

Bath Township's

Garden Bowl Floodplain/ Wetland Restoration

Funding through:



OhioEPA

Section 319(h) Grant

PROJECT NUMBER 09(h)EPA-26

Environmental Results: Successful completion of the project will restore a 15-acre degraded wetland & 1,500 feet of flood plain of the North Fork Tributary of Yellow 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.

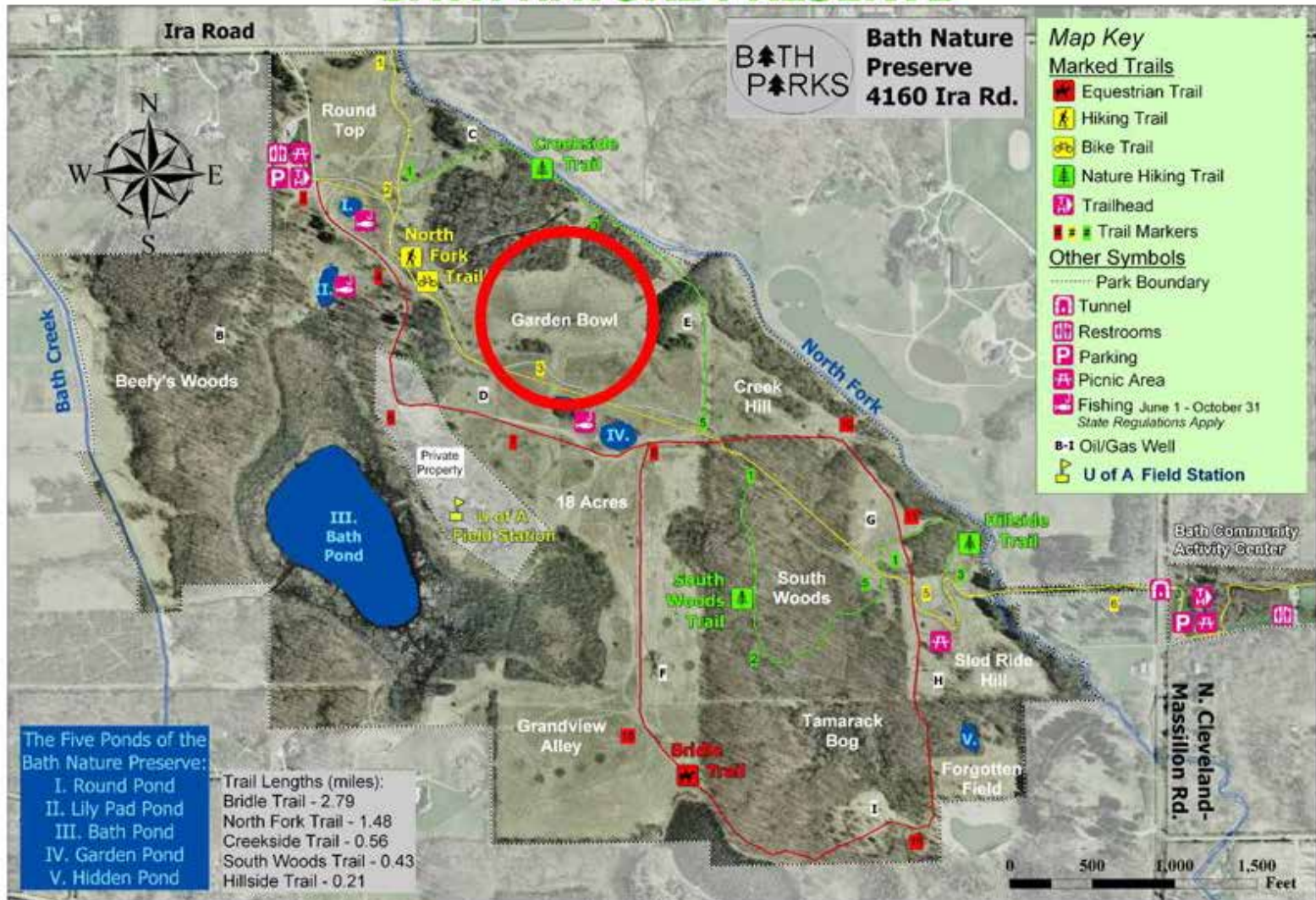
In February of 2012, Bath Township was awarded funding through the Ohio Environmental Protection Agency (EPA) 319 Grant to restore the area known as the Garden Bowl within the Bath Nature Preserve to a functioning floodplain / wetland.

319 grants give the recipients three years to complete the grant. However, this funding is from the 2009 grant round. Therefore the three year limit to complete the project has been shortened to one year. Bath Township had to finish the restoration by the end of 2012.

The \$48,452 grant involves a 40% match from the township and will go toward the restoration of the floodplain / wetland of the North Fork Tributary of Yellow Creek.

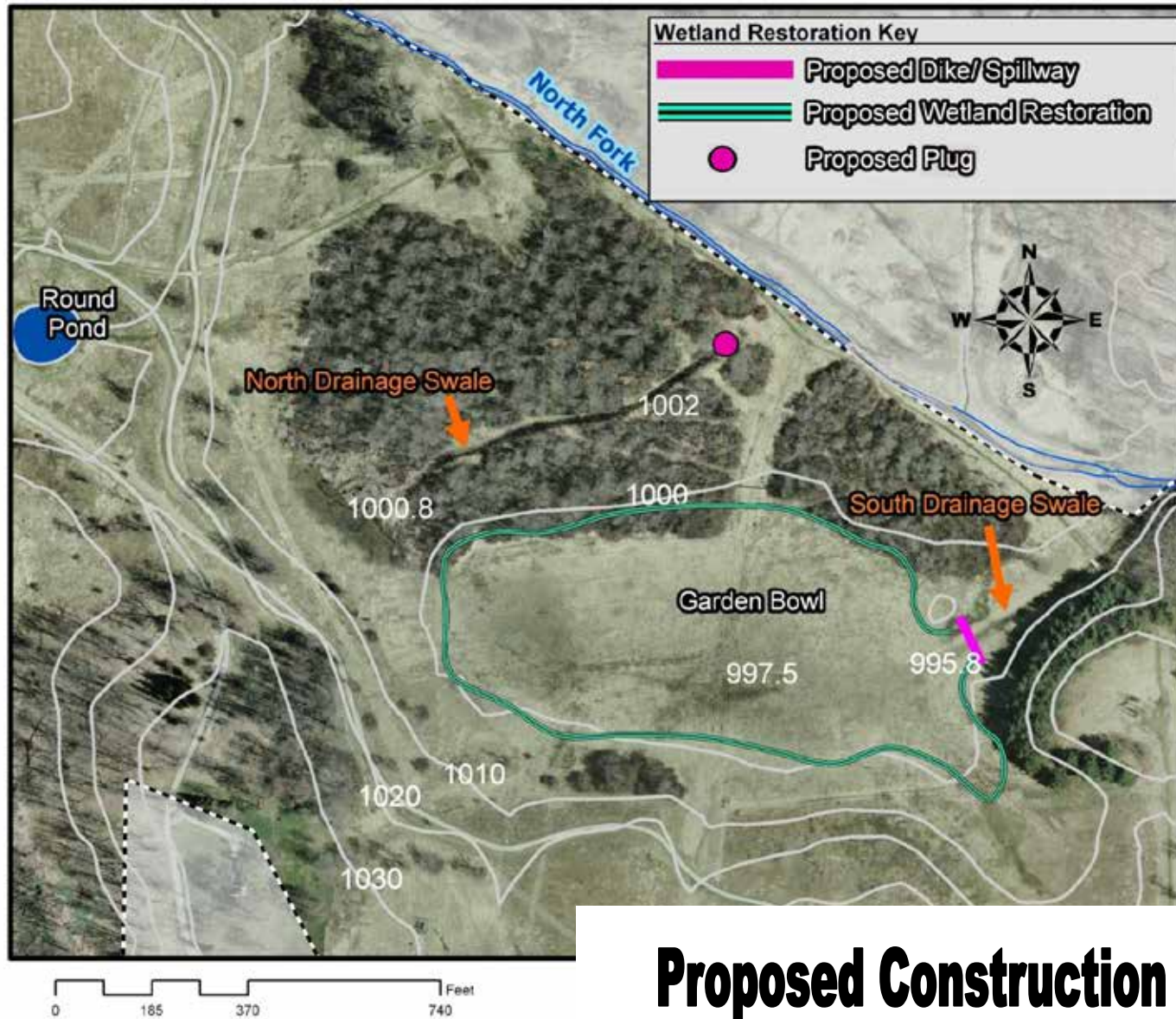
SITE MAP

BATH NATURE PRESERVE



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 Data Source: Summit County GIS data. Prepared by the Bath Township Parks Department, January 2007.

Garden Bowl Layout



EPA 319 Project Sign



Located along the North Fork Trail adjacent to the Garden Bowl



Herbicide - 15 Acres of Existing Vegetation Including Multiple Exotic Species



Installation of Water Control Feature with Anti-Seep Collar within the Dike





Marl Layer

While excavating for the dike portion of the project a unique discovery was found in what is called a marl layer. Marl is a lacustrine sediment common in post-glacial lakes and streams. It is often calcareous due to the presence of shell fragments of snails and bivalves mixed into the clay.

BMP's - During Construction

Best Management Practices



Construction of Dike with Water Control Feature Outlet (West View).



Flooding from Super Storm Sandy 10/29/2012



Aerial Seeding the Emergent Species

- *Note the seeds (dust).*



Aerial Seeding the Emergent Species

- *Note the seeds (dust).*



230 Live Stakes being Planted



EPA 319 Project Kiosk

Located at the Bath Nature Preserve Ira Road Trailhead



Shoreline Planting of Wet Meadow Species



Don Beam from Stucker Meadow was awarded the bid to restore the wetland vegetation. Sadly, Don passed away shortly after the emergent species was sown. His family and friends finished the seeding during the spring of 2013.



EPA 319 Project Display Board



**June 2013 - Emergent Vegetation of Water Plantain - *Alisma subcordatum*,
Water Purslane - *Ludwigia palustris*, and Eel grass *Vallisneria americana***



August 2013 - Emergent Vegetation of
Arrow Arum *Peltandra virginica*, Great Bulrush *Scirpus validus* and
Burr-weed *Sparganium eurocarpum*.





August 2013 - Vegetation of Wet Meadow:

Awne'd Barnyard Grass *Echinochloa muricata muricata*, Blue Vervain *Verbena hastata*, Pennsylvania Smartweed *Polygonum pennsylvanicum*, Arrow-Leaved Tearthumb *Tracaulon sagittatum*

Garden Bowl on September 23, 2013



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