

Wilcox and Phoenix Lakes Restoration Project









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- US Environmental Protection Agency: Great Lakes National Program Office- Funding (Great Lakes Restoration Initiative)
- > Alliance of Rouge Communities (ARC) Grant/Project Owner
- Wayne County Parks Land Owner/ARC Community Member
- City of Plymouth ARC Community Member
- Plymouth Township ARC Community Member
- Northville Township ARC Community Member
- Rouge River Advisory Council Local PAC
- > Environmental Consulting & Technology, Inc. (ECT) Engineer
- ENTACT Contractor



















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#### 1987

**AOCs Identified** 

#### 2010

Great Lakes Restoration Initiative (GLRI)

#### 2016

Habitat Restoration Project List Approved







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2021 EPA GLRI Grant for Design (2021- 2022)

QAPP Topographic Survey

Wetland Streambank Assessment

T&E Design

Permitting

2022 EPA GLRI Grant for Implementation (2022- 2026)

Contract Documents Construction Bidding
Construction Grant Administration

Public Outreach

Implementation Grant Objectives

6.0 acres of habitat restored and created

- √ 4.5 acres at Wilcox
- √ 1.5 acres at Phoenix

Approximately 6,000 cubic yards of sediment were removed from Wilcox Lake

6.5 acres of invasive species management

- 2.5 acres at Wilcox
- √ 4.0 acres at Phoenix









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### Project

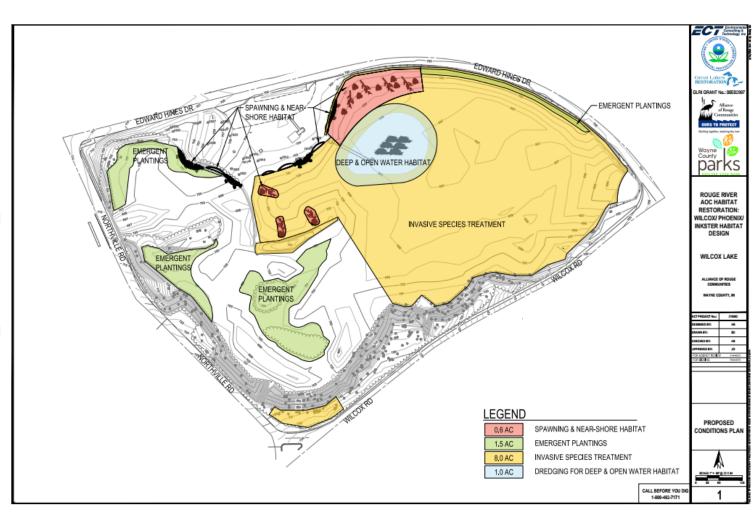
- ✓ Invasive Species Control, Revegetation, Erosion Repair
- ✓ Natural Sand Spawning Habitat
- ✓ Cover Habitat
- ✓ Emergent Habitat

#### Grant Metric Objectives

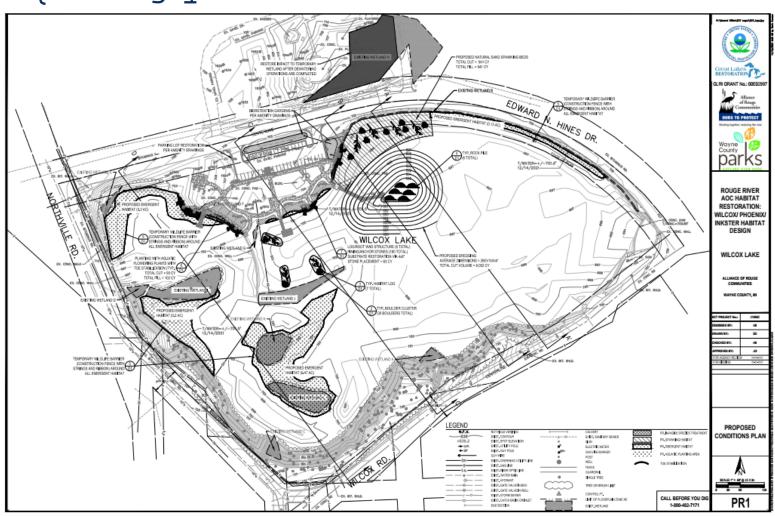
- 4.5 acres of habitat restored and created
- 2.5 acres of invasive species management

#### Anticipated Outcomes

- 3.6 acres of habitat restored and created
- 8.0 acres of invasive species management



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### Project

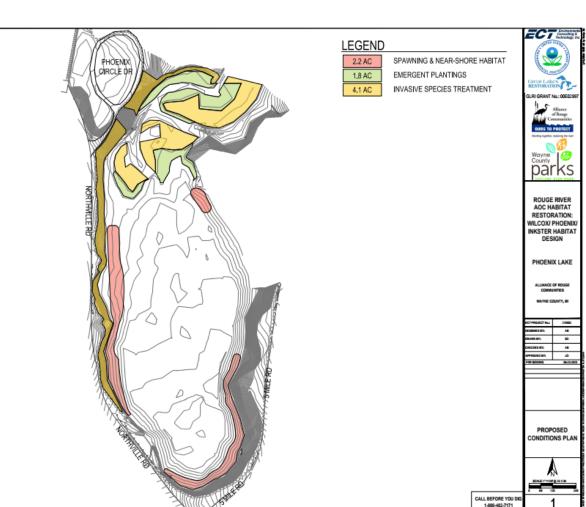
- ✓ Invasive Species Control, Revegetation, Erosion Repair
- ✓ Natural Sand Spawning Habitat
- ✓ Cover Habitat
- ✓ Emergent Habitat

#### Grant Metric Objectives

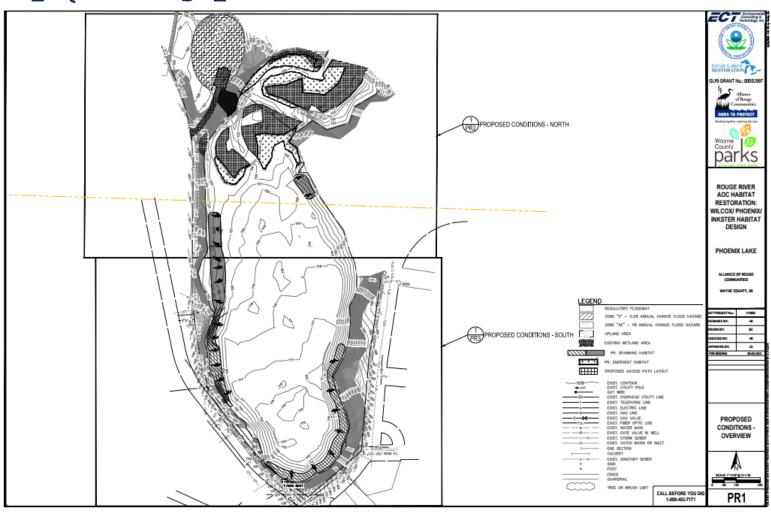
- 1.5 acres of habitat restored and created
- 4.0 acres of invasive species management

### Anticipated Outcomes

- 4.0 acres of habitat restored and created
- 4.1 acres of invasive species management



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  - Fish Spawning
    - Substrate and aquatic vegetation for egg-laying
  - Fish Nursery
  - Fish Cover
    - Nursery cover and feeding for Larval and juvenile
    - Escape predators
    - Attachment surfaces for foraging
    - Predator ambush
  - Turtle and Waterfowl Loafing
  - Nearshore and Aquatic Plantings help Insect Diversity







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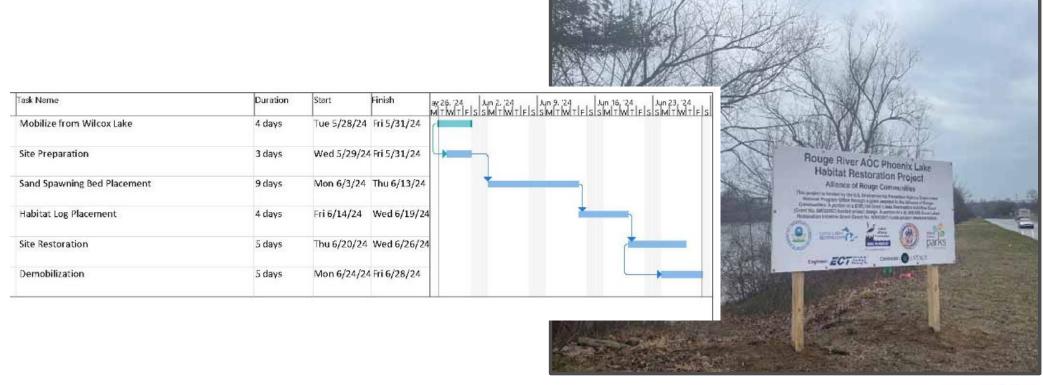
| Task Name                                   | Duration | Start       | Finish      | March   May   N.   April   May   N.   April   3/3   3/10 3/17 3/24 3/31  4/7   4/14 4/21 4/25  5/5   5/12 5/19 5/26  6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------|----------|-------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mobilize to Wilcox Lake                     | 10 days  | Mon 3/11/2  | Fri 3/22/24 | The state of the s |
| Site Prepration                             | 16 days  | Mon 3/11/2/ | Mon 4/1/24  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Woody invasive Management                   | 7 days   | Wed 3/13/2  | Thu 3/21/24 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Deep Water Habitat & Sand Spawning Dredging | 17 days  | Tue 4/2/24  | Wed 4/24/24 | <u> </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Sediment Disposal Trucking                  | 15 days  | Tue 4/2/24  | Tue 4/23/24 | <b>—</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| In Lake Habitat Construction                | 8 days   | Tue 4/23/24 | Fri 5/3/24  | <u> </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Sand Spawning Bed Placement                 | 2 days   | Tue 4/23/24 | Thu 4/25/24 | *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Rock Pile Placement                         | 1 day    | Thu 4/25/24 | Fri 4/26/24 | +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Boulder Cluster and Habita Log Placement    | 5 days   | Fri 4/26/24 | Fri 5/3/24  | <u> </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Shoreline Habitat Construction              | 10 days  | Fri 5/3/24  | Fri 5/17/24 | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Log Root Wad                                | 5 days   | Fri 5/3/24  | Fri 5/10/24 | <b>*</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Aquatic Planting Areas                      | 5 days   | Fri 5/10/24 | Fri 5/17/24 | *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Site Restoration                            | 15 days  | Fri 5/17/24 | Fri 6/7/24  | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Demobilization                              | 7 days   | Mon 5/27/24 | Wed 6/5/24  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |







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