



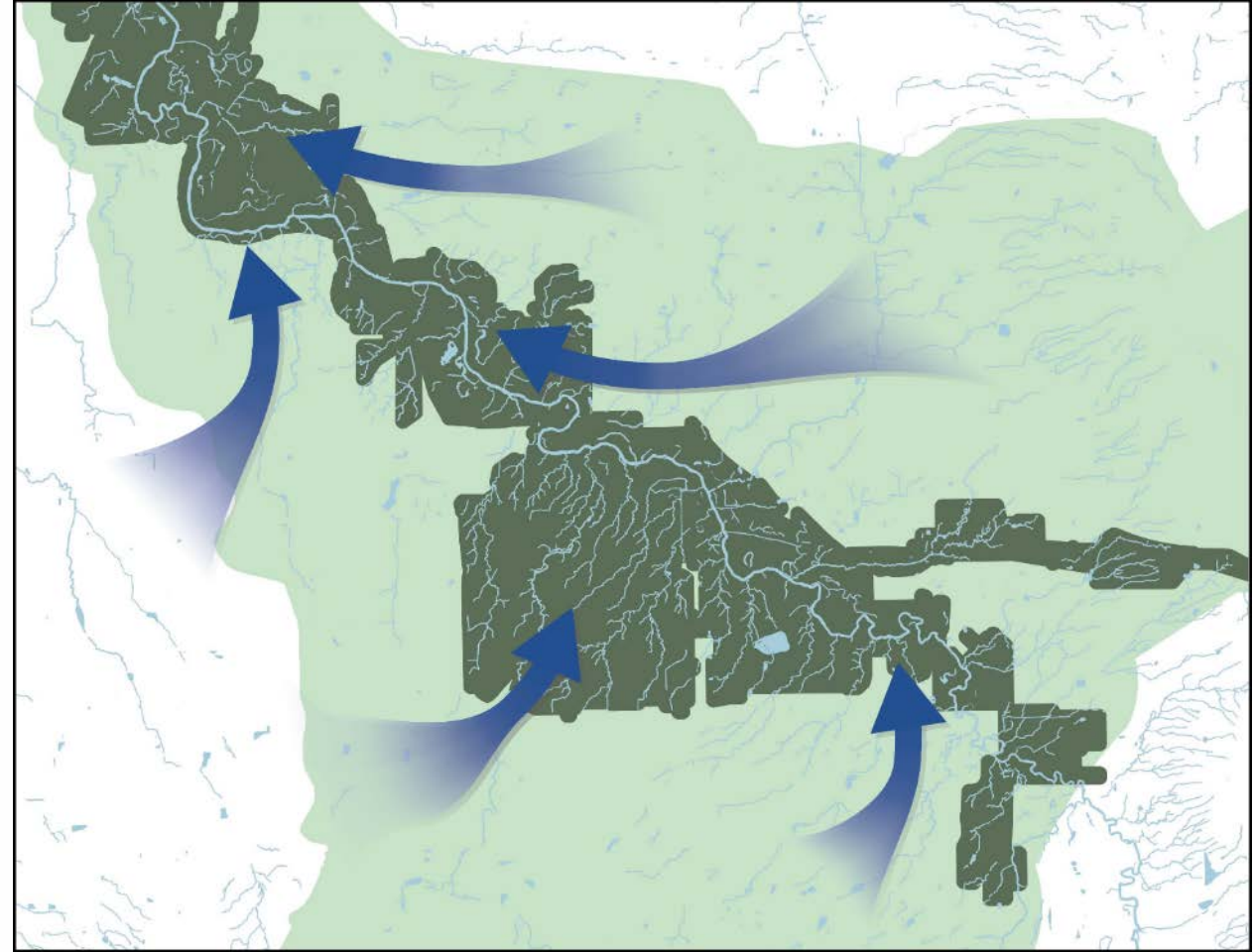
Cleveland
Metroparks

100
YEARS

STORMWATER MANAGEMENT IN CLEVELAND METROPARKS

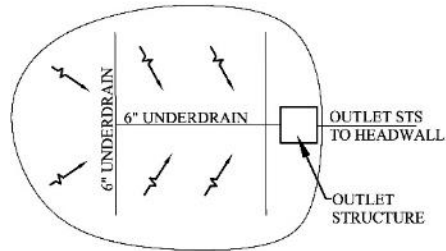
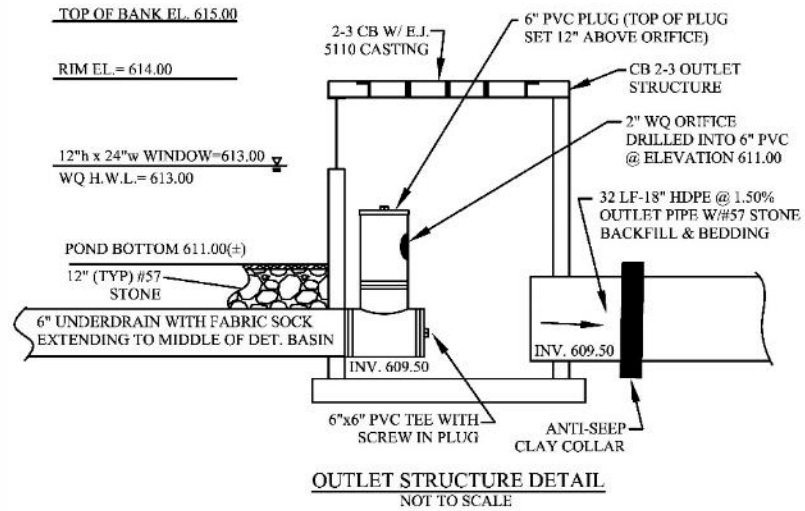
Why do we pursue stormwater projects?

- Reduce Flooding & Erosion
- Improve Water Quality
- Create Plant & Wildlife Habitat

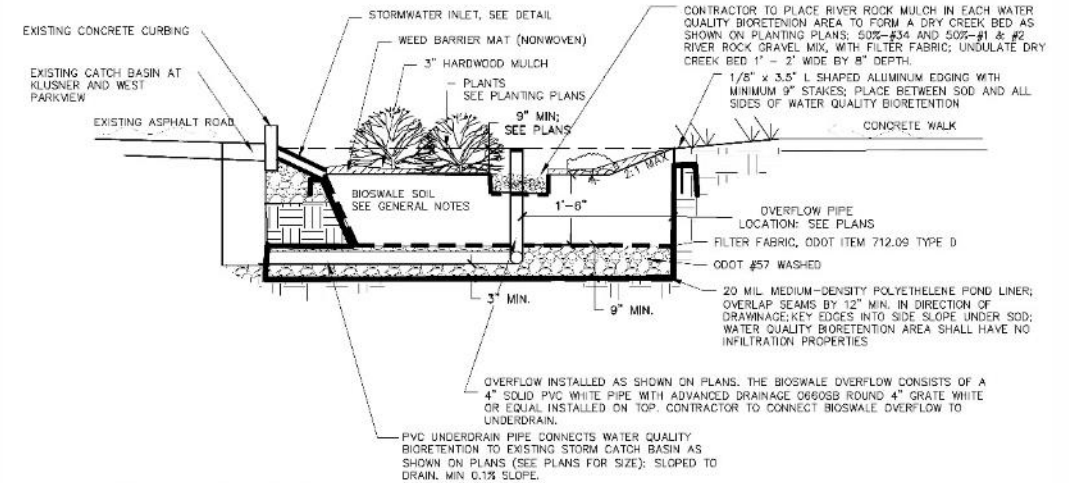


Stormwater Control and Water Quality Treatment

Control Structures



Bioswales/Wetlands



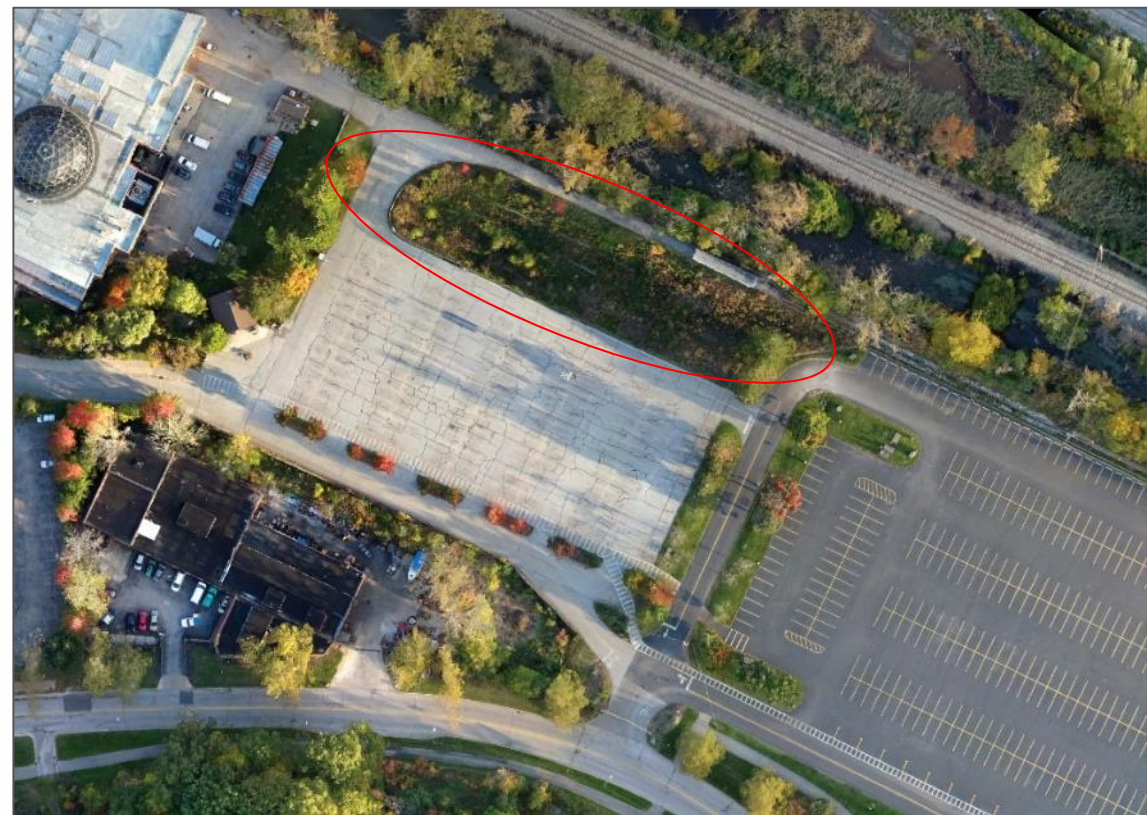
Parking Lot Stormwater Control: Cleveland Metroparks Zoo

- Ohio EPA GLRI Grant
- 11 Acre Parking Lot



Parking Lot Stormwater Control: Cleveland Metroparks Zoo

- 200,000+ Gallons of Stormwater Quality Treatment
- 1/2 Acre of Natural Habitat



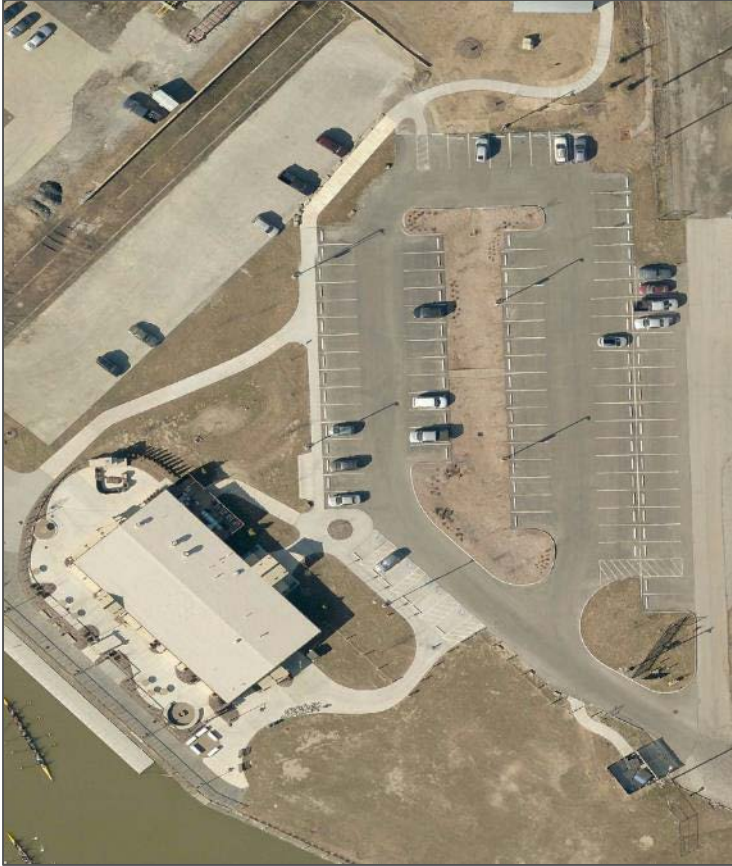
Parking Lot Stormwater Control: *Rivergate Park*

- 1.75 Acre Industrial Parking Lot



Parking Lot Stormwater Control: Rivergate Park

- 16,000 Gal. of Water Quality Treatment
- 7,500 SF Vegetated Island + Rain Garden



Reservation Maintenance Facilities: *Huntington Reservation*

- 50 Year Underground Storm Detention
- Water quality Treatment



Reservation Maintenance Facilities: *Bedford Reservation*

- 100 Year Storm Detention
- Water quality Treatment



Parking Lot Stormwater Control: Seneca Golf Course

- 2 Acre Parking Lot
- 0 SF of Pervious Area



Parking Lot Stormwater Control: Seneca Golf Course

- 3 In-Line Treatment Types
- 1/3 Acre of Pervious Area
- 100 Year Storm Detention
- Water Quality Treatment



After

Parking Lot Stormwater Control: Seneca Golf Course

- Ohio EPA GLRI Grant Funded



Before



After

Water Quality Basins: Fern Hill Stormwater Wetland



**Water Quality Treatment for 50
Ac. Neighborhood to West**

- **OEPA SWIF Grant Funded**



During

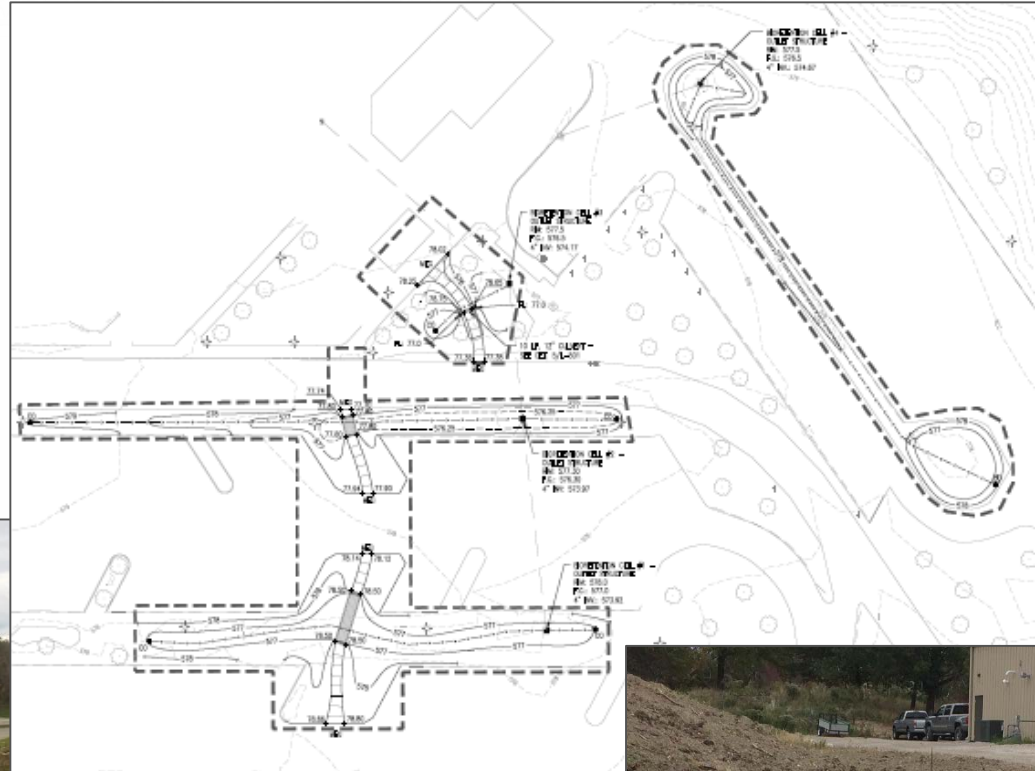
Water Quality Basins: Fern Hill Stormwater Wetland

- 250,000(+) gal. Water Quality Treatment Basin
- Wildlife/Plant Habitat



Parking Lot Stormwater Control – Wildwood

- 2 Treatment Types
- Includes Haydite soil material
- Water Quality Treatment



After

Other Projects of Note

West Creek Watershed Stewardship Center



Residential Retrofit



Other Projects of Note

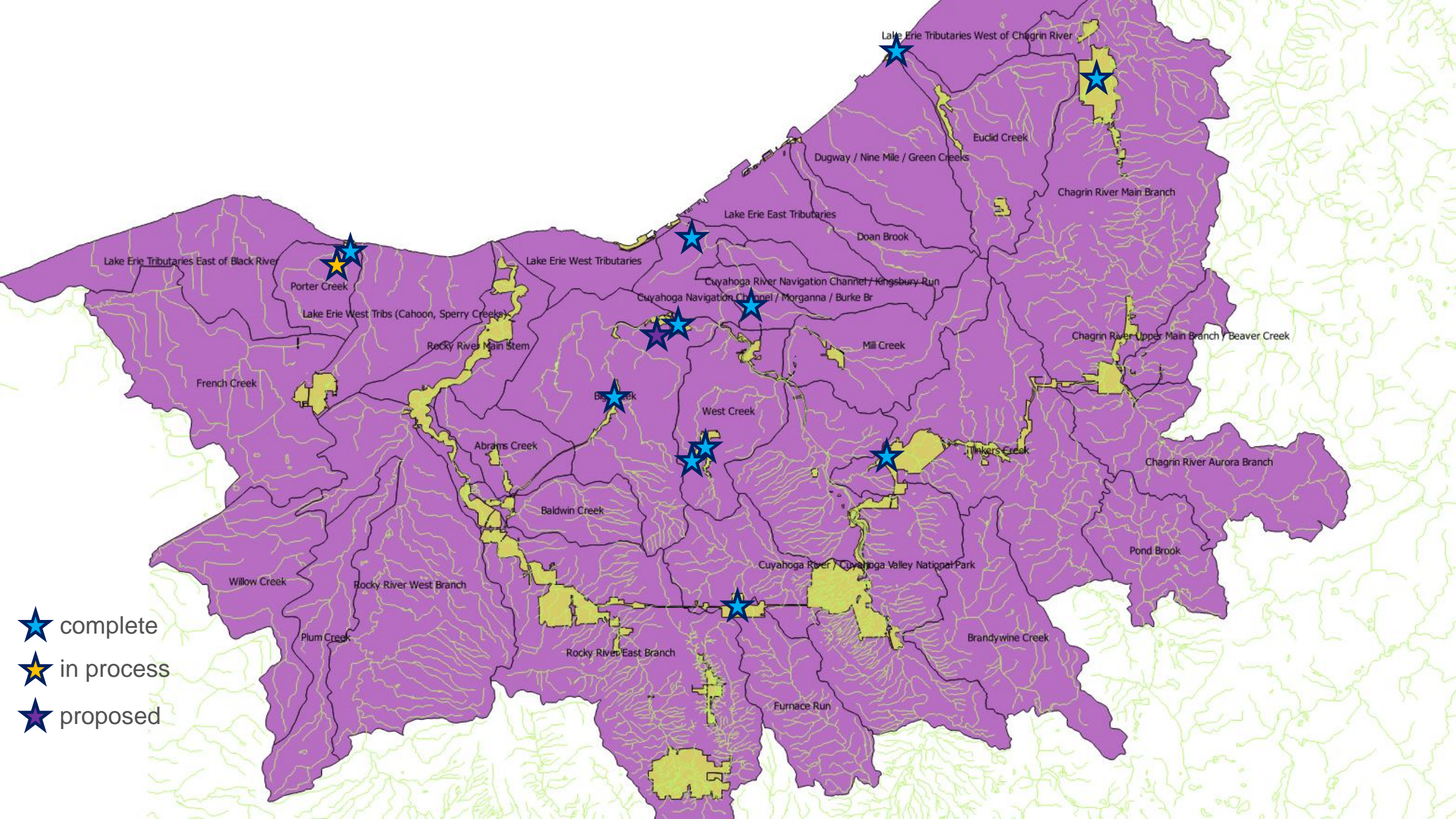
North Chagrin Nature Center



Washington Golf Course



Wolf Road Picnic Area (In-Process)



- ★ complete
- ★ in process
- ★ proposed