

Stormwater BMP Workshop – Ohio – Nov/Dec 2011

Stormwater Wetlands, Vegetative Filter Strips & Permeable Pavement Design Tips

Bill Hunt, Ph.D., PE

Associate Professor & Extension Specialist

Biological and Agricultural Engineering

www.bae.ncsu.edu/stormwater

Brevard College (NC)



Caldwell County Armory



Asheville Wetland



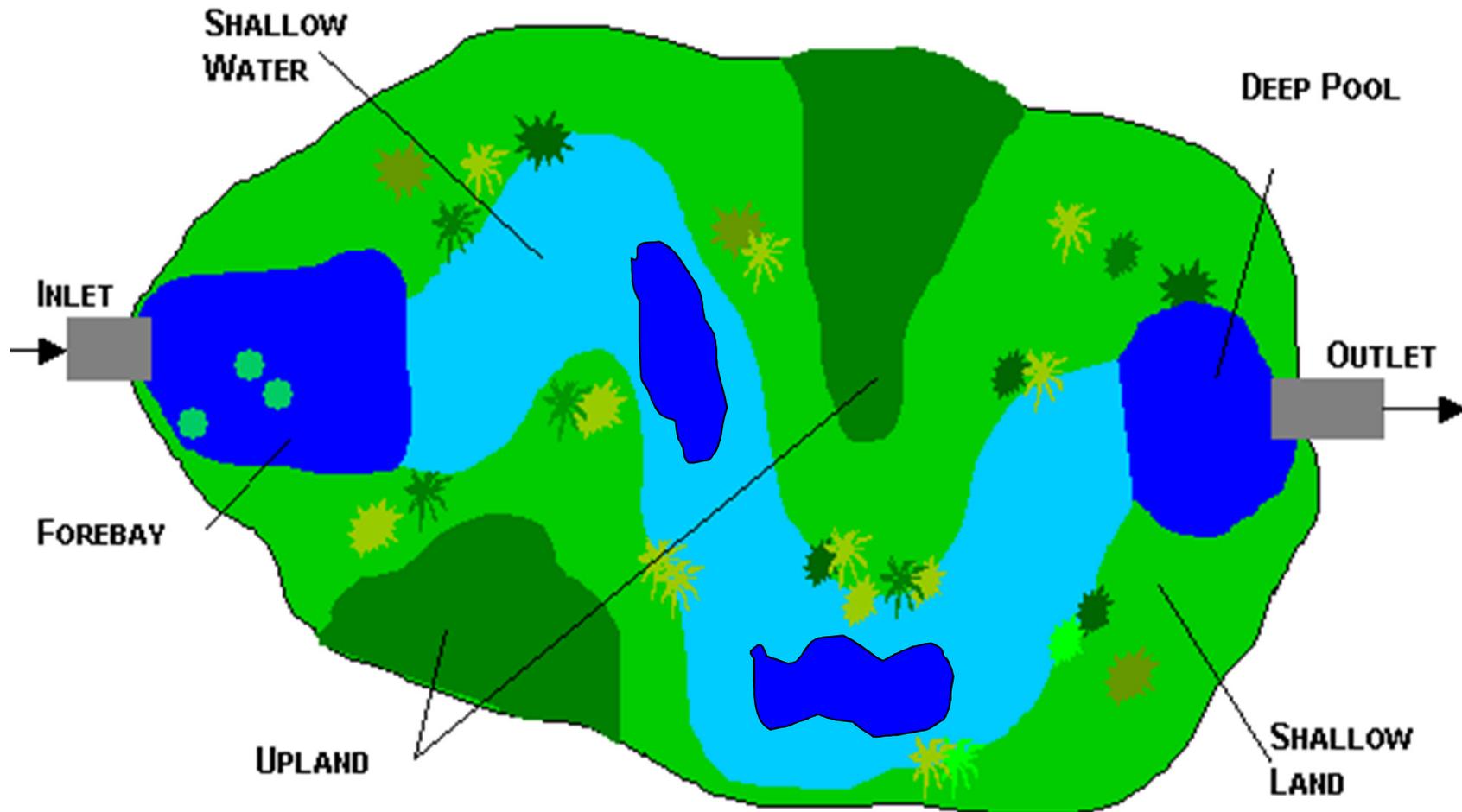
LA River (California)



Key Design Concepts

- Getting the Outlet Right
- Elevations/Topography matters
- Please no cattails

“Classic” Wetland Flow Path Sinuosity



But, this works too!



Forebays



“Entry” Deep Pool is the Forebay

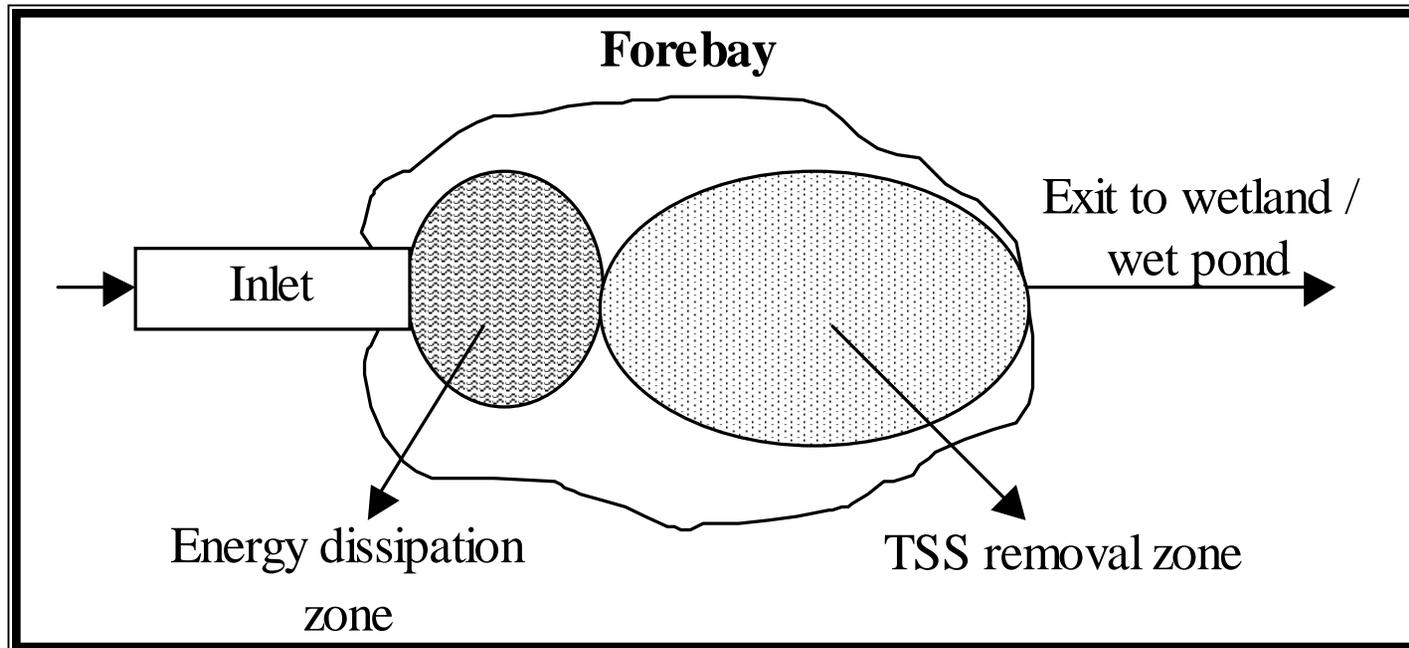


1. Still H₂O
2. Capture Sediment & Gross Solids



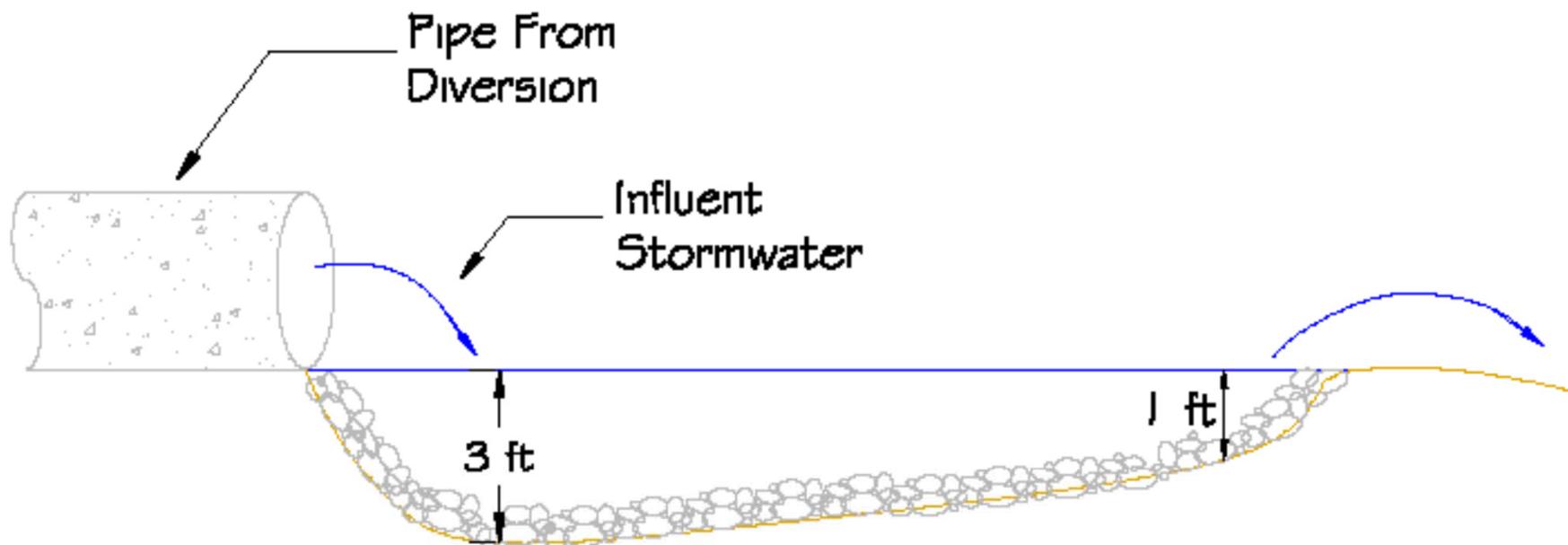
2 Purposes...

Forebays remove TSS and other debris from the incoming water.



- Forebay objectives:
 - (1) To dissipate energy of concentrated inflow
 - (2) To provide additional volume for sediment accumulation

Forebay schematic



Shade Valley Pond - Charlotte



**As Designers, PLEASE
provide Clean Out Access**



Clean out: NYC Style

