# Alternative Approach to Native Maintenance Program Management

Matt Moffitt, P.E., CFM Brandie Bray IAFSM - 2023





# that could be Programs?

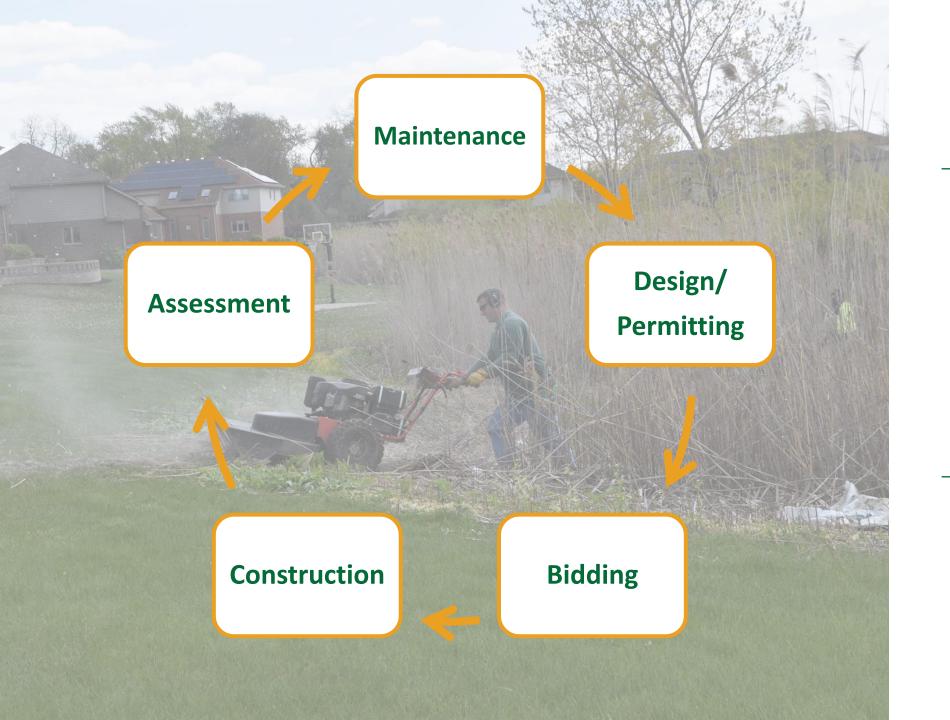


# **Consider your Native Areas**



- Ponds
- Ditches
- Creeks
- Rivers
- GreenInfrastructure





Does your municipality handle all these activities in the same department?



#### **Baxter & Woodman Natural Resources**





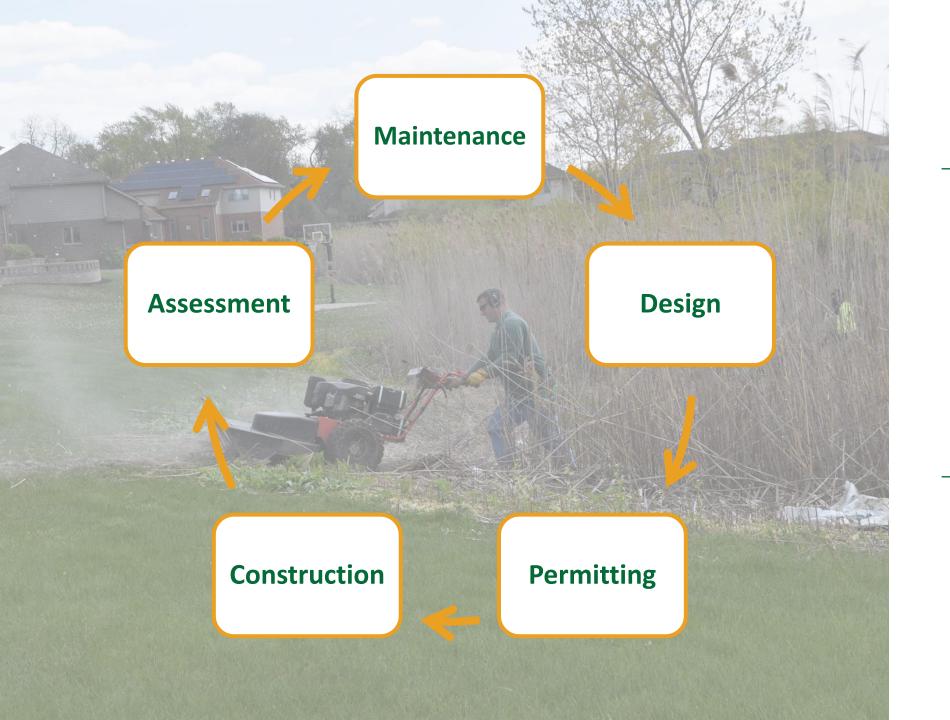












From Multiple contracts and vendors
To one annual contract with one vendor





"Our business park ditches went from a hassle that often got overlooked to one of our easiest and best programs in the Village"

Asst. Director of Public Works

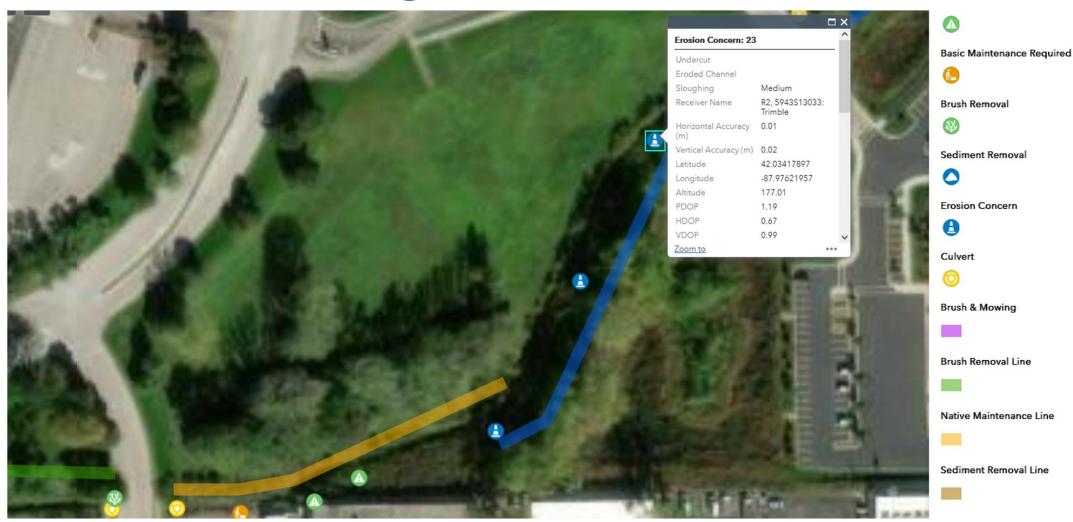


## **GIS Asset Manager**





## **GIS Asset Manager**





#### MAINTENANCE UPDATE MEMORANDUM

DATE: July 5, 2022

TO: Bill Bolich, Superintendent of Public Works - Elk Grove Village

FROM: Brandie Bray, Baxter & Woodman, Inc., Restoration Ecologist

PROJECT NUMBER: 210178.50

SUBJECT: Swale Maintenance Updates - Swale C9, C25

The purpose of this memorandum is to present the required project documentation as requested by the Village of Elk Grove.

#### **Project Overview**

The primary objective of this project is to manage vegetation within drainage swales throughout the village to relieve chronic flooding issues as well as address any erosion and sediment build up.

#### Location Map - Current







#### Summary

Progress continues to be made. The swale located between Estes Ave and Lunt Ave has been the primary focus the few past visits and is nearly all cleared. Construction work has begun at C25 and is currently underway. After finishing C9 (2598 Greenleaf Ave) crews will be moving to 199 Randall Street.



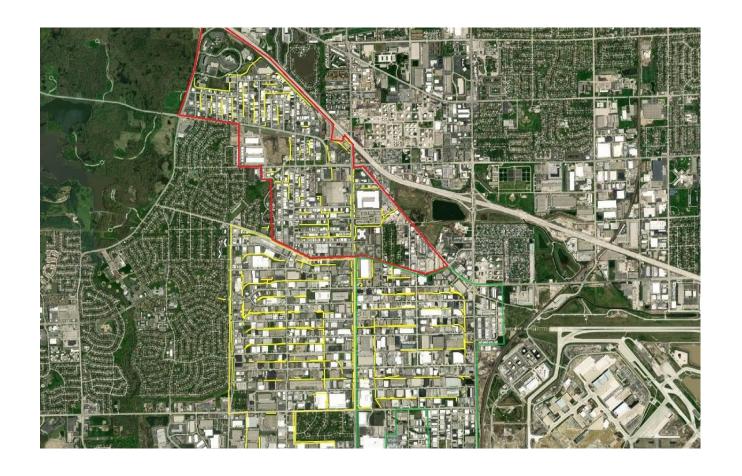
# **Flood Mitigation**



Businesses losing millions due to flooding after rain events



#### **Assessment**







#### **Assessment**





#### **Assessment**





#### **Annual Maintenance**



- Mowing
- Brush Cutting
- Herbicide Application
- Minor Grading



#### **Managing for Invasives**



Goal: Remove vegetation hindering water conveyance while promoting a healthy ecosystem



### Phragmites Phragmites australis



- Dense, forms monocultures
- Extremely difficult to control



#### **Managing for Invasives**



- Brush growth
  - Mostly Buckthorn and callery pear
  - Managing for none
  - Erosion



#### What we want to see

Sedges Cattails Wet Prairie Species



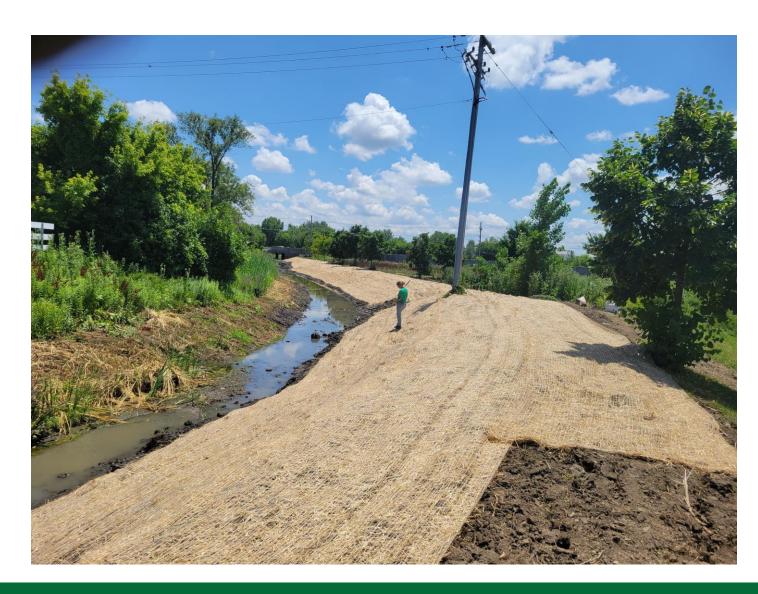
#### Restoration







#### Restoration



 Making repairs to mitigate sediment build up and erosion

