The background features a light blue-to-purple gradient. It is decorated with several realistic water droplets of various sizes, some with highlights and shadows, scattered across the top and right sides. In the center, there is a faint, light-colored silhouette of a tree with a thick trunk and a rounded canopy.

# **Guidance for Planting Trees in Stormwater Management Ponds**

***Mary Travaglini***  
***Montgomery County, MD***



**First understand your pond, and  
what it's for...**

**Stormwater function will take priority over any habitat  
value, aesthetics, or recreation.**

**Sorry.**



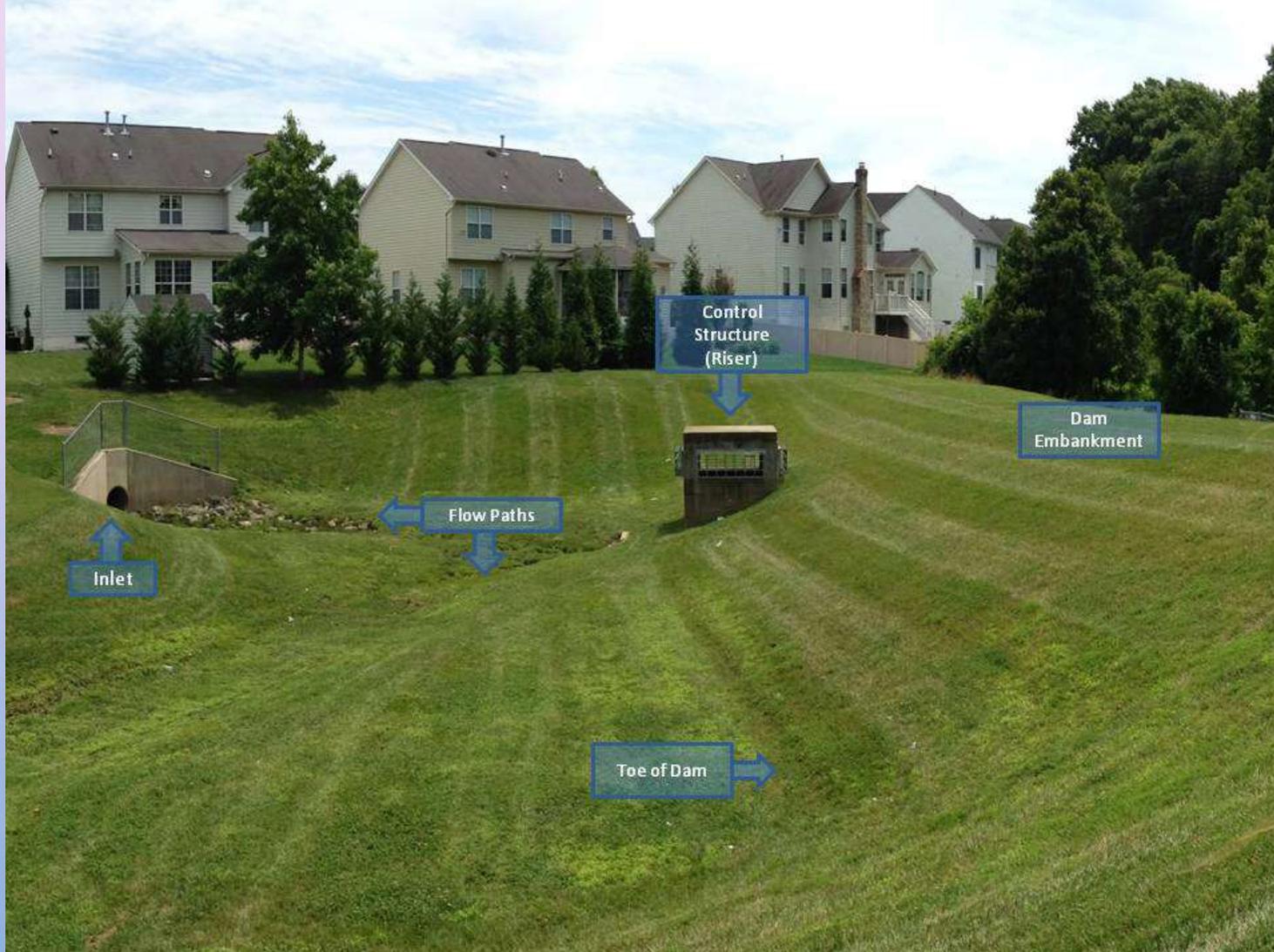
# Dry or wet? Different opportunities



# How a stormwater pond works



# Critical features that constrain planting



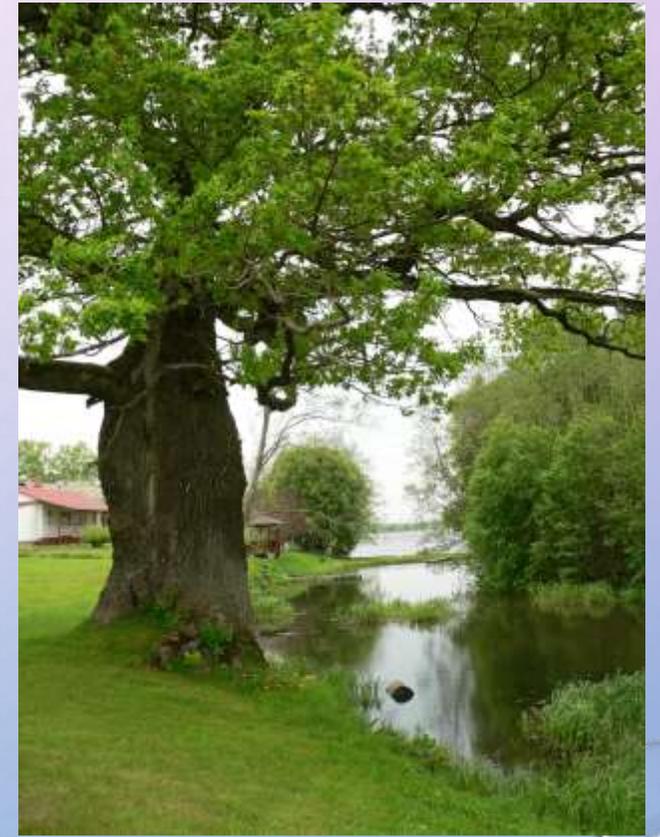
# What plants can do that ponds cannot do alone (go biology, go!)

- *Infiltrate water—roots loosen soil and provide channels*
- *Evapotranspiration*
- *Pollutant transformation through soil biology*
- *Shade and cool runoff*



# Other benefits of planting

- *Habitat (including predator habitat)*
- *Aesthetics*
- *Reduce mowing*
- *Buffer toxic runoff*
- *Prevent erosion*
- *Reduce geese*



# Where can you (not) plant? General guidance



# Where can you (not) plant?—Control structure, inlets, outlets

Stay 25' away, plus  
outfall pipes



Keep flowpaths  
clear



Don't block inlets



# Where can you (not) plant?—Dam embankments



# Where can you (not) plant?—Sand filter bottoms



No planting in sand filters or over pipes

# Great opportunities to plant—pond slopes



# Great opportunities to plant—dry bottoms



# Great opportunities to plant—wet edges



# Floating islands



# Types of plants/opportunities

## *Native plants when possible*

### **Wet edges**

- Need to handle some drought/low water levels
- Can be subject to salt or pesticides

### **Dry bottoms**

- Will be temporarily submerged
- Most susceptible to maintenance activity damage

### **Shallow water**

- Emergent aquatics
- Do not use invasives

### **Pond Slopes**

- Dry conditions



# Lofty Goals...



# **How to maximize a limited budget?**

- ***Reduce water temperature on edges of wet ponds, or wet channels***
- ***Choose locations that block or enhance views***
- ***Choose trees***
- ***Dense edge plantings to reduce geese***
- ***Funding support from grant or municipal resources***

# How much planting makes a difference?



# Deer, beaver, geese, ducks, humans-- protection



# Maintenance and inspection

- *No mulching*
- *Remove heavy leaf accumulations and debris*
- *Low flow drains may need more frequent cleaning*
- *Monitor and remove invasives*
- *Keep access paths clear*
- *Keep dams mowed*
- *Remove captured trash*
- *Weeding*

# Some good pond “plantings”















# Questions/Comments?

[\*montgomerycountymd.gov/stormwater\*](http://montgomerycountymd.gov/stormwater)



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