



# **Alachua County Stormwater Code Evaluation Update**

**Alachua County Environmental Protection Department**

# **Oct 1, 2024 - BoCC Motion Mill Creek Sink developments**



- **Bring back recommendations to strengthen our stormwater quality code regulations and procedures immediately.**
- **Bring back recommendations to eliminate the current self-certification process ... and look at improving these regulations prior to preliminary approval.**

# Code verses Outcomes



- **The Nature Conservancy did a review of stormwater codes across the state and Alachua County ranked very high.**
- **Our stormwater manual is recognized as one of the best in the state.**
- **Many of our protections are in various codes, not just stormwater code.**
- **We have not fundamentally changed the way development occurs.**

# Low Impact Development (LID)



**LID is most successful when incorporated into earliest stages of planning.**



## Avoidance (LID)

- Map natural infrastructure
- Preserve open spaces, natural areas, trees and native soils
- Retain natural hydrologic and topographic features in site plan

Tree protection,  
wetland protection,  
open space



## Minimization (LID)

- Limit and disconnect impervious surfaces
- Mimic and maximize pre-development hydrologic processes
- Integrate practices that provide co-benefits and multifunctional areas



## Mitigation (GSI)

- Implement runoff source control measures
- Employ natural processes to treat and retain stormwater
- Provide treatment and attenuation in multiple areas across the site

Resource and design intensive, expensive, req. maintenance<sub>4</sub>

# Low Impact Development Outcomes in Alachua County



**May 2019 - May 2024**

**Total Projects: 204**

**LID Required: 35 sites  
(4 are County Projects)**

Bioswales	19
Forebay	7
Swale	4
Infiltration Vault	2
Rain Garden/ Bioretention	2
Outflow filter on Wet Pond	1



# Stormwater Code Compliance



## Water Quality Code - applicable to all persons within incorporated and unincorporated Alachua County.

Sec 77.28 – Required Documents

Within 30 calendar days of submitting an application for a final development plan... the applicant shall submit to the county:

- a) **Project site plans** clearly indicating the proposed BMPs used to meet stormwater treatment performance standards;
- b) **Calculated nitrogen and phosphorous load reductions** for each of the BMPs used and for the overall stormwater management system, including supporting documentation and data;
- c) **Operation & maintenance requirements** for each BMP used and the entity responsible for the implementation of the requirements;
- d) **An affidavit** from a registered professional engineer, architect or landscape architect ... certifying that the stormwater system meets all of the requirements of the Alachua County Stormwater Treatment Code.

# Stormwater Code Compliance within the Municipalities



**Alachua County is not receiving the required documents:**

Year	ERPs	Confirmed Municipal Review	Self Certification Affidavit Received
2022	13	9	2
2023	12	7	1

**\*even with 100% compliance, timing of information is too late to create real change.**

# Staff's Review of Code



- **Submittal compliance is low in the municipalities, but receiving documentation after approval is too late.**
- **Staff needs to get involved sooner in the process to shift the way sites are developed.**
  - **May have little influence in the municipalities, as we can not dictate land use.**



# Take Aways from Local Experts



- In Karst Geology most nutrients leach into groundwater before making it to stormwater basins.
- The key is to reduce land disturbance (Reisenger et al 2025):
  - Non-fertilized yards leach 10 X more nutrients than undisturbed land.
  - Fertilized yards leach 80 X more nutrients than undisturbed land.
- It is essential to do source control (fertilizer, leaf litter, reclaimed water).

# Take Aways from BANCf Meeting



- Land is expensive and they feel they have to set aside so much due to tree protection driving design
- County achieving “avoidance” through Tree Code/Open Space/Conservation
- Consultants need designs to be time efficient (copy and paste between sites), not site specific
- How to get credit for doing other things like rain gardens and avoidance?
- Client pressure to maximize profit/lots

# **County verses 2024 State Stormwater Quality Code**



- **The State updated the State Stormwater Rule in 2024 and it goes into effect end of 2025.**
- **The State requirements are now mostly as protective as the County's and some are more stringent.**
- **The State rule still lacks specific groundwater requirements; County code currently has “General Groundwater Protection Standards within Sensitive Karst Areas (RESERVED)”.**

# Next Steps



- **Monitor outcomes from changes to State Rule (applies in municipalities).**
- **Evaluate outcomes from proposed changes to Tree Code:**
  - **Preservation of landmark Live Oaks (45" dbh and above) and champion trees in all development projects may decrease building footprint.**
- **Consider requiring soil amendments in Landscaping code once there is a local supplier.**
  - **Reduces fertilizer use and decreases stormwater runoff.**

# Next Steps



- **Implement consistency check list and LID Inventory check list at preliminary review in unincorporated.**
- **Communicate expectations to consultants, builders, and developers.**
- **Consider requiring maintenance entities to do source control (street sweeping, inlet baskets, etc.).**
- **Identify further opportunities in EAR and Climate Action Plan.**

# Next Steps- Municipalities



- **Improve early coordination with municipalities to get project information during pre-liminary**
  - **May require Code Change**
- **Staff could review those in sensitive areas**
  - **Could require additional staff member depending on workload**



# **Oct 1, 2024 - BoCC Motion Mill Creek Sink Developments**



- **Bring back recommendations to strengthen our stormwater quality code regulations and procedures immediately.**
  - *Check list at preliminary*
  - *Require soil amendments in Landscaping Code*
- **Bring back recommendations to eliminate the current self-certification process ... and look at improving these regulations prior to preliminary approval.**
  - *Pilot test reviewing applications in sensitive areas*
  - *Possibly update Code to change submittal deadlines*

# Municipality Case Study



- **Ongoing collaboration with the City of Alachua on development in Mill Creek Sink Watershed**
  - **Four City of Alachua Public Meetings**
  - **Two Water Management District (WMD) meetings**
  - **Multiple letters to the City of Alachua and WMD**
  - **Dozens of staff meetings and phone calls**
  - **Technical review**