

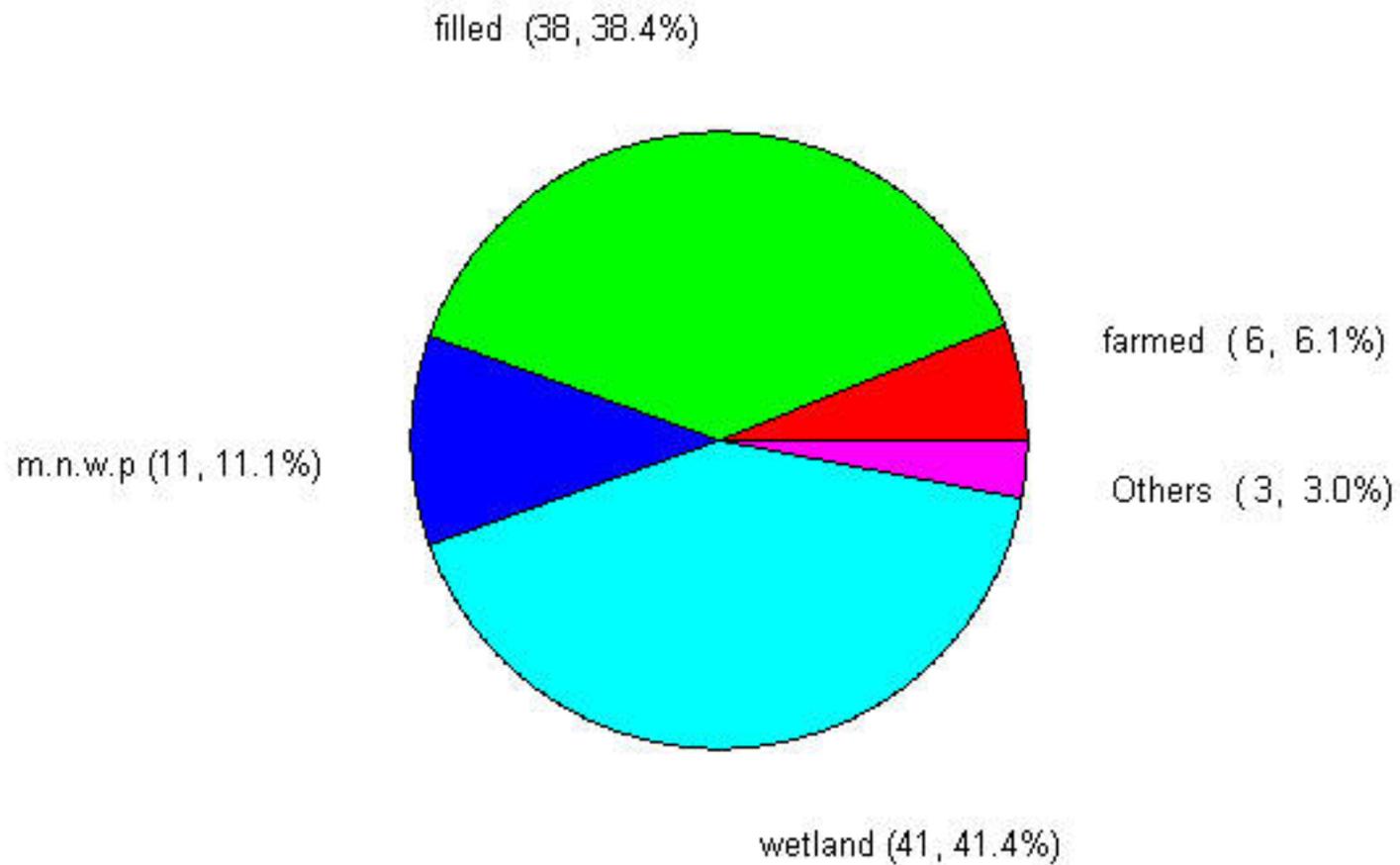
A photograph of a wetland area. In the foreground, a stream flows through a dense thicket of bare, brown trees and shrubs. The water is dark and reflects the surrounding vegetation. Two pink survey flags are visible in the water, one on the left and one in the center. The background shows more trees and a clear blue sky. The overall scene is a natural, somewhat desolate wetland environment.

Urban Wetlands

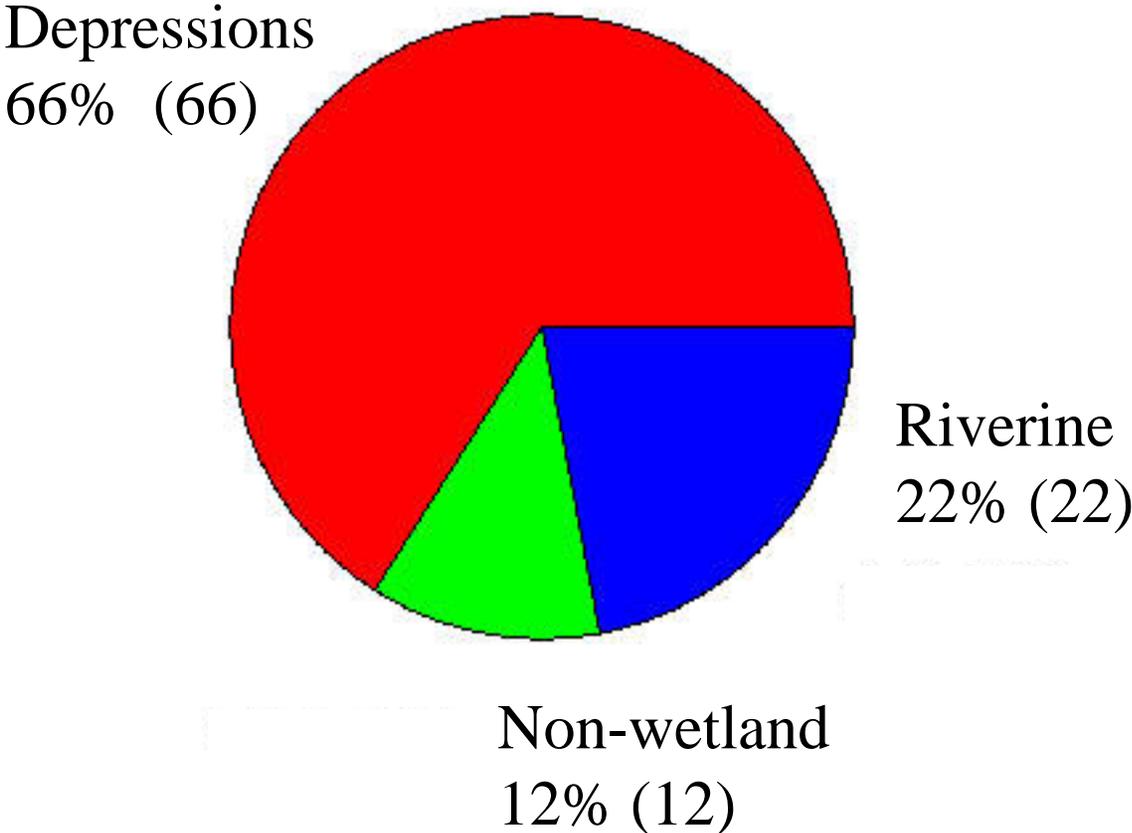
Wetland Ecology Group
Ohio EPA

Columbus Urban Wetlands

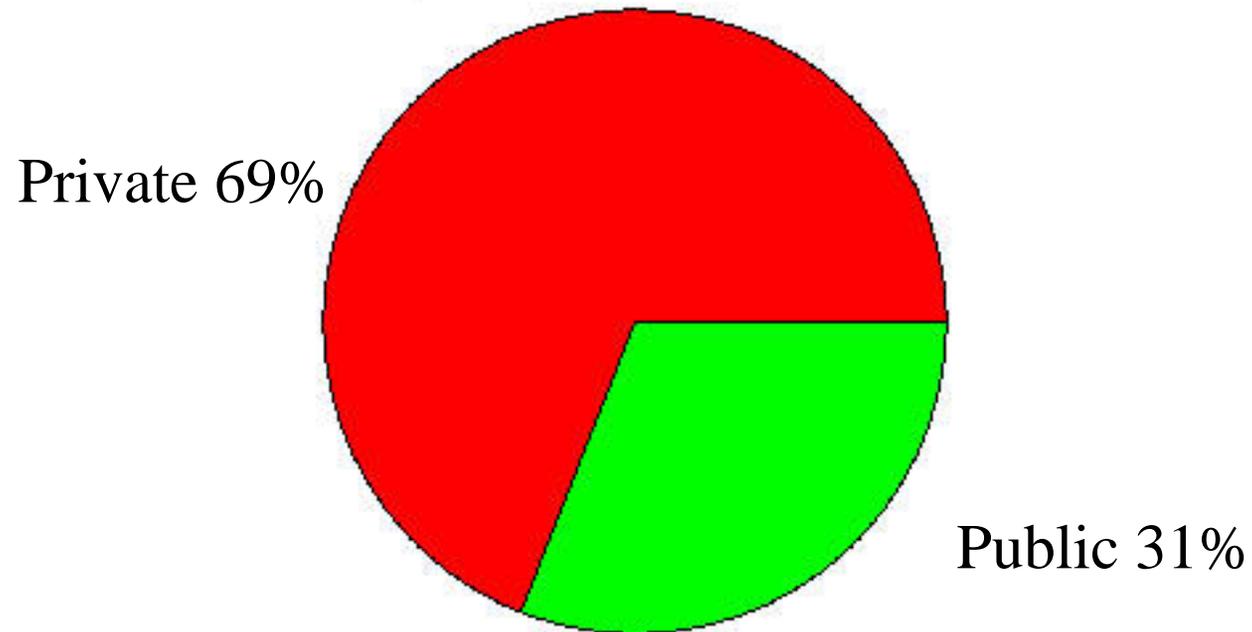
1st 100 Random Sites



HGM Classes of Columbus Urban Wetlands



Public vs. Private Ownership



-82% of depressions
privately owned

-64 % of riverines
publicly owned

Depressional Wetland



Riverine Wetland



Floodwater Holding Capacity of Depressional and Riverine Wetlands

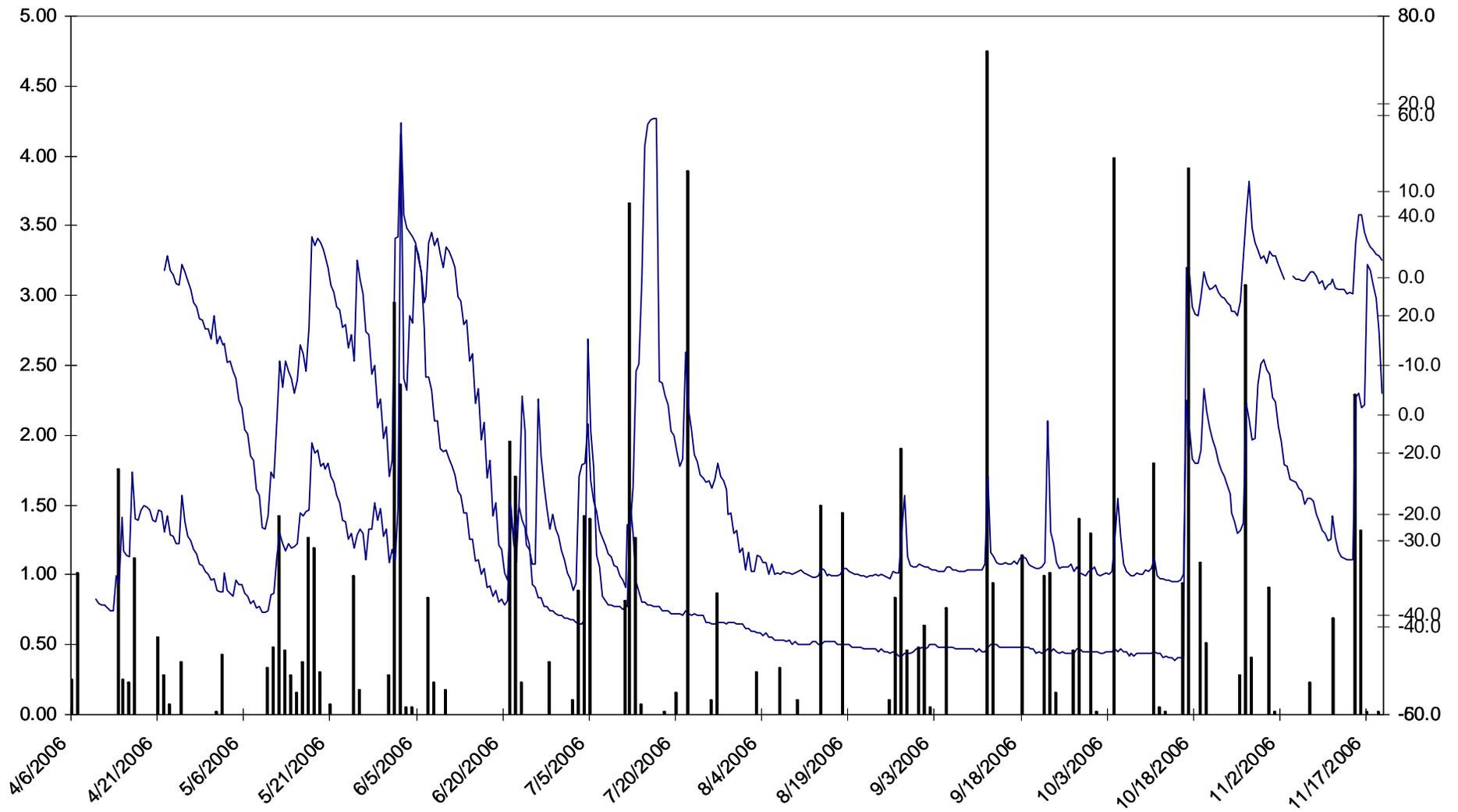
- **Depressional**

- Hold 0.4 acre-feet/acre
- Closed basin
- Release all water by evapotranspiration
- Hold water until empty
- Have additional water holding capacity in soils

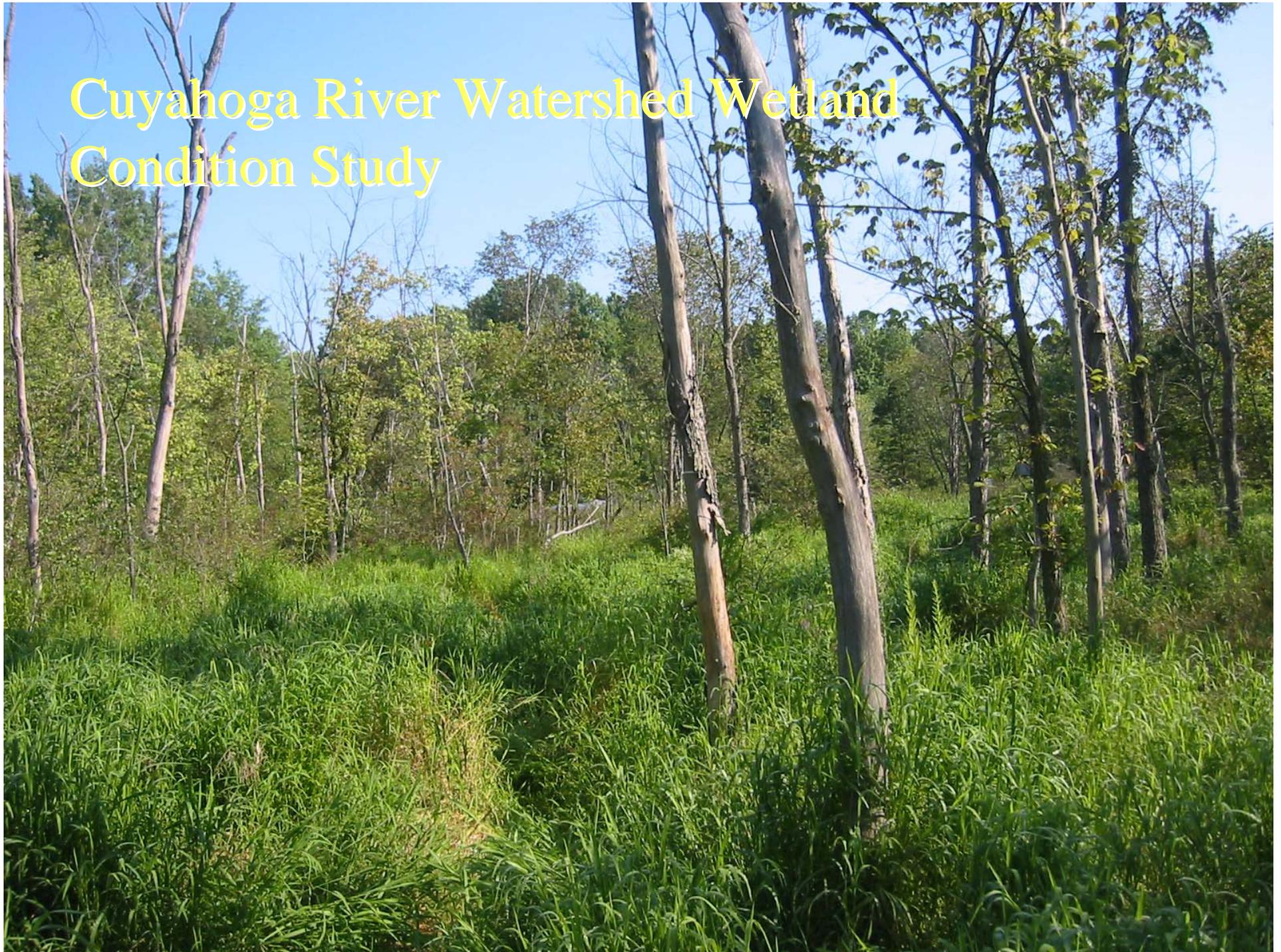
- **Riverine**

- Hold 0.8 acre-feet/acre
- Partially open basin
- Release flood waters to stream
- Release water as stream levels decrease
- Soils are generally saturated

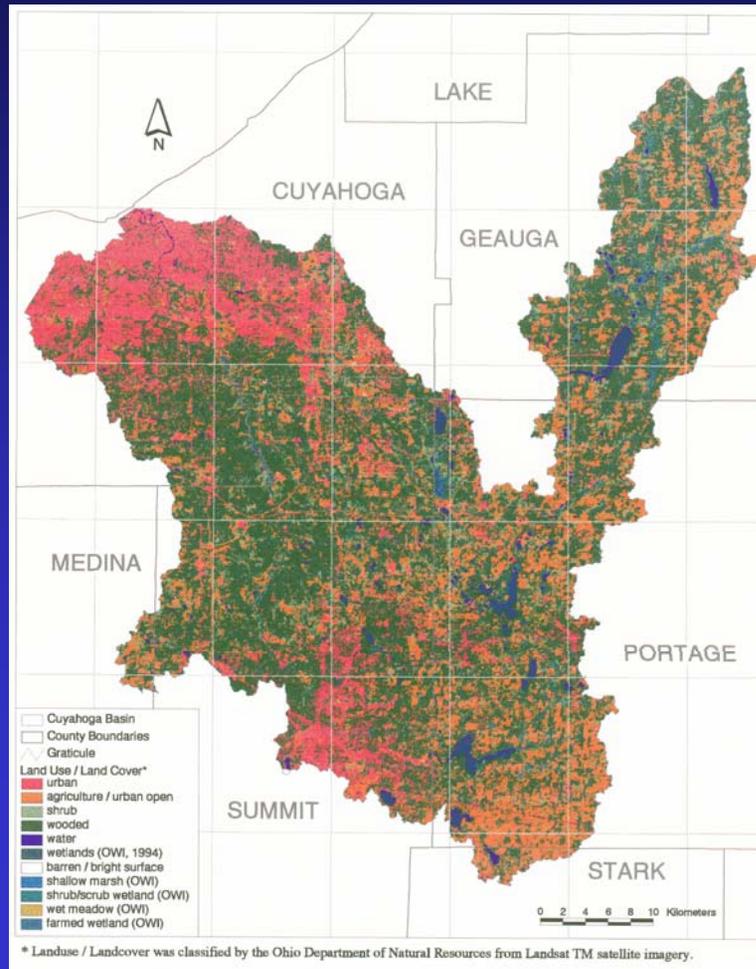
Floodwater Holding Capacity of Depressional and Riverine Wetlands



Cuyahoga River Watershed Wetland Condition Study



Cuyahoga Watershed: land use



Ohio Rapid Assessment Method (ORAM) Metrics

- Disturbance metrics
 - buffer width, intensity of surrounding land use, hydrologic, substrate, and habitat intactness
- Other metrics
 - size, water source, hydroperiod, connectivity, habitat development, special wetland communities (fen, bogs, T&E spp., old growth), plant community quality, microtopography, habitat heterogeneity, amphibian habitat

ORAM Metrics –100 Point Scale

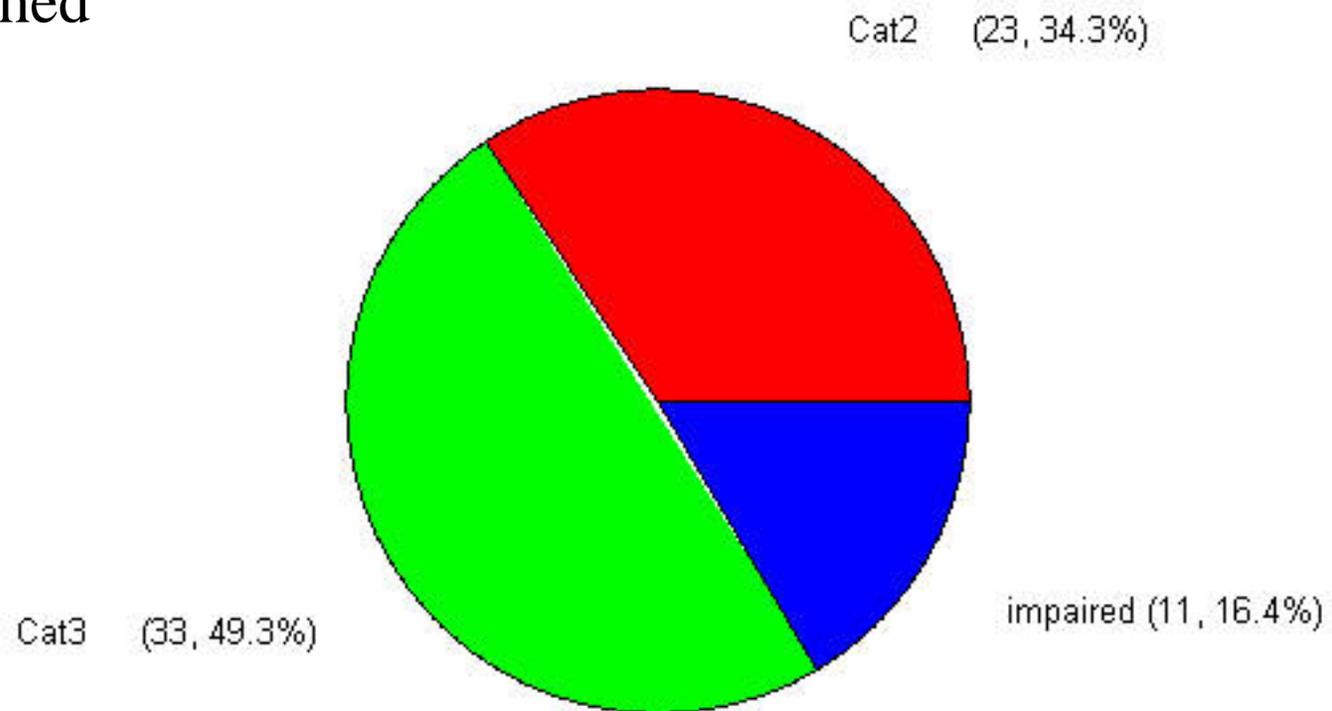
- Wetland Area – Max.6 pts.
- Upland Buffers and Intensity of Surrounding Land Uses – Max. 14 pts.
- Hydrology – Max. 30 pts.
- Habitat Alteration and Development – Max. 20 pts.
- Special Wetlands – Max. 10 pts.
- Plant Communities, Interspersion and Microtopography – Max. 20 pts.

ORAM Scoring Breakpoints

Category	ORAM V. 5.0 Score
1	0 to 29.5
1 or 2 gray zone	30 to 34.5
2	35 to 59.5
2 or 3 gray zone	60 to 64.5
3	65 to 100

**Geauga County -
Cuyahoga River
Watershed**

67 wetlands



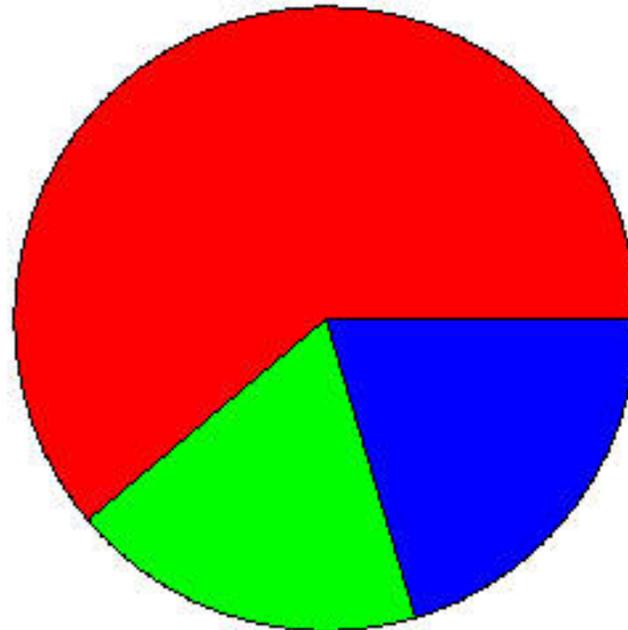
Upper Cuyahoga River Wetland



**Portage & Stark
Counties –
Cuyahoga River
Watershed**

108 wetlands

Cat 2 (66, 61.1%)



impaired (22, 20.4%)

Cat3 (20, 18.5%)

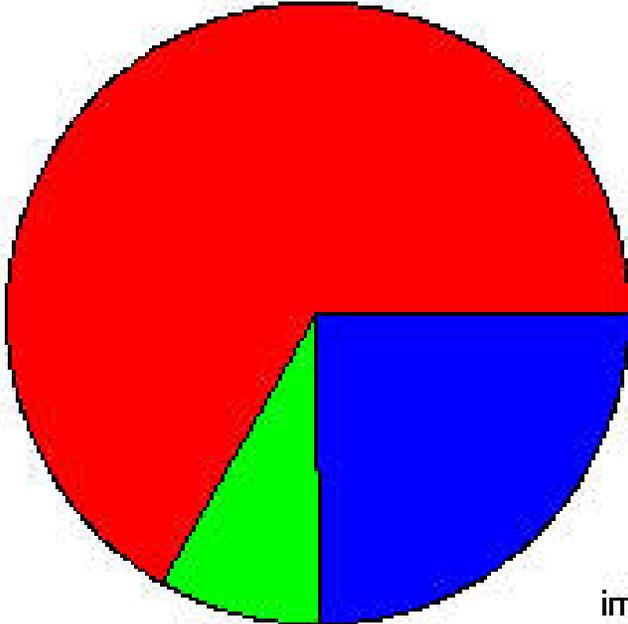
Cuyahoga River Watershed- Good Quality Wetland



**Cuyahoga and Medina
Counties – Cuyahoga
River Watershed**

12 wetlands

Cat2 (8, 66.7%)



impaired (3, 25.0%)

Cat3 (1, 8.3%)

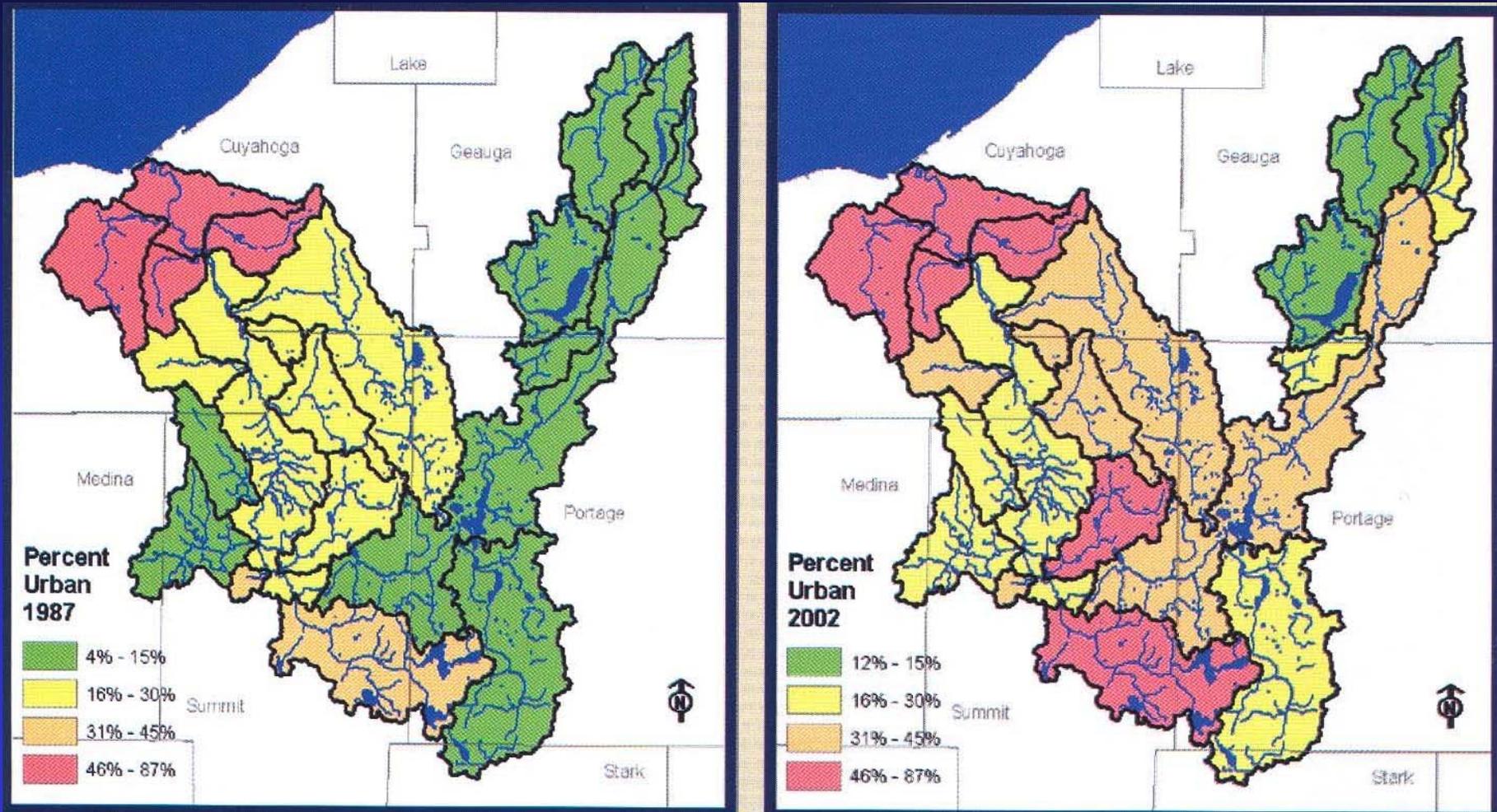
Impaired Wetland



Urban Isolated Depressions – Why they are urban development targets

- Often are present as wetlands in landscapes that are otherwise dominated by uplands
- Generally small
- Often are dry much of the year and may not be recognized as wetlands at those times
- Surrounding development has lowered their quality

How are landscapes changing? Urbanization



Courtesy Cuyahoga River RAP Committee

A photograph of a wetland area. In the center, there is a small, shallow pond surrounded by tall, vibrant green grasses. The background is a dense forest of green trees and shrubs. The overall scene is lush and natural.

Thank You!

Any Questions?