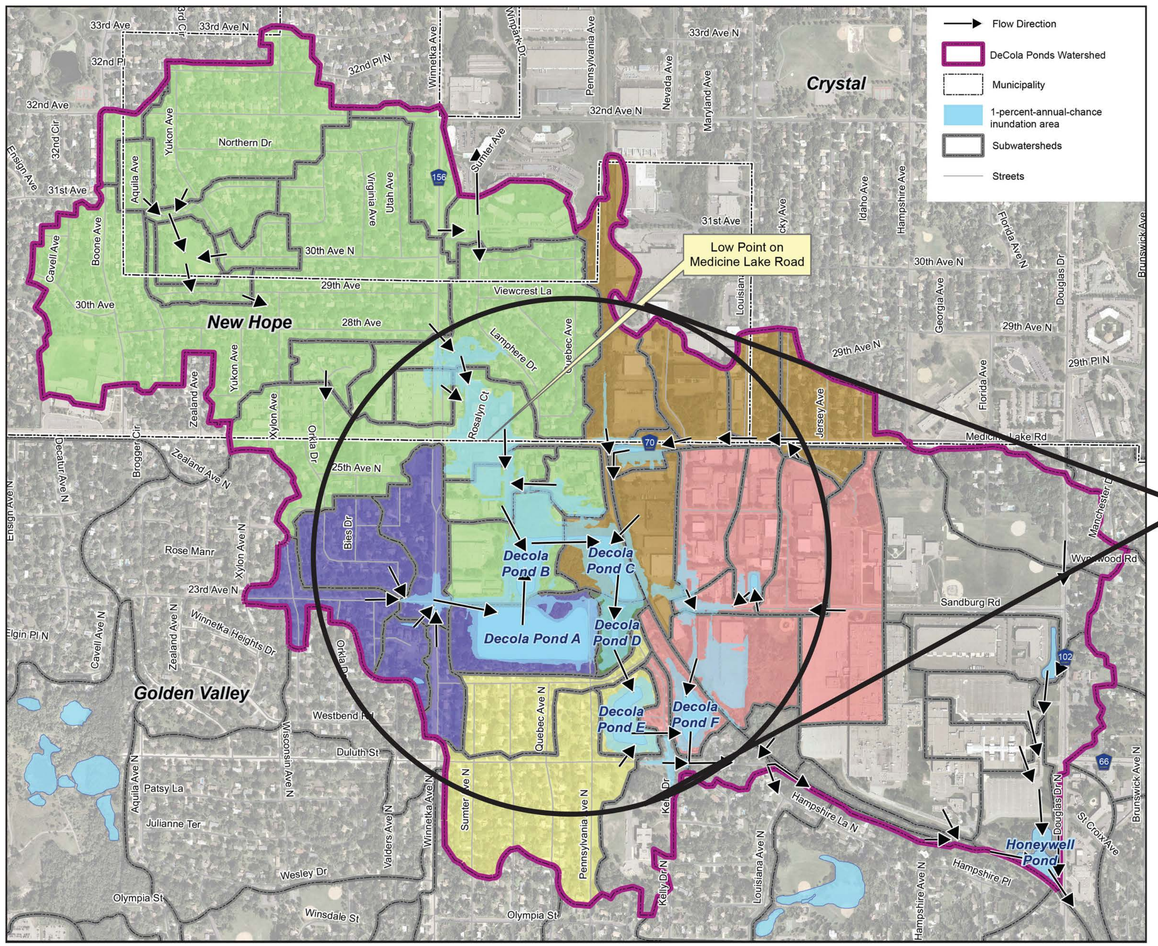
Flooding is a chronic problem in the area

Flooding has been a chronic issue in the area around Medicine Lake Road and caused damage to homes on DeCola Ponds in 1978. Since then, numerous storms have caused flooding of structures around the ponds and, at times, have made Medicine Lake Road (east of Winnetka) impassable for emergency vehicles.

Flooding at Terra Linda Drive

Residential flooding around the DeCola Ponds

Flooding at Medicine Lake Road and Rosalyn Court, June 2010



DeCola Ponds B&C Improvement Project Feasibility Study

History of flooding and mitigation efforts to date

1960s
- Many wetlands filled
- Area around ponds developed
- DeCola Ponds shaped to current configuration

1978
- Severe storm damages to homes on DeCola Ponds

1985
- Adjustable weir installed at DeCola Pond F (residents control weir)

1987
"Super storm" with damages around DeCola Ponds

2001, 2003
Storm events with damages around DeCola Ponds

2006
- Storm event with flooding at Medicine Lake Road
- City of New Hope constructs Terra Linda Drive improvements

2010
- Storm event with flooding at Medicine Lake Road

2012
- City of Golden Valley completes DeCola Ponds Area Flood Mitigation Study; multi-city issue requires more study and coordination

2013, 2015
- Storm events with flooding at Medicine Lake Road

2016
Cities of Golden Valley, Crystal, and New Hope complete long-term flood-mitigation plan outlining six flood-mitigation projects and property owner floodproofing

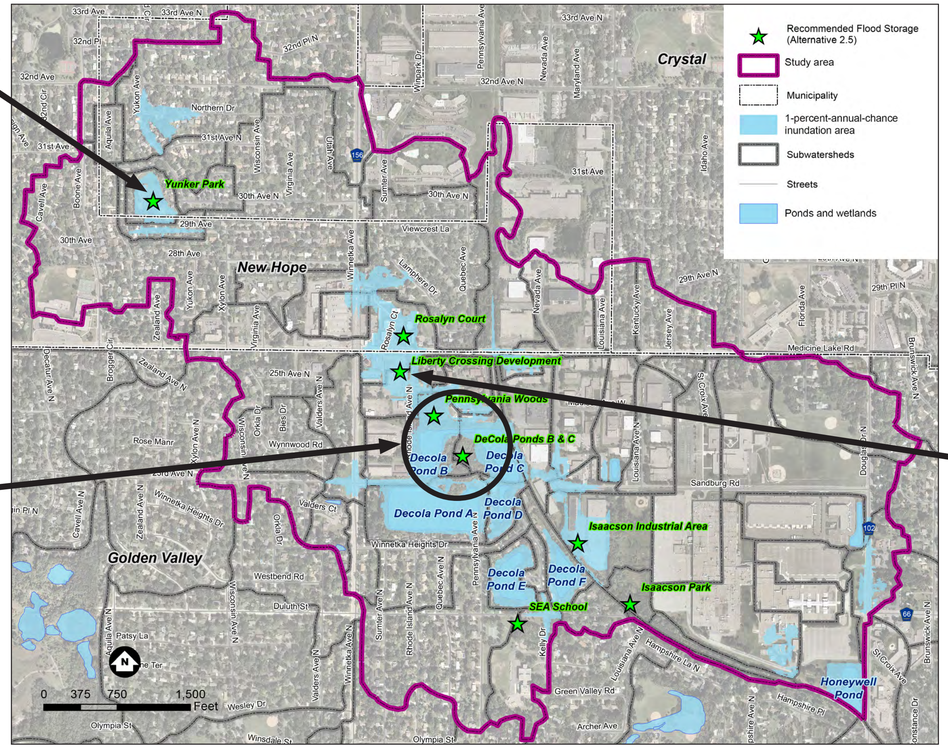
2017
- City of Golden Valley completes Liberty Crossing flood mitigation project
- City of Crystal expands storage at Yunker Park
- BCWMC and City of Golden Valley begin feasibility study for DeCola Ponds B&C improvement project

Long-term flood mitigation projects

Total flood-mitigation volume in the long-term flood-mitigation plan: 68.4 acre-feet

City of Crystal expands storage at Yunker Park (completed in 2017)

BCWMC DeCola Ponds B&C improvement project in partnership with the City of Golden Valley



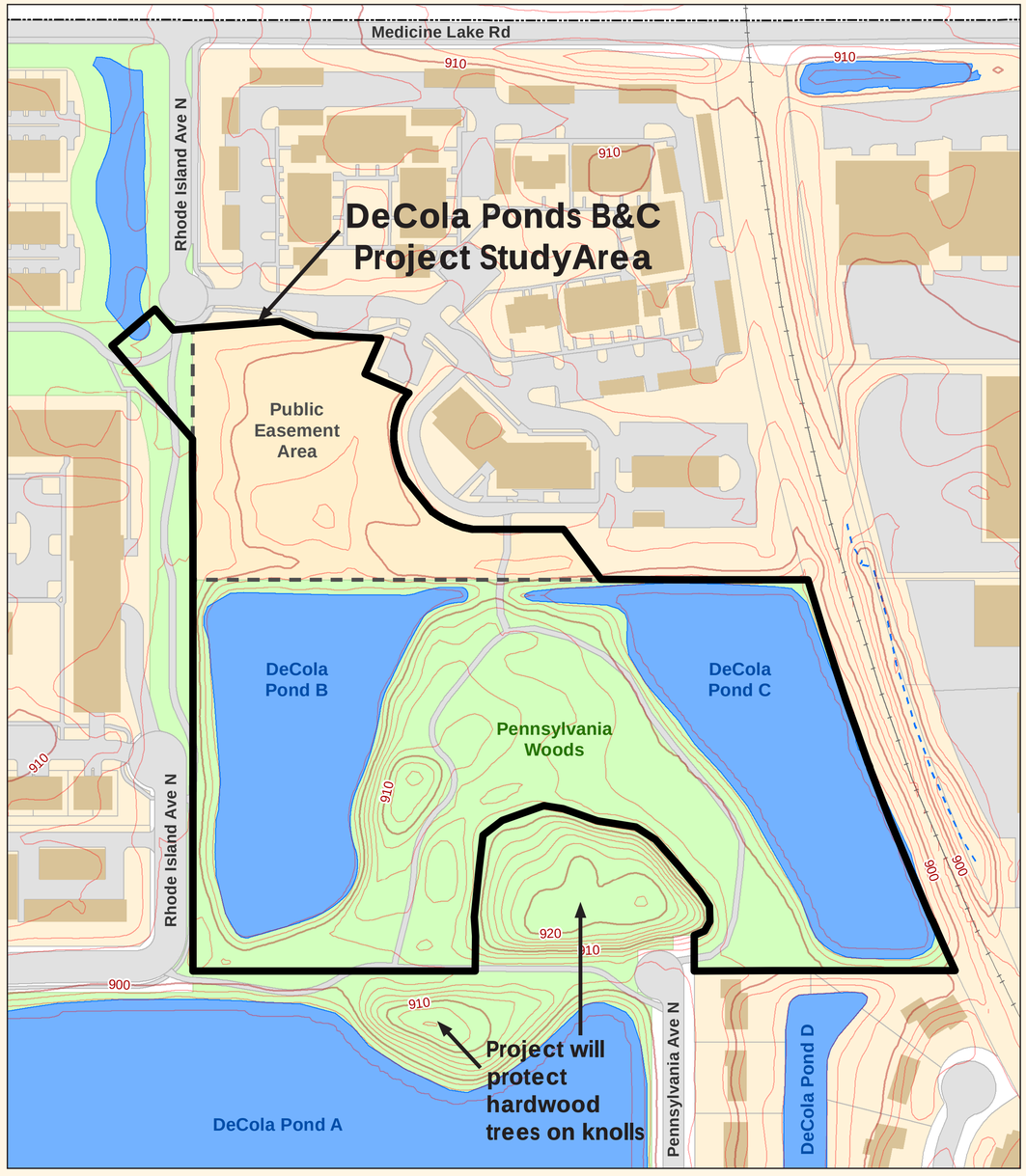
Liberty Crossing flood mitigation project | 2017

(City of Golden Valley develops approximately 8 acre-feet of surface and subsurface flood storage)

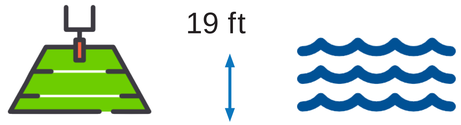
DeCola Ponds B&C Improvement Project Feasibility Study

The DeCola Ponds B and C Improvement Project

Project study area:



Project goals:



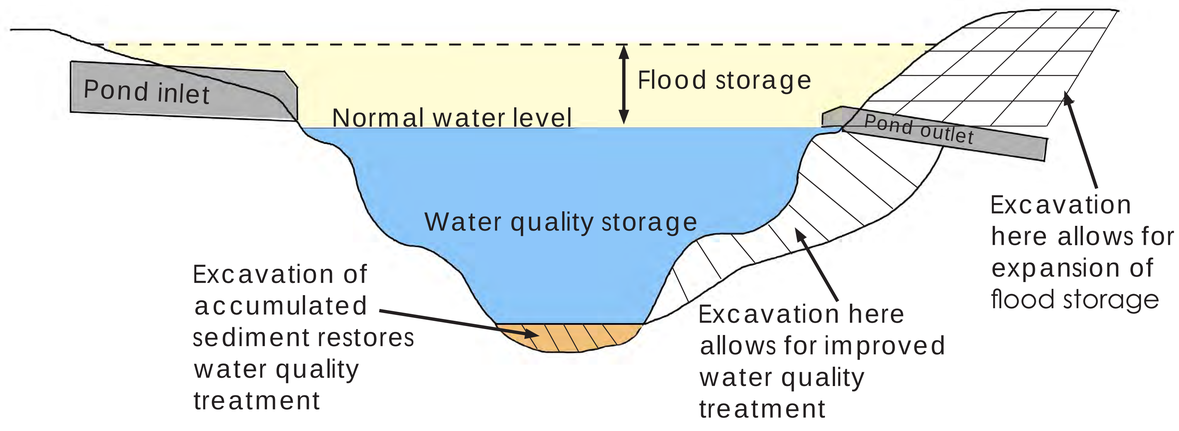
Reduce damages and improve public safety by developing 20–25 acre-feet of flood storage—that's 19 feet of water over an entire football field!

Water quality improvement, outlet modifications, sediment removal, and habitat restoration.

Preserve recreational use and improve park user experience.

Tree removal will be required to achieve flood storage and water quality improvements; but, the goal is to preserve significant hardwoods in the area and restore vegetation.

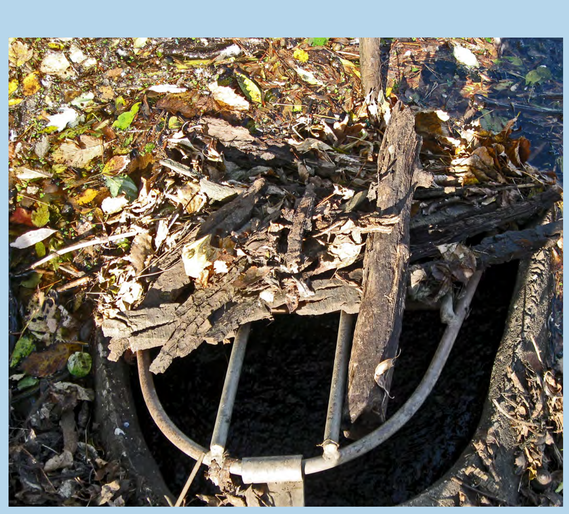
How do you create flood and water quality storage?



DeCola Ponds B&C Improvement Project Feasibility Study

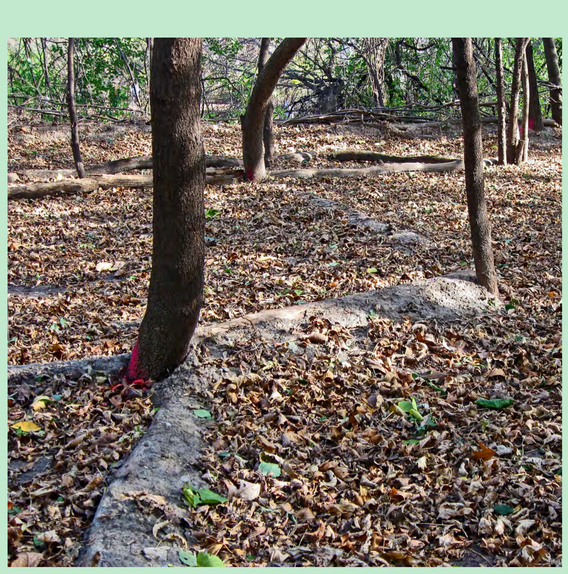
Other issues in Pennsylvania Woods and around DeCola Ponds B&C






Downed trees and exposed soils in channel, debris blocking outlet, and accumulated sediment at storm sewer outfall to DeCola Pond B






Downed trees and debris in park, unauthorized use, low-quality vegetation (significant buckthorn)

Feedback From the November 2017 Open House

Comment Themes	Response
Desire for Trail Accessibility & Maintenance	New trails will be designed to be ADA-compliant
	Trail locations will consider and optimize maintenance and usability
	Existing trash and debris will be removed as part of project construction
	As part of final design, City will consider locations for trash receptacles, benches, overlooks, signage and other park amenities
Management of Debris, Litter, and Trash	The proposed forebay will help capture trash from upstream and will be accessible for inspections and maintenance by City
Management of Invasive Species (e.g. Buckthorn)	Buckthorn and other invasive plant species within the disturbed areas will be removed/managed
	Disturbed areas will be restored with ecologically beneficial native wetland and upland plant and tree species (pollinator habitat)
Management of Trees	Trees within the disturbance limits, including downed or dying trees, will be removed
	All trees outside the disturbance limits will be preserved, including those hardwoods on the knolls between Ponds A, B, and C
	Trees providing existing screening will remain (along south & west side of Pond B, north and east side of Pond C)
	New upland habitat will include native trees, shrubs, forbs, and grasses.
Concern about Sedimentation & Stagnant Water	Accumulated sediment will be removed from Pond B
	The forebay will provide water quality treatment of runoff, including an access for inspection and maintenance by City
	The open water area of Ponds B & C will be expanded and there is an opportunity to deepen the channel connecting Ponds B & C
	The outlet from Pond C will be modified to prevent debris from accumulating on the outlet structure/pipe
Concerns about Safety & Security due to Density of Trees/Undergrowth	The restored areas will be more open providing more visibility in these areas
	On and around the knoll and along the undisturbed shorelines, the tree density will be the same as existing conditions
Concerns about Pond Safety	A 10 foot safety bench will be incorporated along disturbed/expanded shorelines
	Slopes will be designed at 3:1 side slopes (standard)
	Wetland buffer vegetation will be planted along all disturbed shorelines
	Ponds B & C will be ~4 feet deep (same as existing)
Special Assessments to Property Owners	No special assessments will be used to fund this project
	Pursuing a variety of funding sources including City of Golden Valley, BCWMC Capital Improvement Project (CIP) Funds, MnDNR Flood Damage Reduction Grants, Hennepin County, and Others

Final Design Process

Project Funding Sources (Total Funds Available: $4.6 Million)

Minnesota Department of Natural Resources Flood Damage Reduction Grant Funds

$2.3 million (50%)

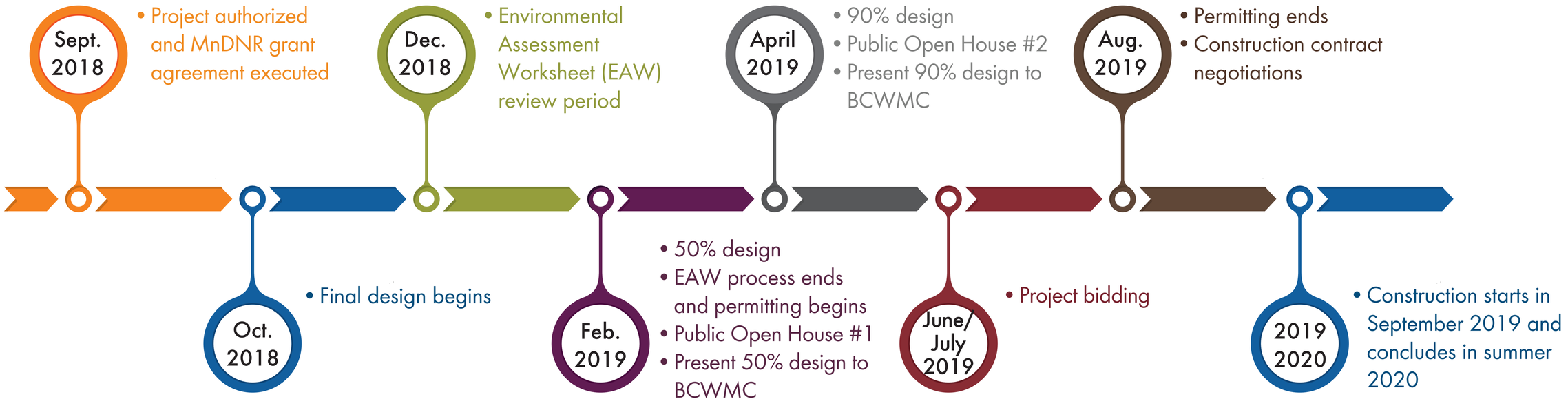
Bassett Creek Watershed Management Commission Capital Improvement Funds

$1.6 million (35%)

Hennepin County and City of Golden Valley

$700,000 (15%)

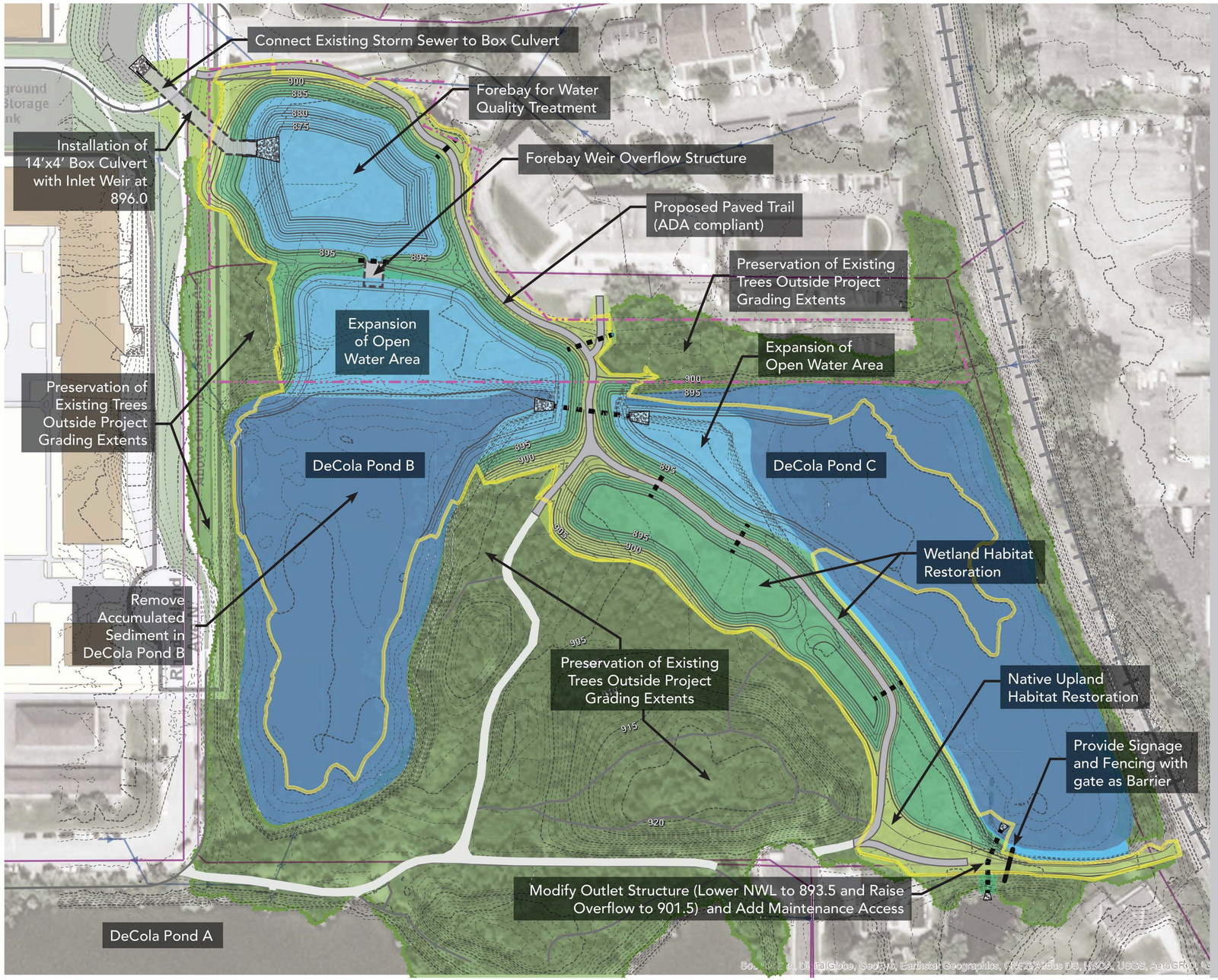
Final Design Timeline:



DeCola Ponds B&C Improvement Project Final Design

50% Design

Estimated Cost (-10%/+20%) = $4.1 Million



Key

- Project Grading Extents
- Expanded Open Water
- Wetland Habitat
- Upland Habitat
- Tree Preservation Area
- Existing Pond Footprint
- Proposed 14'x4' Box Culvert
- Proposed Paved Trail
- Proposed Outlet Structure/Storm Sewer
- Proposed Contour
- Existing Contour
- Existing Storm Sewer
- Existing Sanitary Sewer
- Existing Natural City Trail
- Existing Paved City Trail
- Existing Rail
- Dover Hills Apartments Easement Extents

N

0 60 120
Feet

Figure
50% Design

DeCola Ponds B&C Improvement Project Final Design

Concept Summary

Additional Flood Storage Created:
24.0 acre-feet

Open Water Expansion:
2.0 acres

Improved Water Quality:
Additional 8.5 lbs/yr phosphorus removed

Restored Wetland and Upland habitat:
2.3 acres total
(1.1 acres upland and 1.2 acres wetland)

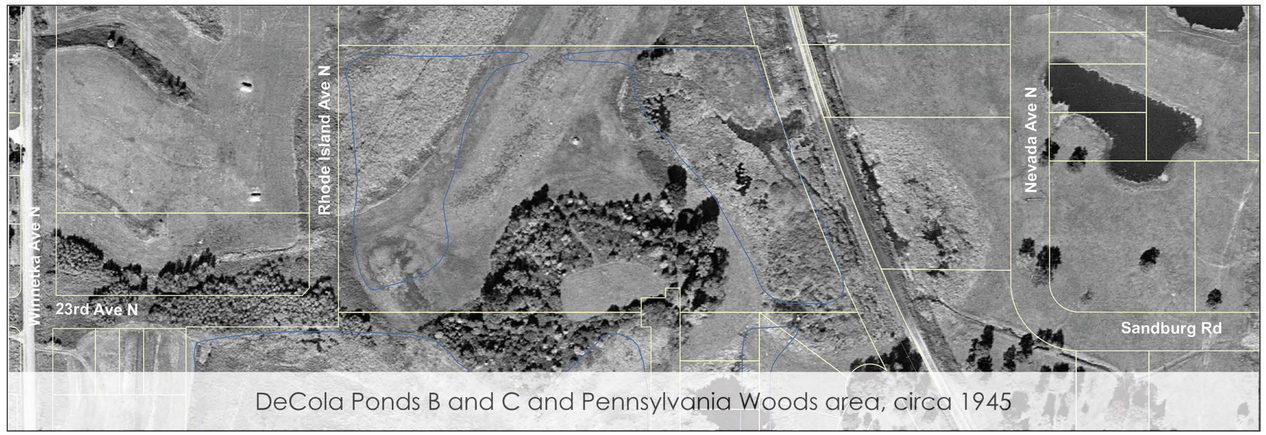
Medicine Lake Road 100-Year Flood Depth
Reduced to approximately 2 ft

Reduction of Flood Level on Ponds:

DeCola Pond	Feet
A,B,C	- 0.5'
D	- 0.5'
E,F	- 0.1'

DeCola Ponds B&C Improvement Project Final Design

How Should this Area Be Restored?



DeCola Ponds B and C and Pennsylvania Woods area, circa 1945

Restore and enhance area with a mix of native vegetation

- Trees
- Shrubs
- Forbs/Wildflowers
- Grasses

Diversify ecology

Improve wildlife habitat

Improved Accessibility

- ADA-accessible trails (where replaced/reconstructed)
- Improved maintenance access

Other possible park amenities

- Benches
- Overlooks
- Signage (entry, wayfinding, informational/educational)
- Waste/recycling carts

We need to hear from you!

Please take the time to:

- Talk with staff
- Fill out comment cards
- Mark up map in center of the room