

**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: The Professional Staff of the Committee on Fiscal Policy

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BILL: CS/SB 1386

INTRODUCER: Appropriations Committee on Agriculture, Environment, and General Government and Senator Calatayud

SUBJECT: Department of Environmental Protection

DATE: February 20, 2024      REVISED: \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Carroll</u>	<u>Rogers</u>	<u>EN</u>	<u>Favorable</u>
2.	<u>Reagan</u>	<u>Betta</u>	<u>AEG</u>	<u>Fav/CS</u>
3.	<u>Carroll</u>	<u>Yeatman</u>	<u>FP</u>	<u>Pre-meeting</u>

**Please see Section IX. for Additional Information:**

COMMITTEE SUBSTITUTE - Substantial Changes

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**I. Summary:**

CS/SB 1386 amends provisions relating to aquatic preserves, resilience, onsite sewage treatment and disposal systems (OSTDSs, otherwise known as septic systems), and wastewater treatment facilities.

The bill provides that a representative of the Department of Environmental Protection (DEP) may at any reasonable time enter and inspect any property, except a building which is used exclusively for a private residence, that has an OSTDS to ascertain compliance with applicable law, rules, and regulations. Under current law, DEP personnel must have reason to believe noncompliance exists and must first obtain permission from the owner or occupant of a residence of private building to secure an inspection warrant.

The bill requires all applicants for permits to construct and operate a domestic wastewater treatment facility to prepare a reuse feasibility study. Domestic treatment facilities that dispose of effluent by certain means must implement reuse to the extent feasible and consider the ecological or public water supply benefits afforded by any disposal.

The bill makes revisions to facilitate the transfer of the OSTDS program including:

- Creating new procedures for the DEP regarding the processing and enforcement of septic tank requirements.

- Directing the DEP to adopt rules for a general permit for projects which have, individually or cumulatively, a minimal adverse impact on public health or the environment.
- Directing the DEP to establish an enhanced nutrient-reducing OSTDS approval program.

Regarding domestic wastewater treatment facilities and wastewater treatment plans, the bill:

- Requires certain public and private facilities to participate in developing the domestic wastewater treatment plan including providing certain information to the applicable local government.
- Requires certain wastewater treatment facilities that provide reclaimed water within a basin management action plan or reasonable assurance plan area to meet advanced waste treatment standards.

Regarding reclaimed water, the bill:

- Directs the water management districts and the DEP to develop rules to promote reclaimed water and encourage potable water offsets that produce significant water savings.
- Authorizes extended permits for those applicants or permittees that propose a development or water resource development project using reclaimed water.

Regarding the Resilient Florida Grant Program, the bill:

- Authorizes the DEP to provide grants to counties or municipalities to fund:
  - An update of their inventory of critical assets, including those that are currently or reasonably expected to be impacted by flooding and sea level rise;
  - Development of strategies to enhance community preparations for threats from flooding and sea level rise, including adaptation plans; and
  - Permitting for projects designed to achieve reductions in the risks or impacts of flooding and sea level rise using nature-based solutions.
- Requires vulnerability assessments to use data from the Florida Flood Hub that is certified by the Chief Resilience Officer.
- Requires certain data and planning horizons to be used in the assessment.

The bill requires the Comprehensive Statewide Flood Vulnerability and Sea Level Rise Data Set and Assessment to include the 20- and 50-year projected sea level rise at each active National Oceanic and Atmospheric Administration tidal gauge off the Florida coast as derived from statewide sea level rise projections.

Regarding the Statewide Flooding and Sea Level Rise Resilience Plan, the bill:

- Authorizes the plan to include projects not yet identified in the comprehensive statewide flood vulnerability and sea level rise assessment at the DEP and the Chief Resilience Officer's discretion.
- Expands the types of projects that can be submitted by local or regional entities.

The bill requires the DEP to include the projects funded under the water quality grant program on a user-friendly website or dashboard.

The bill requires the Office of Economic and Demographic Research to provide a publicly-accessible data visualization tool on its website related to its statewide wastewater and stormwater needs analysis.

Regarding aquatic preserves, the bill:

- Provides that it is a noncriminal infraction to operate a vessel outside a lawfully marked channel in a careless manner that causes seagrass scarring within the Nature Coast Aquatic Preserve.

Declares the Kristin Jacobs Coral Reef Ecosystem Conservation Area to be an aquatic preserve.

The bill may have a positive, yet indeterminate, fiscal impact on state government, because the DEP is directed to deposit certain damages, costs, or penalties it collects relating to onsite sewage treatment and disposal systems regulations into the Water Quality Assurance Trust Fund.

The bill has an effective date of July 1, 2024.

## II. Present Situation:

### 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>1</sup> In Florida, 35 percent of waterbodies are impaired for nutrients and 87 percent of counties have nutrient impaired waters within their boundaries.<sup>2</sup>

Phosphorus and nitrogen are derived from natural and human-made sources.<sup>3</sup> Human-made sources include sewage disposal systems (wastewater treatment facilities and septic systems), overflows of storm and sanitary sewers (untreated sewage), agricultural production and irrigation practices, and stormwater runoff.<sup>4</sup>

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<sup>1</sup> U.S. Environmental Protection Agency (EPA), *Nutrient Pollution: The Problem*, <https://www.epa.gov/nutrientpollution/problem> (last visited Jan. 18, 2024).

<sup>2</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>3</sup> *Id.*

<sup>4</sup> U.S. Environmental Protection Agency (EPA), *Sources and Solutions*, <https://www.epa.gov/nutrientpollution/sources-and-solutions> (last visited Jan. 18, 2024).

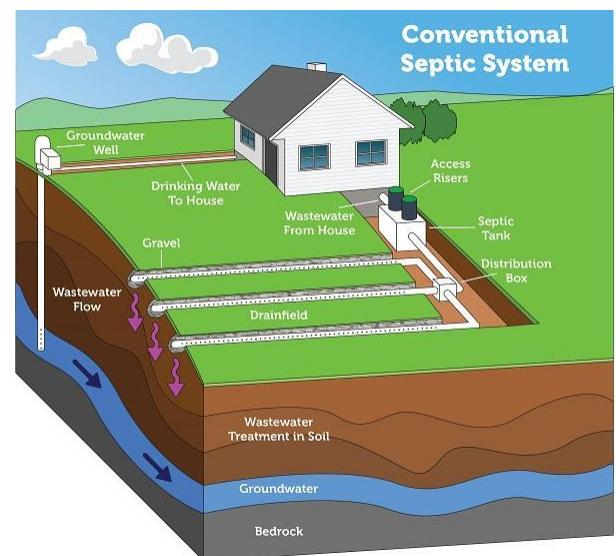
## Onsite Sewage Treatment and Disposal Systems

Onsite Sewage Treatment and Disposal Systems (OSTDSs), commonly referred to as “septic systems,” generally consist of two basic parts: the septic tank and the drainfield.<sup>5</sup> Waste from toilets, sinks, washing machines, and showers flows through a pipe into the septic tank, where anaerobic bacteria break the solids into a liquid form. The liquid portion of the wastewater flows into the drainfield, which is generally a series of perforated pipes or panels surrounded by lightweight materials such as gravel or Styrofoam. The drainfield provides a secondary treatment where aerobic bacteria continue deactivating the germs. The drainfield also provides filtration of the wastewater, as gravity draws the water down through the soil layers.<sup>6</sup>

There are an estimated 2.6 million OSTDSs in Florida, providing wastewater disposal for 30 percent of the state’s population.<sup>7</sup> In Florida, development in some areas is dependent on OSTDSs due to the cost and time it takes to install central sewer systems.<sup>8</sup> For example, in rural areas and low-density developments, central sewer systems are not cost-effective.<sup>9</sup>

In a conventional OSTDS, a septic tank does not reduce nitrogen from the raw sewage. In Florida, approximately 30-40 percent of the nitrogen levels are reduced in the drainfield of a system that is installed 24 inches or more from groundwater.<sup>10</sup> This still leaves a significant amount of nitrogen to percolate into the groundwater, which makes nitrogen from OSTDSs a potential contaminant in groundwater.<sup>11</sup>

Different types of advanced OSTDSs exist that can remove greater amounts of nitrogen than a typical septic system (often referred to as “advanced” or “nutrient-reducing” septic systems).<sup>12</sup> The



Please note: Septic systems vary. Diagram is not to scale.

<sup>5</sup> DOH, *Septic System Information and Care*, <http://columbia.floridahealth.gov/onsite-sewage-disposal/septic-information-and-care.html> (last visited Jan. 9, 2024); EPA, *Types of Septic Systems*, <https://www.epa.gov/septic/types-septic-systems> (last visited Jan. 18, 2024) (showing the graphic provided in the analysis).

<sup>6</sup> *Id.*

<sup>7</sup> DEP, *Onsite Sewage Program*, <https://floridadep.gov/water/onsite-sewage#:~:text=Onsite%20sewage%20treatment%20and%20disposal%20systems%20%28OSTDS%29%2C%20commonly,represents%2012%25%20of%20the%20United%20States%E2%80%99%20septic%20systems> (last visited Jan. 18, 2024).

<sup>8</sup> DOH, *Report on Range of Costs to Implement a Mandatory Statewide 5-Year Septic Tank Inspection Program*, Executive Summary (Oct. 1, 2008), available at <http://www.floridahealth.gov/environmental-health/onsite-sewage/documents/costs-implement-mandatory-statewide-inspection.pdf>.

<sup>9</sup> *Id.*

<sup>10</sup> DOH, *Florida Onsite Sewage Nitrogen Reduction Strategies Study, Final Report 2008-2015*, 21 (Dec. 2015), available at <http://www.floridahealth.gov/environmental-health/onsite-sewage/research/draftlegreportsm.pdf>; See Fla. Admin. Code R. 64E-6.006(2).

<sup>11</sup> University of Florida Institute of Food and Agricultural Sciences (IFAS), *Onsite Sewage Treatment and Disposal Systems: Nitrogen*, 3 (Oct. 2020), available at <http://edis.ifas.ufl.edu/pdf/SS/SS55000.pdf>.

<sup>12</sup> DOH, *Nitrogen-Reducing Systems for Areas Affected by the Florida Springs and Aquifer Protection Act* (updated May 2021), available at <http://www.floridahealth.gov/environmental-health/onsite-sewage/products/documents/bmap-n-reducing-tech-18-10-29.pdf>.

Department of Environmental Protection (DEP) publishes on its website approved products and resources on advanced systems.<sup>13</sup> Determining which advanced system is the best option can depend on site-specific conditions.

In 2023, the Florida Legislature passed a law requiring enhanced nutrient-reducing OSTDSs in places where waterbodies do not meet water quality standards and there is a plan in place, such as a basin management action plan (BMAP) or alternative restoration plan, to address water quality issues.<sup>14</sup> Enhanced nutrient-reducing OSTDSs are required for new systems on lots of one acre or less within all BMAP areas, reasonable assurance plan areas, and pollution reduction plan areas when sewer is not available.<sup>15</sup> Within the Banana River Lagoon BMAP, the Central Indian River Lagoon BMAP, the North Indian River Lagoon BMAP, and the Mosquito Lagoon reasonable assurance plan area, all new OSTDSs are prohibited unless central sewerage is not available, in which case only enhanced nutrient-reducing OSTDSs are authorized.<sup>16</sup>

The owner of a properly functioning OSTDS must connect to a sewer system within one year of receiving notification that a sewer system is available for connection.<sup>17</sup> Owners of an OSTDS in need of repair or modification must connect within 90 days of notification from the DEP.<sup>18</sup>

In 2020, the Clean Waterways Act provided for the transfer of the Onsite Sewage Program from the Department of Health (DOH) to the DEP.<sup>19</sup> The Onsite Sewage Program will be transferred over a period of five years, and guidelines for the transfer are provided by an interagency agreement.<sup>20</sup> Per the agreement, the DEP has the primary powers and duties of the Onsite Sewage Program, meaning that the county departments of health will implement the OSTDS program under the direction of the DEP instead of the DOH.<sup>21</sup> The county departments of health still handle permitting and inspection of OSTDS.<sup>22</sup> In the event of an alleged violation of OSTDS laws, county departments of health are responsible for conducting an inspection to gather information regarding the allegations.<sup>23</sup>

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<sup>13</sup> DEP, *Onsite Sewage Program, Product Listings and Approval Requirements*, <https://floridadep.gov/water/onsite-sewage/content/product-listings-and-approval-requirements>.

<sup>14</sup> DEP, *Permitting of Enhanced Nutrient Reducing Onsite Sewage Treatment and Disposal Systems*, <https://floridadep.gov/water/onsite-sewage/content/permitting-enhanced-nutrient-reducing-onsite-sewage-treatment-and> (last visited Jan. 18, 2024); No. 2023-169, Laws of Fla.; Sections 373.811 and 403.067(7)(a)10., F.S.

<sup>15</sup> Section 403.067(7)(a)10., F.S.

<sup>16</sup> Section 373.469, F.S.

<sup>17</sup> Section 381.00655, F.S.

<sup>18</sup> *Id.*

<sup>19</sup> DEP, *Program Transfer*, <https://floridadep.gov/water/onsite-sewage/content/program-transfer> (last visited Jan. 18, 2024).

<sup>20</sup> DOH, DEP, *Interagency Agreement between DEP and DOH in Compliance with Florida's Clean Waterways Act for Transfer of the Onsite Sewage Program*, 5 (June 30, 2021), available at <http://www.floridahealth.gov/environmental-health/onsite-sewage/documents/interagency-agreement-between-fdoh-fdep-onsite-signed-06302021.pdf>.

<sup>21</sup> *Id.* at 14.

<sup>22</sup> *Id.* at 11; and DEP, *Onsite Sewage Program*, <https://floridadep.gov/water/onsite-sewage> (last visited Jan. 18, 2024).

<sup>23</sup> DOH, DEP, *Interagency Agreement between DEP and DOH in Compliance with Florida's Clean Waterways Act for Transfer of the Onsite Sewage Program* at 11.

In 2008, less than one percent of OSTDSs in Florida were actively managed under operating permits and maintenance agreements.<sup>24</sup> The remainder of systems are generally serviced only when they fail, often leading to costly repairs that could have been avoided with routine maintenance.<sup>25</sup> Current law directs the DEP to administer permits, site evaluations, and inspections associated with the construction, installation, maintenance, modification, abandonment, operation, use, or repair of an OSTDS.<sup>26</sup> Although this statutory authority is broad, inspections for traditional OSTDS generally occur during OSTDS construction, repair, or abandonment.<sup>27</sup> Buildings that use an aerobic treatment unit or generate commercial waste must be inspected by the DEP at least annually to assure compliance with the operating permit.<sup>28</sup>

Under s. 381.0065(5), F.S., DEP personnel who have reason to believe noncompliance exists, may at any reasonable time, enter a premises with an OSTDS permit or the business premises of any septic tank contractor to ascertain compliance with applicable statutes and rule. The term “premises” does not include a residence or private building. To gain entry to a residence or private building, the DEP must obtain permission from the owner or occupant or secure an inspection warrant from a court of competent jurisdiction. The DEP may issue citations that may contain an order of correction or an order to pay a fine, or both when a violation of applicable laws or rules is enforceable by an administrative, civil remedy, or is a misdemeanor of the second degree.<sup>29</sup> The fines imposed by citation may not exceed \$500 per violation. Each day the violation exists constitutes a separate violation.<sup>30</sup> The department may reduce or waive the fine imposed by the citation. Fines are deposited into the county health department trust fund.<sup>31</sup>

The DEP is also required by law to make rules relating to the location of OSTDSs, including establishing setback distances, to prevent groundwater contamination and surface water contamination and to preserve the public health. The rules must consider:

- Conventional and enhanced nutrient-reducing onsite sewage treatment and disposal system designs,
- Impaired or degraded water bodies,
- Domestic wastewater and drinking water infrastructure,
- Potable water sources,
- Nonpotable wells,
- Stormwater infrastructure,
- The onsite sewage treatment and disposal system remediation plans developed for purposes of a BMAP,
- Nutrient pollution, and

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<sup>24</sup> DOH, *Report on Range of Costs to Implement a Mandatory Statewide 5-Year Septic Tank Inspection Program*, Executive Summary (Oct. 1, 2008), available at [http://www.floridahealth.gov/environmental-health/onsite-sewage/\\_documents/costs-implement-mandatory-statewide-inspection.pdf](http://www.floridahealth.gov/environmental-health/onsite-sewage/_documents/costs-implement-mandatory-statewide-inspection.pdf).

<sup>25</sup> *Id.*

<sup>26</sup> Section 381.0065(3)(b); Fla. Admin. Code 62-6.003.

<sup>27</sup> See Fla. Admin. Code 62-6.003, 62-6.011.

<sup>28</sup> Section 381.0065(4), F.S.

<sup>29</sup> Section 381.0065(5), F.S.

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

<sup>31</sup> *Id.*

- The recommendations of the onsite sewage treatment and disposal systems technical advisory committee established pursuant to former s. 381.00652, F.S.<sup>32</sup>

The rules are required to allow a variance from a rule requirement upon demonstration that the requirement would cause an undue hardship and granting the variance would not cause or contribute to the exceedance of a total maximum daily load.<sup>33</sup> The DEP updated Chapter 62-6 of the Florida Administrative Code in 2022 to address these requirements.

A county or municipality that contains a first magnitude spring must, and any county or municipality that does not contain a first magnitude spring may, develop and adopt by local ordinance an OSTDS evaluation and assessment program meeting the requirements of state law.<sup>34</sup> If adopted, the OSTDS evaluation and assessment program requires that each OSTDS within all or part of the county’s or municipality’s jurisdiction be evaluated once every five years to assess the fundamental operational condition of the system and to identify system failures.

The following table includes administrative and judicial remedies available pursuant to part I of ch. 403 for violations of OSTDSs regulations, part I of ch. 386, relating to sanitary nuisances involving OSTDSs, or part III of ch. 489.

<b>Statute</b>	<b>Administrative Remedies</b>	<b>Judicial Remedies</b>
Part I, ch. 403, F.S.	<ul style="list-style-type: none"> <li>• Institute an administrative proceeding to establish liability and recover damages for any injury to air, waters, or property of the state caused by any violation; the department may order the violator to pay damages to the state.</li> <li>• Institute an administrative proceeding to order the prevention, abatement, or control of the conditions creating the violation or other appropriate corrective action. Except for violations involving hazardous wastes, asbestos, or underground injection, the</li> </ul>	<ul style="list-style-type: none"> <li>• Institute a civil action in a court of competent jurisdiction to establish liability and to recover damages for any injury to the air, waters, or property, including animal, plant and aquatic life, of the state caused by any violation.</li> <li>• Institute a civil action in a court of competent jurisdiction to impose and to recover a</li> </ul>

<sup>32</sup> Section 381.0065(4)(e), F.S.

<sup>33</sup> *Id.*

<sup>34</sup> Section 381.00651(2), F.S. There are exceptions. If a county or municipality that contains a first magnitude spring has already adopted an OSTDS evaluation and assessment program, and it meets the grandfathering provisions of the statute, it is exempt from the requirement. The governing body of a local government can also choose to opt out of the requirement by adopting a resolution by a 60 percent vote that indicates an intent to not adopt an OSTDS evaluation and assessment program.

	<p>department shall proceed administratively when penalties sought do not exceed \$50,000 per assessment.</p> <ul style="list-style-type: none"> <li>• Institute an administrative proceeding by serving a written notice of violation upon the alleged violator by certified mail.</li> <li>• In any administrative proceeding brought by the department, the prevailing party shall recover all costs as provided by law.</li> <li>• For a drinking water contamination violation, a penalty of \$3,000 for a maximum containment level violation; plus \$1,500 if the violation is for a primary inorganic, organic, or radiological maximum contaminant level or it is a fecal coliform bacteria violation.</li> <li>• For failure to obtain a required wastewater permit, other than a permit required for surface water discharge, a penalty of \$2,000.</li> <li>• For failure to install, maintain, or use a required pollution control system or device, \$6,000.</li> <li>• For failure to obtain a required permit before construction or modification, \$4,500.</li> <li>• For failure to conduct required monitoring or testing; failure to conduct required release detection; or failure to construct in compliance with a permit, \$3,000.<sup>35</sup></li> </ul>	<p>civil penalty for each violation in an amount of not more than \$15,000 per offense.<sup>36</sup></p> <ul style="list-style-type: none"> <li>• Institute a civil action in a court of competent jurisdiction to seek injunctive relief.<sup>37</sup></li> </ul>
<p>Part I, ch. 386, F.S.</p>	<ul style="list-style-type: none"> <li>• Undertake required correctional procedures regarding sanitary nuisances, the cost or expense of which must be paid by the person(s) committing, creating, keeping, or maintaining such nuisance; institute a civil action if the cost and expense is not paid within 10 days of removal.</li> <li>• Institute administrative proceedings authorized pursuant to s. 381.0061, F.S., (DEP may impose a fine, which may not exceed \$500 for each violation of regulations relating to OSTDSs, septic tank contracting, and sanitary nuisances).<sup>38</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Institute criminal proceedings in the county court in the jurisdiction of which the condition exists against all persons failing to comply with notices to correct sanitary nuisance conditions.</li> <li>• Institute legal proceedings authorized pursuant to s. 381.0012, F.S., (DEP may apply for an injunction in the proper circuit court; DEP may receive a warrant from a trial court judge to carry out the purpose and intent of ch. 381,</li> </ul>

<sup>35</sup> Section 403.121, F.S.

<sup>36</sup> *Id.*

<sup>37</sup> Section 403.131, F.S.

<sup>38</sup> Section 386.03, F.S.



		F.S., relating to public health). <sup>39</sup>
Part III, ch. 489, F.S.	<ul style="list-style-type: none"> <li>• Revoke or suspend a certificate of registration for certain violations.<sup>40</sup></li> <li>• Deny a registration if the department determines that an applicant does not meet all requirements of this part or has violated any provisions of this part.<sup>41</sup></li> </ul>	<ul style="list-style-type: none"> <li>• None.</li> </ul>

**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>42</sup> States must also develop a list of threatened waters that may not meet water quality standards in the following reporting cycle.<sup>43</sup>

The DEP sorted those waters into 29 major watersheds, or basins, and further organized them into five basin groups for assessment purposes.<sup>44</sup> If the 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>45</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>46</sup> A waterbody may be removed from the verified list at any time during the TMDL process if it attains water quality standards.<sup>47</sup>

**Basin Management Action Plans**

BMAPs are one of the primary mechanisms the DEP uses to achieve TMDLs. BMAPs are plans that address the entire pollution load, including point and nonpoint discharges,<sup>48</sup> for a watershed.

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

<sup>40</sup> Section 489.556, F.S.

<sup>41</sup> Section 489.558, F.S.

<sup>42</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 Jan. 18, 2024); 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 Jan. 18, 2024).

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

<sup>44</sup> DEP, *Assessment Lists*, <https://floridadep.gov/dear/watershed-assessment-section/content/assessment-lists> (last visited Jan. 18, 2024).

<sup>45</sup> *Id.*; DEP, *Verified List Waterbody Ids (WBIDs)*, <https://geodata.dep.state.fl.us/datasets/FDEP::verified-list-waterbody-ids-wbids/about> (last visited Jan. 18, 2024); section 403.067(4), F.S.

<sup>46</sup> Section 403.067(6)(a), F.S. *See also* 33 U.S.C. § 1251, s. 303(d) (the Clean Water Act).

<sup>47</sup> Section 403.067(5), F.S.

<sup>48</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).

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>49</sup> A nonpoint source discharger may be subject to enforcement action by the DEP or a water management district for failure to implement these requirements.<sup>50</sup>

The 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>51</sup> Then, the BMAP establishes the schedule for implementing projects and activities to meet the pollution reduction allocations.<sup>52</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>53</sup> Every five years an assessment of progress toward these milestones must be conducted and revisions to the plan made as appropriate.<sup>54</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>55</sup>
- The source and amount of financial assistance to be made available; and
- A planning-level estimate of each project's expected load reduction, if applicable.<sup>56</sup>

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<sup>49</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>50</sup> Section 403.067(7)(b)2.h., F.S.

<sup>51</sup> *Id.*

<sup>52</sup> *Id.*

<sup>53</sup> Section 403.067(7)(a)6., F.S.

<sup>54</sup> *Id.*

<sup>55</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.

<sup>56</sup> Section 403.067(7)(a)4., F.S.

## Flooding and Sea Level Rise

Given Florida's flat topography<sup>57</sup> and extreme rainfall events, flooding has been an issue throughout the state's history.<sup>58</sup> The effects of climate change—including sea level rise, increased storm intensity, and increased frequency and severity of extreme rainfall events—have increased flooding in inland and coastal areas.<sup>59</sup>

Sea level rise is a direct effect of climate change, resulting from a combination of thermal expansion of warming ocean waters and the addition of water mass into the ocean, largely associated with the loss of ice from glaciers and ice sheets.<sup>60</sup> The global mean sea level has risen about 8–9 inches since 1880, and the rate of rise is accelerating: 0.06 inches per year throughout most of the twentieth century, 0.14 inches per year from 2006–2015, and 0.24 inches per year from 2018–2019.<sup>61</sup> In 2021, global sea levels set a new record high—3.8 inches above 1993 levels.<sup>62</sup>

The latest projections from the National Oceanic and Atmospheric Administration (NOAA) estimate that an average of two feet sea level rise can be expected over the next 50 years.<sup>63</sup> All coastal areas of Florida will be affected under this scenario.<sup>64</sup>

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<sup>57</sup> The Florida coastline has an average elevation of approximately 15 to 20 feet above mean sea level (MSL) with barrier islands typically at elevation zero to five feet above MSL. The southern portion of the state (south of Lake Okeechobee) is typically lower than 15 feet MSL. U.S. Army Corps of Engineers, *South Atlantic Coastal Study: Florida Appendix*, 3-26 (2022), available at [https://www.sad.usace.army.mil/Portals/60/siteimages/SACS/SACS\\_FL\\_Appendix\\_508\\_20220812.pdf?ver=XGRM8v-69\\_bdLAFPXEmlOg%3d%3d](https://www.sad.usace.army.mil/Portals/60/siteimages/SACS/SACS_FL_Appendix_508_20220812.pdf?ver=XGRM8v-69_bdLAFPXEmlOg%3d%3d).

<sup>58</sup> Florida Office of Economic and Demographic Research (EDR), *Annual Assessment of Flooding and Sea Level Rise*, 2 (2023), available at [http://edr.state.fl.us/Content/natural-resources/2023\\_AnnualAssessmentFloodingandSeaLevelRise\\_Chapter6.pdf](http://edr.state.fl.us/Content/natural-resources/2023_AnnualAssessmentFloodingandSeaLevelRise_Chapter6.pdf).

<sup>59</sup> National Aeronautics and Space Administration (NASA), *The Effects of Climate Change*, <https://climate.nasa.gov/effects/> (last visited Jan. 18, 2024).

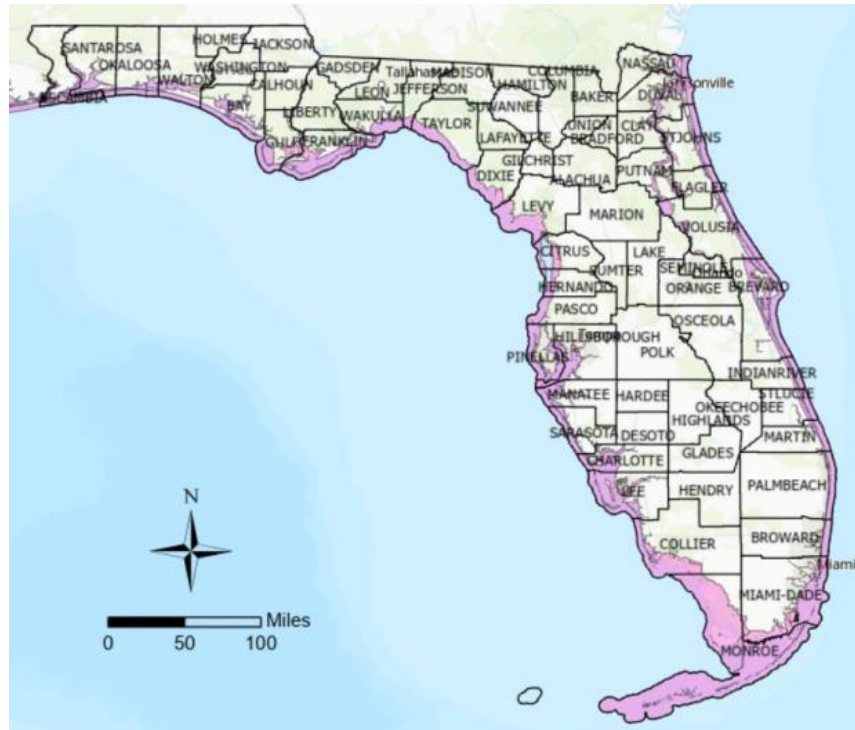
<sup>60</sup> National Oceanic and Atmospheric Administration (NOAA) et al., *Global and Regional Sea Level Rise Scenarios for the U.S.*, (2022) available at <https://oceanservice.noaa.gov/hazards/sealevelrise/sealevelrise-tech-report.html>.

<sup>61</sup> NOAA, *Climate Change: Global Sea Level*, <https://www.climate.gov/news-features/understanding-climate/climate-change-global-sea-level> (last visited Jan. 18, 2024).

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

<sup>63</sup> EDR, *Annual Assessment of Flooding and Sea Level Rise* at 20; NOAA, *Global and Regional Sea Level Rise Scenarios for the U.S.*, (2022) available at <https://oceanservice.noaa.gov/hazards/sealevelrise/sealevelrise-tech-report.html>.

<sup>64</sup> EDR, *Annual Assessment of Flooding and Sea Level Rise* at 21.



*Projection of 2 ft. Sea Level Rise<sup>65</sup>*

Over five million structures are estimated to be affected by flooding under a two-foot sea level rise scenario. The estimated value of these at-risk properties exceeds \$576 billion.<sup>66</sup>

Due to its porous geology, economic and property value, and the potential impact of various flooding hazards, southeast Florida is the area most at risk from sea level rise.<sup>67</sup> The effects of sea level rise are already apparent in this region and pose a threat to lives, livelihoods, economies, and the environment.<sup>68</sup> Physical impacts of sea level rise include coastal inundation and erosion, increased frequency of flooding in vulnerable coastal and inland areas due to impairment of the region’s largely gravity-driven stormwater infrastructure system, reduced soil infiltration capacity, and saltwater intrusion of drinking-water supply. Moreover, the impacts of surge from tropical storms or hurricanes are exacerbated by sea level rise. Increased pollution and contamination from flooding degrades natural resources critical to the region’s economy. Sea level rise can also result in displacement, decrease in property values and tax base, increases in insurance costs, loss of services, and impairment of infrastructure such as roads and septic systems.<sup>69</sup>

<sup>65</sup> *Id.* at 21.

<sup>66</sup> *Id.* at 24, 25.

<sup>67</sup> EDR, *Annual Assessment of Flooding and Sea Level Rise* at 2.

<sup>68</sup> Sea Level Rise Ad Hoc Work Group, Southeast Florida Regional Climate Change Compact (SFRCCC), *Unified Sea Level Rise Projection: Southeast Florida*, 5 (2019), available at [https://southeastfloridaclimatecompact.org/wp-content/uploads/2020/04/Sea-Level-Rise-Projection-Guidance-Report\\_FINAL\\_02212020.pdf](https://southeastfloridaclimatecompact.org/wp-content/uploads/2020/04/Sea-Level-Rise-Projection-Guidance-Report_FINAL_02212020.pdf).

<sup>69</sup> Sea Level Rise Ad Hoc Work Group, Southeast Florida Regional Climate Change Compact (SFRCCC), *Unified Sea Level Rise Projection: Southeast Florida* at 5.

## Sea Level Rise Projections

Entities from the international to the local level use scientific data and modeling to create projections of future sea level rise for planning and decision-making. The NOAA operates tide gauges along the nation’s coasts and satellites that measure changes in sea level. In 2017 and 2022, the NOAA published sea level rise projections for the U.S.<sup>70</sup> The NOAA’s projections include observation-based extrapolations and five scenarios ranging from “low” to “high.”<sup>71</sup> Interactive maps have been developed to depict local conditions under each NOAA scenario.<sup>72</sup>

## Resilience and Nature-Based Solutions

Resilience is the ability of a community to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions.<sup>73</sup> Resilience planning includes preparing for hazard events, risk mitigation, and post-event recovery and should be proactive, continuous, and integrated into other community goals and plans.<sup>74</sup>

Nature-based solutions are an important part of resilience planning. Nature-based solutions use natural features and processes to combat climate change, reduce flood risks, improve water quality, protect coastal property, restore and protect wetlands, and stabilize shorelines.<sup>75</sup>

Examples of nature-based solutions include:

- Living shorelines, which stabilize a shore by combining living components, such as plants, with structural elements, such as rock or sand. Living shorelines can slow waves, reduce erosion, and protect coastal property.
- Oyster reefs. Oysters are often referred to as “ecosystem engineers” because of their tendency to attach to hard surfaces and create large reefs made of thousands of individuals. In addition to offering shelter and food to coastal species, oyster reefs buffer coasts from waves and filter surrounding waters.
- Dunes, which often have dune grasses or other vegetation and serve as a barrier between the water’s edge and inland areas.<sup>76</sup>

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<sup>70</sup> NOAA, *Global and Regional Sea Level Rise Scenarios for the United States*, (2017), available at [https://tidesandcurrents.noaa.gov/publications/techrpt83\\_Global\\_and\\_Regional\\_SLR\\_Scenarios\\_for\\_the\\_US\\_final.pdf](https://tidesandcurrents.noaa.gov/publications/techrpt83_Global_and_Regional_SLR_Scenarios_for_the_US_final.pdf);

NOAA, *Global and Regional Sea Level Rise Scenarios for the United States*, (2022), available at <https://aambpublicoceanservice.blob.core.windows.net/oceanserviceprod/hazards/sealevelrise/noaa-nos-techrpt01-global-regional-SLR-scenarios-US.pdf>.

<sup>71</sup> NOAA, *Global and Regional Sea Level Rise Scenarios for the United States*, 15 (2022). The 2017 projections also included an “extreme” scenario, which has been removed from the 2022 report. See NOAA, *Global and Regional Sea Level Rise Scenarios for the United States*, 23 (2017).

<sup>72</sup> University of Florida, *Florida Sea Level Scenario Sketch Planning Tool*, <https://sls.geoplan.ufl.edu/viewer/> (last visited Jan. 18, 2024).

<sup>73</sup> Federal Emergency Management Agency (FEMA), *National Risk Index: Community Resilience*, <https://hazards.fema.gov/nri/community-resilience> (last visited Jan. 18, 2024).

<sup>74</sup> National Institute of Standards and Technology, U.S. Dep’t of Commerce, *Community Resilience Planning Guide for Buildings and Infrastructure Systems*, 1 (2016), available at <https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.1190v1.pdf>.

<sup>75</sup> FEMA, *FEMA Resources for Climate Resilience*, 5 (2021), available at [https://www.fema.gov/sites/default/files/documents/fema\\_resources-climate-resilience.pdf](https://www.fema.gov/sites/default/files/documents/fema_resources-climate-resilience.pdf).

<sup>76</sup> FEMA, *Types of Nature-Based Solutions*, <https://www.fema.gov/emergency-managers/risk-management/nature-based-solutions/types> (last visited Jan. 18, 2024).

## The Resilient Florida Grant Program

The Florida Legislature has established several statewide resilience programs, including the Resilient Florida Grant Program, the Comprehensive Statewide Flood Vulnerability and Sea Level Rise Data Set, and the Statewide Flooding and Sea Level Rise Resilience Plan.

The Resilient Florida Grant Program provides grants to counties or municipalities for community resilience planning, including vulnerability assessments, plan development, and projects to adapt critical assets.<sup>77</sup> In the program's first two years, 263 implementation projects were awarded a total of nearly \$954 million.<sup>78</sup> Vulnerability assessments funded through this program must encompass the entire county or municipality; use the most recent publicly available Digital Elevation Model and dynamic modeling techniques, if available; and analyze the vulnerability of and risks to critical assets,<sup>79</sup> including regionally significant assets.<sup>80</sup> In addition, vulnerability assessments must include, where applicable:

- Peril of flood comprehensive plan amendments that address the requirements of s. 163.3178(2)(f), F.S.,<sup>81</sup> if the county or municipality is subject to, but has not complied with, such requirements;
- The depth of tidal flooding, current and future storm surge flooding, rainfall-induced flooding (including for a 100-year and 500-year storm), and compound flooding or the combination of tidal, storm surge, and rainfall-induced flooding; and
- The following scenarios and standards:
  - All analyses in the North American Vertical Datum of 1988;<sup>82</sup>
  - At least two local sea level rise scenarios, which must include the 2017 NOAA intermediate-low and intermediate-high sea level rise projections;
  - At least two planning horizons that include planning horizons for the years 2040 and 2070; and

<sup>77</sup> Section 380.093(2)(a), F.S. "Critical asset" is defined to include broad lists of assets relating to transportation, critical infrastructure, emergency facilities, natural resources, and historical and cultural resources.

<sup>78</sup> This figure includes \$270 million of state funding for the Statewide Flooding and Sea Level Resilience Plan. DEP, *Presentation to the Florida Senate Committee on Environment and Natural Resources* (Feb. 23, 2023), available at [https://www.flsenate.gov/Committees/Show/SSHR/MeetingPacket/5700/10150\\_MeetingPacket\\_5700\\_2.23.23.pdf](https://www.flsenate.gov/Committees/Show/SSHR/MeetingPacket/5700/10150_MeetingPacket_5700_2.23.23.pdf).

<sup>79</sup> Critical assets include transportation assets and evacuation routes (airports, bridges, bus terminals, major roadways, etc.), critical infrastructure (wastewater and stormwater treatment facilities, drinking water facilities, solid and hazardous waste facilities, etc.), critical community and emergency facilities (schools, correctional facilities, fire stations, hospitals, etc.), and natural, cultural, and historical resources (conservation lands, parks, shorelines, wetlands, etc.). Section 380.093(2)(a), F.S.

<sup>80</sup> Section 380.093(3)(c), F.S. Regionally significant assets are critical assets that support the needs of communities spanning multiple geopolitical jurisdictions. Section 380.093(2)(d), F.S.

<sup>81</sup> This section provides that, in communities abutting the Gulf of Mexico or Atlantic Ocean or other coastal areas defined by statute, a local government's comprehensive plan must include a coastal management element. Sections 163.3178(2) and 163.3177(6)(g), F.S. This element must contain a redevelopment component that outlines the principles that must be used to eliminate inappropriate and unsafe development in the coastal areas when opportunities arise. Section 163.3178(2)(f), F.S.

<sup>82</sup> A vertical datum is a surface of zero elevation to which heights of various points are referenced. Traditionally, vertical datums have used classical survey methods to measure height differences (i.e. geodetic leveling) to best fit the surface of the earth. The current vertical datum for the contiguous United States and Alaska is the North American Vertical Datum of 1988. NOAA, *National Geodetic Survey: Vertical Datums*,

<https://www.ngs.noaa.gov/datums/vertical/#:~:text=TABLE%201%3A%20Current%20Vertical%20Datums%20for%20United%20States,%20202002-present%20201%20more%20rows%20> (last visited Jan. 18, 2024).

- Local sea level data that has been interpolated between the two closest NOAA tide gauges.<sup>83</sup>

The Comprehensive Statewide Flood Vulnerability and Sea Level Rise Data Set and Assessment will provide information necessary to determine the risks to inland and coastal communities.<sup>84</sup> By July 1, 2023, the DEP must develop a data set providing statewide sea level rise projections and information necessary to determine the risks of flooding and sea level rise to inland and coastal communities. By July 1, 2024, the DEP must develop a statewide assessment (using the statewide data set) identifying vulnerable infrastructure, geographic areas, and communities. The statewide assessment must include an inventory of critical assets and be updated every five years.<sup>85</sup>

The Statewide Flooding and Sea Level Rise Resilience Plan consists of ranked projects that address risks of flooding and sea level rise to coastal and inland communities.<sup>86</sup> Examples of projects include construction of living shorelines, seawalls, and pump stations, elevation projects, and infrastructure hardening.<sup>87</sup> Counties, municipalities, water management districts, regional water supply authorities, and other entities may submit to the DEP an annual list of proposed projects. Each project must have a minimum 50 percent cost share, unless the project assists or is within a financially disadvantaged community.<sup>88</sup> The DEP ranks the projects using a four-tier scoring system.<sup>89</sup> The DEP has adopted rules to implement s. 380.093, F.S., relating to the Statewide Flooding and Sea Level Rise Resilience Plan and project submittal requirements. These rules can be found in Chapter 62S-8 of the Florida Administrative Code.<sup>90</sup> In December 2022, the DEP submitted the FY 23-24 Statewide Flooding and Sea Level Rise Resilience Plan totaling nearly \$408 million over the next three years.<sup>91</sup>

The DEP may also provide funding for regional resilience entities to assist local governments with planning for the resilience needs of communities and coordinating intergovernmental solutions to mitigate adverse impacts of flooding and sea level rise.<sup>92</sup> As of February 2023, \$4 million had been appropriated to regional resilience entities.<sup>93</sup>

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<sup>83</sup> Section 380.093(3)(d)

<sup>84</sup> Section 380.093(4), F.S.; DEP, *Resilient Florida Program – Statewide Assessment*, <https://floridadep.gov/rcp/resilient-florida-program/content/resilient-florida-program-statewide-assessment> (last visited Jan. 18, 2024).

<sup>85</sup> *Id.* See also DEP, *Resilient Florida Program – Statewide Assessment*.

<sup>86</sup> Section 380.093(5), F.S.

<sup>87</sup> DEP, *2023-2024 Statewide Flooding and Sea Level Rise Resilience Plan*, available at

[https://floridadep.gov/sites/default/files/2023-24%20Statewide%20Flooding%20and%20Sea%20Level%20Rise%20Resilience%20Plan\\_0.pdf](https://floridadep.gov/sites/default/files/2023-24%20Statewide%20Flooding%20and%20Sea%20Level%20Rise%20Resilience%20Plan_0.pdf).

<sup>88</sup> Section 380.093(5)(e), F.S. A financially disadvantaged small community is a municipality with a population of 10,000 or fewer, or a county with a population of 50,000 or fewer, where the per capita annual income is less than the state's per capita annual income. *Id.*

<sup>89</sup> Section 380.093(5)(h), F.S.

<sup>90</sup> Fla. Admin. Code Chapter 62S-8, available at [https://floridadep.gov/sites/default/files/Final%20Rule%20Language\\_0.pdf](https://floridadep.gov/sites/default/files/Final%20Rule%20Language_0.pdf).

<sup>91</sup> DEP and Florida Statewide Office of Resilience, *2022 Flood Resilience and Mitigation Efforts Across Florida*, 9, available at [https://floridadep.gov/sites/default/files/2022%20Flood%20Resilience%20and%20Mitigation%20Efforts%20Report%20Only\\_0.pdf](https://floridadep.gov/sites/default/files/2022%20Flood%20Resilience%20and%20Mitigation%20Efforts%20Report%20Only_0.pdf)

<sup>92</sup> Section 380.093(6), F.S.

<sup>93</sup> DEP, *Presentation to the Florida Senate Committee on Environment and Natural Resources*, 18 (Feb. 23, 2023), available at [https://www.flsenate.gov/Committees/Show/SSHR/MeetingPacket/5700/10150\\_MeetingPacket\\_5700\\_2.23.23.pdf](https://www.flsenate.gov/Committees/Show/SSHR/MeetingPacket/5700/10150_MeetingPacket_5700_2.23.23.pdf).

In 2022, the Statewide Office of Resilience was created within the Executive Office of the Governor for the purpose of reviewing all flood resilience and mitigation activities in the state and coordinating flood resilience and mitigation efforts with federal, state, and local governmental entities and other stakeholders. The office's Chief Resilience Officer and the DEP worked together to provide the Governor and the Legislature with a report on flood resilience and mitigation efforts across Florida.<sup>94</sup>

### **Florida Flood Hub for Applied Research and Innovation**

The Florida Flood Hub for Applied Research and Innovation was established within the University of South Florida College of Marine Science to coordinate efforts between the academic and research institutions of the state.<sup>95</sup> The Florida Flood Hub is tasked with, among other things, organizing existing data needs for a comprehensive statewide flood vulnerability and sea level rise analysis and performing gap analyses to determine data needs; developing statewide open source hydrologic models for physically based flood frequency estimation and real-time forecasting of flood; establishing community-based programs to improve flood monitoring and prediction along major waterways; and providing tidal and storm surge flooding data to counties and municipalities for vulnerability assessments.<sup>96</sup>

### **Water Reuse**

Water reuse is an important component of both wastewater management and water resource management in Florida. Reuse is defined as the deliberate application of reclaimed water for a beneficial purpose.<sup>97</sup> Whereas, reclaimed water is defined as water from a domestic wastewater<sup>98</sup> treatment facility that has received at least secondary treatment<sup>99</sup> and basic disinfection<sup>100</sup> for reuse.<sup>101</sup>

Florida has approximately 2,000 permitted domestic wastewater treatment facilities.<sup>102</sup> These facilities may require state and federal permits for discharges to surface waters.<sup>103</sup> Federal requirements for most facilities or activities are generally incorporated into a state-issued

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<sup>94</sup> DEP and Florida Statewide Office of Resilience, *2022 Flood Resilience and Mitigation Efforts Across Florida*, 2, available at

[https://floridadep.gov/sites/default/files/2022%20Flood%20Resilience%20and%20Mitigation%20Efforts%20Report%20Only\\_0.pdf](https://floridadep.gov/sites/default/files/2022%20Flood%20Resilience%20and%20Mitigation%20Efforts%20Report%20Only_0.pdf); Letter from Department of Economic Opportunity to DEP, 1-2 (Nov. 9, 2022), available at [https://floridadep.gov/DEO\\_PoF\\_Letter2022](https://floridadep.gov/DEO_PoF_Letter2022).

<sup>95</sup> Section 380.0933(1), F.S.

<sup>96</sup> Section 380.0933(2) and (3), F.S.

<sup>97</sup> Fla. Admin. Code R. 62-610.200(52).

<sup>98</sup> Section 367.021(5), F.S., defines the term "domestic wastewater" to mean wastewater principally from dwellings, business buildings, institutions, and sanitary wastewater or sewage treatment plants.

<sup>99</sup> Fla. Admin. Code R. 62-610.200(54) defines the term "secondary treatment" to mean "wastewater treatment to a level that will achieve the effluent limitations specified in paragraph 62-600.420(1)(a), F.A.C."

<sup>100</sup> Fla. Admin. Code R. 62-600.440(5) provides the requirements for basic disinfection.

<sup>101</sup> Section 373.019(17), F.S.; Fla. Admin. Code R. 62-610.200(48).

<sup>102</sup> DEP, *General Facts and Statistics about Wastewater in Florida*, <https://floridadep.gov/water/domestic-wastewater/content/general-facts-and-statistics-about-wastewater-florida> (last visited Jan. 18, 2024).

<sup>103</sup> For required state permits, see Section 403.087, F.S.; see also DEP, *Wastewater Permitting*, available at <https://floridadep.gov/water/domestic-wastewater/content/wastewater-permitting> (last visited Jan. 18, 2024). For federal permits, see 33 U.S.C. s. 1342.



permit.<sup>104</sup> The DEP also regulates the construction and operation of domestic wastewater treatment facilities and establishes disinfection requirements for the reuse of reclaimed water.<sup>105</sup>

Reusing water helps conserve drinking water supplies by replacing the use of drinking quality water for non-drinking water purposes, such as irrigation, industrial cooling, groundwater recharge, and prevention of saltwater intrusion in coastal groundwater aquifers.<sup>106</sup> Water reuse also provides environmental benefits, including reduced groundwater withdrawals, reduced needs for new drinking water supplies and infrastructure, and improved water quality of the natural environment by reducing the amount of nutrients that are discharged directly to surface water and groundwater by wastewater treatment facilities.<sup>107</sup> The use of reclaimed water also provides for the recovery of water that would otherwise be lost to tide and evaporation.

In its rules, the DEP requires promotion of reuse of reclaimed water, recycling of stormwater for irrigation and other beneficial uses, recycling of industrial wastewater, and encourages local governments to create programs for reuse.<sup>108</sup> Water conservation and the promotion of water reuse have also been established as formal state objectives by the Legislature.<sup>109</sup> State law further provides that the use of reclaimed water provided by wastewater treatment plants permitted and operated under a reuse program by the DEP are considered environmentally acceptable and are not a threat to public health and safety.<sup>110</sup>

Florida tracks its reuse inventory in an annual report compiled by the DEP.<sup>111</sup> In 2021, a total of 455 domestic wastewater treatment facilities reported making reclaimed water available for reuse.<sup>112</sup> Approximately 908 million gallons per day (mgd) of reclaimed water were used for beneficial purposes in 2021,<sup>113</sup> which represents approximately 53 percent of the total domestic wastewater flow in the state.<sup>114</sup> The total reuse flow associated with reuse systems was 1,701 mgd,<sup>115</sup> which represents approximately 61 percent of the total domestic wastewater treatment flow in the state.<sup>116</sup>

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<sup>104</sup> Sections 403.061 and 403.087, F.S.

<sup>105</sup> Fla. Admin. Code R. 62-600.

<sup>106</sup> Martinez, Christopher J. and Clark, Mark W., *Reclaimed Water and Florida's Water Reuse Program*, UF/IFAS Agricultural and Biological Engineering Department (rev. 07/2012), available at <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.590.5063&rep=rep1&type=pdf>.

<sup>107</sup> *Id.*

<sup>108</sup> Fla. Admin. Code R. 62-40.416.

<sup>109</sup> Sections 403.064(1) and 373.250(1), F.S.

<sup>110</sup> *Id.*

<sup>111</sup> See DEP, *2021 Reuse Inventory Report* (2022), available at

<https://floridadep.gov/sites/default/files/2021%20Reuse%20Inventory.pdf>; compiled from reports collected pursuant to chapter 62-610 of the Florida Administrative Code.

<sup>112</sup> DEP, *2019 Reuse Inventory Report* at 2.

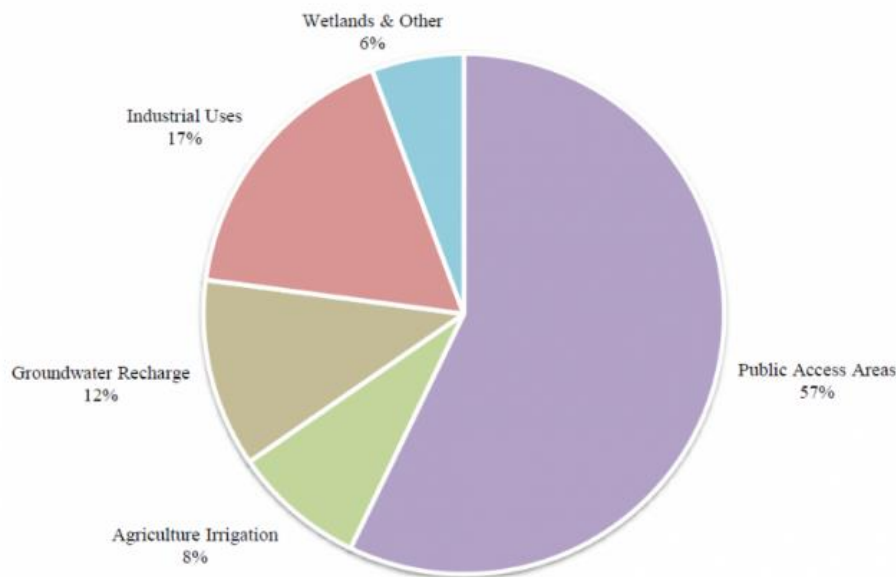
<sup>113</sup> This represents an average per capita reuse of 38.66 gallons per day per person. DEP, *Florida's Reuse Activities*, <https://floridadep.gov/water/domestic-wastewater/content/floridas-reuse-activities> (last visited Jan. 18, 2024).

<sup>114</sup> DEP, *2019 Reuse Inventory Report* at 2, 3.

<sup>115</sup> *Id.* at 2.

<sup>116</sup> *Id.* at 3.

The chart below shows the percentage of reclaimed water utilization by flow.<sup>117</sup>



Note: Agriculture irrigation includes edible crops (e.g., citrus) as well as feed and fodder crops (e.g., spray fields).

In 2021, the Legislature passed SB 64, which required domestic wastewater utilities that dispose of effluent, reclaimed water, or reuse water by surface water discharge to submit a plan for eliminating non-beneficial surface water discharge by January 2032.<sup>118</sup> The plan must include the average gallons per day that discharges are reduced, the average gallons per day of discharges that will continue, the level of treatment discharged water receives, and any modified or new plans submitted by a utility since the last report.<sup>119</sup>

SB 64 authorized discharges that are being beneficially used or otherwise regulated, including discharges associated with an indirect potable reuse project; permitted wet weather discharge; discharges into a stormwater management system, which are subsequently withdrawn for irrigation purposes; utilities that operate domestic wastewater treatment facilities with reuse systems that reuse at least 90 percent of a facility’s annual average flow; or discharges that provide direct ecological or public water supply benefits.<sup>120</sup> The bill further specified that potable reuse is an alternative water supply and made reuse projects eligible for alternative water supply funding and incentivized the development of potable reuse projects.<sup>121</sup>

***Reclaimed Water as Alternative Water Supply***

When traditional water supplies are constrained, alternative water supplies must be developed in addition to water conservation efforts. Alternative water supply can include reclaimed water,

<sup>117</sup> DEP, *Florida’s Reuse Activities*.  
<sup>118</sup> Chapter 2021-168, Laws of Fla.; s. 403.064(17), F.S.  
<sup>119</sup> *Id.*  
<sup>120</sup> *Id.*  
<sup>121</sup> *Id.*

brackish groundwater, surface water, and excess surface water captured and stored in reservoirs or aquifer storage and recovery wells.<sup>122</sup>

Reclaimed water is a type of alternative water supply and is eligible to receive alternative water supply funding.<sup>123</sup> Reclaimed water can be used for many purposes to meet water demand, including:

- Irrigation of golf courses, parks, residential properties, and landscaped areas;
- Urban uses, such as toilet flushing, car washing, and aesthetic purposes;
- Agricultural uses, such as irrigation of food crops, pasture lands, and at nurseries;
- Wetlands creation, restoration, and enhancement;
- Recharging groundwater through rapid infiltration basins, absorption fields, and direct injection;
- Augmentation of surface waters used for drinking water supplies; and
- Industrial uses such as processing and cooling water.<sup>124</sup>

### ***Regulation of Reclaimed Water***

Both the DEP and the water management districts (districts) play a regulatory role in the use of reclaimed water. The DEP regulations focus on water quality and ensure that reclaimed water is appropriately treated for its intended use to ensure protection of public health and the environment. The districts work with local utilities and water users to maximize the beneficial use of reclaimed water as an alternative water supply. The districts include alternative water supply projects in their regional water supply plans<sup>125</sup> and implement cost-share programs to assist communities in developing reclaimed water systems.<sup>126</sup>

In its rules, the DEP provides detailed reclaimed water treatment requirements depending upon how the reclaimed water will be used, including for groundwater recharge, surface water discharge, or to protect water quality.<sup>127</sup> In order to be reused as reclaimed water, domestic wastewater must meet, at minimum, a treatment standard of secondary treatment, basic disinfection, and pH control.<sup>128</sup> The regulations also include requirements for groundwater monitoring at reuse and land application sites.<sup>129</sup>

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<sup>122</sup> DEP, *Alternative Water Supply*, <https://floridadep.gov/water-policy/water-policy/content/alternative-water-supply/#Alternative%20Water%20Supplie> (last visited Jan. 18, 2024).

<sup>123</sup> Section 373.250(2), F.S.

<sup>124</sup> DEP, *Uses of Reclaimed Water*, <https://floridadep.gov/water/domestic-wastewater/content/uses-reclaimed-water> (last visited Jan. 18, 2024).

<sup>125</sup> Section 373.036(2), F.S.

<sup>126</sup> DEP, *Water Management District Reuse Programs*, <https://floridadep.gov/water/domestic-wastewater/content/water-management-district-reuse-programs> (last visited Jan. 18, 2024).

<sup>127</sup> Fla. Admin. Code R. 62-610.

<sup>128</sup> DEP, *Applicable Rules for Reuse Projects*, <https://floridadep.gov/water/domestic-wastewater/content/applicable-rules-reuse-projects#:~:text=Treatment%20and%20disinfection%20requirements%20for%20reuse%20of%20reclaimed,in%20order%20to%20be%20reused%20as%20reclaimed%20water> (last visited Jan. 18, 2024).

<sup>129</sup> Fla. Admin. Code R. 62-610.412.

The districts are responsible for the administration of water resources at a regional level, including programs to protect water supply, water quality, and natural systems.<sup>130</sup> The districts issue consumptive use permits (CUPs) to manage the use of water. A CUP allows the holder to withdraw a specified amount of water from surface water and groundwater sources for reasonable and beneficial use.<sup>131</sup> CUPs require water conservation to prevent wasteful uses, require the reuse of reclaimed water instead of higher-quality groundwater where appropriate, and set limits on the amount of water that can be withdrawn.<sup>132</sup> The districts may not require CUPs for reclaimed water.<sup>133</sup>

The districts also implement minimum flows and minimum water levels (MFLs) to balance public water supply needs with protection of the state's natural systems.<sup>134</sup> For water bodies that are below or projected to fall below their MFL, the districts are required to implement a recovery or prevention strategy to ensure the MFL is maintained.<sup>135</sup>

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<sup>130</sup> DEP, *Water Management Districts*, <https://floridadep.gov/water-policy/water-policy/content/water-management-districts> (last visited Jan. 18, 2024).

<sup>131</sup> South Florida Water Management District, *Consumptive Water Use Permits*, <https://www.sfwmd.gov/doing-business-with-us/permits/water-use-permits> (last visited Jan. 18, 2024).

<sup>132</sup> *Id.*

<sup>133</sup> Section 373.250, F.S.

<sup>134</sup> DEP, *Minimum Flows and Minimum Water Levels and Reservations*, <https://floridadep.gov/water-policy/water-policy/content/minimum-flows-and-minimum-water-levels-and-reservations> (last visited Jan. 18, 2024); *see also* section 373.042(1), F.S. Minimum flows and minimum water levels are the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area.

<sup>135</sup> *Id.*

### *Class I Injection Wells*

Class I injection wells are used to inject hazardous and non-hazardous wastes into deep, confined rock formations (see the image to the right).<sup>136</sup> Class I wells are typically drilled thousands of feet below the lowermost underground source of drinking water.<sup>137</sup> There are more than 180 active Class I wells in Florida, the majority of which dispose of non-hazardous, secondary-treated effluent from domestic wastewater treatment plants.<sup>138</sup> New hazardous waste wells were banned in Florida in 1983.<sup>139</sup>

Class I injection wells are required to be constructed, maintained, and operated so that the injection fluid remains in the injection zone, and the unapproved interchange of water between aquifers is prohibited. The wells are monitored so that any migration of injection fluids would be detected before reaching the underground source of drinking water.<sup>140</sup>

### *Aquatic Preserves*

The State of Florida passed the Aquatic Preserve Act in 1975 to ensure that the state-owned submerged lands in areas with exceptional biological, aesthetic, and scientific value were set aside forever as aquatic preserves or sanctuaries for the benefit of future generations.<sup>141</sup> There are currently 42 aquatic preserves encompassing about 2.2 million acres.<sup>142</sup> All but four are located along Florida's 8,400 miles of coastline.<sup>143</sup>

Aquatic preserves only include lands or water bottoms owned by the state. The Aquatic Preserve Act excludes any privately owned lands or water bottoms, or any publicly owned and maintained navigation channel or other public works project authorized by the U.S. Congress designed to improve or maintain commerce and



<sup>136</sup> U.S. Environmental Protection Agency, *Underground Injection Control, Class I Industrial and Municipal Waste Disposal Wells*, <https://www.epa.gov/uic/class-i-industrial-and-municipal-waste-disposal-wells> (last visited Jan. 18, 2024).

<sup>137</sup> *Id.*

<sup>138</sup> DEP, *UIC Wells Classification*, <https://floridadep.gov/water/aquifer-protection/content/uic-wells-classification#:~:text=In%20Florida%2C%20there%20are%20six%20classes%20of%20injection,than%20180%20active%20Class%20I%20wells%20in%20Florida> (last visited Jan., 18, 2024).

<sup>139</sup> *Id.*

<sup>140</sup> *Id.*

<sup>141</sup> Section 258.36, F.S.; DEP, *Aquatic Preserve Program*, <https://floridadep.gov/rcp/aquatic-preserve> (last visited Jan. 18, 2024).

<sup>142</sup> DEP, *Aquatic Preserve Program*; DEP, Geospatial Open Data, *Florida Aquatic Preserves*, <https://geodata.dep.state.fl.us/datasets/FDEP::florida-aquatic-preserves/explore?location=27.492338%2C-83.860873%2C5.95> (last visited Jan. 18, 2024); DEP, Office of Resilience and Coastal Protection, *Aquatic Preserve Program*, [https://floridaapdata.org/about\\_FCO.php](https://floridaapdata.org/about_FCO.php) (last visited Jan. 18, 2024).

<sup>143</sup> DEP ORCP, *Aquatic Preserve Program*.

navigation.<sup>144</sup> Further, the Aquatic Preserve Act excludes all lands lost by avulsion or artificially induced erosion.<sup>145</sup>

The Board of Trustees of the Internal Improvement Trust Fund (Board) may establish additional aquatic preserves, subject to confirmation by the Legislature.<sup>146</sup> Following public notice and public hearing in the county or counties in which the proposed preserve is to be located, the Board may adopt a resolution formally setting aside such areas. The resolution must include:

- A legal description of the area to be included;
- The designation of the type of aquatic preserve being set aside;
- A general statement of what is sought to be preserved; and
- A clear statement of the management responsibilities for the area.<sup>147</sup>

Privately-owned lands and water bottoms may be included in an aquatic preserve upon specific authorization from the owner as a dedication in perpetuity or a lease.<sup>148</sup>

Current law restricts certain activities in aquatic preserves, including the construction of utility cables and pipes and spoil disposal.<sup>149</sup> Further, the Board may not:

- Sell, lease, or transfer sovereign submerged lands<sup>150</sup> unless it is in the public interest.
- Approve the waterward relocation or setting of bulkhead lines waterward of the line of mean high water within the preserve, except when public road and bridge construction projects have no reasonable alternative and it is not contrary to the public interest.
- Approve further dredging or filling of submerged lands, except for certain activities that must be authorized pursuant to a permit.<sup>151</sup>

Only minimal or maintenance dredging is permitted in an aquatic preserve and any alteration of the preserves' physical conditions is restricted unless the alteration enhances the quality or utility of the preserve or the public health generally.<sup>152</sup> Oil and gas well drilling is prohibited within the aquatic preserve. Docking facilities and structures for shore protection are restricted as to size and location.<sup>153</sup>

No wastes or effluents may be discharged into an aquatic preserve if they substantially inhibit the accomplishment of the purposes of the Aquatic Preserve Act. Riparian owners may selectively trim or alter mangroves on adjacent publicly owned submerged lands, provided that the selective

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<sup>144</sup> Section 258.40, F.S.

<sup>145</sup> *Id.*

<sup>146</sup> Section 258.41, F.S.

<sup>147</sup> *Id.*

<sup>148</sup> *Id.*

<sup>149</sup> Section 258.42, F.S.

<sup>150</sup> Sovereign submerged lands include, but are not limited to, tidal lands, islands, sandbars, shallow banks, and lands waterward of the ordinary or mean high water line, beneath navigable fresh water or beneath tidally influenced waters. The Board holds title to sovereign submerged lands. DEP, *Submerged Lands Management*, <https://floridadep.gov/lands/bureau-public-land-administration/content/submerged-lands-management> (last visited Jan 18, 2024).

<sup>151</sup> Section 258.42, F.S.

<sup>152</sup> Fla. Admin. Code R. 18-20.004. Note that every aquatic preserve in the state has specific restrictions and policies that are set out in the Florida Administrative Code and/or ch. 258, F.S.

<sup>153</sup> Section 258.42, F.S. Administrative rules applicable to aquatic preserves generally may be found in Chapters 18-20, F.A.C., Management Policies, Standards and Criteria.

trimming or alteration is in compliance with the requirements of state law including permit requirements for mangrove trimming.<sup>154</sup>

Leases of sovereign submerged lands are more costly within aquatic preserves. A rate of two times the existing rate is applied to aquatic preserve leases if 75 percent or more of the lease shoreline and the adjacent 1000 feet on either side of the leased area is in a natural, unbulkheaded, non-seawalled or non-riprapped condition.<sup>155</sup>

The Board has a duty to conserve and improve state-owned lands and the products thereof, which includes the preservation and regeneration of seagrass.<sup>156</sup> A person operating a vessel outside a lawfully marked channel in a careless manner that causes seagrass scarring within an aquatic preserve, with the exception of the Lake Jackson, Oklawaha River, Wekiva River, and Rainbow Springs aquatic preserves, commits a noncriminal infraction. The Nature Coast Aquatic Preserve is also not included. The penalties are as follows:

- \$100 for a first offense;
- \$250 for a second offense occurring within 12 months of a prior conviction;
- \$500 for a third offense occurring within 36 months of a prior conviction; and
- \$1,000 for a fourth or subsequent offense occurring within 72 months of a prior conviction.<sup>157</sup>

### ***The Nature Coast Aquatic Preserve***

The Florida Legislature designated the Nature Coast Aquatic Preserve in 2020<sup>158</sup> and it is the 42<sup>nd</sup> aquatic preserve.<sup>159</sup> The preserve is the second-largest in Florida. It encompasses 800 square miles of coastal waters, including 625 miles of shoreline along Citrus, Hernando, and Pasco Counties. The preserve is bordered to the north and south by three other aquatic preserves. The combination of all four aquatic preserves protects the largest contiguous seagrass meadow in the Gulf of Mexico and the largest spring-fed seagrass habitat in the world.<sup>160</sup>

The preserve by itself protects nearly 400,000 acres of seagrass that support working waterfront industries, including fisheries, seafood production, and ecotourism. The preserve also includes mangrove islands, saltmarsh, sponge beds, marine springs, oyster reefs, and limestone hardbottom habitats.<sup>161</sup>

### ***Kristin Jacobs Coral Reef Ecosystem Conservation Area***

The Kristin Jacobs Coral Reef Ecosystem Conservation Area, formerly known as the Southeast Florida Coral Reef Initiative, was officially established on July 1, 2018.<sup>162</sup> The conservation area

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<sup>154</sup> Section 258.42, F.S.

<sup>155</sup> Fla. Admin. Code Rule 18-21.011(1)(b)5.

<sup>156</sup> Section 253.04(3), F.S.

<sup>157</sup> Section 327.73(x), F.S.

<sup>158</sup> Section 258.3991, F.S.

<sup>159</sup> DEP, *Nature Coast Aquatic Preserve*, <https://floridadep.gov/NatureCoastAP> (last visited Jan. 18, 2024).

<sup>160</sup> *Id.*

<sup>161</sup> *Id.*

<sup>162</sup> Section 253.90, F.S.; DEP, *Coral ECA: Kristin Jacobs Coral Reef Ecosystem Conservation Area*, <https://floridadep.gov/rcp/coral/content/coral-eca-kristin-jacobs-coral-reef-ecosystem-conservation-area> (last visited Jan. 18, 2024).

is the northernmost section of Florida's coral reef and runs 105 miles from the St. Lucie Inlet to the northern boundary of Biscayne National Park. The conservation area is part of the only barrier reef system in the continental U.S. and is home to more than 6,000 species of marine life including fish, stony corals, gorgonians, sponges, and other marine invertebrates.<sup>163</sup>

### III. Effect of Proposed Changes:

**Section 1** amends s. 253.04, F.S., to extend the area in which a person operating a vessel outside a lawfully marked channel in a careless manner that causes seagrass scarring within an aquatic preserve commits a noncriminal infraction. The area now includes the Nature Coast Aquatic Preserve.

**Section 2** amends s. 258.39, F.S., to declare as an aquatic preserve the Kristin Jacobs Coral Reef Ecosystem Conservation Area, as designated by chapter 2021-107, Laws of Florida, the boundaries of which consist of the sovereignty submerged lands and waters of the state offshore of Broward, Martin, Miami-Dade, and Palm Beach Counties from the St. Lucie Inlet to the northern boundary of the Biscayne National Park.

**Section 3** amends s. 373.250, F.S., to direct each water management district, in coordination with the Department of Environmental Protection (DEP), to develop rules by December 31, 2025, to promote the use of reclaimed water and encourage potable quantifiable water offsets that produce significant water savings beyond those required in a consumptive use permit.

The bill requires that the rules must provide that if an applicant proposes a water supply development or water resource development project using reclaimed water that meets the advanced wastewater treatment standards for total nitrogen and total phosphorous as part of an application for consumptive use, the applicant is eligible for a permit duration of up to 30 years if there is sufficient data to provide reasonable assurance that the conditions for permit issuance will be met for the duration of the permit. The bill provides that the rules developed pursuant to this paragraph must include, at a minimum:

- A requirement that the permittee demonstrate how quantifiable groundwater or surface water savings associated with the new water supply development or water resource development project helps meet water demands beyond a 20-year permit duration or is completed to benefit a waterbody with a minimum flow or minimum water level with a recovery or prevention strategy; and
- Guidelines for a district to follow in determining the permit duration based on the project's implementation.

The bill requires that the rules must also provide authorization for a consumptive use permittee to seek a permit extension of up to 10 years if the permittee proposes a water supply development or water resource development project using reclaimed water that meets the advanced wastewater treatment standards for total nitrogen and total phosphorous during the term of its permit which results in the reduction of groundwater or surface water withdrawals or is completed to benefit a waterbody with a minimum flow or minimum water level with a

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<sup>163</sup> DEP, *Coral ECA: Kristin Jacobs Coral Reef Ecosystem Conservation Area*.



recovery or prevention strategy. The bill provides that rules associated with this paragraph must include, at a minimum:

- A requirement that the permittee be in compliance with the permittee's consumptive use permit;
- A requirement that the permittee demonstrate how the quantifiable groundwater or surface water savings associated with the new water supply development or water resource development project helps meet water demands beyond the issued permit duration or benefits a waterbody with a minimum flow or minimum water level with a recover or prevention strategy;
- A requirement that the permittee demonstrate a water demand for the permit's allocation through the term of the extension; and
- Guidelines for a district to follow in determining the number of years extended, including a minimum year requirement, based on the project implementation.

The bill expressly states that these provisions do not limit the existing authority of a water management district to protect from harm the water resources or ecology of the area, or to otherwise ensure compliance with the conditions for permit issuance.

**Section 4** amends s. 380.093, F.S., to define the "Florida Flood Hub" as the Florida Flood Hub for Applied Research and Innovation established pursuant to s. 380.0933, F.S.

The bill amends the definition of "preconstruction activities" to specify that the activities are those associated with a project that *addresses the risks of flooding and sea level rise* that occur before construction begins.

#### Resilient Florida Grant Program

The bill provides that the DEP may provide grants to a county or municipality to fund updates to the county's or municipality's inventory of critical assets, including regionally significant assets that are currently or reasonably expected to be impacted by flooding and sea level rise. The bill adds that the updated inventory must be submitted to the DEP and, at the time of submission, must reflect all such assets that are currently, or within 50 years may reasonably be expected to be, impacted by flooding and sea level rise.

The bill adds that the DEP may provide grants to a county or municipality to fund the development of strategies, in addition to projects, plans, and policies, that enhance community preparations for threats from flooding and sea level rise, including adaptation plans that help local governments prioritize project development and implementation across one or more jurisdictions in a manner consistent with departmental guidance.

The bill specifies that, under the grant program, the DEP may provide grants to a county or municipality for the cost of permitting for projects designed to achieve reductions in the risks or impacts of flooding and sea level rise using nature-based solutions.

The bill requires that, upon completion of a vulnerability assessment, the county or municipality must submit to the DEP an inventory of critical assets, including regionally significant assets that

are currently, or within 50 years are reasonably expected to be, impacted by flooding and sea level rise.

The bill requires that a vulnerability assessment make use of the best available information through the Florida Flood Hub as certified by the Chief Science Officer, in consultation with the Chief Resilience Officer. The bill adds that this includes analyzing impacts related to the depth of tidal flooding, current and future storm surge flooding, and rainfall-induced flooding, which are already listed in statute. With regard to current and future storm surge flooding, the bill removes language directing the use of publicly available National Oceanic and Atmospheric Administration (NOAA) or Federal Emergency Management Agency storm surge data, unless there is an absence of applicable data from the Florida Flood Hub. Further, the bill adds that higher frequency storm events may be analyzed to understand the exposure of a regionally significant asset. With regard to rainfall-induced flooding, the bill specifies that a spatiotemporal analysis used in the analysis must be GIS-based.

The bill requires that a vulnerability assessment initiated after July 1, 2024, must apply at a minimum the 2022 NOAA intermediate-low and intermediate sea level rise scenarios or the statewide sea level rise projections developed pursuant to the comprehensive statewide flood vulnerability and sea level rise assessment. This replaces language in current law requiring two local sea level rise scenarios that must include the 2017 NOAA intermediate-low and intermediate-high sea level rise scenarios.

The bill adds that a vulnerability assessment apply at least two planning horizons that are identified in the following table which correspond with the appropriate comprehensive statewide flood vulnerability and sea level rise assessment for which the DEP, at the time of award, determines such local vulnerability assessment will be incorporated:

Year of assessment	20-year planning horizon	50-year planning horizon
2024	2040	2070
2029	2050	2080
2034	2055	2085
2039	2060	2090
2044	2065	2095
2049	2070	2100

The bill requires that the local sea level data required to be applied in a vulnerability assessment must be the data maintained by the Florida Flood Hub which reflect the best available scientific information as certified by the Chief Science Officer, in consultation with the Chief Resilience Officer. If such data is not available, then the bill allows the use of local sea level data that may be interpolated between the two closest NOAA tide gauges.

Comprehensive Statewide Flood Vulnerability and Sea Level Rise Data Set and Assessment

The bill updates an out-of-date requirement, to require the DEP to develop and maintain a comprehensive statewide flood vulnerability and sea level rise data set. The bill directs the DEP to develop and maintain the data set in coordination with the Chief Resilience Officer. The bill

requires the compilation, analysis, and incorporation of information related to critical asset inventories. The bill requires the Chief Science Officer to coordinate specifically with the Chief Resilience Officer and the Florida Flood Hub to develop statewide sea level rise projections. The bill updates an out-of-date provision and requires the DEP to coordinate with the Chief Resilience Officer and the Florida Flood Hub, to complete a comprehensive statewide flood vulnerability and sea level rise assessment. The bill requires that the assessment must include the 20- and 50-year projected sea level rise at each active NOAA tidal gauge off the coast of this state as derived from the statewide sea level rise projections.

The bill requires the DEP to coordinate with the Chief Resilience Officer and the Florida Flood Hub to update the comprehensive statewide flood vulnerability and sea level rise data set using the best available information each year at least every five years. The bill removes language requiring the DEP to update the data set and assessment more frequently than every five years if it determines that updates are necessary to maintain their validity.

#### Statewide Flooding and Sea Level Rise Resilience Plan

The bill removes an out-of-date requirement regarding a preliminary plan to be submitted by December 1, 2021. The bill requires that each annual plan must *primarily* address risks of flooding and sea level rise, but adds that it may also include, at the DEP's discretion in consultation with the Chief Resilience Officer, certain other projects that address risks of flooding and sea level rise to critical assets not yet identified in the comprehensive statewide flood vulnerability and sea level rise assessment.

The bill specifies that local governments, special districts, and regional resilience entities may submit proposed projects that address risks of flooding or sea level rise identified in the comprehensive statewide flood vulnerability and sea level rise assessment.

The bill extends the deadline for counties, municipalities, special districts, and regional resilience entities acting on behalf of one or more member counties or municipalities to submit projects identified in existing vulnerability assessments that do not comply with the requirements of the Resilient Florida Grant Program to December 1, 2024. Such entities may submit those projects only if the entity is actively developing a vulnerability assessment that is either under a signed grant agreement with the DEP pursuant to the grant program or funded by another state or federal agency, or is self-funded and intended to meet the grant program's vulnerability assessment requirements or the existing vulnerability assessment was completed using previously compliant statutory requirements. The bill provides that projects identified from this category of vulnerability assessments are eligible for submittal until the prior vulnerability assessment has been updated to meet the most recent statutory requirements

The bill removes the term "financially disadvantaged community" for purposes of reduced cost share and replaces it with the term "community eligible for reduced cost share" and includes a municipality or county with a per capita annual income that is equal to or less than 75 percent of the state's per capita annual income as shown in the most recent release from the Bureau of the Census of the United States Department of Commerce.

The bill specifies that water management, drainage, erosion control, and flood control districts and regional water supply authorities may submit proposed projects that address risks of flooding or sea level rise identified in the comprehensive statewide flood vulnerability and sea level rise assessment or vulnerability assessments that meet the requirements of the Resilient Florida Grant Program.

The bill removes language requiring that for a project to be eligible for inclusion in the plan, it must have been submitted by an authorized entity or must have been identified in the comprehensive statewide flood vulnerability and sea level rise assessment, as applicable.

The bill authorizes the DEP to adopt rules to implement this section.

### Regional Resilience Entities

The bill specifically includes regional planning councils and estuary partnerships as regional entities that may receive funding for certain purposes.

The bill specifies that one of the purposes for which the DEP may provide funding to certain regional entities is to coordinate and conduct activities authorized by the Resilient Florida Grant Program with broad regional benefit or on behalf of multiple member counties and municipalities. This replaces language authorizing the DEP to provide funding for the purpose of coordinating multijurisdictional vulnerability assessments.

**Section 5** amends s. 381.0061, F.S., to remove an authorization allowing the Department of Health (DOH) to impose a fine for a violation of the laws relating to onsite sewage treatment and disposal systems (OSTDSs) regulations, OSTDS fees, and septic tank contracting.

The bill specifies that the DOH may impose a fine for a violation of any rule adopted by the DOH under ch. 381, F.S., relating to public health, or for a violation of ch. 386, F.S., relating to sanitary nuisances and the Florida Clean Air Act, that does not involve OSTDSs.

**Section 6** provides that the Legislature intends that the transfer of the regulation of the Onsite Sewage Program from the DOH to the DEP, as required by the Clean Waterways Act, be completed in a phased approach.

The bill directs that before the phased transfer, the DEP must coordinate with the DOH to identify equipment and vehicles that were previously used to carry out the program in each county and that are no longer needed for such purpose. The DOH must transfer the agreed-upon equipment and vehicles to the DEP, to the extent that each county agrees to relinquish ownership of such equipment and vehicles to the DOH.

The bill provides that when the DEP begins implementing the program within a county, the DOH may no longer implement or collect fees for the program unless specified by separate delegation or contract with the DEP.

**Section 7** amends s. 381.0065, F.S., to specify that the DEP must conduct enforcement activities in accordance with part I of chapter 403, F.S., relating to pollution control, as well as for a violation of any rule adopted by the DEP under laws regulating OSTDSs, sanitary nuisances relating to OSTDSs, or septic tank contracting.

The bill adds that all references in this section (s. 381.0065, F.S.) to part I of chapter 386, regarding sanitary nuisances, relate solely to nuisances that involve improperly built or maintained septic tanks or other OSTDSs and untreated or improperly treated or transported waste from OSTDSs. The bill provides that the DEP shall have all the duties and authorities of the DOH for sanitary nuisances involving OSTDSs. The bill provides that this authority is in addition to and may be pursued independently of or simultaneously with the enforcement remedies provided under this section relating to OSTDSs regulations and ch. 403, F.S., relating to pollution control.

The bill directs the DEP to adopt rules establishing and implementing a program of general permits for projects, or categories of projects, which have, individually or cumulatively, a minimal adverse impact on public health or the environment. The rules must:

- Specify design or performance criteria which, if applied, would result in compliance with appropriate standards; and
- Authorize a person who complies with the general permit eligibility requirements to use the permit 30 days after giving notice to the DEP without any agency action by the DEP. Within the 30-day notice period, the DEP shall determine whether the activity qualifies for a general permit. Further, if the activity does not qualify or the notice does not contain all the required information, the DEP must notify the person.

The bill specifies that for DEP personnel to gain entry to a residence or private building, the DEP must obtain permission from the owner or occupant or secure an inspection warrant from a court of competent jurisdiction pursuant to the procedures of s. 403.091, F.S., relating to inspections (see Section 13 of the bill). The bill removes language authorizing the DEP to issue citations that may contain an order of correction or an order to pay a fine, or both, and instead provides that the DEP has all the judicial and administrative remedies available to it pursuant to part I of ch. 403, F.S., relating to pollution control.

The bill removes all requirements relating to the DEP issuing citations.

The bill provides that DEP shall deposit any damages, costs, or penalties it collects pursuant to this section on OSTDSs regulations and part I of ch. 403, F.S., relating to pollution control, in the Water Quality Assurance Trust Fund. The bill removes language directing the DEP to deposit money from fines into the county health department trust fund.

**Section 8** amends s. 381.0066, F.S., relating to OSTDS fees, to provide that the fee schedule for application review, permit issuance, or system inspection applies when performed by the DEP or a private provider inspector.

The bill removes language providing that fees collected with respect to OSTDS must be deposited in a trust fund administered by the DEP, to be used for purposes stated in the OSTDS fees and regulations laws. The bill directs that funds collected for the implementation of OSTDS

regulation, connection of existing OSTDSs to central sewerage systems, and corrective orders relating to OSTDSs and private and certain public water systems, subsequent to any phased transfer of implementation from the DOH to the DEP within any county, must be deposited in the Florida Permit Fee Trust Fund, to be administered by the DEP.

**Section 9** amends s. 403.061, F.S., to direct that, upon direction of the DEP, all counties must make available necessary scientific, technical, research, administrative, and operational services and facilities. Current law only requires all state agencies to make these services and facilities available.

**Section 10** amends s. 403.064, F.S., to provide a Legislative finding that the reuse of reclaimed water is a critical component of meeting the state's existing and future water supply needs while sustaining natural systems and encouraging its best and most beneficial use.

Therefore, the bill would require *all* applicants for permits to construct and operate a domestic wastewater treatment facility to prepare a reuse feasibility study. Currently, this requirement is limited to wastewater treatment facilities discharging to a water resource caution area.

The bill makes the following changes to the content requirements of reuse feasibility studies:

- A reuse feasibility study must include an evaluation of the estimated water savings resulting from different types of reuse, if implemented;
- A reuse feasibility study must include an evaluation of environmental and water resource benefits associated with different types of reuse;
- A reuse feasibility study must include an evaluation of economic, environmental, and technical constraints associated with the different types of reuse, including any constraints caused by potential water quality impacts.

The bill requires that a domestic wastewater treatment facility that disposes of effluent or a portion thereof by Class I deep well injection, surface water discharge, land application, or other method to dispose of effluent or a portion thereof must give consideration to direct ecological or public water supply benefits afforded by any disposal and implement reuse to the degree that it is feasible.

**Section 11** amends s. 403.067, F.S., to specify that if a local government is required to develop a wastewater treatment plan as part of a basin management action plan (BMAP), that plan is a *domestic* wastewater treatment plan. The bill adds that public and private domestic wastewater treatment facilities that specifically provide services or are located within the jurisdiction of the local government must participate in developing the domestic wastewater treatment plan.

The bill adds that private domestic wastewater facilities and special districts providing domestic wastewater services must provide the required wastewater facility information to the applicable local governments.

**Section 12** amends s. 403.0673, F.S., which creates the water quality improvement grant program to require the DEP in the annual report to the Governor, the President of the Senate, and the Speaker of the House of Representatives on projects funded in the water quality grant program to include a status report on each project funded since 2021. The status report must, at a

minimum, identify which projects have been completed and, if such information is available, provide nutrient load improvements or water quality testing data for the waterbody. The bill also directs the DEP to include projects funded under the water quality grant program on a user-friendly website or dashboard.

**Section 13** amends s. 403.086, F.S., to require that by July 1, 2034, within a BMAP or a reasonable assurance plan area, any wastewater treatment facility providing reclaimed water that will be used for commercial or residential irrigation or be otherwise land applied must meet the standards for advanced waste treatment for total nitrogen and phosphorous as set in statute,<sup>164</sup> if the DEP has determined in an applicable BMAP or reasonable assurance plan that the use of reclaimed water is contributing to the nutrient impairment being addressed in such plan. The bill provides that for such DEP determinations made in a nutrient BMAP or reasonable assurance plan after July 1, 2024, an applicable wastewater treatment facility must meet the requisite advanced wastewater treatment standards within 10 years after such determination. The DEP is not prevented from requiring an alternative treatment standard, including a more stringent treatment standard, if the DEP determines that alternative standard is necessary to achieve the total maximum daily load or applicable water quality criteria. The bill provides that this criteria does not apply to reclaimed water that is otherwise land applied as part of a water quality restoration project or water resource development project approved by the DEP to meet a total maximum daily load or minimum flow or level and where such reclaimed water will be at or below the advanced wastewater treatment standards before entering groundwater or surface water.

**Section 14** amends s. 403.091, F.S., to provide that any duly authorized representative of the DEP may at any reasonable time enter and inspect, for the purpose of ascertaining the state of compliance with the law or rules and regulations of the DEP, any property, premises, or place, except a building used exclusively for a private residence, on or at which an OSTDS is located or is being constructed or installed or where certain required records are kept.

The bill provides that any authorized representative may at any reasonable times obtain any other information necessary to determine compliance with permit conditions or other requirements of OSTDSs regulations, sanitary nuisances for purposes of OSTDSs only, septic tank contracting, or rules of standards adopted pursuant thereto. The bill adds that an inspection warrant may be issued:

- When it appears that the properties to be inspected may be connected with or contain evidence of the violation of any of the laws listed above.
- When the inspection sought is an integral part of a larger scheme of systematic routine inspections which are necessary to, and consistent with, the continuing efforts of the DEP to ensure compliance with the law listed above.

**Section 15** amends s. 403.121, F.S., to provide that the DEP shall have certain judicial and administrative remedies available to it for violations of statutes relating to:

- General requirements for OSTDSs (ss. 381.0065-381.0067, F.S.);
- Sanitary nuisances for purposes of OSTDSs only (part I of ch. 386, F.S.);
- Septic tank contracting (part III of ch. 489, F.S., or any rule promulgated thereunder).

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<sup>164</sup> Section 403.086(4), F.S.

With regard to the schedule for administrative penalties, the DEP shall assess a penalty of \$2,000 for the following violations:

- Failure to obtain an OSTDS permit or for another violation of s. 381.0065, F.S., relating to OSTDSs regulations;
- The creation of or maintenance of a nuisance related to an OSTDS under part I of ch. 386, F.S.; or
- For a violation of part III of ch. 489, relating to septic tank contracting, or any rule properly promulgated thereunder.

The bill adds that each day the cause of a sanitary nuisance is not addressed constitutes a separate offense.

**Section 16** amends s. 403.9301, F.S., to require the Office of Economic and Demographic Research to provide, beginning July 1, 2024, and annually thereafter, a publicly-accessible data visualization tool on its website related to its statewide wastewater services projections.

**Section 17** amends s. 403.9302, F.S., to require the Office of Economic and Demographic Research to provide, beginning July 1, 2024, and annually thereafter, a publicly accessible data visualization tool on its website related to its statewide stormwater services projections.

**Section 18** amends s. 403.0671, F.S., to clarify that BMAP wastewater reports must include projects to construct, upgrade, or expand domestic wastewater treatment facilities to meet the *domestic* wastewater treatment plan. This change conforms to amendments made in Section 11 of the bill.

**Sections 19** reenacts s. 327.73(1)(x), F.S., relating to noncriminal infractions, to incorporate the amendment made by this bill in a reference to the amended section.

**Section 20** reenacts s. 381.0072(4)(a) and (6)(a), F.S., relating to food service protection, to incorporate the amendment made by this bill in a reference to the amended section.

**Section 21** reenacts s. 381.0086(4), F.S., relating to public health rules, variances, and penalties, to incorporate the amendment made by this bill in a reference to the amended section.

**Section 22** reenacts s. 381.0098(7), F.S., relating to biomedical waste, to incorporate the amendment made by this bill in a reference to the amended section.

**Section 23** reenacts s. 513.10(2), F.S., relating to operating a mobile home or recreational vehicle park without a permit, enforcement, and penalties, to incorporate the amendment made by this bill in a reference to the amended section.

**Section 24** provides an effective date of July 1, 2024.



**IV. Constitutional Issues:****A. Municipality/County Mandates Restrictions:**

Article VII, s. 18 of the Florida Constitution prohibits a general law that requires a county or municipality to spend funds to take an action requiring the expenditure of funds, unless the law fulfills an important state interest and unless an exception applies. This bill may contain a local mandate because it requires all counties, at the direction of the Department of Environmental Protection, to make available necessary scientific, technical, research, administrative, and operational services and facilities. Because these are services and facilities that the local government would already have available, the exemption for insignificant fiscal impacts may apply.

**B. Public Records/Open Meetings Issues:**

None.

**C. Trust Funds Restrictions:**

None.

**D. State Tax or Fee Increases:**

None.

**E. Other Constitutional Issues:**

None.

**V. Fiscal Impact Statement:****A. Tax/Fee Issues:**

None.

**B. Private Sector Impact:**

The Department of Environmental Protection (DEP) shall assess a penalty of \$2,000 for the following violations:

- Failure to obtain an OSTDS permit or for another violation of s. 381.0065, F.S., relating to OSTDSs regulations;
- The creation of or maintenance of a nuisance related to an OSTDS under part I of ch. 386, F.S.; or
- For a violation of part III of ch. 489, relating to septic tank contracting, or any rule properly promulgated thereunder.

**C. Government Sector Impact:**

This bill may have a positive fiscal impact on certain local governments, because opportunities for reduced cost share now includes a municipality or county with a per capita annual income that is equal or less than 75 percent of the state's per capita annual income as shown in the most recent census for the Resilient Florida Grant Program. With more counties and municipalities available for reduced cost share and a finite amount of funds, some counties and municipalities may not receive grants that they may otherwise have.

This bill may have a negative fiscal impact on local governments due to the requirement that all counties must make available necessary scientific, technical, research, administrative, and operational services and facilities. Further, county health departments will lose revenue and staffing that is being taken over by the DEP, but they will also no longer have to provide those services.

This bill may have a positive fiscal impact on state government, because the DEP is directed to deposit certain damages, costs, or penalties it collects relating to onsite sewage treatment and disposal systems regulations into the Water Quality Assurance Trust Fund. Local governments may experience a negative fiscal impact, because the bill removes language directed the DEP to deposit funds from fines into the county health department trust fund.

**VI. Technical Deficiencies:**

None.

**VII. Related Issues:**

None.

**VIII. Statutes Affected:**

This bill substantially amends the following sections of the Florida Statutes: 253.04, 258.39, 373.250, 380.093, 381.0061, 381.0065, 381.0066, 403.061, 403.064, 403.067, 403.0673, 403.086, 403.091, 403.9301, 403.9302, 403.121, and 403.0671,.

This bill reenacts the following sections of the Florida Statutes: 327.73(1)(x), 381.0072(4)(a) and (6)(a), 381.0086(4), 381.0098(7), and 513.10(2).

**IX. Additional Information:****A. Committee Substitute – Statement of Changes:**

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

**CS by Appropriations Committee on Agriculture, Environment, and General Government on February 13, 2024:**

The committee substitute:

- Clarifies that resiliency projects identified in a previously completed vulnerability assessment remain eligible for funding in the state resilience plan and project applications may be submitted to the department any time prior to September 1 of each year.
- Specifies that the requirement to treat reclaimed water used for irrigation to advanced waste treatment standards only applies to the nitrogen and phosphorous criteria and if within a nutrient basin management action plan where the department has determined that the use of reclaimed water is causing or contributing to the nutrient impairment.
- Directs the Office of Economic and Demographic Research to provide a publicly-accessible data visualization tool related to its statewide wastewater and stormwater needs analysis.
- Directs the DEP to include the Water Quality Grant Program projects funded under the water quality grant program on a user-friendly website or dashboard.
- Specifies that a consumptive use permit extension authorized in the bill only applies if the reclaimed water meets the advanced treatment standards for total nitrogen and phosphorous.

B. Amendments:

None.