Middle Sand Creek Corridor Restoration

Public Meeting

Coon Creek Watershed District

City of Coon Rapids

September 24th, 2019

Please sign in

Agenda

Please sign in

Introductions

Project Presentation

- Background
- Project details

Discussion

- Questions, Concerns, Suggestions

Introductions

Coon Creek WD

Tim Kelly
District Administrator

Justine Dauphinais
Water Quality

Jon Janke
Operations & Maintenance

Dawn Doering
Information & Education

Ed Matthiesen Engineer (Wenck)

Seth Bossert Engineer (Wenck)

City of Coon Rapids

Tim Himmer Public Works Director

Mark Hansen City Engineer

Gregg Engle Park Supervisor

Tom Schibilla City Forester

MN DNR

Nick Proulx Clean Water Specialist

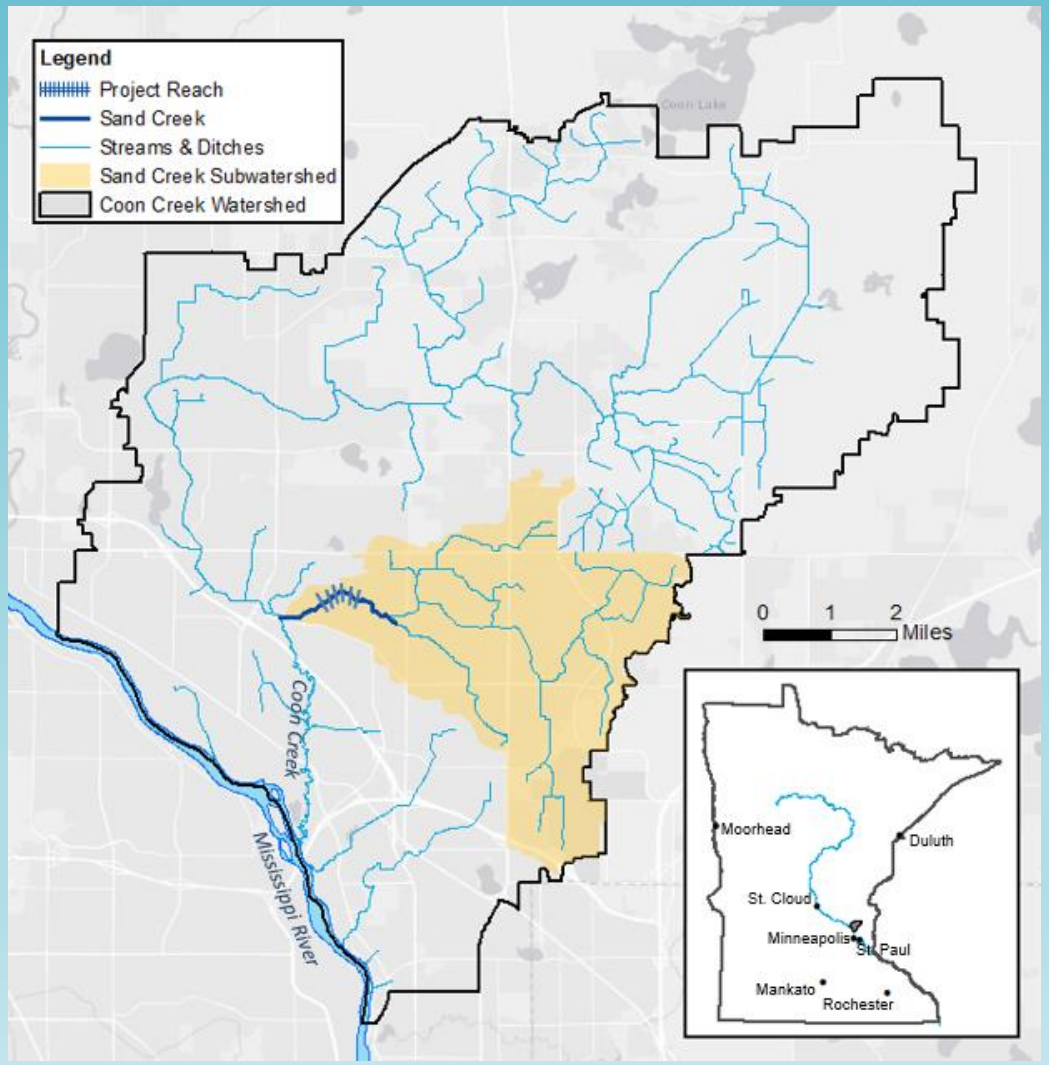
Background

Sand Creek Drainage Area

Size: ~16 mi^2

Suburban land use

Upstream area ditched for agriculture & now serves as stormwater conveyance system.



Current Status of Sand Creek

Sand Creek does not meet state water quality standards for aquatic life or recreation

Impaired *under Section 303(d) of Federal Clean Water Act*

Stressors:

- Excess Sediment
- Excess Phosphorus
- Poor Habitat
- Altered Hydrology

Current Status of Sand Creek

Sand Creek does not meet State water quality standards for aquatic life or recreation

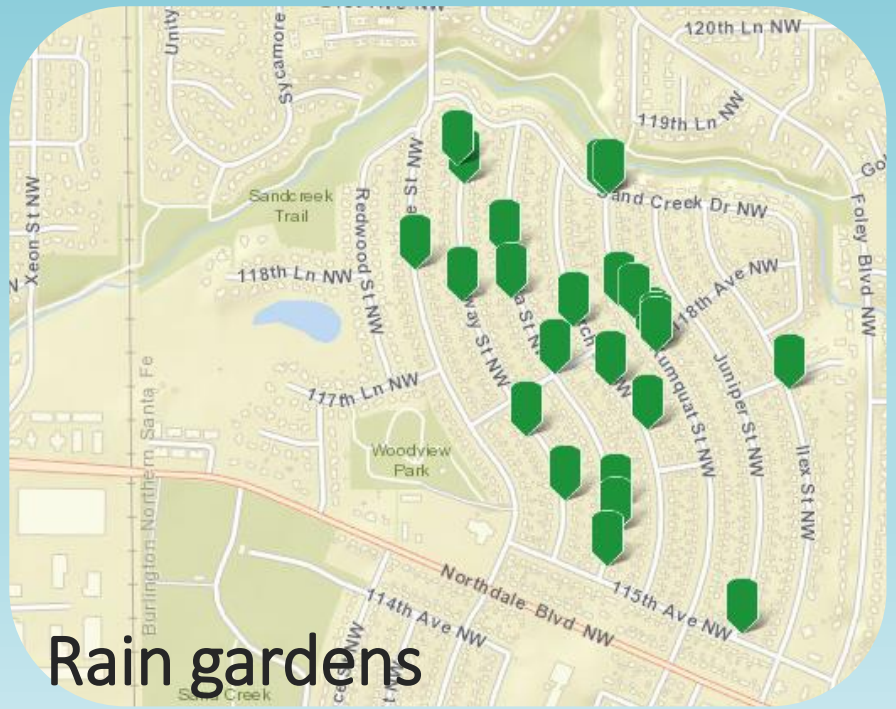
Impaired *under Section 303(d) of Federal Clean Water Act*

Causes:

- Urban stormwater runoff
- Stream bank erosion

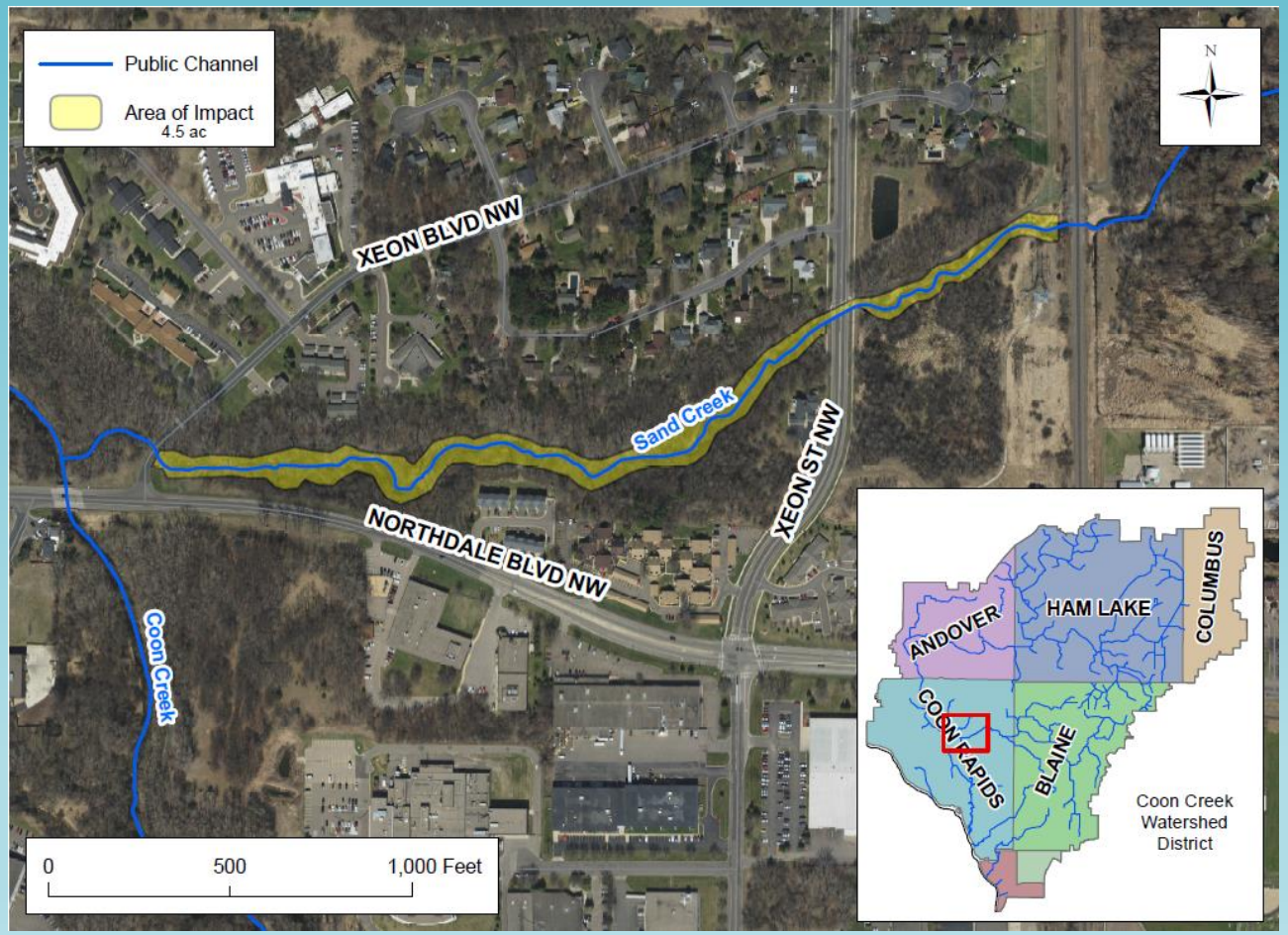
Past Projects to address urban stormwater

- Constructed new stormwater pond at Xeon St.
- Modified 2 pond outlets to hold more water
- Installed 25 Rain Gardens
- Stormwater regulations



Rain gardens

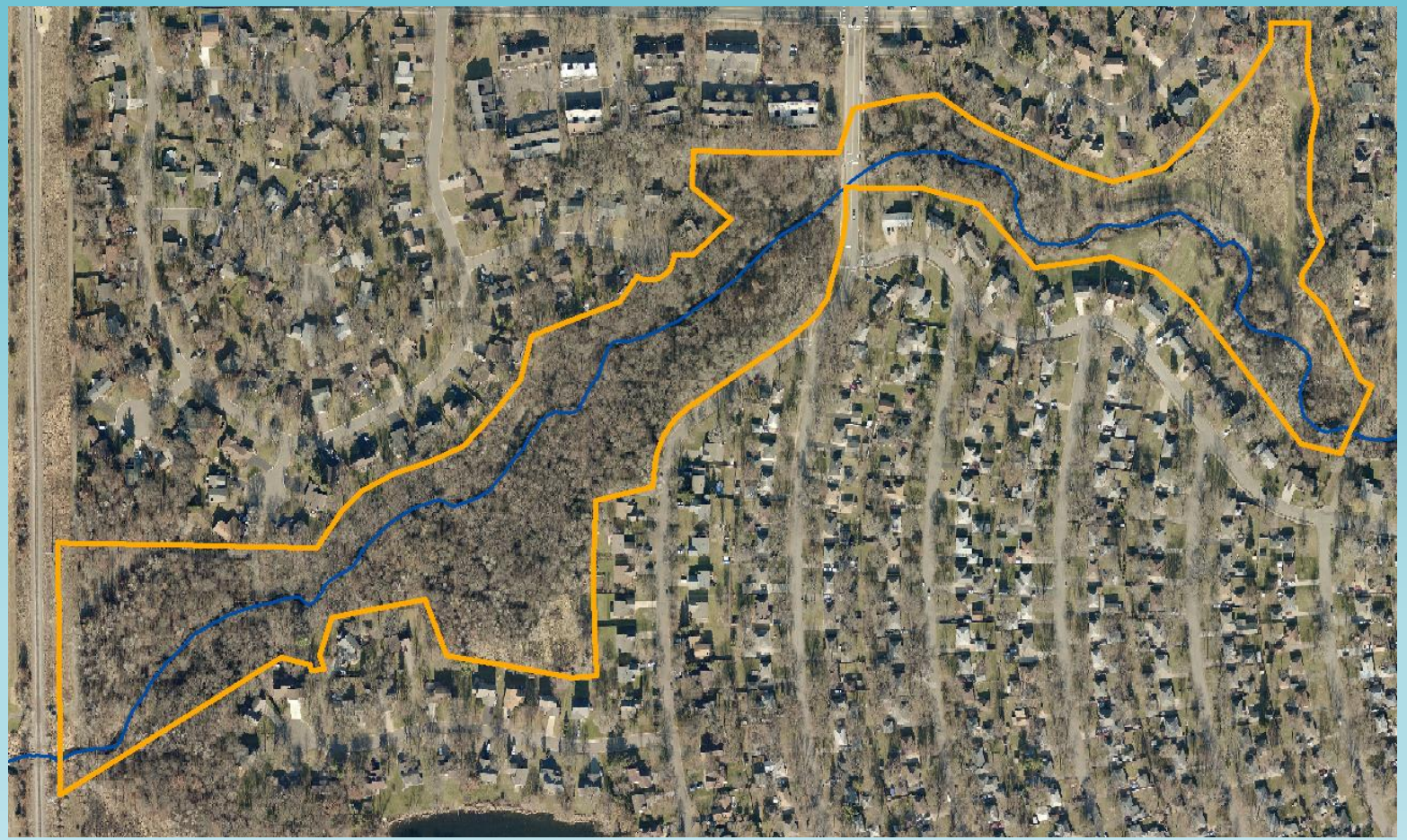
Past Projects to address bank erosion/ poor habitat



2018 Lower Sand Creek Corridor Restoration

Middle Sand Creek Area

Location: Railroad to Kumquat Pedestrian Bridge



Proposed Middle Sand Creek Project

Goals:

1. Reduce sediment & nutrient pollution from streambank erosion
2. Enhance habitat for native species
3. Lessen impacts of altered hydrology, while providing conveyance

1. Reduce excess sediment/phosphorus

Stabilize eroding banks using 3 methods:

Vegetated Rock Riprap

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Stabilize eroding banks using 3 methods:

Vegetated Rock Riprap

Lower Sand Creek Example

1. Reduce excess sediment/phosphorus

Stabilize eroding banks using 3 methods:

- Vegetated Rock Riprap
- Re-grading & seeding

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Stabilize eroding banks using 3 methods:

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Lower Sand Creek Example

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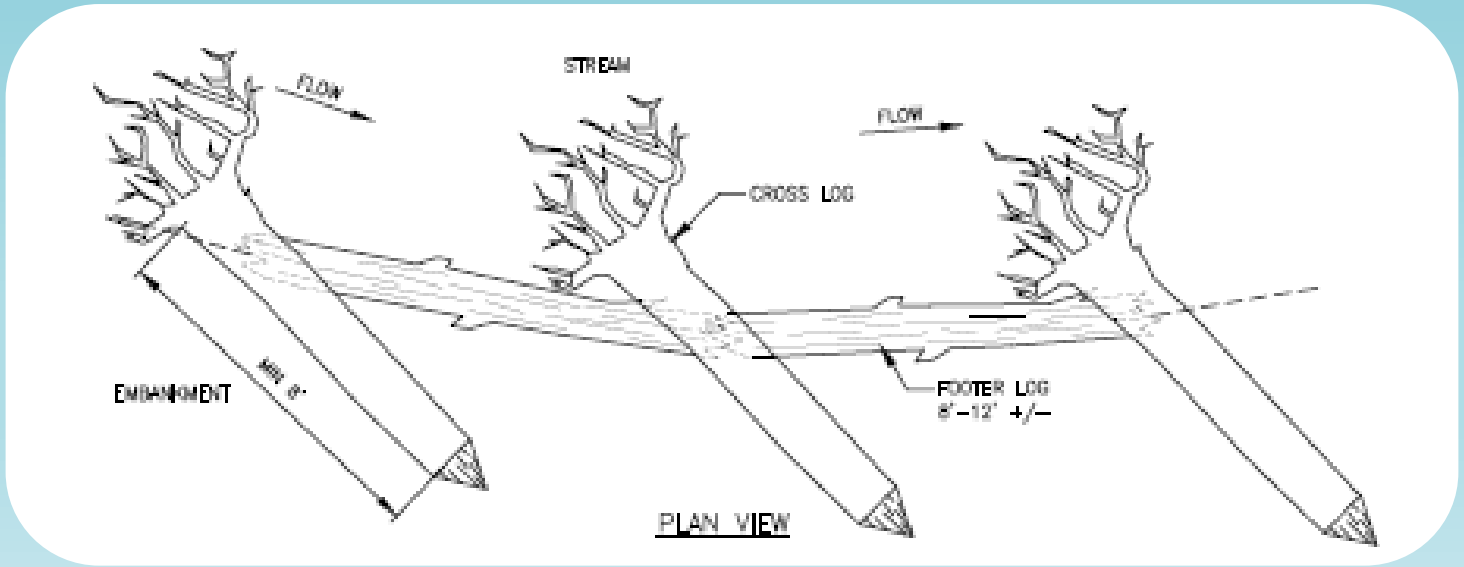
Stabilize eroding banks using 3 methods:

Vegetated Rock Riprap

Re-grading & seeding

Woody materials: log toes, root wads, toe wood



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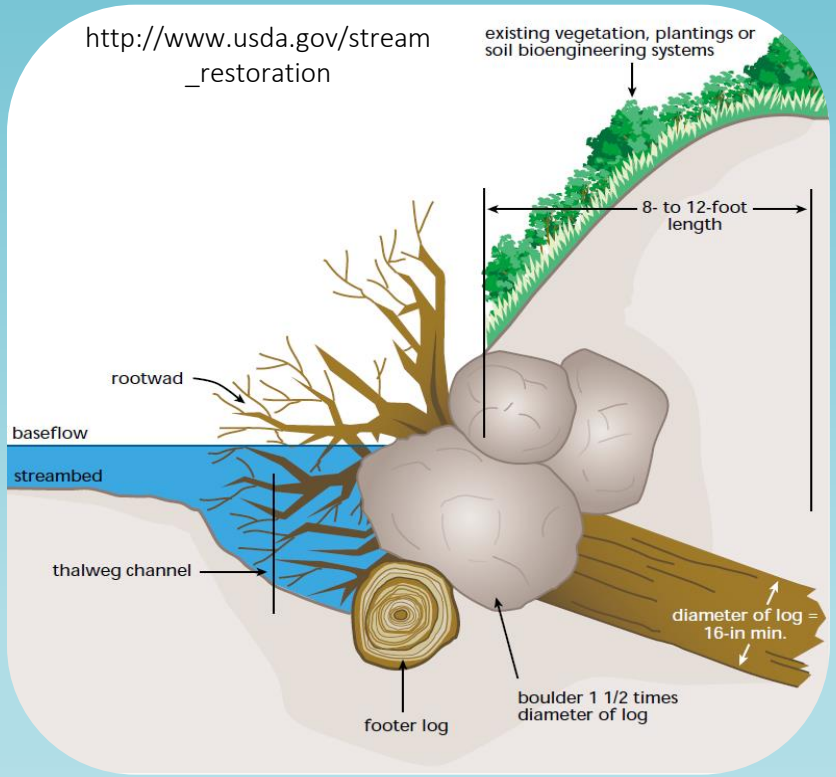
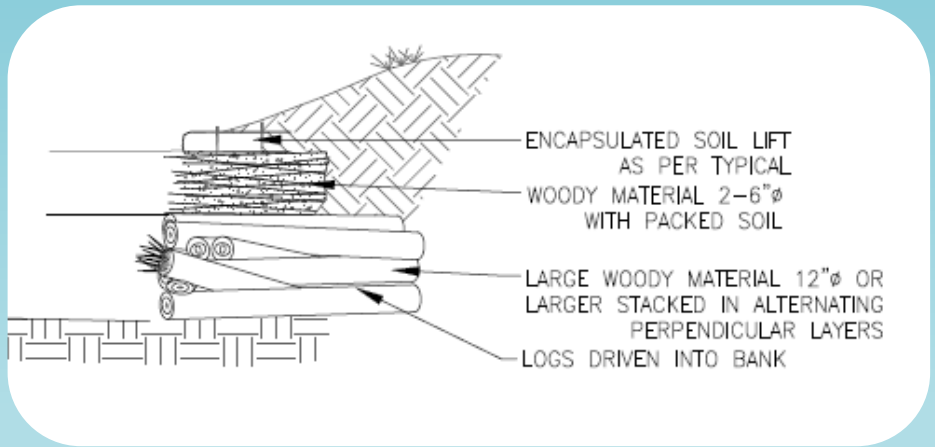
Woody materials: log toes, root wads, toe wood





1. Reduce excess sediment/phosphorus

Woody materials: log toes, root wads, toe wood

Lower Sand Creek Example

2. Enhance habitat for native species

- Incorporating wood in bank stabilization practices
- Adding in-stream structures: cross vanes, rock riffles, J-hooks

https://www.nrcs.usda.gov/wps/portal/nrcs/

2. Enhance habitat for native species

- Incorporating wood in bank stabilization practices
- Adding in-stream structures: cross vanes, rock riffles, J-hooks
- Managing vegetation: Tree thinning, buckthorn removal, planting native species

www.prairieresto.com/buckthorn_control

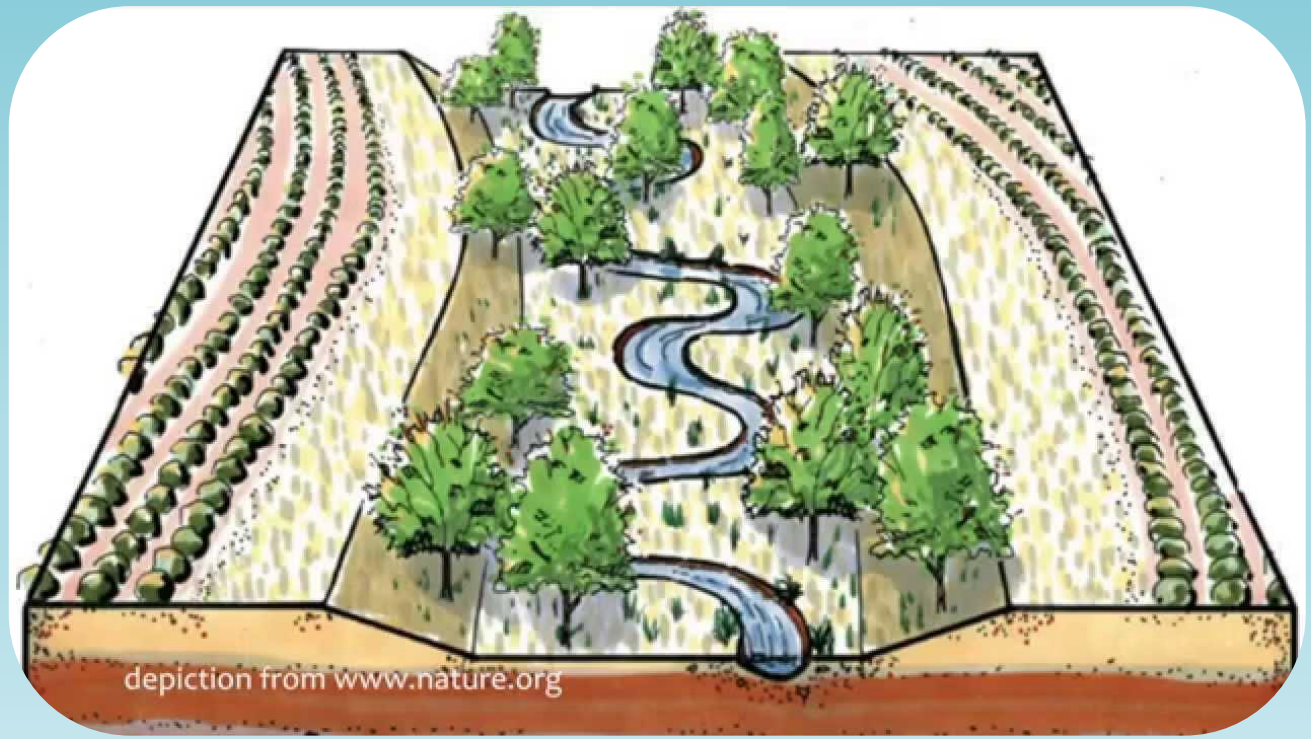
3. Lessen impacts of altered hydrology

(while providing conveyance & promoting long term channel stability)

Channel meandering

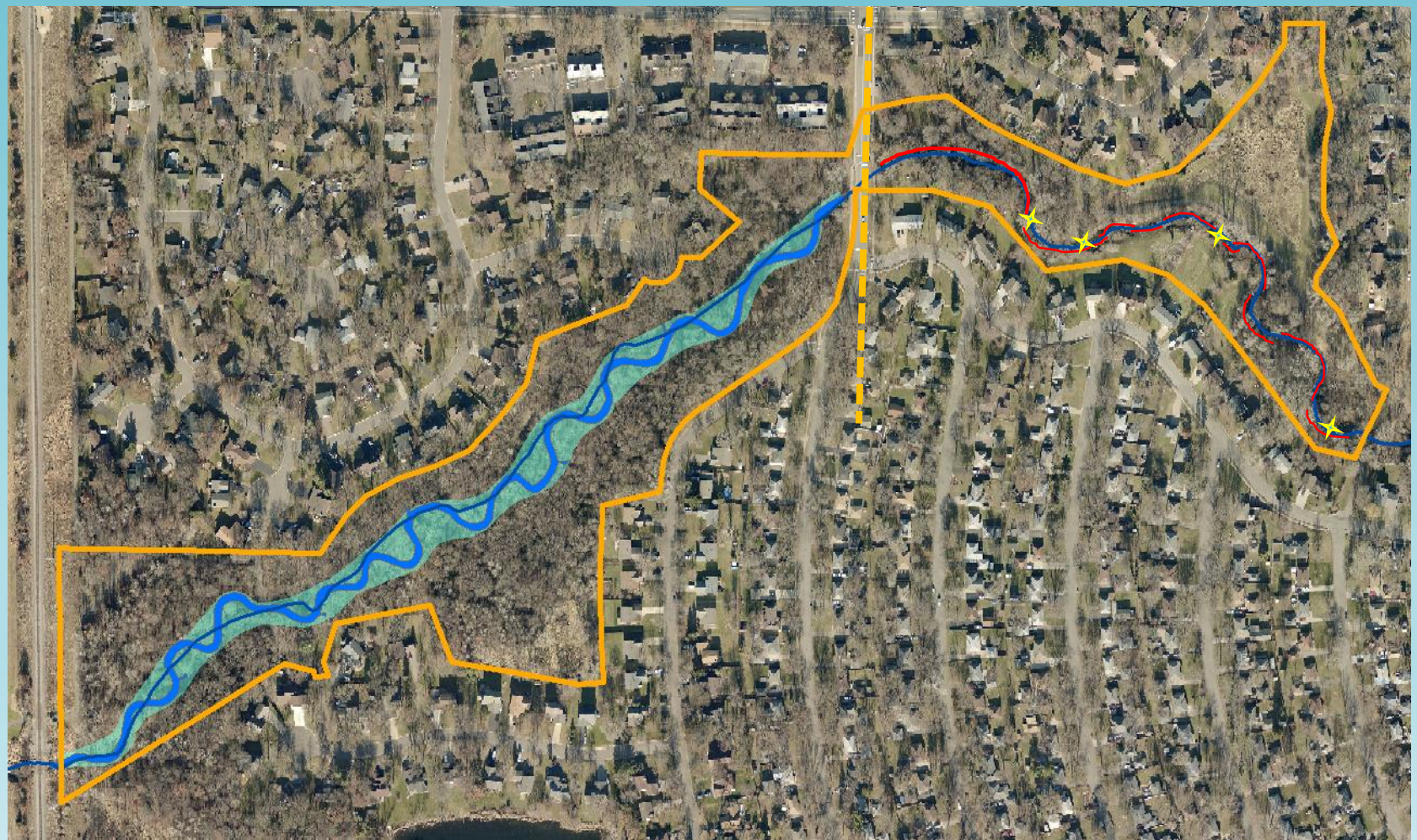
Floodplain reconnection

"Natural Channel Design"



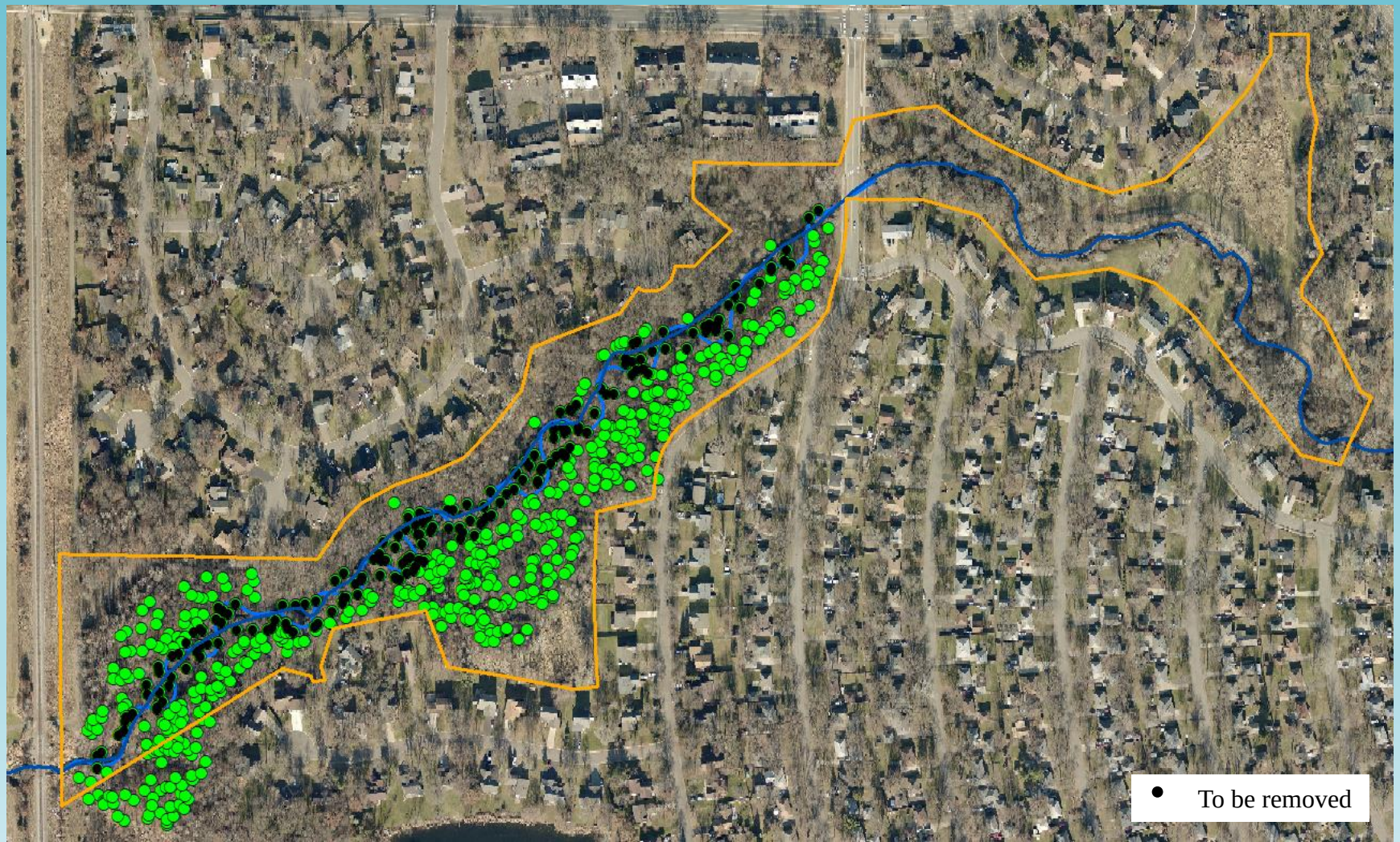
Proposed Middle Sand Creek Corridor Project

- Upstream reach: stabilize banks in place + add in-channel habitat elements
- Downstream reach: Natural channel design



Proposed Middle Sand Creek Corridor Project

Extent of tree-thinning, 26% of surveyed trees



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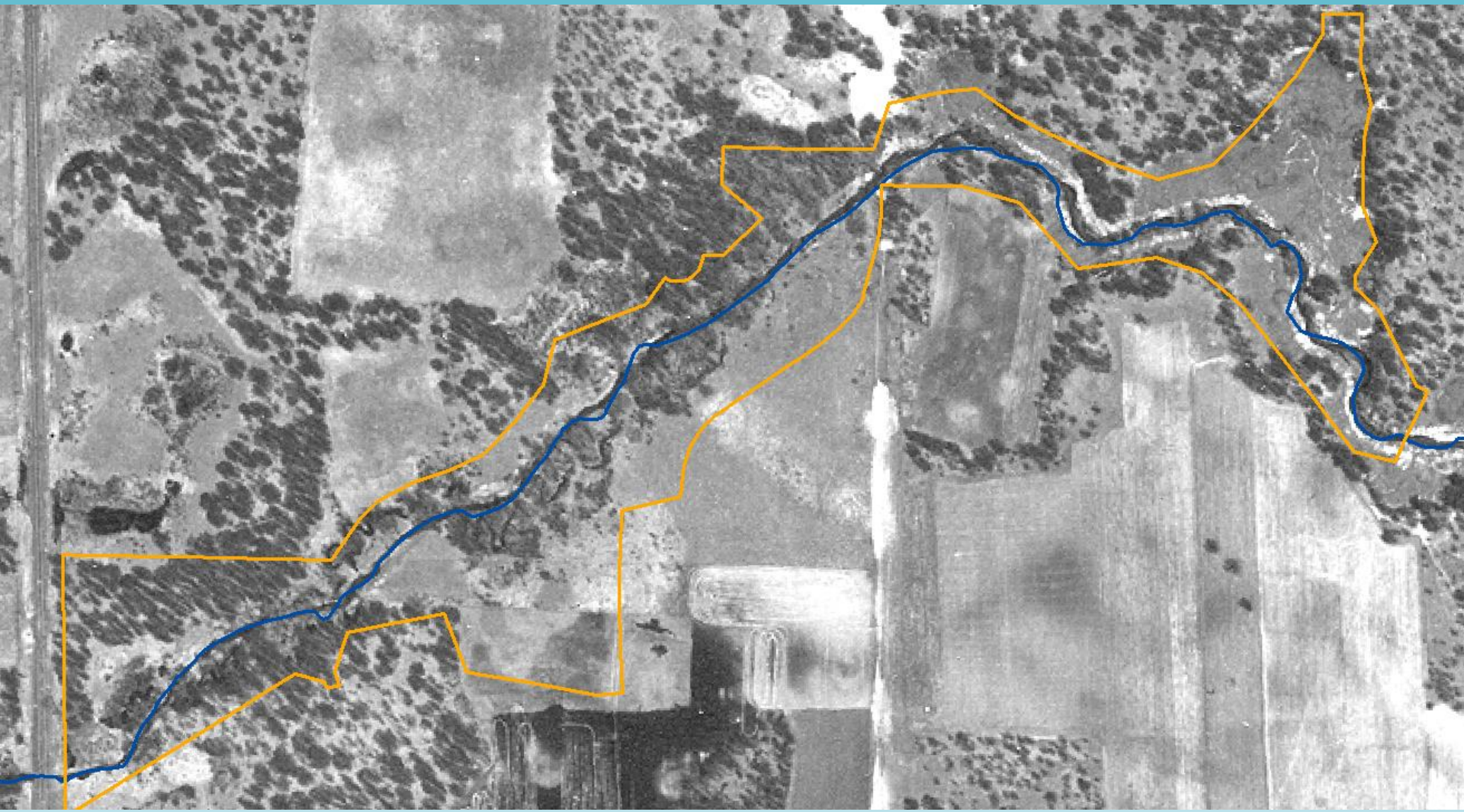

Project Timeline

Spring-Fall 2019: Planning

Winter-Spring 2019: Phase 1 construction

Spring-Summer 2019: Site restoration/ vegetation establishment

Fall-Winter 2020: Phase 2 construction

Spring-Summer 2020: Site restoration/ vegetation establishment

Fall 2020-2021: Continued invasive species control and maintenance

Middle Sand Creek Corridor Project

Cost: ~$1,000,000

NO DIRECT COST *to you*

MN Clean Water Fund grant: $382,772

Federal 319 grant: $291,000

Coon Creek WD: ~$400,000

CLEAN WATER LAND & LEGACY AMENDMENT

Additional project elements

Newsletter & webpage updates: www.cooncreekwd.org/MiddleSandCreekResto

Interpretive signage

Interactive “Watershed walks”

Follow-up monitoring & maintenance

Issues & Concerns

- Maintain wild & natural character of area
  - Concentrate tree removal to maintain untouched buffer
  - Use pollinator-friendly native plant species
  - bird nesting boxes
- Heavily-used trail corridor
  - Temporary spot closures
  - Safety
  - Lack of dog waste disposal stations
- Construction disturbance/ noise
- Storm damage/ resiliency/ Long-term maintenance

Questions, Concerns, Suggestions?

Thank you!

Contact:
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763-755-0975
www.cooncreekwd.org/MiddleSandCreekResto