

Maintenance of LID

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From the beginning of the design
include maintenance plan -

- Documents - Complete finished plan and boundary definitions
- Maintenance agreements on file
- Designate chain of command
- Maintenance directions/incentives such as mowing schedule, exclusion fencing, snake signage

1.3.4 Operation and Maintenance and Legal Documentation

- ❑ a. Describe the overall maintenance and operation schedule for the proposed system.
 - ❑ b. Identify the entity that will be responsible for operating and maintaining the system in perpetuity.
 - ❑ c. Provide copies of all proposed conservation easements, storm water management system easements, property owner's association documents, and plats for the property containing the proposed system.
 - ❑ d. Provide a copy of the boundary survey and/or legal description and acreage of the total land area of contiguous property owned or controlled by the applicant.
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4. Hydraulic Design of Storm Water Storage Systems

4.2 General Design Considerations

4.2.9 Operation Maintenance Considerations

- ❑ In the documentation submitted to the City, the applicant shall identify the entity responsible for the perpetual care, operation, maintenance, and associated liabilities of the system. If the entity is to be a public body, such as a county, municipality, or special district, a letter or other evidence of acceptance must be included. If the entity is a non-public body such as a homeowners' association or private corporation or person, documentation of its existence, fiscal and legal ability, and willingness to accept the responsibility must be included.
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Chain of Command

Who's In Charge?

Designated contact
Public Works
Work Crews

Building Inspector ?
Public Works Director ?
Crew?
Laborer?

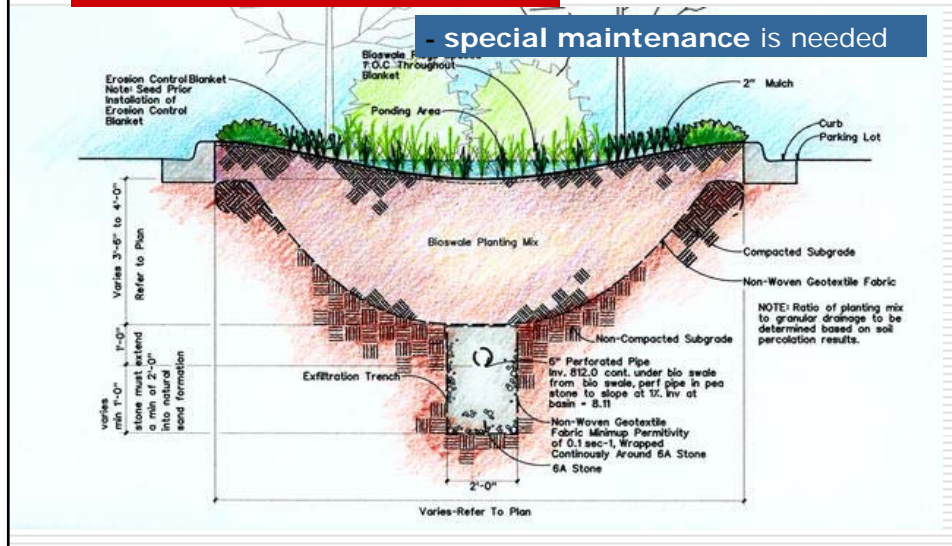
Example of Record Keeping

- ❑ Advanced Stormwater Information System (ASIST) for tracking all BMP activities and scheduling the maintenance activities.
- ❑ ASIST is a database that allows the City to track the progress of its interim Stormwater Management Plan, schedule activities such as collection system maintenance and inspections, construction site inspections, and water quality monitoring data can be entered.

For example, if an inspection identifies a problem, the inspector enters a description of it into the City's computer-based project tracking and management program. *What does your city have?*

Some LID work is underground

- special maintenance is needed



Expected LID Maintenance Practices

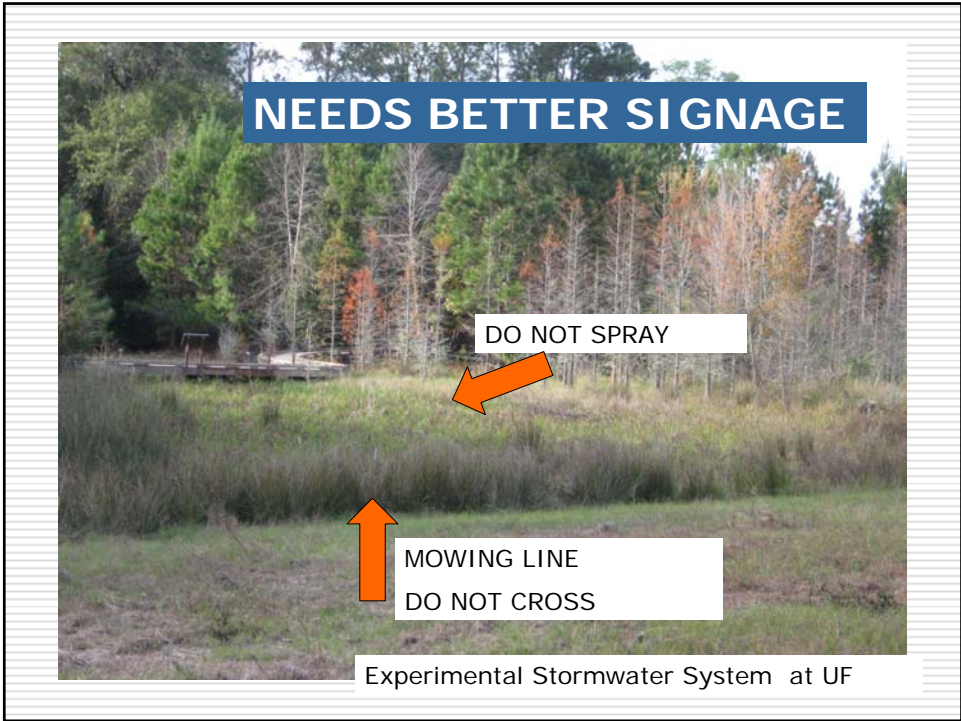
- Sediment Removal
 - Proper disposal of debris, leaf litter
 - Replacement of dead vegetation
 - Proper operation of irrigation
- HOW?
- Establish maintenance guidelines
 - Education of maintenance supervisors

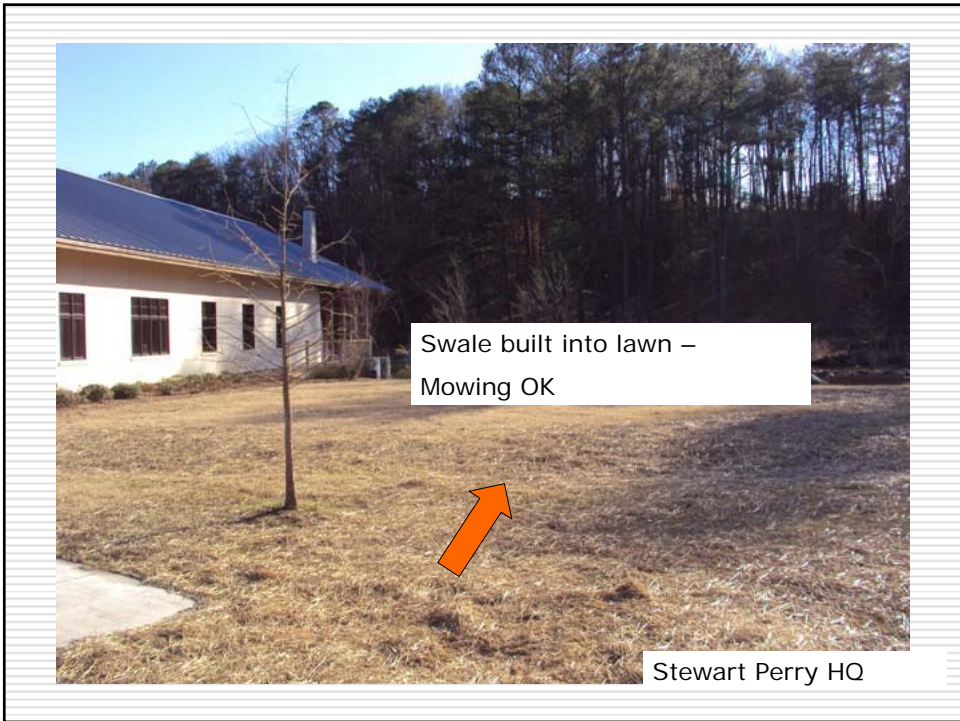
Maintenance Schedule

- Soil – erosion and stabilization
 - Plants – watering new plants, twice a year remove and replace all dead and diseased plants, prune, longer term watering plan, mowing (how often?), herbicides allowed??
 - General – check pond after rainstorms for standing water, match infiltration to specs for Vector Control (mosquitoes).
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Extra Assurance

- A good design should come with a plan for maintenance.
 - That plan needs to be incorporated into seasonal grounds schedule
 - Sometimes extra barriers and reminders are needed.
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Native Grasses mowed only twice a year

Hewitt-Trussville High School Parking Lot

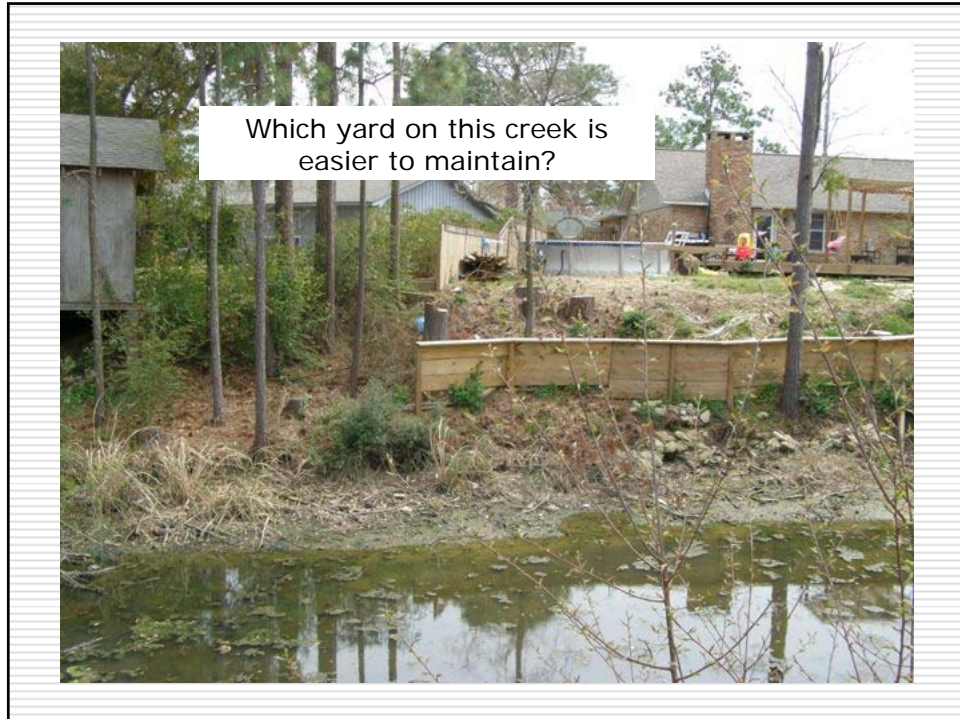


POISONOUS
SNAKES
AND INSECTS
INHABIT THE
AREA



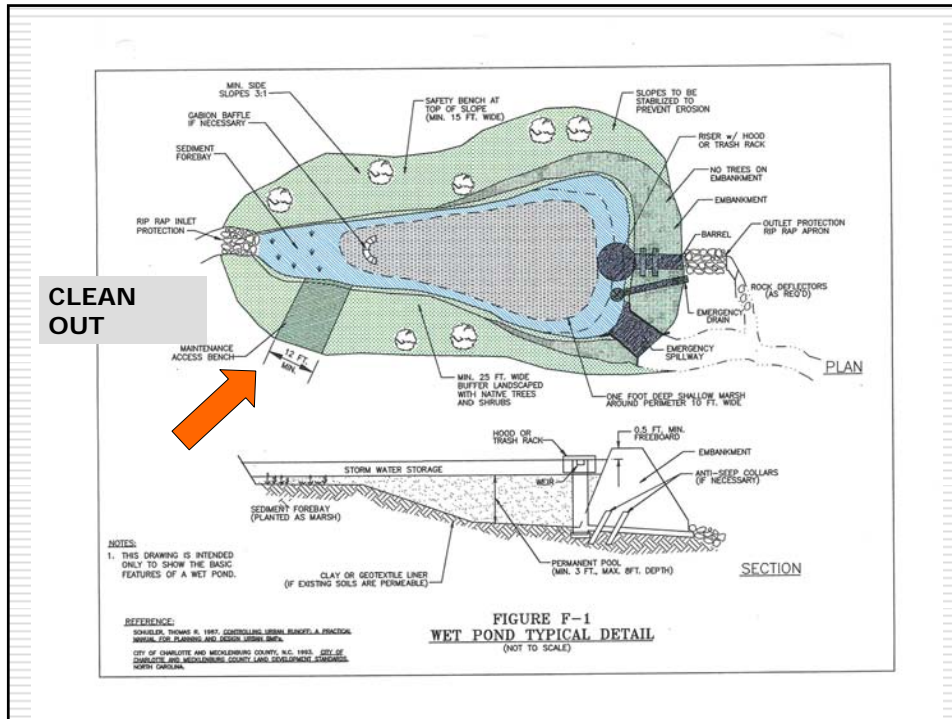
Snake
Habitat
Do not mow





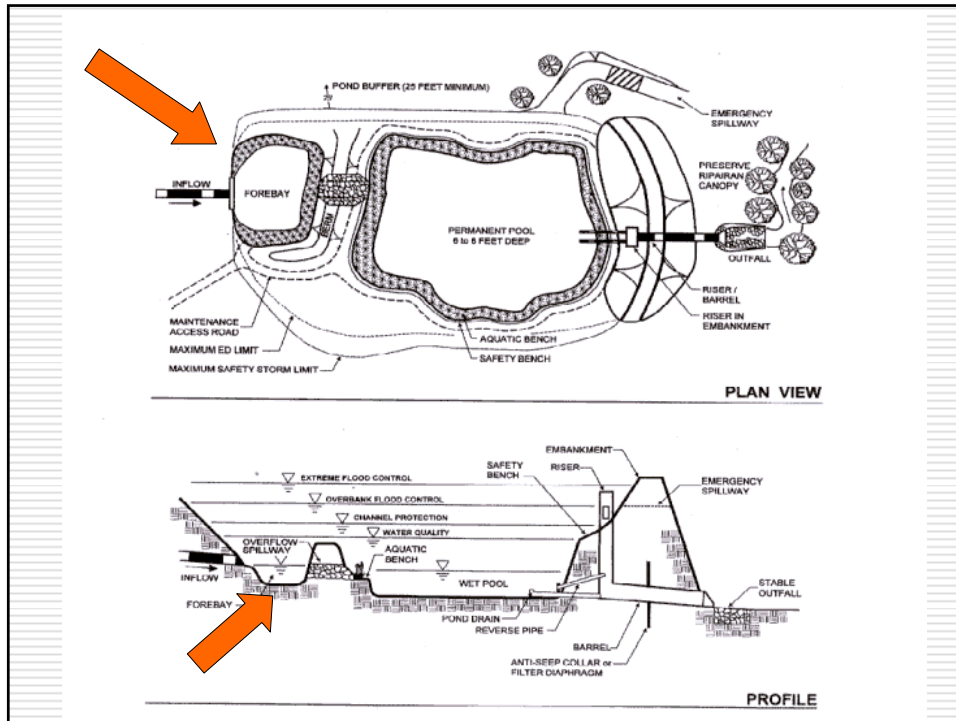
Each Design has a different
maintenance plan

- Some need to be mowed
 - Some need to be cleaned out
with a Bob Cat
 - Some need to be left to grow without
mowing or spray
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EXAMPLE: Clean Out “Forebay”

- ❑ In the original design – a clean out area must be included at the inflow point.
- ❑ City must have a maintenance agreement with landowners for property access (liability issues).
- ❑ If LID is for treatment of pollutants, “forebay” soils need to be replaced (this should be in the original maintenance plan).



LID Success is a Good Maintenance Plan

- ❑ On file for all to find easily – design drawings and maintenance agreements
 - ❑ Designated chain of command
 - ❑ Maintenance directions/incentives in public works work plan
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Communication is the key



Each Public Works Shop will receive
this sign

STORMWATER CONTACTS

Administrator supervisor:

NAME

CONTACT

Stormwater Manager:

NAME

CONTACT

ADEM Field Office: (205) _____
