## HOUSE OF REPRESENTATIVES STAFF FINAL BILL ANALYSIS

BILL #:CS/HB 1343Environmental Resource ManagementSPONSOR(S):State Affairs Committee, Payne, Ingoglia and othersTIED BILLS:IDEN./SIM. BILLS:CS/CS/SB 712

FINAL HOUSE FLOOR ACTION: 118 Y'S 0 N'S GOVERNOR'S ACTION: Approved

# SUMMARY ANALYSIS

CS/HB 1343 passed the House on March 11, 2020, as CS/CS/SB 712. The bill includes HB 1199 and portions of HB 405, SB 686, CS/CS/HB 715, CS/CS/HB 1091, CS/HB 1363, CS/SB 1382, CS/CS/SB 1450, and CS/CS/SB 1656.

The federal Clean Water Act requires states to maintain the quality of their waters. In Florida, water quality is addressed through water quality standards, total maximum daily loads (TMDLs), basin management action plans (BMAPs), and permits. The bill addresses water quality impacts by:

- Transferring the Onsite Sewage Program from the Department of Health to the Department of Environmental Protection (DEP);
- Repealing certain onsite sewage treatment and disposal system (OSTDS) advisory committees;
- Creating an OSTDS technical advisory committee to make recommendations that increase the availability of nutrient-reducing OSTDSs and assist DEP in the development of setback distances;
- Requiring OSTDS remediation plans;
- Requiring DEP staff training to include field inspections of stormwater structural controls;
- Requiring DEP and the water management districts (WMDs) to update the stormwater regulations using the most recent science;
- Requiring the model stormwater management program to contain model ordinances targeting nutrient reduction;
- Requiring local governments to create wastewater treatment plans;
- Requiring sanitary sewage facilities to take steps to prevent sanitary sewer overflows;
- Requiring DEP to establish real-time water quality monitoring;
- Requiring advanced wastewater treatment for domestic wastewater discharges to the Indian River Lagoon;
- Prohibiting the land application of biosolids on certain sites, unless an exception applies;
- Requiring the Department of Agriculture and Consumer Services (DACS) to conduct inspections of producers enrolled in best management practices (BMPs);
- Requiring the University of Florida to develop research plans for developing new BMPs; and
- Creating grant programs for the funding of water quality projects.

To address water quantity in the state, the bill requires DEP to conduct a study on the bottled water industry in the state and adopt rules relating to potable water reuse based on the Potable Reuse Commission's 2020 report.

The bill prohibits a local government regulation from recognizing or granting any legal right to a plant, animal, body of water, or any other part of the natural environment that is not a person or political subdivision; or from granting a person or political subdivision any specific rights relating to the natural environment.

The bill may have an indeterminate negative fiscal impact to the state and local governments. The proposed House of Representatives' Fiscal Year 2020-2021 General Appropriations Act appropriates funding within DEP and DACS for the increase in the number of required site visits, water quality improvement cost share grants, water quality monitoring, and TMDLs.

The bill was approved by the Governor on June 30, 2020, ch. 2020-151, L.O.F., and will become effective on July 1, 2020, except as otherwise provided.

# I. SUBSTANTIVE INFORMATION

# A. EFFECT OF CHANGES:

# Water Quality

## Background

The federal Clean Water Act (CWA) requires states to adopt water quality standards (WQS) for navigable waters.<sup>1</sup> The CWA also requires states to develop lists of water bodies that do not meet WQS, which are called impaired waters. States must then develop a total maximum daily load (TMDL) for the particular pollutants causing the impairment. The TMDL is the maximum allowable amount of the pollutants the water body can receive while still maintaining WQS.<sup>2</sup>

## Total Maximum Daily Loads and Basin Management Action Plans

The Florida Watershed Restoration Act guides the development and implementation of TMDLs.<sup>3</sup> TMDLs must include reasonable and equitable pollutant load allocations between or among point sources (e.g., pipes and culverts discharging from a permitted facility, such as a domestic wastewater treatment facility) and nonpoint sources (e.g., agriculture, septic tanks, golf courses) that will alone, or in conjunction with other management and restoration activities, reduce pollutants and achieve WQS.<sup>4</sup> The allocation must consider cost-effective approaches coordinated between contributing point and nonpoint sources of pollution for impaired water bodies and may include both non-regulatory and incentive-based programs.<sup>5</sup> However, under the Florida Watershed Restoration Act, the Department of Environmental Protection (DEP) is not required to develop a TMDL if there is existing reasonable assurance that there are existing or proposed pollution control mechanisms or programs that will effectively address the impairment.<sup>6</sup>

DEP is the lead agency coordinating the development and implementation of TMDLs.<sup>7</sup> Once a TMDL is adopted,<sup>8</sup> DEP may develop and implement a basin management action plan (BMAP), which is a restoration plan for the watersheds and basins connected to the impaired water body.<sup>9</sup> A BMAP must integrate appropriate management strategies available to the state through existing water quality protection programs to achieve the TMDL.<sup>10</sup> The BMAP must also include milestones for implementation and water quality improvement, and associated water quality monitoring, which determine whether there has been reasonable progress in pollutant load reductions. DEP must conduct an assessment of progress every five years, and revisions to the BMAP must be made as appropriate.<sup>11</sup>

For point source discharges, any management strategies and pollutant reduction requirements associated with a TMDL must be incorporated into subsequent permits or permit modifications. DEP may not impose limits or conditions implementing an adopted TMDL in a permit until the permit expires, the discharge is modified, or the permit is reopened pursuant to an adopted BMAP.<sup>12</sup>

- <sup>8</sup> Section 403.067(6)(c), F.S.
- <sup>9</sup> Section 403.067(7)(a)1., F.S.
- <sup>10</sup> Id.

<sup>12</sup> Section 403.067(7)(b)2., F.S.

<sup>&</sup>lt;sup>1</sup> 33 U.S.C. s. 1313.

<sup>&</sup>lt;sup>2</sup> 33 U.S.C. s. 1313; see s. 403.067, F.S.

<sup>&</sup>lt;sup>3</sup> Section 403.067, F.S.; ch. 99-223, Laws of Fla.

<sup>&</sup>lt;sup>4</sup> Section 403.067(6)(b), F.S.

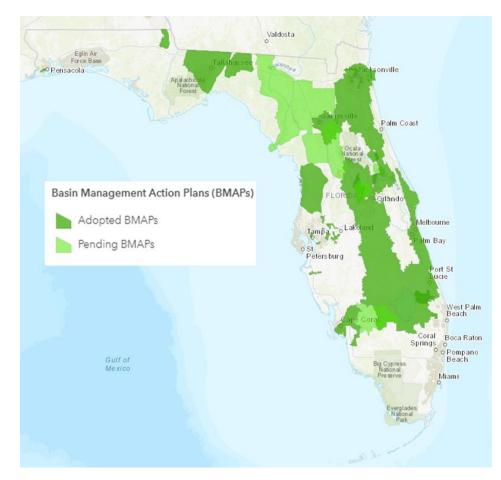
<sup>&</sup>lt;sup>5</sup> Section 403.067(1), F.S.

<sup>&</sup>lt;sup>6</sup> *Id*. at 2.

<sup>&</sup>lt;sup>7</sup> Section 403.061, F.S. DEP has the power and the duty to control and prohibit pollution of air and water in accordance with the law and rules adopted and promulgated by it. Section 403.061(21), F.S., allows DEP to advise, consult, cooperate, and enter into agreements with other state agencies, the federal government, other states, interstate agencies, etc.

<sup>&</sup>lt;sup>11</sup> Section 403.067(7)(a)6., F.S.

A best management practice (BMP) is a practice or combination of practices adopted by rule by the Department of Agriculture and Consumer Services (DACS), DEP, or the applicable water management district (WMD) as an effective and practicable means for reducing nutrient inputs and improving water quality, taking into account economic and technological considerations.<sup>13</sup> Where there is an adopted BMP for a nonpoint source, the BMAP must require the nonpoint source to implement the applicable BMPs. The nonpoint source discharger must demonstrate compliance with BMP implementation or conduct water quality monitoring prescribed by DEP or the WMD. If the discharger fails to demonstrate compliance, the discharger may be subject to enforcement action.<sup>14</sup>



The adopted and pending BMAPs are illustrated in the graphic below:<sup>15</sup>

# Agricultural Best Management Practices

Agricultural BMPs are practical measures that agricultural producers undertake to reduce the impacts of fertilizer and water use and otherwise manage the landscape to further protect water resources. Agricultural BMPs are implemented by DACS. Since the implementation of the BMP program in 1999, DACS has adopted nine BMP manuals that cover nearly all major agricultural commodities in Florida. The University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS) is also involved in the adoption and implementation of agricultural BMPs. UF/IFAS provides expertise to both DACS and agricultural producers, holds summits and workshops on agricultural BMPs,<sup>16</sup> conducts research to

<sup>&</sup>lt;sup>13</sup> Rule 62-306.200(2), F.A.C.; r. 62-503.200(4), F.A.C., defines "best management practice" as a control technique used for a given set of conditions to achieve water quality and water quantity enhancement at a feasible cost.

<sup>&</sup>lt;sup>14</sup> Sections 403.067(7)(b)2.g. and 2.h., F.S.

<sup>&</sup>lt;sup>15</sup> DEP, Impaired Waters, TMDLs, and Basin Management Action Plans Interactive Map, available at

https://floridadep.gov/dear/water-quality-restoration/content/impaired-waters-tmdls-and-basin-management-action-plans (last visited Jan. 17, 2020).

<sup>&</sup>lt;sup>16</sup> UF/IFAS, Best Management Practices Resource, available at https://bmp.ifas.ufl.edu/ (last visited Jan. 21, 2020).

issue recommendations for improving agricultural BMPs,<sup>17</sup> and issues training certificates for agricultural BMPs that require licenses, such as Green Industry BMPs.<sup>18</sup> It is estimated that approximately 54 percent of the state's agricultural acreage is enrolled in the DACS BMP program.<sup>19</sup>

Producers implementing agricultural BMPs receive a presumption of compliance with WQS for the pollutants addressed by the BMPs,<sup>20</sup> and those who enroll in the BMP program are eligible for technical assistance and cost-share funding for BMP implementation. To enroll in the BMP program, a producer must meet with the Office of Agricultural Water Policy (OAWP) within DACS to determine the BMPs that are applicable to its operation and must submit a Notice of Intent to Implement the BMPs, along with the BMP checklist from the applicable manual. Where DEP adopts a BMAP that includes agriculture, producers must either implement DACS-adopted BMPs or conduct water quality monitoring (prescribed by DEP or the WMD and paid for by the producer) to show they are not violating WQS.<sup>21</sup>

DACS also has an implementation verification program to follow up with producers and help ensure that BMPs are being implemented properly. Representatives of DACS conduct site visits to enrolled operations, and some producers are asked to complete online surveys.<sup>22</sup>

# Effect of the Bill

The bill requires DACS to conduct onsite inspections at least every two years for each agricultural producer enrolled in a BMP to ensure proper implementation of the BMPs. The bill further requires verification to include a collection and review of BMP documentation from the previous two years, including nitrogen and phosphorus fertilizer application records. The bill requires DACS to initially prioritize the inspection of agricultural producers located in BMAPs for Lake Okeechobee, the Indian River Lagoon, the Caloosahatchee River and Estuary, and Silver Springs. The bill requires DACS to provide all documentation regarding BMPs to DEP.

The bill requires DEP, DACS, and owners of agricultural operations in a basin to develop a cooperative agricultural regional water quality improvement element as part of the BMAP if:

- Agricultural measures adopted by DACS have been implemented and the waterbody remains impaired;
- Agricultural nonpoint sources contribute to at least 20 percent of nonpoint source nutrient discharges; and
- DEP determines that additional measures, in combination with state-sponsored regional projects and other management strategies included in the BMAP, are necessary to achieve the TMDL.

The bill requires the cooperative agricultural regional water quality improvement element to be implemented through a cost-sharing program. The element must include cost-effective and technically and financially practical cooperative regional agricultural nutrient reduction projects that can be implemented on private properties on a site-specific, cooperative basis. Such projects may include land acquisition in fee or conservation easements on the lands of willing sellers and site-specific water quality improvement or dispersed water management projects on the lands of project participants. To qualify for participation in the element, the bill requires a participant to have already implemented the interim measures, BMPs, or other measures adopted by DACS. The bill allows the element to be included in the BMAP as a part of the next five-year assessment and authorizes DEP to submit a legislative budget request to fund projects developed pursuant to the cooperative element. In allocating

<sup>&</sup>lt;sup>17</sup> UF/IFAS, *Best Management Practices & Water Resources*, available at https://erec.ifas.ufl.edu/featured-3-menus/research-/best-management-practices--water-resources/ (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>18</sup> UF/IFAS, *GI-BMP Training Program Overview*, available at https://ffl.ifas.ufl.edu/professionals/BMP\_overview.htm (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>19</sup> *Id*. at 2.

<sup>&</sup>lt;sup>20</sup> Section 403.067(7), F.S.

<sup>&</sup>lt;sup>21</sup> DACS, *Agricultural Best Management Practices*, available at https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Best-Management-Practices (last visited Jan. 21, 2020).

funds for projects funded pursuant to the legislative budget requests, the bill requires DEP to provide at least 20 percent of its annual appropriation for projects in subbasins with the highest nutrient concentrations within a BMAP.

The bill requires DACS, in cooperation with UF/IFAS, and other state universities and Florida College System institutions with agricultural research programs to annually develop research plans and legislative budget requests related to evaluating and developing BMPs. The bill further requires UF/IFAS and the other universities and colleges to submit such research plans to DEP and DACS by August 1, 2021, and each May 1 thereafter to be considered for funding.

The bill requires DEP to work with UF/IFAS and regulated entities to consider the adoption of BMPs for nutrient impacts from golf courses.

## Wastewater

## Background

A person generates approximately 100 gallons of domestic wastewater<sup>23</sup> per day.<sup>24</sup> This wastewater must be managed to protect public health, water quality, recreation, fish, wildlife, and the aesthetic appeal of the state's waterways.<sup>25</sup>

## Onsite Sewage Treatment and Disposal Systems

One of the methods utilized to treat domestic wastewater is an onsite sewage treatment and disposal system (OSTDS),<sup>26</sup> commonly referred to as a septic system.<sup>27</sup> Approximately 30 percent of the population in Florida uses an OSTDS.<sup>28</sup>

An OSTDS must be permitted and inspected by the Department of Health (DOH) before it is placed into operation and must be located and installed so that, along with proper maintenance, the system functions in a sanitary manner, does not create a sanitary nuisance or health hazard, and does not endanger the safety of any domestic water supply, groundwater, or surface water.<sup>29</sup> Sewage waste and effluent from an OSTDS may not be discharged onto the ground surface or directly or indirectly discharged into ditches, drainage structures, groundwaters, surface waters, or aquifers.<sup>30</sup> DOH regulates an estimated 2.6 million OSTDSs.<sup>31</sup> The permitting and inspection of OSTDSs is handled mainly by county health departments with support from the Bureau of Onsite Sewage within DOH.<sup>32</sup>

<sup>&</sup>lt;sup>23</sup> Section 367.021(5), F.S., defines "domestic wastewater" as wastewater principally from dwellings, business buildings, institutions, and sanitary wastewater or sewage treatment plants.

<sup>&</sup>lt;sup>24</sup> DEP, *Domestic Wastewater Program*, available at https://floridadep.gov/water/domestic-wastewater (last visited Jan. 21, 2020). <sup>25</sup> Sections 381.0065(1) and 403.021, F.S.

<sup>&</sup>lt;sup>26</sup> Section 381.0065(2)(k), F.S., defines an "onsite sewage treatment and disposal system" as a system that contains a standard subsurface, filled, or mound drainfield system; an aerobic treatment unit; a graywater system tank; a laundry wastewater system tank; a septic tank; a grease interceptor; a pump tank; a solids or effluent pump; a waterless, incinerating, or organic waste-composting toilet; or a sanitary pit privy that is installed or proposed to be installed beyond the building sewer on land of the owner or on other land to which the owner has the legal right to install a system. The term includes any item placed within, or intended to be used as a part of or in conjunction with, the system. This term does not include package sewage treatment facilities and other treatment works regulated under ch. 403, F.S.

<sup>&</sup>lt;sup>27</sup> Sections 381.0065(2)(k) and (3), F.S.; chs. 62-600 and 62-701, F.A.C.

<sup>&</sup>lt;sup>28</sup> DOH, Onsite Sewage, available at http://www.floridahealth.gov/environmental-health/onsite-sewage/index.html (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>29</sup> Section 381.0065(4), F.S.; rr. 64E-6.003 and 64E-6.004, F.A.C.

<sup>&</sup>lt;sup>30</sup> Rule 64E-6.005, F.A.C.

<sup>&</sup>lt;sup>31</sup> DOH, Onsite Sewage, available at http://www.floridahealth.gov/environmental-health/onsite-sewage/index.html (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>32</sup> Sections 381.006(7) and 381.0065, F.S.; r. 62-600.120, F.A.C.; see DEP, Domestic Wastewater - Septic Systems, available at https://floridadep.gov/water/domestic-wastewater/content/septic-systems (last visited Jan. 21, 2020).

## DOH OSTDS Advisory Committees

DOH operates and serves three advisory organizations related to OSTDSs: the Research Review and Advisory Committee (RRAC),<sup>33</sup> the Technical Review and Advisory Panel (TRAP),<sup>34</sup> and the Variance Review and Advisory Committee (VRAC).<sup>35</sup> The TRAP assists in the adoption of rules for OSTDSs and reviews and comments on any legislation or existing policy related to OSTDSs. All rules proposed by DOH that relate to OSTDSs must be presented to the TRAP for review and comment prior to adoption.<sup>36</sup> The RRAC advises on new research, reviews and ranks proposals for research contracts, and reviews and provides comments on draft research reports regarding the OSTDS industry.<sup>37</sup>

The VRAC recommends agency action on variance requests. A person who applies for an OSTDS construction permit but cannot meet the requirements of the rule or statute will not be issued a permit; however, a person may request a variance from the standards.<sup>38</sup> DOH, in hardship cases, may grant variances, which may be less restrictive than the OSTDS provisions required by statute and rule.<sup>39</sup>

# Outstanding Florida Springs

Nutrients, specifically nitrogen and phosphorous, are naturally present in the water and are necessary for the growth of plant and animal life. However, too much nitrogen or phosphorous can harm water quality. In some areas, the wastewater leaving OSTDSs has been identified as a contributor to nitrogen pollution.<sup>40</sup>

In 2016, the Legislature enacted the Springs and Aquifer Protection Act (act), which established additional protections to conserve and protect 30 Outstanding Florida Springs.<sup>41</sup> The act directed DEP to assess the Outstanding Florida Springs for nutrient impairment and, in collaboration with other state agencies and local governments, develop BMAPs by July 1, 2016.<sup>42</sup> Each BMAP was required to identify the sources of nitrogen pollution within the springshed and identify projects and strategies that will achieve the reductions needed to improve water quality in the region, including, as necessary, an OSTDS remediation plan that identifies cost-effective and financially feasible projects to reduce nitrogen contributions from OSTDSs.<sup>43</sup>

Further, the act prohibited new homes or businesses with new OSTDSs on lots less than one acre in priority focus areas<sup>44</sup> from installing conventional non-nitrogen reducing OSTDSs if the installation is

http://www.floridahealth.gov/provider-and-partner-resources/advisory-councils-stakeholder-groups/index.html (last visited Jan. 21, 2020).

<sup>37</sup> Section 381.0065(4)(o), F.S.

<sup>38</sup> DOH, *Variances*, available at http://www.floridahealth.gov/environmental-health/onsite-sewage/variances/index.html (last visited Jan. 21, 2020).

<sup>39</sup> Section 381.0065(4)(h), F.S.

<sup>40</sup> DEP, Meeting the Septic System Permitting Requirements: Springs and Aquifer Protection Act, available at

<sup>42</sup> DEP, Meeting the Septic System Permitting Requirements: Springs and Aquifer Protection Act, available at

https://floridadep.gov/sites/default/files/Springs%20and%20Aquifer%20Protection%20Act\_0.pdf (last visited Jan. 21, 2020). <sup>43</sup> Section 373.807, F.S.; DEP, *Meeting the Septic System Permitting Requirements: Springs and Aquifer Protection Act*, available at https://floridadep.gov/sites/default/files/Springs%20and%20Aquifer%20Protection%20Act\_0.pdf (last visited Jan. 21, 2020). <sup>44</sup> Section 373, 809(5), F.S., dofiner a "priority focus areas" as the area or areas of a basin where the Elevider Acuifer is generally mos

<sup>44</sup> Section 373.802(5), F.S., defines a "priority focus area" as the area or areas of a basin where the Floridan Aquifer is generally most vulnerable to pollutant inputs where there is a known connectivity between groundwater pathways and an Outstanding Florida Spring, as determined by DEP in consultation with the appropriate WMDs, and delineated in a BMAP.

<sup>&</sup>lt;sup>33</sup> Section 381.0065(4)(o), F.S.

<sup>34</sup> Section 381.0068, F.S.

<sup>&</sup>lt;sup>35</sup> Section 381.0065(4)(h)2., F.S.; see also, DOH, Boards, Councils and Committees, available at

<sup>&</sup>lt;sup>36</sup> Section 381.0068, F.S.

https://floridadep.gov/sites/default/files/Springs%20and%20Aquifer%20Protection%20Act\_0.pdf (last visited Jan. 21, 2020). <sup>41</sup> Section 373.802(4),F.S., defines an "Outstanding Florida Spring" as all historic first magnitude springs, including their associated spring runs, as determined by DEP using the most recent Florida Geological Survey springs bulletin, and the following additional springs, including their associated spring runs: De Leon Springs, Peacock Springs, Poe Springs, Rock Springs, Wekiwa Springs, and Gemini Springs. The term does not include submarine springs or river rises; ch. 2016-001, Laws of Fla.

inconsistent with a BMAP.<sup>45</sup> Instead, new construction must either connect to available central sewer lines, install a nitrogen-reducing OSTDS, such as "in-ground, passive nitrogen-reducing systems" that use additional soil and media layers to reduce nitrogen flowing into the aquifer, or install nitrogen-reducing Aerobic Treatment Units and Performance-Based Treatment Systems.<sup>46</sup>

## Wastewater Treatment Facilities

Because domestic wastewater treatment facilities are stationary installations that are reasonably expected to be sources of water pollution, they must be operated, maintained, constructed, expanded, or modified with a permit issued by DEP.<sup>47</sup> Approximately 2,000 domestic wastewater treatment facilities in the state serve roughly two-thirds of the state's population.<sup>48</sup> Each day over 1.5 billion gallons of treated wastewater effluent<sup>49</sup> and reclaimed water<sup>50</sup> are disposed of from these facilities.<sup>51</sup> Methods of disposal include reuse and land application systems, groundwater disposal by underground injection, groundwater recharge using injection wells, surface water discharges, disposal to coastal and open ocean waters, and wetland discharges.<sup>52</sup>

Most domestic wastewater treatment facilities must meet either basic disinfection or high-level disinfection requirements, depending upon the type of discharge.<sup>53</sup> Basic disinfection requires the effluent to contain less than 200 fecal coliforms per 100 micrograms per milliliter,<sup>54</sup> while high-level disinfection requires fecal coliforms to be reduced below detection.<sup>55</sup> Domestic wastewater treatment facilities that discharge to surface waters<sup>56</sup> must also obtain a National Pollutant Discharge Elimination System (NPDES) permit, which is established by the CWA to control point source discharges.<sup>57</sup> NPDES permit requirements for most domestic wastewater facilities are incorporated into the DEP-issued permit.<sup>58</sup> DEP issues operation permits for a period of five years for facilities regulated under the NPDES program and up to 10 years for other domestic wastewater treatment facilities meeting certain statutory requirements.<sup>59</sup>

# Advanced Waste Treatment

Under Florida law, facilities for sanitary sewage disposal are required to provide for advanced waste treatment, as deemed necessary by DEP.<sup>60</sup> The standard for advanced waste treatment requires high-

<sup>46</sup> Id.

<sup>47</sup> Section 403.087(1), F.S.

<sup>48</sup> DEP, General Facts and Statistics about Wastewater in Florida, available at https://floridadep.gov/water/domestic-

wastewater/content/general-facts-and-statistics-about-wastewater-florida (last visited Jan. 21, 2020).

<sup>49</sup> Rule 62-600.200(22), F.A.C., defines the term "effluent" as, unless specifically stated otherwise, water that is not reused after flowing out of any plant or other works used for the purpose of treating, stabilizing, or holding wastes.

<sup>50</sup> Rule 62-600.200(54), F.A.C., defines the term "reclaimed water" as water that has received at least secondary treatment and basic disinfection and is reused after flowing out of a domestic wastewater treatment facility.

<sup>51</sup> DEP, General Facts and Statistics about Wastewater in Florida, available at https://floridadep.gov/water/domestic-

wastewater/content/general-facts-and-statistics-about-wastewater-florida (last visited Jan. 21, 2020).

<sup>52</sup> Rule 62-600.440(4), F.A.C.

<sup>53</sup> DEP, Ultraviolet Disinfection for Domestic Wastewater, available at https://floridadep.gov/water/domestic-

wastewater/content/ultraviolet-uv-disinfection-domestic-wastewater (last visited Jan. 21, 2020).

<sup>54</sup> Rules 62-600.510(1) and 62-600.440(5), F.A.C.

55 Rule 62-600.440(6), F.A.C.

<sup>56</sup> Section 373.019(21), F.S., defines the term "surface water" as water upon the surface of the earth, whether contained in bounds created naturally or artificially or diffused. Water from natural springs is classified as surface water when it exits from the spring onto the earth's surface; s. 403.031(13), F.S., defines the term "waters" as rivers, lakes, streams, springs, impoundments, wetlands, and all other waters or bodies of water, including fresh, brackish, saline, tidal, surface, or underground waters; r. 62-620.200(56), F.A.C. <sup>57</sup> 33 U.S.C. s. 1342.

<sup>58</sup> Section 403.0885, F.S.; ch. 62-620, F.A.C.; DEP, *Wastewater Permitting*, available at https://floridadep.gov/water/domesticwastewater/content/wastewater-permitting (last visited Jan. 21, 2020); Florida's Water Permitting Portal, *Types of Permits*, available at http://flwaterpermits.com/typesofpermits.html (last visited Jan. 21, 2020).

<sup>59</sup> Section 403.087(3), F.S.

<sup>60</sup> Section 403.086(2), F.S.

<sup>&</sup>lt;sup>45</sup> DOH, OSTDS Permitting in a County affected by the Florida Springs and Aquifer Protection Act (May 14, 2018), available at http://www.floridahealth.gov/environmental-health/onsite-sewage/\_documents/letter-to-builders-springs.pdf (last visited Jan. 21, 2020).

level disinfection and is defined using the maximum concentrations of nutrients or contaminants that a reclaimed water product may contain, which are outlined in the following table:<sup>61</sup>

Nutrient or Contaminant	Maximum Concentration Annually
Biochemical Oxygen Demand	5 mg/L
Suspended Solids	5 mg/L
Total Nitrogen	3 mg/L
Total Phosphorus	1 mg/L

Facilities for sanitary sewage disposal are prohibited from disposing of waste into certain waters without providing advanced waste treatment approved by DEP.<sup>62</sup>

## Sanitary Sewer Overflows, Leakages, and Inflow and Infiltration

Although domestic wastewater treatment facilities are permitted and designed to safely and properly collect and manage a specified wastewater capacity, obstructions or extreme conditions can cause a sanitary sewer overflow (SSO). Any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system is considered a SSO.<sup>63</sup> Factors contributing to SSOs may include:

- Build-up of solids, fats, oils, and greases in the wastewater collection system that impede flow;
- Too much rainfall infiltrating the system through leaky infrastructure, roof drains, or poorly connected wastewater lines;
- Blocked, broken, or cracked pipes and other equipment or power failures that keep the system from functioning properly (e.g., tree roots growing into the system, pipe settling or shifting so pipe joints no longer match, buildup of sediment and other material causing pipes to break or collapse); and
- A deteriorating or aging system.<sup>64</sup>

A SSO may subject the owner or operator of a facility to civil penalties of not more than \$10,000 for each offense, a criminal conviction or fines, and additional administrative penalties.<sup>65</sup> Each day during the period in which a violation occurs constitutes a separate offense.<sup>66</sup> However, administrative penalties are capped at \$10,000.<sup>67</sup>

A key concern with SSOs entering rivers, lakes, or streams is their negative effect on water quality. Because SSOs contain partially treated or potentially untreated domestic wastewater, ingestion or similar contact may cause illness. People can be exposed through direct contact in areas of high public access, food that has been contaminated, inhalation, and skin absorption. DOH may issue health advisories when bacteria levels present a risk to human health, and may post warning signs when bacteria affect public beaches or other areas where there is a risk of human exposure.<sup>68</sup>

<sup>63</sup> DEP, SSOs, available at https://floridadep.gov/sites/default/files/sanitary-sewer-overflows.pdf (last visited Jan. 21, 2020).

<sup>64</sup> DEP, *Preventing SSOs*, available at https://floridadep.gov/sites/default/files/preventing-sanitary-sewer-overflows.pdf (last visited Jan. 21, 2020); DEP, *SSOs*, available at https://floridadep.gov/sites/default/files/sanitary-sewer-overflows.pdf (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>61</sup> Sections 403.086(4) and (4)(b), F.S.; r. 62-600.440(6), F.A.C.

<sup>&</sup>lt;sup>62</sup> Section 403.086(1)(c), F.S. Facilities for sanitary sewage disposal may not dispose of any wastes into Old Tampa Bay, Tampa Bay, Hillsborough Bay, Boca Ciega Bay, St. Joseph Sound, Clearwater Bay, Sarasota Bay, Little Sarasota Bay, Roberts Bay, Lemon Bay, or Charlotte Harbor Bay, or into any river, stream, channel, canal, bay, bayou, sound, or other water tributary thereto, without providing advanced waste treatment approved by DEP. This prohibition does not apply to facilities permitted before February 1, 1987, that discharge secondary treated effluent, followed by water hyacinth treatment, to tributaries of the named waters; or to facilities permitted to discharge to the nontidally influenced portions of the Peace River.

<sup>65</sup> Sections 403.121 and 403.141, F.S.

<sup>&</sup>lt;sup>66</sup> Id.

<sup>&</sup>lt;sup>67</sup> Sections 403.121(2)(b), (8), and (9), F.S.

<sup>&</sup>lt;sup>68</sup> DEP, SSOs, available at https://floridadep.gov/sites/default/files/sanitary-sewer-overflows.pdf (last visited Jan. 21, 2020).

Reduction of SSOs can be achieved through cleaning and maintaining the sewer system; reducing inflow and infiltration through rehabilitation and repairing broken or leaking lines; enlarging or upgrading sewer, pump station, or sewage treatment plant capacity and reliability; and constructing wet weather storage and treatment facilities to treat excess flows.<sup>69</sup>

Inflow and Infiltration (I&I) occurs when groundwater and/or rainwater enters the sanitary sewer system and ends up at the wastewater treatment facility, necessitating its treatment as if it were wastewater.<sup>70</sup> I&I can be caused by groundwater infiltrating the sewer system through faulty pipes or infrastructure, or any inflows of rainwater or non-wastewater into the sewer system.

I&I is a major cause of SSOs in Florida.<sup>71</sup> When domestic wastewater facilities are evaluated for permit renewal, collection systems are not evaluated for issues such as excessive I&I, unless problems result at the treatment plant.<sup>72</sup> Another major cause of SSOs is the loss of electricity to the infrastructure for the collection and transmission of wastewater, such as pump stations, especially during storms.<sup>73</sup> Pump stations receiving flow from another station through a force main, or those discharging through pipes 12 inches or larger, must have emergency generators.<sup>74</sup> All other pump stations must have emergency pumping capability through one of three specified arrangements.<sup>75</sup> These requirements for emergency pumping capacity only apply to domestic wastewater collection/transmission facilities existing after November 6, 2003, unless facilities existing prior to that date are modified.<sup>76</sup>

#### Wastewater Asset Management

Asset management is the practice of managing infrastructure capital assets to minimize the total cost of owning and operating these assets while delivering the desired service levels.<sup>77</sup> Many utilities use asset management to pursue and achieve sustainable infrastructure. A high-performing asset management program includes detailed asset inventories, operation and maintenance tasks, and long-range financial planning.<sup>78</sup>

Each utility is responsible for making sure that its system stays in good working order, regardless of the age of its components or the availability of additional funds.<sup>79</sup> Asset management programs with good data can be the most efficient method of meeting this requirement. Some key steps for asset management are making an inventory of critical assets, evaluating the condition and performance of such assets, and developing plans to maintain, repair, and replace assets and to fund these activities.<sup>80</sup>

<sup>80</sup> Id.

<sup>&</sup>lt;sup>69</sup> Id.

<sup>&</sup>lt;sup>70</sup> City of St. Augustine, *Inflow & Infiltration Elimination Program*, available at https://www.citystaug.com/549/Inflow-Infiltration-Elimination-Program (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>71</sup> See RS&H, Inc., Evaluation of Sanitary Sewer Overflows and Unpermitted Discharges Associated with Hurricanes Hermine and Matthew (Jan. 2017), available at

https://floridadep.gov/sites/default/files/Final%20Report\_Evaluation%20of%20SSO%20and%20Unpermitted%20Discharges%2001\_06\_17.pdf (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>72</sup> Rule 62-600.735, F.A.C.; *see* r. 62-600.200, F.A.C. "Collection/transmission systems" are defined as sewers, pipelines, conduits, pumping stations, force mains, and all other facilities used for collection and transmission of wastewater from individual service connections to facilities intended for the purpose of providing treatment prior to release to the environment.

<sup>&</sup>lt;sup>73</sup> See RS&H, Inc., Evaluation of Sanitary Sewer Overflows and Unpermitted Discharges Associated with Hurricanes Hermine and Matthew (Jan. 2017), available at

https://floridadep.gov/sites/default/files/Final%20Report\_Evaluation%20of%20SSO%20and%20Unpermitted%20Discharges%2001\_06\_17.pdf (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>74</sup> Rule 62-604.400, F.A.C.

<sup>&</sup>lt;sup>75</sup> Id.

<sup>&</sup>lt;sup>76</sup> Rule 62-604.100, F.A.C.

<sup>&</sup>lt;sup>77</sup> EPA, Sustainable Water Infrastructure - Asset Management for Water and Wastewater Utilities, available at

https://www.epa.gov/sustainable-water-infrastructure/asset-management-water-and-wastewater-utilities (last visited Jan. 22, 2020). <sup>78</sup> Id.

<sup>&</sup>lt;sup>79</sup> Id.

The United States Environmental Protection Agency (EPA) provides guidance and reference manuals for utilities to aid in developing asset management plans.<sup>81</sup>

Many states, including Florida, provide financial incentives for the development and implementation of an asset management plan when requesting funding under a State Revolving Fund or other state funding mechanism.<sup>82</sup> Florida's incentives include priority scoring,<sup>83</sup> reduction of interest rates,<sup>84</sup> principal forgiveness for financially disadvantaged small communities,<sup>85</sup> and eligibility for small community wastewater facilities grants.<sup>86</sup>

In 2016, the Legislature authorized the Public Service Commission (PSC) to allow a utility to create a utility reserve fund for repair and replacement of existing distribution and collection infrastructure that is nearing the end of its useful life or is detrimental to water quality or reliability of service.<sup>87</sup> The utility reserve fund is funded by a portion of the rates charged by the utility, by a secured escrow account, or through a letter of credit.<sup>88</sup>

The PSC adopted rules governing the implementation, management, and use of the fund, including expenses for which the fund may be used, segregation of reserve account funds, requirements for a capital improvement plan, and requirements for the PSC authorization before fund disbursements.<sup>89</sup> The PSC requires an applicant to provide a capital improvement plan or an asset management plan in seeking authorization to create a utility reserve fund.<sup>90</sup>

Biosolids

When domestic wastewater is treated, a solid byproduct accumulates in the wastewater treatment plant and must be removed periodically to keep the plant operating properly. The collected material, called biosolids or "sewage sludge," is high in organic content and contains moderate amounts of nutrients.<sup>91</sup> Wastewater facilities can dispose of biosolids by transferring them to another facility, placing them in a landfill, incinerating them, distributing them as fertilizer, or land applying them to permitted sites.<sup>92</sup> The option selected for use or disposal is typically stated in the permit issued to the wastewater treatment facility by DEP.<sup>93</sup> Florida produces a total of 340,000 dry tons of biosolids annually, of which approximately two-thirds are beneficially used and one-third is landfilled.<sup>94</sup>

04/documents/am\_tools\_guide\_may\_2014.pdf (last visited Jan. 22, 2020).

04/documents/state\_asset\_management\_initiatives\_11-01-12.pdf (last visited Jan. 22, 2020).

https://floridadep.gov/sites/default/files/Biosolids101-TAC-090518.pdf (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>81</sup> EPA, Asset Management: A Best Practices Guide (2008), available at

https://nepis.epa.gov/Exe/ZyPDF.cgi/P1000LP0.PDF?Dockey=P1000LP0.PDF (last visited Jan. 22, 2020); EPA, *Reference Guide for* Asset Management Tools/Asset Management Plan Components and Implementation Tools for Small and Medium Sized Drinking Water and Wastewater Systems (May 2014), available at https://www.epa.gov/sites/production/files/2016-04/document/om\_tools\_may\_2014\_ndf (last visited Jan\_22\_2020)

<sup>&</sup>lt;sup>82</sup> EPA, State Asset Management Initiatives (Aug. 2012), available at https://www.epa.gov/sites/production/files/2016-

<sup>83</sup> Rule 62-503.300(e), F.A.C.

<sup>&</sup>lt;sup>84</sup> Rules 62-503.300(5)(b)1. and 62-503.700(7), F.A.C.

<sup>&</sup>lt;sup>85</sup> Rule 62-503.500(4), F.A.C.

<sup>&</sup>lt;sup>86</sup> Rules 62-505.300(d) and 62-505.350(5)(c), F.A.C.

<sup>&</sup>lt;sup>87</sup> Chapter 2016-226, Laws of Fla.; s. 367.081(2)(c), F.S.

<sup>&</sup>lt;sup>88</sup> Section 367.081(2)(c), F.S.

<sup>&</sup>lt;sup>89</sup> Rule 25-30.444, F.A.C.

<sup>&</sup>lt;sup>90</sup> Rules 25-30.444(2)(e) and 25-30.444(2)(m), F.A.C.

<sup>&</sup>lt;sup>91</sup> DEP, *Domestic Wastewater Biosolids*, available at https://floridadep.gov/water/domestic-wastewater/content/domestic-wastewaterbiosolids (last visited Jan. 21, 2020); r. 62-640.200(6), F.A.C., defines the term "biosolids" to mean the solid, semisolid, or liquid residue generated during the treatment of domestic wastewater in a domestic wastewater treatment facility, formerly known as "domestic wastewater residuals" or "residuals." The treated effluent or reclaimed water from a domestic wastewater treatment plant is not included. Also, solids removed from pump stations and lift stations, screenings and grit removed from the preliminary treatment components of domestic wastewater treatment facilities, other solids as defined in subsection 62-640.200(31), F.A.C., and ash generated during the incineration of biosolids are not included.

<sup>&</sup>lt;sup>92</sup> DEP, *Biosolids Use and Regulations in Florida* (Sept. 2018), slide 3, available at

<sup>&</sup>lt;sup>93</sup> *Id.* at slide 4.

<sup>&</sup>lt;sup>94</sup> *Id*. at slide 5.

Three classes of biosolids are regulated for beneficial use and are categorized based on treatment and quality: Class B, Class A, and Class AA.<sup>95</sup> Treatment is required to either reduce or completely eliminate pathogens. Class B treatment significantly reduces pathogens, but does not completely eliminate them. Class AA treatment essentially eliminates pathogens and meets strict concentration limits for heavy metals. The Class A treatment level is between Class B and Class AA. While Class A and Class AA can be used for a variety of beneficial purposes, Class B, the lowest quality of biosolids, is typically only used for land application.<sup>96</sup>

Land application is the use of biosolids at a permitted site, such as agricultural land or a golf course, forest, park, or reclamation site, to provide nutrients or organic matter to the soil. The biosolids are applied in accordance with restrictions based on crop nutrient needs, phosphorus limits in the area, and soil fertility.<sup>97</sup> Biosolids contain macronutrients (such as nitrogen and phosphorus) and micronutrients (such as copper, iron, and manganese) that are utilized by crops. The application of these nutrient-rich biosolids increases the organic content of the soil, fostering more productive plant growth.<sup>98</sup> To prevent odor or the contamination of soils, crops, and livestock, land application sites must meet site management requirements such as the construction of site slopes and establishment of setback distances.<sup>99</sup> There are approximately 140 permitted land application sites in Florida.<sup>100</sup>

Class AA biosolids can be land applied or can be distributed and marketed as a commercial fertilizer.<sup>101</sup> Class AA biosolids products are also not subject to site management requirements if distributed and marketed as a fertilizer or distributed and marketed to a person or entity that will sell or give away the biosolids products as a fertilizer or component of a fertilizer.<sup>102</sup> There are approximately 39 facilities in Florida that produce Class AA biosolids.<sup>103</sup> In 2016, 197,115 dry tons of Class AA biosolids product was distributed and marketed in Florida.<sup>104</sup>

The beneficial use of biosolids is regulated by DEP under ch. 62-640, F.A.C., and by the EPA under Title 40 Code of Federal Regulations Part 503 (Part 503).<sup>105</sup> Adopted in 1993, Part 503 created standards for the final use or disposal of biosolids generated during domestic wastewater treatment. The standards included general requirements, pollutant limits, management practices, and operational standards for biosolids. Standards were also included for biosolids applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.<sup>106</sup>

In 1990, DEP adopted rules governing biosolids based on the draft of Part 503 and previously adopted solid waste rules.<sup>107</sup> DEP's rules were revised in 1998 to be consistent with the final version of Part 503. Part 503, a self-implementing program, did not address phosphorus, a major pollutant in

<sup>&</sup>lt;sup>95</sup> *Id*. at slide 6.

<sup>&</sup>lt;sup>96</sup> *Id*. at slide 7.

<sup>&</sup>lt;sup>97</sup> DEP, Biosolids Use and Regulations in Florida (Sept. 2018), slide 23, available at

https://floridadep.gov/sites/default/files/Biosolids101-TAC-090518.pdf (last visited Jan. 21, 2020); *see also*, EPA, *A Plain English Guide to the EPA Part 503 Biosolids Rule* (Sept. 1994), 26, available at https://www.epa.gov/sites/production/files/2018-12/documents/plain-english-guide-part503-biosolids-rule.pdf (last visited Jan. 21, 2020).

 <sup>&</sup>lt;sup>98</sup> DEP, *Biosolids Use and Regulations in Florida* (Sept. 2018), slide 20, available at

https://floridadep.gov/sites/default/files/Biosolids101-TAC-090518.pdf (last visited Jan. 21, 2020).

 $<sup>^{99}</sup>$  Id. at slides 8-9.

<sup>&</sup>lt;sup>100</sup> *Id*. at slide 20.

<sup>&</sup>lt;sup>101</sup> *Id.* at slide 6.

<sup>&</sup>lt;sup>102</sup> DEP, *Biosolids in Florida: 2013 Summary* (Dec. 2014), 4, available at https://floridadep.gov/sites/default/files/BiosolidsFlorida-2013-Summary\_2.pdf (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>103</sup> DEP, *Biosolids Use and Regulations in Florida* (Sept. 2018), slide 13, available at

https://floridadep.gov/sites/default/files/Biosolids101-TAC-090518.pdf (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>104</sup> *Id.* at slide 19.

<sup>&</sup>lt;sup>105</sup> EPA, *Biosolids Laws and Regulations*, available at https://www.epa.gov/biosolids/biosolids-laws-and-regulations (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>106</sup> 40 C.F.R. Part 503.

<sup>&</sup>lt;sup>107</sup> Chapters 62-701 and 62-709, F.A.C.

Florida.<sup>108</sup> As a result, DEP amended its rules in 2010 to improve site accountability and nutrient management by requiring site permits for the land application of biosolids, requiring nutrient management plans (NMPs), establishing phosphorus limitations, and specifying site management requirements.<sup>109</sup> Additionally, the rules clarified that the disposal and incineration of biosolids must be in accordance with DEP's solid waste<sup>110</sup> and air<sup>111</sup> rules to protect water quality and human health.

NMPs are site-specific plans that specify the rate at which biosolids can be applied in the area, the method of application allowed (i.e., surface application, injection, incorporation, etc.), the zone in which biosolids can be applied, pollutant concentration targets, and cumulative pollutant loading limits from all sources at the application site.<sup>112</sup> NMPs are submitted to DEP along with the permit application for each agricultural site.

Agricultural sites that are required to have a NMP for the application of biosolids are also often required to participate in DACS's agricultural BMP program if the site is located in an impaired watershed because of the potential impact biosolids may have on water quality.<sup>113</sup> Typical BMP practices include nutrient management, irrigation and water table management, and water resource protection. Nutrient management practices for biosolids land application address appropriate source, rate, timing, and placement of nutrients to minimize impacts to water resources. Irrigation and water table management practices address methods for irrigating to reduce water and nutrient losses to the environment and to maximize the efficient use and distribution of water. Finally, water resource protection practices, such as the site management requirements for biosolids, help to reduce or prevent the transport of nutrients and sediments from production areas to water resources.<sup>114</sup> The BMPs for the site are typically included in facility permits.<sup>115</sup>

# Biosolids Technical Advisory Committee

In 2018, DEP created a Biosolids Technical Advisory Committee (Biosolids TAC) to evaluate current management practices and explore opportunities to better protect Florida's water resources.<sup>116</sup> The Biosolids TAC was composed of various stakeholders, including environmental and agricultural industry experts, representatives of large and small utilities, waste haulers, consultants, and academics.<sup>117</sup> The meetings included presentations and public comments as well as discussions among the Biosolids TAC members, the audience, and DEP.

Based on the deliberations of the Biosolids TAC and feedback from public participants, the Biosolids TAC recommended that DEP take the following actions:

• Permit biosolids in a manner that minimizes migration of nutrients to prevent impairment to waterbodies and amend current permitting rules to:

<sup>114</sup> DACS, Agriculture and Water Quality, available at

<sup>&</sup>lt;sup>108</sup> DEP, *Biosolids Rule/Permitting* (Nov. 2018), slide 2, available at https://floridadep.gov/water/domestic-wastewater/documents/tac-3-biosolids-rulepermitting (last visited Jan. 21, 2020); *see also*, DEP, *Biosolids Use and Regulations in Florida* (Sept. 2018), slide 11, available at https://floridadep.gov/sites/default/files/Biosolids101-TAC-090518.pdf (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>109</sup> DEP, *Biosolids Rule/Permitting* (Nov. 2018), slide 2, available at https://floridadep.gov/water/domestic-wastewater/documents/tac-3-biosolids-rulepermitting (last visited Jan. 21, 2020); *see* ch. 62-640, F.A.C.

<sup>&</sup>lt;sup>110</sup> Chapter 62-701, F.A.C.

<sup>&</sup>lt;sup>111</sup> See Chapters 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.

<sup>&</sup>lt;sup>112</sup> DEP, *NMPs*, available at https://floridadep.gov/water/domestic-wastewater/documents/nutrient-management-plans-biosolids (last visited Jan. 21, 2020); *see also*, r. 62-640.500, F.A.C.

<sup>&</sup>lt;sup>113</sup> Rule 62-303.200(7), F.A.C., defines "impaired water" to mean a waterbody or waterbody segment that does not meet its applicable water quality standards [...] due in whole or in part to discharges of pollutants from point or nonpoint sources.

https://www.freshfromflorida.com/content/download/33106/813038/Agriculture\_and\_water\_quality\_2018.pdf (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>115</sup> Section 403.067(7)(c), F.S.; *see* ch. 2016-1, Laws of Fla.

 <sup>&</sup>lt;sup>116</sup> DEP, *DEP Biosolids Technical Advisory Committee*, available at https://floridadep.gov/water/domestic-wastewater/content/dep-biosolids-technical-advisory-committee (last visited Jan. 21, 2020).
 <sup>117</sup> Id.

- Establish the rate of biosolids application based on site specifics, such as soil characteristics/adsorption capacity, water table, hydrogeology, site use, and distance to surface water;
- Evaluate the percentage of water extractable phosphorus in all biosolids to inform the appropriate application rate; and
- Establish criteria for low, medium, and high-risk sites that guide application practices and required water quality monitoring.
- Increase the inspection rate of land application.
- Develop site-specific groundwater and surface water monitoring protocols to detect nutrient migration.
- Develop and conduct biosolids and nutrient management research on nutrient run-off through surface and groundwater flow using various application rates, types of biosolids application, and different geologic conditions.
- Promote innovative technology pilot projects for biosolids processing that could provide a wider range of beneficial end products.<sup>118</sup>

DEP published a notice of rule development to amend its biosolids rules<sup>119</sup> on March 22, 2019. DEP held rulemaking workshops on June 25, 26, and 27, 2019, in various locations across the state and accepted public comments until August 15, 2019. A notice of proposed rule was published on October 29, 2019.<sup>120</sup>

The statement of estimated regulatory costs (SERC) for the proposed rule includes the following statewide cost estimates:

- \$10 million in capital costs for new permitting and land application sites;
- At least \$31 million in recurring costs for additional sites and transportation of wet biosolids; and
- \$1 million in additional monitoring costs.<sup>121</sup>

DEP expects more biosolids to be converted to Class AA biosolids/fertilizer as a result of the proposed rule and estimates the capital cost for additional Class AA biosolids projects to be between \$300 and \$400 million.<sup>122</sup> DEP is currently reviewing lower cost regulatory alternatives that have been submitted. Because the SERC shows that the adverse impact or regulatory cost of the proposed rule exceeds \$1 million in the aggregate within five years after implementation, the proposed rule must be submitted to the Legislature for ratification and may not take effect until it is ratified by the Legislature.<sup>123</sup>

# Consolidated WMD Annual Reports

By March 1 of each year, the WMDs must submit a consolidated annual report to the Governor, the Legislature, and DEP. The WMDs must also provide copies of the report to the chairs of the legislative committees having substantive or fiscal jurisdiction over the WMDs and to the governing boards of all county entities having jurisdiction or deriving any funds for operations of the district. The report must also be made available to the public in either a printed or an electronic format.<sup>124</sup>

The consolidated annual report includes several legislatively mandated plans and reports regarding the status of water resource programs. The consolidated annual report includes: the Strategic Water Management Plan Annual Work Plan Report; the Minimum Flows and Minimum Water Levels Annual

<sup>&</sup>lt;sup>118</sup> DEP, Biosolids Technical Advisory Committee Recommendations (January 2019), available at

https://floridadep.gov/water/domestic-wastewater/documents/tac-4-biosolids-tac-considerations (last visited Jan. 21, 2020). <sup>119</sup> Chapter 62-640, F.A.C.

<sup>&</sup>lt;sup>120</sup> The public comment period was originally scheduled to end July 29, 2019, but the deadline was extended; *see* Florida Administrative Register, *Notice List:* 62-640, available at https://www.flrules.org/gateway/result.asp (last visited Jan. 21, 2020). <sup>121</sup> *Id*.

 $<sup>^{122}</sup>$  *Id*.

<sup>&</sup>lt;sup>123</sup> Section 120.541, F.S.

<sup>&</sup>lt;sup>124</sup> Northwest Florida WMD, *Consolidated Annual Reports*, available at https://www.nwfwater.com/Data-Publications/Reports-Plans/Consolidated-Annual-Reports (last visited Jan. 21, 2020).

Priority List and Schedule; the Annual Five-Year Capital Improvement Plan; the Alternative Water Supplies Annual Report; the Five-Year Water Resource Development Work Program; the Florida Forever WMD Work Plan Annual Report; the Mitigation Donation Annual Report; the Water Projects in the Five-Year Water Resources Development Work Program; and the Surface Water Improvement and Management Program Annual Report.<sup>125</sup>

## Indian River Lagoon

The Indian River Lagoon (IRL) system is an estuary<sup>126</sup> that runs along 156 miles of Florida's east coast and borders Volusia, Brevard, Indian River, St. Lucie, and Martin Counties.<sup>127</sup> The IRL system is composed of three main waterbodies: Mosquito Lagoon, Banana River, and the Indian River Lagoon.<sup>128</sup> Four BMAPs have been adopted for the IRL region.<sup>129</sup>

The IRL is one of the most biologically diverse estuaries in North America and is home to more than 2,000 species of plants, 600 species of fish, 300 species of birds, and 53 endangered or threatened species.<sup>130</sup> The estimated economic value received from the IRL in 2014 was approximately \$7.6 billion.<sup>131</sup> Industry groups that are directly influenced by the IRL support nearly 72,000 jobs.<sup>132</sup>

The IRL ecosystem has been harmed by human activities in the region. Specifically, stormwater runoff from urban and agricultural areas, wastewater treatment facility discharges, canal discharges, septic systems, animal waste, and fertilizer applications have led to harmful levels of nutrients and sediments entering the lagoon.<sup>133</sup> These pollutants create cloudy conditions, feed algal blooms, and lead to muck accumulation, all of which negatively impact the seagrass that provides habitat for much of the IRL's marine life.<sup>134</sup>

#### Effect of the Bill

# OSTDSs

The bill requires the consolidated WMD annual report to be submitted to the Office of Economic and Demographic Research (EDR)<sup>135</sup> in addition to DEP, the Governor, and the Legislature and requires the report to include projects to connect OSTDSs to central sewerage systems and to convert OSTDSs to enhanced nutrient reducing OSTDSs.

<sup>&</sup>lt;sup>125</sup> Section 373.036(7), F.S.

 <sup>&</sup>lt;sup>126</sup> An estuary is a partially enclosed coastal waterbody where freshwater from rivers and streams mixes with saltwater from the ocean. EPA, *What Is An Estuary*?, available at https://www.epa.gov/nep/basic-information-about-estuaries (last visited Jan. 21, 2020).
 <sup>127</sup> IRL National Estuary Program, *About the Indian River Lagoon*, available at http://www.irlcouncil.com/ (last visited Jan. 21, 2020).
 <sup>128</sup> Id.

<sup>&</sup>lt;sup>129</sup> East Central Florida Regional Planning Council and the Treasure Coast Regional Planning Council, *Indian River Lagoon Economic Valuation Update* (Aug. 26, 2016), x, available at http://tcrpc.org/special\_projects/IRL\_Econ\_Valu/FinalReportIRL08\_26\_2016.pdf (last visited Jan. 21, 2020); DEP, *Basin Management Action Plans (BMAPs)*, available at https://floridadep.gov/dear/water-quality-restoration/content/basin-management-action-plans-bmaps (last visited Jan. 21, 2020).

 <sup>&</sup>lt;sup>130</sup> IRL National Estuary Program, *About the Indian River Lagoon*, available at http://www.irlcouncil.com/ (last visited Jan. 21, 2020).
 <sup>131</sup> East Central Florida Regional Planning Council and the Treasure Coast Regional Planning Council, *Indian River Lagoon Economic Valuation Update* (Aug. 26, 2016), x, available at http://tcrpc.org/special\_projects/IRL\_Econ\_Valu/FinalReportIRL08\_26\_2016.pdf (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>132</sup> *Id.* at ix.

<sup>&</sup>lt;sup>133</sup> Tetra Tech, Inc. & Closewaters, LLC, *Draft Save Our Indian River Lagoon Project Plan 2019 Update for Brevard County, Florida* (Mar. 2019), xii, available at

https://www.dropbox.com/s/j9pxd59mt1baf7q/Revised%202019%20Save%20Our%20Indian%20River%20Lagoon%20Project%20Pl an%20Update%20032519.pdf?dl=0 (last visited Jan. 21, 2020).

 $<sup>^{134}</sup>$  *Id*.

<sup>&</sup>lt;sup>135</sup> EDR is a research arm of the Legislature that is principally concerned with forecasting economic and social trends that affect policymaking, revenues, and appropriations. EDR publishes the official economic, demographic, revenue, and agency workload forecasts that are developed by Consensus Estimating Conferences and makes them available to the Legislature, state agencies, universities, research organizations, and the general public. *See* EDR, *Welcome*, available at http://edr.state.fl.us/Content/ (last visited Jan. 21, 2020); EDR, *About Us*, available at http://edr.state.fl.us/Content/about/index.cfm (last visited Jan. 21, 2020).

The bill requires DEP and DOH to include all portions of a lot subject to any easement, right-of-way, and right of entry when calculating the size of the lot when determining whether an OSTDS can be installed on lots of less than one acre in priority focus areas.

The bill repeals the TRAP and the RRAC.

Before July 1, 2020, the bill requires DOH to implement a fast-track approval process of no longer than six months for the determination of the use of American National Standards Institute 245 systems approved by the National Sanitation Foundation International (NSF/ANSI 245).<sup>136</sup>

The bill creates an OSTDS TAC to provide recommendations to increase the availability of enhanced nutrient reducing OSTDSs in the marketplace, to consider and recommend regulatory options to facilitate the use of enhanced nutrient reducing OSTDSs approved by a national agency or organization, and provide recommendations on appropriate setback distances for OSTDSs from surface water, groundwater, and wells. The bill requires DEP to use existing and available resources to administer and support the activities of the TAC.

By August 1, 2021, the bill requires DEP, in consultation with DOH, to appoint no more than 10 members to the TAC, who must include:

- A professional engineer;
- A septic tank contractor;
- Two representatives from the home building industry;
- A representative from the real estate industry;
- A representative from the OSTDS industry;
- A representative from local government;
- Two representatives from the environmental community; and
- A representative of the scientific and technical community who has expertise in water pollutants, toxicology, epidemiology, geology, biology, or environmental sciences.

The bill requires the TAC to submit its recommendations to the Governor and the Legislature by January 1, 2022, and requires the TAC to expire August 15, 2022.

The bill requires DEP to adopt rules relating to the location of OSTDSs, including establishing setback distances, to prevent surface water and groundwater contamination. The bill further requires the rulemaking process for such rules to be completed by July 1, 2022, and requires DEP to notify the Division of Law Revision of the date such rules take effect. The bill requires the rules to consider conventional and enhanced nutrient-reducing OSTDS designs, impaired or degraded water bodies, domestic wastewater and drinking water infrastructure, potable water sources, non-potable wells, stormwater infrastructure, OSTDS remediation plans, nutrient pollution, and recommendations by the OSTDS TAC. The rules must also allow a person to apply for and receive 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. The bill specifies that OSTDSs permitted before the rules take effect must comply with the statutory setback distances.

# Wastewater Treatment Facilities

The bill requires DEP to adopt rules to reasonably limit, reduce, and eliminate domestic wastewater collection and transmission system pipe leakages and inflow and infiltration.

<sup>&</sup>lt;sup>136</sup> NSF/ANSI 245 is a certification applied to an OSTDS that defines total nitrogen reduction requirements. A NSF/ANSI 245 certified system covers residential wastewater treatment systems with rated capacities between 400 and 1,500 gallons per day. To achieve certification, treatment systems must produce an acceptable quality of effluent during a six-month (26-week) test; *see also*, The Public Health and Safety Organization, *NSF/ANSI 245: Nitrogen Reduction*, available at http://www.nsf.org/services/by-industry/water-wastewater/onsite-wastewater/nitrogen-reduction (last visited Jan. 21, 2020).

The bill requires public utilities, or their affiliated companies, holding, applying for, or renewing a domestic wastewater discharge permit to file annual reports regarding transactions or allocations of common costs and expenditures on pollution mitigation and prevention among the utility's permitted systems. DEP must adopt rules to implement the reporting requirement.

The bill requires DEP, subject to appropriation, to establish a real-time water quality monitoring program to assist in the restoration, preservation, and enhancement of impaired waterbodies and coastal resources. The bill encourages DEP to form public-private partnerships with established scientific entities that have proven existing real-time water quality monitoring equipment in order to expedite creation of the program.

The bill requires BMAPs for nutrient TMDLs to include a wastewater treatment plan developed by a local government in consultation with DEP, the WMD, and the public and private domestic wastewater facilities within the local government's jurisdiction if DEP identifies domestic wastewater facilities or OSTDSs as contributors of at least 20 percent of point source or nonpoint source nutrient pollution or if DEP determines remediation is necessary to achieve nutrient TMDLs. The bill requires the wastewater treatment plan to be adopted as part of the BMAP no later than July 1, 2025.

The bill requires the wastewater treatment plan to provide for construction, expansion, or upgrades necessary to achieve the TMDL requirements applicable to the domestic wastewater treatment facility and include the permitted capacity in average annual gallons per day for the domestic wastewater treatment facility, the average nutrient concentration and the estimated average nutrient load of the domestic wastewater, a projected timeline of the dates by which the construction of any facility improvements will begin and be completed, the date by which operations of the improved facility will begin, the estimated cost of the improvements, and the identity of responsible parties.

The bill specifies that if a local government does not have a domestic wastewater treatment facility in its jurisdiction then it is not required to develop a wastewater treatment plan unless there is a demonstrated need to establish a domestic wastewater treatment facility within its jurisdiction to improve water quality necessary to achieve a TMDL. The bill further specifies that a local government is not responsible for a private domestic wastewater facility's compliance with a BMAP unless such facility is operated through a public-private partnership to which the local government is a party.

The bill requires BMAPs to include an OSTDS remediation plan developed by a local government, in consultation with DOH, the WMD, DEP, and public and private domestic wastewater facilities, if DEP determines that OSTDSs contribute to at least 20 percent of nonpoint source nutrient pollution or that the plan is necessary to achieve the TMDL.

The bill requires an OSTDS remediation plan to include an inventory of OSTDSs; identify OSTDSs that would be upgraded to enhanced nutrient reducing systems, that would be connected to existing or future central domestic wastewater infrastructure in the jurisdiction or domestic wastewater service area of the local government, or that would remain conventional; estimate the cost of these upgrades; and identify deadlines and interim milestones for the planning, design, and construction of projects. The bill further requires DEP to adopt the OSTDS remediation plan as part of a BMAP by July 1, 2025, or as required for Outstanding Florida Springs.

When identifying wastewater projects in a BMAP, the bill prohibits DEP from requiring the higher cost project if a lower cost option achieves the same nutrient load reduction. However, the bill allows the regulated entity to choose a different cost option if it complies with the pollutant reduction requirements of an adopted TMDL and meets or exceeds the pollution reduction requirement of the original project.

By July 1, 2021, the bill requires DEP, in consultation with county health departments, wastewater treatment facilities, and other governmental entities, to submit a report to the Governor and the Legislature evaluating the costs of wastewater projects identified in BMAPs, OSTDS remediation plans, and other restoration plans developed to meet TMDLs. The report must include:

- Projects to replace OSTDSs with enhanced nutrient reducing OSTDSs; install or retrofit OSTDSs with enhanced nutrient reducing technologies; construct, upgrade, or expand domestic wastewater treatment facilities to meet the wastewater treatment plan; and connect OSTDSs to domestic wastewater treatment facilities;
- The estimated costs, nutrient load reduction estimates, and other benefits of each project;
- The estimated implementation timeline for each project;
- A proposed five-year funding plan for each project and the source and amount of financial assistance DEP, the WMD, or other project partner will make available to fund the project; and
- The projected costs of installing enhanced nutrient reducing OSTDSs on buildable lots in priority focus areas to comply with statutory restrictions on the activities allowed in such areas.

The bill requires DEP to submit a report to the Governor and the Legislature by July 1, 2021, that provides an assessment of the water quality monitoring being conducted for each BMAP implementing a nutrient TMDL. The bill specifies that DEP may coordinate with the WMDs and any applicable university in developing the report. The bill requires the report to:

- Evaluate the water quality monitoring prescribed for each BMAP to determine if it is sufficient to detect changes in water quality caused by the implementation of a project;
- Identify gaps in water quality monitoring; and
- Recommend water quality needs.

The bill requires DEP, beginning January 1, 2022, to submit annual cost estimates for projects listed in the wastewater treatment plans or OSTDS remediation plans to EDR, and requires EDR to include the estimates in its annual assessment of water resources and conservation lands.

The bill creates a wastewater grant program and allows DEP, in consultation with the WMDs, to provide grants, subject to appropriation, for projects within BMAPs, alternative restoration plans adopted by final order, or rural areas of opportunity (RAOs)<sup>137</sup> that will reduce excess nutrient pollution. Projects eligible for funding include projects to retrofit OSTDSs to upgrade them to enhanced nutrient-reducing OSTDSs; projects to provide advanced waste treatment; and projects to connect OSTDSs to central sewer facilities. The bill requires each grant for a project to have a minimum 50 percent local match, but allows DEP to waive such match for projects within an area designated as a RAO. The bill establishes the following priority for funding projects:

- First priority must be given to projects that subsidize the connection of OSTDSs to a wastewater treatment facility;
- Second priority must be given to projects that expand a collection or transmission system that promotes efficiency by planning the installation of wastewater transmission facilities to be constructed concurrently with other construction projects occurring within or along a transportation facility right-of-way; and
- Third priority must be given to projects that otherwise connect OSTDSs to wastewater treatment facilities.

The bill further requires DEP, in determining priorities, to consider the estimated reduction in nutrient load per project; project readiness; cost-effectiveness of the project; overall environmental benefit of a project; the location of a project; the availability of local matching funds; and projected water savings or quantity improvements associated with a project. The bill requires DEP, beginning January 1, 2021, and each January 1 thereafter, to submit a report to the Governor and the Legislature regarding the projects funded pursuant to the grant program.

<sup>&</sup>lt;sup>137</sup> A RAO is a rural community or region of rural communities that presents a unique economic development opportunity of regional impact or that has been adversely affected by an extraordinary economic event, severe or chronic distress, or a natural disaster. By executive order, the Governor may designate up to three RAOs, establishing each region as a priority assignment for Rural Economic Development Initiative agencies. The Governor can waive the criteria, requirements, or any similar provisions of any state economic development incentive for projects in a RAO. Sections 288.0656(2)(d) and (7), F.S.

Beginning July 1, 2025, the bill prohibits wastewater treatment facilities from discharging into the IRL without providing advanced waste treatment.

The bill requires DEP, by December 31, 2020, to submit a report to the Governor and the Legislature that provides the status of upgrades made by each wastewater treatment facility discharging into specified waterbodies to meet the advanced waste treatment requirements. The report must include a list of wastewater treatment facilities that will be required to upgrade to advanced waste treatment, the preliminary cost estimates for the upgrades, and a projected timeline for the upgrades.

The bill requires any facility for sanitary sewage disposal to have a power outage contingency plan that mitigates the impacts of power outages on the utility's collection system and pump stations.

The bill requires sanitary sewage disposal facilities that control a collection or transmission system of pipes and pumps to collect or transmit wastewater from domestic or industrial sources to the facility to take steps to prevent SSOs or underground pipe leaks and ensure collected wastewater reaches the facility. The bill further requires these facilities to use I&I studies and leakage surveys to develop pipe assessment, repair, and replacement action plans on a five-year planning horizon. The facilities must report such plans to DEP and include information regarding the annual expenditures dedicated to the I&I studies and replacement action plans; expenditures dedicated to pipe assessment, repair, and replacement action plans; expenditures dedicated to pipe assessment, repair, and replacement; and expenditures designed to limit the presence of fats, roots, oils, and grease in the facility's collection system. The bill requires DEP to adopt rules regarding the implementation of I&I studies and leakage surveys but prohibits such rules from fixing or revising utility rates or budgets. The bill specifies that substantial compliance with these replacement action plan requirements must be considered evidence in mitigation for the purposes of assessing penalties.

The bill requires DEP to issue an operation permit for a domestic wastewater treatment facility not regulated under the NPDES program for a term of up to 10 years if the facility is meeting the goals stated in its action plan.

The bill requires water pollution operation permits to include procedures to investigate or survey a significant percentage of the domestic wastewater collection system throughout the duration of the permit to determine pipe integrity. The bill further requires the permittee to submit an annual report to DEP including annual facility revenues and expenditures and detailing any deviation from annual expenditures related to I&I studies; model pipe assessment, repair, and replacement action plans; and pipe assessment, repair, and replacement. The bill directs DEP to adopt rules establishing requirements for the annual report. The bill specifies that substantial compliance with these requirements must be considered evidence in mitigation for the purposes of assessing penalties.

The bill requires DEP, by March 1 of each year, to submit a report to the Governor and the Legislature identifying all domestic wastewater utilities that experienced a SSO in the preceding calendar year. The report must include the name of the utility or responsible entity, permitted capacity in annual average gallons per day, number of overflows, type of water discharged, and total volume of sewage released. To the extent known and available, the report must also include the volume of sewage recovered, the volume of sewage discharged to surface waters, and the cause of the SSO. The bill further requires that, for each facility that experienced an overflow, DEP submit with the SSO report the annual report required for water pollution operation permits regarding facility revenues and expenditures.

#### Biosolids

The bill requires DEP to adopt rules for biosolids management and specifies that such rules may not take effect until ratified by the Legislature.

For a new land application site permit or permit renewal issued after July 1, 2020, the bill requires the permittee of the biosolids land application site to ensure a minimum unsaturated soil depth of 2 feet between the depth of biosolids placement and the water table level at the time the Class A or Class B biosolids are applied to the soil. The bill specifies that biosolids may not be applied on soils that have a

seasonal high-water table less than six inches from the soil surface or within six inches of the intended depth of biosolids placement, unless a DEP-approved NMP and water quality monitoring plan provide reasonable assurances that the land application of biosolids at the site will not cause or contribute to a violation of the state's surface WQS or groundwater standards. The bill defines the term "seasonal high water" to mean the elevation to which the ground and surface water may be expected to rise due to a normal wet season.

The bill also requires a new land application site permit or permit renewal submitted after July 1, 2020, to be enrolled in DACS's BMP program or be within an agricultural operation enrolled in the program for the applicable commodity type. The bill requires all permits to comply with these statutory requirements by July 1, 2022.

The bill requires new or renewed biosolids land application site or facility permits issued after July 1, 2020, to include a permit condition that requires the permit to be reopened to insert a compliance date of no later than one year after the effective date of the biosolids rules adopted by DEP. The bill specifies that all permits must meet the requirements of the biosolids rules adopted by DEP no later than two years after the effective date of such rules.

The bill authorizes a municipality or county to enforce or extend a local ordinance, regulation, resolution, rule, moratorium, or policy relating to the land application of Class A or Class B biosolids if it was adopted before November 1, 2019. The bill specifies that such local ordinance, regulation, resolution, rule, moratorium, or policy is effective until repealed by the municipality or county.

## Stormwater

#### **Background**

Stormwater is the flow of water resulting from, and immediately following, a rainfall event.<sup>138</sup> When stormwater falls on pavement, buildings, and other impermeable surfaces, the runoff flows quickly and can pick up sediment, nutrients (such as nitrogen and phosphorous), chemicals, and other pollutants.<sup>139</sup> A stormwater management system is a system designed to control discharges necessitated by rainfall events, incorporating methods to collect, convey, store, treat, use, or reuse water to prevent or reduce flooding, overdrainage, environmental degradation, and water pollution.<sup>140</sup> Most activities that create new impermeable surfaces or alter surface water flows will involve a stormwater management system.<sup>141</sup>

Effective stormwater management is essential to reducing nonpoint source pollution.<sup>142</sup> Methods such as low-impact design technologies and BMPs can be implemented to address pollution in stormwater discharges.<sup>143</sup> Low-impact development refers to systems and practices that mimic or preserve natural drainage processes to manage stormwater.<sup>144</sup> This approach is also known as "green infrastructure," and instead of moving stormwater away from the built environment, these methods treat stormwater at

<sup>142</sup> Rule 62-40.431(1), F.A.C.

<sup>&</sup>lt;sup>138</sup> DEP, *Environmental Resource Permit Applicant's Handbook Volume I (General and Environmental)* (June 1, 2018), 2-10, available at https://www.swfwmd.state.fl.us/sites/default/files/medias/documents/Applicant\_Hanbook\_I\_-\_Combined.pd\_0.pdf (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>139</sup> DEP, *Stormwater Management* (2016), 1, available at https://floridadep.gov/sites/default/files/stormwater-management\_0.pdf (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>140</sup> Section 373.403(10), F.S.

<sup>&</sup>lt;sup>141</sup> DEP, *Environmental Resource Permit Applicant's Handbook Volume I (General and Environmental)* (June 1, 2018), 1-5, available at https://www.swfwmd.state.fl.us/sites/default/files/medias/documents/Applicant\_Hanbook\_I\_-\_Combined.pd\_0.pdf (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>143</sup> South Florida WMD, *Quick Facts on the Statewide Unified Stormwater Rule* (2009), available at

https://www.sfwmd.gov/sites/default/files/documents/spl\_stormwater\_rule.pdf (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>144</sup> EPA, Benefits of Low Impact Development (2012), 1, available at https://www.epa.gov/sites/production/files/2015-

<sup>09/</sup>documents/bbfs1benefits.pdf (last visited Jan. 21, 2020); EPA, Urban Runoff: Low Impact Development, available at https://www.epa.gov/nps/urban-runoff-low-impact-development (last visited Jan. 21, 2020).

its source.<sup>145</sup> Low-impact designs, including green roofs, permeable pavements, or bioswales, can result in stormwater being reused, soaking into vegetation that performs evaporative cooling, or infiltrating the soil and replenishing groundwater.<sup>146</sup>

Since the 1980s, Florida has regulated the discharge of stormwater to prevent pollution of the waters of the state and protect the designated beneficial use of surface waters.<sup>147</sup> Florida has established minimum stormwater treatment performance standards, which require design and performance criteria for new stormwater management systems to achieve at least an 80 percent reduction of the average annual load of pollutants that would cause or contribute to violations of state WQS and further achieve at least a 95 percent reduction of the average annual load of pollutants that would cause or contribute to violations of state WQS in Outstanding Florida Waters.<sup>148</sup> When a stormwater management system complies with rules establishing applicable design and performance criteria, there is a rebuttable presumption that the system's discharge will comply with WQS.<sup>149</sup>

Through its Environmental Resource Permitting (ERP) program, DEP regulates activities that create stormwater runoff, as well as dredging and filling in wetlands and other surface waters.<sup>150</sup> ERPs are designed to prevent flooding, protect wetlands and other surface waters, and protect Florida's water quality from stormwater pollution.<sup>151</sup> DEP implements the statewide ERP program in conjunction with the WMDs and certain local governments. The ERP Applicant Handbook, which is incorporated by reference into DEP rules, provides guidance on DEP's ERP program, including stormwater topics such as the design of stormwater management systems.<sup>152</sup>

# 2010 Stormwater Rulemaking

From 2008 to 2010, DEP and the WMDs worked together to develop a statewide unified stormwater rule to protect Florida's surface waters from the effects of excessive nutrients in stormwater runoff.<sup>153</sup> A technical advisory committee was established and, in 2010, DEP announced a series of workshops to allow for public comment on the statewide stormwater quality draft rule.<sup>154</sup> The goal of the rule was to increase the level of nutrient treatment in stormwater discharges and provide statewide consistency by establishing revised stormwater quality treatment performance standards and BMP design criteria.<sup>155</sup>

<sup>149</sup> Rule 62-40.432(2), F.A.C.

<sup>&</sup>lt;sup>145</sup> DEP, *Green Infrastructure*, available at https://floridadep.gov/wra/319-tmdl-fund/content/green-infrastructure (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>146</sup> EPA, Benefits of Low Impact Development (2012), 1, available at https://www.epa.gov/sites/production/files/2015-

<sup>09/</sup>documents/bbfs1benefits.pdf (last visited Jan. 21, 2020); South Florida WMD, *Quick Facts on the Statewide Unified Stormwater Rule* (2009), available at https://www.sfwmd.gov/sites/default/files/documents/spl\_stormwater\_rule.pdf (last visited Jan. 21, 2020). <sup>147</sup> DEP, *Evaluation of Current Stormwater Design Criteria within the State of Florida* (2007), 1-1, available at

https://www.sfwmd.gov/sites/default/files/documents/sw%20treatment%20report-final71907.pdf (last visited Jan. 21, 2020).

<sup>&</sup>lt;sup>148</sup> Rule 62-40.432(2), F.A.C.; DEP, *Outstanding Florida Waters*, available at https://floridadep.gov/dear/water-qualitystandards/content/outstanding-florida-waters (last visited Jan. 21, 2020). Rule 62-302.200(26), F.A.C., defines "Outstanding Florida Water" to mean waters designated by the Environmental Regulation Commission as worthy of special protection because of their natural attributes.

<sup>&</sup>lt;sup>150</sup> DEP, *DEP 101: Environmental Resource Permitting*, available at https://floridadep.gov/comm/press-office/content/dep-101-environmental-resource-permitting (last visited Jan. 22, 2020).

<sup>&</sup>lt;sup>151</sup> South Florida WMD, *Environmental Resource Permits*, available at https://www.sfwmd.gov/doing-business-with-us/permits/environmental-resource-permits (last visited Jan. 22, 2020).

<sup>&</sup>lt;sup>152</sup> Rule 62-330.010(4), F.A.C.; DEP, *Environmental Resource Permit Applicant's Handbook Volume I (General and Environmental)* (June 1, 2018), 2-10, available at https://www.swfwmd.state.fl.us/sites/default/files/medias/documents/Applicant\_Hanbook\_I\_-\_\_Combined.pd\_0.pdf (last visited Jan. 22, 2020).

<sup>&</sup>lt;sup>153</sup> South Florida WMD, *Quick Facts on the Statewide Unified Stormwater Rule*, available at

https://www.sfwmd.gov/sites/default/files/documents/spl\_stormwater\_rule.pdf (last visited Jan. 21, 2020).

 <sup>&</sup>lt;sup>154</sup> Chapter 62-347, F.A.C.; Florida Administrative Register, *Notice of Rescheduling* (Apr. 23, 2010), 1885, available at https://www.flrules.org/Faw/FAWDocuments/FAWVOLUMEFOLDERS2010/3616/3616doc.pdf (last visited Jan. 21, 2020).
 <sup>155</sup> Id.

These rulemaking efforts produced a draft document called the "ERP Stormwater Quality Applicant's Handbook: Design Requirements for Stormwater Treatment in Florida."<sup>156</sup> The 2010 draft handbook provided for different stormwater treatment performance standards based on various classifications of water quality;<sup>157</sup> included instructions for calculating a project's required nutrient load reduction based on comparing the predevelopment and post-development loadings;<sup>158</sup> provided the required criteria for stormwater BMPs; and listed 15 different types of stormwater treatment systems, including low impact design, pervious pavements, and stormwater harvesting.<sup>159</sup>

The proposed rule and revised handbook were expected to be adopted in 2011; however, neither the rule nor a revised handbook were ever adopted.

## Effect of the Bill

The bill requires DEP local pollution control staff training to include coordinating field inspections of public and privately-owned stormwater structural controls.

The bill requires DEP and the WMDs to initiate rulemaking by January 1, 2021, to update the stormwater design and operation regulations using the most recent scientific information available. As part of rule development, the bill requires DEP to consider and address low-impact design BMPs and design criteria that increase the removal of nutrients from stormwater discharges, and measures for consistent application of the net performance standard to ensure significant reductions of any pollutant loadings to a waterbody.

In addition, the bill requires DEP to review and evaluate permits and inspection data by entities that submit a self-certification for the construction, alteration, and maintenance of a stormwater management system serving a total project area of up to 10 acres for compliance with state WQS. DEP must recommend to the Legislature improvements to the self-certification process, including, but not limited to, additional staff resources for DEP review of portions of the process where high-priority water quality issues justify such action.

The bill requires the model stormwater management program to contain model ordinances targeting nutrient reduction practices and utilizing green infrastructure.

#### **Consumptive Use of Water**

#### Background

# Consumptive Use Permits

Before using waters of the state,<sup>160</sup> a person must apply for and obtain a consumptive use permit (CUP) from the applicable WMD<sup>161</sup> or DEP. The WMD or DEP may impose reasonable conditions necessary to assure that the proposed use is consistent with the overall objectives of the WMD or DEP and is not harmful to the water resources of the area.<sup>162</sup> To obtain a CUP, an applicant must establish

<sup>156</sup> DEP, March 2010 Draft, Environmental Resource Permit Stormwater Quality Applicant's Handbook, Design Requirements for Stormwater Treatment Systems in Florida (2010), available at https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/content2/roadway/drainage/files/stormwaterqualityapphb-draft.pdf?sfvrsn=579bf184\_0 (last visited Jan. 21, 2020). <sup>157</sup> Id. at 6-7.

 $<sup>^{158}</sup>$  *Id.* at 8-11.

<sup>&</sup>lt;sup>159</sup> *Id.* at 3.

<sup>&</sup>lt;sup>160</sup> Section 373.019(22), F.S., defines the term "water" or "waters in the state" to mean any and all water on or beneath the surface of the ground or in the atmosphere, including natural or artificial watercourses, lakes, ponds, or diffused surface water and water percolating, standing, or flowing beneath the surface of the ground, as well as all coastal waters within the jurisdiction of the state.
<sup>161</sup> Section 373.216, F.S.; *see* chs. 40A-2, 40B-2, 40C-2, 40D-2, and 40E-2, F.A.C., for CUP permitting requirements.
<sup>162</sup> Section 373.219(1), F.S.; an individual solely using water for domestic consumption is exempt from CUP requirements.

that the proposed use of water is a reasonable-beneficial use,<sup>163</sup> will not interfere with any presently existing legal use of water, and is consistent with the public interest.<sup>164</sup>

It is possible for consumptive use to lower the flows and levels of water bodies to a point that the resource values are significantly harmed. To prevent this harm, the WMDs must identify and establish the limit at which further water withdrawals would be significantly harmful to the water resources or ecology of the area, known as the minimum flow<sup>165</sup> and minimum level (MFL).<sup>166</sup>

For water bodies that are below their MFL, or are projected to fall below it within 20 years, the WMDs are required to implement a recovery or prevention strategy to ensure the MFL is maintained.<sup>167</sup> A recovery or prevention strategy must include the development of additional water supplies and other actions to achieve recovery to the established MFL as soon as practicable or prevent the existing flow or water level from falling below the established MFL.<sup>168</sup> A recovery or prevention strategy must also include a phased-in approach or a timetable that will allow for the provision of sufficient water supplies for all existing and projected reasonable-beneficial uses, including implementation of conservation and other efficiency measures to offset reductions in permitted withdrawals.<sup>169</sup>

## Bottled Water

The U.S. Food and Drug Administration regulates the bottled water industry for safety and water quality.<sup>170</sup> Bottled water is water intended for human consumption that is sealed in bottles or other containers with no added ingredients except that it may optionally contain safe and suitable antimicrobial agents.<sup>171</sup> A "bottled water plant" is an establishment in which bottled water is prepared for sale.<sup>172</sup>

Florida law requires that bottled water come from an "approved source," which is defined as any source of water that complies with the federal Safe Drinking Water Act.<sup>173</sup> Bottled water must be processed in conformance with applicable federal regulations such as standards for water quality and label statements.<sup>174</sup> If the label bears a name or trademark containing terms such as "springs," "well," or "natural," then the label must also state the source of the water.<sup>175</sup>

<sup>167</sup> DEP, *Minimum Flows and Minimum Water Levels and Reservations*, available at https://floridadep.gov/water-policy/water-policy/content/minimum-flows-and-minimum-water-levels-and-reservations (last visited Jan. 27, 2020). <sup>168</sup> Section 373.0421(2), F.S.

 $^{169}$  *Id*.

<sup>172</sup> Sections 500.03(1)(e), (n), and (p), F.S.

<sup>&</sup>lt;sup>163</sup> Section 373.019(16), F.S., defines the term "reasonable-beneficial use" to mean the use of water in such quantity as is necessary for economic and efficient utilization for a purpose and in a manner that is both reasonable and consistent with the public interest. <sup>164</sup> Section 373.223(1), F.S.

<sup>&</sup>lt;sup>165</sup> Section 373.042(1)(a), F.S., provides that the minimum flow for a given watercourse is the limit at which further water withdrawals would be significantly harmful to the water resources or ecology of the area.

<sup>&</sup>lt;sup>166</sup> Section 373.042(1)(b), F.S., provides that the minimum level is the level of groundwater in an aquifer or the level of a surface waterbody at which further withdrawals will significantly harm the water resources of the area. DEP, *Minimum Flows and Minimum Water Levels and Reservations*, available at https://floridadep.gov/water-policy/water-policy/content/minimum-flows-and-minimum-water-levels-and-reservations (last visited Jan. 27, 2020).

<sup>&</sup>lt;sup>170</sup> 21 C.F.R. Part 129; Food and Drug Administration, *FDA Regulates the Safety of Bottled Water Beverages Including Flavored Water and Nutrient-Added Water Beverages*, available at https://www.fda.gov/food/buy-store-serve-safe-food/fda-regulates-safety-bottled-water-beverages-including-flavored-water-and-nutrient-added-water (last visited Feb. 19, 2020).

<sup>&</sup>lt;sup>171</sup> Section 500.03(1)(d), F.S. Florida law defines "bottled water" using the description provided in federal regulation; 21 C.F.R. s. 165.110(a)(1).

<sup>&</sup>lt;sup>173</sup> Sections 500.03(1)(c) and 500.147(3), F.S.; s. 500.03(1)(w), F.S., defines the term "natural water" to mean bottled spring water, artesian well water, or well water that has not been altered with water from another source or that has not been modified by mineral addition or deletion, except for alteration that is necessary to treat the water through ozonation or an equivalent disinfection and filtration process.

<sup>&</sup>lt;sup>174</sup> Section 500.147(3), F.S.; 21 C.F.R. Part 129; 21 C.F.R. § 165.110; *see* DACS, *Bottled Water Testing Requirements*, available at https://www.fdacs.gov/content/download/72733/file/Bottled-Water-Testing-Requirements.pdf (last visited Feb. 19, 2020). <sup>175</sup> Section 500.11(1)(o), F.S.

## **Reclaimed Water**

Reclaimed water is water from a domestic wastewater<sup>176</sup> treatment facility that has received at least secondary treatment<sup>177</sup> and basic disinfection<sup>178</sup> for reuse.<sup>179</sup> Reuse is the deliberate application of reclaimed water for a beneficial purpose.<sup>180</sup> Current law specifies that encouraging and promoting the reuse of reclaimed water are state objectives and are considered to be in the public interest. In response to these objectives, DEP and the WMDs have implemented a comprehensive reuse program.<sup>181</sup>

Florida law allows reclaimed water to be used in slow-rate land application systems for public access areas (e.g., golf courses, parks, and highway medians), residential irrigation, and edible crops;<sup>182</sup> rapidrate land application systems;<sup>183</sup> groundwater recharge and indirect potable reuse systems;<sup>184</sup> and overland flow systems.<sup>185</sup> Industrial uses for reclaimed water such as cooling water, wash water, and process water are also authorized.<sup>186</sup> Florida has been utilizing reclaimed water for landscape irrigation and industrial uses since the early 1970s. Currently, Florida is the national leader in water reuse, utilizing 48 percent of the total domestic wastewater in the state for nonpotable uses.<sup>187</sup>

The use of reclaimed water for the purpose of directly or indirectly augmenting drinking water supplies is known as potable reuse. Indirect potable reuse is the planned discharge of reclaimed water to ground or surface waters for the development or supplementation of a potable water supply. Direct potable reuse is the introduction of advanced treated reclaimed water into a raw water supply immediately upstream of a drinking water treatment facility or directly into a potable water distribution system.<sup>188</sup>

Although regulations currently exist in Florida for using reclaimed water for indirect potable reuse for augmenting surface water, there are no regulations that address using reclaimed water for indirect potable reuse involving groundwater replenishment or direct potable reuse.<sup>189</sup>

## Potable Reuse Commission

The Potable Reuse Commission (PRC) was organized by stakeholders to develop a consensus-based framework to advance the safe implementation of potable reuse in Florida. The framework was developed to safeguard the protection of public health and the environment, provide regulatory and financial certainty to communities considering potable reuse, and ensure consistency in permitting and implementation of potable reuse projects throughout the state.<sup>190</sup>

The PRC final report was published in January 2020 and provided the following recommendations:

<sup>190</sup> *Id*. at iii.

<sup>&</sup>lt;sup>176</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>&</sup>lt;sup>177</sup> Rule 62-610.200(54), F.A.C., defines the term "secondary treatment."

<sup>&</sup>lt;sup>178</sup> Rule 62-600.440(5), F.A.C., provides the requirements for basic disinfection.

<sup>&</sup>lt;sup>179</sup> Section 373.019(17), F.S.; r. 62-610.200(48), F.A.C.

<sup>&</sup>lt;sup>180</sup> Rule 62-610.200(52), F.A.C.

<sup>&</sup>lt;sup>181</sup> DEP, *Risk Impact Statement* (Dec. 21, 1998), available at https://floridadep.gov/sites/default/files/risreuse\_508C.pdf (last visited Jan. 24, 2020).

<sup>&</sup>lt;sup>182</sup> Chapter 62-610, Part III, F.A.C.

<sup>&</sup>lt;sup>183</sup> Chapter 62-610, Part IV, F.A.C., includes rapid infiltration basins and absorption fields.

<sup>&</sup>lt;sup>184</sup> Chapter 62-610, Part V, F.A.C.

<sup>&</sup>lt;sup>185</sup> Chapter 62-610, Part VI, F.A.C., includes the treatment of domestic wastewater to meet effluent limitations for discharge to surface waters.

<sup>&</sup>lt;sup>186</sup> Chapter 62-610, Part VII, F.A.C.

<sup>&</sup>lt;sup>187</sup> PRC, Framework for the Implementation of Potable Reuse in Florida (Jan. 2020), xxiii, available at

http://prc.watereuseflorida.com/wp-content/uploads/Framework-for-Potable-Reuse-in-Florida-FINAL-January-2020-web10495.pdf (last visited Jan. 27, 2020).

<sup>&</sup>lt;sup>188</sup> *Id.* at xxiv.

<sup>&</sup>lt;sup>189</sup> Id.

- Move Florida's existing reclaimed water regulations that apply to potable reuse into the appropriate drinking water regulation rule chapters;
- Revise the existing drinking water regulations to specify that reclaimed water is a water supply source;
- Require potable reuse to meet drinking water standards by providing pathogen treatment; and
- Address emerging constituents,<sup>191</sup> such as pharmaceuticals and personal care products, in potable reuse.<sup>192</sup>

# Effect of the Bill

The bill requires DEP, in coordination with the WMDs, to conduct a study on the bottled water industry in the state. The study must identify all springs statewide that have an associated CUP for a bottled water facility producing its product with water derived from a spring. Such identification must include the magnitude of the spring; whether the spring has been identified as an Outstanding Florida Spring; any MFLs adopted by DEP or the WMD, the status of any such adopted MFLs, and any associated recovery or prevention strategies; the permitted and actual use associated with the CUPs; the reduction in flow associated with the permitted and actual use associated with the CUPs; the impact on springs of bottled water facilities compared to other users; and the types of water conservation measures employed at bottled water facilities permitted to derive water from a spring.

The study must also:

- Identify the labeling and marketing regulations associated with the identification of bottled water as spring water, including whether the regulations incentivize the withdrawal of water from springs;
- Evaluate the direct and indirect economic benefits to the local communities resulting from bottled water facilities that derive water from springs, including, but not limited to, tax revenue, job creation, and wages;
- Evaluate the direct and indirect costs to the local communities located in proximity to springs impacted by withdrawals from bottled water production, including, but not limited to, the decreased recreational value of the spring and the cost to other users for the development of alternative water supply or reductions in permit durations and allocations;
- Include a cost-benefit analysis of withdrawing, producing, marketing, selling, and consuming spring water as compared to other sources of bottled water; and
- Evaluate how much bottled water derived from Florida springs is sold in the state.

The bill requires DEP to submit a report containing the findings of the study to the Governor, the Legislature, and EDR by June 30, 2021.

The bill requires DEP to initiate rule revisions by December 31, 2020, based on the recommendations of the PRC final report. The bill specifies that the rules for potable reuse projects must address contaminants of emerging concern and meet or exceed federal and state drinking WQS and other applicable WQS. The bill further specifies that reclaimed water is deemed a water source for public water supply systems.

# Water Quality Funding Sources

**Background** 

Clean Water State Revolving Fund

<sup>&</sup>lt;sup>191</sup> Emerging constituents, also known as "emerging substances of concern" and "contaminants of emerging concern," is a catch-all term used to describe a fluid list of contaminants of interest to regulatory agencies on both the state and federal level. DEP, *Emerging Substances of Concern* (Dec. 2008), 2, available at https://floridadep.gov/sites/default/files/esoc\_fdep\_report\_12\_8\_08.pdf (last visited Jan. 27, 2020).

<sup>&</sup>lt;sup>192</sup> PRC, Framework for the Implementation of Potable Reuse in Florida (Jan. 2020), xxvii-xxviii, available at

http://prc.watereuseflorida.com/wp-content/uploads/Framework-for-Potable-Reuse-in-Florida-FINAL-January-2020-web10495.pdf (last visited Jan. 27, 2020).

Florida's Clean Water State Revolving Fund (CWSRF) is a federal-state partnership that provides communities a permanent, independent source of low-cost financing for a wide-range of water quality infrastructure projects.<sup>193</sup> The CWSRF is funded through money received from federal grants as well as state contributions, which then "revolve" through the repayment of previous loans and interest earned. While these programs offer loans, grant-like funding is also available for qualified small, disadvantaged communities, which reduces the amount owed on loans by the percentage for which the community qualifies.<sup>194</sup>

The CWSRF provides low-interest loans to local governments to plan, design, and build or upgrade wastewater, stormwater, and nonpoint source pollution prevention projects. Interest rates on loans are below market rates and vary based on the economic means of the community. Generally, local governments and special districts are considered eligible loan sponsors.<sup>195</sup> The EPA classifies 11 types of projects that are eligible to receive CWSRF assistance. They include projects for:

- A publicly owned treatment works;
- A public, private, or nonprofit entity to implement a state nonpoint source pollution management program;
- A public, private, or nonprofit entity to develop and implement a conservation and management plan;
- A public, private, or nonprofit entity to construct, repair, or replace decentralized wastewater treatment systems that treat municipal wastewater or domestic sewage;
- A public, private, or nonprofit entity to manage, reduce, treat, or recapture stormwater or subsurface drainage water;
- A public entity to reduce the demand for publicly owned treatment works capacity through water conservation, efficiency, or reuse;
- A public, private, or nonprofit entity to develop and implement watershed projects;
- A public entity to reduce the energy consumption needs for publicly owned treatment works;
- A public, private, or nonprofit entity for projects for reusing or recycling wastewater, stormwater, or subsurface drainage water;
- A public, private, or nonprofit entity to increase the security of publicly owned treatment works; and
- Any qualified nonprofit entity to provide technical assistance to owners and operators of small and medium sized publicly owned treatment works to plan, develop, and obtain financing for CWSRF eligible projects and to assist each treatment works in achieving compliance with the Clean Water Act.<sup>196</sup>

Of these eligible projects, DEP must give priority to projects that: eliminate public health hazards; enable compliance with laws requiring the elimination of discharges to specific water bodies, including the requirements for domestic wastewater ocean outfalls; assist in the implementation of TMDLs adopted under BMAPs; enable compliance with other pollution control requirements, including toxics control, wastewater residuals management, and reduction of nutrients and bacteria; assist in the implementation of surface water improvement and management plans and pollutant load reduction goals developed under state water policy; promote reclaimed water reuse; eliminate failing OSTDSs or those that are causing environmental damage; or reduce pollutants to and otherwise promote the restoration of surface and ground waters.<sup>197</sup>

Small Community Sewer Construction Assistance Act

 <sup>&</sup>lt;sup>193</sup> 33 USC s. 1383; EPA, *CWSRF*, available at https://www.epa.gov/cwsrf (last visited Feb. 21, 2020); EPA, *Learn about the CWSRF*, available at https://www.epa.gov/cwsrf/learn-about-clean-water-state-revolving-fund-cwsrf (last visited Feb. 21, 2020).
 <sup>194</sup> Id.

<sup>&</sup>lt;sup>195</sup> DEP, State Revolving Fund, available at https://floridadep.gov/wra/srf (last visited Feb. 21, 2020).

<sup>&</sup>lt;sup>196</sup> EPA, *Learn about the CWSRF*, available at https://www.epa.gov/cwsrf/learn-about-clean-water-state-revolving-fund-cwsrf (last visited Feb. 21, 2020).

<sup>&</sup>lt;sup>197</sup> Section 403.1835(7), F.S.

The Small Community Sewer Construction Assistance Act is a grant program established as part of the CWSRF program that requires DEP to award grants to assist financially disadvantaged small communities<sup>198</sup> with their needs for adequate domestic wastewater facilities.<sup>199</sup>

In accordance with rules adopted by the Environmental Regulation Commission (ERC), DEP may provide grants for up to 100 percent of the costs of planning, designing, constructing, upgrading, or replacing wastewater collection, transmission, treatment, disposal, and reuse facilities, including necessary legal and administrative expenses.<sup>200</sup> The rules of the ERC must also:

- Require that projects to plan, design, construct, upgrade, or replace wastewater collection, transmission, treatment, disposal, and reuse facilities be cost-effective, environmentally sound, permittable, and implementable;
- Require appropriate user charges, connection fees, and other charges to ensure the long-term operation, maintenance, and replacement of the facilities constructed under each grant;
- Require grant applications to be submitted on appropriate forms with appropriate supporting documentation and require records to be maintained;
- Establish a system to determine eligibility of grant applications;
- Establish a system to determine the relative priority of grant applications, which must consider public health protection and water pollution abatement;
- Establish requirements for competitive procurement of engineering and construction services, materials, and equipment; and
- Provide for termination of grants when program requirements are not met.<sup>201</sup>

# Effect of the Bill

For projects funded by the CWSRF, the bill requires DEP to prioritize projects that are identified in sewage disposal facility action plans or water pollution operation facility reports or that promote efficiency by planning for the installation of wastewater transmission facilities to be constructed concurrently with other construction projects occurring within or along a transportation facility right-of-way.

The bill requires the system established by ERC rule that determines the priority of grant applications for funding under the Small Community Sewer Construction Assistance Act to consider water pollution prevention or abatement and further requires such system to prioritize projects that plan for the installation of wastewater transmission facilities to be constructed concurrently with other construction projects occurring within or along a transportation facility right-of-way.

# Type Two Transfer

# Background

A type two transfer is the merging of an existing department, program, or activity into another department.<sup>202</sup> Any program or activity transferred by a type two transfer retains all the statutory powers, duties, and functions it held before the transfer. The program or activity also retains its records, personnel, property, and unexpended balances of appropriations, allocations, or other funds, unless otherwise provided by law. The transfer of segregated funds must be made in such a manner that the relation between the program and the revenue source is retained.<sup>203</sup>

<sup>&</sup>lt;sup>198</sup> Section 403.1838(2), F.S., defines the term "financially disadvantaged small community" to mean a county, municipality, or special district that has a population of 10,000 or fewer, according to the latest decennial census, and a per capita annual income less than the state per capita annual income as determined by the U. S. Department of Commerce.

<sup>&</sup>lt;sup>199</sup> Sections 403.1835(3)(d) and 403.1838, F.S.

<sup>&</sup>lt;sup>200</sup> Section 403.1838(3)(a), F.S.

<sup>&</sup>lt;sup>201</sup> Section 403.1838(3)(b), F.S.; ch. 62-505, F.A.C.

<sup>&</sup>lt;sup>202</sup> Section 20.06(2), F.S.

<sup>&</sup>lt;sup>203</sup> Section 20.06(2), F.S.

# Effect of the Bill

Effective July 1, 2021, the bill transfers the duties and powers related to regulation of the Onsite Sewage Program from DOH to DEP by a type two transfer and requires DEP and DOH to submit recommendations to the Governor and the Legislature regarding the transfer by December 31, 2020. The bill further requires DOH to submit a report by July 1, 2020, detailing the number of permits issued per year, costs and expenditures related to equipment and contracting, and other employee-related information.

The bill requires DEP and DOH, by June 30, 2021, to enter into an interagency agreement that addresses agency cooperation following the transfer. The bill allows employees transferred from DOH to DEP to retain any accrued leave.

# **Environmental Violations**

# **Background**

In accordance with the state's numerous environmental laws, DEP is responsible for compliance and enforcement.<sup>204</sup> In addition to damages, a violator can be liable for penalties. Penalties differ from damages in that they are designed to punish the wrongdoer rather than to address the harm caused by the violation.<sup>205</sup> In environmental enforcement, penalties should create incentives to bring immediate compliance and curb future violations.<sup>206</sup> In current law, several types of violations impose a penalty for each offense, with each day during which a violation occurs constituting a separate offense.

Administrative penalties may be levied directly by DEP or in a proceeding in the Division of Administrative Hearings.<sup>207</sup> The formal administrative enforcement process is typically initiated by serving a notice of violation and is finalized through entry of a consent order or final order.<sup>208</sup> In most administrative proceedings, DEP has the final decision.<sup>209</sup> An administrative law judge has the final decision for administrative proceedings involving the Environmental Litigation Reform Act (Reform Act), codified in s. 403.121, F.S., which is the primary statute addressing DEP's administrative penalties.<sup>210</sup> Compared to the judicial process, the administrative process is generally considered less expensive, faster, and more conducive to negotiated settlement.<sup>211</sup> However, if DEP is seeking immediate injunctive relief, which compels a party to act or stop acting, an order must be obtained from a court.<sup>212</sup>

DEP must proceed administratively when it seeks administrative penalties that do not exceed \$10,000 per assessment; DEP is prohibited from imposing administrative penalties in excess of \$10,000 in a single notice of violation.<sup>213</sup> DEP also may not have more than one notice of violation pending against a party unless the additional violation occurred at a different site or was discovered subsequent to the filing of a previous notice of violation.<sup>214</sup>

https://floridadep.gov/sites/default/files/chapter5\_0.pdf (last visited Jan. 27, 2020). <sup>209</sup> *Id.* 

 <sup>&</sup>lt;sup>204</sup> DEP, *Enforcement Manual: DEP Regulatory Enforcement Organization* (2017), available at https://floridadep.gov/sites/default/files/Chapter%201%20October%202017.pdf (last visited Jan. 27, 2020).
 <sup>205</sup> See BLACK'S LAW DICTIONARY 1247 (9th ed. 2009).

<sup>&</sup>lt;sup>206</sup> DEP, *Enforcement Manual: Judicial Process and Remedies, Collections, and Bankruptcies* (2014), 89, available at https://floridadep.gov/sites/default/files/chapter6.pdf (last visited Jan. 27, 2020).

<sup>&</sup>lt;sup>207</sup> See ch. 120, F.S. The administrative process is formalized in the Administrative Procedure Act.

<sup>&</sup>lt;sup>208</sup> DEP, Enforcement Manual: The Administrative Process and Remedies (2014), 58, available at

<sup>&</sup>lt;sup>210</sup> Id. at 58-59, 66-70; ch. 2001-258, Laws of Fla.

<sup>&</sup>lt;sup>211</sup> DEP, Enforcement Manual: The Administrative Process and Remedies (2014), 59, available at

https://floridadep.gov/sites/default/files/chapter5\_0.pdf (last visited Jan. 27, 2020).

<sup>&</sup>lt;sup>212</sup> *Id.* at 59-60.

<sup>&</sup>lt;sup>213</sup> Section 403.121(2)(b), F.S.; DEP, *Enforcement Manual: The Administrative Process and Remedies* (2014), 66-67, available at https://floridadep.gov/sites/default/files/chapter5\_0.pdf (last visited Jan. 27, 2020). This requirement does not apply to underground injection, hazardous waste, or asbestos programs. <sup>214</sup> *Id.* 

Civil penalties are noncriminal fines that are generally levied by a court, but certain agencies may impose them under certain circumstances. The Reform Act allows DEP to seek civil penalties of up to \$10,000 through the administrative process for most environmental violations.<sup>215</sup>

In state court, DEP may pursue two forms of action: a petition to enforce an order previously entered through the administrative process, or a complaint for violations of statutes or rules.<sup>216</sup> Under both actions, DEP may seek injunctive relief, civil penalties, damages, and costs and expenses.<sup>217</sup> For judicially imposed civil penalties, DEP is authorized to recover up to \$10,000 per offense, with each day during any portion of which a violation occurs constituting a separate offense.<sup>218</sup>

A court or an administrative law judge may receive evidence in mitigation, which may result in the decrease or elimination of penalties.<sup>219</sup>

In addition to DEP, the Department of Legal Affairs, any political subdivision or municipality of the state, and any citizen of the state also have the authority to bring an action for injunctive relief against violators of environmental laws.<sup>220</sup>

## Effect of the Bill

The bill requires DEP to assess a penalty of \$4,000 for failure to comply with the pollution prevention and mitigation report or the facility action plan.

The bill increases the administrative penalties for the failure to obtain certain wastewater permits from \$1,000 to \$2,000; an unpermitted or unauthorized discharge not involving a surface water or groundwater quality violation from \$2,000 to \$4,000; and an unpermitted or unauthorized discharge involving a surface water or groundwater quality violation from \$5,000 to \$10,000.

The bill increases the cap of administrative penalties that may be assessed by DEP per violator from \$5,000 to \$10,000, unless the economic benefit of the violation exceeds \$10,000, and the cap for all violations attributable to one person from \$10,000 per assessment to \$50,000 per assessment.

# **Environmental Rights**

#### **Background**

#### Environmental Protection Act

Florida's Environmental Protection Act (Protection Act) authorizes the Department of Legal Affairs, any political subdivision or municipality of the state, or a citizen of the state to take legal action seeking to:<sup>221</sup>

- Compel a governmental agency or authority to enforce laws, rules, and regulations protecting Florida's air, water, and other natural resources; or
- Prevent any person or governmental agency or authority from violating any laws, rules, or regulations protecting Florida's air, water, and other natural resources.

In an administrative, licensing, or other legal proceeding to protect Florida's air, water, or other natural resources from pollution, impairment, or destruction, the Department of Legal Affairs, a political

<sup>&</sup>lt;sup>215</sup> Section 403.121, F.S.

<sup>&</sup>lt;sup>216</sup> DEP, *Enforcement Manual: Judicial Process and Remedies, Collections, and Bankruptcies* (2014), 86, available at https://floridadep.gov/sites/default/files/chapter6.pdf (last visited Jan. 27, 2020).

<sup>&</sup>lt;sup>217</sup>*Id*.

<sup>&</sup>lt;sup>218</sup> Section 403.121(1)(b), F.S.

<sup>&</sup>lt;sup>219</sup> Section 403.121, F.S.

<sup>&</sup>lt;sup>220</sup> Section 403.412, F.S.

<sup>&</sup>lt;sup>221</sup> Section 403.412(2), F.S.

subdivision or municipality of the state, or a citizen of the state is authorized to intervene<sup>222</sup> as a party to the legal action. To intervene, the party must file a verified pleading asserting that the particular activity, conduct, or product will impair, pollute, or otherwise injure the air, water, or other natural resources of the state.<sup>223</sup> A citizen may not institute, initiate, petition for, or request such a proceeding unless he or she will suffer a sufficiently immediate injury that is of the type and nature intended to be protected by law. However, a citizen is not required to demonstrate that his or her injury is different from that which the general public is required to show. A citizen's substantial interest injury is sufficient if the proposed activity, conduct, or product will affect his or her use or enjoyment of air, water, or natural resources protected by law.<sup>224</sup>

The Florida Supreme Court has held that the Protection Act is not an impermissible intrusion by the Legislature into the court's power over practice and procedure in state courts, but instead creates a new cause of action setting out substantive rights not previously possessed by enabling a Florida citizen to take legal action to protect the environment without a showing of special injury.<sup>225</sup>

## Rights of Nature

While Florida authorizes a citizen to assert standing to enjoin an activity that will affect his or her use or enjoyment of air, water, or natural resources, some court rulings and legislation in the U.S. and worldwide<sup>226</sup> have authorized specific legal rights of nature authorizing a person to assert standing on behalf of natural resources.<sup>227</sup>

The U.S. Supreme Court's ruling in *Sierra Club v. Morton* is the closest the U.S. federal government has come to granting personhood to natural resources. In *Sierra Club*, a conservation group took legal action to prevent the U.S. Forest Service from approving a ski development proposed by Walt Disney Productions near the Sequoia National Forest.<sup>228</sup> The Sierra Club (Club) argued that the ski development would adversely affect the forest, but did not allege any personal injury to any specific member of the Club.<sup>229</sup> The court held that because there was no injury in fact to any member of the Club, the Club had no standing to sue on behalf of the forest.<sup>230</sup> The court determined that because the Club did not "have a direct stake in the outcome…authoriz[ing] judicial review at the behest of organizations or individuals who seek to do no more than vindicate their own value preferences through the judicial process" would undermine the goal of the Administrative Procedure Act.<sup>231</sup>

Despite the court's ruling, Justice Douglas's dissenting opinion suggests that "contemporary public concern for protecting nature's ecological equilibrium should lead to the conferral of standing upon environmental objects to sue for their own preservation."<sup>232</sup> In a separate dissent, Justice Blackmun

<sup>&</sup>lt;sup>222</sup> Section 403.412(5), F.S., defines "intervene" to mean to join an ongoing ss. 120.569 or 120.57, F.S., proceeding, and does not authorize a citizen to institute, initiate, petition for, or request a proceeding under ss. 120.569 or 120.57, F.S. Nothing herein limits or prohibits a citizen whose substantial interests will be determined or affected by a proposed agency action from initiating a formal administrative proceeding under the Administrative Procedure Act.

<sup>&</sup>lt;sup>223</sup> Section 403.412(5), F.S.

<sup>&</sup>lt;sup>224</sup> Id.

<sup>&</sup>lt;sup>225</sup> Florida Wildlife Federation v. State Dept. of Environmental Regulation, 390 So. 2d 64 (Fla. 1980).

<sup>&</sup>lt;sup>226</sup> In 2008, Ecuador granted legal rights to all of nature, and in 2017, four rivers were granted legal rights: the Whanganui River in New Zealand, the Ganges and Yamuna rivers in India, and the Rio Atrato in Colombia. Dr. Julia Talbot-Jones, *Flowing from Fiction to Fact: The Challenges of Implementing Legal Rights for Rivers*, Global Water Forum, available at

https://globalwaterforum.org/2018/05/14/flowing-from-fiction-to-fact-the-challenges-of-implementing-legal-rights-for-rivers/ (last visited Jan. 30, 2020).

<sup>&</sup>lt;sup>227</sup> Lidia Cano Pecharroman, *Rights of Nature: Rivers That Can Stand in Court* (Feb 14, 2018), available at https://www.mdpi.com/2079-9276/7/1/13/htm (last visited Jan. 30, 2020).

<sup>&</sup>lt;sup>228</sup> Sierra Club v. Morton, 405 U.S. 727 (1972).

<sup>&</sup>lt;sup>229</sup> *Id.* at 734.

<sup>&</sup>lt;sup>230</sup> *Id.* at 735.

<sup>&</sup>lt;sup>231</sup> *Id.* at 740.

<sup>&</sup>lt;sup>232</sup> *Id.* at 741-42.

expressed similar concern and urged the court to consider the dangers of limiting judicial review solely to human injuries.<sup>233</sup>

While the *Sierra Club* opinion clearly limits standing in environmental actions to action causing injury to a human, the dissenting opinions by Justice Douglas and Justice Blackmun have recently garnered the attention of environmental activists attempting to assert standing on behalf of the environment. For example, in September 2017, the environmental group Deep Green Resistance (DGR) relied on Justice Douglas's dissent when petitioning the federal District Court of Colorado to recognize legal personhood for the Colorado River System.<sup>234</sup> Joined by citizens of Colorado and Utah, DGR asked the U.S. District Court in Denver to declare the Colorado River ecosystem a "person," such that the river system's interest could be represented in court.<sup>235</sup> DGR claimed that the Colorado River System has "the right to exist, flourish, regenerate, and naturally evolve," and that current laws did not protect the natural environment on which persons depend for survival and livelihood.<sup>236</sup> Following lengthy litigation, DGR voluntarily dismissed its case after the Colorado Attorney General set forth numerous reasons the court did not have jurisdiction and opined that the determination of whether the rights of nature exist should be reserved to Congress.<sup>237</sup>

Similar attempts to assert the rights of nature have been made on the local level. For example, in New Mexico in 2013, the Mora County Board of Commissioners passed an ordinance protecting the rights of human communities, nature, and natural water.<sup>238</sup> However, an energy exploration firm challenged the ordinance, and the U.S. district court struck down the ordinance, holding the ordinance violated the Supremacy Clause and was impermissibly overbroad, in violation of the First Amendment.<sup>239</sup>

In 2013, Colorado voters attempted to impose a similar measure targeting oil extraction by hydraulic fracturing ("fracking") and proposed "certain rights for city residents and ecosystems as part of the city charter such as clean water, air and freedom from certain chemicals and oil and gas industry byproducts."<sup>240</sup> When challenged by the Colorado Oil and Gas Association, the Boulder District Court held that Lafayette did not have the authority to prohibit practices authorized and permitted by the state.<sup>241</sup>

More recently, the Orange County, Florida Charter Review Commission approved a request to establish a committee to assess adding rights for the Wekiva River and Econlockhatchee River to the county charter.<sup>242</sup>

#### Effect of the Bill

The bill amends the Protection Act to prohibit, unless otherwise authorized by law or specifically granted in the State Constitution, a local government regulation, ordinance, code, rule, comprehensive plan, charter, or any other provision of law:

 $^{241}$  Id.

<sup>&</sup>lt;sup>233</sup> *Id.* at 755–56.

<sup>&</sup>lt;sup>234</sup> Complaint for Declaratory Relief, Colorado River Ecosystem et al. v. State of Colorado, No. 1:17-cv-02316-RPM (D. Colo. Sept. 25, 2017), at 12–13.

<sup>&</sup>lt;sup>235</sup> *Id.* at 12.

<sup>&</sup>lt;sup>236</sup> *Id.* at 2.

<sup>&</sup>lt;sup>237</sup> Motion to Dismiss, No. 1:17-cv-02316-NYW (D. Colo. Oct. 17, 2017).

<sup>&</sup>lt;sup>238</sup> Swepi, LP v. Mora Cty., 81 F. Supp. 3d 1075, 1090 (D.N.M. 2015).

<sup>&</sup>lt;sup>239</sup> Swepi, 81 F. Supp. 3d at 1088

<sup>&</sup>lt;sup>240</sup> City of Lafayette "Community Rights Act" Fracking Ban Amendment, Question 300 (November 2013), BALLOTOPEDIA (Nov. 2013), available at

https://ballotpedia.org/City\_of\_Lafayette\_%22Community\_Rights\_Act%22\_Fracking\_Ban\_Amendment,\_Question\_300\_(November\_ 2013) (last visited Jan. 30, 2020).

<sup>&</sup>lt;sup>242</sup> Orange County Comptroller, 2020-01-22 Rights of the Wekiva River and Econlockhatchee River Committee, available at https://www.occompt.com/meetings/meeting/2020-01-22-rights-of-the-wekiva-river-and-econlockhatchee-river-committee/ (last visited Jan. 30, 2020).

- From recognizing or granting any legal right to a plant, animal, body of water, or any other part of the natural environment that is not a person<sup>243</sup> or political subdivision;<sup>244</sup> or
- From granting a person or political subdivision any specific rights relating to the natural environment.

The bill provides that the prohibition on granting rights to nonpersons may not be interpreted to limit:

- The power of an adversely affected party to challenge the consistency of a development order with a comprehensive plan, or to file an action for injunctive relief to enforce the terms of a development agreement or to challenge compliance of the agreement with the Florida Local Government Development Agreement Act; or
- The standing of the Department of Legal Affairs, a political subdivision or municipality of the state, or a citizen of the state to maintain an action for injunctive relief as otherwise provided by the Protection Act.

## Important State Interest

The bill specifies that the Legislature determines the bill fulfills an important state interest.

# II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

- A. FISCAL IMPACT ON STATE GOVERNMENT:
  - 1. Revenues:

The bill may have an indeterminate positive impact on state government revenues because some revenue could be realized from enforcement citations and fines.

2. Expenditures:

The bill may have an insignificant negative fiscal impact on DEP and DOH that can be absorbed within existing resources to complete recommendations on the type two transfer. The bill transfers all of the resources and personnel for the OSTDS program by a type two transfer from DOH to DEP, so DEP would use these resources to regulate the OSTDS program beginning July 1, 2021. There may also be an insignificant negative fiscal impact on DEP that can be absorbed within existing resources to administer and support the OSTDS TAC.

The bill requires DEP to make changes to multiple regulatory programs, update BMAPs, and develop, submit, and review multiple new reports.

The bill requires DEP to establish a real-time water quality monitoring program. The bill also requires DEP to create a wastewater grant program. These requirements are subject to appropriation, so there is no fiscal impact.

The bill requires DACS to conduct onsite inspections at least every two years for agricultural producers enrolled in a BMP.

The proposed House of Representatives' Fiscal Year 2020-2021 General Appropriations Act appropriates \$955,592 in trust funds and 8.00 full-time employees (FTE) to DACS for the expected increase in the number of required site visits to be conducted; \$122 million in nonrecurring general revenue funds for water quality improvement cost share grants; \$10.8 million in nonrecurring

<sup>&</sup>lt;sup>243</sup> Section 1.01(3), F.S., defines the term "person" to include individuals, children, firms, associations, joint adventures, partnerships, estates trusts, business trusts, syndicates, fiduciaries, corporations, and all other groups or combinations.

<sup>&</sup>lt;sup>244</sup> Section 1.01(8), F.S., defines the term "political subdivision" to include counties, cities, towns, villages, special tax school districts, special road and bridge districts, bridge districts, and all other districts in Florida.

general revenue funds for water quality improvements and monitoring; and \$50 million in nonrecurring general revenue and trust funds for TMDLs.

## B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

The bill may have an indeterminate negative fiscal impact on local governments because they will be required to create wastewater treatment plans and OSTDS remediation plans.

The bill may have an indeterminate negative fiscal impact to any local government-owned wastewater facilities discharging into the IRL because they must upgrade to provide advanced waste treatment.

The bill may have an indeterminate negative fiscal impact to any local government-owned wastewater facilities that land apply biosolids on a site that does not meet the minimum requirements for land application established by the bill.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

It is unclear whether the transfer of the OSTDS program to DEP on July 1, 2021, will result in changes to the program that could affect the private sector, such as changes in the cost of permit fees or the approval of using lower cost, nutrient reducing OSTDSs.

The bill may have an indeterminate negative fiscal impact to the private sector because the bill requires updates to stormwater rules and the adoption of new OSTDS and wastewater rules. However, if that impact exceeds \$1 million over five years, the rules will require legislative ratification.

The additional requirements of OSTDS remediation plans and wastewater treatment plans may result in a negative fiscal impact on the private sector entities within BMAPs that must address OSTDS or wastewater pollution to meet the TMDL.

The bill may have an indeterminate negative fiscal impact to any private wastewater facilities discharging into the IRL because the facility must make facility improvements to provide advanced waste treatment.

The bill may have an indeterminate negative fiscal impact to any privately-owned wastewater facilities or land application sites that will no longer be permitted to land apply biosolids in certain locations.

# D. FISCAL COMMENTS:

The bill may prevent costly litigation related to granting rights to natural resources, when current legal precedent suggests such rights may not be granted at the state or local level.