

# **Natural Resources Management Department**

2725 Judge Fran Jamieson Way Building A, Room 219 Viera, Florida 32940

TO: Jim Liesenfelt, Interim County Manager

THRU: Tad Calkins, Assistant County Manager

FROM: Amanda Elmore, Deputy Director, Natural Resources Management Dept (NRM)

**SUBJ:** Citizen Efficiency and Effectiveness Recommendation #2025039

CEER #2025039, titled Adopt Low Impact Development (LID) and Green Infrastructure (GI), was received by the County from Ms. Peggy Hickman.

# **Citizen Statement:**

We need to plan for our own future and for our future generations. We must reduce the amount of polluted stormwater entering coastal estuaries, especially the Indian River Lagoon. Low Impact Development (LID) and Green Infrastructure (GI) represent the most progressive trends in stormwater management to protect water quality and reduce flooding.

# **Citizen Recommendation:**

Everyone benefits from Low Impact Development!

## **Developers**

- -Reduces land clearing and grading costs
- -Reduces infrastructure costs (streets, curbs, gutters, sidewalks, retention ponds)
- -Reduces rain water management costs
- -May increase lot yield and may reduce impact fees
- -Increases lot and community marketability

## Municipalities

- -Reduces infrastructure and utility maintenance costs
- -Improves residents' quality of life
- -Balances growth with the need to protect the Indian River Lagoon and the aguifer

### Residents

- -Preserves/protects recreation opportunities of natural areas and habitats (IRL)
- -Improves aesthetics of home and area for livability and re-sale

CEER #2025039 Page 2 of 5

- -Provides habitat for birds, butterflies, and bees
- -Reduces utility costs

### Environment

- -Improves water quality
- -Preserves the balance and integrity of ecological and biological systems
- -Ensures the future health of the Lagoon by preventing additional pollution
- -Increases carbon and nutrient absorption and improves soil health
- -Preserves tree canopy and natural areas
- -Provides aquifer recharge

# Staff Analysis:

Low Impact Development (LID) + Green Stormwater Infrastructure (GSI) Education & Outreach

In October 2020, the Natural Resources Management Department (NRM) produced the grant-funded LID Guide for Commercial and Light Industrial Facilities for Brevard County. The guide and other educational materials are available as part of the Lagoon Loyal stormwater outreach program, www.lagoonloyal.com. A link to the guide, which defines LID and identifies principles and practices that can be applied to virtually all development, is also available on the NRM Stormwater Program webpage at <a href="https://www.brevardfl.gov/NaturalResources/StormwaterProgram">www.brevardfl.gov/NaturalResources/StormwaterProgram</a>.

## Revised State Stormwater Rule

On June 28, 2024, Governor Ron DeSantis signed Senate Bill 7040 into law, which updates Florida's stormwater rules and design criteria to protect the state's waterways. Under the new rule, developers and builders have flexibility to choose from a range of LID design options, and other best management practices, when designing systems to meet the performance-based design criteria. The revised Stormwater Quality Nutrient Permitting Requirements, administered by the Florida Department of Environmental Protection (FDEP), apply to individual and general permits, issued after December 28, 2025. To meet the new performance standard nutrient reduction levels, all new development will likely need to incorporate LID tools appropriate for the site. Brevard County already incorporates, requires and encourages aspects of LID in many of the existing local environmental regulations.

CEER #2025039 Page 3 of 5

# Existing LID+GSI-Related County Requirements & Continuing Efforts

NRM continues to implement and refine policies and Land Development Regulations (LDR) that align with Low Impact Development principles and ensure avoidance and minimization of impacts to natural coastal ecosystems, including native vegetation, wetlands, floodplains, aquifer recharge areas, and dunes.

- Chapter 62, Article XIII, Division 2 Landscaping, Land Clearing & Tree
  Protection, Section 62-4341 requires at least 50% native preserved or planted
  trees for new development. Additionally, at least 50% native or water-wise shrubs
  are required. Trees and shrubs must be maintained on-site in perpetuity. Meeting
  all principles of Xeriscaping or water-wise landscaping is incentivized through a
  50% reduction in the required shrub quantity for new developments.
- Chapter 62, Article XIII, Division 2 Landscaping, Land Clearing & Tree
  Protection, Section 62-4344 provides incentives for increased canopy
  preservation and landscaping above the required thresholds. For example, one
  preserved specimen tree can offset the requirement for planting up to 16 smaller
  trees, thereby retaining the environmental benefits of the established preserved
  tree and offsetting the risk of establishing new, smaller planted trees.
  Landscaping credit may also be accumulated for the preservation of healthy
  vegetation of special concern, such as rare, endangered or threatened plant
  species or hardwood hammock, barrier island scrub, or sand pine scrub.
- Chapter 62, Article XIII, Division 2 Landscaping, Land Clearing & Tree
  Protection, Section 62-4346, provides for an administrative waiver of up to 30%
  of nonresidential parking standards for the preservation or additional planting of
  native or Florida-Friendly Landscaping. This waiver reduces impervious surfaces
  while requiring additional planted green space.
- Chapter 62, Article XII Coastal Setback and Control Lines establishes the Brevard County Coastal Setback Line (CSL), located an additional 25 feet west (landward) of the FDEP Coastal Construction Control Line (CCCL). No development impacts are permitted east of the CSL, with the exception of a minimized elevated dune crossover and maximum of 100 square feet of elevated minor structure. The removal of native vegetation is prohibited east of the CSL.
- Chapter 62, Article X, Division 4 Wetland Protection establishes specific
  allowable land uses in wetlands, including residential density of one unit per five
  acres and the direction of commercial development into established areas of
  commercial use and prioritizes the protection of higher functioning wetlands.
  Additionally, there shall be no net loss of wetland function in the County.
- Chapter 62, Article X, Division 5 Floodplain Protection establishes criteria that exceed state stormwater standards by requiring "no adverse impact" to off-site

CEER #2025039 Page 4 of 5

properties, resources, and infrastructure through compensatory storage of stormwater volume. Brevard County continually advances area-specific flood studies to further refine current modelling and engineering practices. Development is limited or prohibited in the most vulnerable floodplains such as the mean and 10-year riverine floodplains. Riverine floodplains are those areas that have a surface water connection to major freshwater bodies during the 100-year flood.

- Chapter 62, Article X, Division 3 Surface Water Protection establishes buffers 25 to 200 feet in width, depending on water body classification, between development and the Indian River Lagoon (IRL) and St. Johns River. Native vegetation is required in these buffers as well as stormwater management for all impacts to the buffers. This includes GSI practices such as dense native vegetation, rain gardens, and exfiltration.
- Chapter 62, Article X, Division 5 Aquifer Protection establishes impervious area restrictions in recharge soils and/or demonstration of preservation of recharge volume to protect water infiltration into the surficial aquifer.
- Chapter 46, Article II, Division 4, Section 46-87, Nitrogen Reduction Overlay, requires enhanced nutrient-reducing on-site sewage treatment and disposal systems (OSTDS) within the Indian River Lagoon septic overlay area.

In February 2022, Brevard County adopted 13 new "Peril of Flood" Policies as Comprehensive Plan, Coastal Element, Objective 14, entitled Coastal Development and Redevelopment. The primary objective is to create procedures to allow consideration of the changing dynamics of flooding, sea level rise, and storm surge in growth management decisions within Brevard County. The Policies also direct the County to:

- Develop mechanisms to evaluate and recommend new design and development standards for public and private infrastructure projects that consider future climate conditions and amend land development regulations (LDRs) to reduce obstacles that hinder nature-based design standards and/or LID.
- Continually identify strategies and engineering solutions that minimize the loss of flood storage capacity in all floodplains and areas vulnerable to natural hazards such as flooding, storm surge, and sea level rise, and incorporate them into the LDRs.
- Encourage nature-based adaptation strategies design standards and/or LID design for development and redevelopment within areas vulnerable to current and future flooding impacts.

Staff is also currently working on the 2024 Comprehensive Plan Evaluation and Appraisal Report (EAR), further modifying Policies in the Conservation and Coastal

CEER #2025039 Page 5 of 5

Management Elements to better facilitate the implementation of LID practices. Once the EAR is adopted later this year, staff will propose modification of LDR to align with the Comprehensive Plan policies.

Lastly, in July 2023, the county proactively participated in a LID/GSI Code Audit through University of Florida Community Scoping Exercise. That exercise found many Brevard County policies and regulations consistent with LID/GSI and areas where definitions and practices could be better described. Improvements will be proposed as part of the Peril of Flood, EAR, and Barrier Island Area of Critical State Concern LDR updates.

# Staff Recommended Action:

It is recommended that the Board of County Commissioners accept CEER #2025039 with revisions, as LID practices are already being implemented as detailed in the staff analysis. Any legislative changes related to LID must be enacted through the ordinance adoption process and may be considered at the request of the Board of County Commissioners.

CC: Frank Abbate, County Manager

# Horst, Rachel

**From:** CEER@brevardfl.gov

Sent: Saturday, January 25, 2025 5:10 PM

To: Horst, Rachel

**Subject:** A new CEER Recommendation has been submitted as ID #2025039

### Recommendation # 2025039

#### Dear CEER Administrator.

Speak Up Brevard Recommendation ID #2025039 has been submitted. Please login to the CEER Application to start the recommendation evaluation workflow.

## **Contact Information:**

Group/Organization Conradina Chapter FNPS

Name Peggy Hickman

Address 1022 Lennox Way, Melbourne FL 32940

**Phone** (321) 794-6578

**Email** peggyhickman40@gmail.com

Alternate Email

## **Recommendation Information:**

Recommendation ID 2025039

Recommendation Title Adopt Low Impact Development (LID) and Green Infrastructure (GI)

Areas Affected Environmental, water quality, flooding

**Department Affected** 

**Current problem** We need to plan for our own future and for our future generations. We must reduce

the amount of polluted stormwater entering coastal estuaries, especially the Indian River Lagoon. Low Impact Development (LID) and Green Infrastructure (GI) represent the most progressive trends in stormwater management to protect water quality and

reduce flooding.

**Recommendation** We recommend incorporating LID into legislation as is being done throughout other

Florida counties. Everyone benefits from Low Impact Development! Below are the benefits that have been realized in areas outside of Brevard County. As you can see, this impacts many people in multiple ways. Developers -Reduces land clearing and grading costs -Reduces infrastructure costs (streets, curbs, gutters, sidewalks, retention ponds) -Reduces rain water management costs -May increase lot yield and may reduce impact fees -Increases lot and community marketability Municipalities - Reduces infrastructure and utility maintenance costs -Improves residents' quality of life -Balances growth with the need to protect the Indian River Lagoon and the aquifer Residents -Preserves/protects recreation opportunities of natural areas and habitats

(IRL) -Improves aesthetics of home and area for livability and re-sale -Provides habitat for birds, butterflies, and bees -Reduces utility costs Environment -Improves water quality -Preserves the balance and integrity of ecological and biological systems - Ensures the future health of the Lagoon by preventing additional pollution -Increases carbon and nutrient absorption and improves soil health -Preserves tree canopy and natural areas -Provides aquifer recharge

## **Attachments**

No Documents were attached.

Please do not reply to this e-mail, as it will go to an unmonitored mailbox.