

City of Jacksonville

Future of Low Impact Development in Duval County

John P. Pappas, P.E.
Deputy Director
Public Works Department

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CDM

Low Impact Development

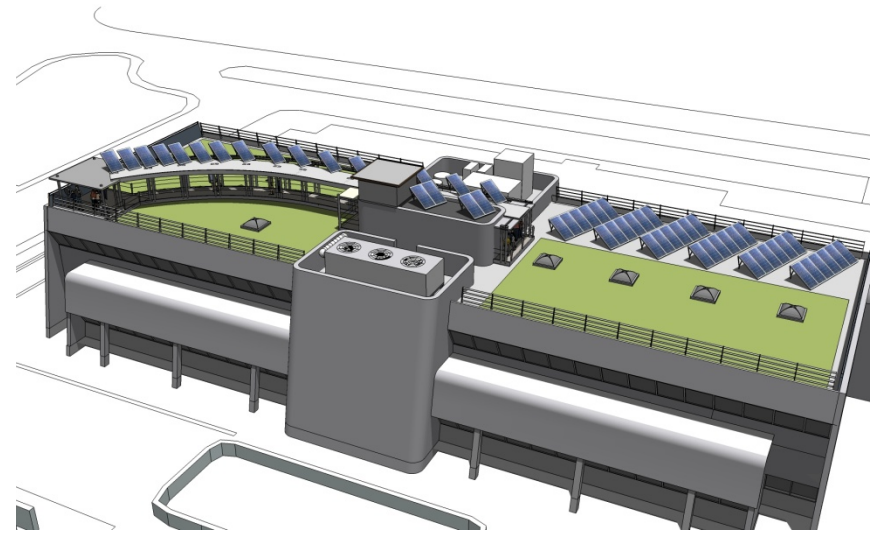
- Outline
 - Low Impact Development
 - COJ TMDL
 - Demonstration projects



Low Impact Development



- Green roofs
 - Reduce runoff
 - Lower electric bills



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Low Impact Development (cont.)

- Rain gardens
 - System storage
 - Nutrient removal
 - Attractive habitat



SOURCE: KEVIN ROBERT PERRY - CITY OF PORTLAND

Low Impact Development (cont.)

- Stormwater irrigation
 - Reduce demand
 - Nutrient removal
 - Groundwater recharge



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COJ, TMDLs, PLRGs, & LID

City of Jacksonville BMAP Allocation	Specific Allocation	Running Total
	mt/yr	mt/yr
City of Jacksonville MS4 Allocation		147
FDOT (10%)	-15	133
Projects Post 1995	-9	124
Future Projects	-20	103
Public Education (Assume 4.5% reduction for starting point load)	-10	93
Seminole Electric Atmospheric Nitrogen Credit	-7	86
Septic Tank Phaseout	-86	0



Achieving TMDLs

- Septic tank phase out
- Structural measures
- Non-structural BMPS: public education
 - Florida yards and neighborhoods
 - Fertilizer ordinance
 - Irrigation ordinance
 - Water conservation initiative
- Low impact development



Screening Criteria for Sound Watershed Management Practices

- Technically feasible and reliable
- Maintainable
- Socially and politically acceptable
- Environmentally acceptable
- Economically viable
- Financially feasible
- Implementable



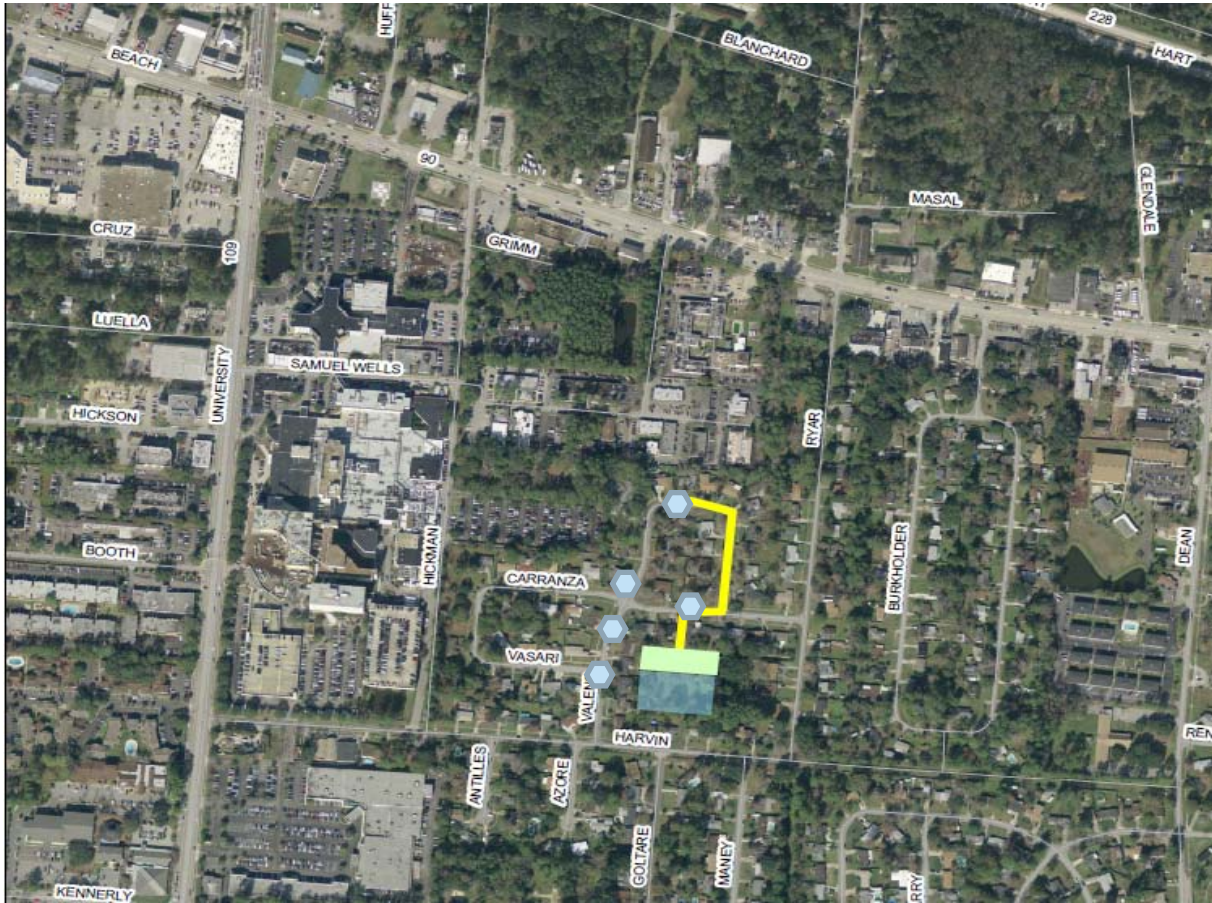
Robert F. Kennedy Community Center

- Front entrance – native landscaping
- Street parking – curb cuts
- Rooftop and internal garden
- Picnic area, playing fields, service entrance – pervious pavement



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LID Retrofit Opportunities: Flood Control



Valens Drive Residential LID



LID Retrofit Opportunities: Public Facilities



Wurn Park Commercial LID



LID Retrofit Opportunities: Public Facilities (cont.)

Hogan Spring Glen Elementary and Park Recreational LID



Educational Components



Stormwater BMP educational signage installed throughout the park



Educational Components (cont.)



Baffle box with viewing cover allows visitors to see the mechanics behind an otherwise invisible technology

Educational Components (cont.)

- Host field trips and events
- Long-term monitoring of pervious systems using infiltrometers
- NPDES MS4 permit education credits



Other LID elements considering for Future Projects

- Minimize clearing (especially along site perimeters)
- Promote infiltration where possible (increase pervious areas)
- Harvest additional Stormwater for Irrigation (Rain Barrels)
- Cisterns for Stormwater Runoff Reuse



Questions?

