

**The Florida Senate**  
**BILL ANALYSIS AND FISCAL IMPACT STATEMENT**

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

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Prepared By:

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BILL: SPB 7040

INTRODUCER: For Consideration by the Environment and Natural Resources Committee

SUBJECT: Ratification of Department of Environmental Protection Rules

DATE: January 22, 2024

REVISED: \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Barriero</u>	<u>Rogers</u>	<u>EN</u>	<u>Pre-Meeting</u>
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____

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**I. Summary:**

SPB 7040 ratifies the Department of Environmental Protection’s (DEP) revisions to the stormwater rules within Chapter 62-330 of the Florida Administrative Code with several changes, including:

- Clarifying provisions relating to grandfathered projects,
- Providing that entities implementing stormwater best management practices also regulated under different provisions of law are not subject to duplicate inspections for the same practices, and
- Allowing alternative treatment standards for redevelopment projects in areas with impaired waters.

As required by the Clean Waterways Act, DEP and the water management districts initiated rulemaking to update the stormwater design and operation regulations for environmental resource permitting, including updates to the Environmental Resource Permit Applicant’s Handbook. The proposed rules were developed to increase the removal of nutrients from stormwater to protect the state’s waterways.

The Statement of Estimated Regulatory Costs developed by DEP concluded that the proposed rules will likely increase stormwater treatment costs by \$1.21 billion (or \$2,600 per acre developed) in the aggregate within five years after the rules’ implementation. This amount triggers the statutory requirement for the rule to be ratified by the Legislature before it may go into effect.

## II. Present Situation:

### Legislative Ratification

A rule is subject to legislative ratification if it:

- Has an adverse impact on economic growth, private sector job creation or employment, or private sector investment in excess of \$1 million in the aggregate within five years after the implementation of the rule;
- Has an adverse impact on business competitiveness, including the ability of persons doing business in the state to compete with persons doing business in other states or domestic markets, productivity, or innovation in excess of \$1 million in the aggregate within five years after the implementation of the rule; or
- Increases regulatory costs, including any transactional costs, in excess of \$1 million in the aggregate within five years after the implementation of the rule.<sup>1</sup>

If a rule requires ratification by the Legislature, the rule must be submitted to the President of the Senate and Speaker of the House of Representatives no later than 30 days prior to the regular legislative session. The rule may not go into effect until it is ratified by the Legislature.<sup>2</sup>

### *Statement of Estimated Regulatory Costs Requirements*

A statement of estimated regulatory costs (SERC) is an analysis prepared by an agency before the adoption, amendment, or repeal of a rule other than an emergency rule. A SERC must be prepared by an agency for a proposed rule that:

- Will have an adverse impact on small businesses; or
- Is likely to directly or indirectly increase regulatory costs in excess of \$200,000 in the aggregate in the state within one year after the implementation of the rule.<sup>3</sup>

A SERC must include:

- An economic analysis showing whether the rule exceeds the thresholds requiring legislative ratification;
- A good faith estimate of the number and types of individuals and entities likely to be required to comply with the rule, and a general description of the types of individuals likely to be affected by the rule;
- A good faith estimate of the cost to the agency, and to other state and local government entities, of implementing and enforcing the proposed rule, including anticipated effects on state or local revenues;
- A good faith estimate of the transactional costs (direct business costs) likely to be incurred by individuals and entities required to comply with the requirements of the rule;
- An analysis of the impact on small businesses, small counties, and small cities; and
- A description of regulatory alternatives submitted to the agency and a statement adopting the alternative or a statement of the reasons for rejecting the alternative in favor of the proposed rule.<sup>4</sup>

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<sup>1</sup> Section 120.541(2)(a), F.S.

<sup>2</sup> Section 120.541(3), F.S.

<sup>3</sup> Section 120.54(3)(b)1., F.S.

<sup>4</sup> Section 120.541(2), F.S.

### *Statement of Estimated Regulatory Costs for Chapter 62-330, F.A.C.*

DEP determined that a SERC was required for the revisions to the stormwater rules within Chapter 62-330 of the Florida Administrative Code and prepared one in advance of rule adoption.<sup>5</sup> DEP estimates the revised rules will increase stormwater treatment costs by approximately \$1.21 billion<sup>6</sup> (or \$2,600 per acre developed) for all expected development projects within a five-year period from implementation.<sup>7</sup> This includes lower cost regulatory alternatives.<sup>8</sup>

### **Water Quality and Nutrients**

Nutrient pollution and the excessive accumulation of nitrogen and phosphorus in water is one of the most widespread, costly, and challenging environmental problems.<sup>9</sup> In Florida, 35 percent of waterbodies are impaired for nutrients and 87 percent of counties have nutrient impaired waters within their boundaries.<sup>10</sup>

The nutrients nitrogen and phosphorus are a natural part of aquatic ecosystems.<sup>11</sup> They support the growth of algae and aquatic plants, which provide food and habitat for fish, shellfish, and smaller organisms that live in water. However, the presence of too much nitrogen and phosphorus can cause algae to grow faster than ecosystems can handle. These algal blooms can harm water quality, food resources, and habitats, and decrease the oxygen that fish and other aquatic life need to survive. Algal blooms can also be harmful to humans because they produce elevated toxins and bacterial growth that can make people sick if they come into contact with polluted water, consume tainted fish or shellfish, or drink contaminated water.<sup>12</sup> Nutrient pollution in ground water—used by millions of people in the United States as their drinking water source—can be harmful even at low levels.<sup>13</sup> Infants are especially vulnerable to a nitrogen-based compound called nitrates in drinking water.<sup>14</sup>

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<sup>5</sup> See DEP, *SERC: Chapter 62-330, F.A.C.* (2023), available at <http://publicfiles.dep.state.fl.us/dworm/draftuledocs/stormwater/noc/serc-template-updated.pdf>.

<sup>6</sup> Prior to receipt of lower cost regulatory alternatives (LCRAs), DEP estimated the revised rules would increase stormwater treatment costs by \$1.44 billion in the aggregate within five years from the rules' implementation, or \$1.486 billion when including additional transactional costs (i.e., new requirements for system design, operation and maintenance, inspections, and reporting) and costs related to the rules' new requirements for dam systems. *Id.* at 2-3. DEP estimates the LCRAs will lower stormwater treatment costs (excluding transactional and dam system costs) by approximately 16 percent from the original estimate. *Id.* at 10. Accordingly, DEP's revised estimate for stormwater treatment costs under the proposed rules is \$1.21 billion. DEP, *Presentation to the Florida Senate Committee on Environment and Natural Resources*, 13 (Dec. 6, 2023), available at [https://www.flsenate.gov/Committees/Show/EN/MeetingPacket/6001/10561\\_MeetingPacket\\_6001.6.23.pdf](https://www.flsenate.gov/Committees/Show/EN/MeetingPacket/6001/10561_MeetingPacket_6001.6.23.pdf); DEP, *Rulemaking Update: Stormwater | Chapter 62-330, F.A.C., Environmental Resource Permitting*, 2 (2023), (on file with the Senate Committee on Environment and Natural Resources).

<sup>7</sup> DEP, *Presentation to the Florida Senate Committee on Environment and Natural Resources*, 13 (Dec. 6, 2023), available at [https://www.flsenate.gov/Committees/Show/EN/MeetingPacket/6001/10561\\_MeetingPacket\\_6001.6.23.pdf](https://www.flsenate.gov/Committees/Show/EN/MeetingPacket/6001/10561_MeetingPacket_6001.6.23.pdf); DEP, *Rulemaking Update: Stormwater | Chapter 62-330, F.A.C., Environmental Resource Permitting* at 2 (2023); DEP, *SERC: Chapter 62-330, F.A.C.* at 2, 10.

<sup>8</sup> DEP, *Presentation to the Florida Senate Committee on Environment and Natural Resources* at 13.

<sup>9</sup> U.S. Environmental Protection Agency (EPA), *Basic Information on Nutrient Pollution*, <https://www.epa.gov/nutrientpollution/problem> (last visited Dec. 11, 2023).

<sup>10</sup> DEP, *Rulemaking Update: Stormwater | Chapter 62-330, F.A.C., Environmental Resource Permitting* at 2.

<sup>11</sup> EPA, *Nutrient Pollution: The Problem*, <https://www.epa.gov/nutrientpollution/problem> (last visited Dec. 11, 2023).

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

One of the primary sources of excess nitrogen and phosphorus is stormwater runoff.<sup>15</sup> This runoff typically traverses impervious surfaces, such as concrete and asphalt, flowing directly into waterbodies or storm drains without the benefit of natural filtration through soil and vegetation or processing by a water treatment facility.<sup>16</sup> Human activities frequently exacerbate the problem by introducing nitrogen and phosphorus pollutants derived from fertilizers, yard and pet waste, and certain soaps and detergents.<sup>17</sup>

### Impaired Waters

Under section 303(d) of the federal Clean Water Act, states must establish water quality standards for waters within their borders and develop a list of impaired waters that do not meet the established water quality standards.<sup>18</sup> States must also develop a list of threatened waters that may not meet water quality standards in the following reporting cycle.<sup>19</sup>

Due to limited funds and the wide variety of surface waters in Florida, DEP sorted those waters into 29 major watersheds, or basins, and further organized them into five basin groups for assessment purposes.<sup>20</sup> If DEP determines that any waters are impaired, the waterbody must be placed on the verified list of impaired waters and a total maximum daily load (TMDL) must be calculated.<sup>21</sup> A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards.<sup>22</sup> A waterbody may be removed from the verified list at any time during the TMDL process if it attains water quality standards.<sup>23</sup> If DEP determines that a waterbody is impaired but further study is needed to determine the causative pollutants or other factors contributing to impairment before the waterbody is placed on the verified list, the waterbody will be placed on a statewide comprehensive study list.<sup>24</sup>

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<sup>15</sup> EPA, *Nutrient Pollution: Sources and Solutions*, <https://www.epa.gov/nutrientpollution/sources-and-solutions> (last visited Dec. 11, 2023). Other sources of excess nitrogen and phosphorus include agriculture, wastewater, fossil fuels, and fertilizers. *Id.*

<sup>16</sup> EPA, *Nutrient Pollution: Sources and Solutions: Stormwater*, <https://www.epa.gov/nutrientpollution/sources-and-solutions-stormwater> (last visited Dec. 11, 2023).

<sup>17</sup> *Id.*

<sup>18</sup> EPA, *Overview of Identifying and Restoring Impaired Waters under Section 303(d) of the CWA*, <https://www.epa.gov/tmdl/overview-identifying-and-restoring-impaired-waters-under-section-303d-cwa> (last visited Dec. 12, 2023); 40 C.F.R. 130.7. Following the development of the list of impaired waters, states must develop a total maximum daily load for every pollutant/waterbody combination on the list. A total maximum daily load is a scientific determination of the maximum amount of a given pollutant that can be absorbed by a waterbody and still meet water quality standards. DEP, *Watershed Evaluation and Total Maximum Daily Loads (TMDL) Section*, <https://floridadep.gov/dear/water-quality-evaluation-tmdl/content/total-maximum-daily-loads-tmdl-program> (last visited Dec. 12, 2023).

<sup>19</sup> *Id.*

<sup>20</sup> DEP, *Assessment Lists*, <https://floridadep.gov/dear/watershed-assessment-section/content/assessment-lists> (last visited Dec. 12, 2023).

<sup>21</sup> *Id.*; DEP, *Verified List Waterbody Ids (WBIDs)*, <https://geodata.dep.state.fl.us/datasets/FDEP::verified-list-waterbody-ids-wbids/about> (last visited Dec. 12, 2023); section 403.067(4), F.S.

<sup>22</sup> Section 403.067(6)(a), F.S. *See also* 33 U.S.C. § 1251, s. 303(d) (the Clean Water Act).

<sup>23</sup> Section 403.067(5), F.S.

<sup>24</sup> Section 403.067(2), F.S.; ch. 62-303.150, F.A.C.

### ***Basin Management Action Plans (BMAPs)***

BMAPs are one of the primary mechanisms DEP uses to achieve TMDLs. BMAPs are plans that address the entire pollution load, including point and nonpoint discharges,<sup>25</sup> for a watershed. There are currently 34 adopted BMAPs in Florida.<sup>26</sup>

Producers of nonpoint source pollution included in a BMAP must comply with the established pollutant reductions by implementing appropriate best management practices (BMPs) or conducting water quality monitoring.<sup>27</sup> A nonpoint source discharger may be subject to enforcement action by DEP or a water management district for failure to implement these requirements.<sup>28</sup>

DEP may establish a BMAP as part of the development and implementation of a TMDL for a specific waterbody. First, the BMAP equitably allocates pollutant reductions to individual basins, to all basins as a whole, or to each identified point source or category of nonpoint sources.<sup>29</sup> Then, the BMAP establishes the schedule for implementing projects and activities to meet the pollution reduction allocations.<sup>30</sup>

BMAPs must include five-year milestones for implementation and water quality improvement and an associated water quality monitoring component to evaluate the progress of pollutant load reductions.<sup>31</sup> Every five years an assessment of progress toward these milestones must be conducted and revisions to the plan made as appropriate.<sup>32</sup>

Each BMAP must also include:

- The management strategies available through existing water quality protection programs to achieve TMDLs;
- A description of BMPs adopted by rule;
- For the applicable five-year implementation milestones, a list of projects that will achieve the pollutant load reductions needed to meet a TMDL or other established load allocations, including a planning-level cost estimate and an estimated date of completion;
- A list of regional nutrient reduction projects submitted by the Department of Agriculture and Consumer Services which will achieve pollutant load reductions established for agricultural nonpoint sources;<sup>33</sup>
- The source and amount of financial assistance to be made available; and

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<sup>25</sup> “Point source” is defined as any discernible, confined, and discrete conveyance, including any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. Nonpoint sources of pollution are sources of pollution that are not point sources. Fla. Admin. Code R. 62-620.200(37).

<sup>26</sup> DEP, *Basin Management Action Plans (BMAPs)*, <https://floridadep.gov/dear/water-quality-restoration/content/basin-management-action-plans-bmaps> (last visited Dec. 18, 2023).

<sup>27</sup> Section 403.067(7)(b)2.g., F.S. For example, BMPs for agriculture include activities such as managing irrigation water to minimize losses, limiting the use of fertilizers, and waste management.

<sup>28</sup> Section 403.067(7)(b)2.h., F.S.

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

<sup>31</sup> Section 403.067(7)(a)6., F.S.

<sup>32</sup> *Id.*

<sup>33</sup> This is required only where agricultural nonpoint sources contribute to at least 20 percent of nonpoint source nutrient discharges or DEP determines that additional measures are necessary to achieve a TMDL. Section 403.067(7)(e)1., F.S.

- A planning-level estimate of each project’s expected load reduction, if applicable.<sup>34</sup>

### Stormwater Runoff

Nationwide, polluted stormwater runoff is considered to be the greatest threat to clean water.<sup>35</sup> Over 40 percent of waters assessed by the states are too polluted for fishing or swimming.<sup>36</sup> Nonpoint sources associated with stormwater account for over 40 percent of these polluted waters.<sup>37</sup> Conversely, traditional point sources (i.e., wastewater treatment plants) account for only about 10 percent of these polluted or “impaired” waters.<sup>38</sup> Hundreds of impaired water segments in Florida have lost their designated use due, in part, to stormwater pollution.<sup>39</sup>

Florida averages 40-60 inches of rainfall a year, depending on the location, with about two-thirds falling between June and October.<sup>40</sup> Stormwater runoff generated during these rain events flows over land or impervious surfaces, such as paved streets, parking lots, driveways, sidewalks, and rooftops, and picks up pollutants like trash, chemicals, oils, and sediment along the way. This unfiltered water ends up in streams, ponds, lakes, bays, wetlands, oceans, and groundwater. Construction sites, lawns, improperly stored hazardous wastes, and illegal dumping are all potential sources of stormwater pollutants.<sup>41</sup>

Stormwater runoff can cause a multitude of problems:

- Excess nutrients, primarily nitrogen and phosphorus from lawn fertilizers or natural sources, such as manure, can cause algal and bacterial blooms that proliferate rapidly. Algae will consume oxygen, increase turbidity in the waterbody, and eventually die along with the fish and other aquatic life that need oxygen to live.<sup>42</sup>
- Pathogenic bacteria and microorganisms can be carried by stormwater into a waterbody. This creates health hazards and can cause lakes and beaches to close to the public.<sup>43</sup>
- Sediment can increase the turbidity (a measure of water cloudiness) of a waterbody. Turbidity can block sunlight from reaching aquatic plants, making it impossible for them to grow. Without plants, animals lose a food source, and it is more difficult to filter pollutants

<sup>34</sup> Section 403.067(7)(a)4., F.S.

<sup>35</sup> South Florida Water Management District (SFWMD), *Your Impact on the Environment*, <https://www.sfwmd.gov/community-residents/what-can-you-do> (last visited Dec. 12, 2023).

<sup>36</sup> DEP, *Stormwater Support*, <https://floridadep.gov/water/engineering-hydrology-geology/content/stormwater-support> (last visited Dec. 12, 2023). A recent study examining water quality across the U.S. shows Florida ranks first in the nation for total acres of lakes classified as impaired for swimming and aquatic life (873,340 acres), and second for total lake acres listed as impaired for any use (935,808 acres). Environmental Integrity Project, *The Clean Water Act at 50*, 28 (2022), available at <https://environmentalintegrity.org/wp-content/uploads/2022/03/CWA@50-report-3-17-22.pdf>. Florida also has the second most total square miles of impaired estuaries (2,533 square miles). *Id.* at 29.

<sup>37</sup> DEP, *Stormwater Support*, <https://floridadep.gov/water/engineering-hydrology-geology/content/stormwater-support> (last visited Dec. 12, 2023).

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*

<sup>40</sup> University of Florida Institute of Food and Agricultural Sciences (UF/IFAS), *Florida Rainfall Data Sources and Types*, 1 (2023), available at <https://edis.ifas.ufl.edu/publication/AE517>.

<sup>41</sup> EPA, *Urbanization and Stormwater Runoff*, <https://www.epa.gov/sourcewaterprotection/urbanization-and-stormwater-runoff> (last visited Dec. 12, 2023).

<sup>42</sup> Southwest Florida Water Management District (SWFWMD), *Stormwater Runoff*, <https://www.swfwmd.state.fl.us/residents/education/kids/stormwater-runoff> (last visited Dec. 12, 2023).

<sup>43</sup> *Id.*

from the water. Instead, pollutants collect at the bottom of the waterbody and remain there indefinitely.<sup>44</sup>

- Debris such as plastic bags, bottles, and cigarette butts can wash into a waterbody and interfere with aquatic life<sup>45</sup> and flood prevention and decrease water quality.<sup>46</sup> When a stormwater drain gets clogged with debris, rainwater that normally would be collected cannot enter into the drainage system. Water will accumulate around the drain, causing flooded sidewalks or streets and increasing the chances for flooding buildings.
- Other hazardous wastes, such as insecticides, herbicides, paint, motor oil, and heavy metals, can be carried by stormwater runoff to waterbodies and cause illness to aquatic life and humans alike.<sup>47</sup>

In addition, inadequate stormwater management increases stormwater flows and velocities, contributes to erosion, overtaxes the carrying capacity of streams and other conveyances, reduces ground water recharge, threatens public health and safety, and is the primary source of pollutant loading entering Florida's rivers, lakes, and estuaries.<sup>48</sup>

### **Best Management Practices for Stormwater Treatment**

A BMP is as a practice or combination of practices based on research, field-testing, and expert review to be the most effective and practicable means, including economic and technological considerations, for improving water quality.<sup>49</sup> BMPs for stormwater treatment promote the natural movement of water and reduce the amount of pollutants entering waterways through runoff.<sup>50</sup>

Stormwater BMPs include dry retention and wet detention ponds, engineered media and filtration, and the use of low impact development and green stormwater infrastructure such as rain gardens, bioswales, tree wells, pervious pavement, littoral zones, floating wetlands, and harvesting systems.<sup>51</sup> BMPs can be implemented in combination or in conjunction with other BMPs in a series as a treatment train.<sup>52</sup>

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<sup>44</sup> *Id.*

<sup>45</sup> *Id.*

<sup>46</sup> SFWMD, *Your Impact on the Environment*, <https://www.sfwmd.gov/community-residents/what-can-you-do> (last visited Nov. 27, 2023).

<sup>47</sup> SFWMD, *Stormwater Runoff*, <https://www.sfwmd.state.fl.us/residents/education/kids/stormwater-runoff> (last visited Nov. 27, 2023).

<sup>48</sup> Fla. Admin. Code R. 62-40.431(2)(b).

<sup>49</sup> Section 373.4595(2)(a), F.S.; *see also* section 373.4592(2)(b), F.S.

<sup>50</sup> EPA, *Best Management Practices (BMPs) Siting Tool*, <https://www.epa.gov/water-research/best-management-practices-bmps-siting-tool> (last visited Dec. 12, 2023).

<sup>51</sup> DEP, *Rulemaking Update: Stormwater / Chapter 62-330, F.A.C., Environmental Resource Permitting*, 2 (2023), (on file with the Senate Committee on Environment and Natural Resources).

<sup>52</sup> *Id.*; *see also* EPA, *Stormwater Best Management Practice Design Guide: Volume 1*, 72 (2004), available at [https://cfpub.epa.gov/si/si\\_public\\_record\\_report.cfm?Lab=NRMRL&dirEntryId=99739](https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&dirEntryId=99739).



### *Green Stormwater Infrastructure (GSI)*

Historically, communities have used gray infrastructure<sup>53</sup> to convey stormwater to treatment systems or straight to local water bodies.<sup>54</sup> However, gray infrastructure can present a variety of challenges, including high construction, maintenance, and repair costs, increased combined sewer overflow events, and the introduction of pollutants into source waters.<sup>55</sup> These problems are exacerbated as population and development continue to increase and new challenges arise, such as changing weather patterns, increasing energy costs, and aging water infrastructure.<sup>56</sup> To meet these challenges, many communities are installing GSI systems to bolster their capacity to manage stormwater.<sup>57</sup>

GSI uses natural processes to improve water quality and manage water quantity by restoring the hydrologic function of the urban landscape, managing stormwater at its source, and reducing the need for additional gray infrastructure.<sup>58</sup> When GSI is employed as part of a larger-scale stormwater management system, it reduces the volume of stormwater that requires conveyance and treatment through conventional means, such as detention ponds.<sup>59</sup> Overall, GSI is more cost-effective than traditional gray infrastructure and offers numerous ancillary benefits.<sup>60</sup>

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<sup>53</sup> Gray infrastructure includes curbs, gutters, drains, piping, and collection systems. Traditional gray infrastructure collects and conveys stormwater from impervious surfaces, such as roadways, parking lots and rooftops, into a series of piping that ultimately discharges untreated stormwater into a local water body. EPA, *Why You Should Consider Green Stormwater Infrastructure for Your Community*, <https://www.epa.gov/G3/why-you-should-consider-green-stormwater-infrastructure-your-community> (last visited Dec. 12, 2023).

<sup>54</sup> EPA, *What is Green Infrastructure?*, <https://www.epa.gov/green-infrastructure/what-green-infrastructure> (last visited Dec. 12, 2023).

<sup>55</sup> EPA, *Case Studies Analyzing the Economic Benefits of Low Impact Development and Green Infrastructure Programs*, 9 (2013), available at [https://www.epa.gov/sites/default/files/2015-10/documents/lid-gi-programs\\_report\\_8-6-13\\_combined.pdf](https://www.epa.gov/sites/default/files/2015-10/documents/lid-gi-programs_report_8-6-13_combined.pdf).

<sup>56</sup> *Id.*

<sup>57</sup> EPA, *What is Green Infrastructure?*, <https://www.epa.gov/green-infrastructure/what-green-infrastructure> (last visited Dec. 12, 2023).

<sup>58</sup> EPA, *Green Infrastructure Opportunities that Arise During Municipal Operations*, 1 (2015), available at [https://www.epa.gov/sites/default/files/2015-09/documents/green\\_infrastructure\\_roadshow.pdf](https://www.epa.gov/sites/default/files/2015-09/documents/green_infrastructure_roadshow.pdf).

<sup>59</sup> *Id.*

<sup>60</sup> *Id.* at 2-3.





**Green Roofs**

- Have a longer lifespan than traditional roofs
- Reduce energy costs
- Buildings with green roofs can command rental premiums
- Vegetation provides habitat for wildlife



**Trees**

- Intercept and absorb rainfall
- Reduce urban heat island
- Improve habitat and aesthetic value
- Provide shade in summer and block wind in winter, reducing heating and cooling costs
- Reduce greenhouse gases by absorbing CO<sub>2</sub>
- Capture urban air pollutants (dust, O<sub>3</sub>, CO)



**Rain Barrels and Cisterns**

- Reduce water consumption and associated costs
- Reduce demand for potable water
- Increase available water supply for other uses
- Can significantly reduce stormwater discharges from roofs



**Bioswales and Rain Gardens**

- Improve property and neighborhood aesthetics
- Reduce localized flooding
- Promote infiltration and groundwater recharge
- Enhance pedestrian safety when used in traffic calming applications



**Permeable Pavements**

- Reduce stormwater runoff and standing water
- Promote infiltration and groundwater recharge
- Improve the longevity of infrastructure
- May be easier to maintain than standard pavement



**Green Space**

- Increase soil porosity
- Reduces stormwater runoff volume
- Reduces peak stormwater flows
- Helps reduce the risk of flooding

**Low Impact Design**

Low Impact Design or Low Impact Development (LID) is a stormwater management set of practices used to reduce runoff and pollutant loadings by managing the runoff as close to the source as possible.<sup>61</sup> LID practices, including the use of GSI, promote the use of natural systems. By working to mimic the natural water cycle, LID practices protect downstream resources from adverse pollutant and hydrologic impacts that can degrade water quality and harm aquatic life.<sup>62</sup> LID practices include:

- Conservation designs that preserve open space, including cluster development, open space preservation, reduced setbacks and widths of streets and sidewalks, and shared driveways;
- Infiltration practices, including porous or permeable pavement, disconnected downspouts, and rain gardens and other vegetated treatment systems;
- Runoff storage practices, including rain barrels and cisterns, green roofs, and depressional storage in landscape islands and in tree, shrub, or turf depressions;
- Runoff conveyance practices, including eliminating curbs and gutters and creating grassed swales and long flow paths over landscaped areas; and

<sup>61</sup> EPA, *Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices*, 2 (2007), available at [https://www.epa.gov/sites/default/files/2015-10/documents/2008\\_01\\_02\\_nps\\_lid\\_costs07uments\\_reducingstormwatercosts-2.pdf](https://www.epa.gov/sites/default/files/2015-10/documents/2008_01_02_nps_lid_costs07uments_reducingstormwatercosts-2.pdf).

<sup>62</sup> *Id.*

- Low impact landscaping, including planting native, drought-tolerant plants, converting turf areas to shrubs and trees, reforestation, and amending soil to improve infiltration.<sup>63</sup>

### Stormwater Management in Florida

Florida was the first state in the country to adopt a rule requiring the treatment of stormwater to a specified level of pollutant load reduction for all new development.<sup>64</sup> Florida's original stormwater rule was adopted in 1981 and went into effect in February 1982.<sup>65</sup> The rule is a technology-based rule that relies upon four key components:

- A performance standard or goal for the minimum level of treatment;
- Design criteria for BMPs that will achieve the required performance standard;
- A rebuttable presumption that discharges from a stormwater treatment system designed in accordance with the BMP design criteria will not cause harm to water resources; and
- Periodic review and updating of BMP design criteria as more information becomes available to increase their effectiveness in removing pollutants.<sup>66</sup>

One of the primary goals of Florida's stormwater management program is to maintain, to the maximum extent practical, the predevelopment stormwater characteristics of a site during and after construction and development.<sup>67</sup> Accordingly, the state's stormwater rules were developed to establish a minimum treatment performance standard that requires stormwater systems to achieve at least an 80 percent reduction of the average annual load of pollutants that would cause or contribute to violations of state water quality standards and a 95 percent reduction for Outstanding Florida Waters (OFW).<sup>68</sup> DEP selected this level of treatment for two reasons:

- To establish equitability in treatment requirements between point and nonpoint sources of pollution. The minimum level of treatment for domestic wastewater point sources was "secondary treatment" which equated to an 80 percent reduction in total suspended solids.
- The costs of stormwater treatment greatly increased as the level of treatment rose above 80 percent.<sup>69</sup>

However, studies show that the rules' existing stormwater presumptive design criteria fail to consistently meet either the 80 or 95 percent target reduction goals, with pollutant removal efficiencies varying greatly depending on the amount of runoff and other conditions.<sup>70</sup>

<sup>63</sup> *Id.* at 3-5.

<sup>64</sup> DEP, *ERP Stormwater*, <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/erp-stormwater#:~:text=To%20manage%20urban%20stormwater%20and%20minimize%20these%20impacts,1981%20and%20went%20into%20effect%20in%20February%201982> (last visited Nov. 27, 2023).

<sup>65</sup> *Id.*

<sup>66</sup> *Id.*

<sup>67</sup> Fla. Admin. Code R. 62-40.431(2)(a).

<sup>68</sup> Fla. Admin. Code R. 62-40.432(2)(a). An OFW is a water designated worthy of special protection because of its natural attributes. DEP, *Outstanding Florida Waters*, <https://floridadep.gov/dear/water-quality-standards/content/outstanding-florida-waters> (last visited Dec. 11, 2023); see Fla. Admin. Code R. 62-302.700(2) and (9).

<sup>69</sup> DEP, *ERP Stormwater*, <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/erp-stormwater#:~:text=To%20manage%20urban%20stormwater%20and%20minimize%20these%20impacts,1981%20and%20went%20into%20effect%20in%20February%201982> (last visited Dec. 19, 2023).

<sup>70</sup> See Harvey H. Harper and David M. Baker, *Evaluation of Current Stormwater Design Criteria within the State of Florida*, 6-1 (2007), available at [https://tmp.nationalstormwater.com/wp/wp-content/uploads/2020/07/Evaluation-of-Current-Stormwater-Design-Criteria-within-the-State-of-Florida\\_Final\\_71907.pdf](https://tmp.nationalstormwater.com/wp/wp-content/uploads/2020/07/Evaluation-of-Current-Stormwater-Design-Criteria-within-the-State-of-Florida_Final_71907.pdf).

Under the newly expanded Water Quality Improvement Grant Program,<sup>71</sup> DEP may provide grants for repairing, upgrading, expanding, or constructing stormwater treatment facilities that result in improvements to surface water or groundwater quality.<sup>72</sup>

### ***Stormwater Rulemaking***

In 2020, the Florida Legislature passed Senate Bill 712, also known as the Clean Waterways Act (the Act).<sup>73</sup> This legislation passed with unanimous, bipartisan support and included a wide range of water-quality protection provisions aimed at minimizing the impact of known sources of nutrient pollution and strengthening regulatory requirements. Among other things, the Act directs DEP and WMDs to update stormwater regulations using the latest scientific information.<sup>74</sup>

Over the last three years, DEP has undertaken rulemaking efforts, including holding two public outreach meetings in 2020 and four rule development workshops between May and December 2022.<sup>75</sup> Interested parties were able to provide public comments and feedback on the proposed rules during these workshops.<sup>76</sup>

In November 2020, DEP established a technical advisory committee (TAC) to offer recommendations for strengthening the state's regulations on stormwater system design and operation.<sup>77</sup> The TAC conducted 13 meetings between December 2020 and November 2021 and published a report summarizing its recommendations in March 2022.<sup>78</sup>

A Notice of Proposed Rule was published in the Florida Administrative Register on February 24, 2023, and DEP held a rule adoption hearing on March 22.<sup>79</sup> A Notice of Change, which incorporated stakeholder feedback and comments as well as four lower cost regulatory alternatives, was published on March 24, 2023.<sup>80</sup> The final rule was filed with the Department of State in April of 2023.<sup>81</sup>

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<sup>71</sup> Ch. 2023-169, s. 15, Laws of Fla. (amending s. 403.0673, F.S., effective July 1, 2023)

<sup>72</sup> Section 403.0673(2)(c), F.S.

<sup>73</sup> Ch. 2020-150, Laws of Fla.

<sup>74</sup> *Id.* at s. 5 (amending s. 373.4131, F.S., effective July 1, 2020).

<sup>75</sup> DEP, *Rulemaking Update: Stormwater / Chapter 62-330, F.A.C., Environmental Resource Permitting*, 2 (2023), (on file with the Senate Committee on Environment and Natural Resources).

<sup>76</sup> DEP, *Clean Waterways Act Stormwater Rulemaking Workshops*, <https://floridadep.gov/water/engineering-hydrology-geology/content/clean-waterways-act-stormwater-rulemaking-workshops> (last visited Dec. 19, 2023).

<sup>77</sup> DEP, *Presentation to the Florida Senate Committee on Environment and Natural Resources*, 5-6 (Dec. 6, 2023), available at [https://www.flsenate.gov/Committees/Show/EN/MeetingPacket/6001/10561\\_MeetingPacket\\_6001.6.23.pdf](https://www.flsenate.gov/Committees/Show/EN/MeetingPacket/6001/10561_MeetingPacket_6001.6.23.pdf).

<sup>78</sup> DEP, *Clean Waterways Act Technical Advisory Committee Summary Report*, 2-3 (2022), available at <https://floridadep.gov/sites/default/files/CleanWaterwaysAct-TAC-SummaryReport.pdf>.

<sup>79</sup> 49 Fla. Admin. Reg. 644 (Feb. 24, 2023); DEP, *Clean Waterways Act Stormwater Rulemaking Workshops*, <https://floridadep.gov/water/engineering-hydrology-geology/content/clean-waterways-act-stormwater-rulemaking-workshops> (last visited Dec. 19, 2023).

<sup>80</sup> *Id.*; 49 Fla. Admin. Reg. 1064 (Mar. 24, 2023).

<sup>81</sup> DEP, *Presentation to the Florida Senate Committee on Environment and Natural Resources*, 6 (Dec. 6, 2023), available at [https://www.flsenate.gov/Committees/Show/EN/MeetingPacket/6001/10561\\_MeetingPacket\\_6001.6.23.pdf](https://www.flsenate.gov/Committees/Show/EN/MeetingPacket/6001/10561_MeetingPacket_6001.6.23.pdf).

## Dam Systems

A dam is a structure that is built across a river or body of water to hold, divert, or regulate water.<sup>82</sup> Dams are a critical part of Florida’s infrastructure for the vital benefits they provide, including flood protection, water supply, irrigation, and recreation.<sup>83</sup> Dams must be properly maintained throughout their lifespan to operate as intended.<sup>84</sup> As dams age, they require greater attention and investment to ensure their safe operation.<sup>85</sup> Continuous dam safety practices are particularly important for dams that are upstream of human populations, where dam misoperation or failure has the potential for loss of life and property.<sup>86</sup>

Various classification systems are used to describe dams. Under the National Dam Safety Program’s classification system, dams are divided into three categories—Low Hazard Potential, Significant Hazard Potential, and High Hazard Potential—based on the probable loss of human life and the impacts on economic, environmental, and lifeline interests should the dam fail or be misoperated.<sup>87</sup> Owners of High Hazard Potential and Significant Hazard Potential dams are strongly encouraged to develop emergency action plans to provide a comprehensive and consistent plan to implement in the event of a developing or imminent emergency in order to protect lives and reduce damage to property, infrastructure, and wetlands and other surface waters.<sup>88</sup>

The construction, operation, alteration, repair, or abandonment of a dam may require an environmental resource permit pursuant to Chapter 62-330 of the Florida Administrative Code.

## Environmental Resource Permitting (ERP)

Part IV of Chapter 373, F.S., and Chapter 62-330 of the Florida Administrative Code regulate the statewide ERP program, which is the primary tool used by DEP and water management districts (WMDs) for preserving natural resources and fish and wildlife, minimizing degradation of water resources caused by stormwater discharges, and providing for the management of water and related land resources. The program governs the construction, alteration, operation, maintenance, repair, abandonment, and removal of stormwater management systems, dams, impoundments, reservoirs, appurtenant works, and other works such as docks, piers, structures, dredging, and filling located in, on, or over wetlands or other surface waters.<sup>89</sup>

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<sup>82</sup> U.S. Army Corps of Engineers (USACE), *National Inventory of Dams: Dams 101*, <https://nid.sec.usace.army.mil/#/learn/dams101> (last visited Dec. 13, 2023).

<sup>83</sup> DEP, *Florida Dam Safety Program*, <https://floridadep.gov/water/engineering-hydrology-geology/content/florida-dam-safety-program> (last visited Dec. 13, 2023).

<sup>84</sup> *Id.*

<sup>85</sup> *Id.*

<sup>86</sup> *Id.*

<sup>87</sup> USACE, *National Inventory of Dams: Managing Dams*, <https://nid.sec.usace.army.mil/#/learn/manage-dams> (last visited Dec. 13, 2023); Federal Emergency Management Agency (FEMA), *Federal Guidelines for Dam Safety: Hazard Potential Classification System for Dams*, 5-6 (2004), available at [https://damsafety.org/sites/default/files/FEMA%20Federal%20Guidelines%20HazPotential%20333\\_04.pdf](https://damsafety.org/sites/default/files/FEMA%20Federal%20Guidelines%20HazPotential%20333_04.pdf).

<sup>88</sup> DEP, *Florida Dam Safety Program*, <https://floridadep.gov/water/engineering-hydrology-geology/content/florida-dam-safety-program> (last visited Dec. 13, 2023).

<sup>89</sup> Fla. Admin. Code R. 62-330.010(2).



The ERP rules within Chapter 62-330 of the Florida Administrative Code contain:

- Criteria and thresholds for requiring permits;
- Types of permits;
- Procedures governing the review of applications and notices, duration and modification of permits, operational maintenance requirements, transfers of permits, provisions for emergencies, and provisions for abandonment and removal of systems;
- Exemptions and general permits that do not allow significant adverse impacts to occur individually or cumulatively;
- Conditions for issuance;
- General permit conditions, including monitoring, inspection, and reporting requirements;
- Standardized fee categories to promote consistency;
- Application, notice, and reporting forms; and
- An Applicant's Handbook containing general program information, application and review procedures, stormwater quality and quantity criteria, and how environmental criteria are evaluated.<sup>90</sup>

### **ERP Applicant's Handbook**

An integral part of the ERP program is the Applicant's Handbook, which consists of two volumes.<sup>91</sup> Volume I applies statewide to all activities regulated under the ERP program.<sup>92</sup> It provides background information on the program, including points of contact, a summary of the statutes and rules used to authorize and implement the ERP program, and the forms used to notice or apply to agencies for an ERP authorization. Volume I also contains detailed information regarding:

- Types of permits, permit thresholds, and exemptions;
- Procedures used to review exemptions and permits, and procedures for inspections, compliance, and enforcement;
- Conditions for issuance of an ERP, including the environmental criteria used for activities located in wetlands and other surface waters;
- Erosion and sediment control practices to prevent water quality violations; and
- Operation and maintenance requirements.<sup>93</sup>

Volume II consists of five separate handbooks, one for each WMD. These handbooks address regional differences in hydrology, soils, geology, and rainfall and provide region-specific design and performance standards.<sup>94</sup> Specifically, it provides:

- Design and performance standards and criteria for water quality and quantity, including those for specific types of stormwater management systems, dams, impoundments, reservoirs, and appurtenant works;
- Standards and criteria pertaining to special basins that may exist within the geographic area of each WMD;

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<sup>90</sup> Section 373.4131(1)(a), F.S.

<sup>91</sup> See section 373.4131(1)(a)9, F.S.

<sup>92</sup> Fla. Admin. Code R. 62-330.010(4)(a).

<sup>93</sup> DEP, *ERP Applicant's Handbook, Vol. I*, s. 1.1 (2020), available at <https://www.flrules.org/gateway/reference.asp?No=Ref-12078>.

<sup>94</sup> *Id.*

- Standards and criteria pertaining to flood protection; and
- Design and performance standards for dams.<sup>95</sup>

Volume II handbooks generally are not applicable to the construction, alteration, modification, maintenance, or removal of projects that cause no more than an incidental amount of stormwater runoff.<sup>96</sup>

### III. Effect of Proposed Changes:

**Section 1** ratifies the revised stormwater rules under Chapter 62-330 of the Florida Administrative Code, titled “Environmental Resource Permitting” (ERP). Chapter 62-330 of the Florida Administrative Code, as proposed by the Department of Environmental Protection (DEP) and filed for adoption with the Florida Department of State pursuant to the certification package dated April 28, 2023.

The bill provides that, except for the changes set forth in section 2 as to rule 62-330.010, Florida Administrative Code, this section serves no other purpose and may not be codified in the Florida Statutes. After this act becomes a law, its enactment and effective dates must be noted in the Florida Administrative Code, the Florida Administrative Register, or both, as appropriate. This section does not alter rulemaking authority delegated by prior law, does not constitute legislative preemption of or exception to any provision of law governing adoption or enforcement of the rule cited, and is intended to preserve the status of any cited rule as a rule under chapter 120, Florida Statutes. This section does not cure any rulemaking defect or preempt any challenge based on a lack of authority or a violation of the legal requirements governing adoption of any rule cited.

#### **DEP’s Revisions to ERP Rules and Volume I of the ERP Applicant’s Handbook**

As discussed in further detail below, the revised ERP rules and Applicant’s Handbook:

- Create new minimum performance standards for all ERP stormwater systems;
- Require applicants to demonstrate through modeling and calculations based on local conditions and annual runoff volumes that their proposed stormwater treatment system is designed to discharge to the required treatment level;
- Create new requirements for periodic inspections and the operation and maintenance of stormwater treatment systems; and
- Provide new permitting criteria applicable to the construction of new dams or alteration of existing dams.

#### ***New Minimum Performance Standards***

Under the revised rules, stormwater treatment systems must be designed to achieve at least an 80 percent reduction of the average annual post-development total suspended solids (TSS) load, or 95 percent if the proposed project is located within a hydrologic unit code (HUC) 12<sup>97</sup>

<sup>95</sup> *Id.*

<sup>96</sup> *Id.*

<sup>97</sup> “Hydrologic Unit Code” or “HUC” means the hydrologic cataloging unit assigned to a geographic area representing a surface watershed drainage basin. Each unit is assigned a two- to 12-digit number that uniquely identifies each of the six

watershed containing an Outstanding Florida Water (OFW)<sup>98</sup> and located upstream of that OFW. In addition, stormwater treatment systems must provide a level of treatment sufficient to accomplish the greater of the following:

- The minimum percent reduction of the average annual loading<sup>99</sup> of total phosphorus (TP) and total nitrogen (TN) as established in the revised rules; or
- A reduction such that the post-development condition<sup>100</sup> average annual loading of nutrients does not exceed the predevelopment condition<sup>101</sup> nutrient loading.

To calculate pre- and post-development loadings of TN and TP, the predevelopment annual runoff volume is multiplied by the land-use-specific runoff characterization data (event mean concentrations or EMCs).<sup>102</sup> EMC values quantify the concentration of pollutants washed off a surface during a rain event and vary by location and land use type. EMC values are calculated by dividing the total annual pollutant load for a given parameter (e.g., TN or TP) by the total annual runoff volume.<sup>103</sup>

The revised rules provide that the most up-to-date verified EMC values available for the project region must be used.<sup>104</sup> ERP applicants may propose the use of EMC values derived from regional or local government studies or other studies accepted by the agency or adopted by DEP.<sup>105</sup> If no appropriate regional studies or EMC values exist for the proposed project area, the applicant must use the EMC values listed in Volume I of the ERP Applicant's Handbook.<sup>106</sup>

The required percent reduction of TP and TN depends primarily on the location of the stormwater treatment system. In general, systems located within a HUC 12 watershed containing

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levels of classification within six two-digit fields. United States Geological Survey (USGS), *Hydrologic Unit Codes (HUCs) Explained*, <https://nas.er.usgs.gov/hucs.aspx> (last visited Dec. 11, 2023). Eight-digit HUCs are used for large watersheds known as subbasins; 10-digit HUCs divide the large subbasins into watersheds; and 12-digit HUCs divide watersheds into subwatersheds that capture local tributary systems. EPA, *Hydrologic Unit Codes: HUC 4, HUC 8, and HUC 12, available at <https://enviroatlas.epa.gov/enviroatlas/datafactsheets/pdf/Supplemental/HUC.pdf>*; DEP, *About the Florida National Hydrography Dataset*, <https://floridadep.gov/dear/watershed-services-program/content/about-florida-national-hydrography-dataset> (last visited Dec. 11, 2023).

<sup>98</sup> An OFW is a water designated worthy of special protection because of its natural attributes. DEP, *Outstanding Florida Waters*, <https://floridadep.gov/dear/water-quality-standards/content/outstanding-florida-waters> (last visited Dec. 11, 2023); see Fla. Admin. Code R. 62-302.700(2) and (9).

<sup>99</sup> "Average annual nutrient load or loading" means the product of annual runoff volumes and land use appropriate event mean nutrient concentrations for TP and TN.

<sup>100</sup> The proposed rules define "post-development condition" as the average annual nutrient loading based on the proposed project area that would exist in accordance with the permitted project design. DEP, *ERP Applicant's Handbook: Vol. I*, s. 2.0(a)89 (proposed 2023), available at [http://publicfiles.dep.state.fl.us/dworm/draftuledocs/stormwater/noc/Updated%20AH\\_I\\_thru%20Clean%20Copy.pdf](http://publicfiles.dep.state.fl.us/dworm/draftuledocs/stormwater/noc/Updated%20AH_I_thru%20Clean%20Copy.pdf).

<sup>101</sup> The proposed rules define "predevelopment condition" as the average annual nutrient loading based on the land use, land cover, and other site conditions that are legally in existence at the time of the application. DEP, *ERP Applicant's Handbook: Vol. I*, s. 2.0(a)90 (proposed 2023).

<sup>102</sup> 49 Fla. Admin. Reg. 647 (Feb. 24, 2023). *Id.* at s. 9.2.2.

<sup>103</sup> Harper, *Evaluation of Current Stormwater Design Criteria within the State of Florida*, 4-11 (2007), available at [https://tmp.nationalstormwater.com/wp/wp-content/uploads/2020/07/Evaluation-of-Current-Stormwater-Design-Criteria-within-the-State-of-Florida\\_Final\\_71907.pdf](https://tmp.nationalstormwater.com/wp/wp-content/uploads/2020/07/Evaluation-of-Current-Stormwater-Design-Criteria-within-the-State-of-Florida_Final_71907.pdf).

<sup>104</sup> DEP, *ERP Applicant's Handbook: Vol. I* at s. 9.2.2a. (proposed 2023).

<sup>105</sup> *Id.* at s. 9.2.2b. (proposed 2023).

<sup>106</sup> 49 Fla. Admin. Reg. 647 (Feb. 24, 2023).



an OFW or impaired water<sup>107</sup>—and located upstream of such OFW or impaired water—must achieve a higher percent reduction of TP and TN than systems located elsewhere. In addition, sites undergoing redevelopment<sup>108</sup> are subject to different reduction criteria and may be exempt from permitting requirements if under one acre and other conditions are met. Below is an overview of the TP and TN reductions required under the proposed rules:

Site Location	Required Reduction	
	TP	TN
OFWs	90%	80%
Impaired Waters	80%	80%
Impaired OFWs	95%	95%
Redevelopment (nonimpaired waters)	80%	45%
Redevelopment OFWs	90%	60%
All other sites	80%	55%

Where the stormwater treatment system is located upstream of and within a HUC 12 watershed which contains an impaired water where basin-specific design and performance criteria for load reductions of nonpoint sources were included to achieve an adopted Total Maximum Daily Load (TMDL), Basin Management Action Plan (BMAP), an approved alternative restoration plan,<sup>109</sup> or other watershed management plan, the applicant must provide a level of treatment sufficient to accomplish:

- The level of treatment prescribed in such TMDL, BMAP, approved alternative restoration plan, or other watershed management plan; and
- The post-development condition average annual loading of those pollutants not meeting water quality standards are less than that of the predevelopment condition.<sup>110</sup>

Best Management Practices (BMPs) are an effective tool for achieving the required minimum performance standards.<sup>111</sup> If the required nutrient reductions are not met by a single BMP, the ERP applicant must either modify the selected BMP or incorporate additional BMPs to achieve the required load reductions. DEP encourages the use of low impact design (LID) approaches,

<sup>107</sup> The proposed rules define “impaired water” as a waterbody or waterbody segment that does not meet its applicable water quality standards due in whole or in part to discharges of pollutants from point or nonpoint sources. Impaired waters include those waters on the verified list of impaired waters, waters with a Total Maximum Daily Load, waters with an alternative restoration plan, and waters with other evidence demonstrating that water quality standards are not being met. DEP, *ERP Applicant’s Handbook: Vol. I*, s. 2.0(a)60 (proposed 2023).

<sup>108</sup> The proposed rules define “redevelopment” as the construction on sites having existing commercial, industrial, institutional, roadway, or residential land uses, excluding silviculture or agriculture, where the existing land use has not been previously permitted, where all or part of the existing impervious surface is removed and replaced with new impervious surface, which has the same or lesser area as the existing impervious surface, and the same or less intense land uses. DEP, *ERP Applicant’s Handbook: Vol. I*, s. 2.0(a)97 (proposed 2023).

<sup>109</sup> Alternative restoration plans are water quality improvement plans that employ the early implementation of restoration activities to avoid being placed on the verified list of impaired waters and the development of TMDLs and BMAPs. DEP, *Alternative Restoration Plans*, <https://floridadep.gov/DEAR/Alternative-Restoration-Plans> (last visited Jan. 18, 2023).

<sup>110</sup> DEP, *ERP Applicant’s Handbook: Vol. I*, s. 8.3.4(b) (proposed 2023).

<sup>111</sup> DEP, *ERP Applicant’s Handbook: Vol. I*, ss. 9.5 and 9.5.1 (proposed 2023).

such as green stormwater infrastructure (GSI), to supplement or replace traditional stormwater infrastructure.<sup>112</sup>

Offsite stormwater treatment, overtreatment,<sup>113</sup> and regional stormwater management systems<sup>114</sup> may be used as an alternative to, or in combination with, onsite treatment to meet the required performance standards.

### ***New requirements for Inspections and Operation and Maintenance***

The revised ERP rules and Applicant’s Handbook provide that an applicant for the construction, alteration, or operation of a stormwater management system must provide a written operation and management plan. The plan must be prepared and certified by a registered professional.

Under the revised rules, operation and maintenance entities for stormwater management systems are required to estimate expected annual operating expenses, including inspection and routine maintenance costs, and certify that they have the financial capability to maintain the system over time. In addition, all operation and maintenance entities, other than MS4 entities,<sup>115</sup> must conduct periodic inspections to ensure that the stormwater management system, and each component thereof, continues to function as designed and permitted. An inspection report must be provided to the permitting agency within 30 days of the inspection.

### ***New Requirements for Dam Systems***

The revised ERP rules and Applicant’s Handbook provide new permitting criteria applicable to the construction of new dams or alteration of existing dams. The criteria require an ERP applicant to:

- Provide dam system information for collection in a repository maintained by DEP;
- Establish a downstream hazard potential<sup>116</sup> for each dam indicating the potential adverse impact on the downstream areas should the dam or its appurtenant structures fail or be misoperated;

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<sup>112</sup> *Id.* at s. 9.5.3.

<sup>113</sup> The proposed rules define “overtreatment” as the treatment of the runoff from the project area that flows to a treatment system to a higher level than the rule requires to make up for the lack of sufficient treatment for a portion of the project area. DEP, *ERP Applicant’s Handbook: Vol. I*, s. 9.7.1 (proposed 2023).

<sup>114</sup> The proposed rules define “regional stormwater management system” as a system designed, constructed, operated, and maintained to collect convey, store, absorb, inhibit, treat, use or reuse stormwater to prevent or reduce flooding, overdrainage, environmental degradation and water pollution or otherwise affect the quantity and quality of discharges from multiple parcels and projects within the drainage area served by the regional system, where the term “drainage area” refers to the land or development that is served by or contributes stormwater to the regional system. DEP, *ERP Applicant’s Handbook: Vol. I*, s. 2.0(a)98 (proposed 2023).

<sup>115</sup> MS4 means municipal separate storm sewer systems, which are publicly-owned conveyance systems (e.g., ditches, curbs, catch basins, underground pipes) designed for collecting or conveying stormwater. DEP, *Municipal Separate Storm Sewer Systems (MS4)*, <https://floridadep.gov/water/stormwater/content/municipal-separate-storm-sewer-systems-ms4#:~:text=A%20municipal%20separate%20storm%20sewer%20system%20%28MS4%29%20is,that%20discharges%20to%20surface%20waters%20of%20the%20state> (last visited Dec. 12, 2023). Under the revised rules, an MS4 entity must conduct and report inspections of ERP-permitted stormwater management systems in accordance with their MS4 permit requirements and any associated standard operating procedures. DEP, *ERP Applicant’s Handbook: Vol. I*, s. 12.5(b) (proposed 2023).

<sup>116</sup> “Downstream Hazard Potential” means the category of a dam that indicates its potential adverse impact on the downstream areas should the dam or its appurtenant structures fail or be mis-operated. The Downstream Hazard Potential

- Develop an emergency action plan for dams with a high hazard potential or significant hazard potential; and
- Provide a condition assessment report for each existing high hazard potential or significant hazard potential dam.

### *Grandfathered/Exempt Activities*

The revised ERP requirements do not apply to certain activities, including:

- Projects and activities already approved by an unexpired conceptual, general, or individual permit;
- Any non-major modification of such permits and to subsequent permits to construct and operate future phases consistent with an unexpired conceptual approval permit;
- Transfer of approved permits or conversions of such permits to the operation phase;
- Projects or activities that are the subject of a general or individual permit application that are deemed complete within twelve months after the effective date of the revised rules;
- Major permit modifications where the purpose of the modification is solely to bring the system into compliance with applicable design and performance criteria that were applicable at the time of the current permit's issuance; and
- Certain public transportation projects and project modifications.

**Section 2** amends s. 373.4131, F.S., regarding the statewide environmental resource permitting rules. The bill ratifies rule 62-330.010 of the Florida Administrative Code, titled "Purpose and Implementation," as filed for adoption with the Department of State pursuant to the certification package dated April 28, 2023, with the following changes to Volume I of the ERP Applicant's Handbook:

- Amending section 3.1.2(e)3. to clarify that nothing in the rule eliminates any grandfather provisions<sup>117</sup> in existence prior to the effective date of the ratified rules. The bill provides that certain grandfathered projects must use all forms in effect at the time the permit was originally issued, except for those subsequent permits to construct and operate the future phases consistent with an unexpired conceptual approval permit.<sup>118</sup>
- Amending sections 8.3.4(a)3. and 8.3.4(b)2. to add commas to language currently in the proposed rule providing that the minimum level of treatment must be sufficient to accomplish a reduction such that "the post-development condition average annual loading, of those pollutants not meeting water quality standards, that is less than that of the predevelopment condition"; and

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reflects probable loss of human life or adverse impacts on economic, environmental, or lifeline interests, or other concerns, such as water quality degradation. The Downstream Hazard may be one of three categories: High Hazard Potential, Significant Hazard Potential, and Low Hazard Potential. DEP, *ERP Applicant's Handbook: Vol. I*, s. 2.0(a)(37) (proposed 2023).

<sup>117</sup> Grandfather provisions are contained within sections 1.4.2 and 3.1.2 of Volume I of the ERP Applicant's Handbook. DEP, *ERP Applicant's Handbook: Vol. I*, ss. 1.4.2 and 3.1.2 (2020), available at <https://www.flrules.org/gateway/reference.asp?No=Ref-12078>.

<sup>118</sup> These projects must use the following forms effective July 1, 2024: Form 62-330.301(26) Financial Capability Certification; Form 62-330.301(25) Dam System Information; Form 62-330.311(1) Operation and Maintenance Certification; or Form 62-330.311(3) Inspection Checklists.

- Amending section 12.5(a) to provide exceptions to the rules' inspection requirements for the following activities and BMPs, and providing such activities must be inspected in accordance with the applicable rules and laws:
  - Activities and BMPs regulated by the South Florida Water Management District pursuant to rule 40E-63 of Florida Administrative Code regarding the Everglades Program; and
  - Activities and BMPs regulated by the Department of Agriculture and Consumer Services pursuant to Title 5M of the Florida Administrative Code, regarding agricultural BMPs, and s. 403.067(7)(c)2., F.S., regarding the establishment and implementation of TMDLs.

The bill also amends section 8.3.5 of the Applicant's Handbook, which provides alternative treatment standards for stormwater systems serving redevelopment<sup>119</sup> activities. The bill permits an alternative level of treatment for redevelopment projects in areas with impaired waters, which DEP's proposed rules currently do not allow.<sup>120</sup> Specifically, the bill provides that stormwater treatment systems located within a HUC 12 subwatershed which contains an impaired water and located upstream of that impaired water may provide an alternative level of treatment sufficient to accomplish:

- An 80 percent reduction of the post-development average annual loading of TP and a 45 percent reduction of the post-development average annual loading of TN from the project area; and
- A post-development condition average annual loading, of those pollutants not meeting water quality standards, that is less than that of the predevelopment condition.

Under DEP's proposed rules, stormwater systems for redevelopment projects located within a such a subwatershed containing an impaired water and located upstream of that impaired water would have to meet the minimum performance standards for impaired waters under section 8.3.4 of the Applicant's Handbook.<sup>121</sup> Section 8.3.4 provides that stormwater systems in these areas must generally provide a level of treatment sufficient to accomplish:

- An 80 percent reduction of the average annual loading of TP and TN from the proposed project, or 95 percent where located within such HUC 12 subwatershed containing an OFW and located upstream of that OFW; and
- A reduction such that the post-development condition average annual loading of nutrients does not exceed the predevelopment condition nutrient loading; and
- The post-development condition average annual loading of those pollutants not meeting water quality standards are less than that of the predevelopment condition.

The bill does not change the required pollutant reductions for redevelopment projects within a HUC 12 subwatershed containing an OFW (a 90 percent reduction of the post-development average annual loading of TP and a 60 percent reduction of the post-development average annual loading of TN from the project area). However, the bill specifies that these alternative standards apply to stormwater systems within an OFW subwatershed if they are *located upstream* of the

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<sup>119</sup> The proposed rules define "redevelopment" as the construction on sites having existing commercial, industrial, institutional, roadway, or residential land uses, excluding silviculture or agriculture, where the existing land use has not been previously permitted, where all or part of the existing impervious surface is removed and replaced with new impervious surface, which has the same or lesser area as the existing impervious surface, and the same or less intense land uses. DEP, *ERP Applicant's Handbook: Vol. I*, s. 2.0(a)97 (proposed 2023).

<sup>120</sup> DEP, *ERP Applicant's Handbook: Vol. I*, s. 8.3.5 (proposed 2023).

<sup>121</sup> *Id.*

OFW. In contrast, under DEP’s proposed rules, these alternative standards would be applicable to all stormwater systems within such a subwatershed, irrespective of their location relative to the OFW.<sup>122</sup>

Below is a table summarizing how the bill changes the required reductions for redevelopment:

Site Location	Required Reduction under DEP’s Proposed Rules		Required Reduction as Amended by Bill	
	TP	TN	TP	TN
Impaired Waters	80%	80%	No Change	No Change
Impaired Waters - Redevelopment	80%*	80%*	80%	45%
OFWs	90%	80%	No Change	No Change
OFWs - Redevelopment	90%	60%	90%**	60%**
All other Redevelopment Sites	80%	45%	No Change	No Change

\* Alternative standards for redevelopment do not apply. Stormwater systems must comply with the minimum level of treatment for impaired waters.

\*\* Applies to stormwater systems located upstream of OFW.

In addition, the bill provides that any future changes to those portions of the Applicant’s Handbook that are amended by the bill must be submitted in bill form to the Speaker of the House of Representatives and to the President of the Senate for their consideration and referral to the appropriate committees. Such amendments would become effective only upon approval by act of the Legislature.

**Section 3** provides that the bill will take effect upon becoming law.

**IV. Constitutional Issues:**

A. Municipality/County Mandates Restrictions:

The municipality/county mandates provision of Art. VII, s. 18(a) of the Florida Constitution may not apply to this bill. The Florida Constitution limits the ability of the State to impose unfunded mandates on local governments. However, if a bill merely reauthorizes existing statutory authority, it is exempt from the unfunded mandates provision. This bill likely falls under this exemption and will therefore not be subject to the unfunded mandates prohibition.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

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<sup>122</sup> *Id.* at s.

D. State Tax or Fee Increases:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

Revisions to Chapter 62-330 of the Florida Administrative Code will increase costs associated with the new requirements for stormwater treatment, operation and maintenance, inspections and reporting, and dam systems information and safety.<sup>123</sup> The Department of Environmental Protection (DEP) estimates that approximately 14,032 entities will be required to comply with the revised rules within five years of the rules' implementation.<sup>124</sup> This includes private and public entities of all sizes that are ordinarily involved in construction or development of residential, commercial, and light industrial properties.<sup>125</sup>

The estimated total cost for developing stormwater infrastructure in compliance with *current* treatment standards is \$12.6 billion in the aggregate over a five-year period.<sup>126</sup> DEP estimates that the proposed rules revisions will increase these costs by approximately \$1.21 billion<sup>127</sup> (or \$2,600 per acre developed) within a five-year period after implementation.<sup>128</sup> This includes lower cost regulatory alternatives.<sup>129</sup> The provisions of this bill allowing redevelopment projects in areas with impaired waters are likely to reduce the fiscal impact of the rules. However, the provisions of this bill creating new law are likely to reduce the fiscal impact of the rules.

<sup>123</sup> DEP, *SERC: Chapter 62-330, F.A.C., 2-3 (2023)*, available at <http://publicfiles.dep.state.fl.us/dwrm/drafruledocs/stormwater/noc/serc-template-updated.pdf>.

<sup>124</sup> *Id.* at 3.

<sup>125</sup> *Id.*

<sup>126</sup> *Id.* at 2.

<sup>127</sup> Prior to receipt of lower cost regulatory alternatives (LCRAs), DEP estimated the revised rules would increase stormwater treatment costs by \$1.44 billion in the aggregate within five years from the rules' implementation, or \$1.486 billion when including additional transactional costs (i.e., new requirements for system design, operation and maintenance, inspections, and reporting) and costs related to the rules' new requirements for dam systems. *Id.* at 2-3. DEP estimates the LCRAs will lower stormwater treatment costs (excluding transactional and dam system costs) by approximately 16 percent from the original estimate. *Id.* at 10. Accordingly, DEP's revised estimate for stormwater treatment costs under the proposed rules is \$1.21 billion. DEP, *Presentation to the Florida Senate Committee on Environment and Natural Resources*, 13 (Dec. 6, 2023), available at [https://www.flsenate.gov/Committees/Show/EN/MeetingPacket/6001/10561\\_MeetingPacket\\_6001.6.23.pdf](https://www.flsenate.gov/Committees/Show/EN/MeetingPacket/6001/10561_MeetingPacket_6001.6.23.pdf); DEP, *Rulemaking Update: Stormwater | Chapter 62-330, F.A.C., Environmental Resource Permitting*, 2 (2023), (on file with the Senate Committee on Environment and Natural Resources).

<sup>128</sup> *Id.* at 2, 10; DEP, *Rulemaking Update: Stormwater | Chapter 62-330, F.A.C., Environmental Resource Permitting*, 2 (2023), (on file with the Senate Committee on Environment and Natural Resources); DEP, *Presentation to the Florida Senate Committee on Environment and Natural Resources*, 13 (Dec. 6, 2023), available at [https://www.flsenate.gov/Committees/Show/EN/MeetingPacket/6001/10561\\_MeetingPacket\\_6001.6.23.pdf](https://www.flsenate.gov/Committees/Show/EN/MeetingPacket/6001/10561_MeetingPacket_6001.6.23.pdf).

<sup>129</sup> DEP, *Presentation to the Florida Senate Committee on Environment and Natural Resources* at 13.

C. **Government Sector Impact:**

DEP intends to implement the proposed rule within its current workload, with existing staff.<sup>130</sup> Local governments that need to comply with the stormwater rule would be subject to the same costs discussed in the private sector impact section above.

VI. **Technical Deficiencies:**

None.

VII. **Related Issues:**

None.

VIII. **Statutes Affected:**

The bill creates an undesignated section of Florida law and amends s. 373.4131 of the Florida Statutes.

IX. **Additional Information:**

A. **Committee Substitute – Statement of Changes:**

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

B. **Amendments:**

None.

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This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.

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<sup>130</sup> DEP, *SERC: Chapter 62-330, F.A.C.*, 4 (2023), available at <http://publicfiles.dep.state.fl.us/dworm/draftruledocs/stormwater/noc/serc-template-updated.pdf>.