

GREENWAY VISIONING

– 3.16.2021 CLFLWD Board Workshop



Introduction

Opportunities & Benefits

Intricacies

Draft Products

Board Questions

Next Steps

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INTRODUCTION

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Greg Grasko, PE
Water Resource Engineer

Role: Oversight



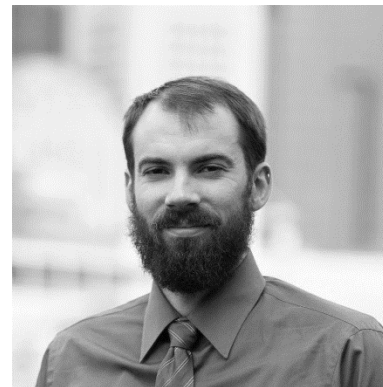
Sarah Grandstrand
GIS Manager

Role: GIS



Kevin Biehn, RLA
Landscape Architect +
Stream Specialist

Role: Project Manager



Mike Talbot, CFM
Technologist + Water
Resource Engineer

Role: Modeling & GIS

Sunrise River Water Quality and Flowage Project

SHALLOW POND RESTORATION
The Shallow Pond component is to increase the stream interaction with the floodplain to allow for improved settling of particulate phosphorus (and other sediments) and uptake of dissolved phosphorus by the wetland vegetation rather than their transport within the channel. This project design attempts to restore the outflow elevation through construction of a series of four grade control structures (rock check) to raise the water elevation of Shallow Pond restoring the function of the historic shallow pond.

WYOMING WETLAND ENHANCEMENT
The purpose of the Wyoming Wetland Enhancement component is to provide water quality improvements for flows from the Helms Lake area of Wyoming and to provide additional treatment for drainage from urbanized portions of the City of Forest Lake.

BIKBY PARK URBAN QUALITY IMPROVEMENT / WETLAND
This component will provide treatment for phosphorus through wetland enhancement and filtration. State grant funding was awarded for this project that will remove over 200 lbs. of phosphorus annually.

FOREST LAKE URBAN RESTORATION
Much of the urbanized portion of the City of Forest Lake developed prior to full consideration for stormwater treatment. This project component provides direct treatment of stormwater where space is available.

CARP MANAGEMENT
Carp presence was confirmed throughout the system. An overall carp management plan is recommended to determine current population and evaluate the need for barriers and removal.

KEY
 - - - - - Park Road
 - - - - - Road
 - - - - - Stream
 - - - - - Lake
 - - - - - Aquatic Wetland Area
 - - - - - Wetland
 - - - - - Urban Watershed
 - - - - - Wetland Restoration
 www.ciffwd.org

Prepared by:
Emmons & Olivier Resources, Inc.
for the Comfort Lake-Forest Lake Watershed District

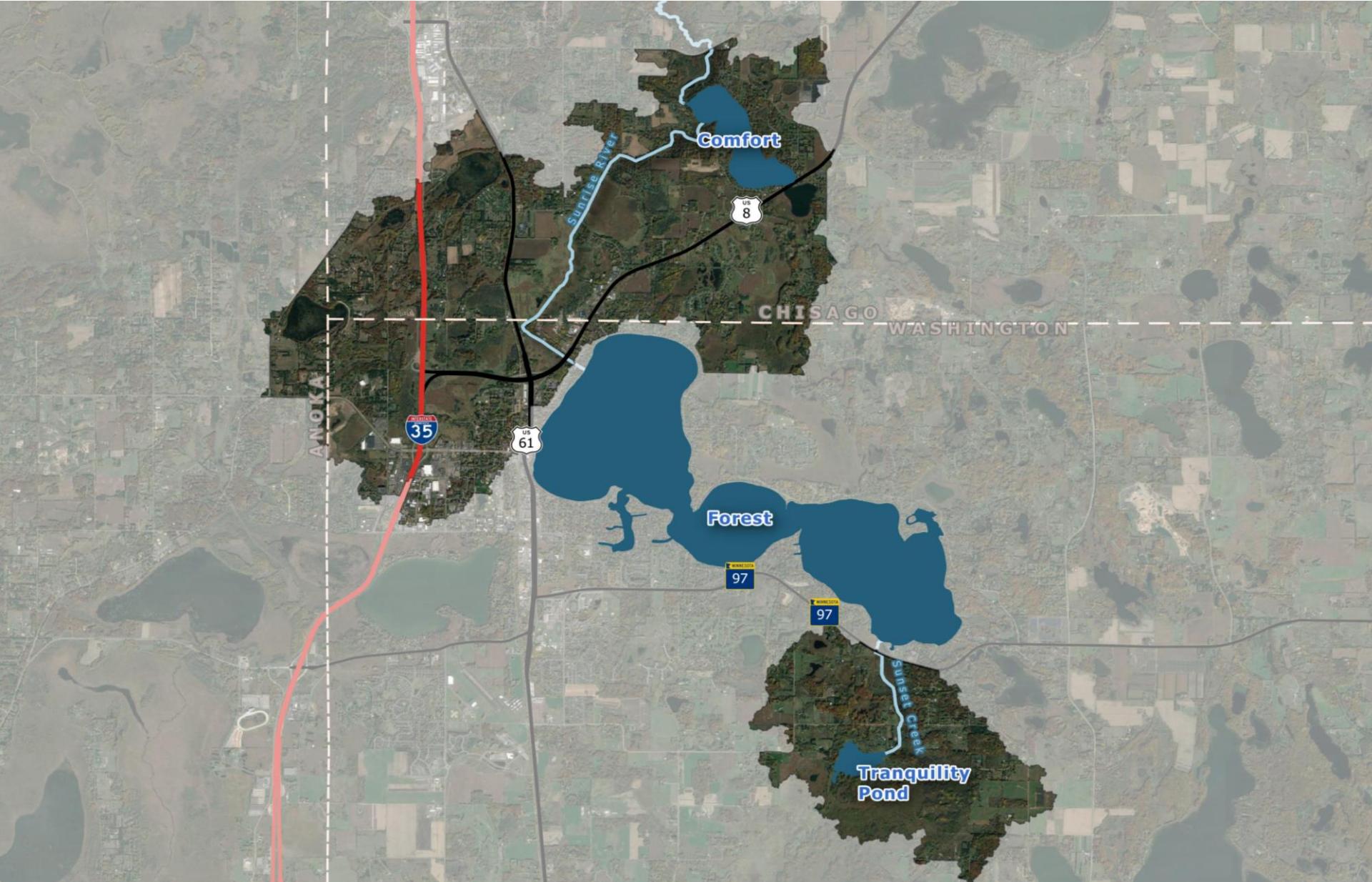
Engineer's Report: Sunrise River Water Quality & Flowage Project



April 18, 2012



introduction



9.24.2020 SCOPE APPROVAL




1. Data collection & Preliminary Corridor Design
- 2. Visioning Workshop #1**
3. Further Refinement of JD-6 Greenway Concepts
4. Map Updates and Visual Renderings of Corridor
5. Visioning Workshop #2
6. Outline Next Steps & Outside Funding Research
7. Interim Findings Report



introduction

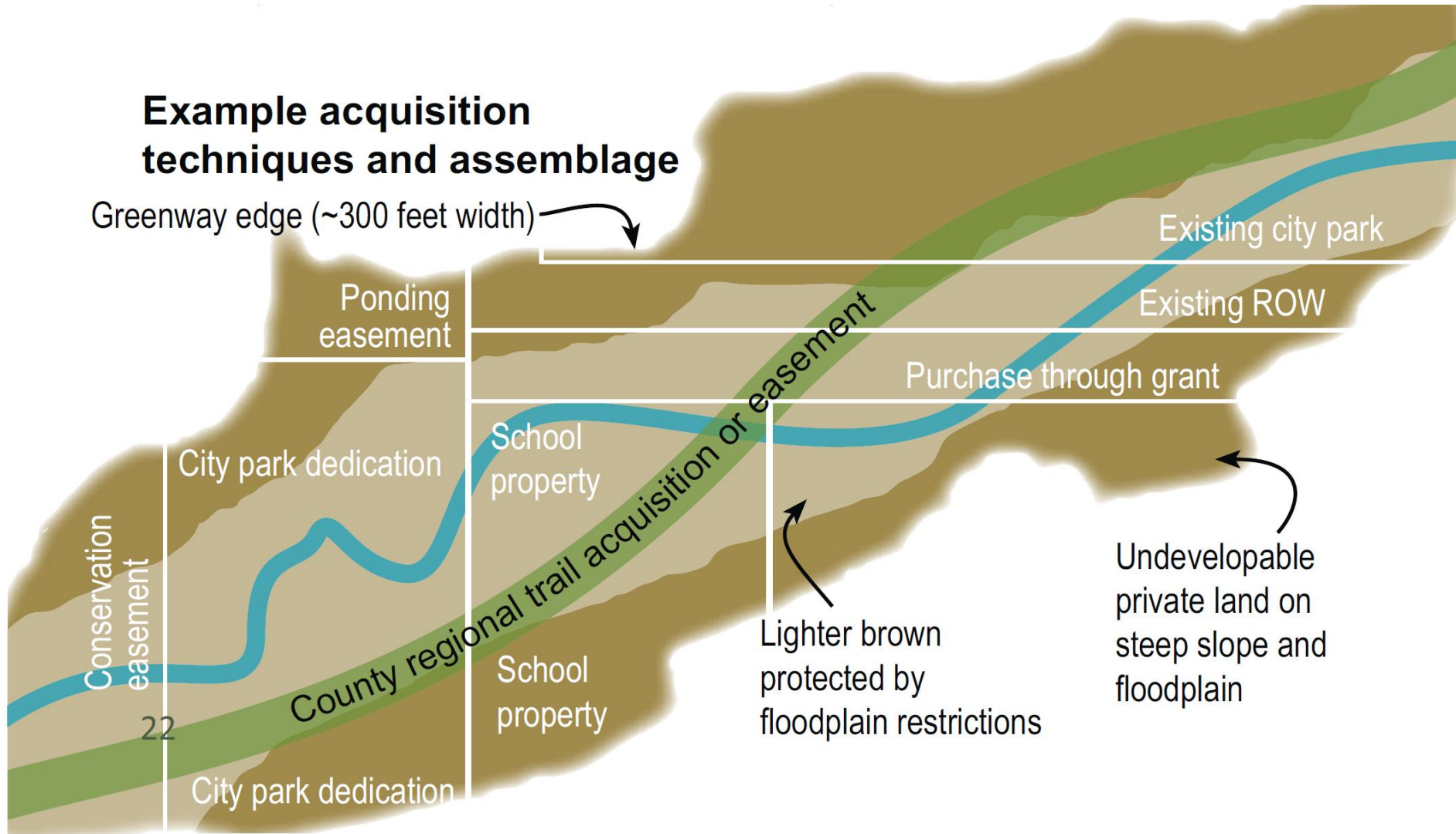


QUESTIONS TO CONSIDER:

1. Does the Board want to continue Greenway Planning?
2. Is there support (individual or collective) for the following greenway components?
 -  Conservation (*Flora and Fauna*)
 -  Projects (*Water Quality, Quantity & Habitat*)
 -  Recreation (*Access and Accessibility*)
3. Should connections outside of District be fostered (e.g. Carlos Avery) via District planning?
4. Is there interest in a goal setting session to better determine interest/support?
5. What would the Board like to see in subsequent workshops?
6. What does the Board want to see before the next workshop?

Example acquisition techniques and assemblage

Greenway edge (~300 feet width)



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OPPORTUNITIES & BENEFITS

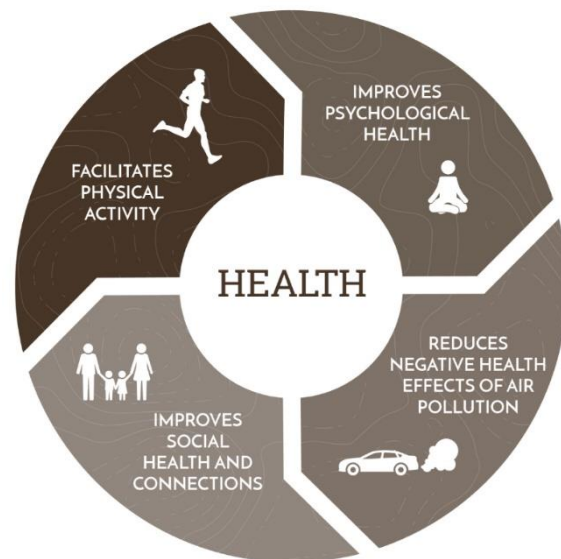
Intricacies

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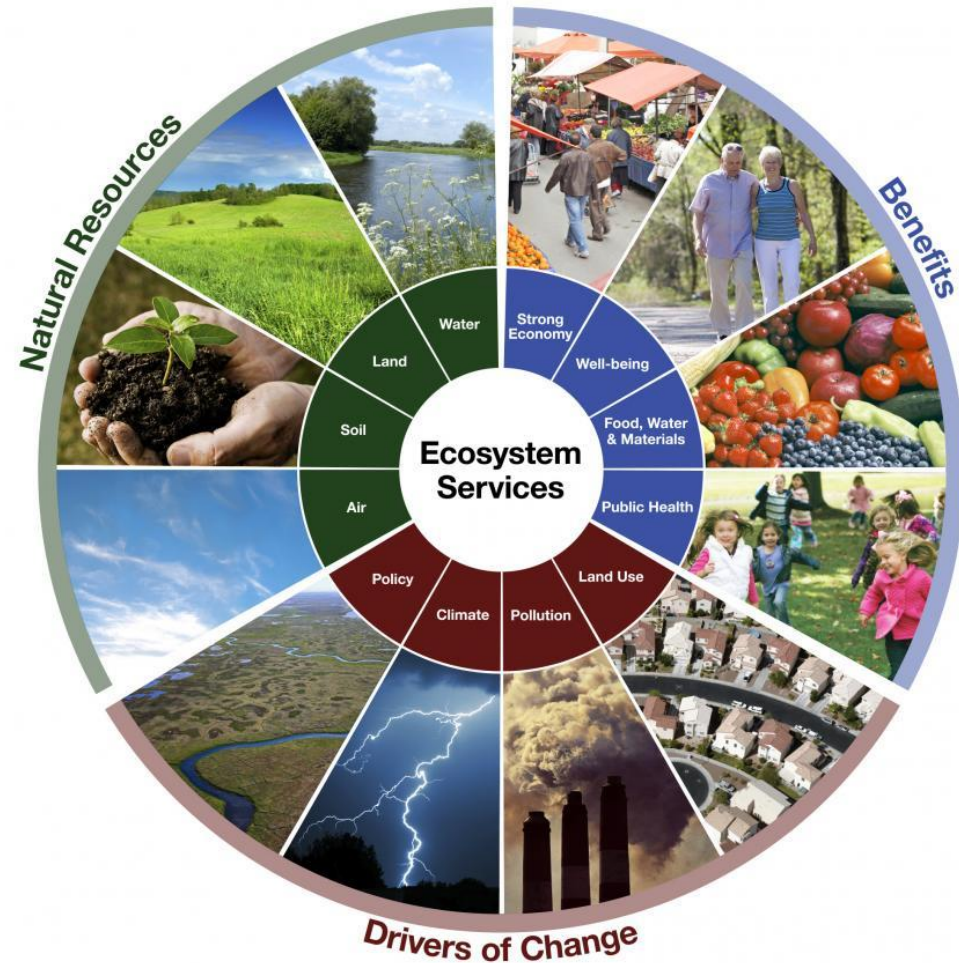
Next Steps

opportunities + benefits



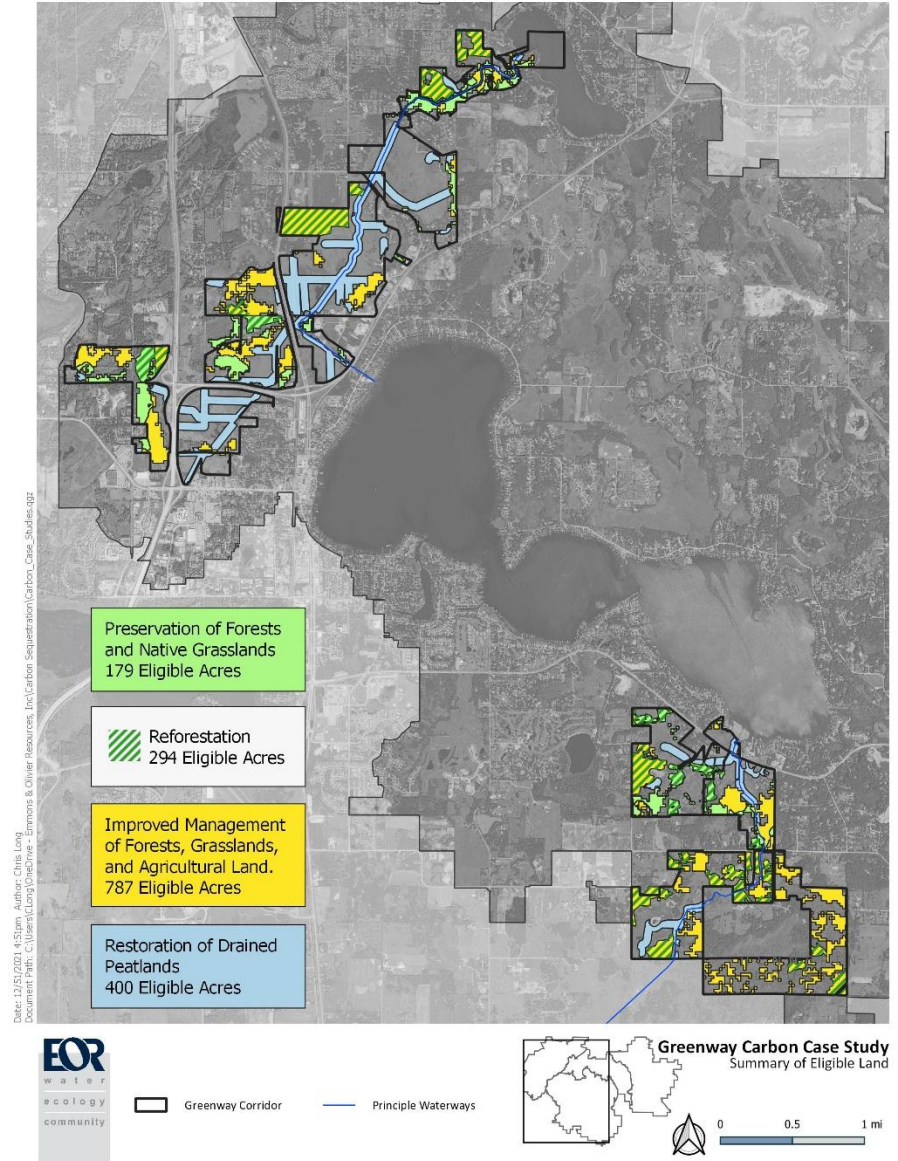
ECOSYSTEM SERVICES

- Financial valuations to communicate cost/benefit
- Mature & emerging markets



ECOSYSTEM MARKETS

- Carbon sequestration
- Nutrient Trading
- Wetland banking
- Stream banking



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Opportunities & Benefits

INTRICACIES

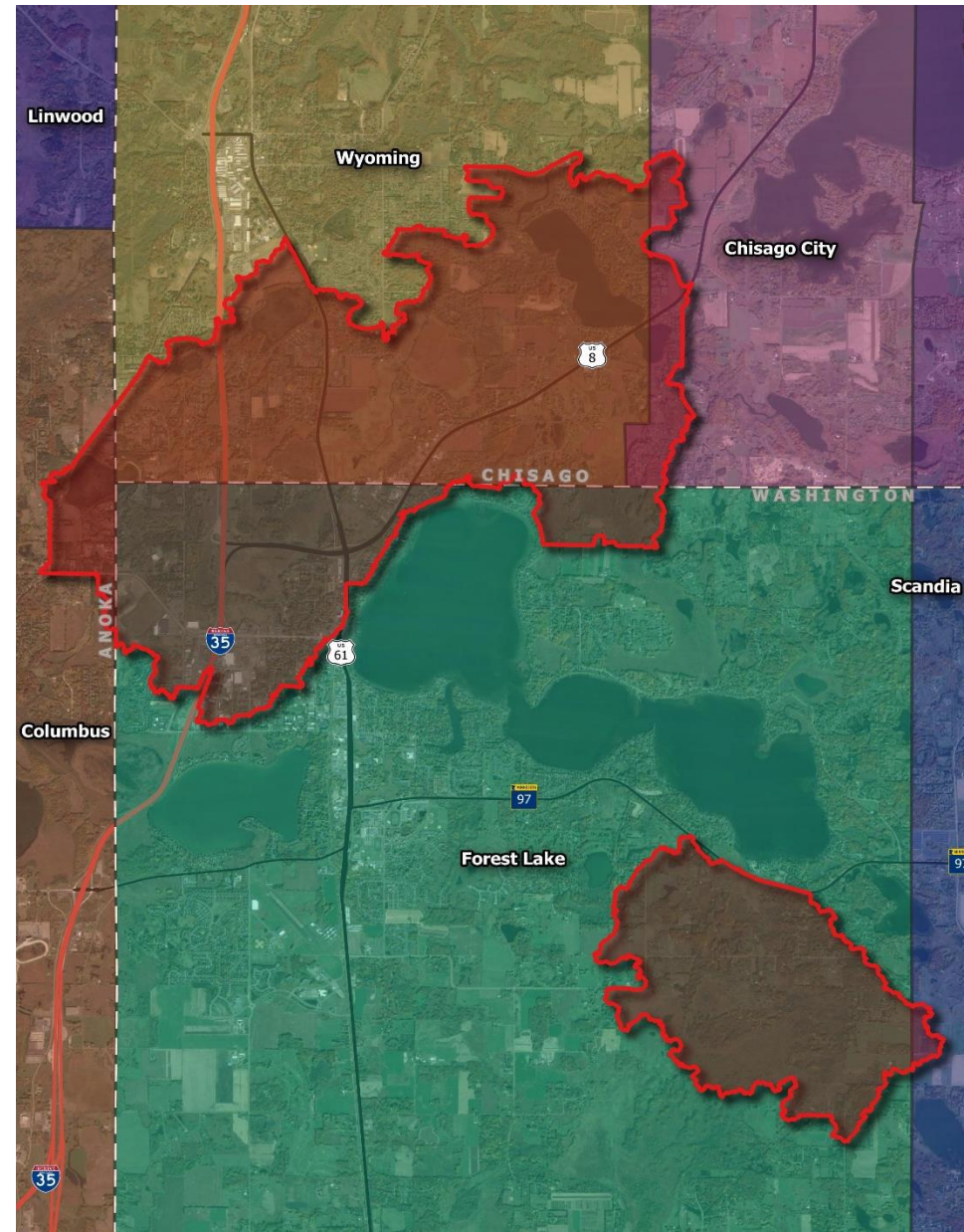
Draft Products

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Next Steps

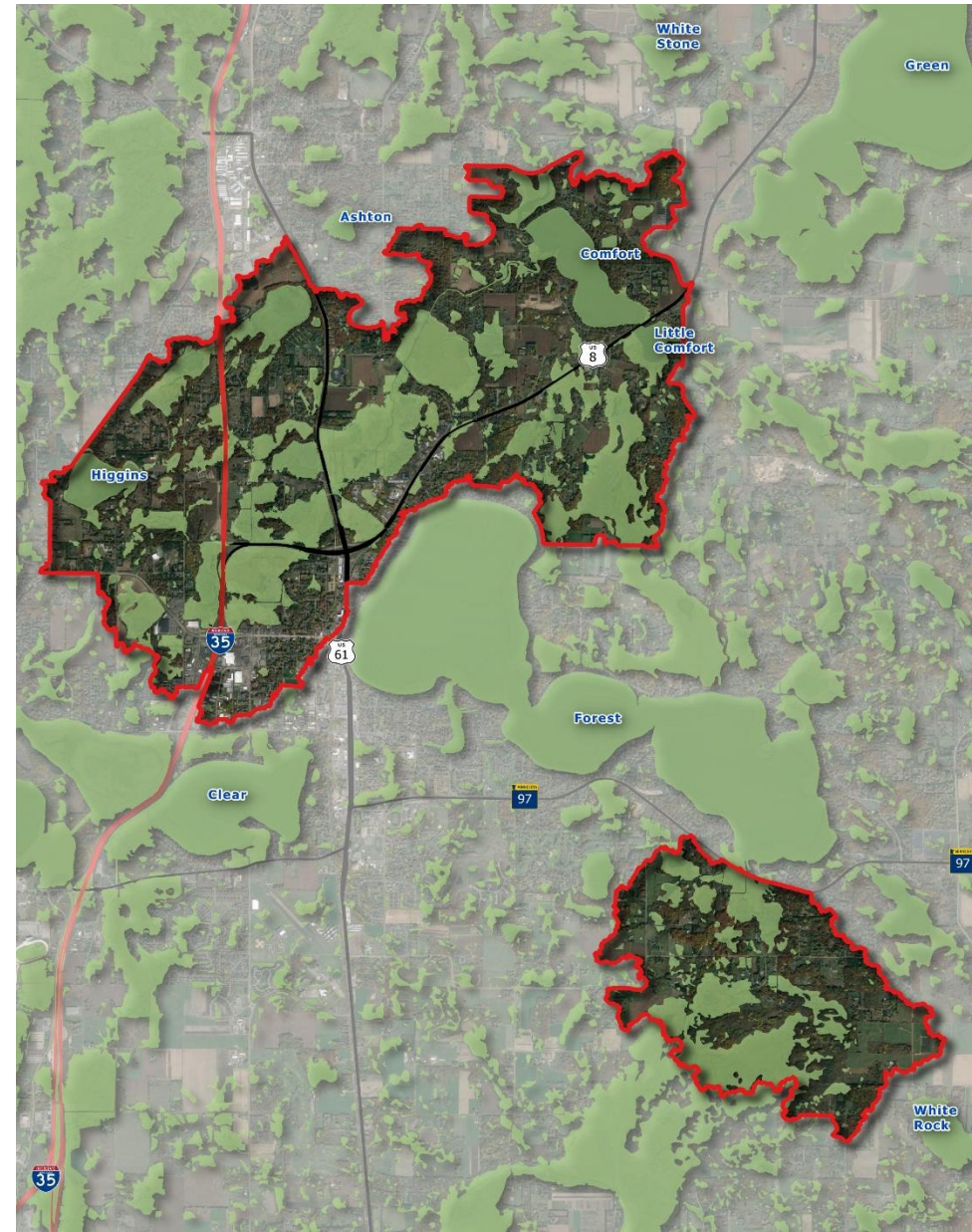
MULTI-JURISDICTIONAL

- Inter-governmental coordination
- Lack of regional governance



REGIONAL CHALLENGE

- % of wetlands
- Degree of property subdivision
- Artificial drainage and development of historic floodplain



ACQUISITION & ASSEMBLY

- Resistance to removing property from tax role
- Landowner resistance
- Multi-decade timeline with Board/Staff turnover & changing priorities



MASTER PLANNING PROCESS

Jan 2021

Jun 2022



Discovery

Visioning

Planning

Action

- *Benchmarking*
- *Inventory*

- *Partnership strategy*
- *Stakeholder meetings*
- *Inventory*

- *Roles & partnerships*
- *Programing*
- *Facilities*
- *O&M*
- *Finance & budget*

- *Prioritize objectives*
- *Finalize plan*
- *Adopt plan*

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DRAFT PRODUCTS

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CONSERVATION

Biological Preservation & Enhancement



PROJECTS

Water Quality & Flood Reduction CIP



RECREATION

ACCESS AND INTERCONNECTIVITY



WHY THREE SEPARATE PRODUCTS?

- Don't yet know District goals/aspirations
- Appetite for greenway continuity and/or strategic acquisition for CIP
- Easier to understand and make decisions at this stage
- Can bring 2 or all 3 together at later stage

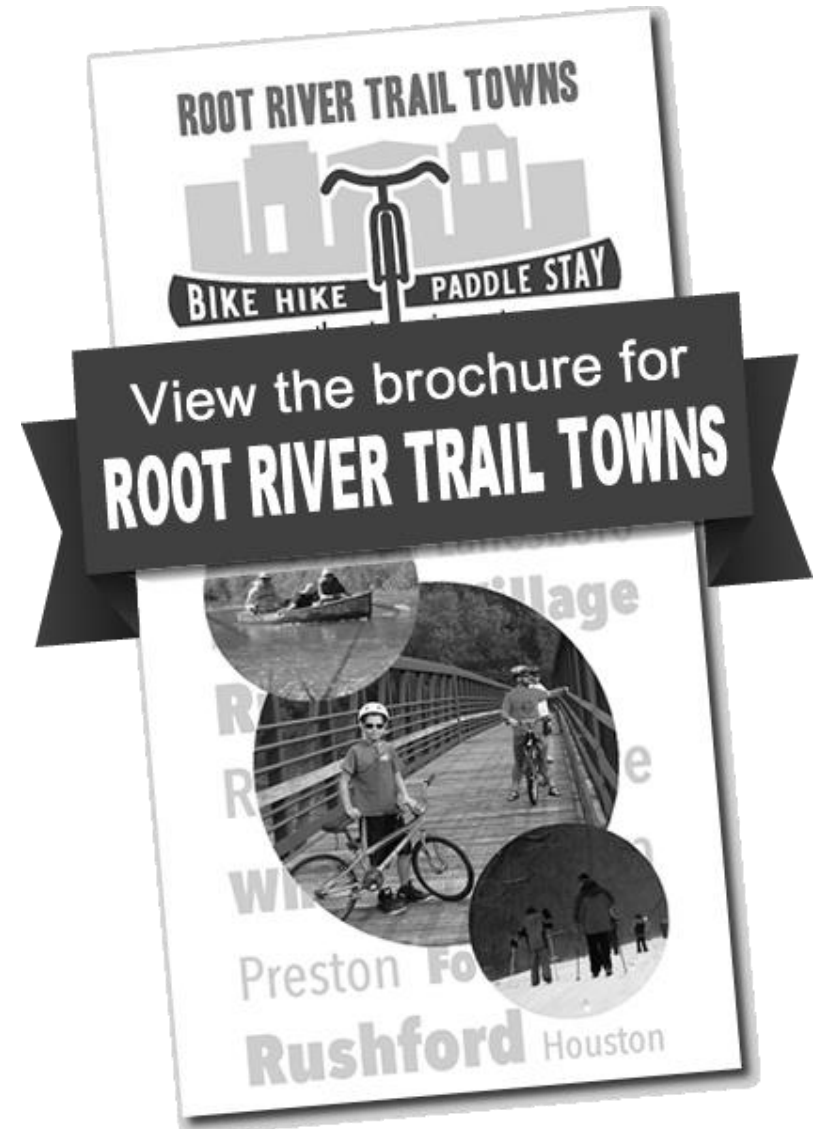


WHAT HAS BEEN INITIATED

- Identification & prioritization of parcels
- Total number of parcels and acreage

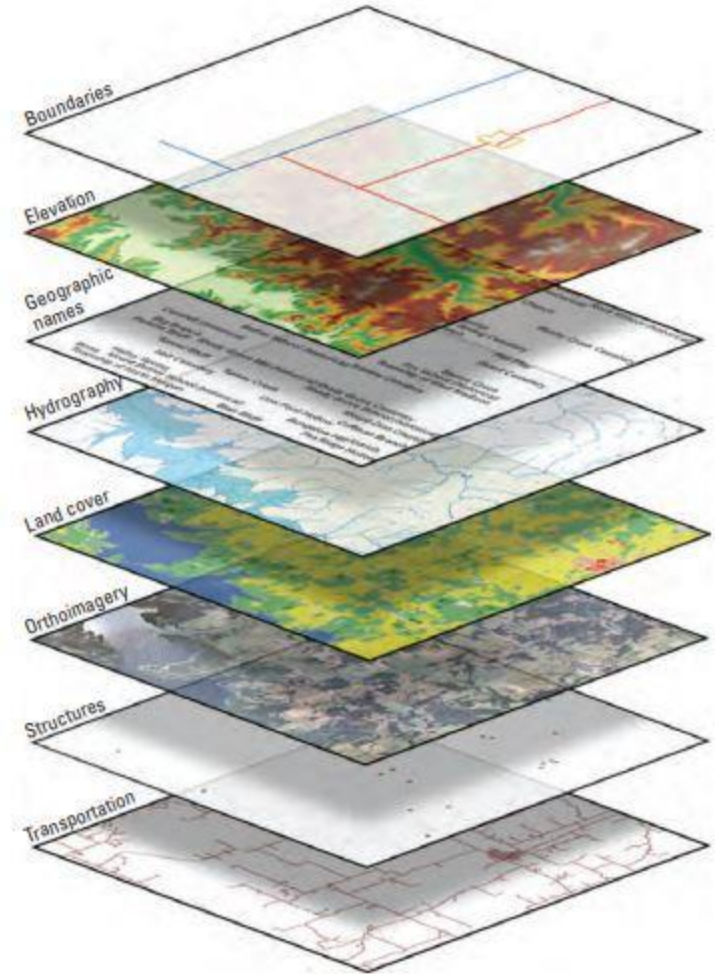
WHAT HAS NOT YET BEEN STARTED

- Full parcel – subdivision not determined
- Combined weighting
- Estimate of acquisition cost



GIS PRODUCT

- Reproducible
- Dynamic product – prioritization will update with acquisition and new data
- Adjacency & proximity
- Each parcel given a mean value – most to least important acquisition
- Data can be hosted on the web



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DRAFT PRODUCTS

- **Conservation**
- Projects
- Recreation

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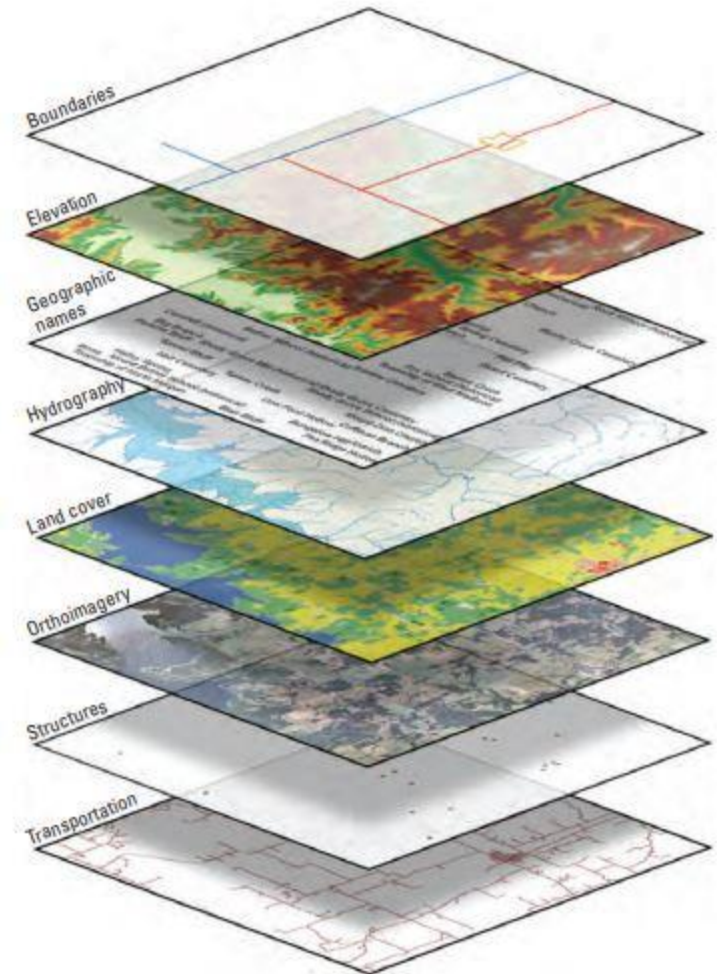


ADJACENCY + PROXIMITY

- Public parcel
- Conservation easements
- Groundwater dependent native plant communities
- Native, high-quality plant communities
- Rare Species

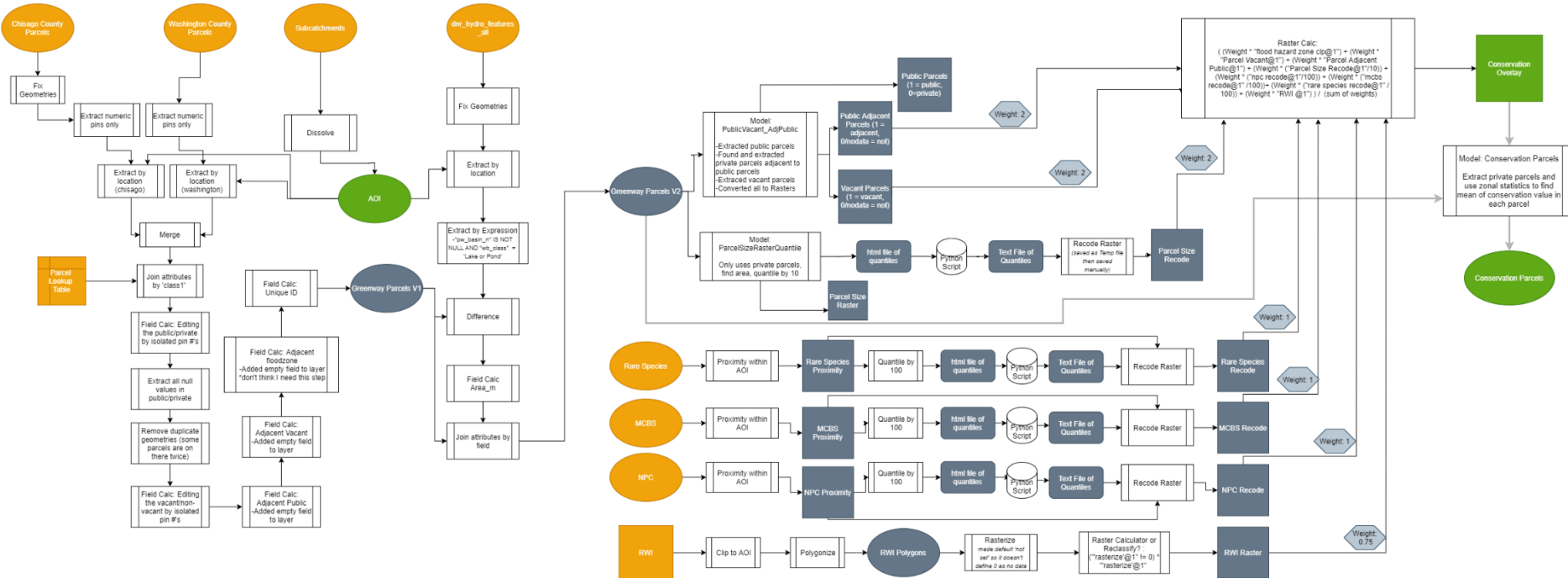
PARCEL CHARACTERISTICS

- Size
- Wetland restoration potential





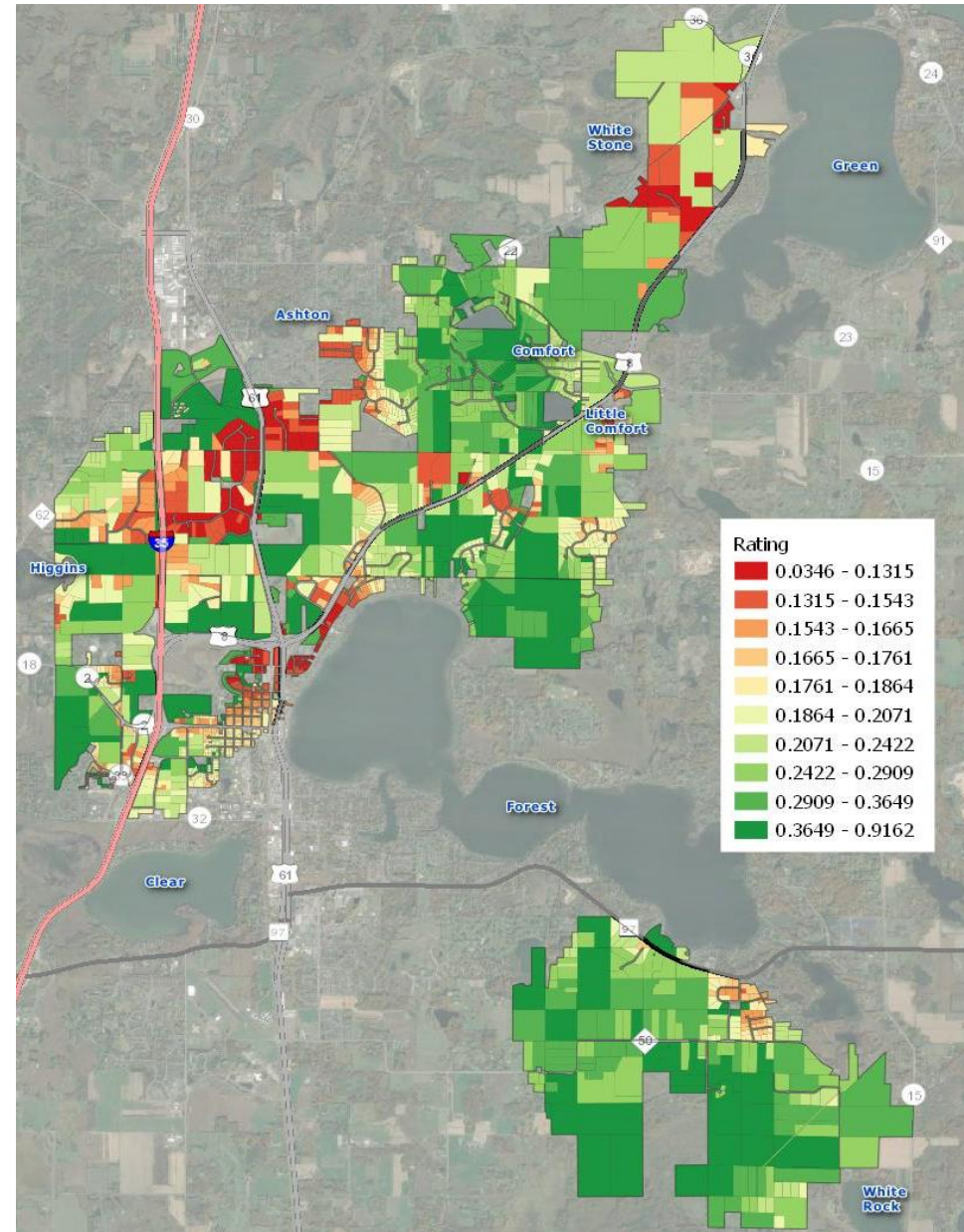
Model: ParcelJoin
 -Removes parcels associated to tax, exempt, Lines and RWI's
 -Joins lookup table for classification of public vs private and vacant vs non-vacant
 -Creates our AOI





CONSERVATION PRIORITIZATION

- Most to least important acquisition
- Tier 1 – 350 acres



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- Conservation
- **Projects**
- Recreation

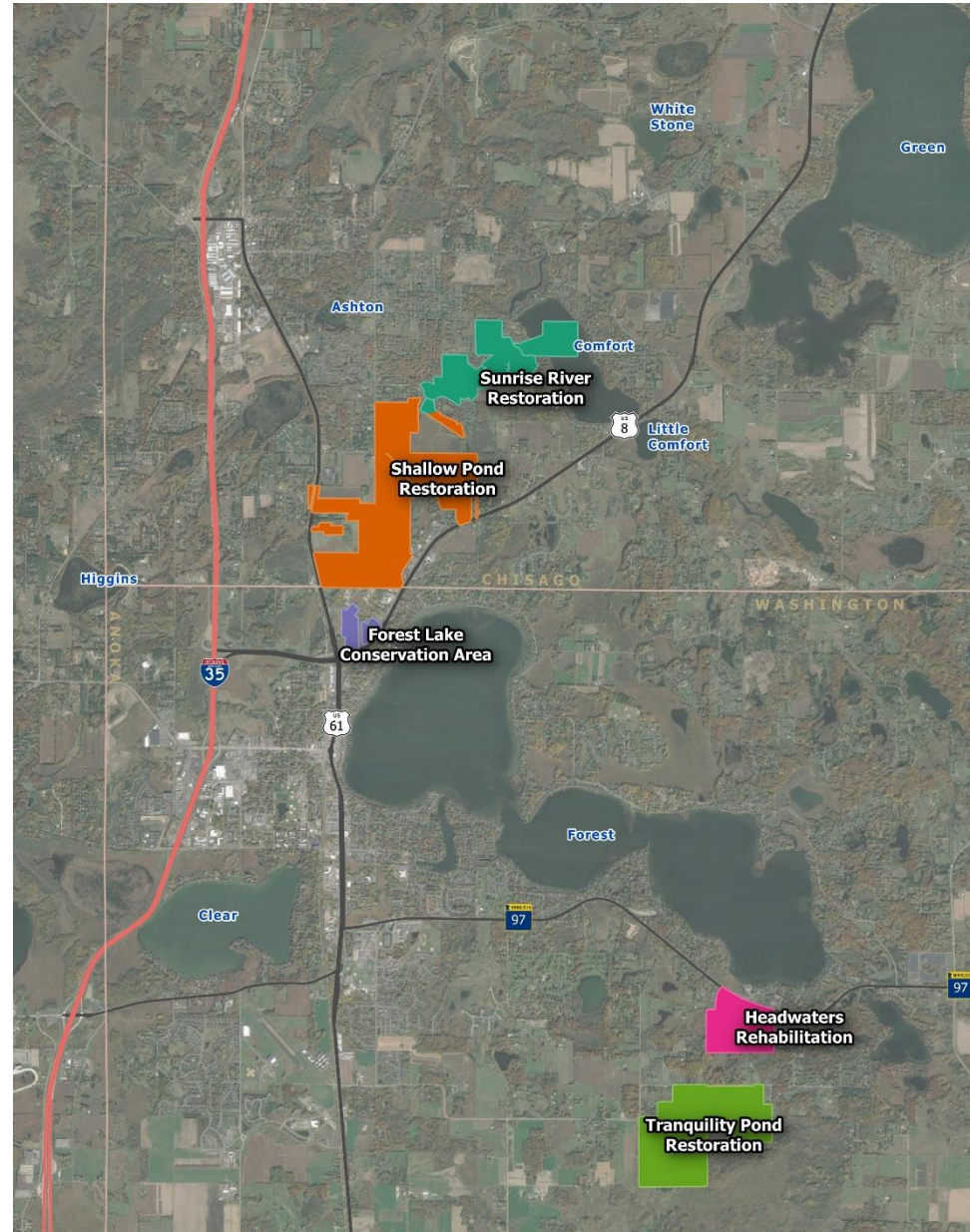
Board Questions

Next Steps



PRIMARY CAPITAL IMPROVEMENT PROJECTS (CIP)

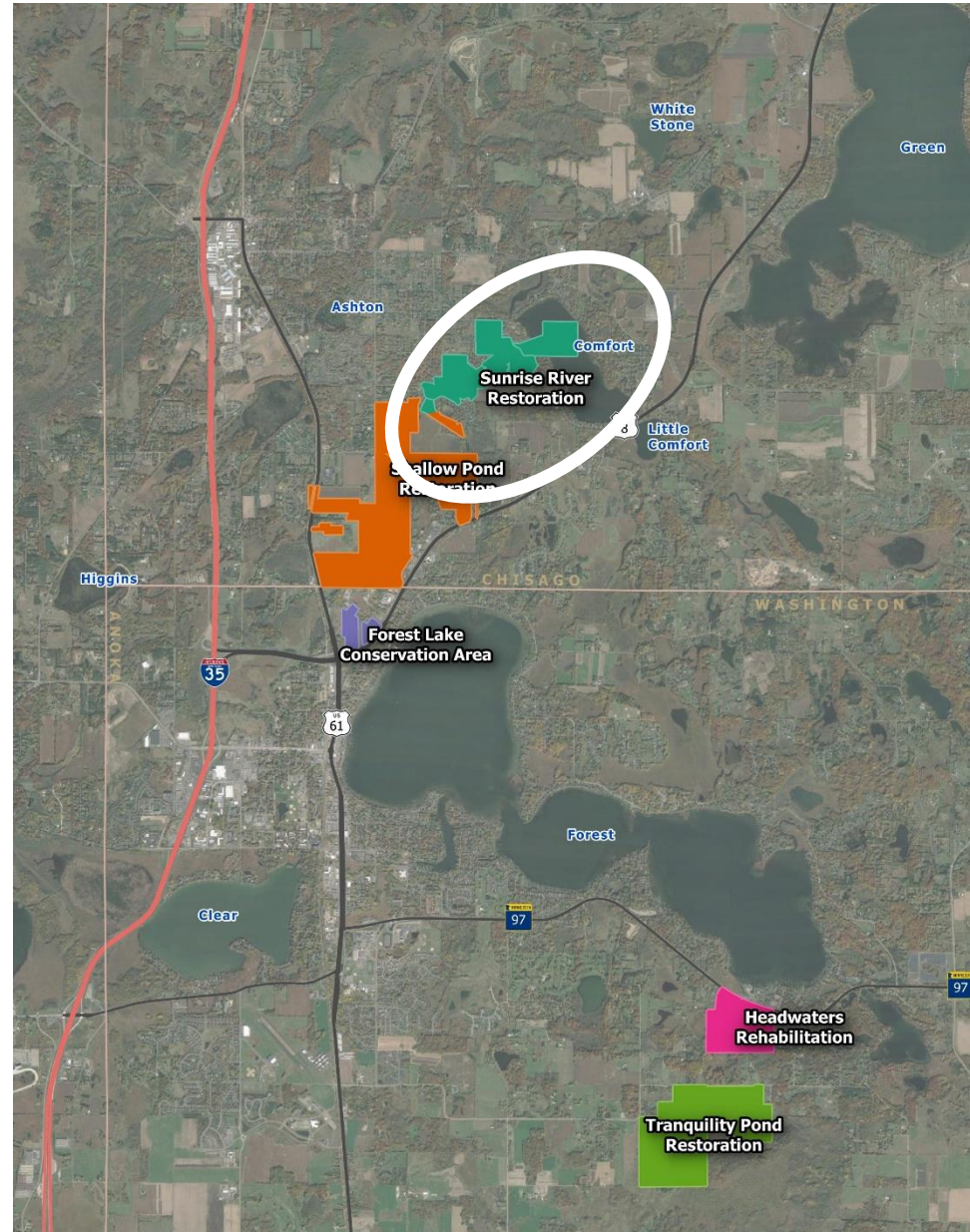
- Greenway vision doesn't address all opportunities
- #5 primary CIP identified & vetted
- Identified necessary parcels
 - ✓ Adequate space to complete project
 - ✓ Change in floodplain
 - ✓ Access requirements
- Two types of parcels
 - ✓ Impacted structure(s)
 - ✓ Impacted property



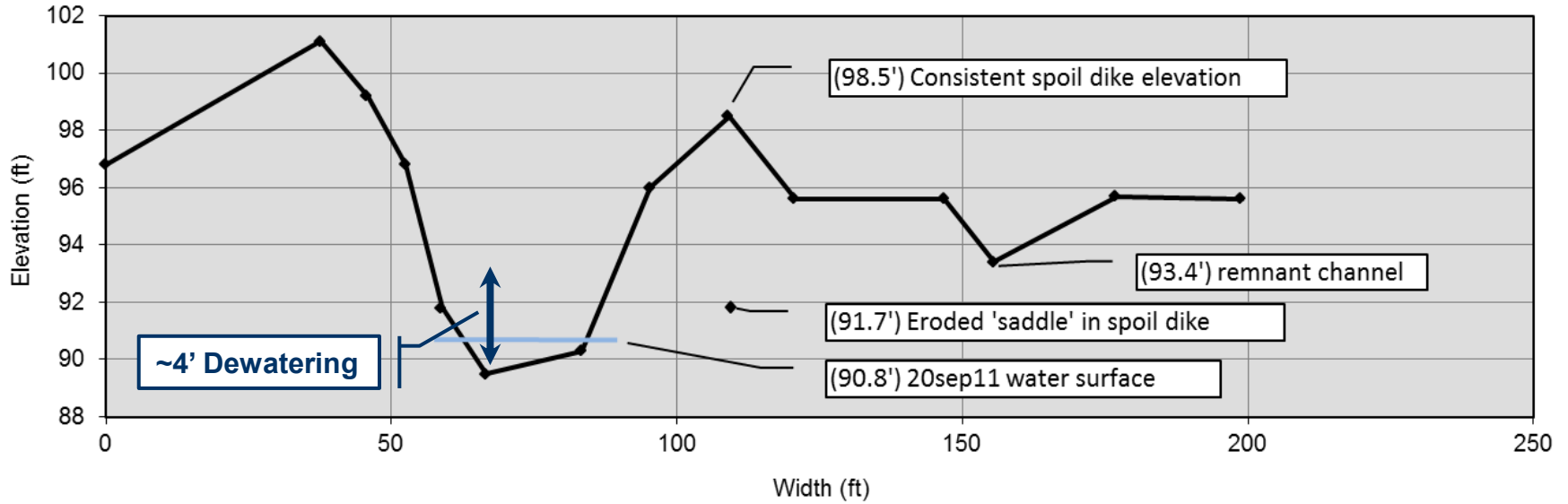


#1 - SUNRISE RIVER RESTORATION

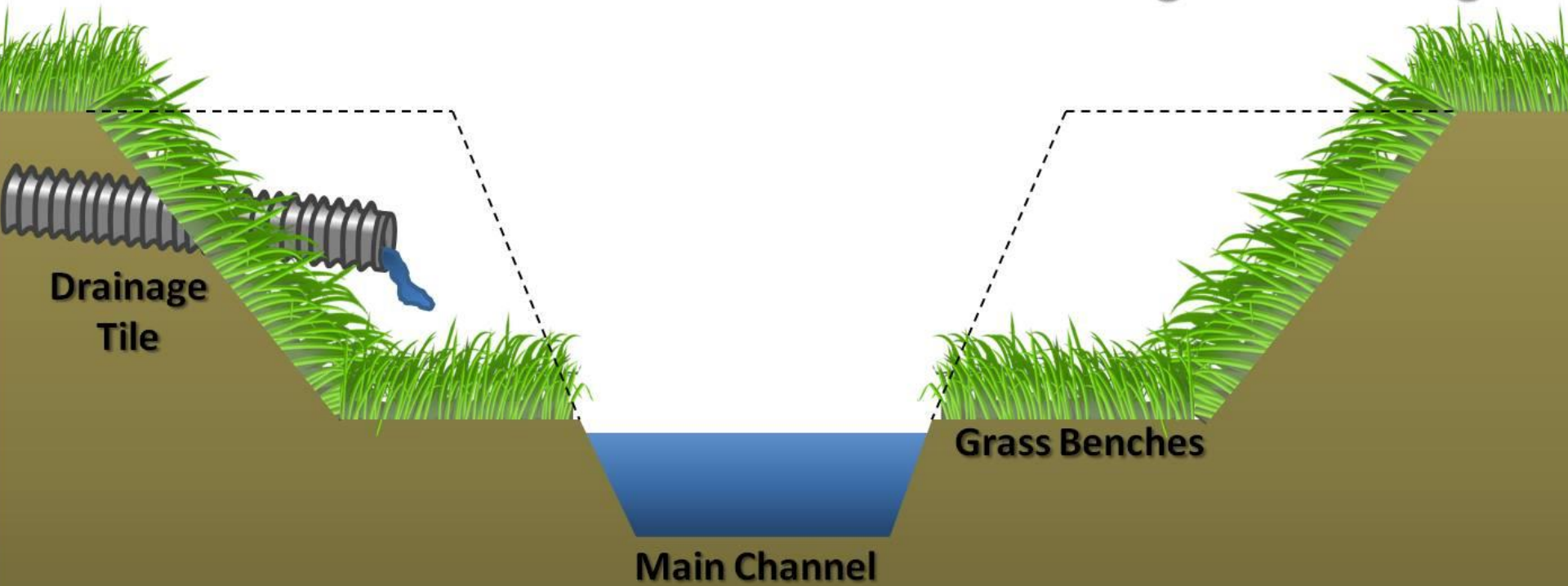
- Restoration of ~1-mile ditched section of the Sunrise River for habitat & water quality returns



project focus



Two-Stage Ditch Design







project focus



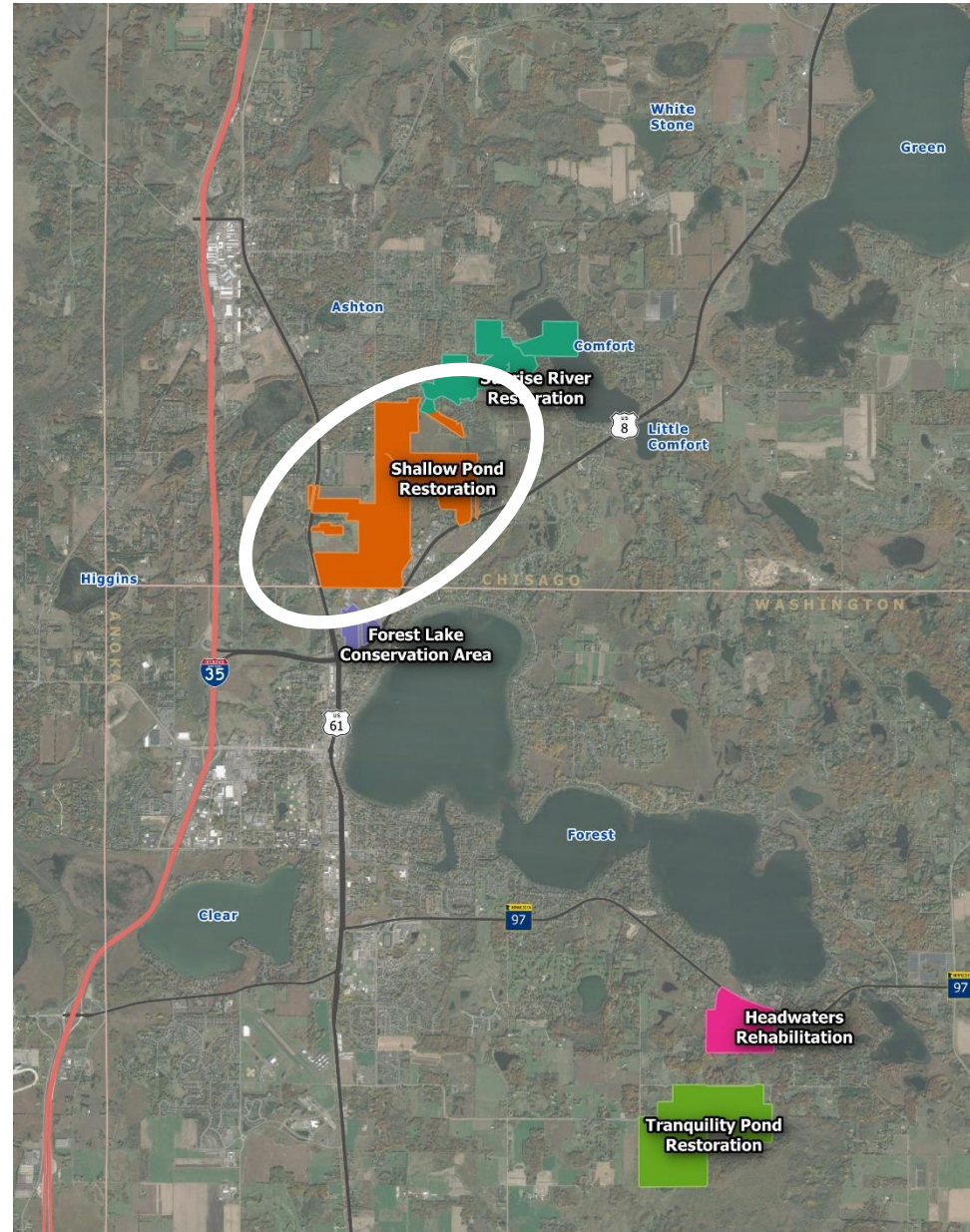
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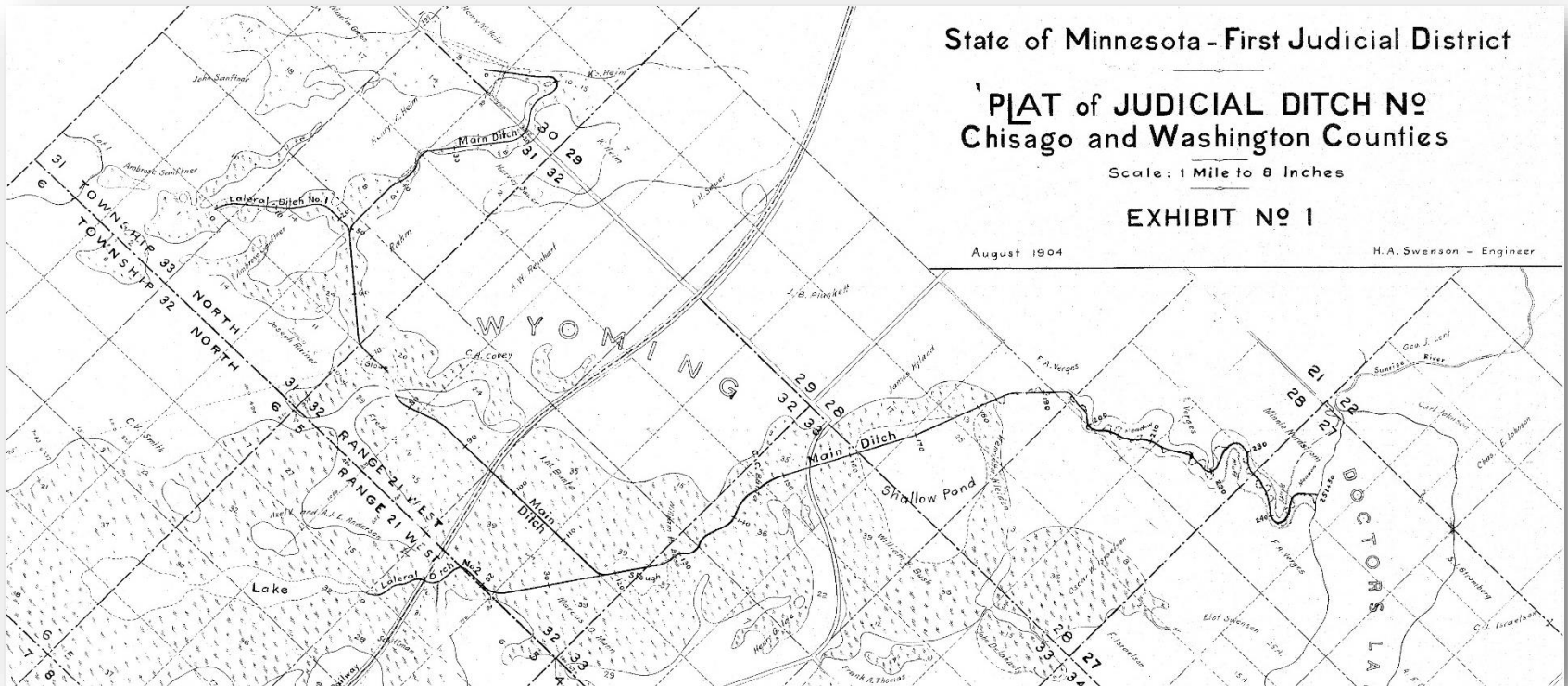
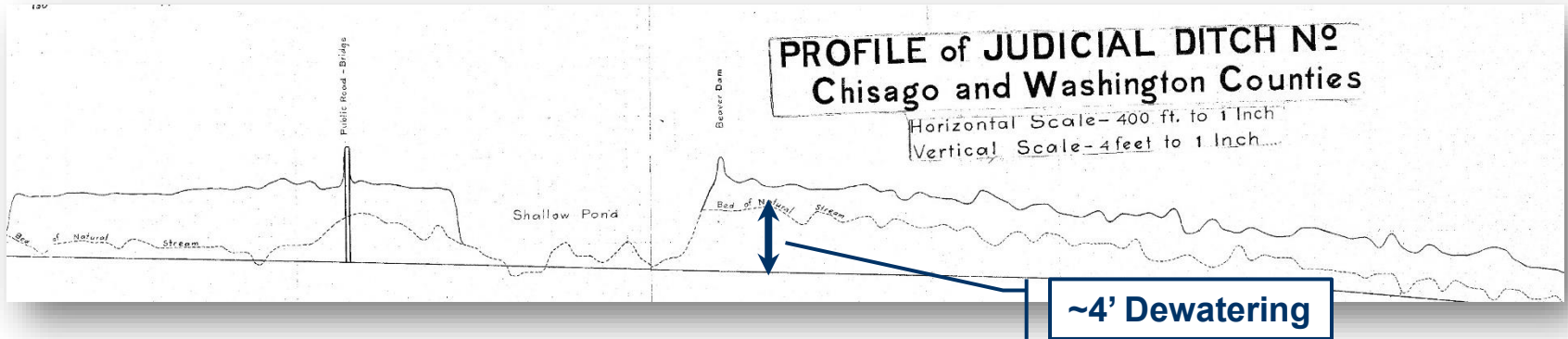
198 Acres

-  Structure(s) Potentially Impacted by Implementation
-  Property potentially impacted by implementation
-  Parcels
-  Public Parcels



#2 - SHALLOW POND RESTORATION

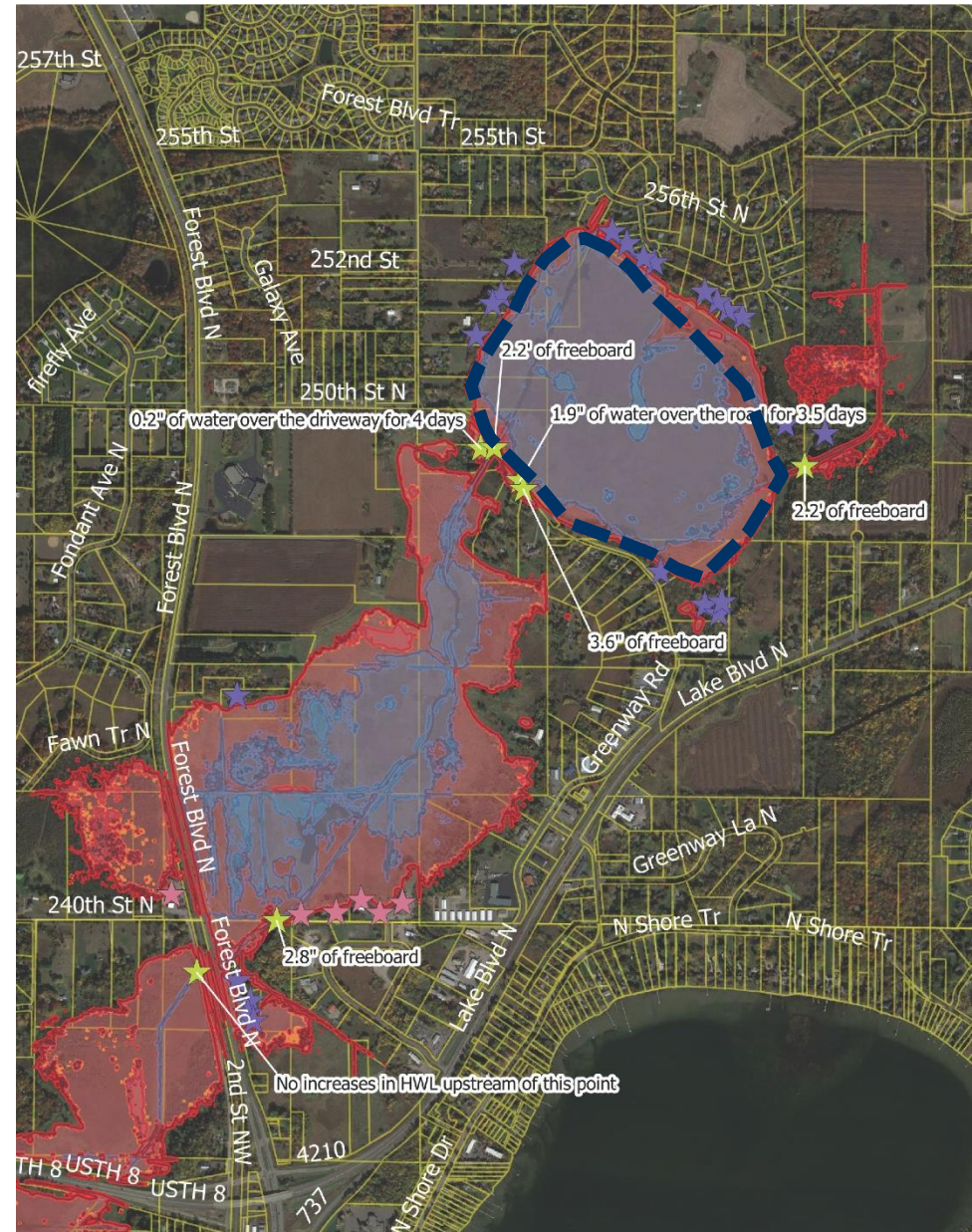






MODELING





- Change in floodplain
- System very flat – impacts upstream
- Structures & infrastructure





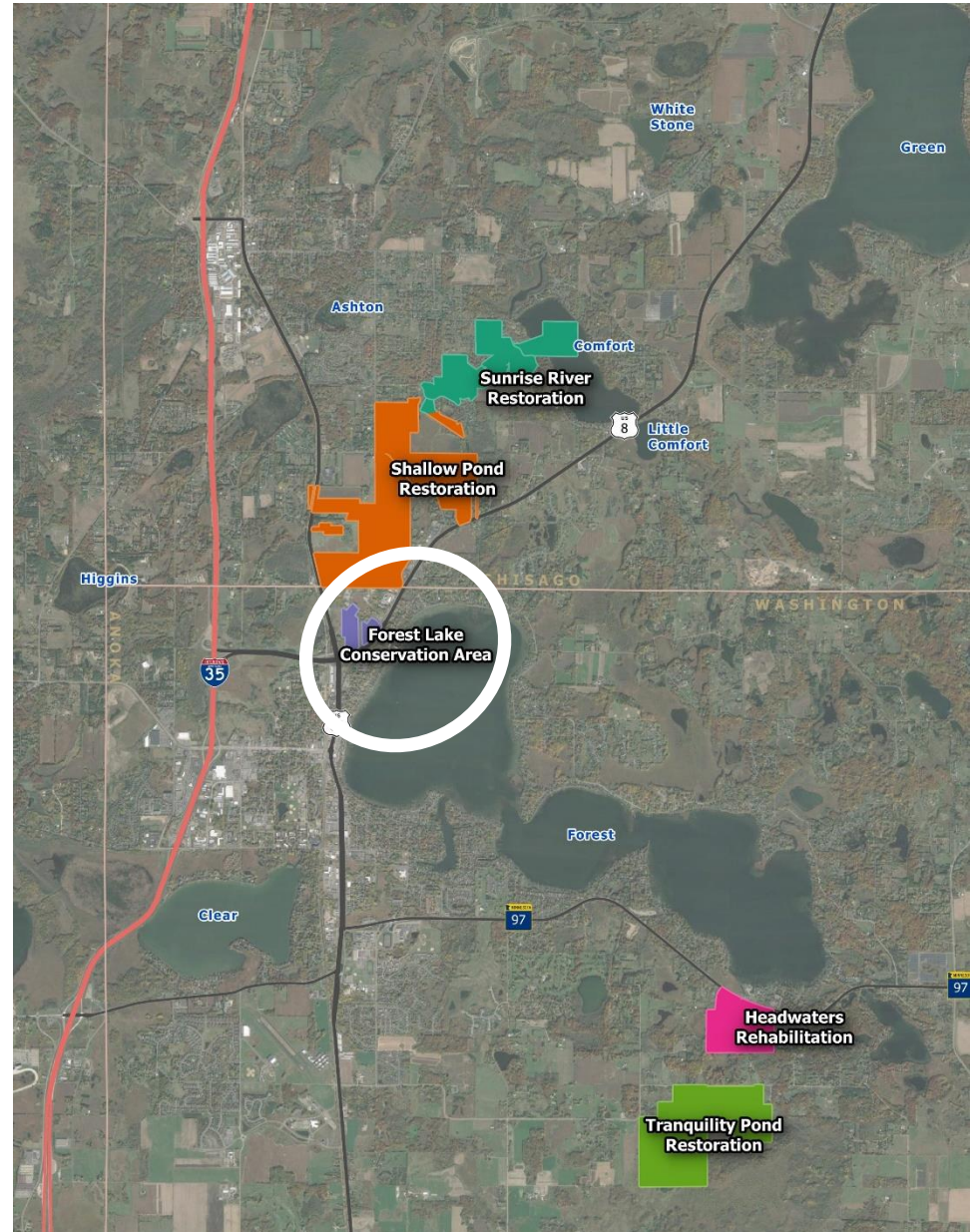
40 Acres

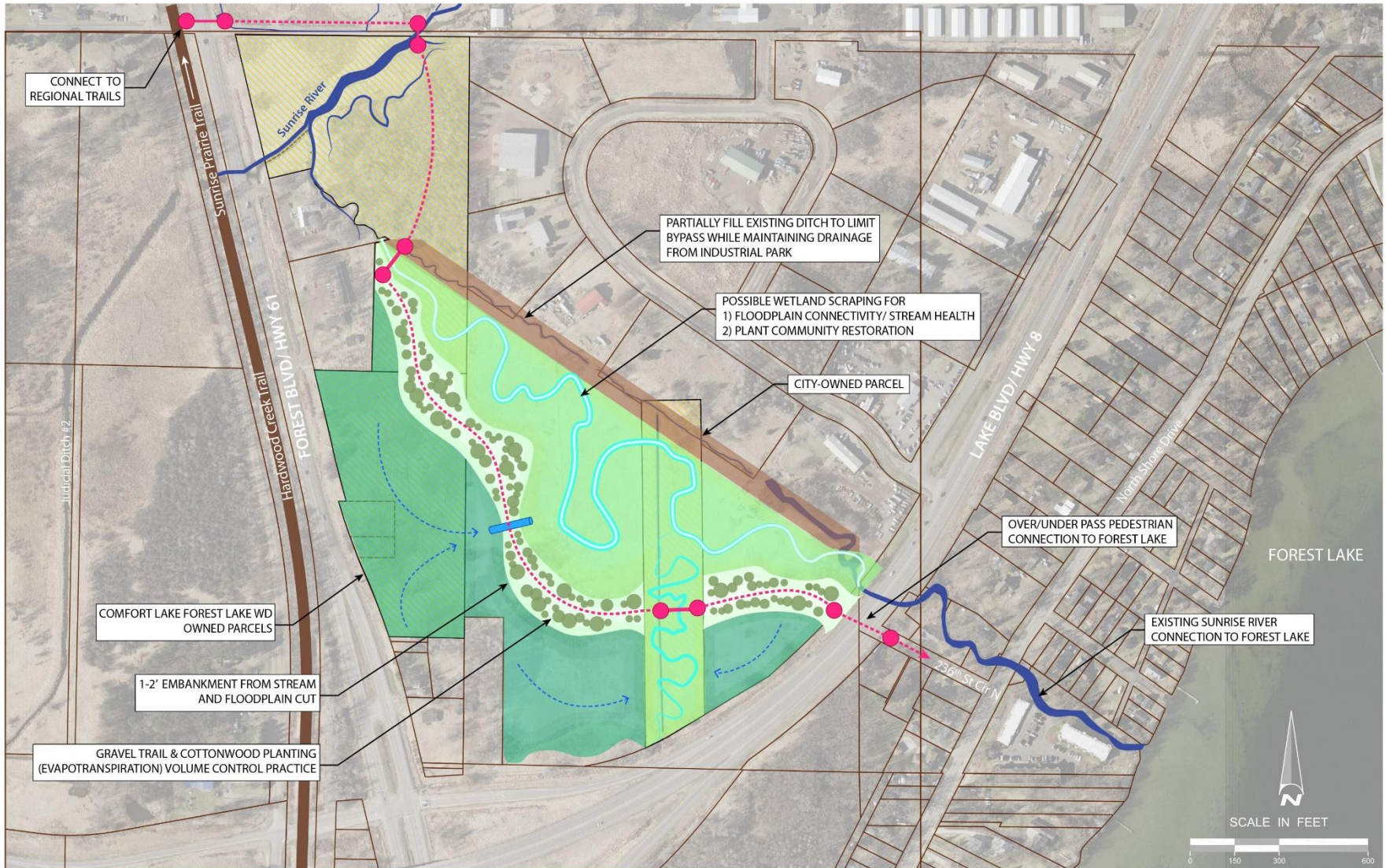
440 Acres

-  Structure(s) Potentially Impacted by Implementation
-  Property potentially impacted by implementation
-  Parcels
-  Public Parcels



#3 – FOREST LAKE CONSERVATION AREA









FOREST LAKE CONSERVATION - CONCEPT PLAN



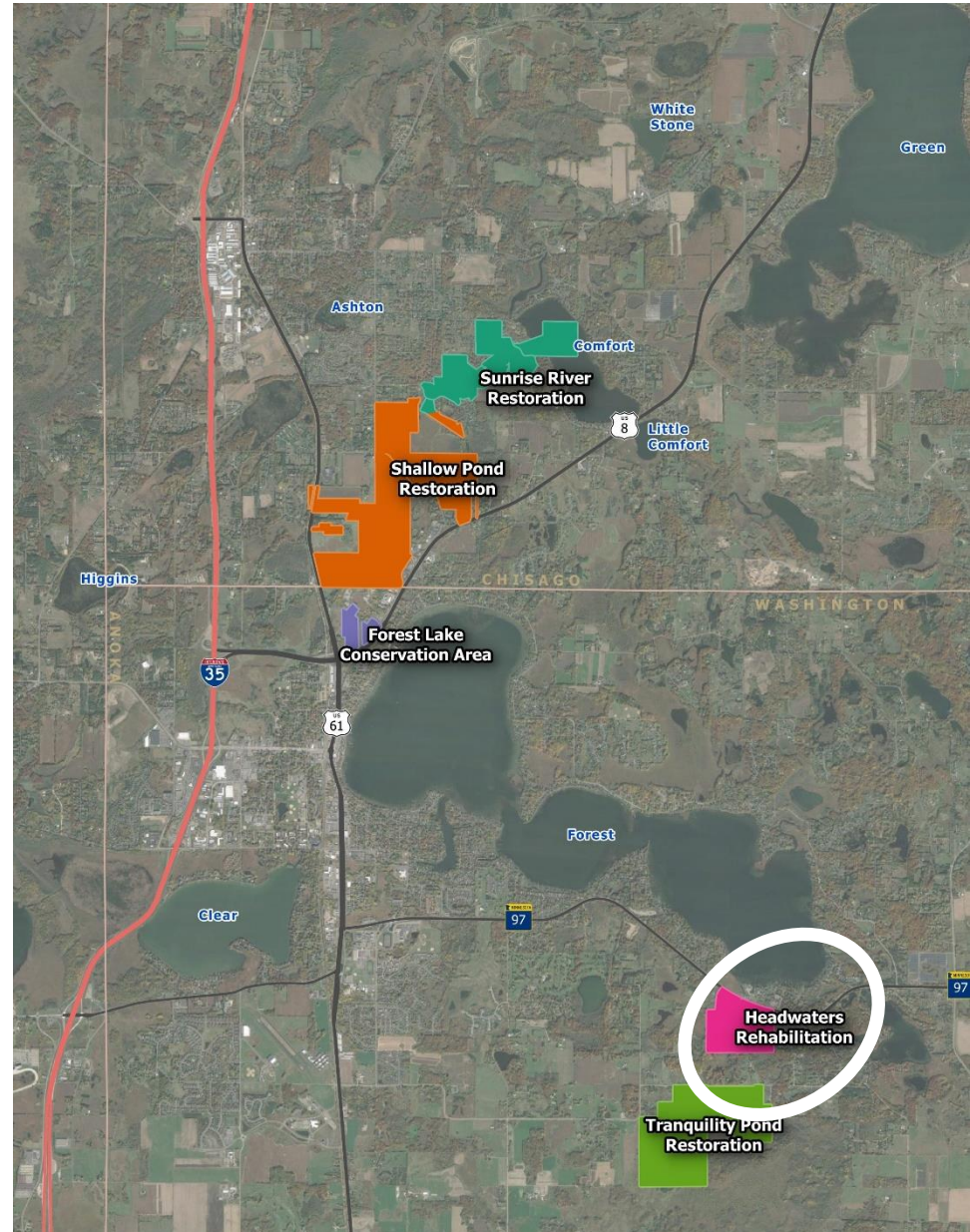
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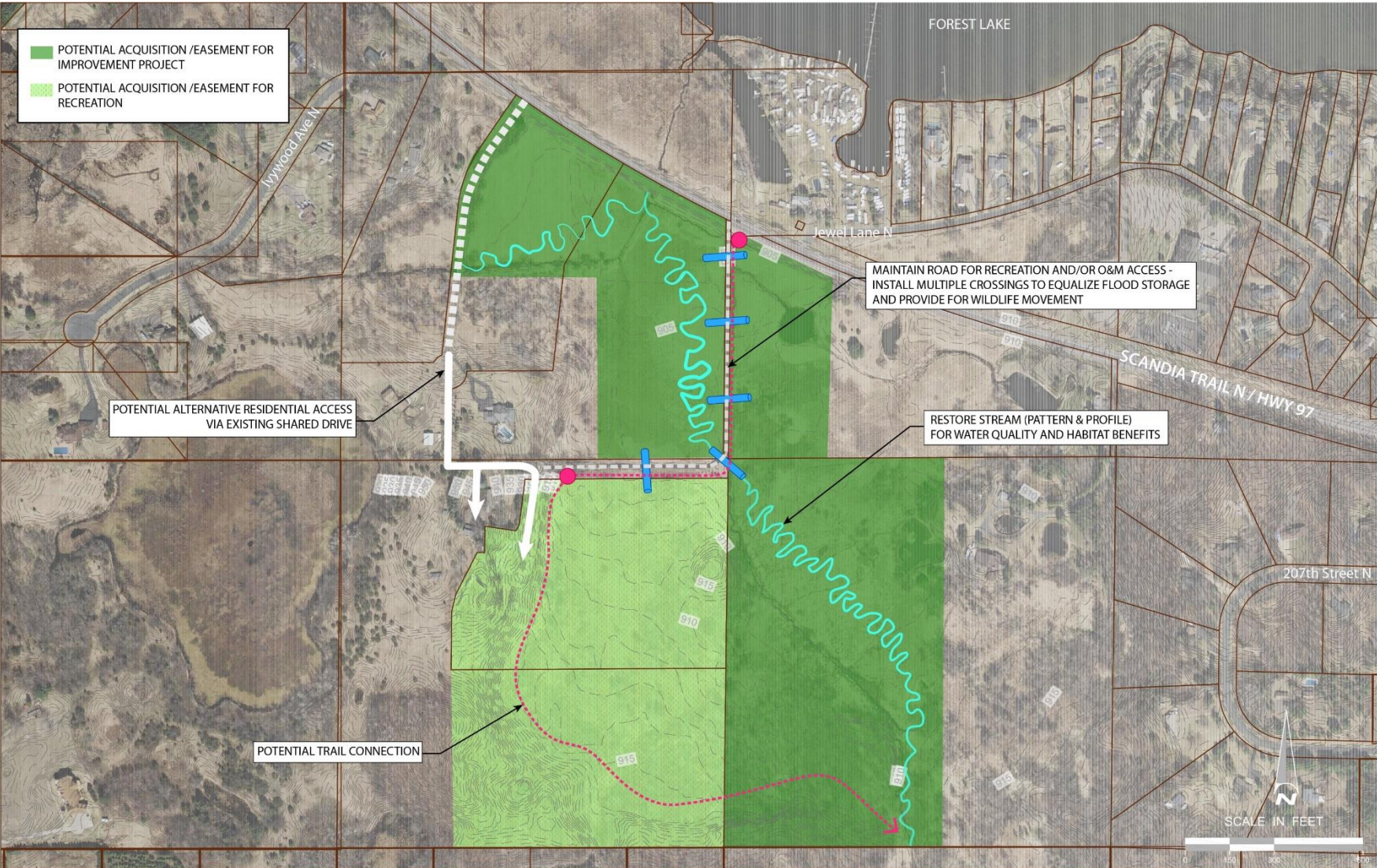
30 Acres

-  Structure(s) Potentially Impacted by Implementation
-  Property potentially impacted by implementation
-  Parcels
-  Public Parcels



#4 – HEADWATERS REHABILITATION









HEADWATERS REHAB - CONCEPT PLAN

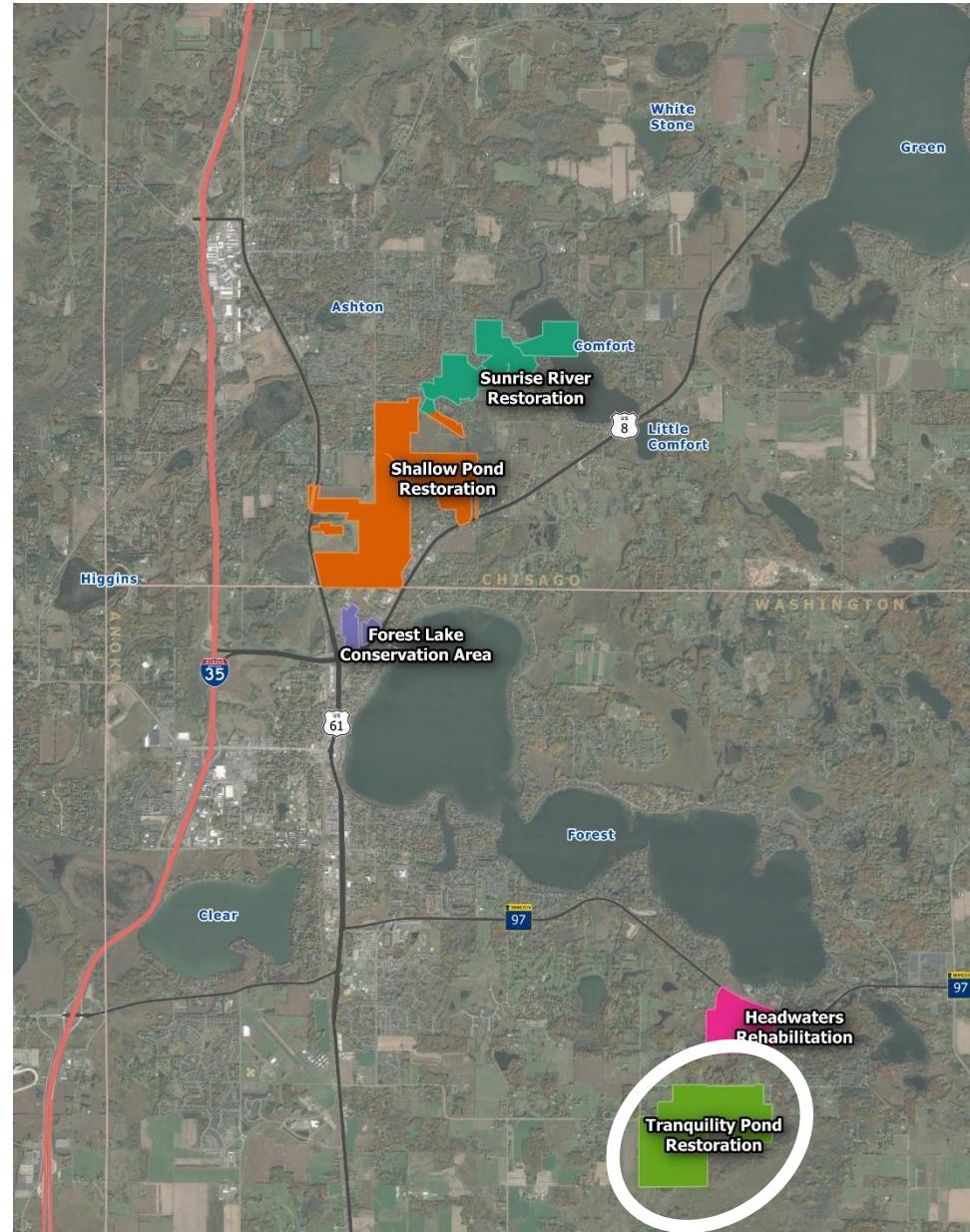


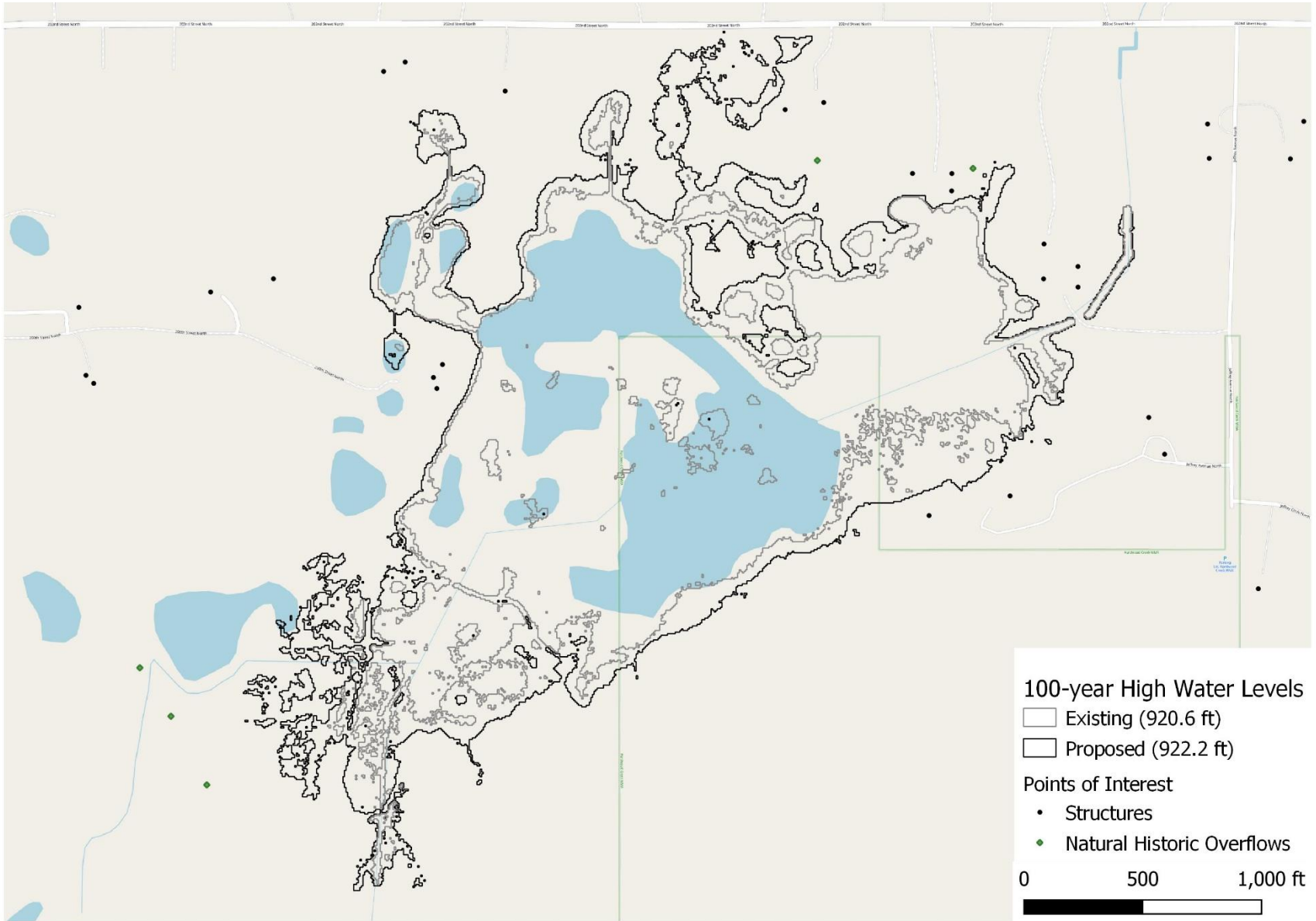
0 Acres
119 Acres

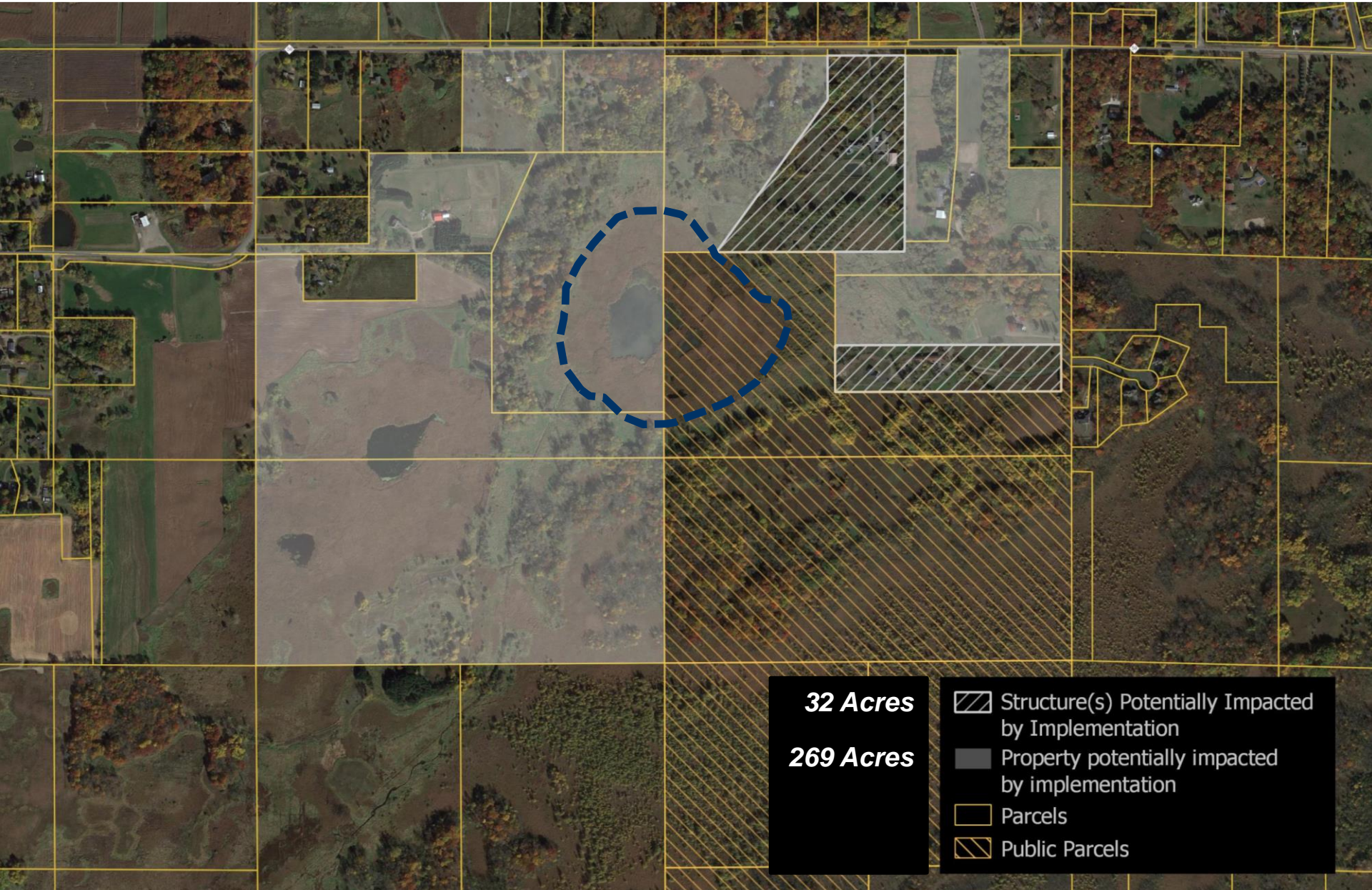
-  Structure(s) Potentially Impacted by Implementation
-  Property potentially impacted by implementation
-  Parcels
-  Public Parcels



#5 – TRANQUILITY POND RESTORATION










32 Acres

269 Acres

-  Structure(s) Potentially Impacted by Implementation
-  Property potentially impacted by implementation
-  Parcels
-  Public Parcels

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DRAFT PRODUCTS

- Conservation
- Projects
- **Recreation**

Board Questions

Next Steps

recreation focus



EOR water
ecology
community



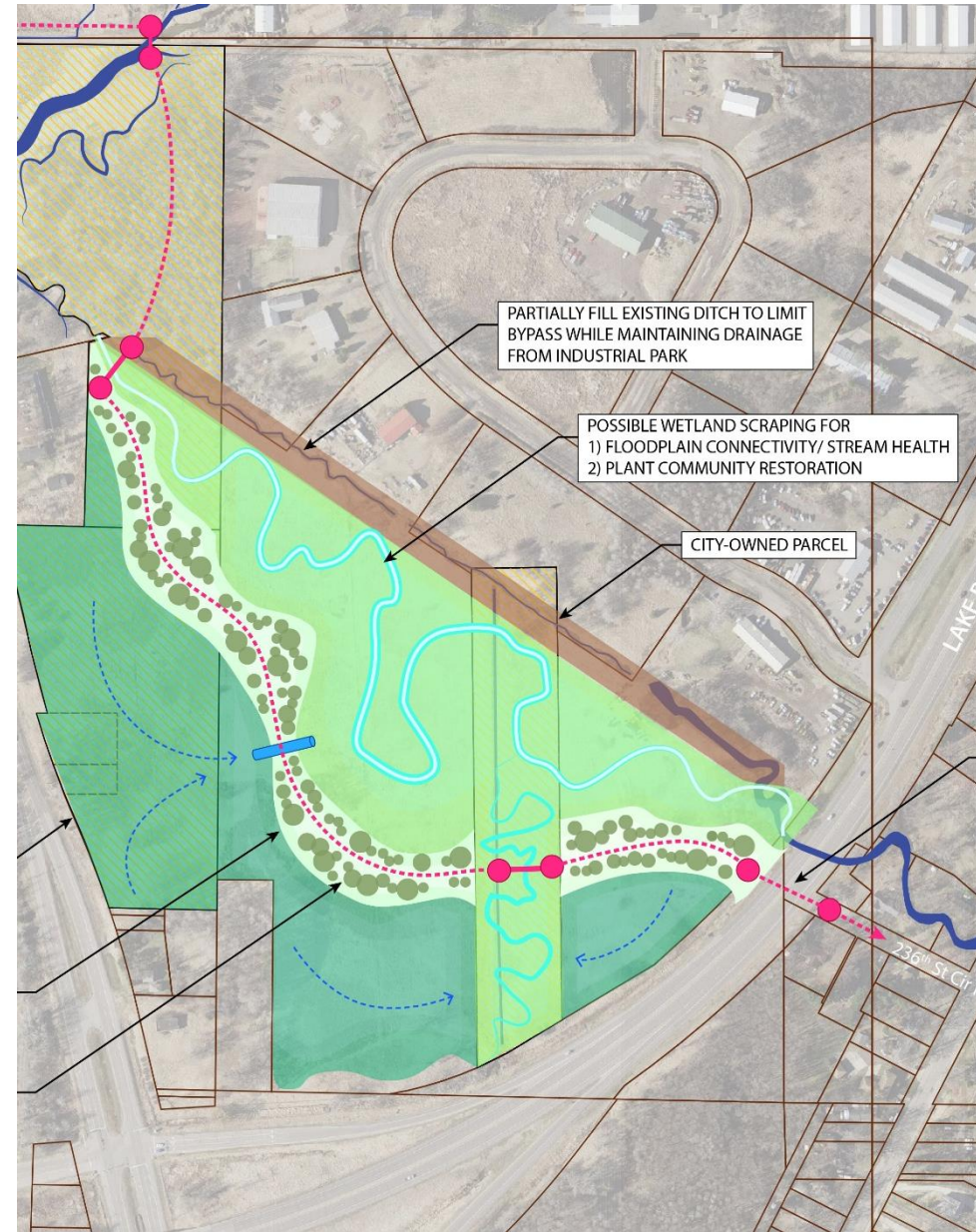


KEY COMPONENT

- Greater public interest & support

ALSO ADDS COMPLEXITY

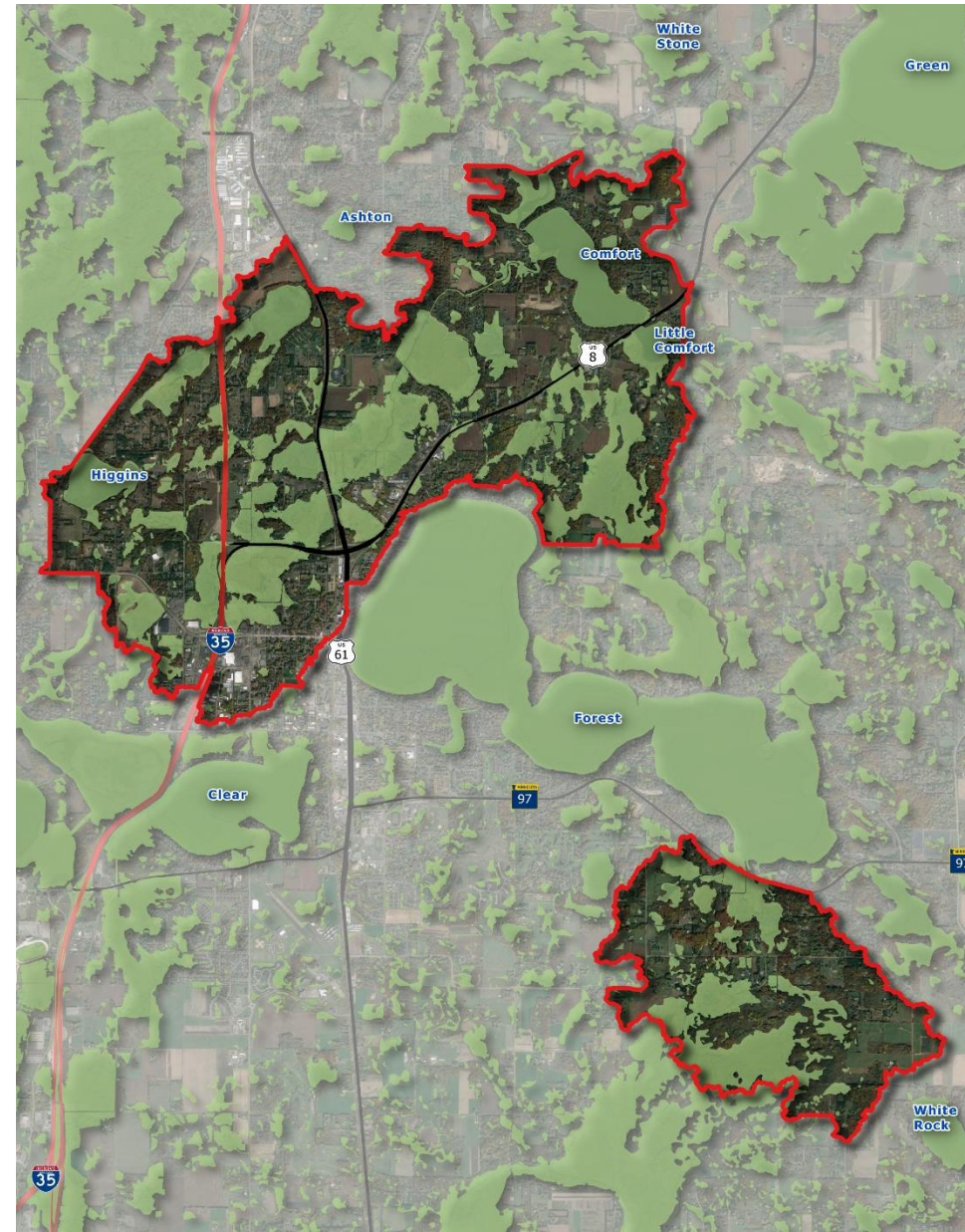
- Adds staunch opposition – NIMBY
- Increase acquisition and construction costs





CONSTRUCTABILITY

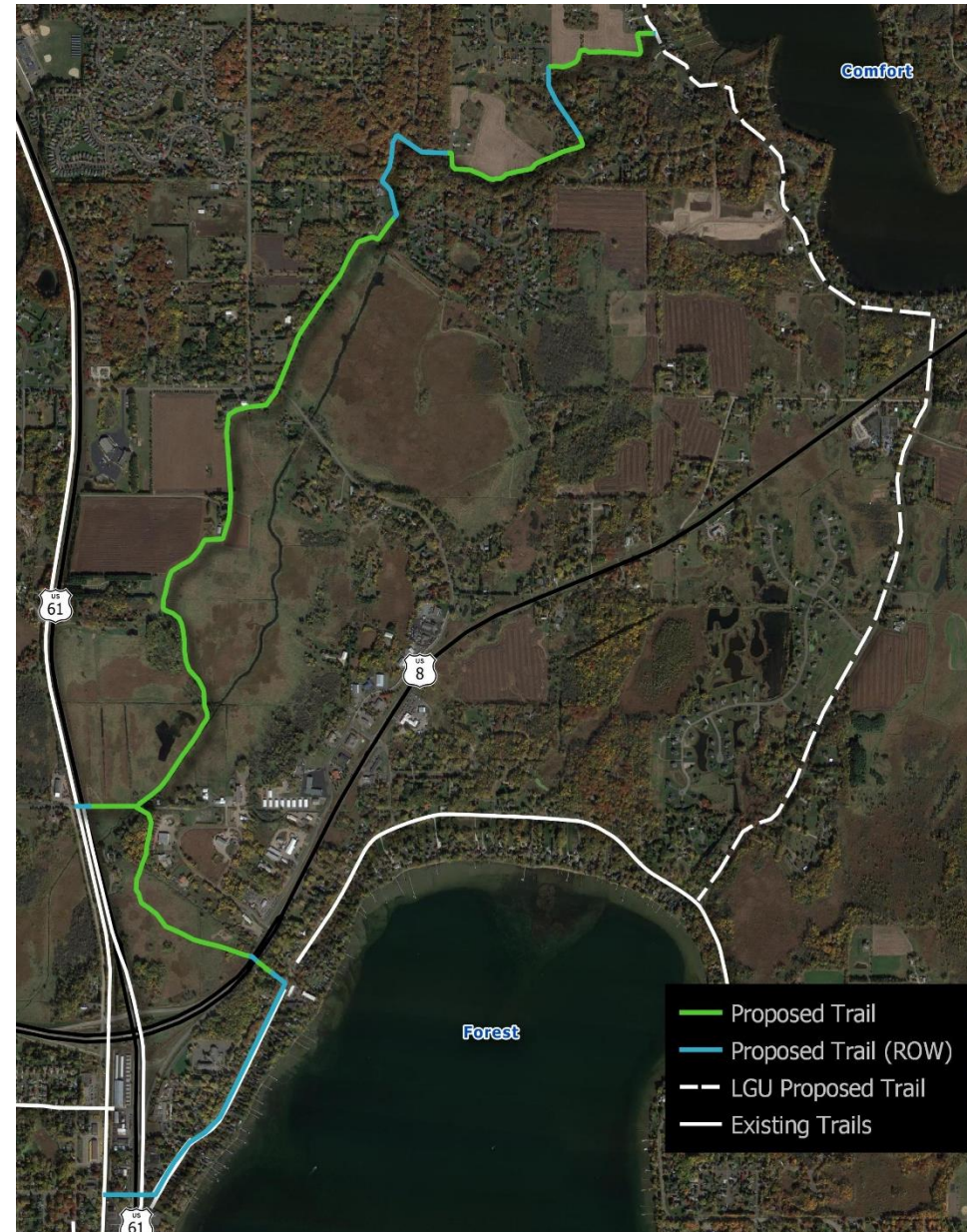
- Upland (greater property cost) versus
- Wetland (greater permitting and construction cost)





MOCK TRAIL ALIGNMENT

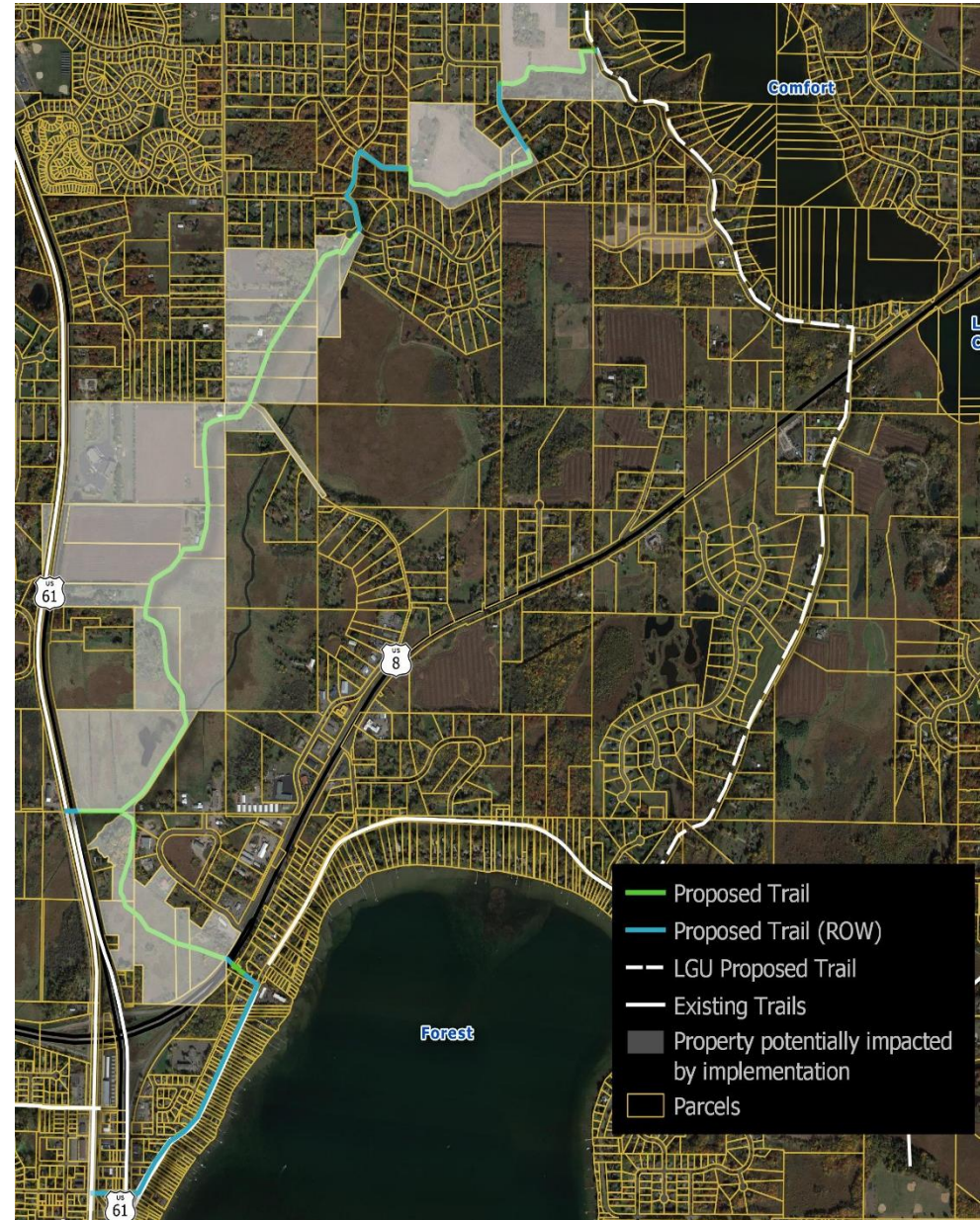
- Sunrise Prairie / Hardwood Creek connections
- Future connection to Swedish Immigrant Trail (*Hwy 8*)
- Future connection Comfort Lake Route (*Comfort Lake & Heath Avenues*)





POTENTIALLY IMPACTED PARCELS

- Essentially same as PROJECT parcels
- 400 acres – not all of which would be necessary



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Next Steps

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2. Is there support (individual or collective) for the following greenway components?
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NEXT STEPS

DISTRICT INPUT

- General Interest
- Specific goals and direction
- Goal setting session



GREENWAY ADVANCEMENT

- Partner & stakeholder engagement
- History evaluation
- Branding
- Further identify and vet components for greenway
- Advance greenway typologies
- Quantify returns
- Acquisition strategies
- Acquisition cost estimating

Jan 2021

Jun 2022



EOR AUTHORIZATION

- Commence next steps
- Refine scope base on Board direction
- Specific goals and direction

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2. Visioning Workshop #1
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