

Proposed language to strengthen Florida Statutes concerning the elimination of surface water discharges of effluent, reclaimed water, or reuse water

Prepared by: Members of a citizens stakeholders group facilitated by the City of Tampa regarding reclaimed water use¹ January 5, 2023

Summary

This document recommends that two sets of additional language be approved by the Florida Legislature to clarify and strengthen a paragraph in the Florida Statutes (403.064(17)) that was included in Senate Bill 64 passed by the Legislature in 2021.² That legislation required utilities to eliminate surface water discharges of effluent, reclaimed water, or reuse water that do not have a beneficial use. These surface water discharges are to be rerouted, typically with additional treatment, and reused for other purposes including potable supply, although disposal by deep well injection is also an option.

- The first set of proposed language allows for yearly variances to the average quantity of surface discharge that a utility must eliminate. This will allow utilities to adjust their operations to account for changes in rainfall, hydrologic conditions, water quality, demands for reclaimed water, or other site-specific factors.
- The second set of proposed language allows the Florida Department of Environmental Protection to recognize the ecological benefits of surface water discharges for specific water bodies that do not currently have adopted minimum flows and levels.

Both sets of additional language would give municipal utilities much needed operational flexibility to develop and manage reclaimed water plans that are beneficial, more cost-effective, protective of the water resource and natural environment, and in the best public interest.

First proposed addition: Allow for yearly variances to the average quantity of surface discharge that must be eliminated

The statute needs additional language to allow utilities to assess seasonal changes in local conditions to give them flexibility in how much surface water discharge must be eliminated and rerouted over various periods of time. Given the high variation of seasonal and inter-annual rainfall in Florida and changes in the availability of existing water supplies, the quantities of surface water discharge that must be given additional treatment and rerouted for reuse could be well in excess of the actual need for the reclaimed water for considerable lengths of time.

When there is an excess of reclaimed water, utilities may put the water into storage for reuse with some plans calling for injecting and later retrieving reclaimed water from the Floridan aquifer using aquifer storage and recovery facilities. However, during some wet years, meeting a regulatory average value could require that reclaimed water be put into storage in quantities well in excess of what is needed for supply, requiring costly additional water treatment for reclaimed water that is in excess of both long and

¹Participants and contact information are listed on page 4

²Relevant passages from Florida Statutes are listed on pages 4 to 7

and short-term needs. As an alternative to reuse, some plans involve disposing of effluent or reclaimed water using deep well injection, which disposes the effluent or reclaimed water in deep groundwater zones, but makes it unavailable for reuse.

If plans involve reuse of the reclaimed water, they should be accompanied by water quality monitoring to ensure that the concentrations of constituents of concern are kept within acceptable limits. If monitoring shows that some constituents are approaching or exceeding certain standards, it would be desirable to reduce or discontinue the rerouting of the reclaimed water for some time to lower those concentrations.

Given the likelihood of situations such as these, the requirement to maintain an average quantity of surface water discharge that must be eliminated and reused or disposed of could unnecessarily increase treatment and operational costs that would be passed on to the water users and possibly risk degradation of the water resource or water dependent natural systems. It would be better to allow utilities to have the flexibility to discontinue the rerouting of the reclaimed water if there are periodic changes in the demand for the reclaimed water, storage areas are at or near full, or concentrations of constituents of concern are approaching or exceeding applicable standards.

The current statute is not clear if utilities have the regulatory ability to periodically not meet the average quantity of surface water discharge that must be eliminated and rerouted. To clarify this matter and allow for valuable operational flexibility, language is proposed to allow utilities to assess changes in hydrologic conditions, water quality concentrations, the demand for reclaimed water, or other site-specific factors to receive temporary variances from the average quantity of surface water discharge that must be eliminated, which would be reported on a yearly basis.

Text from the existing statute (403.064(17)) that deals with the reporting of average values for the surface discharge to be eliminated and that to continue in place is printed below, followed by underlined language that we recommend be added to this statute via legislative action.

Proposed language for first addition to F.S. 403.064(17)

(17)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 which will continue in accordance with the alternatives provided for in subparagraphs (a)2. and 3., 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.

A utility may apply to the department for yearly variances from the average gallons per day of effluent, reclaimed water, or reuse water that was not discharged to surface water and the average gallons per day of discharge that continued at the surface water site. Such variances may be based on short-term or seasonal variations in hydrologic conditions, water quality, environmental factors, reductions in the demand for reclaimed or reuse water, a lack of capacity in storage areas or disposal zones, or other site-specific factors.

Such variances can extend for multi-year periods, but at the end of each calendar year the utility shall describe the conditions that contributed to the average value for surface water discharge that was eliminated and the average value for surface water discharge that continued being less than the corresponding average value identified in the plan.

Second proposed addition: Recognition of ecological benefits to individual water bodies that do not have adopted minimum flows and levels

The statute allows for surface water discharges to continue if, as stated in Paragraph 71(3)e;

“The discharge provides direct ecological or public water supply benefits, such as rehydrating wetlands or implementing the requirements of minimum flows and minimum water levels or recovery or prevention strategies for a water body.”

Florida’s water management districts have adopted minimum flows and levels for many water bodies, but such rules have not yet been adopted for many others. The statute is unclear if ecological benefits can be identified for a water body that does not currently have adopted minimum flows and levels. In that regard, flexibility is needed to allow the Florida Department of Environmental Protection, on a case-by-case basis, to determine if there are ecological benefits of surface water discharges for specific water bodies that do not have adopted minimum flows and levels, including ecologically important zones of Florida’s coastal bays and estuaries which are dependent upon freshwater flow to maintain their ecological health and economically valuable fishery productivity.

Such a determination of ecological benefits for a water body would not preclude the evaluation of reclaimed water projects using discharges to that water body, but would allow the Florida Department of Environmental Protection to evaluate the proportion of discharge that can be removed without causing significant harm, similar to the approach used by the water management districts to determine minimum flows and levels.

Similarly, a determination of ecological benefits would not preclude state, regional, or local agencies from pursuing other natural resource management plans or regulations for a water body, such as meeting nutrient load reduction targets or habitat restoration projects using the reclaimed water. The language simply allows the Florida Department of Environmental Protection to evaluate site specific data or other information to determine if an existing surface water discharge provides ecological benefits for a water body that is not covered by the existing statute. In this manner, comprehensive resource management plans can be developed that best fit the characteristics of that water body and the need for reclaimed water by the utility that has a surface water discharge to it.

Text from paragraph 17(3)e in the existing statute is printed in quotes below, followed by underlined language we recommend be added to the statute via legislative action.

Proposed language for second addition to F.S. 403.064(17)

(17)(3)e. The discharge provides direct ecological or public water supply benefits, such as rehydrating wetlands or implementing the requirements of minimum flows and minimum water levels or recovery or prevention strategies for a water body. For water bodies that do not currently have such management plans or regulations, including estuarine waters, the department may recognize the ecological benefits of a surface water discharge to a water body based on data or other information for that system.

Participants and authors

The individuals listed below are members of a citizens stakeholders group facilitated by the City of Tampa Water Department over the past two years that considered options to reuse reclaimed from the City's Howard F. Curren Advanced Wastewater Treatment Plant that currently discharges to Tampa Bay. As part of that process, this group closely followed the development and the City's plans for implementation of Senate Bill 64 passed by the Florida Legislature in 2021 that concerned the elimination of discharges of effluent, reclaimed water, or reuse water to surface waters in the state. This report reflects the conclusions of this group based on their assessment of the need to clarify and strengthen the language of the statute that resulted from Senate Bill 64. It is also noted that at their meeting on December 1, 2022, the Tampa City Council voted without opposition to support efforts to explore using available legal and lobbying resources of the City to support a change in Senate Bill 64.

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Relevant passages from existing Florida Statutes

Chapter 373.019 - Definitions

(17) "Reclaimed water" means water that has received at least secondary treatment and basic disinfection and is reused after flowing out of a domestic wastewater treatment facility. Reclaimed water is not subject to regulation pursuant to s. 373.175 or part II of this chapter until it has been discharged into waters as defined in s. 403.031(13).

(18) "Reclaimed water distribution system" means a network of pipes, pumping facilities, storage facilities, and appurtenances designed to convey and distribute reclaimed water from one or more domestic wastewater treatment facilities to one or more users of reclaimed water.

Chapter 403.064, Paragraph 17

(17) By November 1, 2021, domestic wastewater utilities that dispose of effluent, reclaimed water, or reuse water by surface water discharge shall submit to the department for review and approval a plan for eliminating nonbeneficial surface water discharge by January 1, 2032, subject to the requirements of this section. 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 which will continue in accordance with the alternatives provided for in subparagraphs (a)2. and 3., 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.

(a) The department shall approve a plan that includes all of the information required under this subsection as meeting the requirements of this section if one or more of the following conditions are met:

1. The plan will result in eliminating the surface water discharge.
2. The plan will result in meeting the requirements of s. 403.086(10).
3. 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:
 - a. The discharge is associated with an indirect potable reuse project;
 - b. The discharge is a wet weather discharge that occurs in accordance with an applicable department permit;
 - c. The discharge is into a stormwater management system and is subsequently withdrawn by a user for irrigation purposes;
 - d. 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 the department using monitoring data for the prior 5 consecutive years, for reuse purposes authorized by the department; or
 - e. The discharge provides direct ecological or public water supply benefits, such as rehydrating wetlands or implementing the requirements of minimum flows and minimum water levels or recovery or prevention strategies for a water body.

The plan may include conceptual projects under sub-subparagraphs 3.a. and e.; however, such inclusion does not extend the time within which the plan must be implemented.

(b) The department shall approve or deny a plan within 9 months after receiving the plan. A utility may modify the plan by submitting such modification to the department; however, the plan may not be modified such that the requirements of this subsection are not met, and the department may not extend the time within which a plan will be implemented. The approval of the plan or a modification by the department does not constitute final agency action.

(c) A utility shall fully implement the approved plan by January 1, 2032.

(d) If a plan is not timely submitted by a utility or approved by the department, 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. A violation of this paragraph is subject to administrative and civil penalties pursuant to ss. 403.121, 403.131, and 403.141.

(e) A domestic wastewater utility applying for a permit for a new or expanded surface water discharge shall prepare a plan in accordance with this subsection as part of that permit application. The department may not approve a permit for a new or expanded surface water discharge unless the plan meets one or more of the conditions provided in paragraph (a).

(f) By December 31, 2021, and annually thereafter, the department shall submit a report to the President of the Senate and the Speaker of the House of Representatives which provides 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 per day of surface water discharges that will continue in accordance with the alternatives provided in subparagraphs (a)2. and 3., 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.

(g) This subsection does not apply to any of the following:

1. A domestic wastewater treatment facility that is located in a fiscally constrained county as described in s. 218.67(1).
2. A domestic wastewater treatment facility that is located in a municipality that is entirely within a rural area of opportunity as designated pursuant to s. 288.0656.
3. A domestic wastewater treatment facility that is 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 in accordance with s. 218.32.
4. A domestic wastewater treatment facility that is operated by an operator of a mobile home park as defined in s. 723.003 and has a permitted capacity of less than 300,000 gallons per day.

(h) This subsection does not prohibit the inclusion of a plan for backup discharges under s. 403.086(8)(a).

(i) This subsection 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.