Welcome to C.A.R.P.

Columbia Aquatic Restoration project

Class Schedule

- Tonight:
- Introduction to C.A.R.P – Brett O'Brien, Columbia Park Supervisor.

- Storm Water Management – Mike Heimos, Storm Water Educator, Columbia Utilities - Stormwater.

Class schedule

- March 22, 6:00 P.M.
- Invertebrates and fishes – Amy Meier, Stream Team Biologist.
- Aquatic Plant ID – Ryan Russell, Horticulturalist, Columbia Parks & Recreation.
- Planting projects and what to expect – Michael Acton, Groundskeeper, Columbia Parks & Recreation.

The primary goal of C.A.R.P

- To enable trained volunteers to assist the Columbia Parks Department in aquatic & shoreline plant management and maintenance in the growing number of park ponds, retention basins, rain gardens and lakes.

Program benefits include:

- Educational experience for both volunteers and park staff involved.
- Program provide catalysis for partnerships and dialogue with other agencies and non-profit organizations.
- Works toward building a greater connection with civic ecology in the Columbia community.
- Volunteer hours are invaluable as a match in grant funding.

Major challenges facing our urban natural resources.

Water quality issues

Invasive plants

Storm water problems

Stormwater and flooding has a major impact on our parks and local community

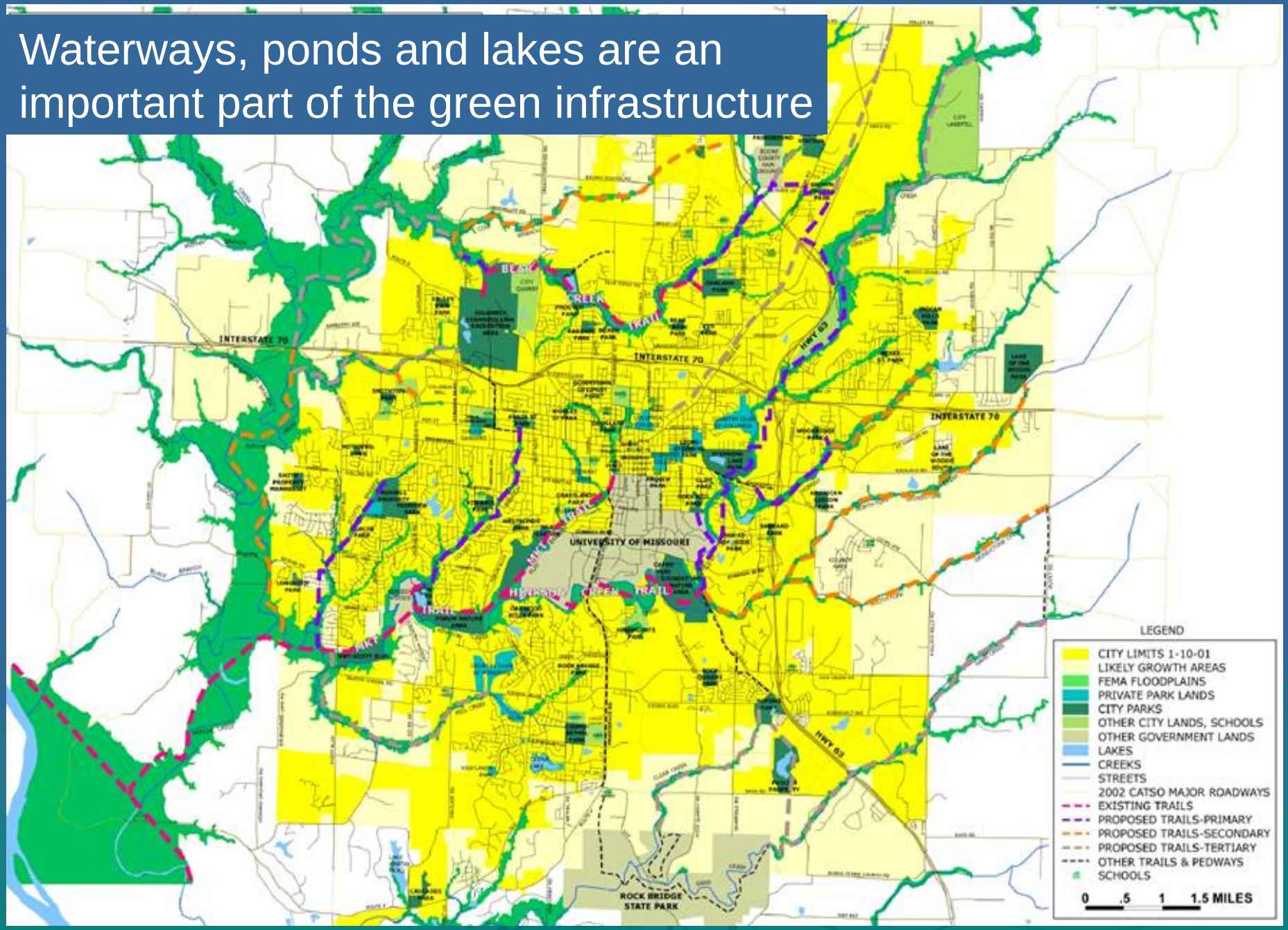
Water quality critical to managing our parks and facilities.

recreation

swimming

wildlife

Waterways, ponds and lakes are an important part of the green infrastructure



Dynamic changes

Hinkson Creek

2006

2012

Grindstone Nature Area

2012

2006

Park development projects and C.A.R.P. Volunteers

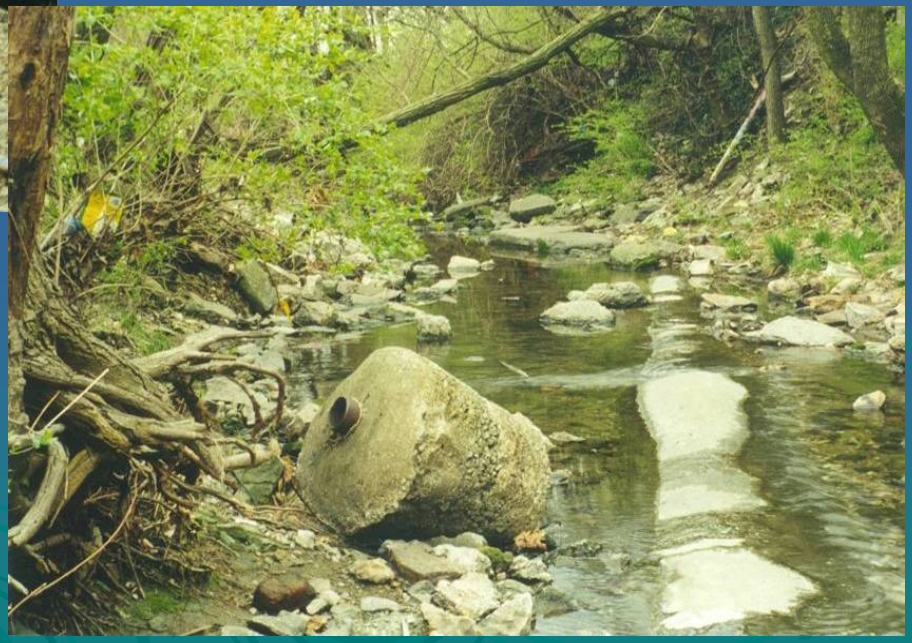
Flat Branch Park

Stephens lake park

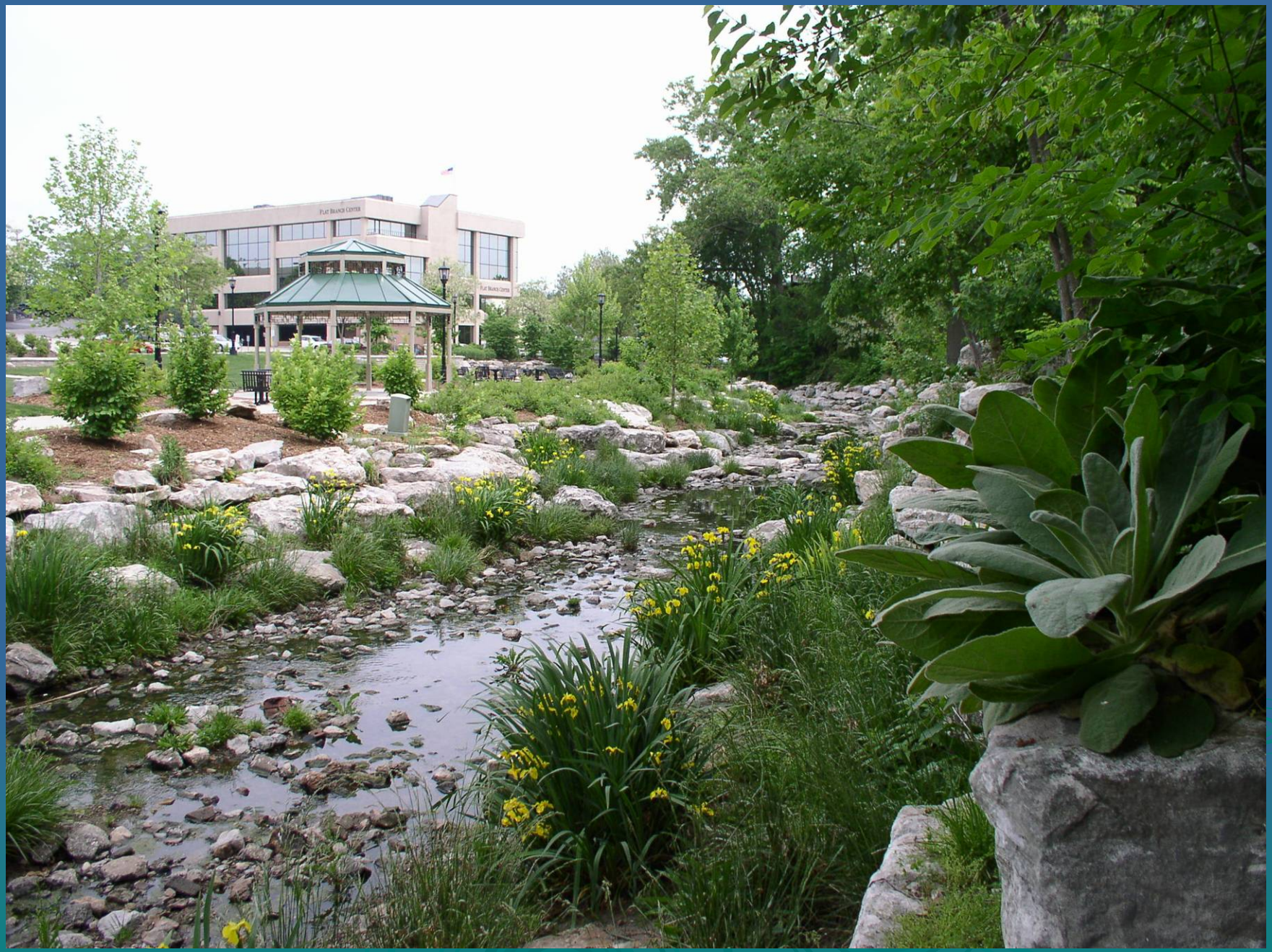
Flat Branch park 2001

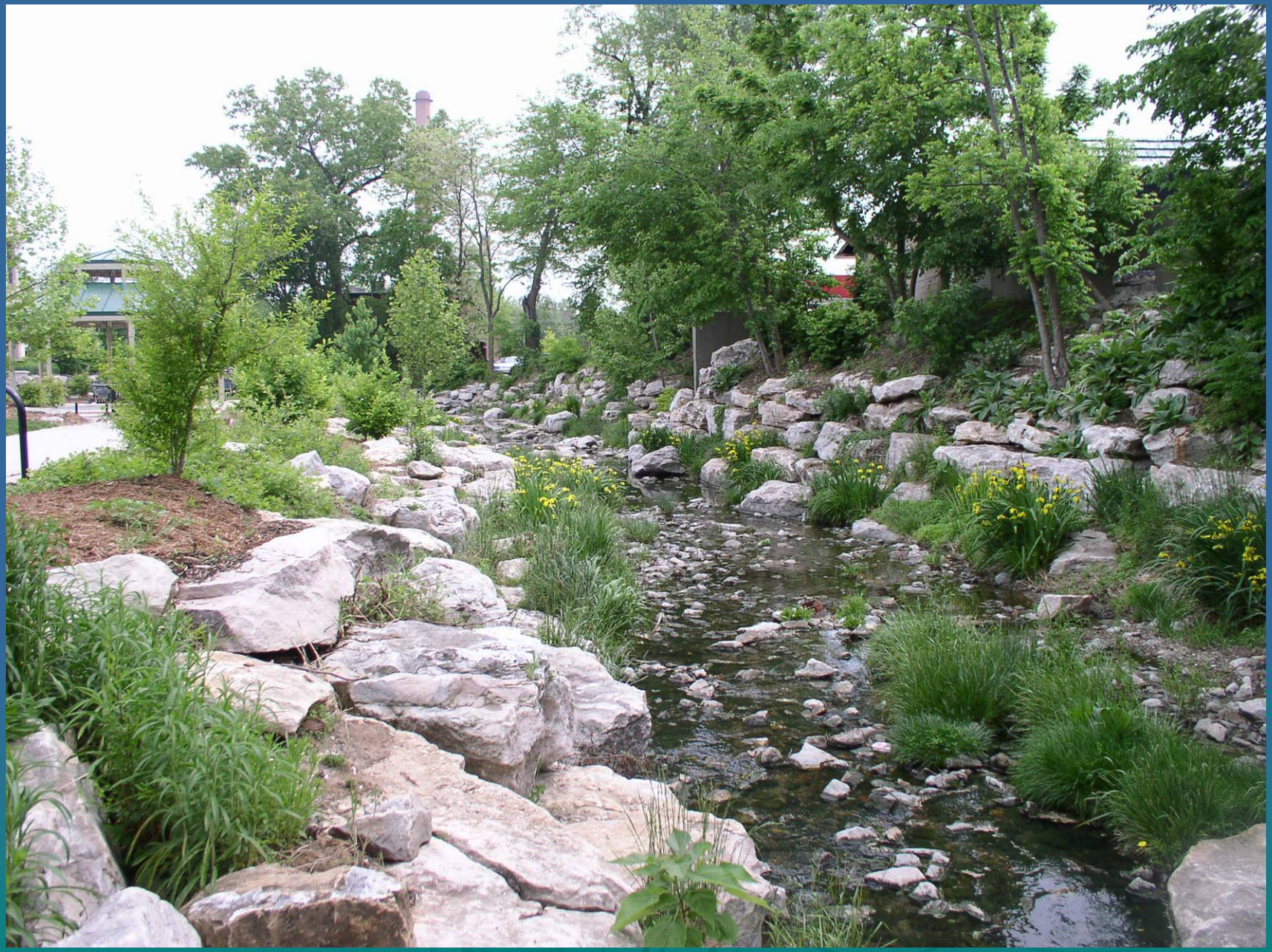
Site conditions - 1991

Inhospitable creek banks of concrete and debris.



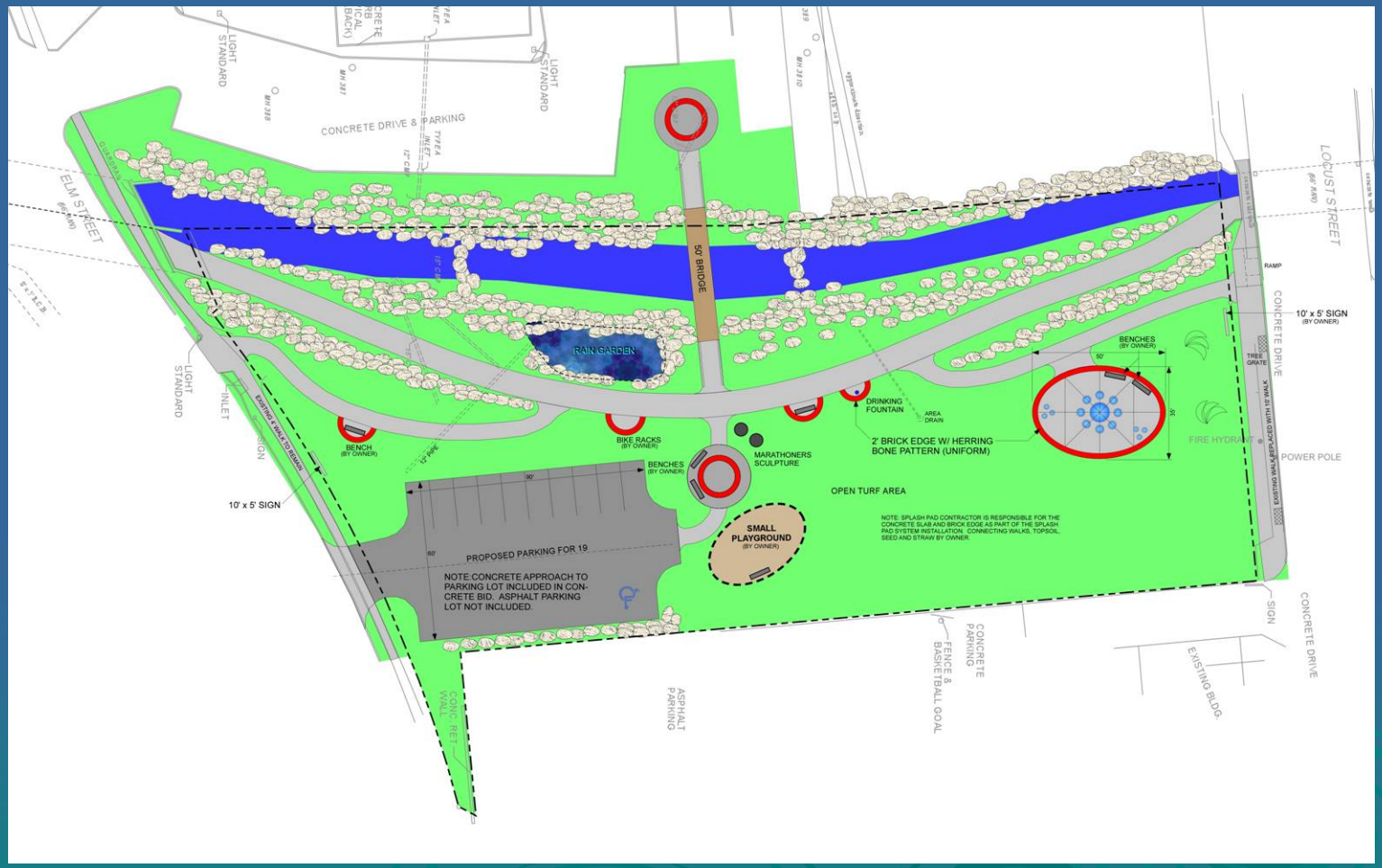
Park staff use burlap and mulch to stabilized soil for planting.


FLAT BRANCH CENTER



From a site of desolation to a place for community involvement.

Flat Branch park, Phase II 2005-2008

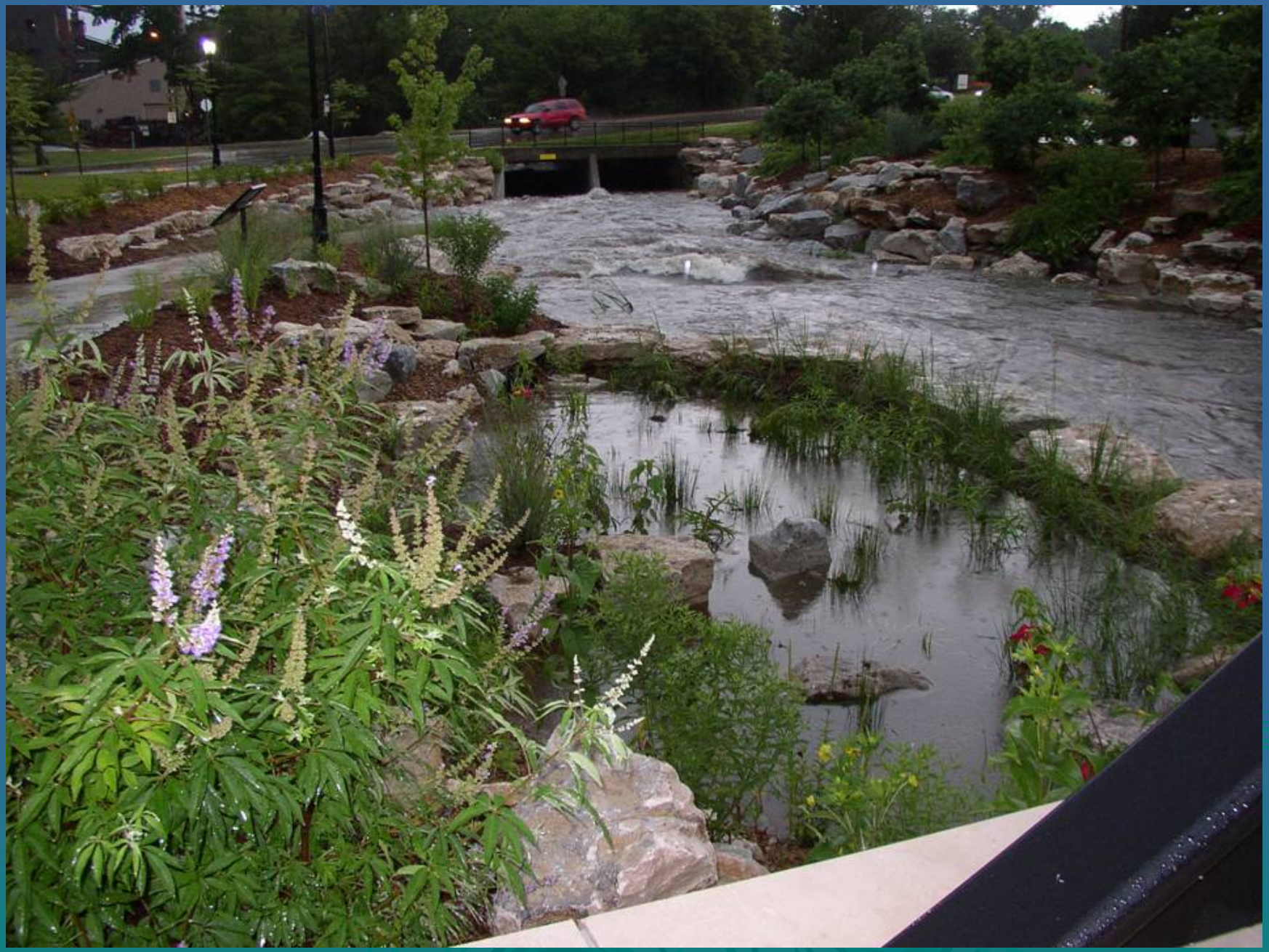


Removal of contaminated soil.

C.A.R.P volunteers planting iris at Flat Branch Park- 2007

Weeding & cleanup project 2008

Many hands makes progress possible



Stephens Lake Park , summer 2006

Stephens lake, prior to park development

Lake partially drained to construct boardwalk and swimming beach.

Planting project-2007

Copper Iris -2008

Invasive plant removal in retention basin at Stephens lake Park

Runoff from parking lot.

Constructed raingarden in 2007 to manage flow.

Canada geese problem at Twin Lakes

C.A.R.P. volunteers planting shoreline Trees & shrubs.

Aquatic plants & Choir logs

Auburn Hills-2009

A combination planting
and shoreline restoration project.

CARP

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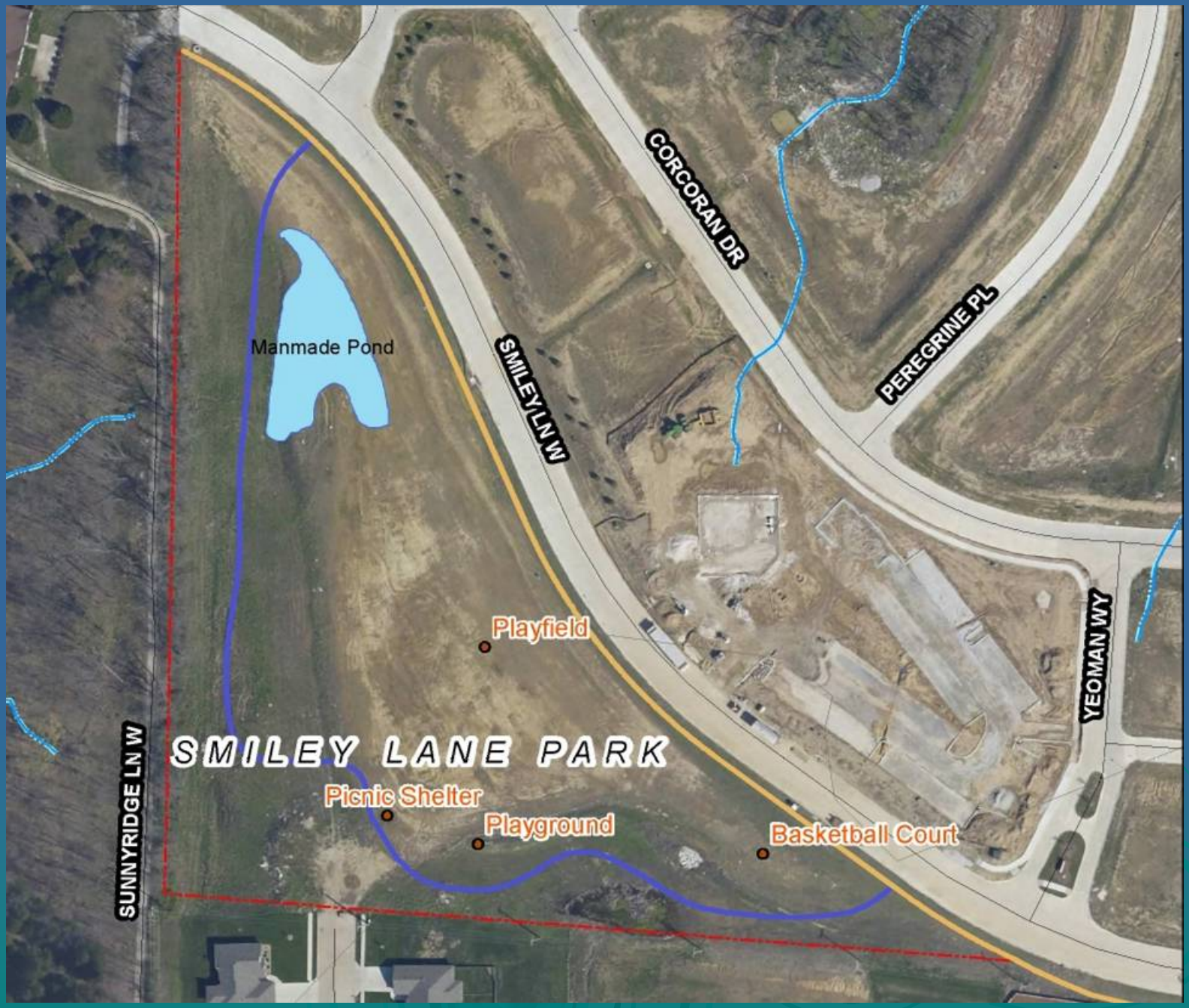

CORCORAN DR
PEREGRINE PL
SMILEY LN W
Manmade Pond
Playfield
YEOMAN WY
SMILEY LANE PARK
SUNNYRIDGE LN W
Picnic Shelter
Playground
Basketball Court

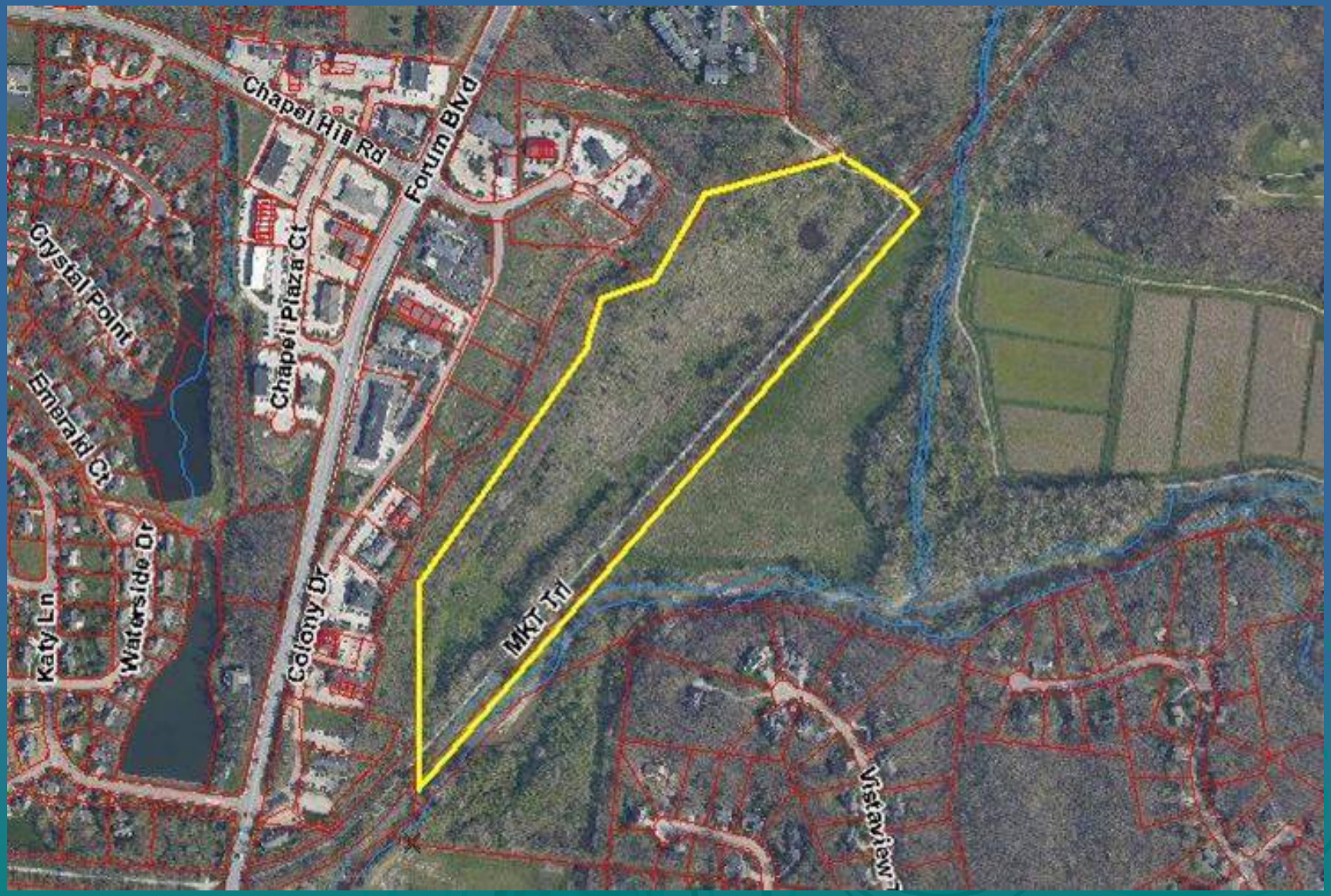
Planting day, 2009

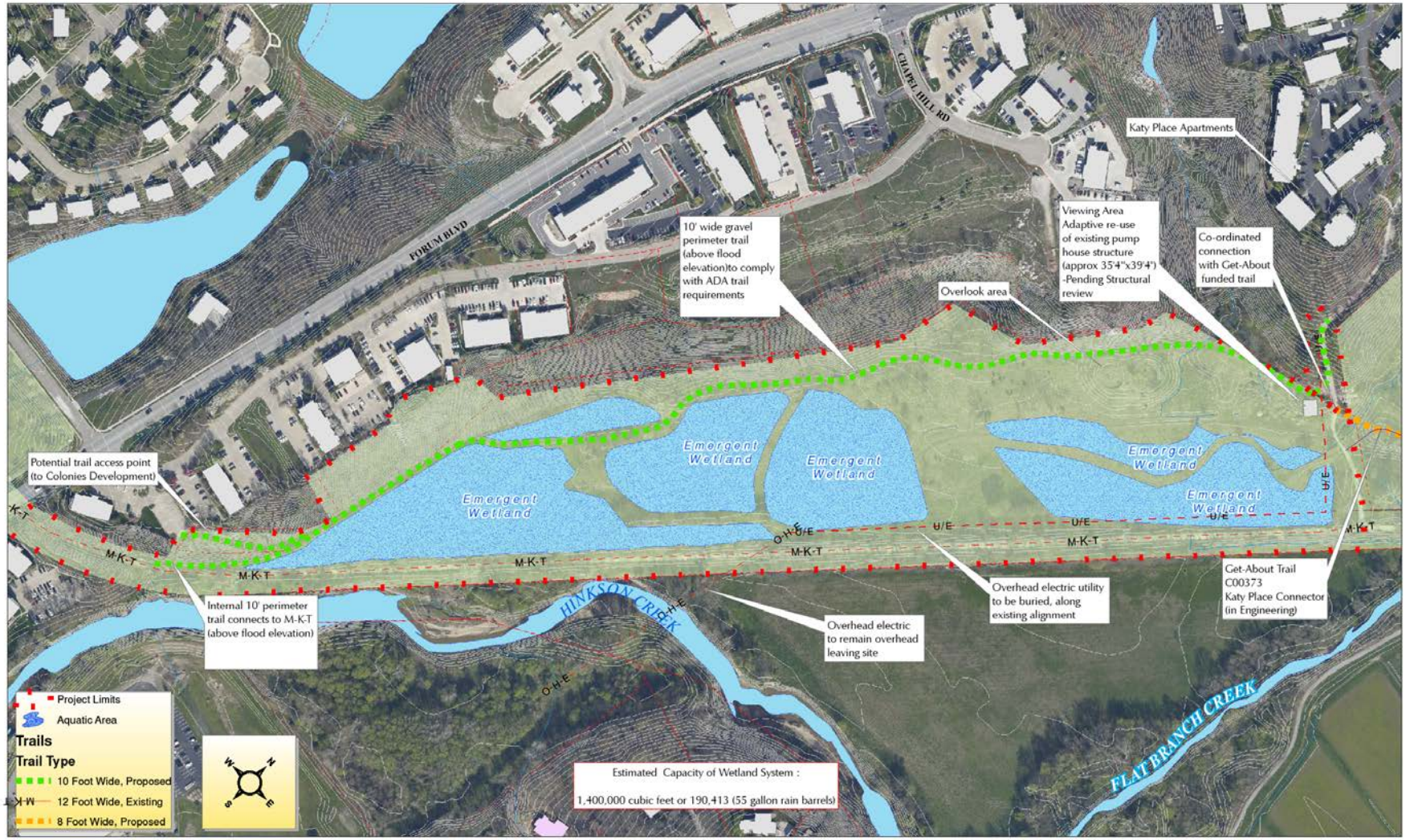
A. Perry Philips Park Master Plan

Phillips Lake Prior to development.

C.A.R.P project, April 2011

Urban ecology restoration project





Preliminary Schematic - 3M Urban Ecology Restoration Project

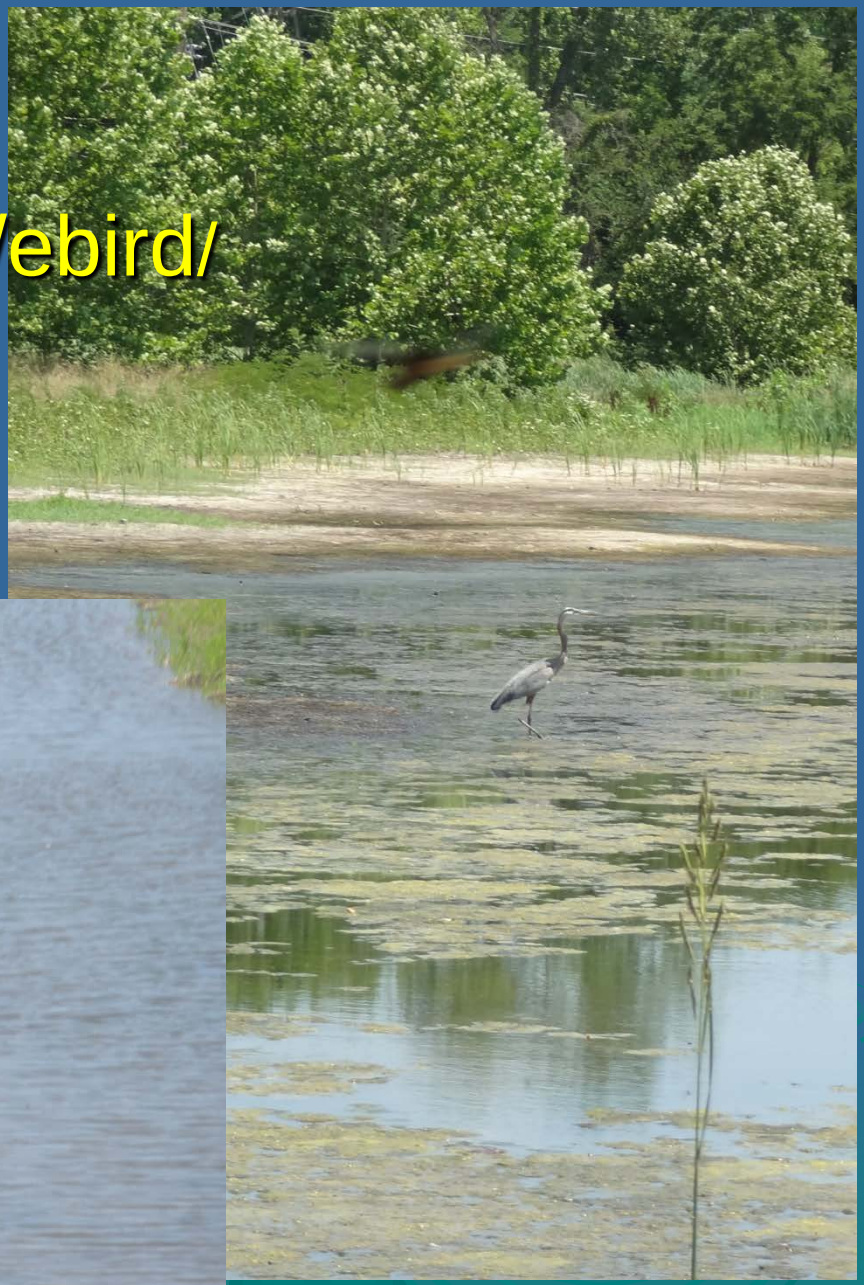
1 inch = 100 feet 0 80 160 320 480 640 Feet

Site of decommissioned sewer treatment plant #2

Fall of 2012

Hours on restoration project helps with grant funding

- http://ebird.org/content/ebird/



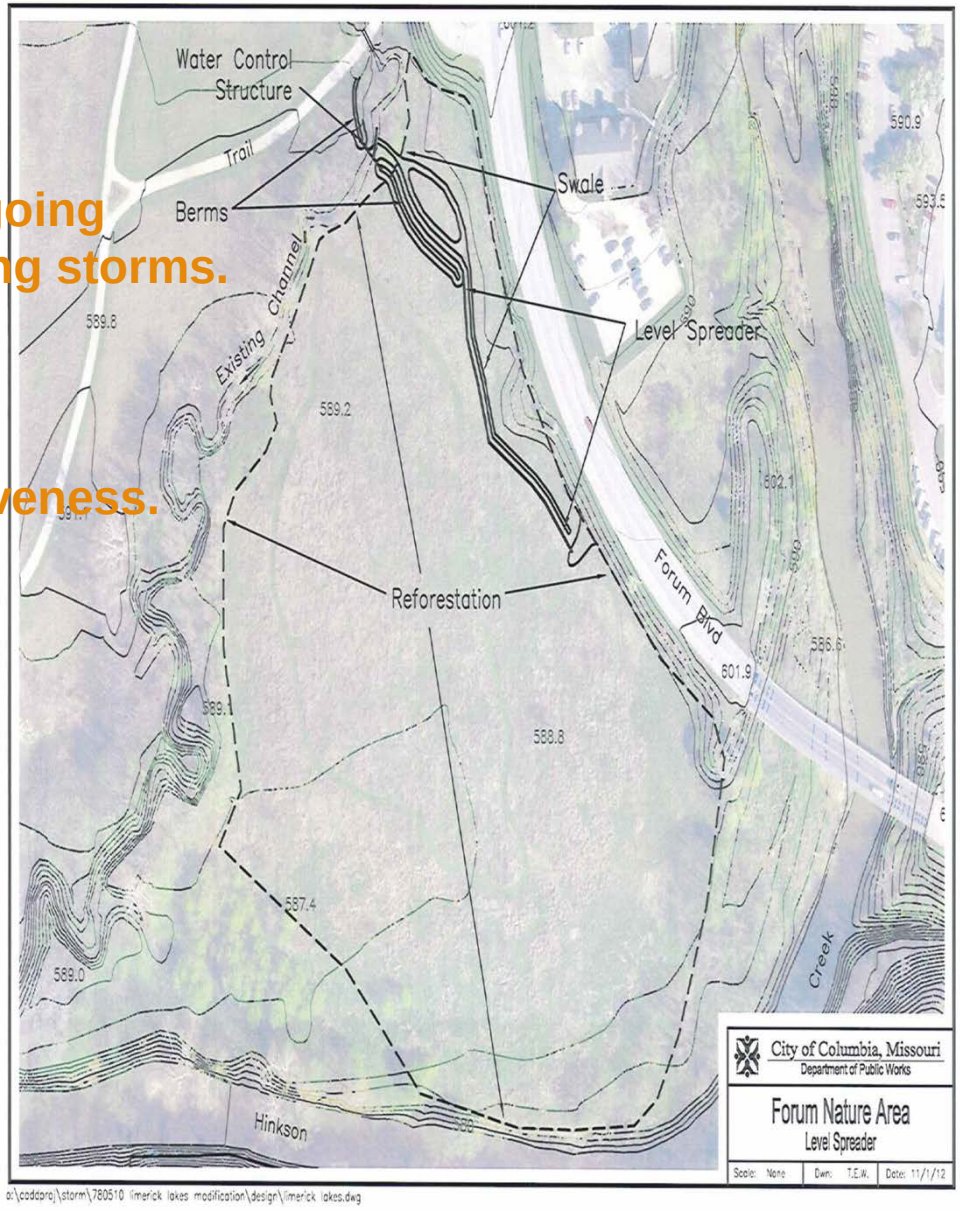
Collaborative Adaptive Management (CAM)

- The goal of the collaborative adaptive management process is to improve water quality in Hinkson Creek by using a science-based approach guided by a local stakeholder committee. It will assess the entire stream system, including the creek and other parts of the watershed.

http://helpthehinkson.org/CollaborativeAdaptiveManagement.htm

Level spreader

- **Decreases the amount of water going To the creek in the channel forming storms.**
- **Possibly funded through grant.**
- **Pilot project to determine effectiveness.**



Thank you for joining the CARP Program!

Columbia Parks and Recreation
Creating Community