

# Bath Township's

## Bath Creek Floodplain / Wetland Restoration

### Funding through:



**OhioEPA**

**Section 319(h) Grant**

**PROJECT NUMBER 11(h)EPA-07**

**Environmental Results:** Successful completion of the project will restore a 12-acre degraded wetland & 1,700 feet of tributary stream flowing into Bath Creek. The restoration effort is expected to reduce flooding and improve overall water quality in the Yellow Creek watershed.

**For more information on this project go to the Ohio Environmental Protection Agency 319 Grant website <http://www.epa.ohio.gov/dsw/nps/319Program.aspx>**

The 319 grants are made possible through amendments to the Clean Water Act in 1987. Section 319 Nonpoint Source Management Program is designed to improve specific nonpoint source pollution of the country's rivers, streams, and communities in general.

This is being done by addressing nonpoint source pollution, management of innovative storm water projects, as well as stream and wetland restoration in Ohio's communities.

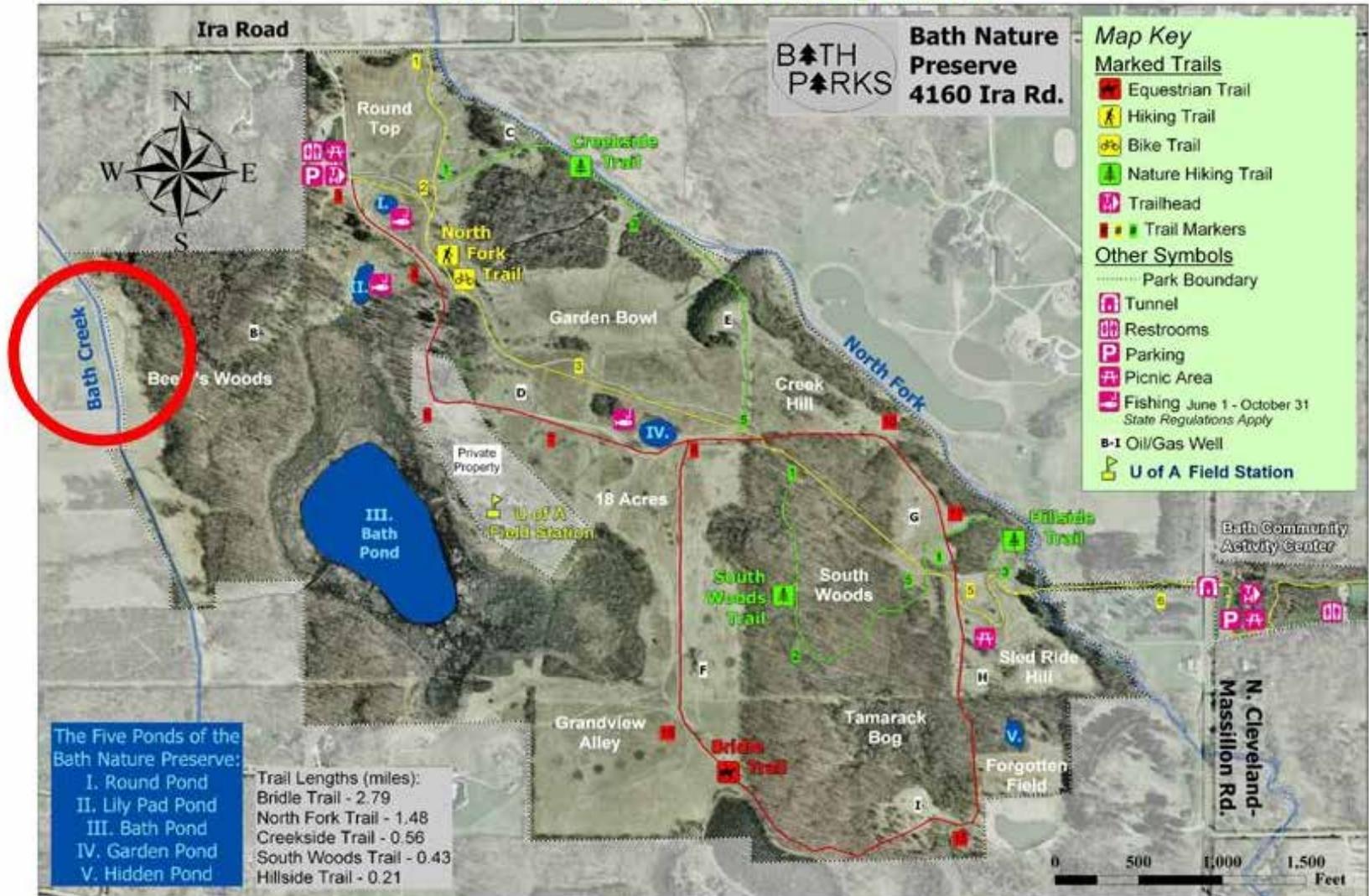
In May 2011, Bath Township was awarded funding through the Ohio Environmental Protection Agency (EPA) 319 Grant to restore a 12 acre area known as the Moore's Chapel Wetland (Bath Creek Floodplain/ Wetland Restoration) adjacent to the Bath Nature Preserve into a functioning floodplain / wetland.

319 grants give the recipients three years to complete the grant. Therefore Bath Township must finish the restoration by June of 2014.

The \$71,350 grant involves a 20% match from the township and will go toward the restoration of the floodplain / wetland of the North Fork Tributary of Yellow Creek.

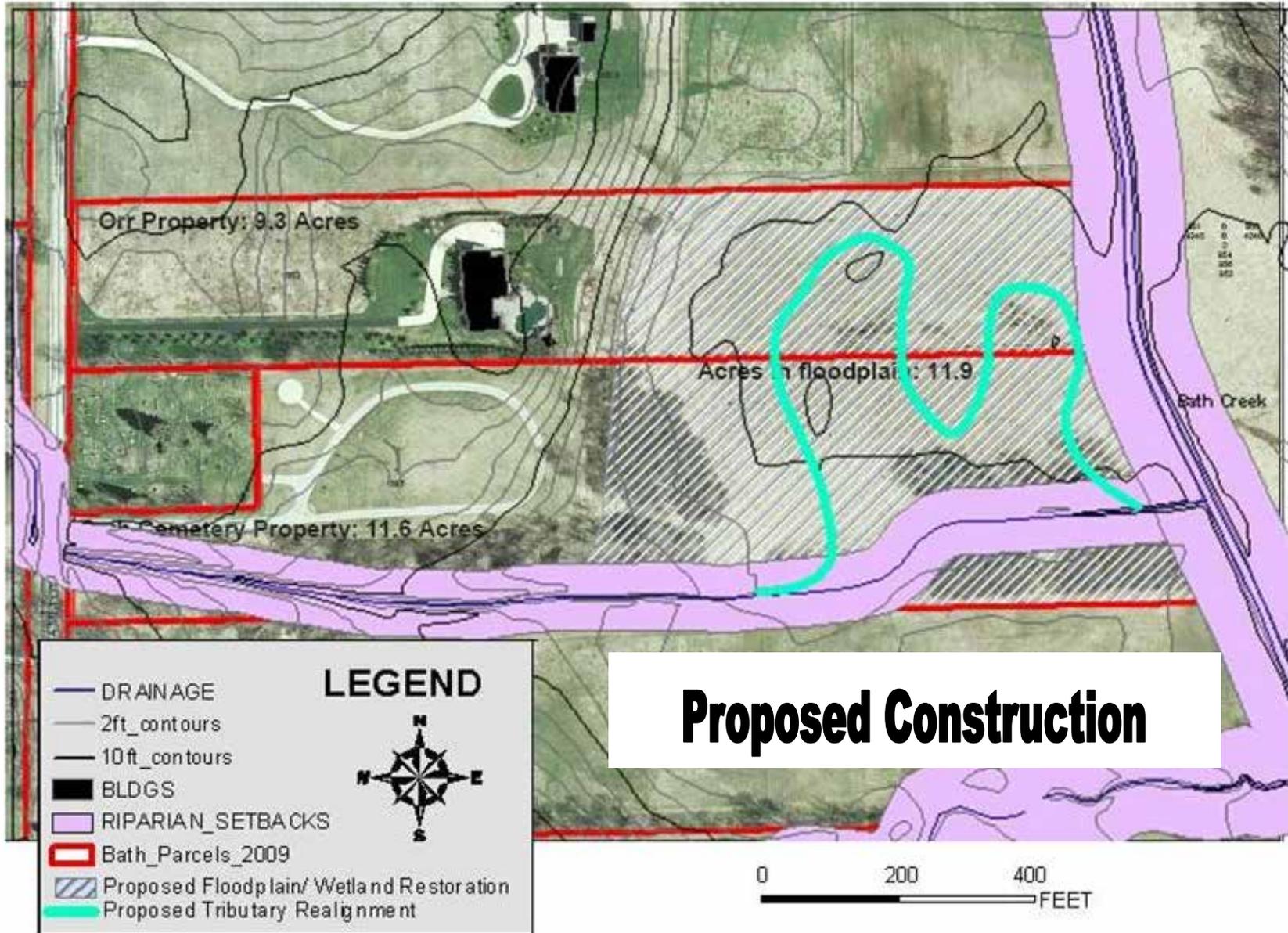
# SITE MAP

## BATH NATURE PRESERVE



This map is for informational use only. No representation is made or warranty given as to its content. The user assumes all risk of use. Bath Township assumes no responsibility for any loss or delay resulting from such use. Data Source: Summit County GIS data. Prepared by the Bath Township Parks Department, January 2007.

# Moore's Chapel Wetland Layout



# Aerial View of both Bath Creek Restoration and the Moore's Chapel Wetland



Bath Pond



Bath Creek Restoration

319 Grant 12 Acre Wetland Restoration  
Completion July 2014

# EPA 319 Project Sign





# Mowing - 12 Acres of Existing Vegetation - Reed Canary Grass *Phalaris arundinacea*



**View From Inside the Tractor**

CHARGES FOR PICK-UP AND/OR DELIVERY AND SERVICE CALLS ARE NOT COVERED BY WARRANTY



# Control Burn of the - 12 Acres of Existing Vegetation 8/31/2012



# 2012 Construction of Moore's Meander (at the Confluence of Bath Creek)



**July 2013 - Moore's Meander with Burr Reed *Sparganium americanum*  
Naturally Growing Throughout it's Channel**



## Restoring the Hydrology is the key to any Wetland Restoration. To meet this goal Bath Township took the following steps:

- The Moore's Chapel Wetland has a ditched tributary of Bath Creek along the southern edge of the property. To restore the hydrology Bath Township had the stream re-configured by meandering it toward the center of the site (Moore's Meander). To ensure the site receives as much water as possible, multiple meandering channels were added running off of Moore's Meander. This design is called a "braided stream" or an Anastomose stream - meaning the interconnection between parts of any branching system.
- To ensure constant moisture to the site throughout the year a water control device was installed at the confluence of Moore's Meander and Bath Creek.

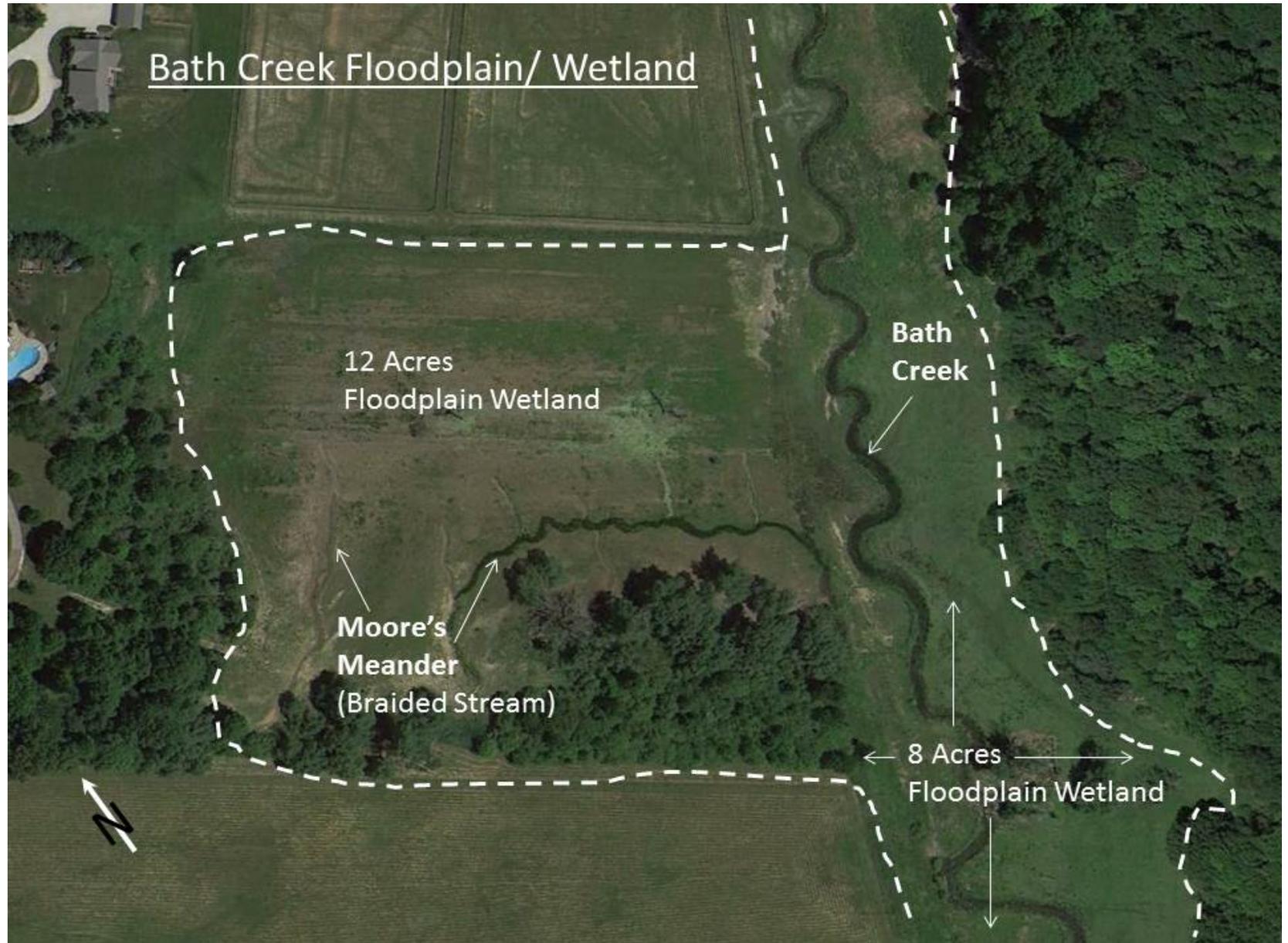
Bath Creek Floodplain/ Wetland

12 Acres  
Floodplain Wetland

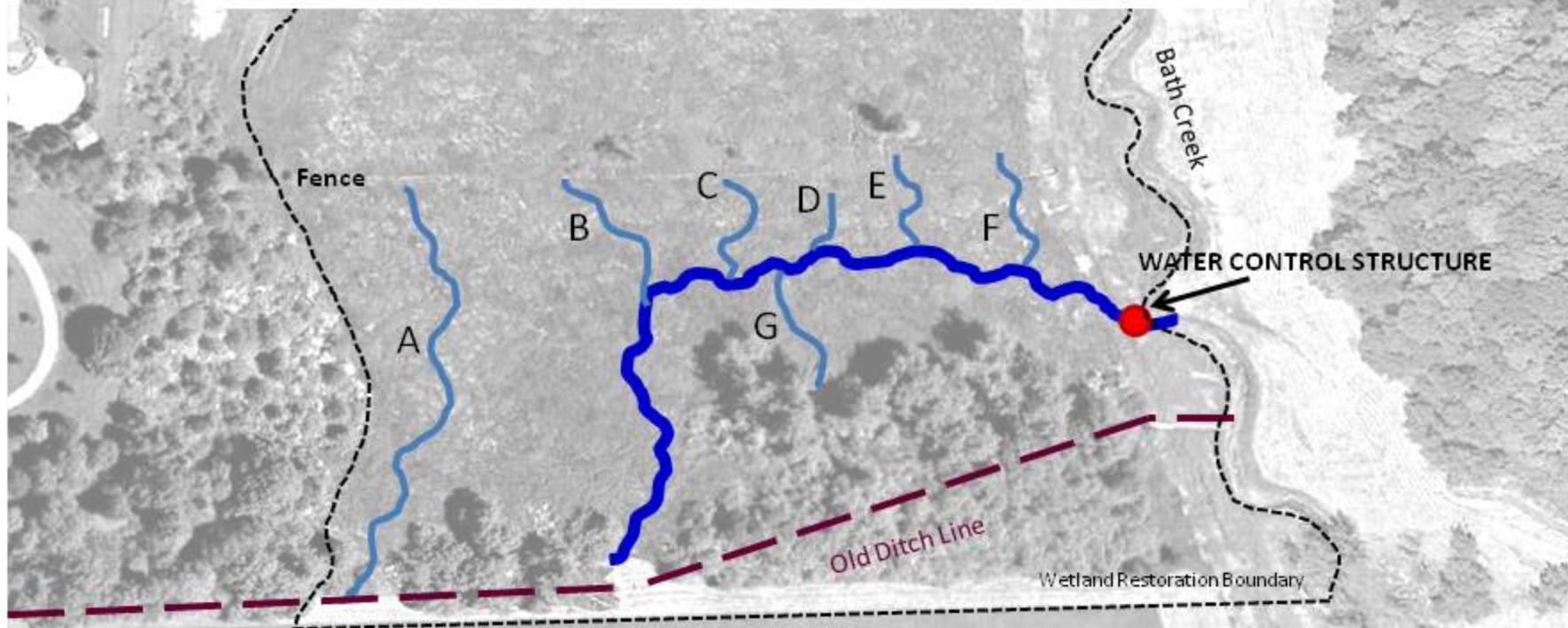
Bath  
Creek

Moore's  
Meander  
(Braided Stream)

8 Acres  
Floodplain Wetland



# MOORE'S CHAPEL FLOODPLAIN/ WETLAND RESTORATION



**Restored 1745 linear feet of stream.**

• Moore's Meander = 736 Feet

Tributary A = 410 feet    Tributary E = 97 feet

Tributary B = 126 feet    Tributary F = 118 feet

Tributary C = 102 feet    Tributary G = 113 feet

Tributary D = 43 feet

NOTE: - Not to Scale

# 2013 - Tributary "A" of Moore's Meander



# Installation of Water Control Feature with Vertical Outlet



# **Inlet of Water Control Feature Wrapped with Burlap to Prevent Wetland Seeds from Washing Off Site**



# **BMP's - During Construction**

Best Management Practices



**Straw Waddles**

# Monthly BMP Inspections of Straw Waddles



# **Flooding from July Flood Event 7/16/2013**



# **Flooding from December Thaw 12/21/2013**



# Flooding from January Thaw 1/13/2014



# Aerial Seeding the Emergent Species.



# Aerial Seeding the Emergent Species

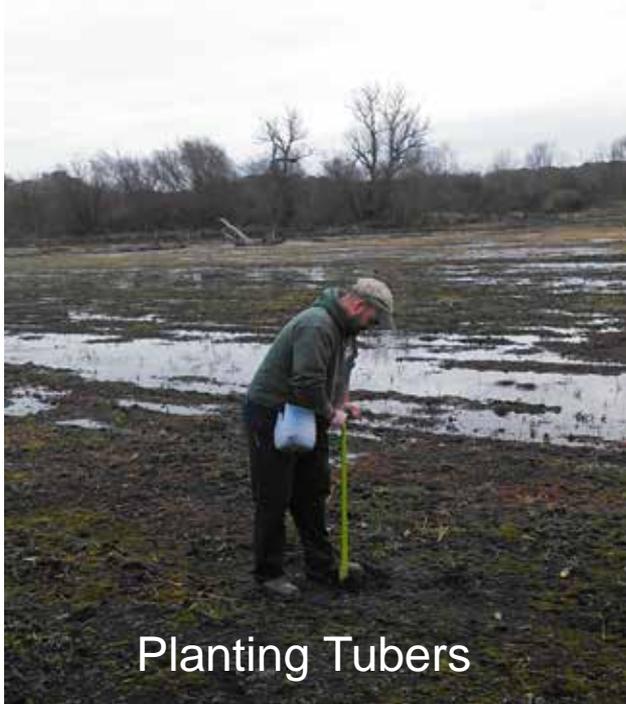
– *Note the seeds on the ice.*



# EPA 319 Project Kiosk Located at the Bath Nature Preserve Ira Road Trailhead



# Planting of Wetland Trees and Tubers



Planting Tubers

Bath Township Park personnel planted 22 trees consisting of both Black Willows and Black gums, 100 Bog Willows cuttings and over 200 tubers of Jerusalem Artichokes in the fall of 2014



Planting of a Black Gum *Nyssa sylvatica*

# EPA 319 Project Display Board



**Successful completion of the restoration effort is expected to reduce flooding and improve overall water quality in the Yellow Creek watershed.**