

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: PCS for HB 165 Sampling of Beach Waters and Public Bathing Spaces

SPONSOR(S): Water Quality, Supply & Treatment Subcommittee

TIED BILLS: **IDEN./SIM. BILLS:**

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
Orig. Comm.: Water Quality, Supply & Treatment Subcommittee		Curtin	Curtin

SUMMARY ANALYSIS

Water-based activities are healthy ways to be physically active. However, if an individual comes into contact with certain bacteria, or swallows, has contact with, or breathes in mists or aerosols from water contaminated with germs, or comes into contact with chemicals that are in the water or that evaporate from the water and turn into gas in the air she or he may become ill. The regulation of beaches and bathing places is important to prevent disease and sanitary nuisances which may threaten or impair the health or safety of individuals.

The bill requires, rather than allows, the Department of Health (DOH) to:

- Adopt and enforce rules to protect the health, safety, and welfare of persons using the beach waters and public bathing places of this state.
- Within 24 hours or the next business day, whichever occurs first, issue health advisories if the quality of beach waters or a public bathing place fails to meet standards established by DOH and must require closure of beach waters and public bathing places that fail to meet DOH's standards if it deems closure is necessary to protect the health, safety, and welfare of the public.

The bill preempts to the state the issuance of health advisories related to the results of bacteriological sampling of public bathing places.

The bill requires:

- Municipalities and counties to, within 24 hours or the next business day, whichever occurs first, notify DOH of any incident that negatively impacts the quality of beach waters or public bathing places within their respective jurisdictions.
- Municipalities and counties to post and maintain health advisory signs around affected beach waters and public bathing places that they own.
- Public boat docks, marinas, and piers to, within 24 hours or the next business day, whichever occurs first, notify the jurisdictional municipality or county of any incident that negatively impacts the quality of beach waters in which the dock, marina, or pier is located.
- The Department of Environmental Protection (DEP) to post and maintain health advisory signs around affected beach waters and public bathing places owned by the state.
- DOH to coordinate with DEP and the Fish and Wildlife Conservation Commission as necessary to implement the signage requirements of the bill, and requires that such signage be posted and maintained in compliance with this subsection until the health advisory is no longer in effect

The bill may have an indeterminate negative fiscal impact on DOH and on local governments. See Section II., below.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Background

Water-based activities are healthy ways to be physically active.¹ However, if an individual comes into contact with certain bacteria, or swallows, has contact with, or breathes in mists or aerosols from water contaminated with germs, or comes into contact “with chemicals that are in the water or that evaporate from the water and turn into gas in the air” she or he may become ill.²

Bacteria

Water is full of bacteria, some of which are beneficial and others which are not.³ Fecal coliform are naturally occurring bacteria found in the digestive tracts of most animals and they are shed from the body with excrement.⁴ While infections from fecal coliform bacteria are typically not fatal, severe symptoms may lead to death.⁵ *Escherichia coli* (*E. coli*), a type of fecal coliform bacteria, are found in the environment, intestines of people and animals, and foods.⁶ Some strains of *E. coli* may cause illnesses such as intestinal and urinary tract infections, meningitis⁷, and septicemia^{8,9} Enterococci are bacteria that live in the intestinal tracts of humans and warm-blooded animals.¹⁰ These bacteria can sicken swimmers and “[o]ther potential health effects can include diseases of the skin, eyes, ears and respiratory tract.”¹¹

Sources of fecal indicator bacteria such as enterococci include wastewater treatment plant effluent, leaking septic systems, stormwater runoff, sewage discharged or dumped from recreational boats, domestic animal and wildlife waste, improper land application of manure or sewage, and runoff from manure storage areas, pastures, rangelands, and feedlots. There are also natural, non-fecal sources of fecal indicator bacteria, including plants, sand, soil and sediments, that contribute to a certain background level in ambient waters and vary based on local environmental and meteorological conditions.¹²

Beach Waters and Public Bathing Places

Beach waters are the salt waters and brackish waters along the coastal and intracoastal beaches.¹³ A public bathing place is a body of water, including artificial impoundments, waters along the coastal and

¹ Centers for Disease Control and Prevention (CDC), *Healthy Swimming* (last updated May 1, 2023), <https://www.cdc.gov/healthywater/swimming/index.html> (last visited Jan. 26, 2024).

² CDC, *Swimming-related Illnesses* (last updated July 8, 2022), <https://www.cdc.gov/healthywater/swimming/swimmers/rwi.html> (last visited Jan. 26, 2024).

³ United States Geological Survey (USGS), *Bacteria and E. Coli in Water*, <https://www.usgs.gov/special-topics/water-science-school/science/bacteria-and-e-coli-water> (last visited Jan. 26, 2024).

⁴ Jesse Minor, Encyclopedia of Environment and Society - Fecal Coliform Bacteria, https://www.researchgate.net/publication/285400656_Fecal_Coliform_Bacteria, p. 3 (2007).

⁵ *Id.*

⁶ USGS, *supra* note 3.

⁷ Some people with meningitis caused by bacteria “die and death can occur in as little as a few hours. However, most people recover from bacterial meningitis. Those who do recover can have permanent disabilities, such as brain damage, hearing loss, and learning disabilities.” CDC, *Bacterial Meningitis* (last updated July 15, 2021), <https://www.cdc.gov/meningitis/bacterial.html> (last visited Jan. 26, 2024).

⁸ “Septicemia is an infection that occurs when bacteria enter the bloodstream and spread. It can lead to sepsis, the body’s reaction to the infection, which can cause organ damage and even death.” Cleveland Clinic, *Septicemia* (last updated May 17, 2021), <https://my.clevelandclinic.org/health/diseases/21539-septicemia> (last visited Jan. 26, 2024).

⁹ USGS, *supra* note 3.

¹⁰ Environmental Protection Agency (EPA), National Aquatic Resource Surveys, *Indicators: Enterococci, What are enterococci?* (last updated June 9, 2023), <https://www.epa.gov/national-aquatic-resource-surveys/indicators-enterococci> (last visited Jan. 26, 2024).

¹¹ *Id.*

¹² *Id.*

¹³ S. 514.023(1), F.S.

intracoastal beaches and shores of the state, lakes, streams, and rivers that are used by the public for swimming and recreational bathing.¹⁴

The Department of Health (DOH) may, but is not required to, adopt and enforce rules to protect the health, safety, and welfare of individuals using beach waters and public bathing places in Florida.¹⁵ If adopted, “[t]he rules must establish health standards and prescribe procedures and timeframes to conduct bacteriological sampling of beach waters and public bathing places.”¹⁶ While the issuance of health advisories related to such sampling is preempted to the state, DOH may, but is not required to, issue health advisories when beach waters or a public bathing place fail to meet health standards.¹⁷

DOH Regulation of Beach Waters and Public Bathing Places

The regulation of bathing places is important to prevent disease and sanitary nuisances which may threaten or impair the health or safety of individuals.¹⁸ DOH has adopted and enforces rules requiring the owners or managers of public bathing places to monitor for water quality, report the results to DOH and the relevant county health department, and provide notice to DOH and the public whenever there are water quality violations of the adopted bacteriological standards for fecal coliform, *E. coli*, or enterococci.¹⁹ The owner or manager of a public bathing place is required to collect and test bacteriological samples each month.²⁰

If test results exceed standards established by DOH, then the owner or manager must, within 24 hours of receipt of the results, notify the relevant county health department and re-sample the water.²¹ The county health department must also inspect the waters upon receipt of the test results.²² If the 24-hour samples confirm an exceedance of standards, the owner or manager must immediately post a no swimming advisory²³; if the owner or manager does not post the advisory, DOH is required to post it.²⁴ Once re-sampling confirms that the bathing water again meets the standards, the owner or manager may rescind the posted no-swimming advisory.²⁵

When DOH issues a health advisory against swimming in beach waters or a public bathing place because elevated levels of fecal coliform, *E. coli*, or enterococci bacteria have been detected in a water sample, it must “concurrently notify the municipality or county in which the affected beach waters are located, whichever has jurisdiction, and the local office of the Department of Environmental Protection (DEP), of the advisory.”²⁶ The local DEP office is required to “promptly investigate” all wastewater treatment facilities located within 1 mile of the affected area(s) to determine whether a facility may have contributed to the contamination.²⁷ The local DEP office is also required to provide the results of its investigation to the local government with jurisdiction over the affected area.²⁸

Florida Healthy Beaches Program

The Florida Healthy Beaches Program was created to monitor salt and brackish water beaches²⁹ for enterococci bacteria and to more accurately determine whether beaches are safe for recreational

¹⁴ S. 514.011(4), F.S.

¹⁵ S. 514.023(2), F.S.

¹⁶ *Id.*

¹⁷ S. 514.023(3), F.S.

¹⁸ R. 64E-9.001(1), F.A.C.

¹⁹ R. 64E-9.013(1)-(3), F.A.C.

²⁰ R. 64E-9.013(2)(a), F.A.C.

²¹ R. 64E-9.013(2)(a)1., F.A.C.

²² R. 64E-9.013(2)(b), F.A.C.

²³ Form DH 4158, Bathing Place Public Health Advisory Sign – Poor Water Quality, 02/13, is incorporated in rule 64E-0.013(a)2., F.A.C. by reference and available at <http://www.flrules.org/Gateway/reference.asp?No=Ref-06899>.

²⁴ R. 64E-9.013(2)(a)2., F.A.C.

²⁵ *Id.*

²⁶ S. 514.023(4), F.S.

²⁷ *Id.*

²⁸ *Id.*

²⁹ DOH Lee County, *Healthy Beaches* (last updated Feb. 4, 2016), <https://lee.floridahealth.gov/programs-and-services/environmental-health/healthy-beaches/index.html> (last visited Jan. 26, 2024).

uses.³⁰ In 1998, a grant-funded pilot program allowed 5 of Florida's coastal counties to monitor for enterococci bacteria.³¹ In 2000, the program was expanded to 30 counties and also provided for sampling of fecal coliform.³² In 2002, the Environmental Protection Agency (EPA) provided funding which enabled sampling on a weekly basis; however, in 2011 funding levels decreased, which resulted in a return to bi-weekly sampling.³³ "The goal of the Healthy Beaches Program is to prevent waterborne illness by advising Florida residents and visitors against recreating in waters potentially contaminated with human pathogens."³⁴

Effect of the Bill

The bill requires, rather than allows, DOH to:

- Adopt and enforce rules to protect the health, safety, and welfare of persons using the beach waters and public bathing places of this state.
- Within 24 hours or the next business day, whichever occurs first, issue health advisories if the quality of beach waters or a public bathing place fails to meet standards established by DOH and must require closure of beach waters and public bathing places that fail to meet DOH's standards if it deems closure is necessary to protect the health, safety, and welfare of the public. Closures must remain in effect until the quality of the beach waters or public bathing place is restored in accordance with DOH's standards and until DOH has removed any related health advisories that it issued.

The bill requires DOH to:

- When it issues a health advisory against swimming in beach waters or a public bathing place on the basis of finding elevated levels of fecal coliform, *E. coli*, or enterococci bacteria in a water sample, within 24 hours or the next business day, whichever occurs first, concurrently notify the municipality or county in which the affected public bathing place is located, whichever has jurisdiction, and the local affiliates of national television networks in the affected area of the advisory.
- Adopt by rule a sign that must be used when it issues a health advisory against swimming in affected beach waters or public bathing places due to elevated levels of fecal coliform, *E. coli*, or enterococci bacteria in the water; require that each sign be no less than 20 inches by 20 inches in diameter; and require that health advisory signs be displayed at beach access points and in conspicuous areas around affected beach waters and public bathing places until subsequent testing of the water demonstrates that the bacteria levels meet the standards established by DOH.

The bill preempts to the state the issuance of health advisories related to the results of bacteriological sampling of public bathing places.

The bill requires municipalities and counties to:

- Within 24 hours or the next business day, whichever occurs first, notify DOH of any incident that negatively impacts the quality of beach waters or public bathing places within their respective jurisdictions.
- Post and maintain health advisory signs around affected beach waters and public bathing places that they own.

The bill requires public boat docks, marinas, and piers to, within 24 hours or the next business day, whichever occurs first, notify the jurisdictional municipality or county of any incident that negatively impacts the quality of beach waters in which the dock, marina, or pier is located.

³⁰ Coastal & Heartland National Estuary Partnership (CHNEP), *Learn More: Healthy Beaches*, https://chnep.wateratlas.usf.edu/library/learn-more/learnmore.aspx?toolsection=lm_healthybeach (last visited Jan. 26, 2024).

³¹ DOH, *Florida Healthy Beaches Program* (last updated Feb. 1, 2022), <https://www.floridahealth.gov/environmental-health/beach-water-quality/index.html> (last visited Jan. 26, 2024).

³² CHNEP, *supra* note 30.

³³ *Id.*

³⁴ DOH, *supra* note 31.

The bill requires DEP to post and maintain health advisory signs around affected beach waters and public bathing places owned by the state.

The bill requires DOH to coordinate with DEP and the Fish and Wildlife Conservation Commission as necessary to implement the signage requirements of the bill, and requires that such signage be posted and maintained in compliance with this subsection until the health advisory is no longer in effect.

B. SECTION DIRECTORY:

Section 1. Amends s. 514.023, F.S., relating to sampling of beach waters; and public bathing places; health advisories.

Section 2. Provides an effective date of upon becoming a law.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

The bill may have an indeterminate negative impact on the state because the bill requires DEP to post and maintain health advisory signs around affected beach waters and public bathing places owned by the state. The bill may also have an indeterminate negative impact on the state because the bill requires DOH to coordinate with DEP and the Fish and Wildlife Conservation Commission as necessary to implement the signage requirements of the bill, and requires that such signage be posted and maintained in compliance with this subsection until the health advisory is no longer in effect.

See Fiscal Comments.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

The bill may have an indeterminate negative impact on municipalities and counties associated with requiring local governments to post and maintain health advisory signs around affected beach waters and public bathing places that they own.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

None.

D. FISCAL COMMENTS:

The bill requires DOH to adopt and enforce rules to protect the health, safety, and welfare of persons using the beach waters and public bathing places of this state, which may require DOH to expend funds to promulgate rules. The bill also requires DOH to adopt by rule a sign that must be used when it issues a health advisory against swimming in affected beach waters or public bathing places due to elevated levels of fecal coliform, *E. coli*, or enterococci bacteria in the water, which may require DOH to expend funds to promulgate rules.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

The county/municipality mandates provision of Art. VII, section 18, of the Florida Constitution may apply because this bill requires counties and municipalities to post and maintain DOH-required health advisory signs at affected beach waters and public bathing places they own. However, an exemption may apply because the fiscal impact to counties and municipalities is indeterminate and may be insignificant.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

The bill requires DOH to adopt rules to protect the health, safety, and welfare of persons using the beach waters and public bathing places of this state.

The bill also requires DOH to adopt by rule a sign that must be used when it issues a health advisory against swimming in affected beach waters or public bathing places due to elevated levels of fecal coliform, *E. coli*, or enterococci bacteria in the water.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE CHANGES

Not applicable.