### **Natural Resources Management Department**



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

#### **BOARD OF COUNTY COMMISSIONERS**

TO: Jim Liesenfelt, Interim County Manager

THRU: Tad Calkins, Assistant County Manager

FROM: Virginia Barker, Director, Natural Resources Management Dept.

SUBJ: Citizen Efficiency and Effectiveness Recommendation (CEER) #2025040

CEER #2025040, titled Low Impact Development (IDL), was received by the County from Carl Winebarger.

## **Citizen Statement:**

Conradina Native Plant Society supports the Brevard Indian River Lagoon (IRL) Coalition to install Advanced Treatment On-Sites septic tank systems and state of the art sewage systems that will help reduce pollution. State funding of these programs would be an excellent way to help protect the Indian River Lagoon and all of Florida waterways.

### Citizen Recommendation:

It will lessen the impact of development on the environment in the county and the state by reducing the impact of development on the environment in the county and the state by reducing storm water runoff and the better processing of sewage the leaching of septic tank systems to rivers and ground water.

# Staff Analysis:

In 2020, the Florida Legislature enacted the Clean Waterways Act to impose stricter requirements for wastewater treatment plants and septic systems operating within the Indian River Lagoon watershed. The Florida Legislature enacted House Bill (HB) 1379 in 2023 and HB 1557 in 2024 to further address sewage-related water quality issues in the Indian River Lagoon watershed. Key requirements include:

- Advanced Wastewater Treatment (AWT) Wastewater Treatment Facilities must upgrade to advanced treatment standards to significantly reduce nitrogen and phosphorus levels in treated wastewater by July 1, 2034.
- Elimination of Surface Water Discharges Wastewater treatment plants in the IRL watershed must phase out direct discharges into surface waters by January 1, 2032.

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 Enhanced Biosolids Regulations – New restrictions limit the application of biosolids (sewage sludge) in areas where they could contribute to nutrient pollution in the lagoon.

- Septic-to-Sewer Conversions Encourages septic system phaseouts in environmentally sensitive areas by promoting connections to centralized sewer systems where feasible.
- Advanced Treatment for New Septic Systems Effective January 1, 2024, New onsite sewage treatment and disposal systems (OSTDS) in the IRL watershed must include enhanced nutrient-reducing technology to limit nitrogen and phosphorus discharge.
- Upgrades for Existing Septic Systems In areas where conversion to central sewer is not feasible, all existing septic systems must be upgraded to achieve at least a 65% nitrogen reduction by July 1, 2030.

The State offers competitive grant programs for wastewater projects. Since 2017, the County's Save Our Indian River Lagoon (SOIRL) Program has used the SOIRL Trust Fund as local match to secure 27 grants totaling \$58M for septic and sewer projects. These grants are helping to fund wastewater treatment plant upgrades, conversion of homes on septic to central sewer, and replacement of conventional septic systems with advanced, nitrogen-reducing septic systems.

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

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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.

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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 100year 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.

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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 #2025040 with revisions, as septic and sewer upgrades and 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

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Website: Brevardfl.gov/NaturalResources

### Horst, Rachel

**From:** CEER@brevardfl.gov

**Sent:** Sunday, January 26, 2025 11:48 AM

To: Horst, Rachel

**Subject:** A new CEER Recommendation has been submitted as ID #2025040

#### Recommendation # 2025040

#### Dear CEER Administrator,

Speak Up Brevard Recommendation ID #2025040 has been submitted. Please login to the CEER Application to start the recommendation evaluation workflow.

#### **Contact Information:**

Group/Organization Conradina Native Plant Society

Name Carl A Winebarger

Address 926 PeACH AVE NE, Palm Bay FL 32907

**Phone** (321) 724-1931

**Email** cwinebarger@cfl.rr.com

Alternate Email cwinebarger@cfl.rr.com

#### **Recommendation Information:**

Recommendation ID 2025040

Recommendation Title Low Impact Development (IDL)

Areas Affected All of Brevard county and the state of Florida

Department Affected BOARD OF COUNTY COMMISSIONERS

Current problem Conradina Native Plant Society supports the Brevard Indian River Lagoon (IRL)

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**Attachments** No Documents were attached.

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