



# Business Item 2024-268

Authorization to Hold a Public Hearing on the Draft Facility Plan for the Crow River Water Resource Recovery Facility (WRRF) and Interceptor



Environment Committee: October 22, 2024

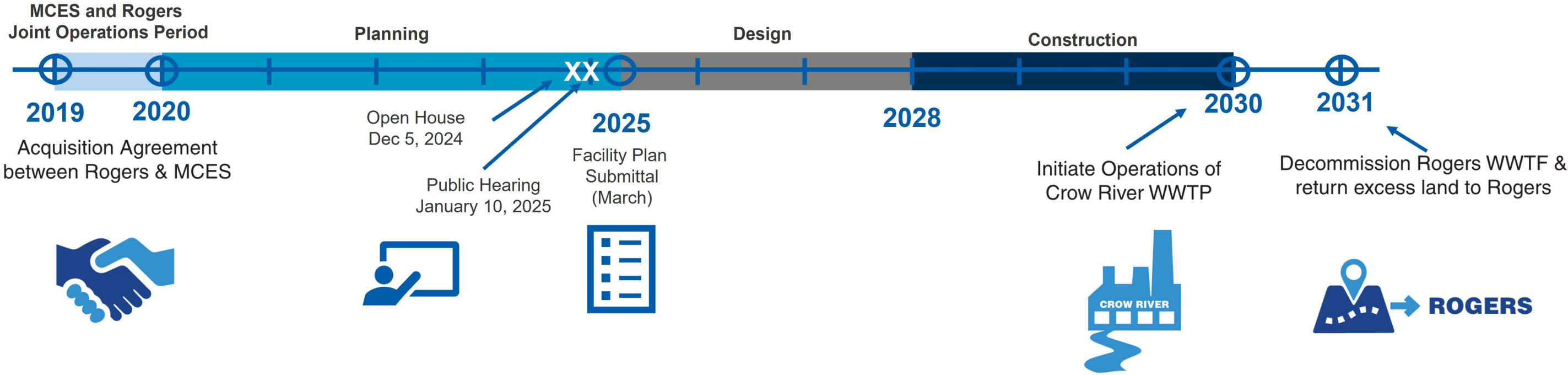
Mark Lundgren / Ryan Piner



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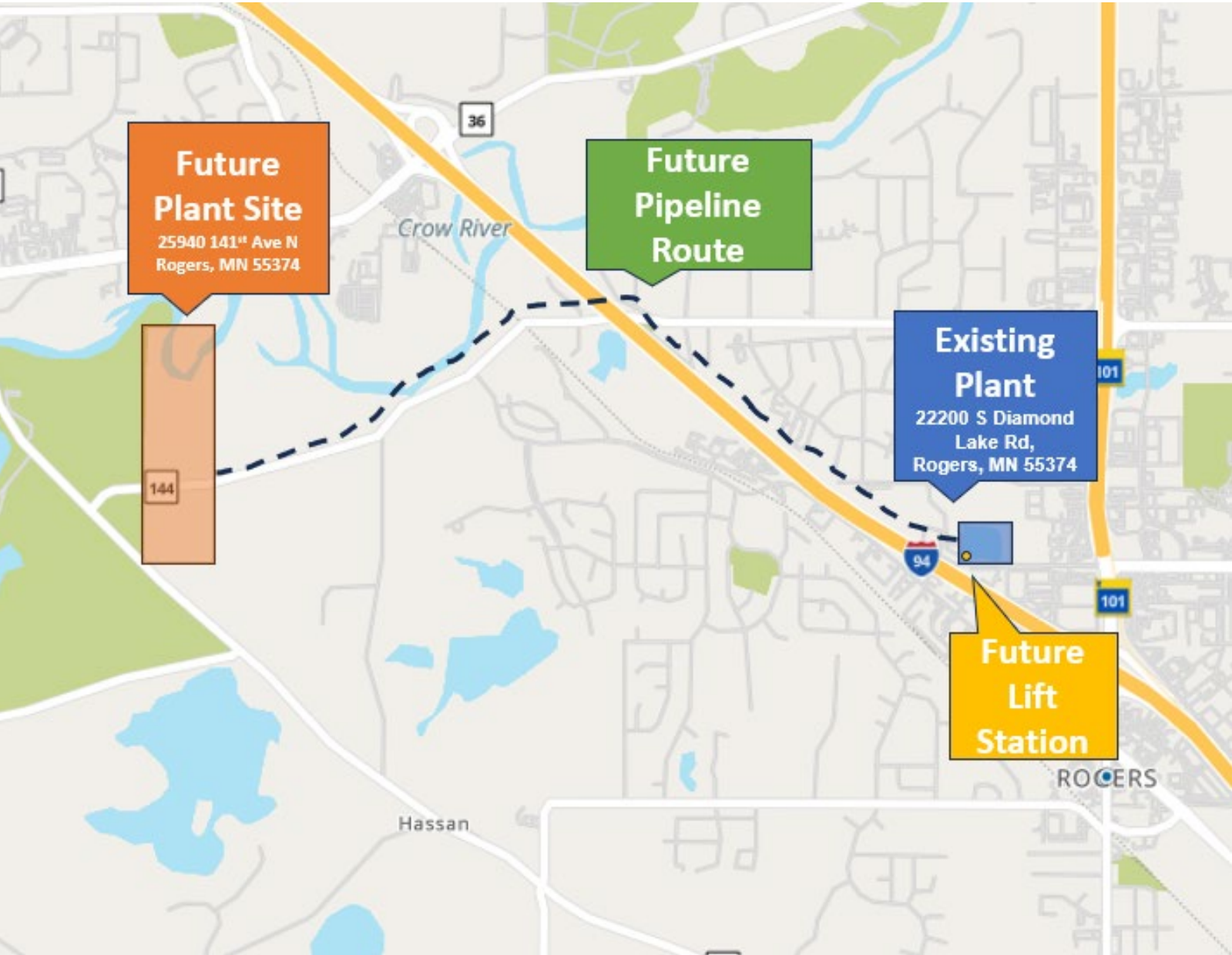
# Crow River WRRF Background



# Crow River Water Resources Recovery Facility (WRRF) Rationale

- *The Crow River WRRF will serve long term growth in the northwestern region and offload flow in the existing elm creek interceptor, making capacity available for growth in the Metropolitan WRRF service area.*
- *New pipelines to Crow River WRRF will allow region to develop in the most efficient and economical way*
- *The Crow River WRRF will continue to protect the Crow River.*

# Council Property for WRRF



# Archeological Studies and Tribal Outreach

## Research and Outreach efforts

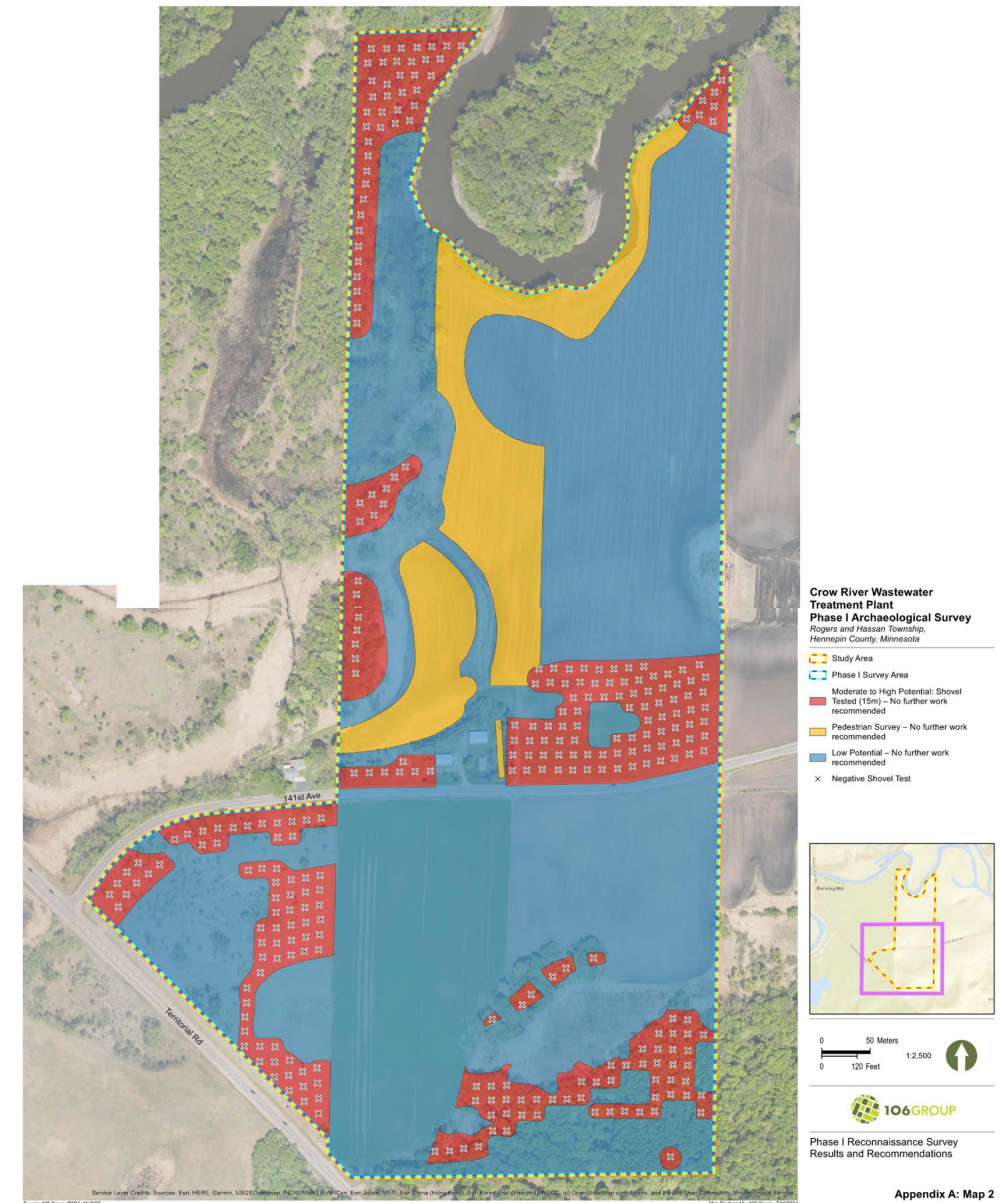
### Archaeological Literature Review And Assessment

- Completed May 2023
- 11 tribes, MIAC, SHPO notified June 2023
- Received comment of interest from Cheyanne St. John, THPO at Lower Sioux Indian Community

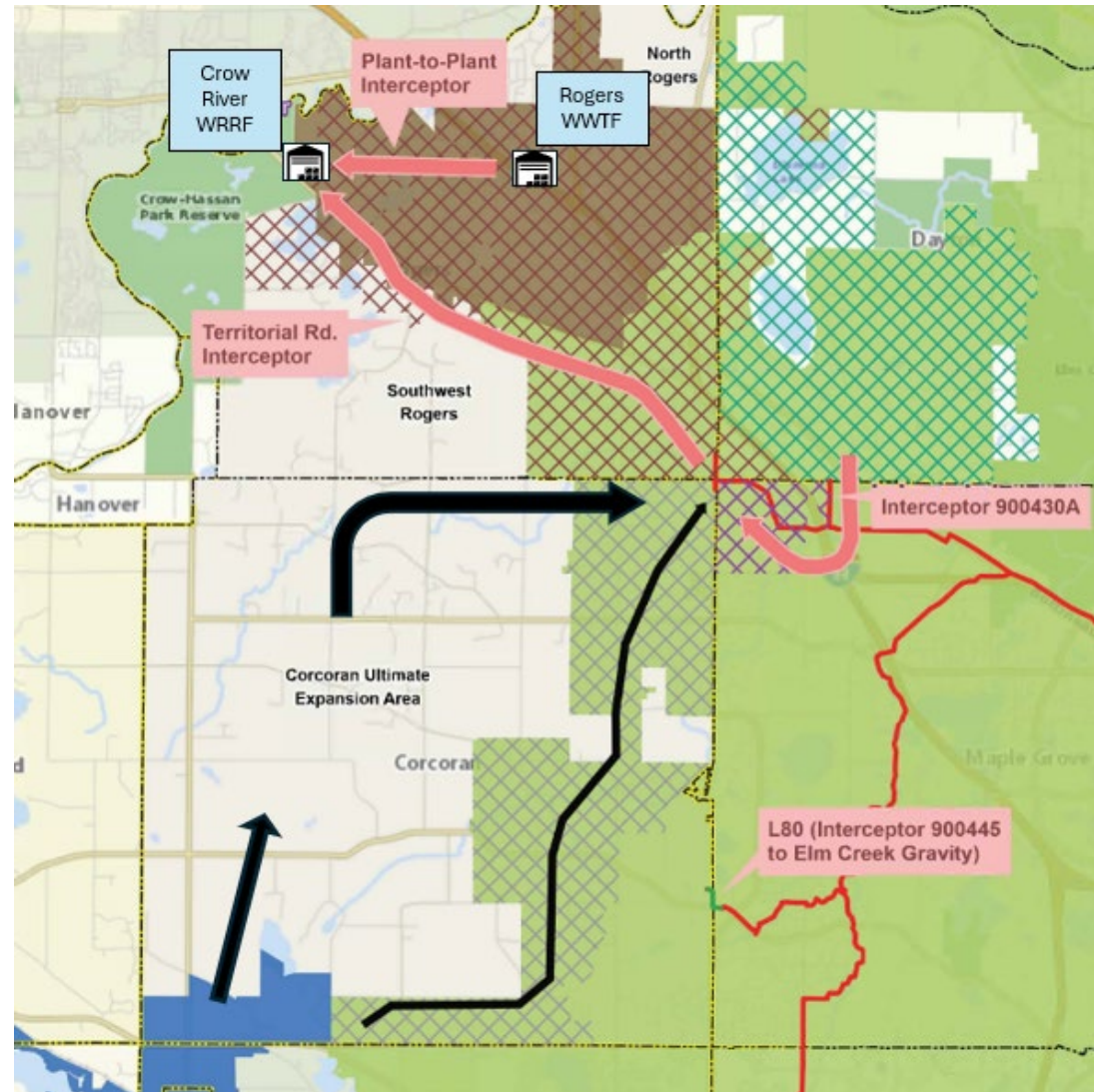
### Phase 1 Archeological Survey

- No archeological materials observed, no new archaeological sites identified
- Complete July 2024
- 11 tribes, MIAC, SHPO notified June 2023
- No additional Tribal comments received

Formal 106 Process initiated with MPCA



# Crow River WRRF Long Term Service Area



## MCES Interceptors

— Gravity

— Forcemain

## 2040 Long Term Wastewater Service Area

■ Metro

■ Blue Lake

■ Rogers

## Sanitary Flow Areas (Option 3a1)

⊗ Rogers 2040 Sewer Service Districts (2040 Comp Plan)

⊗ Flow from Corcoran

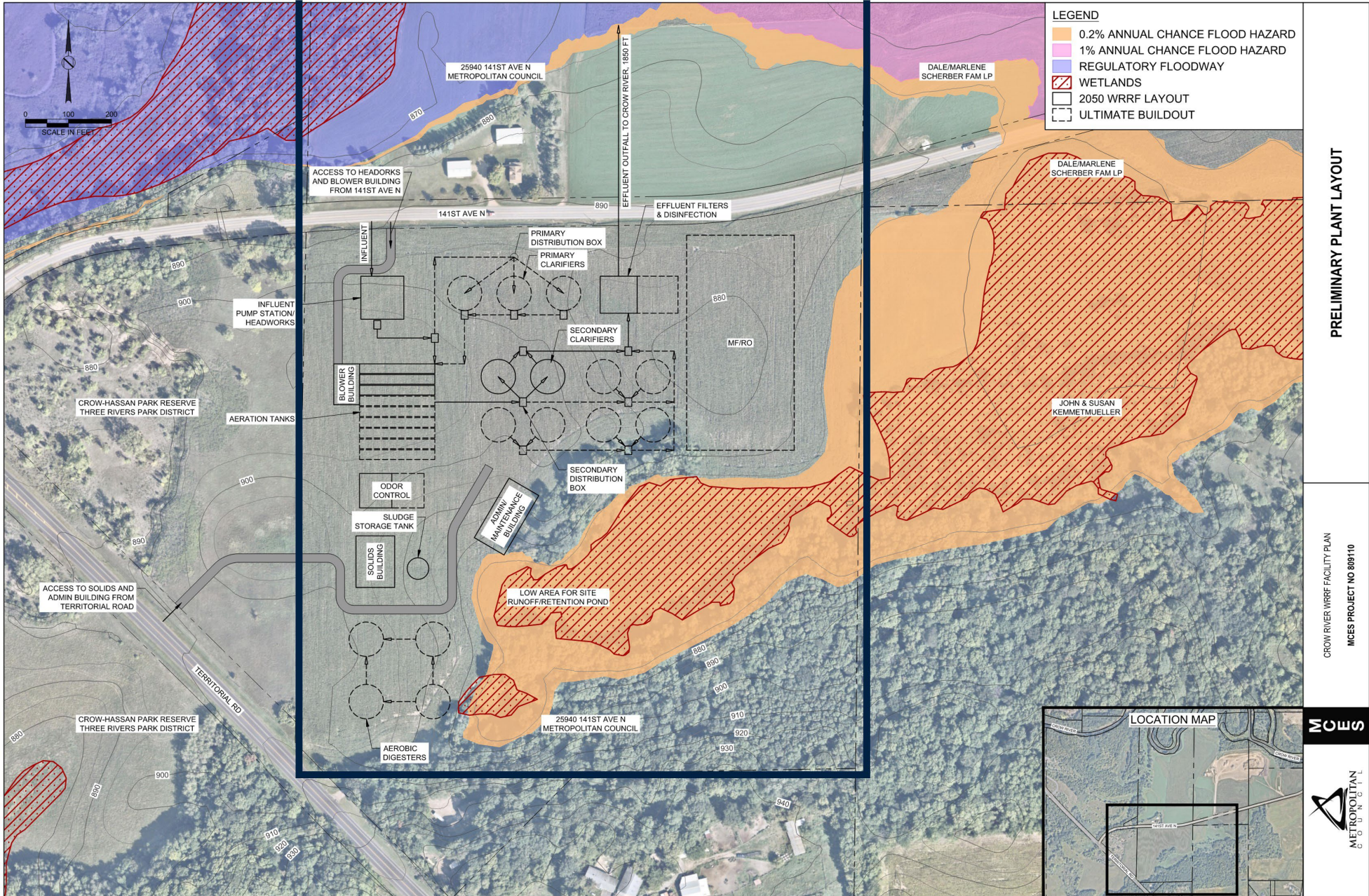
⊗ Flow from Dayton

⊗ Flow from Maple Grove

## Average Daily Service Area Flow

- Initial Service Area
  - 3 MGD
- Ultimate Service Area
  - 16.5 MGD

# Preliminary WRRF Site Layout





# Sustainability Features

## Buildings, Benchmarks, and Beyond (B3) Sustainable Buildings 2030 (SB2030)

- Energy and carbon efficient processes and methods
  - High eff blowers
  - BAS
  - LED lighting
- Decarbonized HVAC systems and effluent heat recovery
  - Air source and water source heat pumps
- Tier 4 generator for Xcel's load deferment program
- MCES Sustainable Landscape Guidelines implementation
- Natural resources management plan
- Stormwater best management practices (BMPs)
  - Grass swales
  - Infiltration basins
  - Rain gardens
  - Porous pavement/permeable pavers

## Wastewater Reuse Opportunities

- In-plant:
  - Flushing toilets
  - Landscaping irrigation
  - Make-up water, washdown water
  - Dust abatement
  - Concrete mixing
  - Priming drain traps
  - Fire protection
- Off-site:
  - Landscaping for commercial and residential areas
  - Agricultural (irrigation)
  - Parks
  - Golf courses
  - Local industries
  - Evaporative cooling locations
  - Data centers, manufacturing

# Opinion of Probable Cost

| DESCRIPTION                                 | VALUE         |
|---|---------------|
| Influent Forcemain/Gravity Effluent Outfall | \$27.7M       |
| Headworks/Influent Pumping Building         | \$25.7M       |
| Administration/Maintenance Building         | \$7.1M        |
| Liquids Treatment                           | \$56.2M       |
| Solids Handling                             | \$11.0M       |
| UV Disinfection                             | \$6.0M        |
| Odor Control                                | \$1.3M        |
| Site Electrical (20%)                       | \$27.0M       |
| <b>TOTAL</b>                                | <b>\$162M</b> |

# Proposed Action

That the Metropolitan Council authorizes a Public Hearing on January 10, 2025 to gather input on the draft Facility Plan for the Crow River Water Resource Recovery Facility (WRRF) and Interceptor.



# Questions

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