WOODS CREEK REACH 11 RESTORATION PROJECT

Village of Lake in the Hills
ILLINOIS

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

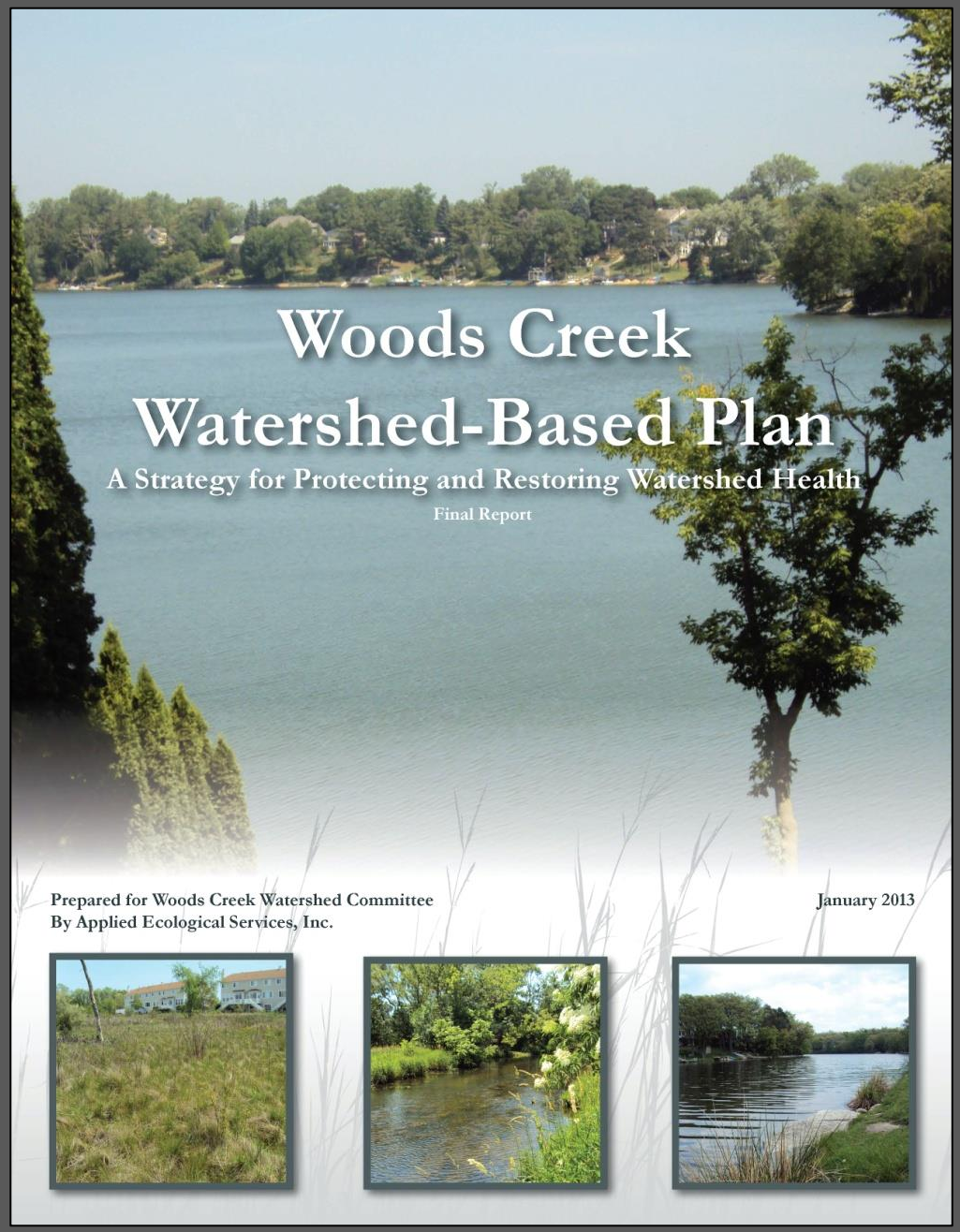
res

AES is excited to be part of RES

CBB

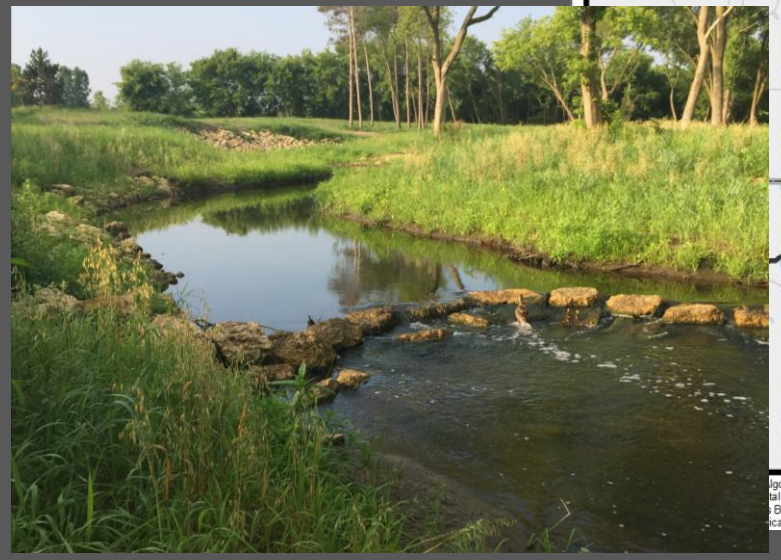
WOODS CREEK WATERSHED PLAN

- Planning effort in 2012-2013 between Lake in the Hills, Algonquin, Crystal Lake Park District, and Crystal Lake to evaluate the ecological health of Woods Creek Watershed and identify potential ecological restoration projects to improve water quality.
- High priority projects in plan are eligible for Illinois EPA 319 Grants.



PREVIOUS STREAM PROJECTS IN WOODS CREEK WATERSHED

- Woods Creek Reaches 2-4
  Algonquin (2017-2021)
- Woods Creek Tributary
  Crystal Lake Park District (2018)
- Woods Creek Reach 10
  Lake in the Hills (2019)



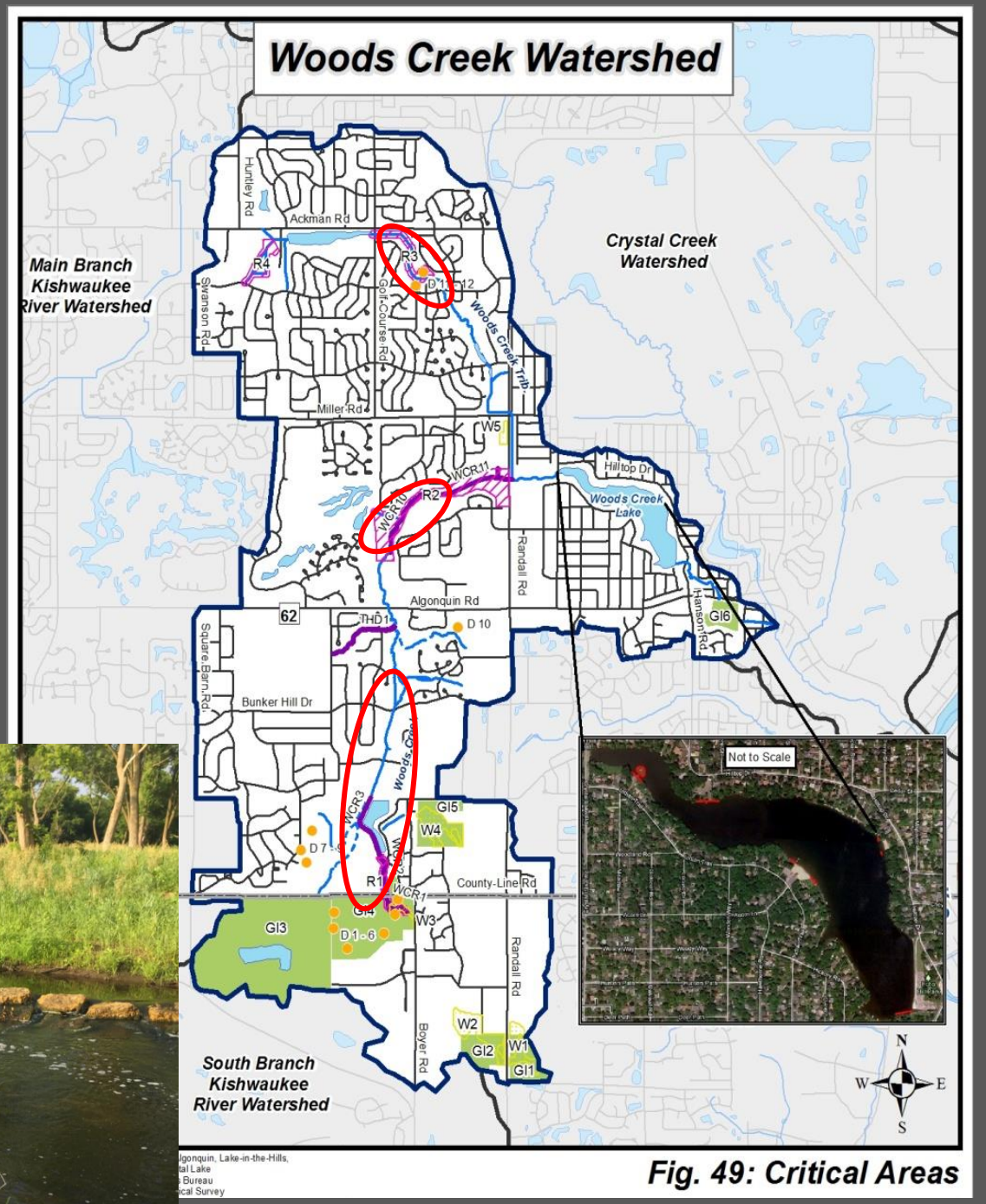
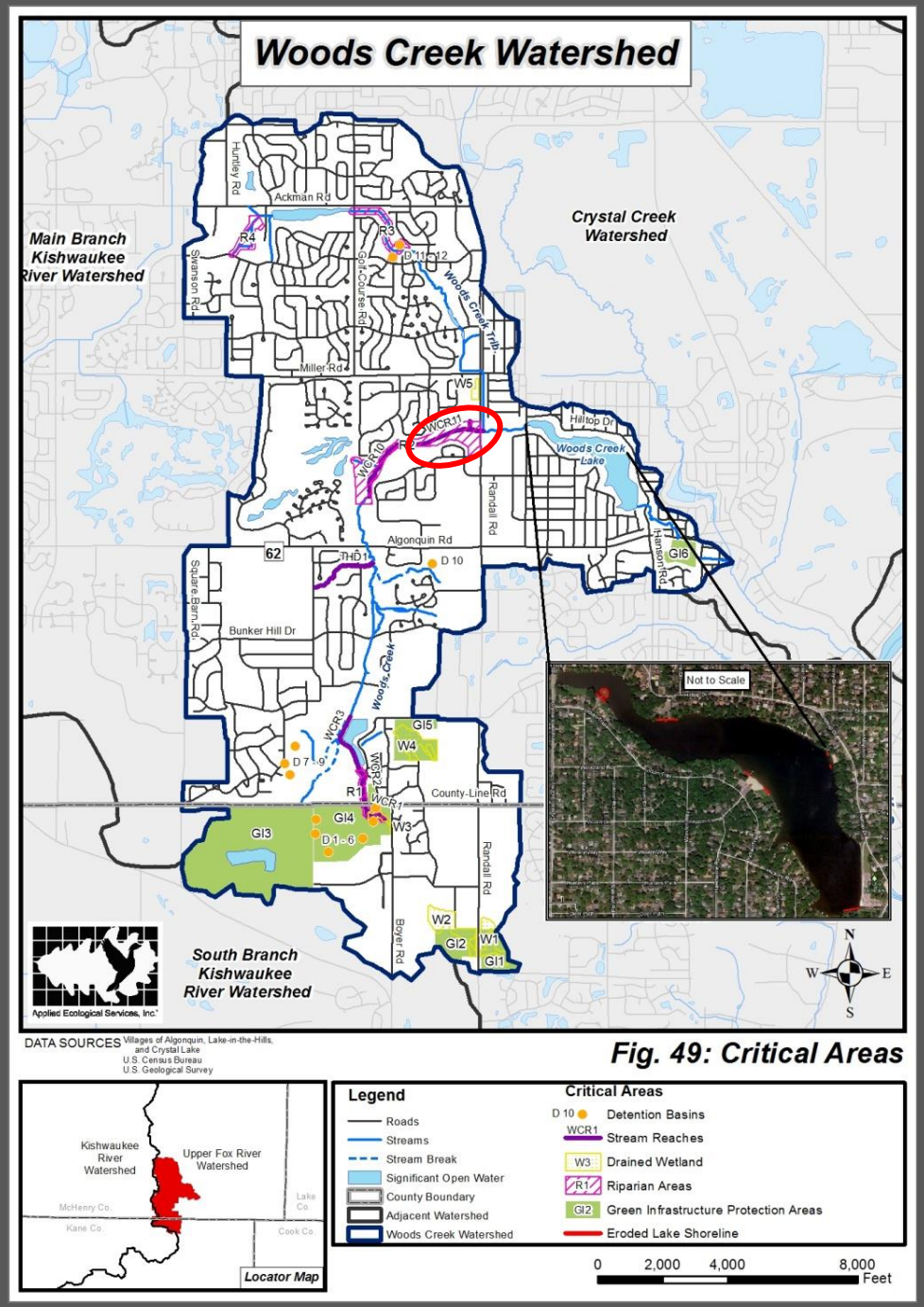


Fig. 49: Critical Areas

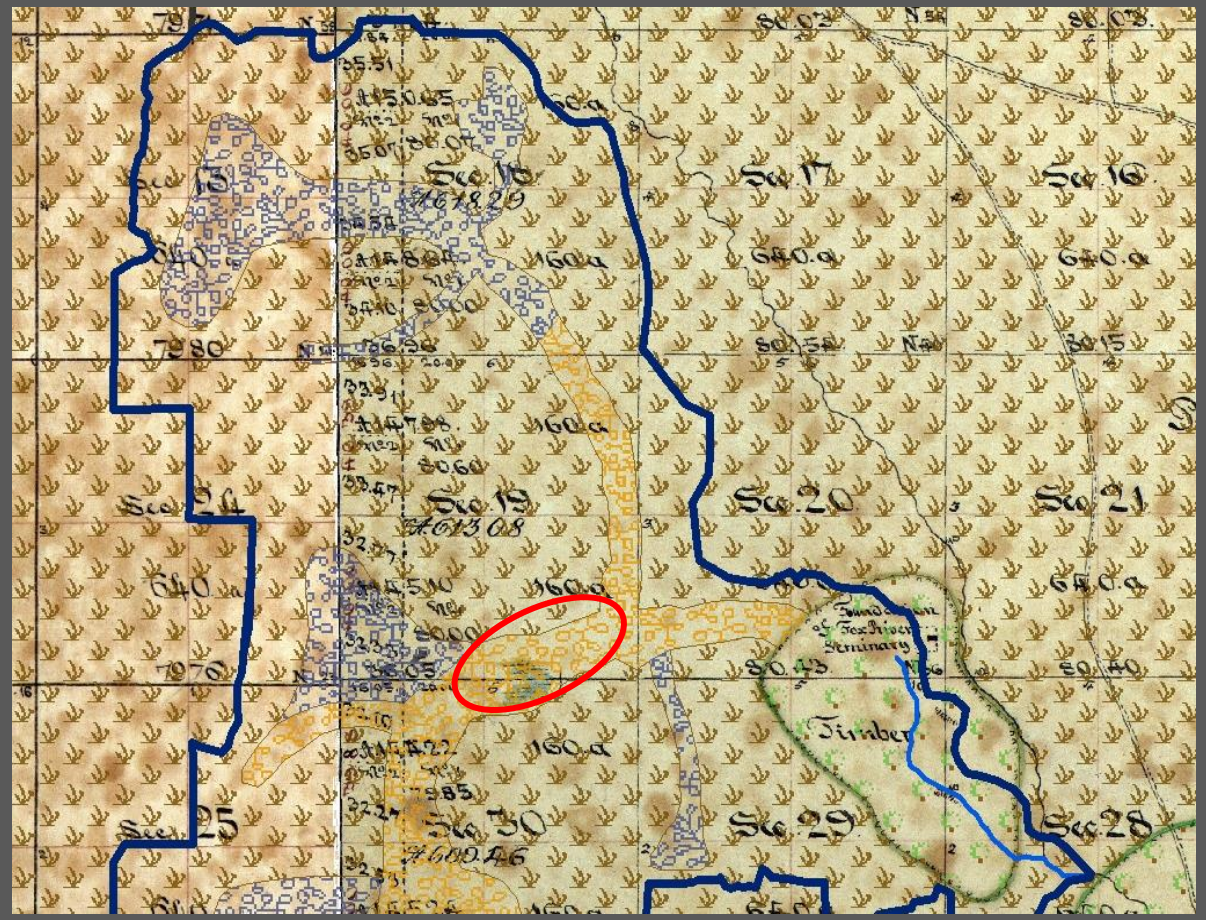
WOODS CREEK REACH 11

- Woods Creek Reach 11 is identified as a “Critical Area”.
- LITH applied for and was awarded Illinois EPA 319 Grant in in 2019/20.
- IEPA = 60% of project cost
  LITH = 40% of project cost



WOODS CREEK PRIOR TO EUROPEAN SETTLEMENT (1830'S)

- Woods Creek did not exist historically. Rather it was a low wet area described as marsh and wet prairie and was devoid of trees.



WOODS CREEK-1939

- Woods Creek Reach 11 was nearly devoid of trees in 1939.

WOODS CREEK TODAY

- Woods Creek is now surrounded by residential development and overgrown with weedy/invasive trees and shrubs.

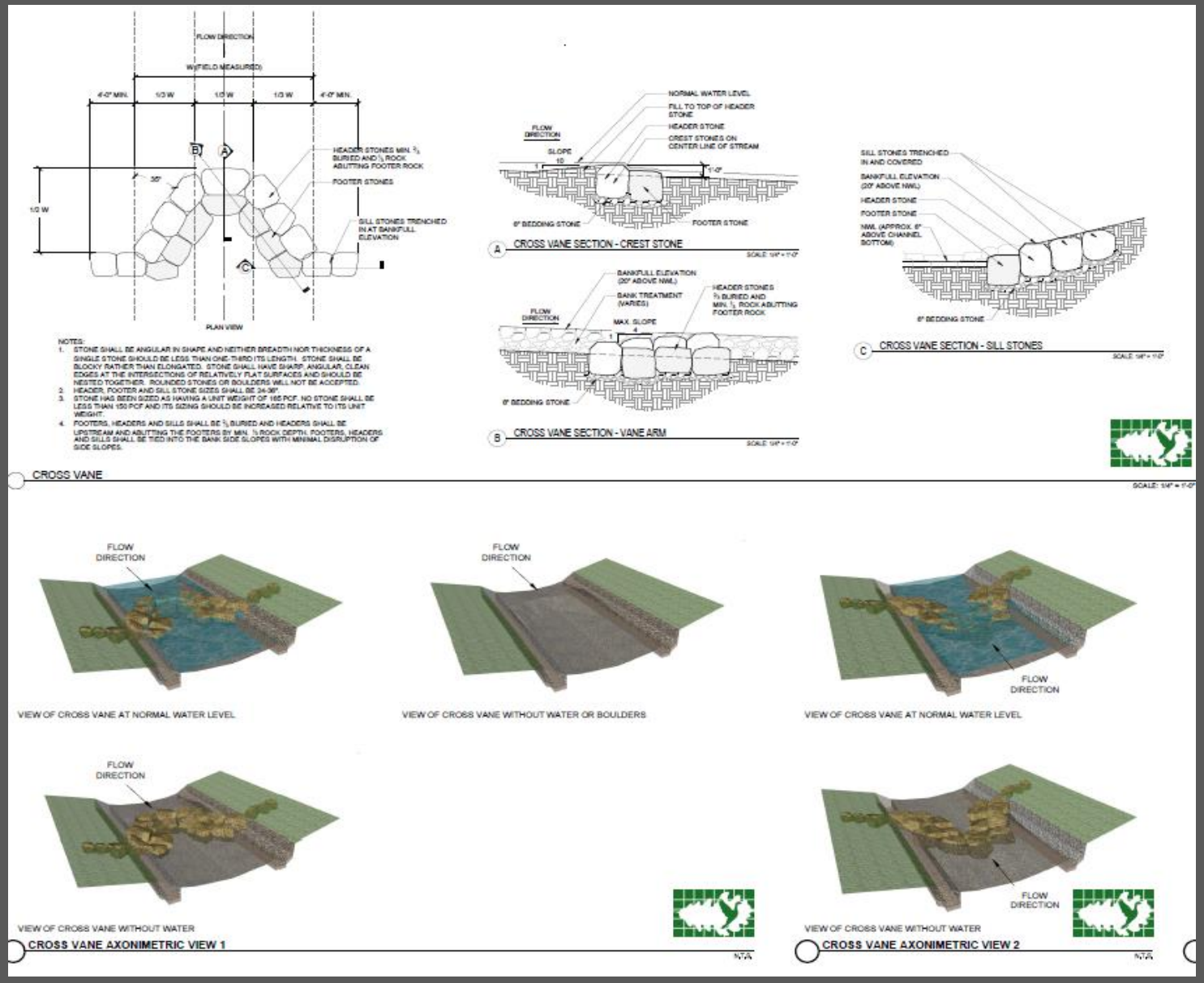
WOODS CREEK REACH 11 RESTORATION GOALS

- Reduce need for future dredging of Woods Creek Lake.
- Improve water quality.
- Improve green infrastructure.
- Improve wildlife and pollinator habitat.
- Improve passive recreation opportunities.
- Provide education opportunities.

STEP1: INVASIVE TREE & SHRUB REMOVAL

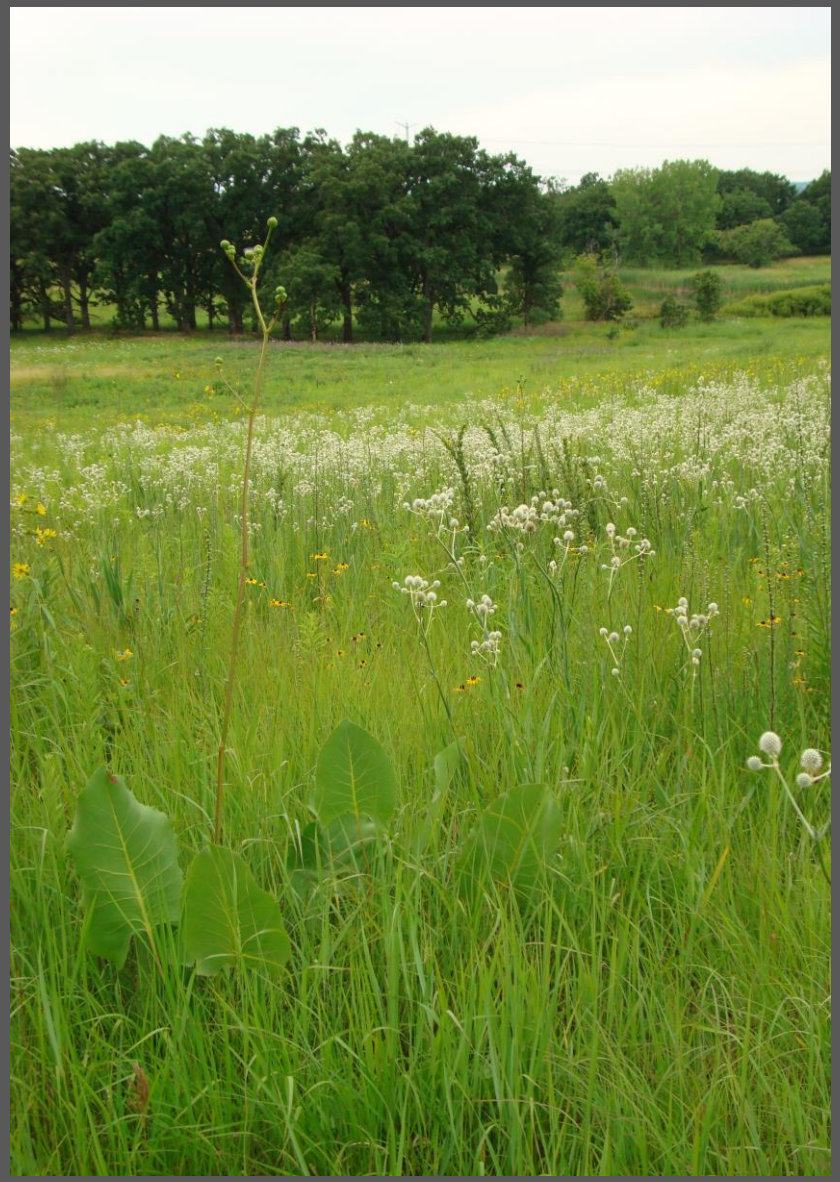
- Tree removal is messy and will be a shock but is essential.

STEP 2: STREAMBANK & CHANNEL RESTORATION



STEP 3: SEEDING & EROSION CONTROL

NATIVE VEGETATION RESTORATION



NATIVE VEGETATION ESTABLISHMENT

- It takes three years for native vegetation to establish from seed.

Year 1: Sleep

Year 2: Creep

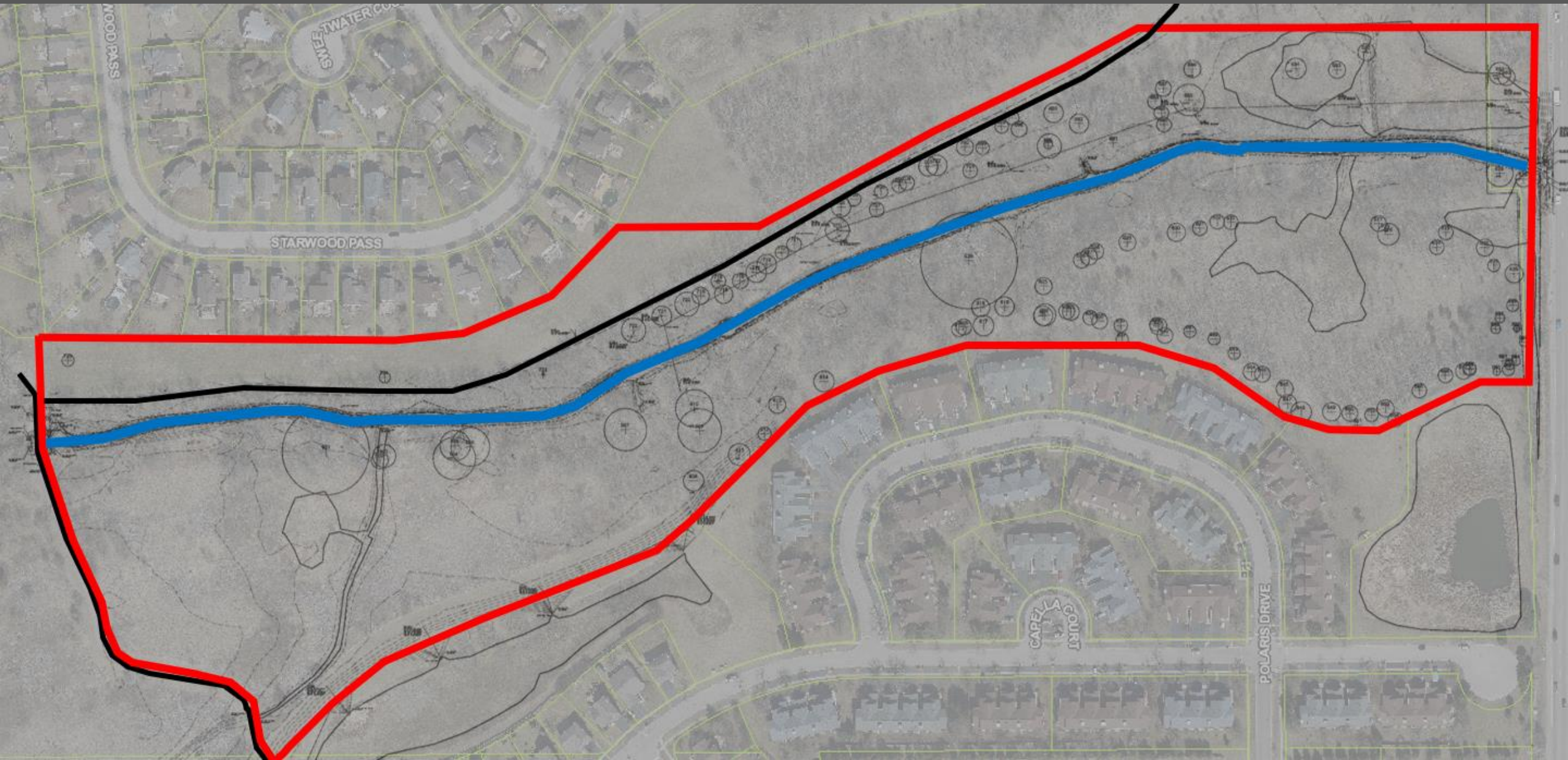
Year 3: Leap

ECOLOGICAL MANAGEMENT

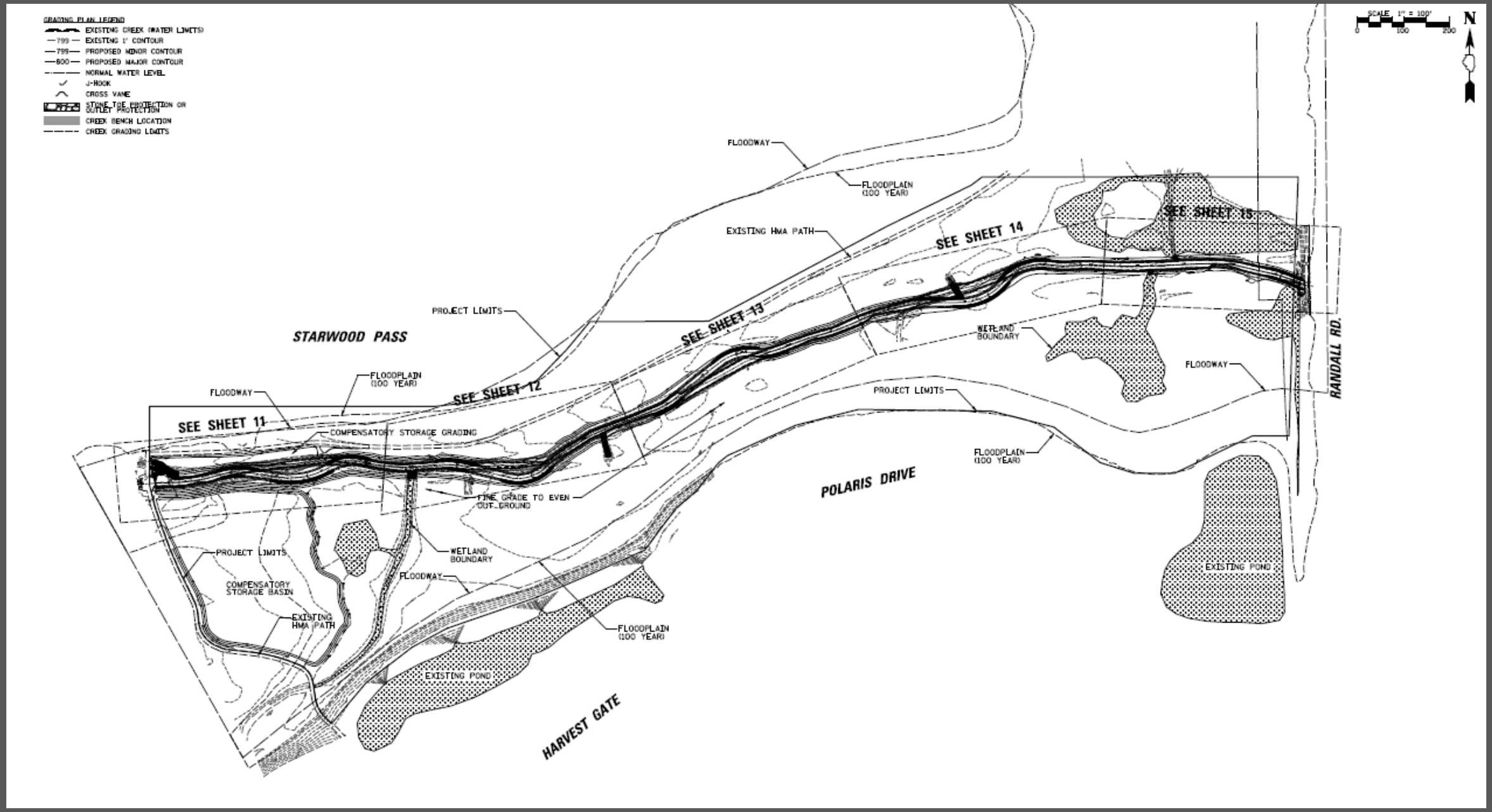
- Three years of management is included in grant.


QUESTIONS

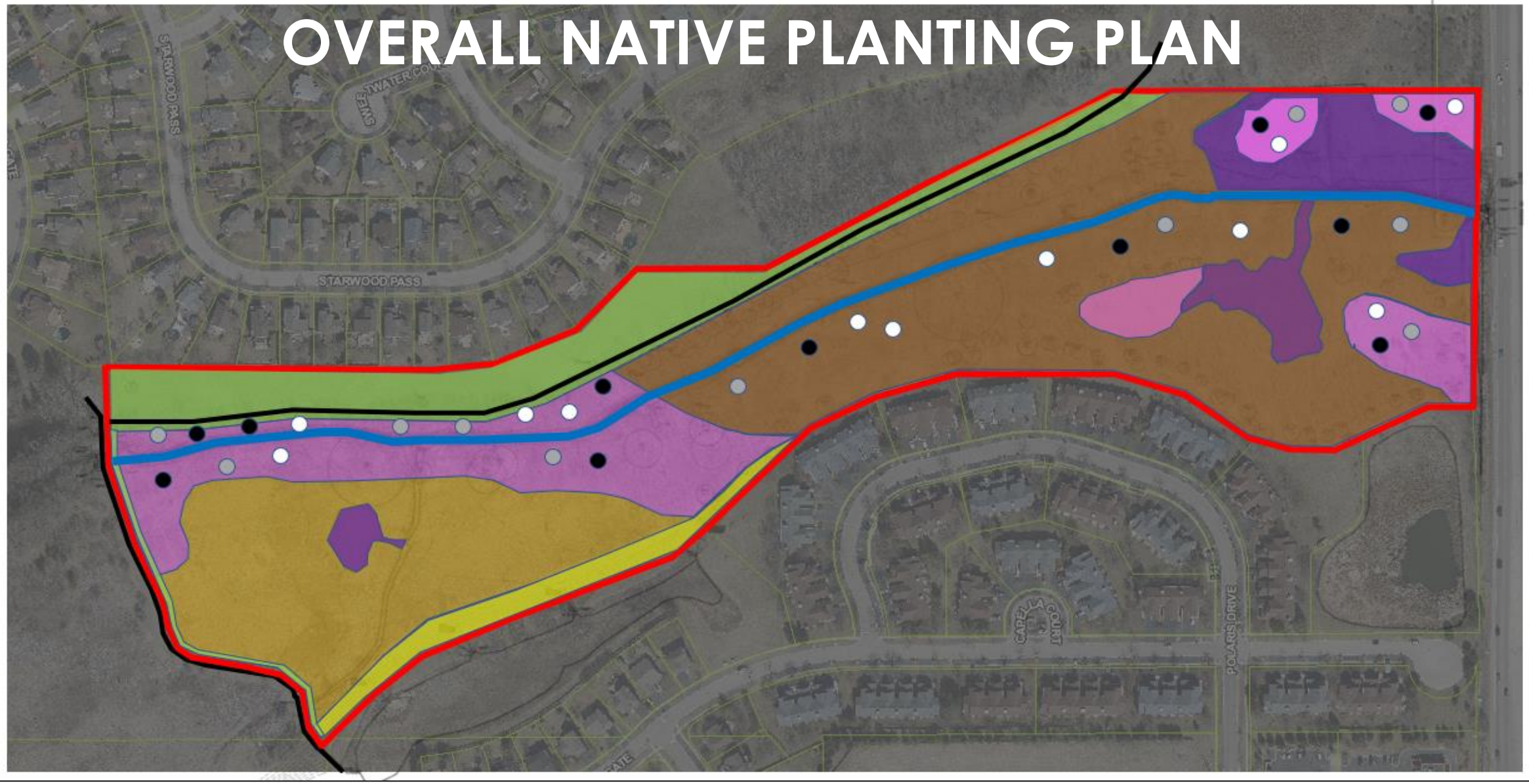
OVERALL TREE PRESERVATION/REMOVAL PLAN



OVERALL GRADING PLAN



OVERALL NATIVE PLANTING PLAN



LEGEND

- Project Boundary
- Trail
- Woods Creek
- Existing Turf Grass to Remain/Repaired
- Existing Prairie to remain/Manage
- Wet Prairie/Sedge Meadow Seeding
- Wet Savanna/Prairie Seeding
- Mesic Prairie Seeding
- Wet-Mesic Savanna/Prairie Seeding
- Swamp White Oak (*Quercus bicolor*) (11-2.5" caliper)
- Sycamore (*Platanus occidentalis*) (11-2.5" caliper)
- Hackberry (*Celtis occidentalis*) (11-2.5" caliper)

OVERALL EROSION CONTROL PLAN