An Overview of LID in the Lake Jesup, Crane Strand, Long Branch (LJCSLB) Basin

Denis W. Frazel, PhD

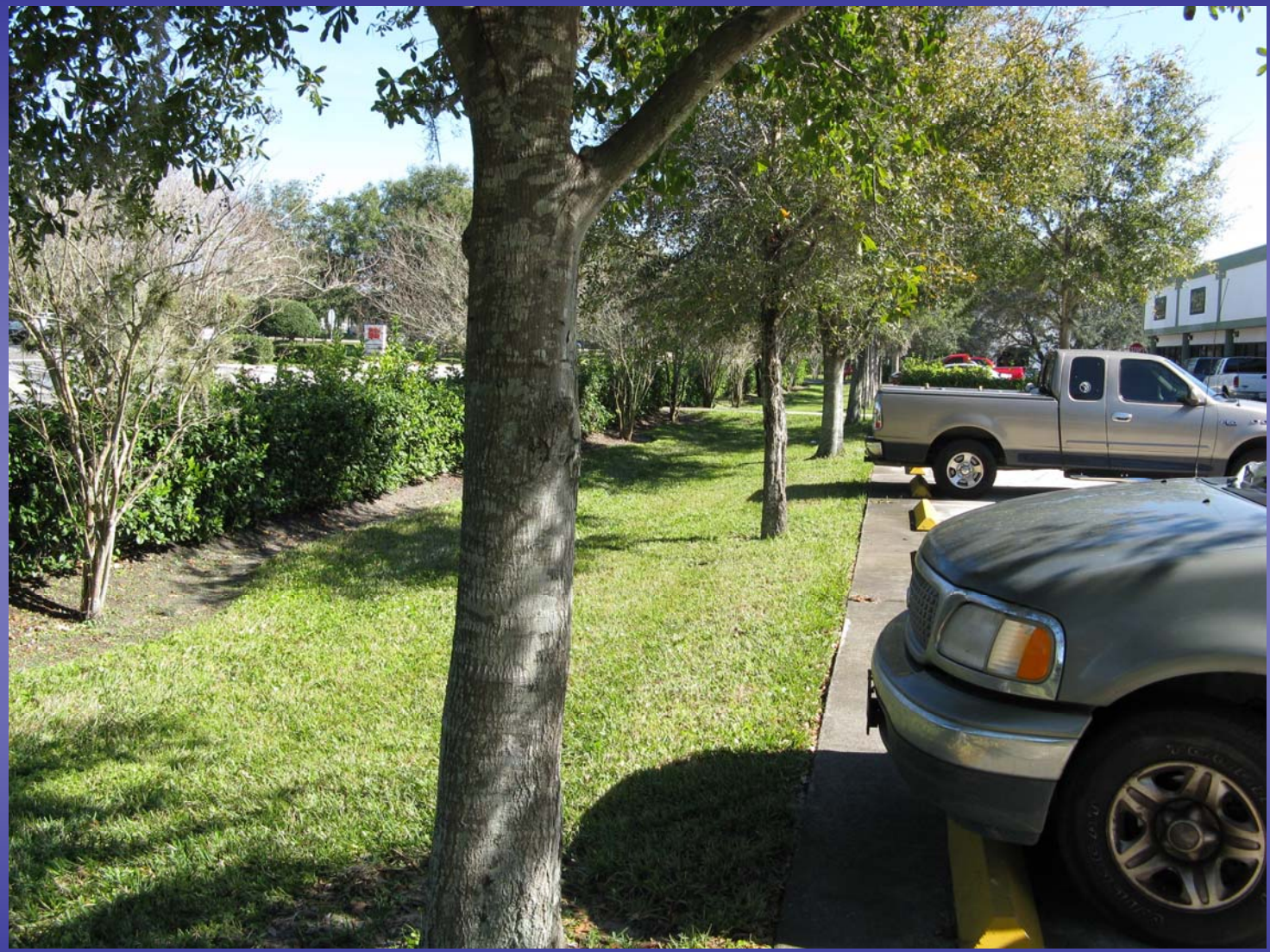
Frazel, Inc.

March 20, 2008

Key Principles

- **Incorporation of small-scale stormwater treatment systems integrated at the lot level**
  - On-site treatment systems offer opportunities for maintaining more natural hydrologic functions on a site, as well as reducing the concentration time needed to move water into larger off-site facilities

Grassed Swale



Tech Center-Lake Mary

Vegetated Filter Strip

Longwood Parking Lot

Grassed Depressed Area

Lake Mary City Park

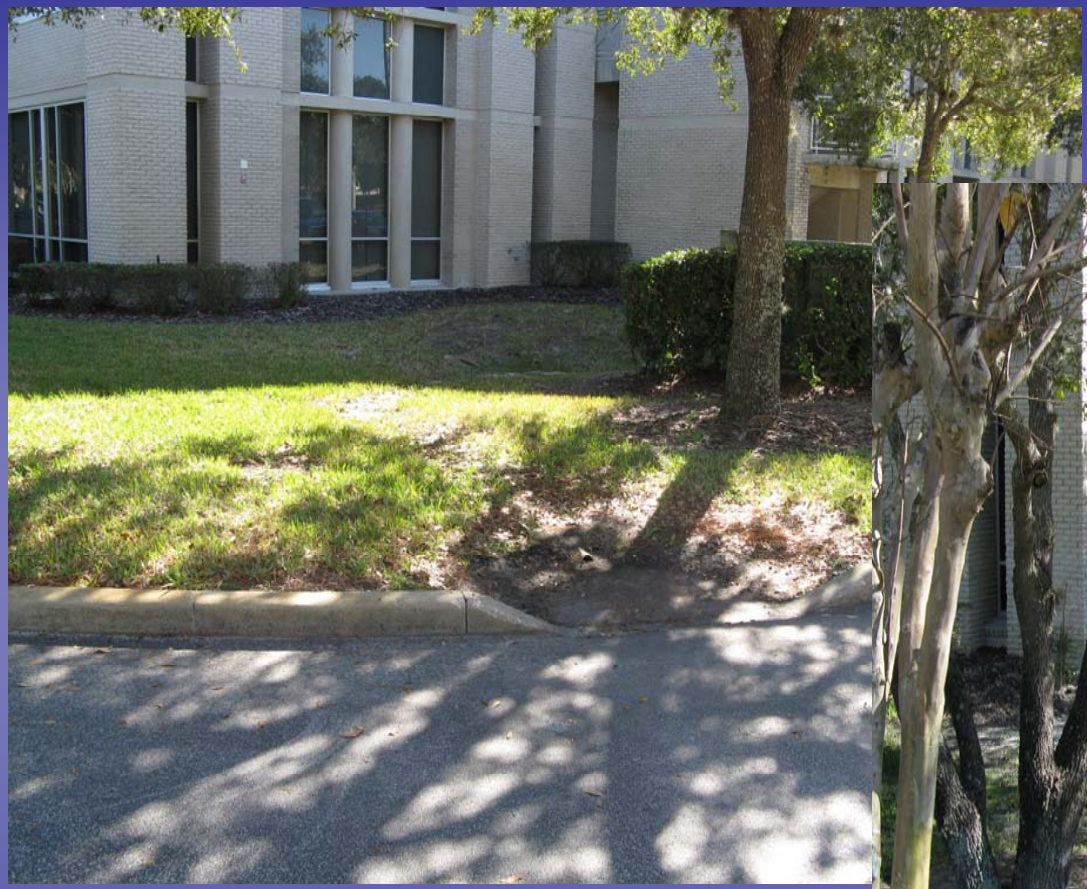
Disconnected Gutters, overland flow

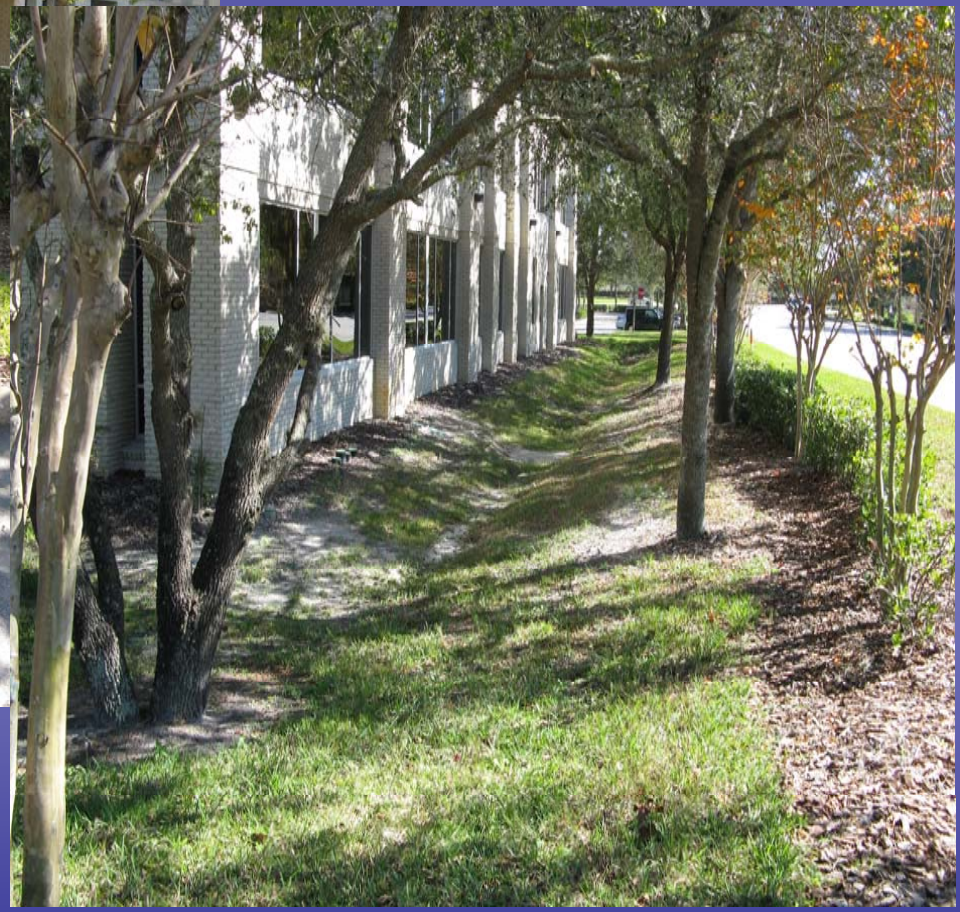
Longwood

Key Principles

- **Increasing infiltration**
  - **Mechanisms that can retain stormwater on-site yet still provide percolation facilitate both the protection of surface water quality and aquifer recharge**

Increasing Infiltration-curb cuts, depressed area





Strang Communications-Lake Mary

Depressed area-onsite storage

Villa de Soleil

Key Principles

- **Reduction of Impervious Surfaces**
  - **Reducing impervious surfaces within a site allows for more on-site retention of runoff, reducing off-site impacts.**

- Swales and Filter Strips
- Porous Pavement/Pervious Surfaces
- Bioretention – Raingardens
- Buffers

Grassed Parking-overland flow

Longwood

Combination Asphalt and Grassed Parking

Lake Mary Events Center

Lake Mary Rain Garden

Raingarden

Lake Mary City Park

Bioretention-Lake Mary

Bioretention

Accidental Rain Garden?

Summary

- Incorporation of LID within the Lake Jesup Basin is occurring
- There are numerous examples of LID in practice
- Local governments are actively reaching out to the community to educate and inform them about LID
- Continued expansion of LID in the Basin will yield water quality benefits