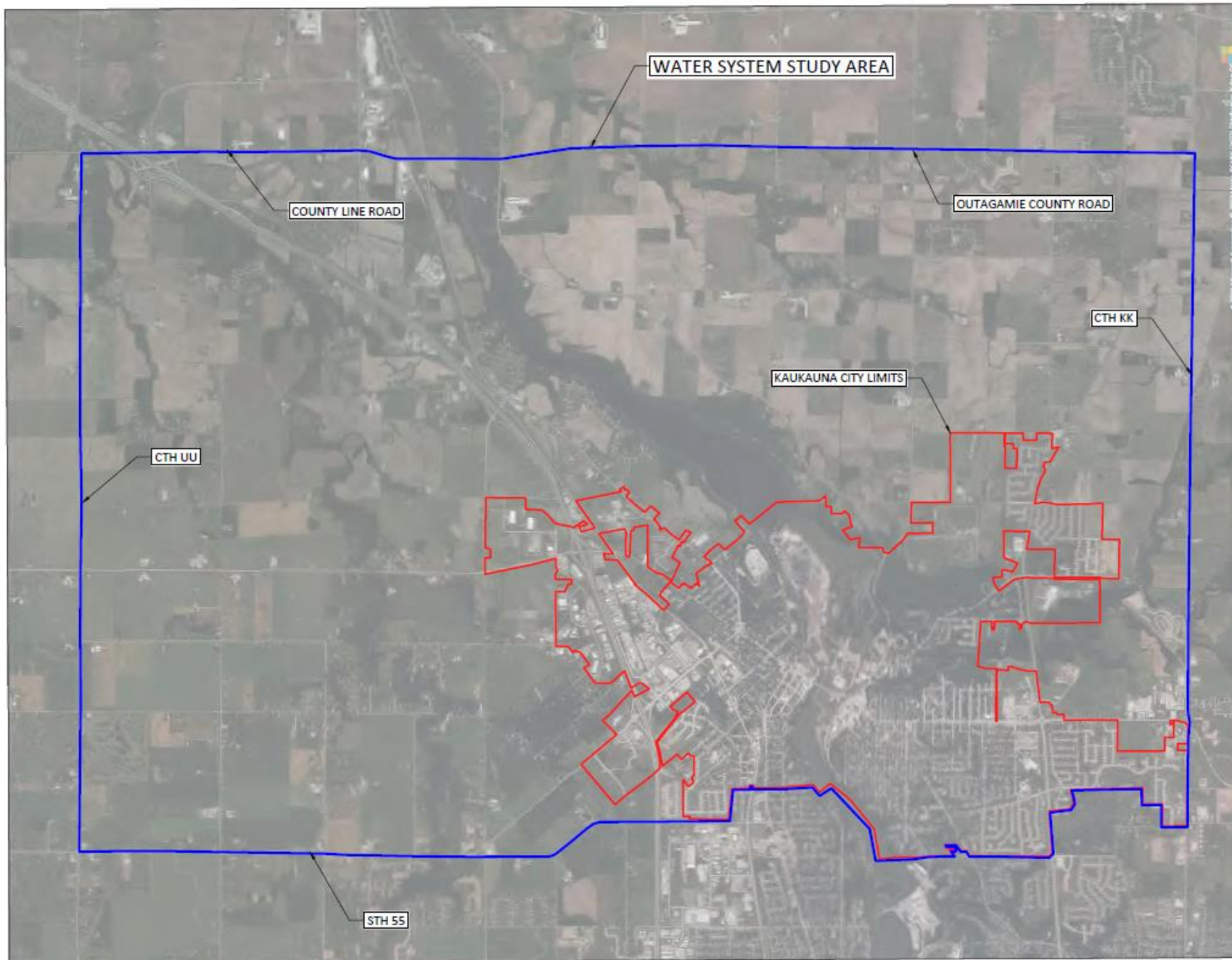


FIGURE 2:  
WATER STUDY LIMITS

# WATER SYSTEM – CURRENT STATE

# CURRENT TREATMENT METHOD

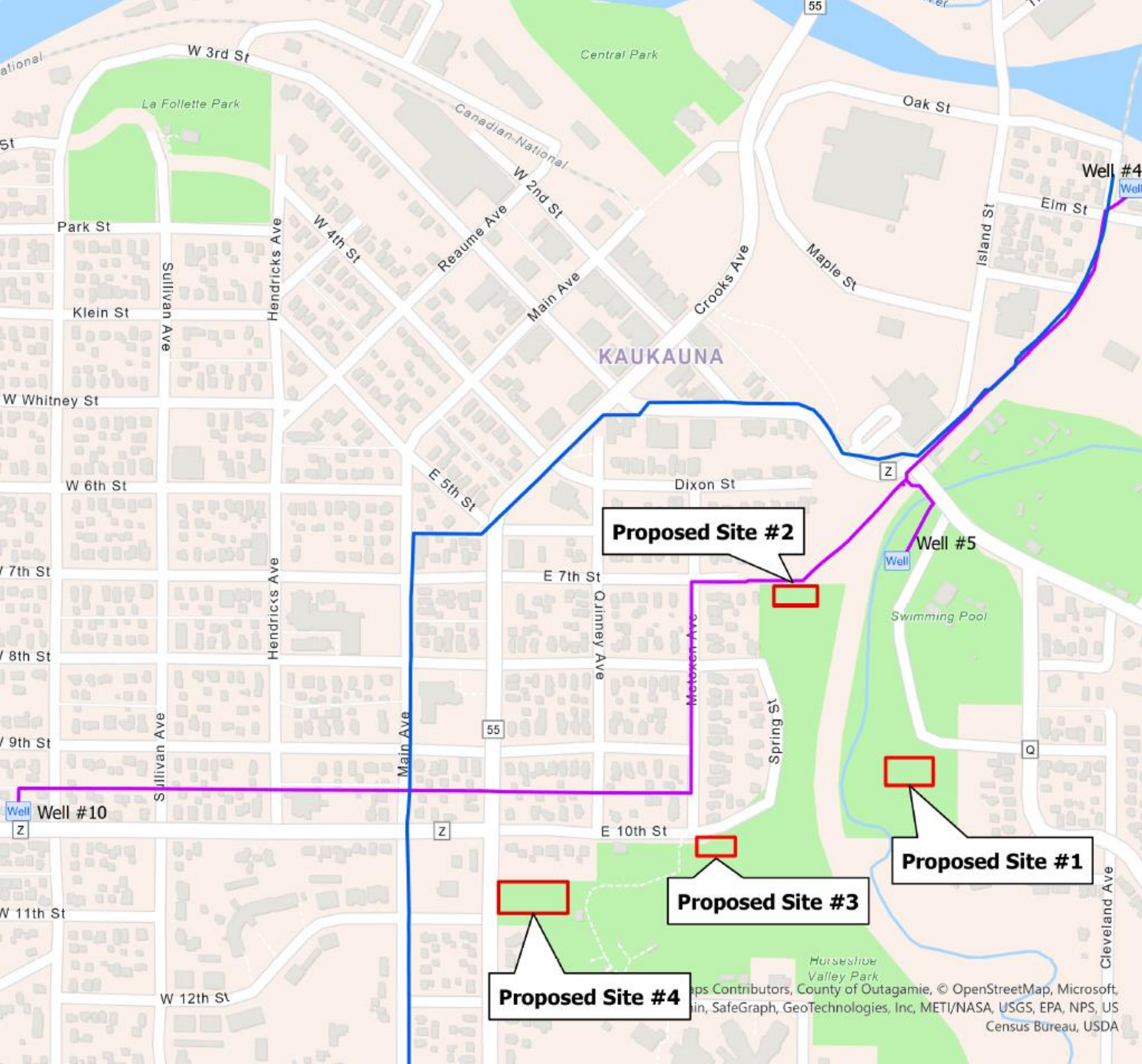
- HMO chemical addition (manganese sulfate and potassium permanganate) for radium removal
- Filtration for iron, manganese, and radionuclide removal
- Poly/Ortho 50/50 blend addition for corrosion control
- Sodium hypochlorite addition for disinfection
- **No hardness removal currently.** Customers still 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 Location Alternatives

- Proposed Filter Plants
- Well
- 16" Water Main
- Raw Water

0 250 500 Feet  
Scale is approximate and is not based on legally recorded or surveyed data.



# MAIN FILTER PLANT

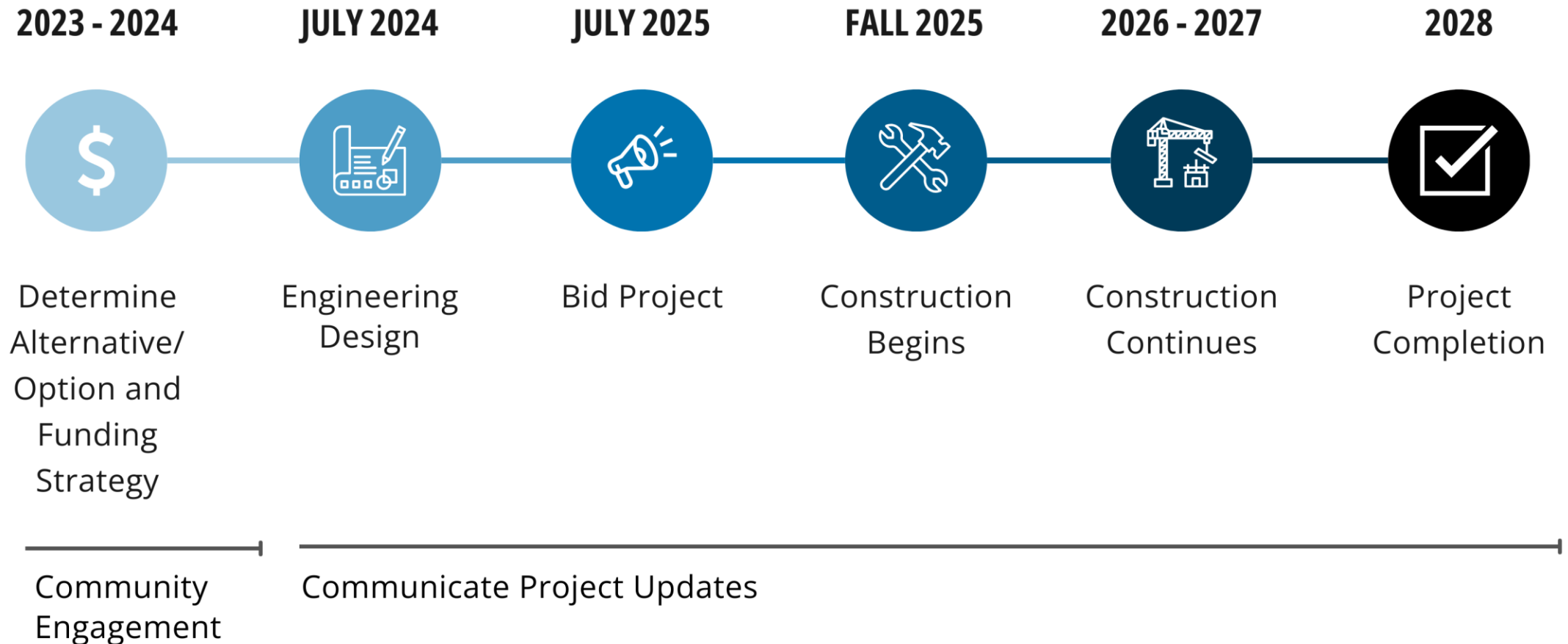
# TREATMENT OPTIONS

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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!

