## HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/HB 263 Reclaimed Water

SPONSOR(S): Environment, Agriculture & Flooding Subcommittee, Maggard

TIED BILLS: IDEN./SIM. BILLS: CS/SB 64

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
Environment, Agriculture & Flooding     Subcommittee	17 Y, 0 N, As CS	Gawin	Moore
Agriculture & Natural Resources Appropriations     Subcommittee	15 Y, 0 N	White	Pigott
3) State Affairs Committee			

#### **SUMMARY ANALYSIS**

Reclaimed water is water from a domestic wastewater treatment facility that has received at least secondary treatment and basic disinfection for reuse. Reuse is the deliberate application of reclaimed water for a beneficial purpose. The use of reclaimed water for the purpose of directly or indirectly augmenting drinking water supplies is known as potable reuse. There are no regulations in Florida that address the use of reclaimed water for indirect potable reuse involving groundwater replenishment or direct potable reuse.

By November 1, 2021, the bill requires all domestic wastewater utilities that dispose of effluent, reclaimed water, or reuse water by surface water discharge to submit to the Department of Environmental Protection (DEP) for review and approval a plan for eliminating non-beneficial surface water discharges within five years. Upon approval of a plan by DEP, the bill requires a utility to fully implement the approved plan by January 1, 2028. However, if the utility proposes to implement a potable reuse project, the utility has until January 1, 2030, to implement the potable reuse project component of the plan, provided the utility has implemented all other components of the plan.

The bill declares that reclaimed water is deemed a water source for public water supply systems. The bill also declares that potable reuse is an alternative water supply, and potable reuse projects are eligible for alternative water supply funding.

The bill specifies that potable reuse projects developed as qualifying public-private partnerships are eligible for expedited permitting beginning January 1, 2026. In addition, such projects are eligible for priority funding from the Drinking Water State Revolving Fund and water management district cooperative funding.

The bill requires counties, municipalities, and special districts to authorize the use of residential graywater technologies under certain circumstances and to provide incentives for the implementation of such technologies.

The bill has a significant negative fiscal impact on the state and an indeterminate negative fiscal impact on local governments. Funding for the bill's provisions will be determined through the appropriations process.

This document does not reflect the intent or official position of the bill sponsor or House of Representatives. STORAGE NAME: h0263c.ANR

#### **FULL ANALYSIS**

#### I. SUBSTANTIVE ANALYSIS

#### A. EFFECT OF PROPOSED CHANGES:

### Background

### **Drinking Water**

Congress passed the federal Safe Drinking Water Act (SDWA) in 1974 to protect public health by regulating the nation's public drinking water supply. The SDWA applies to all public water systems in the U.S., which are regulated by the Environmental Protection Agency (EPA). However, the most direct oversight of water systems is conducted by state drinking water programs. States can apply to the EPA for "primacy," or the authority to implement the SDWA within their jurisdictions, if they can show that they will adopt standards at least as stringent as the EPA's and ensure their water systems meet these standards. All states and territories, except Wyoming and the District of Columbia, have obtained primacy.

# Florida Safe Water Requirements

The "Florida Safe Drinking Water Act" (act) establishes the Department of Environmental Protection (DEP) as the agency with primary responsibility for regulating drinking water, with support by the Department of Health and its units, including county health departments. The act is intended to:

- Implement the federal SDWA;
- Encourage cooperation between federal, state, and local agencies, not only in their enforcement role, but also in their service and assistance roles to city and county elected bodies; and
- Provide for safe drinking water at all times throughout the state, with due regard for economic factors and efficiency in government.<sup>5</sup>

## Drinking Water State Revolving Fund

The Drinking Water State Revolving Fund (DWSRF) program is a federal-state partnership created within the SDWA to help ensure safe drinking water. The DWSRF program provides financial support to water systems and to state safe water programs.<sup>6</sup> In Florida, the DWSRF program within DEP provides low-interest loans to local governments and private utilities to plan, design, and build or upgrade drinking water systems.<sup>7</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>8</sup> Each day over 1.5 billion gallons of treated wastewater, effluent,<sup>9</sup> and reclaimed water<sup>10</sup> are disposed of from these facilities.<sup>11</sup> Methods of disposal include reuse and land application systems, groundwater disposal by underground injection, groundwater

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<sup>&</sup>lt;sup>1</sup> United States Environmental Protection Agency (EPA), *Understanding the Safe Drinking Water Act* (June 2004), https://www.epa.gov/sites/production/files/2015-04/documents/epa816f04030.pdf (last visited Jan. 14, 2021).

<sup>&</sup>lt;sup>2</sup> Pub. L. No. 93-523, 88 Stat. 1660 (1974). Under the Safe Drinking Water Act, the EPA is authorized to regulate contaminants in public drinking water systems.

<sup>&</sup>lt;sup>3</sup> EPA, *Understanding the Safe Drinking Water Act* (June 2004), https://www.epa.gov/sites/production/files/2015-04/documents/epa816f04030.pdf (last visited Jan. 14, 2021).

<sup>&</sup>lt;sup>4</sup> Section 403.850, F.S. The act includes sections. 403.850-403.891, F.S.

<sup>&</sup>lt;sup>5</sup> Section 403.851, F.S.

<sup>&</sup>lt;sup>6</sup> EPA, *Drinking Water State Revolving Fund (DWSRF)*, https://www.epa.gov/dwsrf (last visited Jan. 15, 2021).

<sup>&</sup>lt;sup>7</sup> DEP, State Revolving Fund, https://floridadep.gov/wra/srf (last visited Jan. 28, 2020).

<sup>&</sup>lt;sup>8</sup> Section 403.087(1), F.S.

<sup>&</sup>lt;sup>9</sup> Rule 62-600.200(22), F.A.C., defines "effluent" to mean, 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>&</sup>lt;sup>10</sup> Rule 62-600.200(54), F.A.C., defines "reclaimed water" to mean water that has received at least secondary treatment and basic disinfection and is reused after flowing out of a domestic wastewater treatment facility.

<sup>&</sup>lt;sup>11</sup> DEP, General Facts and Statistics about Wastewater in Florida, https://floridadep.gov/water/domestic-wastewater/content/general-facts-and-statistics-about-wastewater-florida (last visited Jan. 15, 2021).

recharge using injection wells, surface water discharges, disposal to coastal and open ocean waters, and wetland discharges.<sup>12</sup>

Most domestic wastewater treatment facilities must meet either basic disinfection or high-level disinfection requirements, dependent upon the type of discharge.<sup>13</sup> Basic disinfection requires the effluent to contain less than 200 fecal coliforms per 100 micrograms per milliliter,<sup>14</sup> while high-level disinfection requires fecal coliforms to be reduced below detection.<sup>15</sup> Domestic wastewater treatment facilities that discharge to surface waters<sup>16</sup> must also obtain a National Pollutant Discharge Elimination System (NPDES) permit, which is established by the Clean Water Act to control point source discharges.<sup>17</sup> NPDES permit requirements for most domestic wastewater facilities are incorporated into the DEP-issued permit.<sup>18</sup>

## Consumptive Use Permits (CUPs)

Before using waters of the state,<sup>19</sup> a person must apply for and obtain a CUP from the applicable water management district (WMD)<sup>20</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>21</sup> To obtain a CUP, an applicant must establish that the proposed use of water is a reasonable-beneficial use,<sup>22</sup> will not interfere with any presently existing legal use of water, and is consistent with the public interest.<sup>23</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 are responsible for identifying and establishing 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>24</sup> or minimum level (MFL).<sup>25</sup>

#### Water Conservation

The Legislature has recognized that the proper conservation of water is an important means of achieving the economical and efficient utilization of water necessary, in part, to constitute a reasonable-beneficial use.<sup>26</sup> As such, public water supply utilities can provide a goal-based water conservation plan when applying for a consumptive use permit.<sup>27</sup> To promote water conservation and the implementation

<sup>&</sup>lt;sup>12</sup> Rule 62-600.440(4), F.A.C.

<sup>&</sup>lt;sup>13</sup> DEP, *Ultraviolet Disinfection for Domestic Wastewater*, https://floridadep.gov/water/domestic-wastewater/content/ultraviolet-uv-disinfection-domestic-wastewater (last visited Jan. 15, 2021).

<sup>&</sup>lt;sup>14</sup> Rules 62-600.510(1) and 62-600.440(5), F.A.C.

<sup>&</sup>lt;sup>15</sup> Rule 62-600.440(6), F.A.C.

<sup>&</sup>lt;sup>16</sup> Section 373.019(21), F.S., defines "surface water" to mean 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 "waters" to mean rivers, lakes, streams, springs, impoundments, wetlands, and all other waters or bodies of water, including fresh, brackish, saline, tidal, surface, or underground waters; Rule 62-620.200(56), F.A.C. <sup>17</sup> 33 U.S.C. s. 1342.

<sup>&</sup>lt;sup>18</sup> Section 403.0885, F.S.; Rule 62-620, F.A.C.; DEP, *Wastewater Permitting*, https://floridadep.gov/water/domestic-wastewater/content/wastewater-permitting (last visited Jan. 15, 2021); Florida's Water Permitting Portal, *Types of Permits*, http://flwaterpermits.com/typesofpermits.html (last visited Jan. 15, 2021).

<sup>&</sup>lt;sup>19</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>&</sup>lt;sup>20</sup> Section 373.216, F.S.; *See* Rules 40A-2, 40B-2, 40C-2, 40D-2, and 40E-2, F.A.C., for CUP permitting requirements.

<sup>&</sup>lt;sup>21</sup> Section 373.219(1), F.S.; an individual solely using water for domestic consumption is exempt from CUP requirements.

<sup>22</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>&</sup>lt;sup>23</sup> Section 373.223(1), F.S.

<sup>&</sup>lt;sup>24</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>25</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*, https://floridadep.gov/water-policy/water-policy/content/minimum-flows-and-minimum-water-levels-and-reservations (last visited Jan. 21, 2021).

<sup>&</sup>lt;sup>26</sup> Section 373.227(1), F.S.

<sup>&</sup>lt;sup>27</sup> Section 373.227(4), F.S. **STORAGE NAME**: h0263c.ANR

of measures that produce significant water savings beyond those required in a CUP, each WMD must adopt rules providing water conservation incentives, which may include limited permit extensions.<sup>28</sup>

#### **Reclaimed Water**

Reclaimed water is water from a domestic wastewater<sup>29</sup> treatment facility that has received at least secondary treatment<sup>30</sup> and basic disinfection<sup>31</sup> for reuse.<sup>32</sup> Reuse is the deliberate application of reclaimed water for a beneficial purpose.<sup>33</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>34</sup> Currently, each state agency and WMD must submit an annual report to the Secretary of DEP summarizing the activities designed to utilize reclaimed water at its facilities and the amount of reclaimed water used for a beneficial purpose.<sup>35</sup> Additionally, reclaimed water is considered an alternative water supply,<sup>36</sup> and is eligible to receive alternative water supply funding.<sup>37</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>38</sup> rapid-rate land application systems;<sup>39</sup> groundwater recharge and indirect potable reuse systems;<sup>40</sup> and overland flow systems.<sup>41</sup> Industrial uses for reclaimed water, such as cooling water, wash water, and process water, are also authorized.<sup>42</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>43</sup>

#### Potable Reuse

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 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>44</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>45</sup>

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<sup>&</sup>lt;sup>28</sup> Section 373.227(5), F.S.

<sup>&</sup>lt;sup>29</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>30</sup> Rule 62-610.200(54), F.A.C., defines the term "secondary treatment."

<sup>&</sup>lt;sup>31</sup> Rule 62-600.440(5), F.A.C., provides the requirements for basic disinfection.

<sup>&</sup>lt;sup>32</sup> Section 373.019(17), F.S.; Rule 62-610.200(48), F.A.C.

<sup>&</sup>lt;sup>33</sup> Rule 62-610.200(52), F.A.C.

<sup>&</sup>lt;sup>34</sup> DEP, Risk Impact Statement (Dec. 21, 1998), https://floridadep.gov/sites/default/files/risreuse\_508C.pdf (last visited Jan. 15, 2021).

<sup>&</sup>lt;sup>35</sup> Section 403.0645(4), F.S.

<sup>&</sup>lt;sup>36</sup> Section 373.019(1), F.S., defines alternative water supplies as salt water; brackish surface and groundwater; surface water captured predominately during wet-weather flows; sources made available through the addition of new storage capacity for surface or groundwater, water that has been reclaimed after one or more public supply, municipal, industrial, commercial, or agricultural uses; the downstream augmentation of water bodies with reclaimed water; stormwater; and any other water supply source that is designated as nontraditional for a water supply planning region in the applicable regional water supply plan.

<sup>&</sup>lt;sup>37</sup> Section 373.250(2), F.S.

<sup>&</sup>lt;sup>38</sup> Chapter 62-610, Part III, F.A.C.

<sup>&</sup>lt;sup>39</sup> Chapter 62-610, Part IV, F.A.C., includes rapid infiltration basins and absorption fields.

<sup>&</sup>lt;sup>40</sup> Chapter 62-610, Part V, F.A.C.

<sup>&</sup>lt;sup>41</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>42</sup> Chapter 62-610, Part VII, F.A.C.

<sup>&</sup>lt;sup>43</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. 13, 2021).

<sup>&</sup>lt;sup>44</sup> Id. at xxiv.

<sup>&</sup>lt;sup>45</sup> *Id*.

#### 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>46</sup>

The final report on the framework was published in January 2020, and provided the following recommendations:

- 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, 47 such as pharmaceuticals and personal care products, in potable reuse.48

Based on these recommendations, the Legislature directed DEP to initiate rulemaking based on the PCR Report by December 31, 2020, 49 DEP held a rulemaking workshop on January 14, 2021, and the public comment period closed on February 26, 2021.<sup>50</sup>

# Aguifer Storage and Recovery and Aguifer Recharge

DEP has general regulatory authority over underground water, lakes, rivers, streams, canals, ditches, and coastal waters under the jurisdiction of the state to the extent that the pollution of these waters may impact public health or impair the interests of the public or persons lawfully using the waters.<sup>51</sup> Accordingly, through its Aquifer Protection Program, DEP regulates the disposal of appropriately treated fluids, such as reclaimed water, through underground injection wells while also protecting underground sources of drinking water.<sup>52</sup> The program is aimed at preventing degradation of the quality of aquifers adjacent to the injection zone.<sup>53</sup>

Aguifer storage and recovery (ASR) is the underground injection and storage of water into a subsurface formation for the purpose of withdrawing the water for beneficial purposes at a later date.<sup>54</sup> ASR provides for the storage of large quantities of water for both seasonal and long-term storage and ultimate recovery that would otherwise be unavailable due to land limitations, loss to tides, or evaporation.<sup>55</sup> Similar to ASR, aquifer recharge (AR) is the underground injection and storage of water into an aquifer, but the water used to recharge the aquifer is not being stored for the purpose of withdrawing the water from the same facility at a later date. <sup>56</sup> AR is primarily considered a water

<sup>&</sup>lt;sup>46</sup> Framework for the Implementation of Potable Reuse in Florida (Jan. 2020), at iii.

<sup>&</sup>lt;sup>47</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. 15, 2021).

<sup>&</sup>lt;sup>48</sup> PRC, Framework for the Implementation of Potable Reuse in Florida (Jan. 2020), xxvii-xxviii.

<sup>&</sup>lt;sup>49</sup> Section 403.64(17), F.S.

<sup>&</sup>lt;sup>50</sup> DEP, Water Reuse News & Rulemaking Information, https://floridadep.gov/water/domestic-wastewater/content/water-reuse-newsrulemaking-information (last visited Jan. 15, 2021).

<sup>&</sup>lt;sup>51</sup> Section 403.062, F.S.

<sup>&</sup>lt;sup>52</sup> Rule 62-528.200(66), F.A.C., defines the term "underground source of drinking water" to mean aquifer. DEP, Aquifer Protection Program – UIC, https://floridadep.gov/water/aquifer-protection (last visited Jan. 15, 2021).

<sup>&</sup>lt;sup>53</sup> DEP, Aquifer Protection Program – UIC, https://floridadep.gov/water/aquifer-protection (last visited Jan. 15, 2021); See Rule 62-528, F.A.C., for underground injection control permitting requirements.

<sup>&</sup>lt;sup>54</sup> DEP, Report on Expansion of Beneficial Use of Reclaimed Water, Stormwater and Excess Surface Water (Dec. 1, 2015), 83, available at https://floridadep.gov/sites/default/files/SB536%20Final%20Report.pdf (last visited Jan. 15, 2021). <sup>55</sup> *Id*.

<sup>&</sup>lt;sup>56</sup> *Id*.

resource development and conservation strategy used to preserve and enhance water resources and natural systems (e.g., sustain water levels, meet MFLs) and to attenuate flooding.<sup>57</sup>

For both ASR and AR, the aquifer acts as an underground reservoir for the recharged water. Whereas ASR is most commonly utilized near major population centers requiring storage to ensure water system reliability (e.g., public supply and commercial/industrial/mining uses), AR is most effective as a water management strategy in sparsely populated rural areas whose water resources rely on stable regional aquifer levels.<sup>58</sup>

DEP rules regulating ASR require that reclaimed water injected into a receiving groundwater that has 3,000 mg/L or less of total dissolved solids must meet the treatment and disinfection criteria requirements<sup>59</sup> for groundwater recharge projects.<sup>60</sup> If a receiving groundwater contains between 1,000 and 3,000 mg/L of total dissolved solids and the applicant for an underground injection control permit provides an affirmative demonstration that the receiving groundwater is not currently used as a source of public water supply, and is not reasonably expected to be used for public water supply in the future, certain modifications to the treatment and disinfection requirements are available.<sup>61</sup> Reclaimed water recovered from groundwaters containing 3,000 mg/L or less of total dissolved solids must meet full treatment and disinfection requirements and drinking water standards.<sup>62</sup>

# Ocean Outfalls

An ocean outfall occurs when a wastewater treatment facility or other facility discharges treated effluent into coastal or ocean waters. There are six domestic wastewater facilities in Palm Beach, Broward, and Miami-Dade Counties that currently discharge, or previously discharged, treated domestic wastewater directly into the Atlantic Ocean through ocean outfalls.<sup>63</sup>

However, Florida law prohibits the construction of new ocean outfalls and requires that all six ocean outfalls in Florida cease discharging wastewater by December 31, 2025.<sup>64</sup> In addition, wastewater facilities that discharged wastewater through an ocean outfall on July 1, 2008, are required to install a reuse system no later than December 31, 2025.<sup>65</sup> Existing discharges through ocean outfalls were required to meet advanced waste treatment requirements<sup>66</sup> by December 31, 2018.<sup>67</sup>

#### Graywater

Current law defines "graywater" as the part of domestic sewage that is not blackwater,<sup>68</sup> including waste from the bath, lavatory, laundry, and sink, except for kitchen sink waste.<sup>69</sup> Graywater is generally considered to be of lower quality than tap water but of higher quality than blackwater. Graywater installations occur in both residential and non-residential installations and the capture, treatment, and

<sup>&</sup>lt;sup>57</sup> *Id*.

<sup>&</sup>lt;sup>58</sup> *Id*.

<sup>&</sup>lt;sup>59</sup> Rule 62-610.563 F.A.C. Full treatment and disinfection criteria require meeting all primary and secondary drinking water standards and limit total organic carbon and halogen.

<sup>&</sup>lt;sup>60</sup> Rule 62-610.466(9)(a), F.A.C.

<sup>&</sup>lt;sup>61</sup> Rule 62-610.466(9)(b), F.A.C.

<sup>&</sup>lt;sup>62</sup> Rule 62-610.563(3), F.A.C.

<sup>&</sup>lt;sup>63</sup> DEP, *Ocean Outfall Study Final Report* ES-1 (Apr. 18, 2006), *available at* https://floridadep.gov/sites/default/files/OceanOutfallStudy\_0.pdf (last visited Feb. 11, 2021).

<sup>&</sup>lt;sup>64</sup> Section 403.086(10), F.S.; Chapter 2008-232, Laws of Fla.

<sup>&</sup>lt;sup>65</sup> Section 403.086(10)(c), F.S.

<sup>&</sup>lt;sup>66</sup> See Section 403.086(4), F.S., for advanced water treatment concentration levels allowable.

<sup>&</sup>lt;sup>67</sup> Section 403.086(10)(b), F.S.

<sup>&</sup>lt;sup>68</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 Feb. 25, 2021).

<sup>&</sup>lt;sup>69</sup> Section 381.0065(2)(e), F.S. **STORAGE NAME**: h0263c.ANR

reuse of graywater yields usable water that would otherwise be directed to the sewer.<sup>70</sup> Reusing graywater also reduces the use of potable water for non-potable needs and conserves fresh water.<sup>71</sup>

There are barriers to the widespread adoption of residential graywater reuse, including system cost, knowledge and experience of contractors and local officials, homeowner acceptance, and limited permitted uses.<sup>72</sup>

# **Economic-based Designations**

A rural area of opportunity (RAO) is a rural community, or a region composed of rural communities, designated by the Governor 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.<sup>73</sup> The three designated RAOs are:

- The Northwest RAO, which includes Calhoun, Franklin, Gadsden, Gulf, Holmes, Jackson, Liberty, Wakulla, and Washington Counties, and the City of Freeport;
- The South Central RAO, which includes DeSoto, Glades, Hardee, Hendry, Highlands, and Okeechobee Counties, and the Cities of Pahokee, Belle Glade, South Bay, and Immokalee; and
- The North Central RAO, which includes Baker, Bradford, Columbia, Dixie, Gilchrist, Hamilton, Jefferson, Lafayette, Levy, Madison, Putnam, Suwannee, Taylor, and Union Counties.<sup>74</sup>

A fiscally constrained county is a county that is entirely within a RAO or a county for which the value of a mill will raise no more than \$5 million in revenue.<sup>75</sup>

## **Effect of the Bill**

# Plans for Eliminating Non-beneficial Surface Water Discharges

By November 1, 2021, the bill requires all domestic wastewater utilities that dispose of effluent, reclaimed water, or reuse water by surface water discharge to submit to DEP for review and approval a plan for eliminating non-beneficial surface water discharge within five years. The plan must include:

- The average gallons per day of effluent, reclaimed water, or reuse water that will no longer be discharged into surface waters and the date of such elimination;
- The average gallons per day of surface water discharge that will continue in accordance with the requirements of the alternatives described below; and
- The level of treatment that the effluent, reclaimed water, or reuse water will receive before being discharged into a surface water by each alternative.

The bill requires DEP to approve a plan that includes all of the required information if one of the following conditions are met:

- The plan will result in the eliminating the surface water discharge.
- The plan will plan result in meeting the requirements of advanced waste treatment for ocean outfalls.
- The plan does not provide for a complete elimination of the surface water discharge, but does
  provide an affirmative demonstration that any of the following conditions apply to the remaining
  discharge:
  - The discharge is associated with an indirect potable reuse project:
  - The discharge is a wet weather discharge that occurs in accordance with an applicable DEP permit;

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<sup>&</sup>lt;sup>70</sup> Alliance for Water Efficiency, *Graywater Systems*, https://www.allianceforwaterefficiency.org/resources/topic/graywater-systems (last visited Feb. 11, 2021).

<sup>&</sup>lt;sup>71</sup> Martinez, Christopher J., *Gray Water Reuse in Florida*, University of Florida IFAS Extension, *available at* https://edis.ifas.ufl.edu/ae453#:~:text=Gray%20water%20must%20be%20filtered,to%20the%20sanitary%20drainage%20system (last visited Feb. 11, 2021).

<sup>&</sup>lt;sup>72</sup> Id.

<sup>&</sup>lt;sup>73</sup> Section 288.0656(2)(d), F.S.

<sup>&</sup>lt;sup>74</sup> Florida Department of Economic Opportunity, *RAO*, http://www.floridajobs.org/business-growth-and-partnerships/rural-and-economic-development-initiative/rural-areas-of-opportunity (last visited Jan. 21, 2021).

<sup>&</sup>lt;sup>75</sup> Section 218.67(1), F.S.

- The discharge is into a stormwater management system and is subsequently withdrawn by a user for irrigation purposes;
- The utility operates domestic wastewater treatment facilities with reuse systems that reuse a minimum of 90 percent of a facility's annual average flow, as determined by DEP using monitoring data for the prior five consecutive years, for reuse purposes authorized by DEP; or
- The discharge provides direct ecological or public water supply benefits, such as rehydrating wetlands or implementing the requirements of MFLs or recovery or prevention strategies for a waterbody.

The plan may include conceptual plans for indirect potable reuse projects or projects that provide direct ecological or public water supply benefits. However, the inclusion of conceptual plans for such projects does not extend the timeline for implementing the plan.

The bill requires DEP to approve or deny a plan within nine months after receiving it and, if approved, to incorporate the plan in the utility's operating permit. The bill further requires any applicable environmental and public health protection requirements provided by law or DEP rule governing the implementation of the plan to also be incorporated into the permit.

The bill authorizes a utility to modify the plan by amendment to the permit; however, the plan may not be modified such that the bill's requirements for the plan are not met, and DEP may not extend the time within which a plan will be implemented.

Upon approval of a plan by DEP, the bill requires a utility to fully implement the approved plan by January 1, 2028. However, if the utility proposes to implement a potable reuse project, the utility has until January 1, 2030, to implement the potable reuse project component of the plan, provided the utility has implemented all other components of the plan.

The bill specifies that if a plan is not timely submitted by a utility or approved by DEP, the utility's domestic wastewater treatment facilities may not dispose of effluent, reclaimed water, or reuse water by surface water discharge after January 1, 2028. The bill further specifies that a violation of this requirement is subject to administrative and civil penalties.

The bill requires a domestic wastewater utility applying for a permit for a new or expanded surface water discharge to prepare a plan as part of that permit application. The bill prohibits DEP from approving a permit for a new or expanded surface water discharge unless it complies with one or more of the conditions described above.

By December 31, 2021, and annually thereafter, the bill directs DEP to submit a report to the Legislature that provides the following:

- The average gallons per day of effluent, reclaimed water, or reuse water that will no longer be discharged into surface waters by the utility and the dates of such elimination;
- The average gallons of water per day of surface water discharges that will continue in accordance with the alternatives described above, and the level of treatment that the effluent, reclaimed water, or reuse water will receive before being discharged into a surface water by each alternative and utility; and
- Any modified or new plans submitted by a utility since the last report.

The bill specifies that the requirements of the bill related to eliminating non-beneficial surface water discharges do not apply to the following domestic wastewater treatment facilities:

- A facility that is located in a fiscally constrained county.
- A facility located in a municipality that is entirely within a RAO.
- A facility located in a municipality that has less than \$10 million in total revenue, as determined by the municipality's most recent annual financial report submitted to the Department of Financial Services.

The bill specifies that the requirements of the bill do not prohibit the inclusion of a plan for backup discharges. The bill further specifies that the requirements of the bill may not be deemed to exempt a utility from requirements that prohibit the causing of or contributing to violations of water quality standards in surface waters, including groundwater discharges that affect water quality in surface waters.

## Potable Reuse

The bill authorizes DEP to convene and lead one or more technical advisory groups to coordinate the rulemaking and review of rules for potable reuse. The bill requires the technical advisory groups to assist in the development of rules. The bill further requires that the technical advisory groups be composed of knowledgeable representatives of a broad group of interested stakeholders, including, but not limited to, representatives from the WMDs, the wastewater utility industry, the water utility industry, the environmental community, the business community, the public health community, the agriculture community, and the consumers.

The bill declares that potable reuse is an alternative water supply and that potable reuse projects are eligible for alternative water supply funding. The bill prohibits the exclusion of the use of potable reuse water from regional water supply planning.

By December 31, 2023, the bill requires DEP and the WMDs to develop and execute a memorandum of agreement providing for the procedural requirements of a coordinated review of all permits associated with the construction and operation of an indirect potable reuse project. The memorandum of agreement must provide that the coordinated review will occur only if requested by a permittee. The bill states that the purpose of the coordinated review is to share information, avoid the redundancy of information requested from the permittee, and ensure consistency in the permit for the protection of the public health and the environment.

To encourage investment in the development of potable reuse projects by private entities, the bill specifies that a potable reuse project developed as a qualifying public-private partnership is eligible for expedited permitting beginning January 1, 2026. In addition, such projects are eligible for priority funding in the same manner as other alternative water supply projects from the DWSRF, under the Water Protection and Sustainability Program, and for WMD cooperative funding.

## Residential Graywater Technologies

The bill requires a county, municipality, or special district to authorize in its jurisdiction the use of residential graywater technologies that meet the requirements of the Florida Building Code and applicable requirements of the Department of Health and that have received all applicable regulatory permits or authorizations. In addition, the county, municipality, or special district must provide a 15 percent density or intensity bonus to a developer<sup>76</sup> or homebuilder if at least 75 percent of a proposed or an existing development will have a graywater system installed. The bill specifies that this bonus is in addition to any bonus provided by a county, municipality, or special district in effect on July 1, 2021.

To qualify for the incentives, the bill requires the developer or homebuilder to certify to the applicable government entity as part of its application for development approval or amendment of a development order that all of the following conditions are met:

- The proposed or existing development has at least 25 single-family residential homes that are either detached or multifamily dwellings and that do not exceed five stories in height.
- Each single-family residential home or residence will have its own residential graywater system that is dedicated for its use.
- The developer or homebuilder has submitted a manufacturer's warranty or data providing reasonable assurance that the residential graywater system will function as designed and includes an estimate of anticipated potable water saving for each system. A submission of the manufacturer's warranty or data from a building code official, government entity, or research institute that has monitored or measured the residential graywater system that is proposed to be

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<sup>&</sup>lt;sup>76</sup> Section 380.031(2), F.S. defines "developer" as any person, including a governmental agency, undertaking any development as defined in ch. 380, F.S.

- installed for such development must be accepted as reasonable assurance and no further information or assurance is needed.
- The required maintenance of the graywater system will be the responsibility of the residential homeowner.
- An operation and maintenance manual for the graywater system will be supplied to the initial homeowner of each home. The manual must provide a method of contacting the installer or manufacturer and must include directions to the residential homeowner that the manual must remain with the residence throughout the life cycle of the system.

The bill specifies that if the above requirements are met, the county or municipality must include the incentives when it approves the development or amendment of a development order. The bill specifies that the approval must provide for the process that the developer or homebuilder will follow to verify that such systems have been purchased. Proof of purchase must be provided within 180 days from the issuance of a certificate of occupancy for single-family residential homes that are either detached or multifamily projects under five stories.

The bill specifies that the installation of graywater systems in a county or municipality must gualify as a water conservation measure in a public utility's water conservation plan. The efficiency of such measures must be commensurate with the amount of potable water savings estimated for each system provided by the developer or homebuilder.

#### ASR Wells

The bill specifies that to further promote the reuse of reclaimed water for irrigation purposes, the rules that apply when reclaimed water is injected into a receiving groundwater that has 1,000 to 3,000 mg/L total dissolved solids are applicable to a reclaimed water ASR well injecting into a receiving groundwater that has less than 1,000 mg/L total dissolved solids if the applicant demonstrates that:

- It is injecting into a confined aguifer:
- There are no potable water supply wells within 3,500 feet of the ASR well;
- It has implemented institutional controls to prevent the future construction of potable water supply wells within 3,500 feet of the ASR well; and
- The recovered water is being used for irrigation purposes.

The bill specifies that the injection of reclaimed water that meets these requirements is not potable reuse.

#### Important State Interest

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

## **B. SECTION DIRECTORY:**

- Section 1. Amends s. 403.064, F.S., relating to the reuse of reclaimed water.
- Section 2. Creates s. 403.892. F.S., relating to incentives for the use of graywater technologies.
- Section 3. Creates an unnumbered section of law to promote reuse of reclaimed water for irrigation purposes.
- Section 4. Provides a statement of important state interest.
- Section 5. Provides an effective date of upon becoming a law.

### II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

# A. FISCAL IMPACT ON STATE GOVERNMENT:

# 1. Revenues:

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The bill specifies that if a domestic wastewater utility does not timely submit its plan for eliminating non-beneficial surface water discharges or the plan is not approved by DEP, the utility may not dispose of effluent, reclaimed water, or reuse water by surface water discharge after January 1, 2028, or it is subject to administrative and civil penalties. There may be a positive fiscal impact to DEP if these administrative and civil penalties are assessed.

## 2. Expenditures:

The bill has a significant negative fiscal impact on DEP. It is anticipated that DEP will need 11 fulltime equivalent positions and \$924,978 to fulfill the requirements of the bill. Funding for the bill's provisions will be determined through the appropriations process.

#### B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

#### 1. Revenues:

None.

## 2. Expenditures:

The bill may have a significant indeterminate negative fiscal impact on local government-owned wastewater treatment facilities that will be required to develop and implement a plan to eliminate non-beneficial surface water discharges. The bill may also have an indeterminate negative fiscal impact on local governments because they will be required to provide incentives for the use of graywater technologies.

#### C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill may have a significant indeterminate negative fiscal impact on privately-owned wastewater treatment facilities that will be required to develop and implement a plan to eliminate non-beneficial surface water discharges.

The bill may have an indeterminate positive fiscal impact on developers who utilize incentives for the use of graywater technologies.

### D. FISCAL COMMENTS:

None.

#### III. COMMENTS

## A. CONSTITUTIONAL ISSUES:

## 1. Applicability of Municipality/County Mandates Provision:

The county/municipality mandates provision of Art. VII, s. 18 of the Florida Constitution may apply because this bill requires local governments that own wastewater treatment facilities to develop and implement a plan to eliminate non-beneficial surface water discharges, unless an exception applies. An exemption may apply because the requirement applies to similarly situated persons and the bill provides a legislative finding that the requirements of the bill fulfill an important state interest. If the bill does qualify as a mandate, final passage must be approved by two-thirds of the membership of each house of the Legislature.

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## 2. Other:

None.

### B. RULE-MAKING AUTHORITY:

The bill requires DEP to adopt rules relating to potable reuse and reclaimed water.

#### C. DRAFTING ISSUES OR OTHER COMMENTS:

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None.

#### IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On March 3, 2021, the Environment, Agriculture & Flooding Subcommittee adopted four amendments and reported the bill favorably as a committee substitute. The amendments:

- Removed certain hardship exceptions a utility may claim;
- Authorized utilities to include conceptual plans in the plan they must submit to DEP;
- Revised the incentives provided to builders for implementing graywater technologies; and
- Revised provisions describing when the rules for the total dissolved solids allowable in ASR apply.

This analysis is drafted to the committee substitute as approved by the Environment, Agriculture & Flooding Subcommittee.

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