## Wildcat Creek Restoration

July, 2018

Located in: Kulwicki Park,

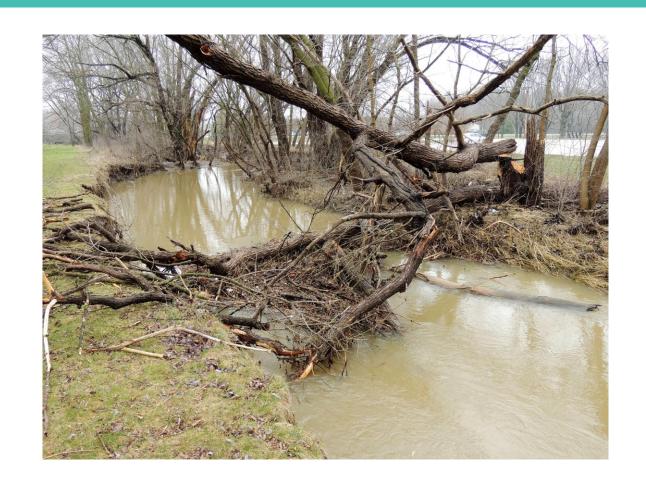
Milwaukee County

Client: City of Greenfield

Engineer: Ruekert & Mielke, Inc.

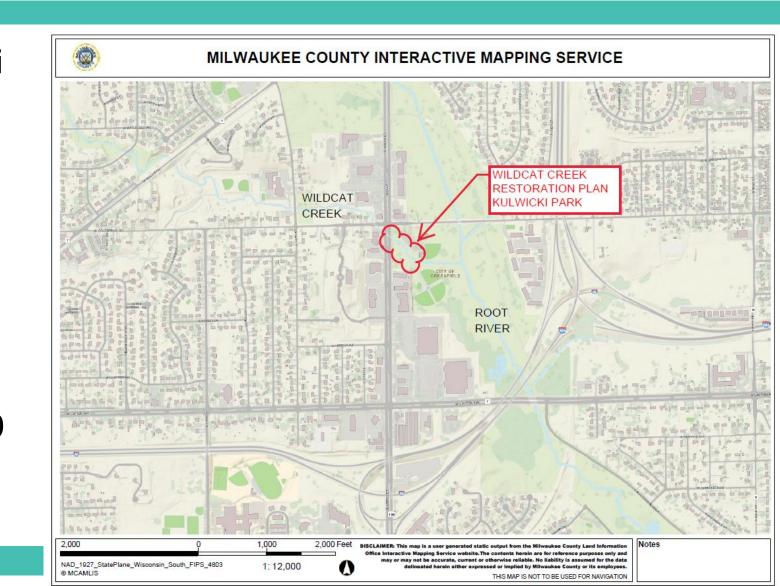
#### Overview

- Wildcat Creek Background
- Project Location
- Project Description
- Local/State Plan Support
- Organizational Support
- Grant Funding



# **Project Location**

- Wildcat Creek at Kulwicki Park
- City of Greenfield
- Less than 700 feet upstream of confluence with Root River
- Visible from Highway 100



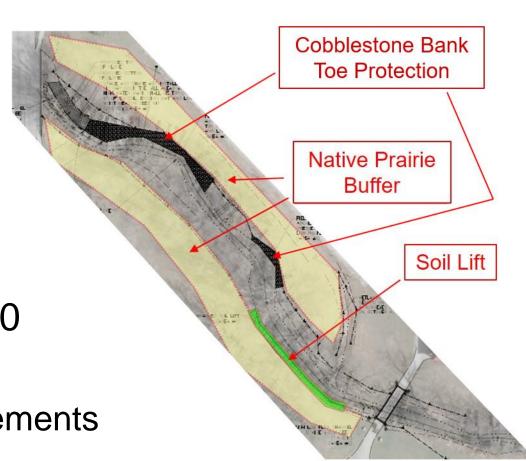
# Wildcat Creek Background

- Wildcat Creek sub-watershed
  - ~ 1,200 acres
    - 2/3 New Berlin, Waukesha Co; 1/3 Greenfield, Milwaukee Co.
  - 90% residential land use
- Wildcat Creek
  - 2.45-mile stream in the Root River watershed
  - Managed for fishing and swimming
  - Considered a cool-warm transitional headwater stream
  - Root River is impaired due to TSS, chlorides, and phosphorus



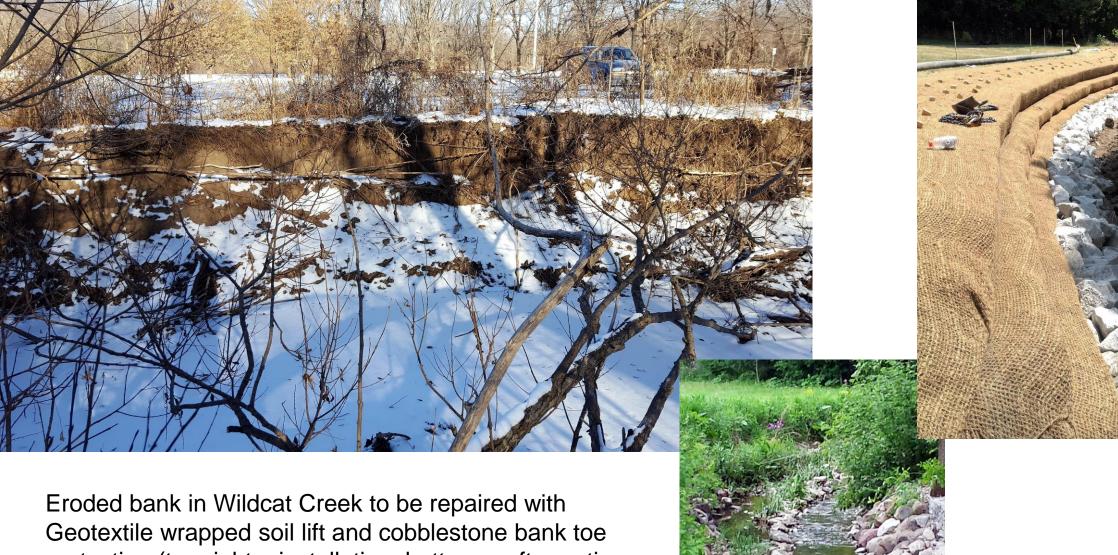
## **Project Description**

- 500 feet of Shoreline Stabilization
  - Geotextile wrapped soil lift
  - Cobblestone bank toe protection
  - Habitat Restoration
  - Invasive Species Removal
- Multi-phase project, started in 2010
  - Streambank & other instream work
  - Aquatic Organism Passage improvements





#### Ruekert · Mielke



protection (top right – installation, bottom – after native plant establishment).

#### Ruekert · Mielke



Streambank Stabilization with tree stumps.



### Ruekert · Mielke

#### **Timeline**

- 2010: Project identified in a storm water study
  - Wildcat Creek Floodplain and Alternative Analysis, September 2010, pgs. 19-24
- 2014: Project included in the Root River Watershed Plan (pg. 517)
- Late 2014/early 2015: Meeting to discuss detailed permit requirements
  - Greenfield (Rick Sokol, Jeff Tamblyn, Jeff Katz, and Craig Skala)
  - WDNR (Nathon Zoch, Kathi Kramasz)
  - U.S. Army Corp of Engineers
- 2015: Plans and permit applications developed, but not submitted



### **Timeline**

- Late 2017: Meeting to discuss the agreement between Milwaukee County and Greenfield
  - Greenfield (Jeff Katz, Brian Haas, and Michael Neitzke)
  - Milwaukee County Parks (Jill Organ, other staff)
- Early 2018: Meeting on-site to discuss project plans and additional habitat improvements into the design
  - Greenfield (Jeff Katz, Brian Haas)
  - Root-Pike WIN (David Giordano)
  - U.S. Fish and Wildlife Service (Betsy Galbraith, Areena Bowman)
- Late 2018: Proposed Construction
- ~Late 2019: MMSD and Sweet Water are developing a Water Quality Improvement Plan (WQIP)
  - □ Plan will provide implementation method for 9-key element plans

# Local/State/National Plan Support

#### Root River Watershed Restoration Plan (July 2014)

- Prepared by SEWRPC for Root Pike WIN and Sweet Water
- EPA & WDNR approved 9 Key Element Plan
- □ Plan funded in part by MMSD, WI Coastal Management, Fund Lake Michigan, NOAA
- Adopted by City of Greenfield, Milwaukee County & MMSD

#### Plan Recommends Wildcat Creek Restoration Project

- "Habitat and Water Quality" improvement project (#URR-17)
- Need for "Streambank Stabilization"
- Project area: Class 1, High-Value Habitat" (Page 170)

# **Grant Funding**

DNR River Management: City has been granted \$50,000

□ Fund for Lake Michigan: City's preproposal was selected for the full proposal stage (amount requested is \$65,000.)







# **Organizational Support**

- Letters of support:
  - Milwaukee Riverkeeper
  - Sweet Water
  - Root-Pike WIN





- Root-Pike WIN will produce educational signage
  - Streambank Stabilization
    - Environmental/ecological benefits
    - Habitat improvements/Streambank Buffer





## **Milwaukee County**

- Parks and County Board Approval
- Coordinate invasive species and tree survey with County Forester
- Long-term maintenance
- City/County agreement status

# Questions?

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