# USC Wetlands Program

## WETLANDS CONSERVATION ON A WATERSHED SCALE

USC Wetland Team
Historic Perspective

# WHY WETLANDS ARE A TARGET ISSUE FOR USC

- The team developed out of recognition that wetlands were generally not a priority, but were a very important component of the watershed.
- Wetlands are a tool for meeting the nutrient delivery goals of the Chesapeake Bay, but are even more important for their functions and values we see locally.
- Long history of wetland disturbance across the watershed
  - Landscape manipulation to promote other land uses resulted in the drainage of many of our wetlands
  - Many of those impacted areas are no longer active agriculture and wetland areas are partially reverting with drainage features still present
  - Lack of interest in the benefits of wetlands
  - Continued wetland impacts across the region though on a smaller scale

# USC WETLAND TEAM

- a centralized team with specialized skills who work on wetland projects throughout the watershed and beyond.
- Skilled equipment operators and an assortment of heavy machinery.
- Project focus flexibility that allows the team to adjust to meet developing needs.
- Partnerships with county and federal agencies, land trusts, and individuals to promote wetlands on every level.

# USC Wetland Team
## Ongoing Projects

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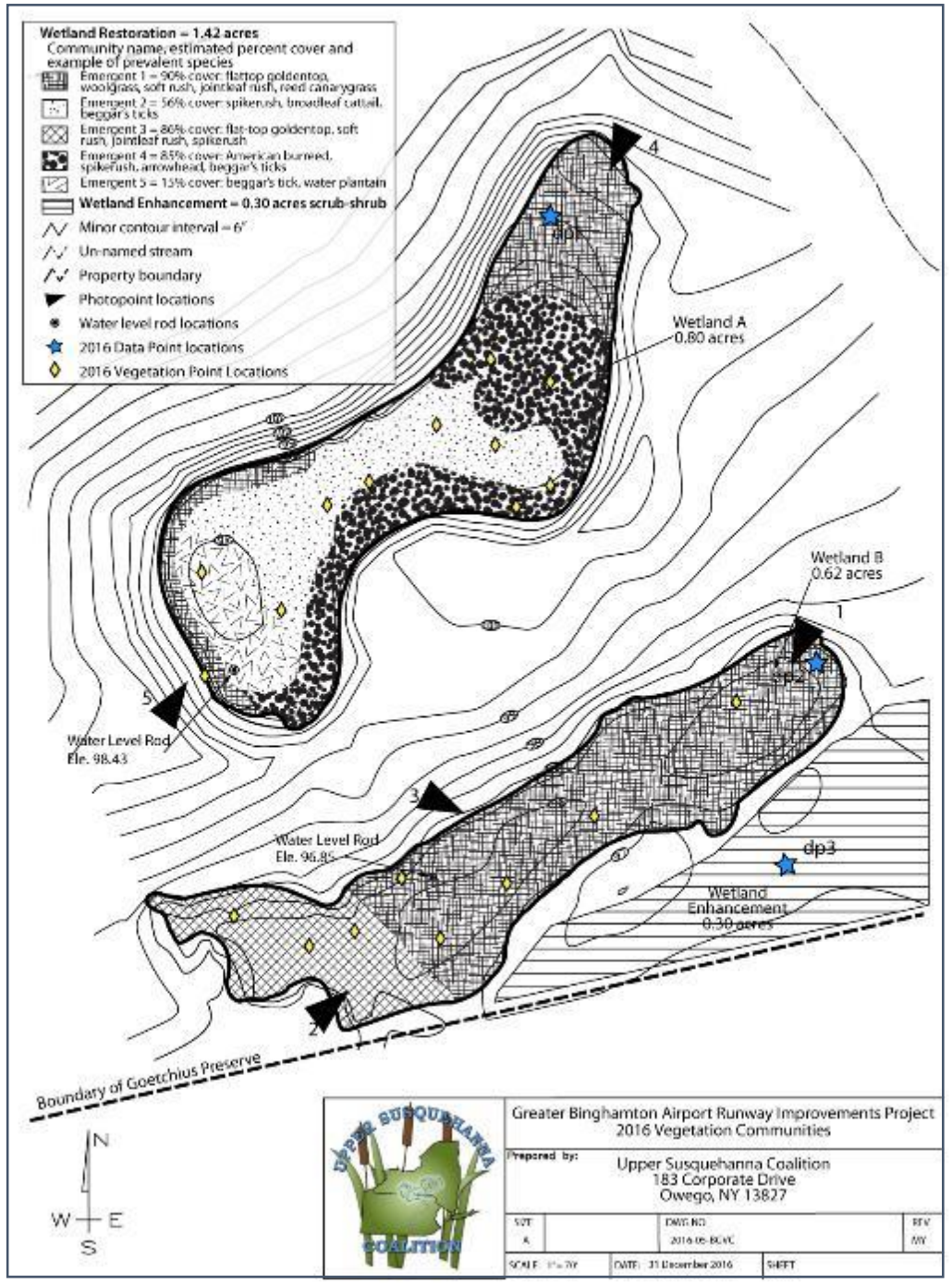
## Ongoing Projects

# USC Wetland Team
## Ongoing Projects

USC Wetland Team Ongoing Projects

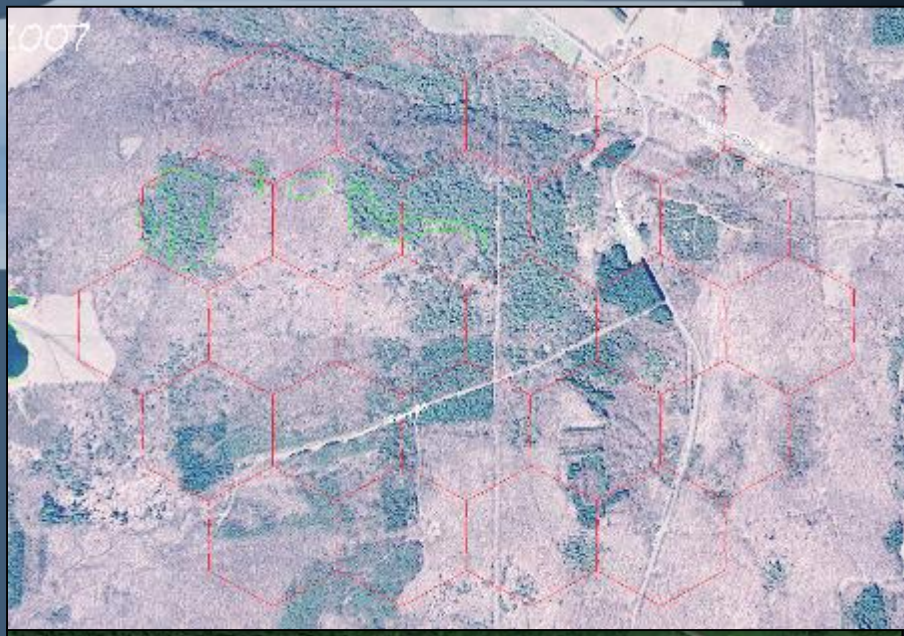
## 71 pools constructed in two arrays

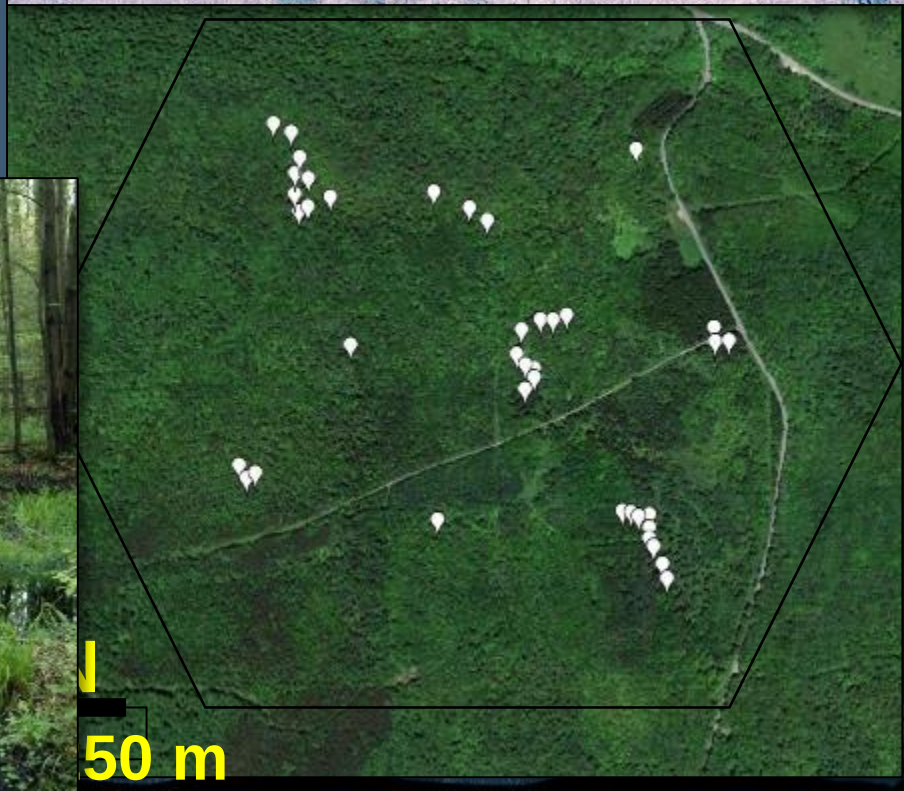
### 32 pools to evaluate pool-level design criteria

- surface area: 5 vs. 10 m diameter
- basin depth: 0.25 vs. 0.50 m deep
- organic matter amendment: added vs. not
- canopy cover: deciduous forest vs. open field

### 39 pools to evaluate landscape-level effects

- cluster size: 1, 3 or 9 pools per hexagon; three replicates of each cluster size
- pools vary with regard to size, depth, shape
- distance from known breeding sites of wood frogs and spotted salamanders





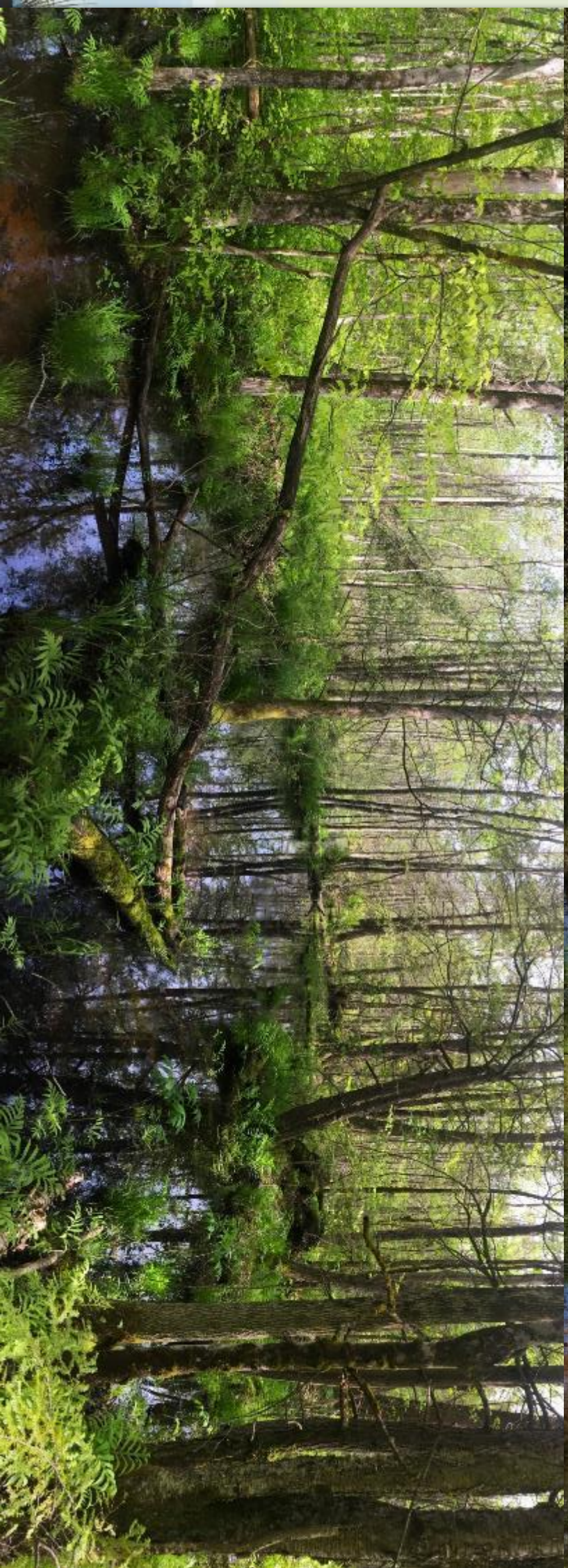
USC Wetland Team Ongoing Projects

# In Lieu Fee Program

- **15 ILF Service Areas**
- **ILF projects**
  - Funds come in
  - Find site
  - Gain site approval
  - Build site
  - Monitor / adaptive management / report


www.thewetlandtrust.org

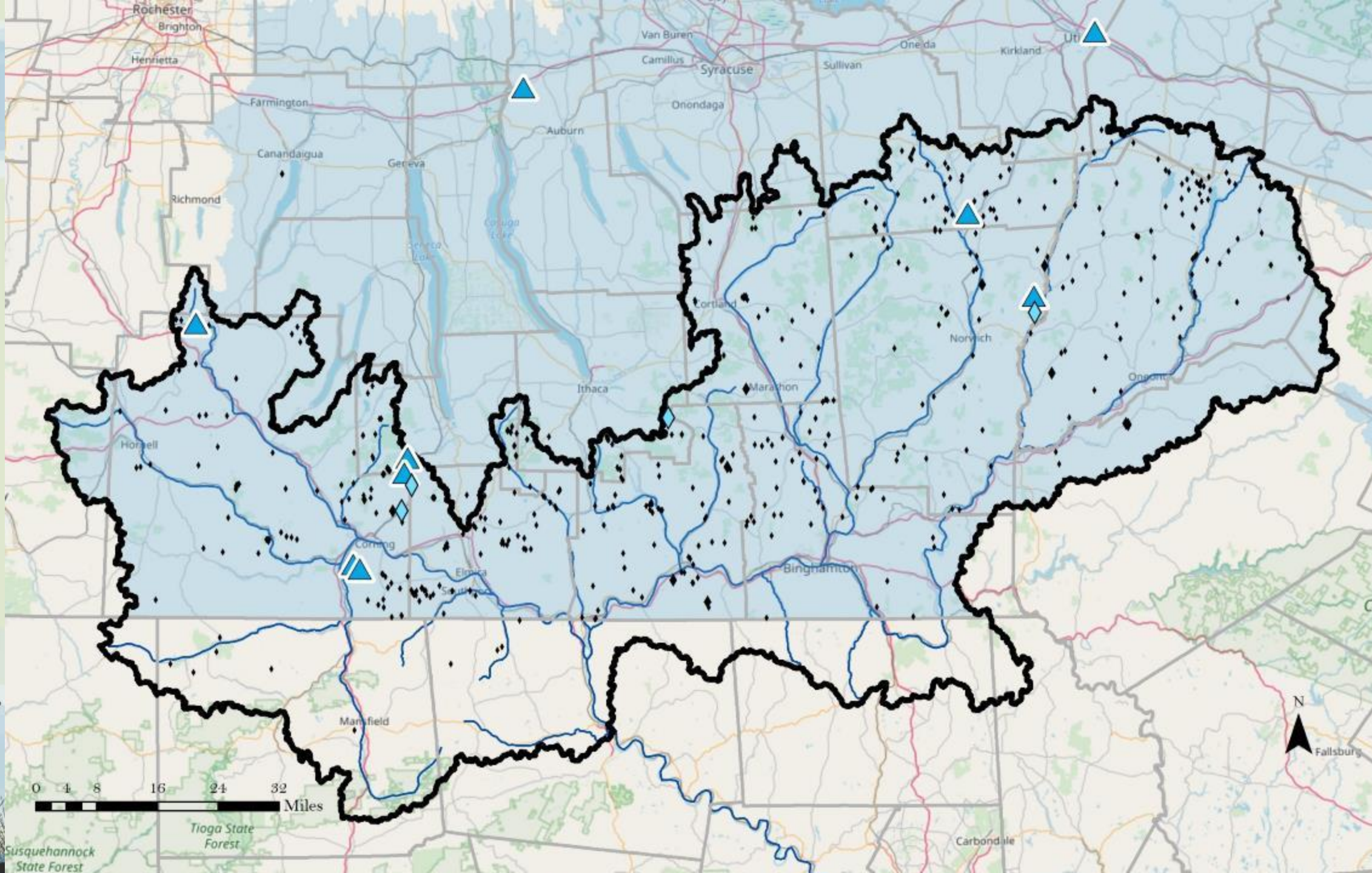
# USC Wetland Team
## Ongoing Projects



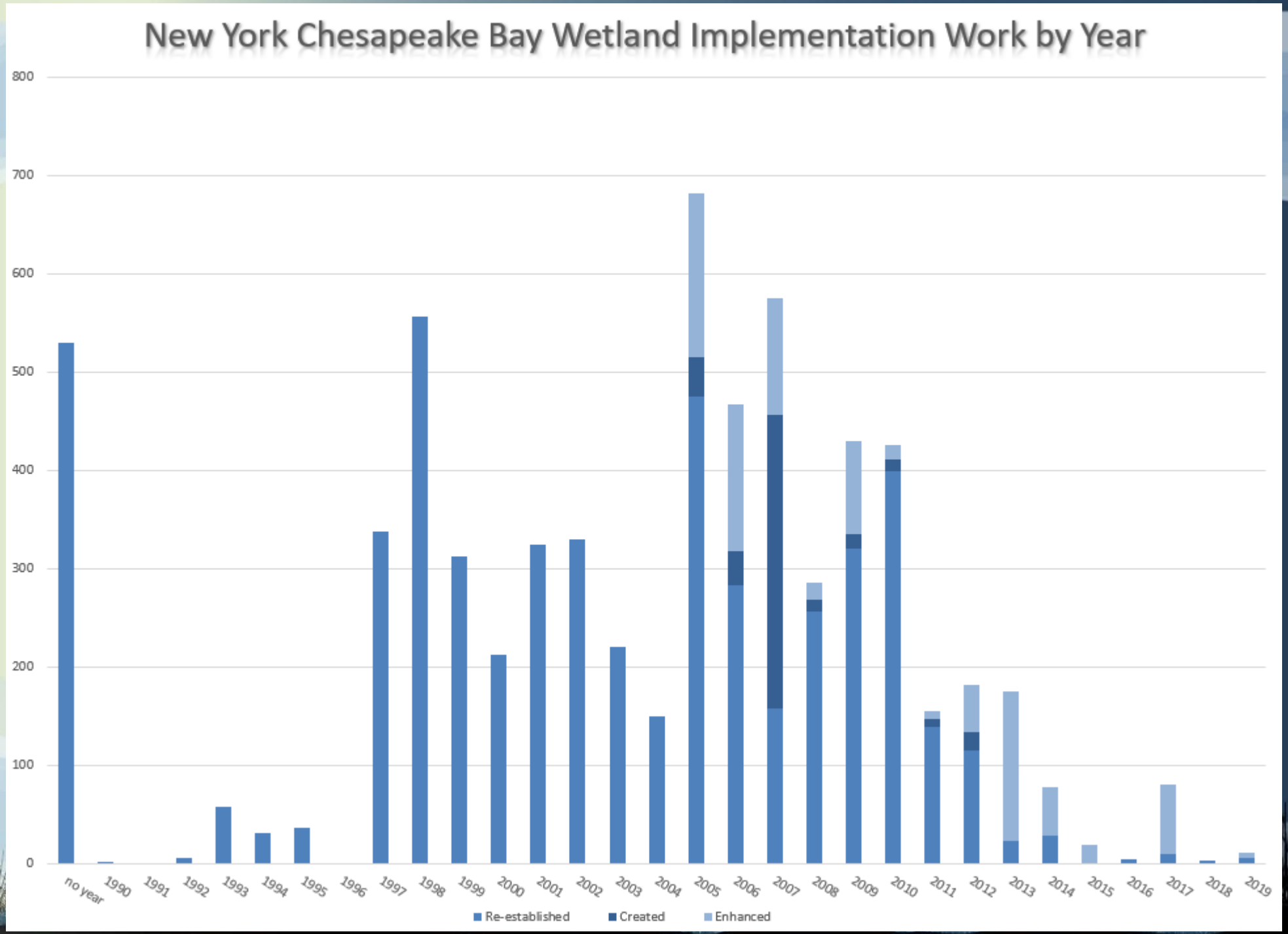
# Wetland Program Funding Sources

- ★ USDA NRCS
- ★ Finger Lakes National Forest
- ★ The Nature Conservancy
- ★ The Wetland Trust
- ★ Ontario SWCD
- ★ Otsego Land Trust
- ★ US EPA
- ★ NYS DEC
- ★ EFC
- ★ NYS DOT
- ★ Millennium Pipeline
- ★ Empire Pipeline
- ★ Broome, Ontario and Madison County Airports
- ★ Congressional Appropriation
- ★ US FWS
- ★ Chesapeake Bay Alliance
- ★ NY State Committee
- ★ NAWCA
- ★ NFWF
- ★ Chesapeake Bay Program
- ★ Izaak Walton League
- ★ Broome County Landfill
- ★ SUNY ESF

# USC Wetland Team Accomplishments



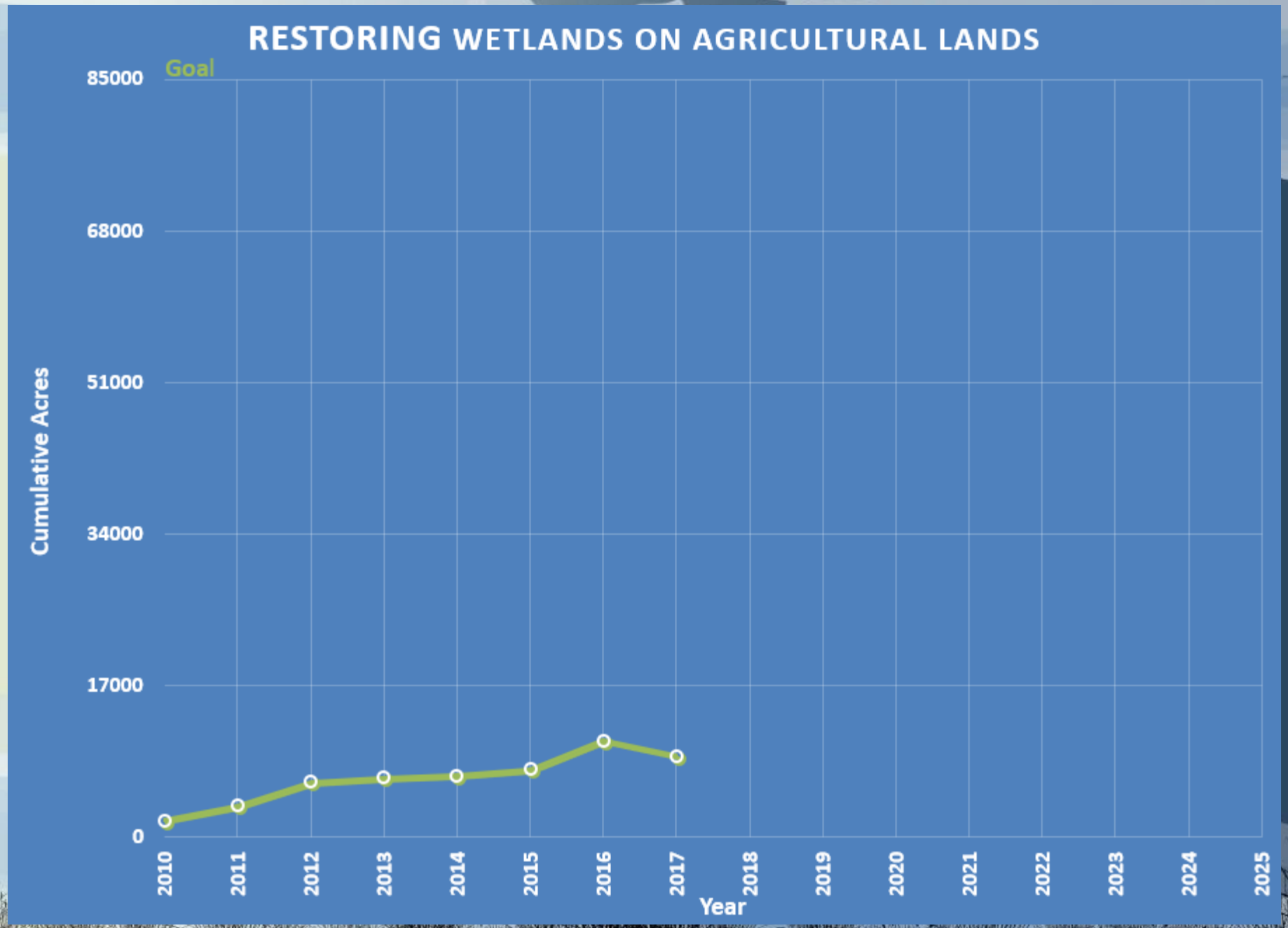
USC Wetland Team Accomplishments



# Where have the wetland restoration numbers gone?

- Decrease in available funding
- Decrease in available staffing
- Prioritization of other programs
- Narrowing of the wetland restoration definition
- Permitting constraints

USC Wetland Team Moving Forward



# Wetland Work as defined by CBP

*Wetland Restoration (re-establishment):* The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former wetland.

*Wetland Rehabilitation:* The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded wetland.

*Wetland Enhancement:* The manipulation of the physical, chemical, or biological characteristics of a wetland to heighten, intensify, or improve a specific function(s).

*Wetland Creation (establishment):* The manipulation of the physical, chemical, or biological characteristics present to develop a wetland that did not previously exist at a site

Of these four categories, restoration and creation are considered *acreage gains*, which means there is an increase in the total area of wetlands. The other two – rehabilitation and enhancement – are considered *functional gains* because they do not change the overall acres of wetlands, but they do improve the wetland's function from its current state.

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## Applicable Land Use Types (or other load sources) Treated by the BMP:

- Agriculture
- Agriculture without Open Space
- Cropland
- Cropland and Hay
- Cropland and Hay Eligible for Manure
- Cropland Eligible for Manure
- Grains not Double Cropped
- Hay
- Leguminous Hay
- Other Hay
- Pasture
- Pasture and Hay
- Row Crops
- Row Crops Eligible for Manure
- Specialty Cropland

# Increasing implementation

- Identify and acquire funding
- Supplement federal staffing gaps with local staff
- Education, outreach and networking
- Identifying target sites in each county and focusing outreach efforts
- What else can we do?

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# Landowner Attitudes Towards Wetland Restoration

## Audience Research
## Social Marketing Recommendations

August—November 2015

**Report of Findings**

CBTRUST Chesapeake Bay Trust

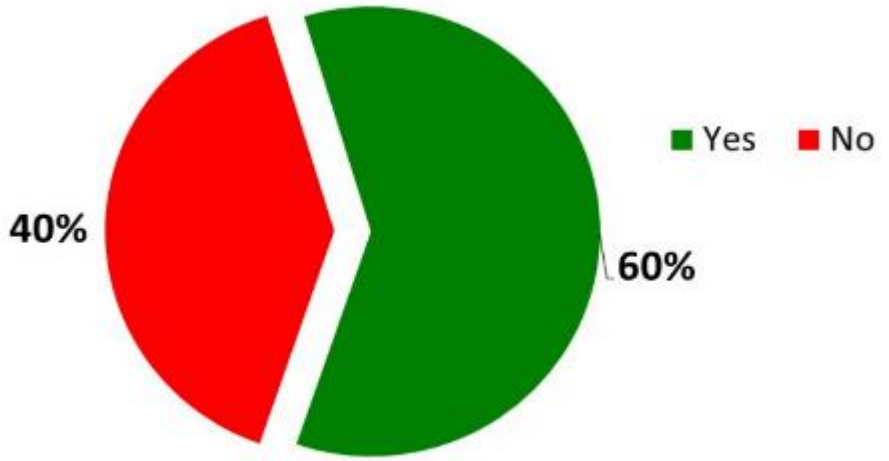
The Nature Conservancy Protecting nature. Preserving life.

DUCKS UNLIMITED

NFWF

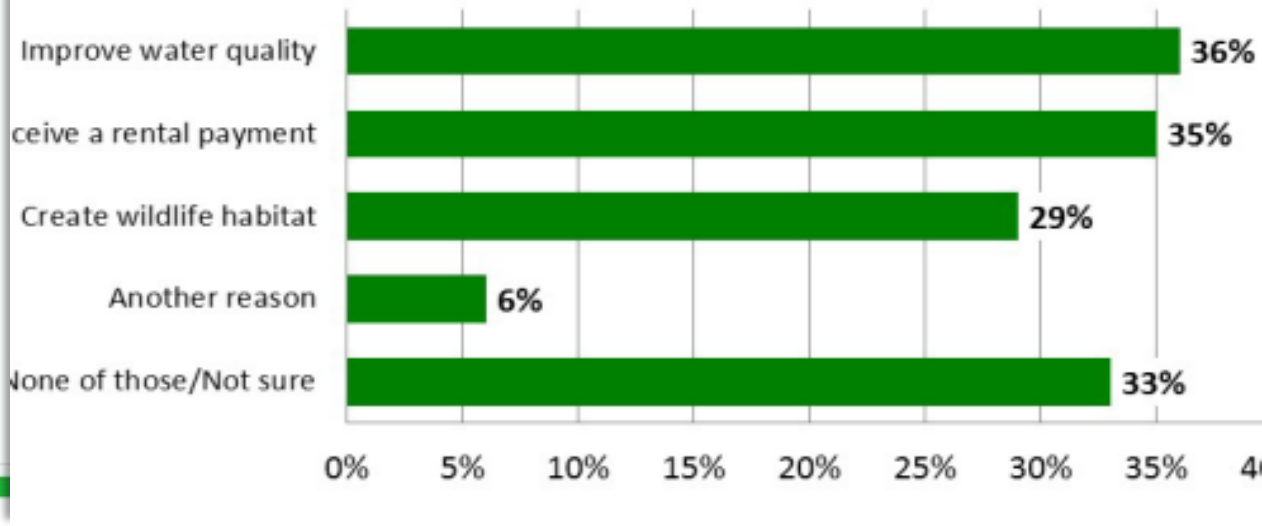
OPINIONWORKS PUBLIC SPIRITED RESEARCH

## Awareness of Wetlands Programs




"Are you aware of any programs that are meant to help you preserve wet areas on your land, or restore them to natural habitat, through technical or financial assistance? Such programs might be offered by agencies such as the Natural Resources Conservation Service, Farm Service Agency, or your state's Department of Agriculture, or through private grantors such as Ducks Unlimited or the Chesapeake Bay Trust."

## Why Landowners Might Consider Wetland



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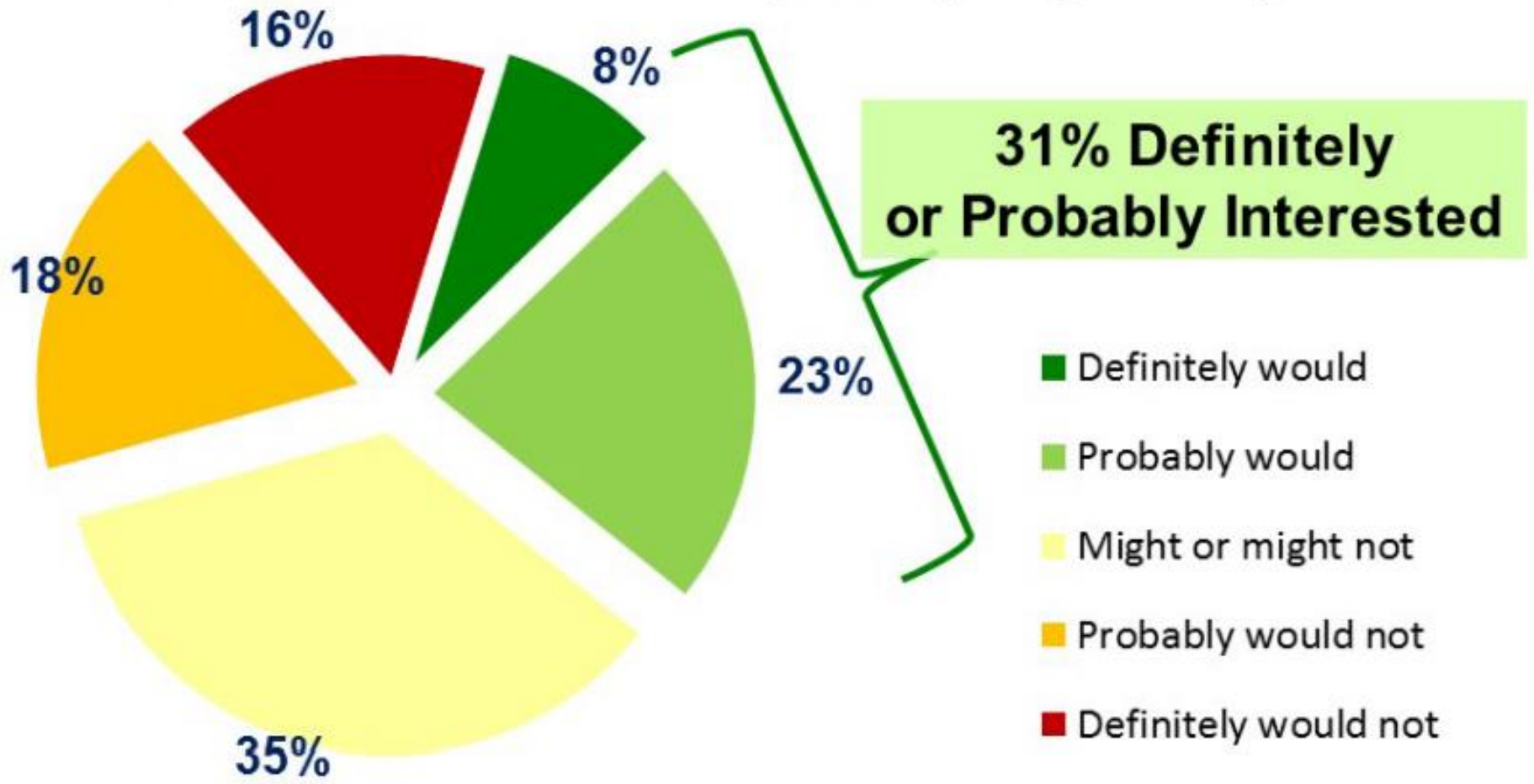
# Landowner Interest in Wetlands Program

*Asked of Those Not Currently Participating in a Program*




"If you were told about a program to help you preserve or restore wet areas on your land as a way of providing wildlife habitat and protecting local streams, and if the program paid enough to cover your costs of participating, without forcing you to give up too much control of what happens on your land, how likely would you be to seriously consider it?"

Go to **www.menti.com** and use the code **96 88 49**

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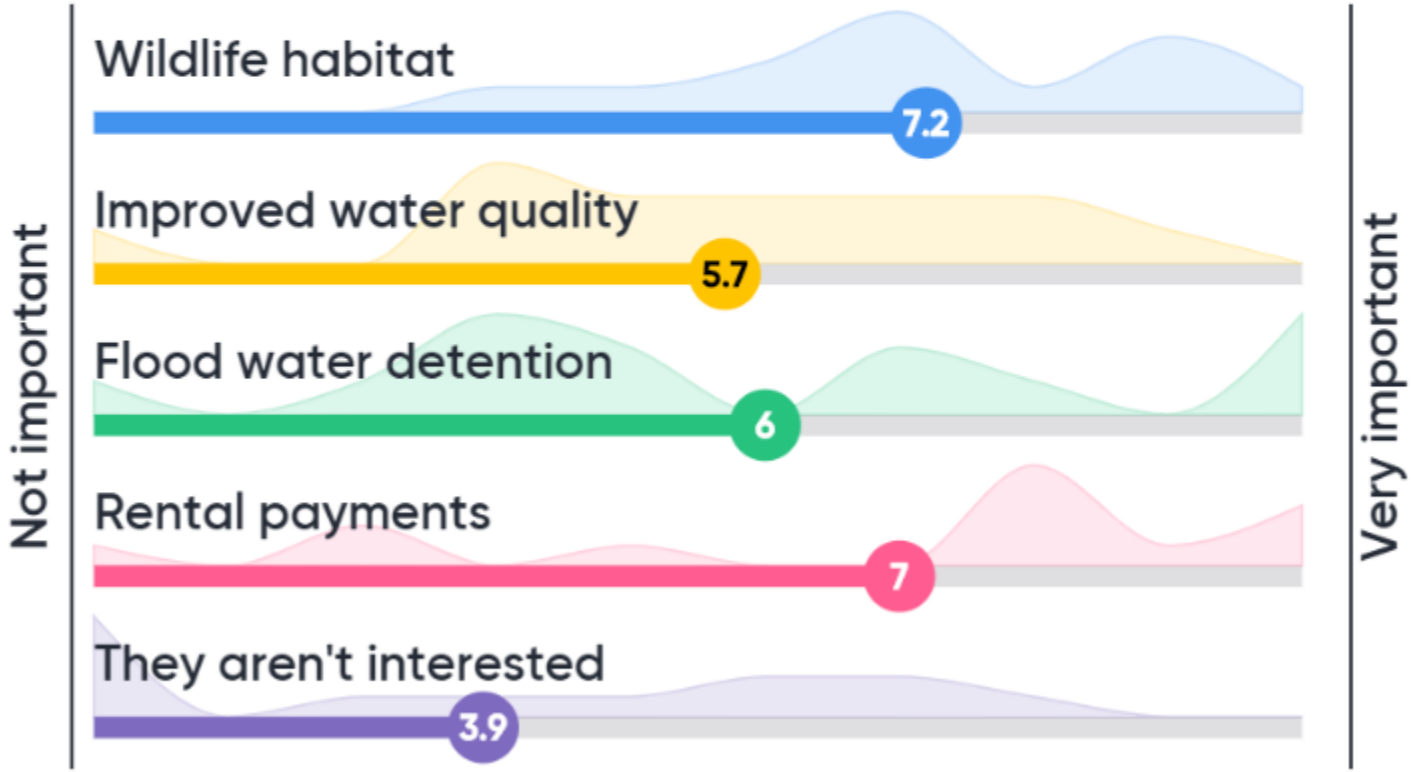
Mentimeter

# What wetland features interest landowners?

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# How can USC help increase wetland restoration across the watershed?


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