



BOARD OF COUNTY COMMISSIONERS

**TO:** Jim Liesenfelt, Interim County Manager

**THRU:** Tad Calkins, Assistant County Manager

**FROM:** Amanda Elmore, Deputy Director, Natural Resources Management Dept. *AE*

**SUBJ:** Citizen Efficiency and Effectiveness Recommendation (CEER) #2025047

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CEER #2025047, titled Low Impact Development and Design in Brevard County, was received by the County from Ms. Jane Higgins.

**Citizen Statement:**

Florida communities 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. These concepts are gaining widespread popularity throughout the state of Florida and the country as citizens are becoming increasingly concerned about conservation and preserving our environment.

We hope Brevard County will join in and become even more ambitiously engaged in LID for the future of our gorgeous county! Thank you!

**Citizen Recommendation:**

Our recommendation is to incorporate LID into legislation as is being done throughout other Florida counties. I'd be glad to participate on a committee or task force to investigate and create legislation.

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 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

### **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](http://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 [www.brevardfl.gov/NaturalResources/StormwaterProgram](http://www.brevardfl.gov/NaturalResources/StormwaterProgram).

#### *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.

### *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 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 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 #2025047 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

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**From:** CEER@brevardfl.gov  
**Sent:** Tuesday, January 28, 2025 8:03 AM  
**To:** Horst, Rachel  
**Subject:** A new CEER Recommendation has been submitted as ID #2025047

### Recommendation # 2025047

Dear CEER Administrator,

Speak Up Brevard Recommendation ID #2025047 has been submitted. Please login to the CEER Application to start the recommendation evaluation workflow.

#### Contact Information:

<b>Group/Organization</b>	Conradina Chapter of the FI Native Plant Society
<b>Name</b>	Jane Higgins
<b>Address</b>	280 NAYLOR ST NE, PALM BAY FL 32907
<b>Phone</b>	(321) 258-4642
<b>Email</b>	janehiggins2016@gmail.com
<b>Alternate Email</b>	

#### Recommendation Information:

<b>Recommendation ID</b>	2025047
<b>Recommendation Title</b>	Low Impact Development and Design in Brevard County
<b>Areas Affected</b>	Brevard County
<b>Department Affected</b>	
<b>Current problem</b>	Florida communities 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. These concepts are gaining widespread popularity throughout the state of Florida and the country as citizens are becoming increasingly concerned about conservation and preserving our environment. We hope Brevard County will join in and become even more ambitiously engaged in LID for the future of our gorgeous county! Thank you!
<b>Recommendation</b>	Our recommendation is to incorporate LID into legislation as is being done throughout other Florida counties. I'd be glad to participate on a committee or task force to investigate and create legislation. 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 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**

LID presentation to FI Legislators - Jan 2025.pdf  
LID presentation to FI Legislators - Jan 2025.pptx

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

# Florida Native Plant Society, Conradina Chapter



The Mission of the Florida Native Plant Society (FNPS) is to promote the preservation, conservation, and restoration of the native plants and native plant communities of Florida.

Conradina provides monthly educational meetings, an annual landscape tour, and volunteer projects to remove invasives and plant native plants. We represent over 1,000 citizens concerned about the Brevard County environment, and collaborate with other environmental groups such as Marine Resources Council, Space Coast Audubon, Surfrider, Keep Brevard Beautiful.

We request that you promote and support legislation and projects that use Low Impact Development and Design (LID) throughout Brevard County to protect our precious wildlife, water, and habitat.



# What is Low Impact Development?

- LID is an internationally recognized stormwater management approach that protects downstream surface water quality, reduces downstream flooding, and improves overall resilience.
- LID is an approach to land development that uses various land planning, design practices, and technologies to preserve and protect essential aquifers and waterways such as the Indian River Lagoon (IRL) while reducing infrastructure costs.
- LID allows land to be developed in a cost-effective manner to ensure that home, habitat, and quality of life are sustained for the future.
- Some cities and counties in Florida have taken the initiative and adopted LID into their code, e.g. Alachua and Pinellas counties. LID provides a more sustainable community with a higher level of natural resource protection such as seagrass, fisheries and shellfisheries, manatees, dolphins, and estuarine birds who fish, such as pelicans.
- LID leads to more fishable, swimmable, and healthier waters.



# LID Offers Several Environmental Benefits

1. **Improves Water Quality:** LID helps to protect downstream surface water quality by reducing pollutants and contaminants that enter water bodies.
2. **Preserves Ecological Balance:** It maintains the balance and integrity of ecological and biological systems, ensuring the health of natural habitats.
3. **Reduces Flooding:** By managing stormwater effectively, LID reduces downstream flooding, which helps to protect both natural and built environments.
4. **Enhances Soil Health:** LID practices increase carbon and nutrient absorption, which improves soil health.
5. **Protects Natural Areas:** It preserves tree canopies and natural areas, providing habitat for various species and maintaining biodiversity.
6. **Aquifer Recharge:** LID helps to recharge aquifers, ensuring a sustainable water supply for the future.

These benefits contribute to creating a more sustainable and resilient environment



CONRADINA CHAPTER

# Who Benefits From LID Implementation? EVERYONE!

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The State of Florida has been slow to adopt LID permitting criteria...

...so local governments are taking the lead.



Please represent us at the state level to support implementation of LID for the future of Florida!