



Alachua County LID Manual

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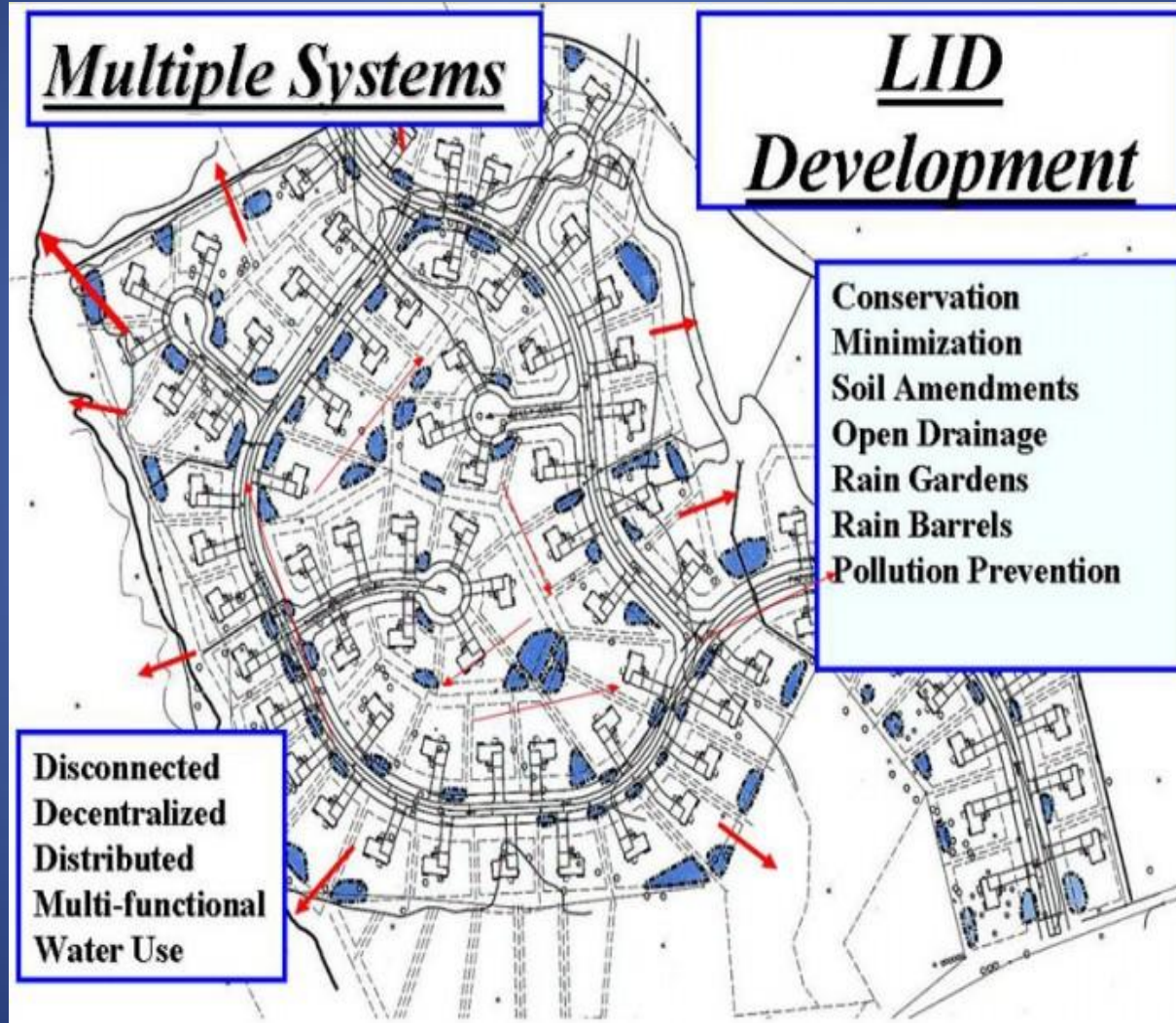


What is LID?

- **Low Impact Development** - A site design strategy for maintaining or replicating the pre-development hydrologic regime... Hydrologic functions of storage, infiltration, and ground water recharge, plus discharge volume and frequency are maintained by integrated and distributed micro-scale stormwater retention and detention areas, reduction of impervious surfaces, and the lengthening of flow paths and runoff time. Other LID strategies include,... the preservation of environmentally sensitive site features such as natural upland habitat, wetlands, wetland buffers, and floodplains.



Conventional vs LID





Examples of LID

- Rain gardens
- Rain cisterns/barrels
- Pervious pavement
- Green roofs
- Florida-friendly landscaping
- Soil augmentation
- Narrow streets
- Vegetated swales
- Retaining topography
- Bioretention
- Reduced impervious areas
- Tree Boxes
- Recessed road medians
- Stormwater reuse
- Underground tanks
- Enhanced basins
- Curb cuts
- Pervious pavers
- Tree retention
- Habitat protection
- Cluster design
- Use existing hydrologic patterns



Why LID?

- Even with current stormwater treatment, nutrient levels are up, lots of impaired waters
- Springs protection and Aquifer recharge
- LID typically requires less water and fertilizer use
- Statewide Stormwater Rule on the way
 - Focus on nutrients
 - Source control
 - Give credit to non-structural controls
 - State-wide consistency



LID Manual

- Technical tool to assist property owner, consultant, developer, builder, and land manager
- Provide guidance on review process, credit options, and design specs
- Will be more fluid and flexible than code
- Expected to be completed later this year
- Coordinated effort with AC EPD, Public Works, and UF Program for Resource Efficient Communities



LID Manual Content

- Introduction to LID and need for LID
- Checklist for easy reference and credit determination
- LID site planning
- Code and Regulations
- LID techniques with local examples
- Maintenance, monitoring, and enforcement

ALACHUA COUNTY
LOW IMPACT DEVELOPMENT (LID)
DESIGN MANUAL



A Joint Venture of:
Alachua County Environmental Protection Department and
Alachua County Public Works
Second Edition, Spring 2011



LID examples in our area



UF –Stormwater Ecological Enhancement Project (SEEP) An example of an enhanced basin



Infiltration trench at Poe Springs Park



UF SW Rec Center

Rain gardens, Vegetated swales, Florida-friendly landscaping





Campus USA Headquarters (Jonesville) Curb cuts with Bioretention





Green street (NW140 Street, Jonesville) Recessed median

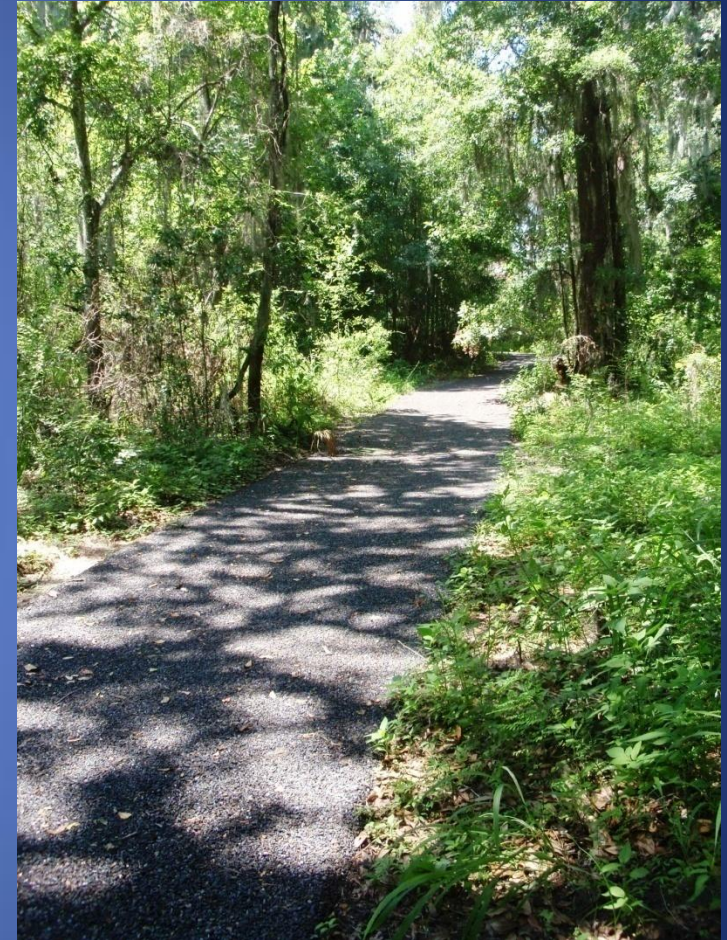




Pervious pavement / pavers



Eloise Gardens – paver driveway



UF campus – pervious sidewalk



NW 16th Ave & 13th St CVS – pervious parking



Cisterns & rain barrels

Example of barrel sold by Alachua County



Cisterns at Kirkwood



Example barrel sold by local retailer





Underground tanks



Fire Station 17 (Jonesville) - Storage tanks under parking lot for stormwater reuse



Madera Subdivision



Clustered design, retention of native vegetation and soils (site fingerprinting), underground storage, pervious pavers, narrow roads, Florida-friendly landscaping, maintained hydrologic regime, on-site bioretention, educational signage, energy efficient home design, floodplain protection



Madera Subdivision



Retention of native vegetation

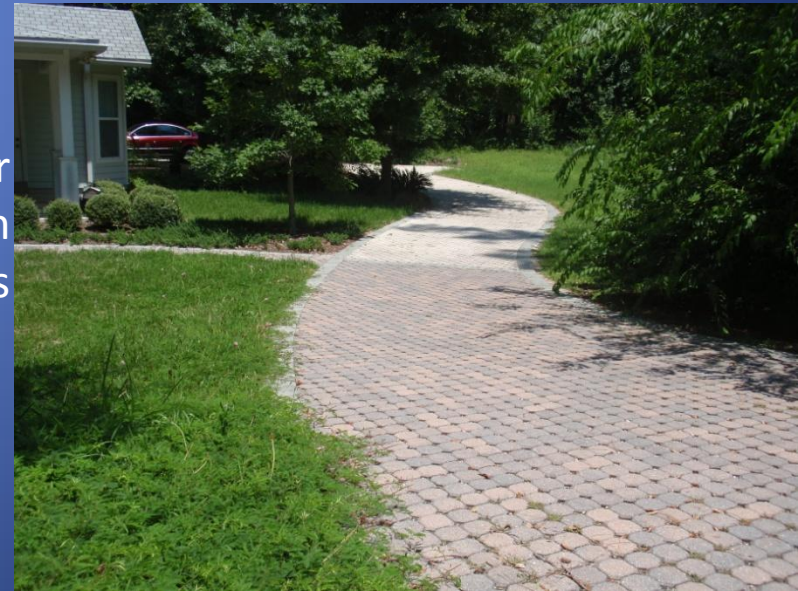


Educational signage



Narrow street with swales

Pervious paver driveway with underground tanks





Rain gardens at local schools

Williams
Elementary



Glen Springs Elementary

Kanapaha
Middle
School





LID and County Rules

- Incentive - Open Space credit for LID
- More flexibility in stormwater design
- Manual will be available to assist applicants
- Intent is to improve water quality and springs protection
- Planning for future State Stormwater Rules



Conclusion

- If you are interested in being part of the stakeholder groups or want additional information, please contact me or Eliana Bardi.
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