Green Infrastructure Primer

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Presented by:

The Low Impact Development Center, Inc.

A non-profit water resources and sustainable design organization

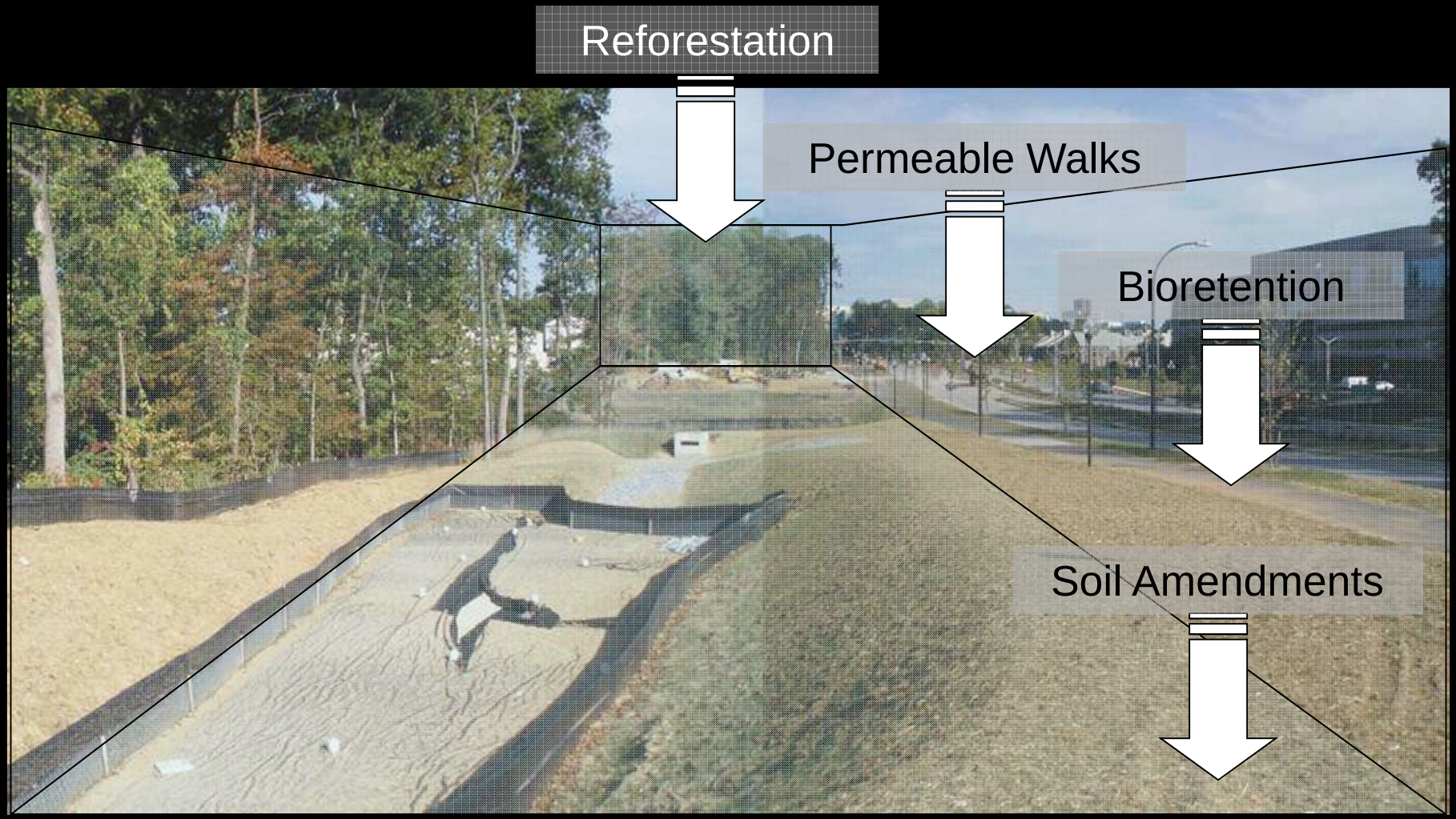
www.lowimpactdevelopment.org

What Green Infrastructure is all about!

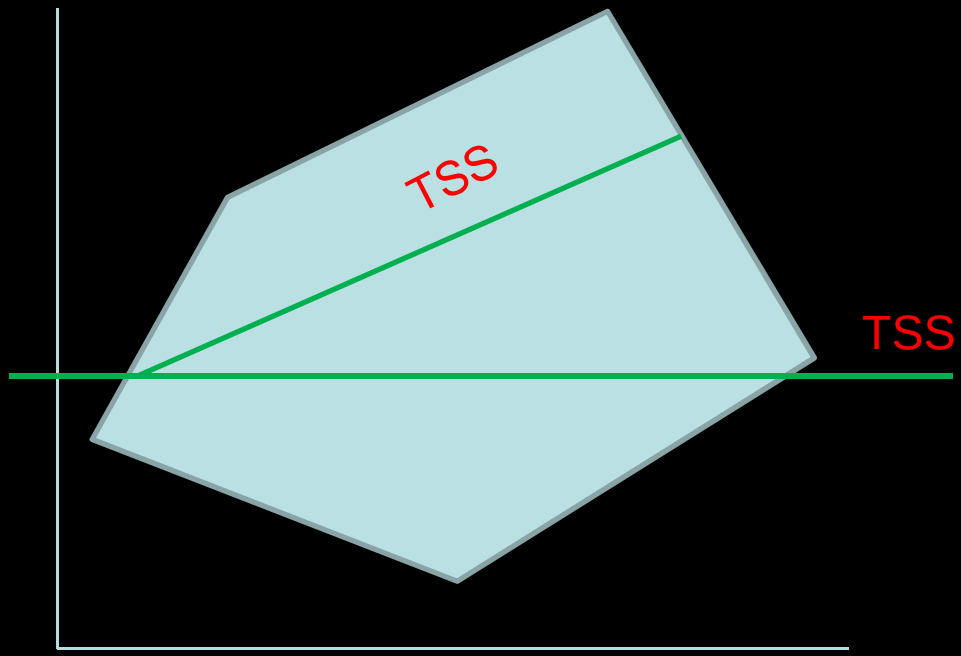
The Money!!!, of course

The use of the network of existing green space within a watershed to manage non-point source runoff. This includes the enhancement and creation of structural and non-structural distributed green controls that replicate pre-development hydrologic functions to protect or restore receiving waters or meet a targeted watershed management goal.

Green Strategies



What does it do?



Let the Marketplace drive the technology!

How Does it Work

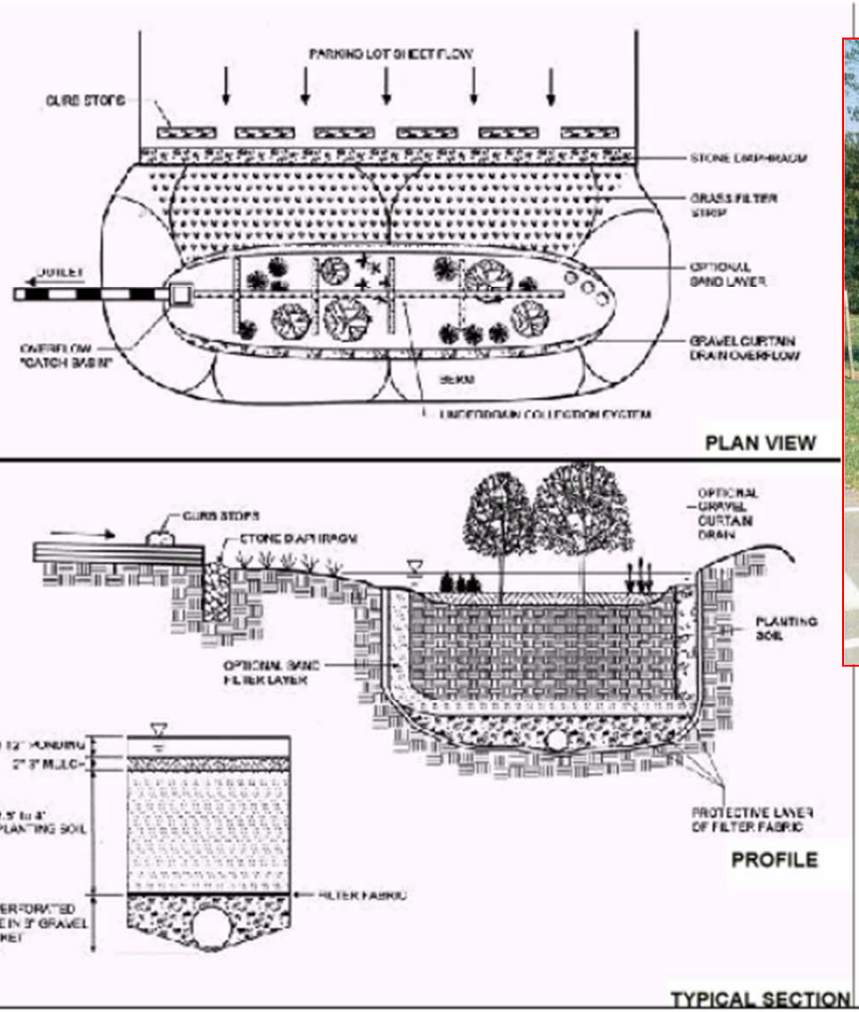
Bioretention

Distributed landscaped areas that contain a specialized media and plants that use biological, physical, and chemical processes to treat runoff through the natural hydrologic functions found within the facility.

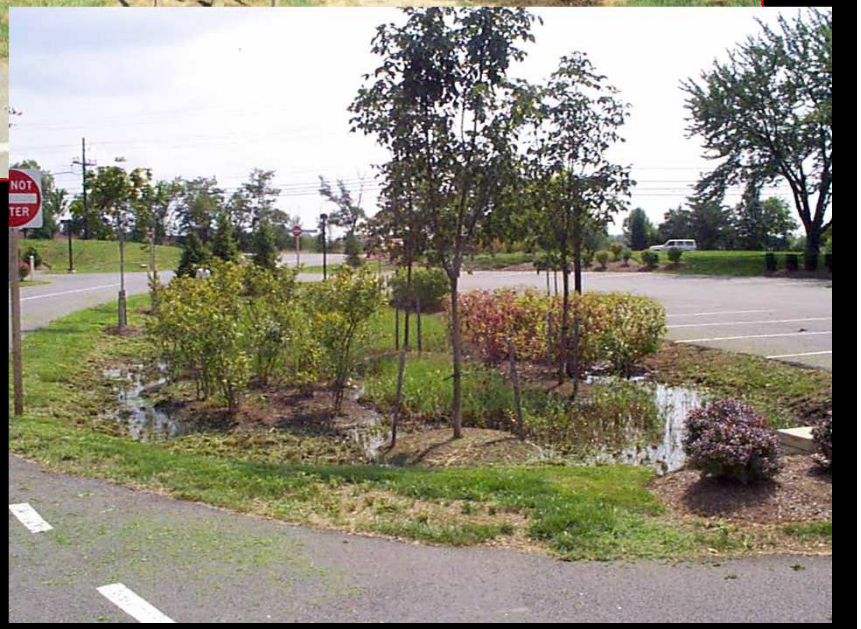
Early Designs

Example of Bioretention from the State Manual

F-6 | **Figure 3.17** Example of Bioretention | F-6



Bioretention combines open space with stormwater treatment.



Bioretention Cell

Bioretention Trench

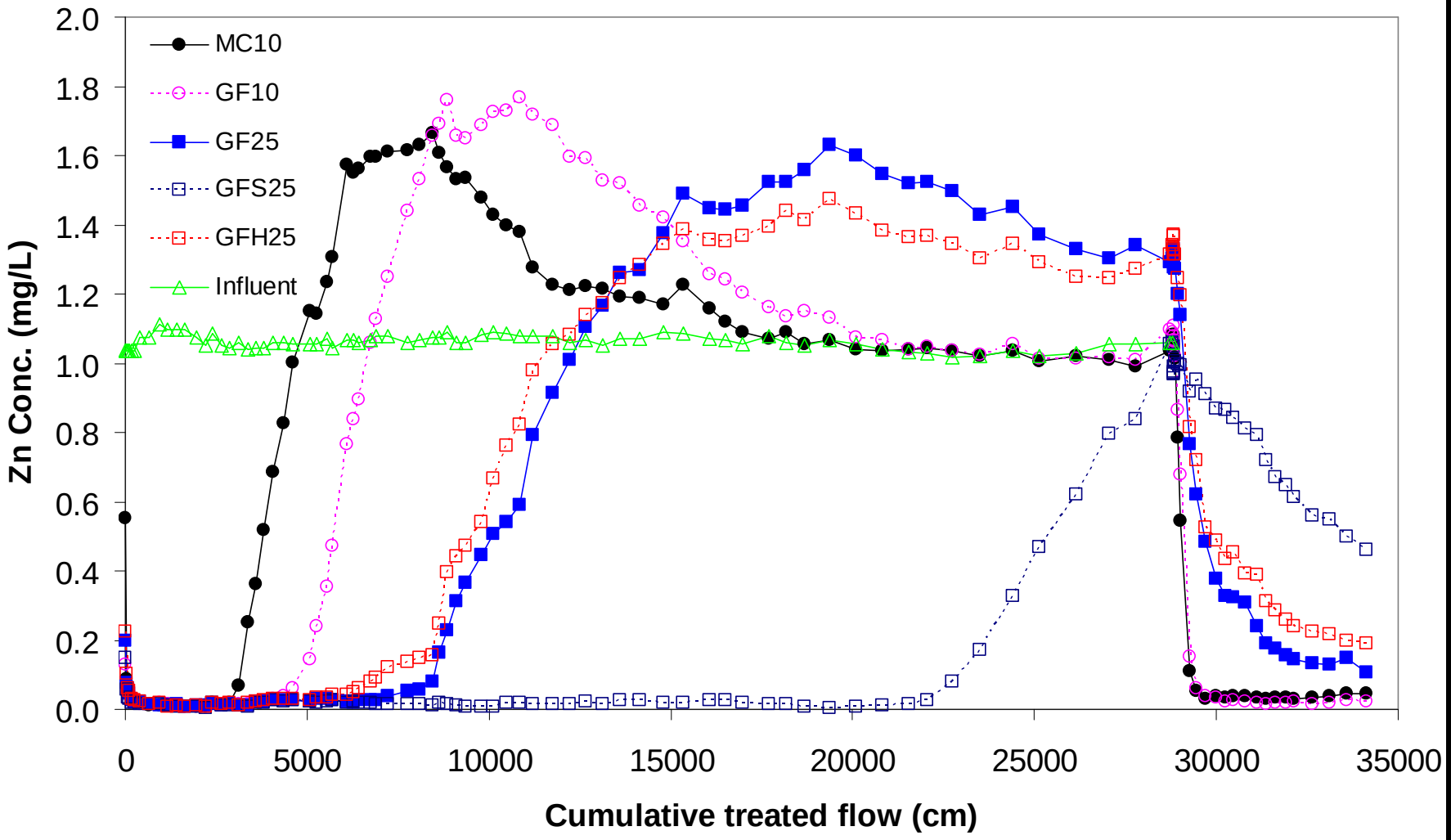

Isolation of Hazards

Site Description:

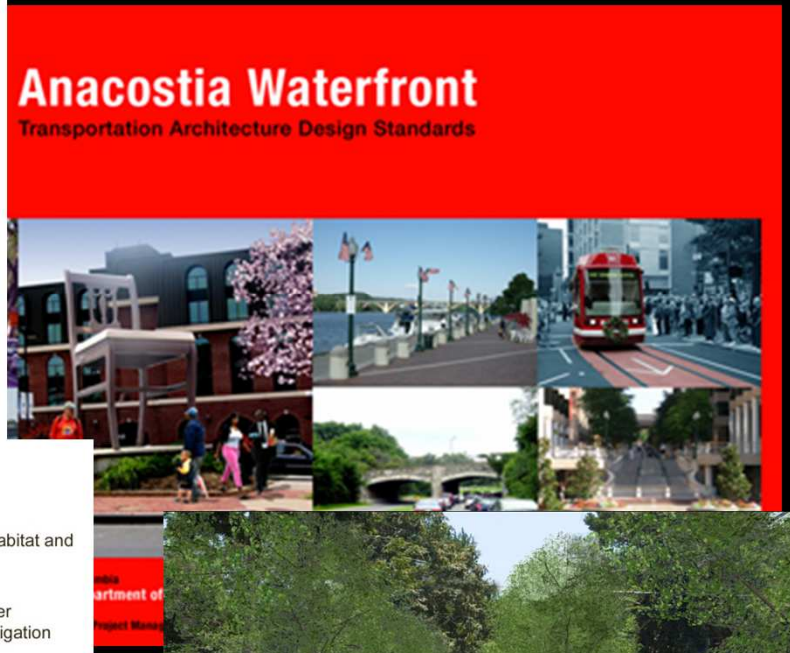
The APHIS (Animal and Plant Health Inspection Service) building at the Beltsville Agricultural Research Center in Beltsville, MD

- Exterior wall and roof are mainly made of Cu and Pb

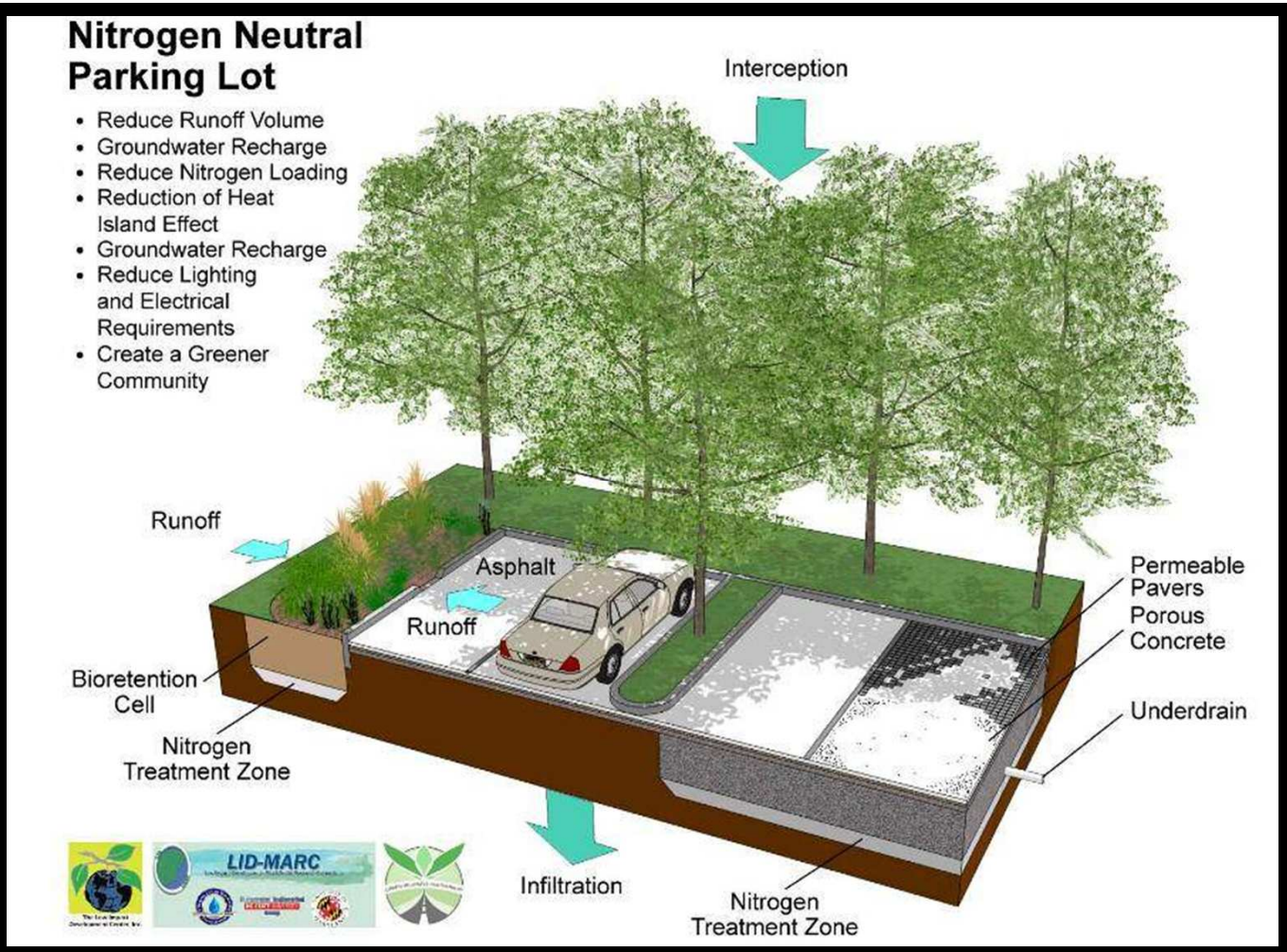
Zn break-through (update)



Full Scale Implementation



Linked and Emerging Issues



Key Implementation Issues

- One Water Approach!
- Moving from cost to financing
- Performance Based Permits
- It's not just volume! Process and Technology
- Training and Enforcements
- Monitoring Approaches
- Program Performance, not necessarily integration
- Industry Validation