



Agriculture & Natural Resources Appropriations Subcommittee

**Monday, February 5, 2024
2:30 PM - 5:30 PM
Webster Hall (212 Knott)**

Meeting Packet

Committee Meeting Notice

HOUSE OF REPRESENTATIVES

(AMENDED 2/1/2024 4:32:08PM)

Amended(2)

Agriculture & Natural Resources Appropriations Subcommittee

Start Date and Time: Monday, February 05, 2024 02:30 pm

End Date and Time: Monday, February 05, 2024 05:30 pm

Location: Webster Hall (212 Knott)

Duration: 3.00 hrs

Consideration of the following bill(s):

CS/HB 1073 Mitigation by Water Quality, Supply & Treatment Subcommittee, Truenow

HB 1565 Florida Red Tide Mitigation and Technology Development Initiative by Grant

HB 1581 Mangrove Replanting and Restoration by Mooney

To submit an electronic appearance form, and for information about attending or testifying at a committee meeting, please see the "Visiting the House" tab at www.myfloridahouse.gov.

NOTICE FINALIZED on 02/01/2024 4:32PM by DAD

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/HB 1073 Mitigation
SPONSOR(S): Water Quality, Supply & Treatment Subcommittee, Truenow
TIED BILLS: **IDEN./SIM. BILLS:** CS/SB 1532

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Water Quality, Supply & Treatment Subcommittee	15 Y, 0 N, As CS	Guy-Hudson	Curtin
2) Agriculture & Natural Resources Appropriations Subcommittee		Byrd	Pigott
3) Infrastructure Strategies Committee			

SUMMARY ANALYSIS

Wetlands are transitional areas between land and deep water, and are sufficiently inundated with water to support vegetation which grows in saturated soils. Approximately 11 million acres of wetlands cover Florida. The Department of Environmental Protection (DEP) regulates surface water flows and protects wetlands through the Environmental Resource Permitting Program (ERP). The ERP program requires avoidance and minimization measures to reduce impacts to wetlands and any remaining adverse impacts to be offset by mitigation.

Mitigation banking is a practice in which an environmental enhancement and preservation project is conducted by a public agency or private entity according to an ERP permit and federal authorization to provide mitigation for unavoidable environmental impacts within a defined region referred to as a mitigation service area. There are currently 131 state-authorized mitigation banks in Florida that cover 227,496 acres.

Water quality credit trading allows one source of pollution, the seller, to control a pollutant at levels greater than required and sell credits to another source, the buyer, which uses the credits to supplement their level of water treatment in order to comply with regulatory requirements. A Water Quality Enhancement Area (WQEA) is used to address pollutants in a watershed, basin, sub-basin, targeted restoration area or waterbody in which the WQEA is located that do not meet applicable state water quality criteria through the award of water quality enhancement credits by DEP. Credits may only be sold to governmental entities.

The bill provides that a governmental entity may, through a public procurement process, solicit proposals from private-sector sponsors for a mitigation bank project on public lands purchased for conservation. The governmental entity and private-sector sponsor must enter into a sponsorship agreement and the private-sector sponsor must pay a usage fee, reflecting the market value of the land that accounts for the use of public land in the pricing of mitigation credits.

The bill provides that, in determining the number of mitigation bank credits assigned to a mitigation bank, DEP or the water management district (WMD) must reflect the conservation status of the land in the location factor set forth in the uniform mitigation assessment method (UMAM).

The bill expands the WQEA program to allow private entities to purchase water quality credits and sponsor mitigation projects. Additionally, the bill prohibits DEP and the WMDs from participating in the establishment of public mitigation banks.

The bill will have an indeterminate fiscal impact on state and local government. See Fiscal Analysis.

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

This document does not reflect the intent or official position of the bill sponsor or House of Representatives.

STORAGE NAME: h1073a.ANR

DATE: 2/2/2024

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Background

Wetlands are transitional areas between land and deep water, and they are sufficiently inundated with water so that they support vegetation which grows in saturated soils.¹ “Florida wetlands generally include swamps, marshes, bayheads, bogs, cypress domes and strands, sloughs, wet prairies, riverine swamps and marshes, hydric seepage slopes,² tidal marshes, mangrove swamps and other similar areas.”³ Prior to development, wetlands covered approximately one half of Florida.⁴ Today, approximately 11 million acres of wetlands cover Florida and the state boasts more wetlands than any of the other 47 conterminous States.⁵

Regulation of Activities in Wetlands

The Clean Water Act (CWA) is the primary federal law that regulates water pollution in the United States and it prohibits the discharge of any pollutant⁶ into waters of the United States (WOTUS).⁷ The discharge of dredged or fill material into WOTUS, including wetlands, is regulated by a program established in Section 404 of the CWA.⁸ States may apply to the U.S. Environmental Protection Agency (EPA) to assume the federal dredge and fill permitting program; Florida assumed the 404 permitting program in 2020.⁹

DEP regulates surface water flows via the Environmental Resource Permit (ERP) Program, a permitting process that addresses and regulates impacts to the landscape including clearing, grading, construction of structures and filling and dredging, whether the work occurs in uplands, wetlands or other surface waters.¹⁰ An ERP permit may be issued by DEP, a WMD or a local government to which DEP delegated ERP permitting authority.¹¹ ERPs are designed to prevent flooding, protect wetlands and other surface waters and protect Florida’s water quality from stormwater pollution.¹²

While the State 404 Program and the ERP Program are separate programs, approximately 85 percent of review requirements of the two programs overlap.¹³ Both programs require avoidance and minimization measures to reduce impacts to wetlands and any remaining adverse impacts to be offset

¹ Melanie R. Darst, Helen M. Light, and Benjamin F. McPherson, U.S. Geological Survey (USGS) Water-Supply Paper 2425, *Florida Wetland Resources*, <https://www.fws.gov/media/wetland-resources-florida>, p. 153 (last visited Jan. 25, 2024); S. 373.019(27), F.S.

² Seepage slopes are wetlands located on the sides of rolling hills. “Unusual hydrology and frequent fires combine to create an environment that supports a variety of carnivorous and other sun-loving herbaceous plants” and “there are many rare or endemic species . . . that can be found in seepage slopes in the Florida Panhandle.” UF, IFAS Extension, *Florida’s Seepage Slope Wetlands* (Apr. 11, 2018), <https://edis.ifas.ufl.edu/publication/UW367> (last visited Jan. 25, 2024).

³ S. 373.019(27), F.S.; see also Department of Environmental Protection (DEP), *Wetland Evaluation and Delineation* (last updated Feb. 17, 2023), <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/wetland-evaluation-and> (last visited Jan. 25, 2024).

⁴ Darst, *supra* note 1.

⁵ *Id.*

⁶ 33 U.S.C. § 1311(a). The definition of the term “pollutant” is quite broad. 33 U.S.C. § 1362(6).

⁷ 33 U.S.C. § 1362(12)(A). “The term ‘navigable waters’ means the waters of the United States, including the territorial seas.” 33 U.S.C. § 1362(7).

⁸ EPA, *Section 404 of the Clean Water Act, Permit Program under CWA Section 404* (last updated Mar. 31, 2023), <https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404> (last visited Jan. 25, 2024).

⁹ 40 C.F.R. § 233.1. See also DEP, *State 404 Program* (last updated Oct. 17, 2023), <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/state-404-program> (last visited Jan. 25, 2024).

¹⁰ DEP, *Environmental Resource Permitting Online Help* (last updated Feb. 8, 2022), <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/environmental-resource-0> (last visited Jan. 25, 2024).

¹¹ *Id.*

¹² *Id.*

¹³ DEP, *State 404 Program*, *supra* note 9.

by mitigation. The methodology ratified by the Legislature for identifying and delineating the extent of wetlands and surface waters¹⁴ is also the methodology used to establish the boundary of state-assumed waters under the State 404 Program.¹⁵ Provisions of state law that conflict with federal requirements under the CWA do not apply to state-administered 404 permits.¹⁶

ERP permitting is governed by s. 373.4131, F.S. DEP implements this section of law in ch. 62-330, F.A.C., which provides for the permitting rules, application process and standards by which applications are considered and approved or denied. The ERP Applicant's Handbook, which is incorporated by reference into DEP rules, provides guidance on DEP's ERP program, which includes all permitted activities governed by ch. 373, part IV, F.S., relating to management and storage of surface waters, as well as stormwater management systems-specific activities.¹⁷ Applicants for an ERP must adhere to requirements in both the ERP Applicant's Handbook, Vol. I, which governs general permitting while WMD-specific permitting requirements are contained in the ERP Applicant's Handbook, Vol. II, for which there is one per WMD.¹⁸

The ERP program requires avoidance and minimization measures to reduce impacts to wetlands and any remaining adverse impacts to be offset by mitigation according to a methodology ratified by the Legislature for identifying and delineating the extent of wetlands and surface waters.¹⁹

DEP's Submerged Lands and Environmental Resources Coordination Program is responsible for the consistent implementation of both the State 404 Program and the ERP Program.²⁰

Mitigation Banks

Some permitted projects result in unavoidable adverse impacts to wetlands and other surface waters. Mitigation activities for such projects include activities that preserve, create, enhance and/or restore wetlands and other surface waters.²¹ Mitigation banking is a practice in which an environmental enhancement and preservation project is conducted by a public agency or private entity to provide mitigation for unavoidable environmental impacts within a defined region referred to as a mitigation service area.²²

A mitigation bank consists of a wetland, stream or other aquatic resource area that has been restored, established or preserved to offset such environmental impacts.²³ Mitigation banks are an alternative to permittee-responsible mitigation.²⁴ Permittee-responsible mitigation refers to mitigation undertaken by the permittee to provide compensatory mitigation for which the permittee retains full responsibility.²⁵ If

¹⁴ S. 373.4211, F.S.

¹⁵ R. 62-331.010(3), F.A.C.

¹⁶ S. 373.4146(3), F.S.

¹⁷ DEP, *Environmental Resource Permit Applicant's Handbook Volume I (General and Environmental)*, p. 1-4 (Dec. 22, 2020) Modified Document, 1/6/2021, <https://www.flrules.org/gateway/reference.asp?No=Ref-12078> (last visited Jan. 21, 2024).

¹⁸ DEP, *ERP Stormwater* (last updated June 7, 2022), [ERP Stormwater | Florida Department of Environmental Protection](https://www.flrules.org/gateway/reference.asp?No=Ref-12078) (last visited Jan. 25, 2024).

¹⁹ S. 373.4211, F.S.

²⁰ DEP, *Submerged Lands and Environmental Resources Coordination Program*, <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination> (last visited Jan. 25, 2024).

²¹ DEP, *Mitigation and Mitigation Banking* (last updated May 31, 2023), <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/mitigation-and-mitigation-banking> (last visited Jan. 24, 2024).

²² *Id.* "Mitigation service area" means the geographic area within which mitigation credits from a mitigation bank may be used to offset adverse impacts of activities regulated under this part. S. 373.403(21), F.S.

²³ EPA, *Mitigation Banks under CWA Section 404* (last updated Oct. 31, 2023), [Mitigation Banks under CWA Section 404 | US EPA](https://www.epa.gov/cwa-404/mitigation-banks-under-cwa-section-404) (last visited Jan. 25, 2024).

²⁴ S. 373.4135(1)(b), F.S.

²⁵ EPA, *Mechanisms for Providing Compensatory Mitigation under CWA Section 404* (last updated Apr. 6, 2023), <https://www.epa.gov/cwa-404/mechanisms-providing-compensatory-mitigation-under-cwa-section-404> (last visited Jan. 25, 2024).

mitigation credits are not available, state law allows permittee-responsible mitigation consisting of the restoration and enhancement of lands owned by a local government.²⁶

State law directs DEP and the WMDs “to participate in and encourage the establishment of private and public mitigation banks and offsite regional mitigation.”²⁷ In general, a governmental entity may not create or provide mitigation for a project other than its own except when a local government has allowed a public or private mitigation project to be created on land it has purchased for conservation purposes.²⁸

The mitigation bank is the site itself and the currency sold by the banker to the impacted permittee is a credit, representing the wetland ecological value equivalent to the complete restoration of one acre.²⁹ The permitting agencies determine the number of potential credits permitted for the bank and the credit debits required for impact permits.³⁰

Mitigation banks are authorized by an ERP permit issued by DEP, the St. Johns River WMD, the Southwest Florida WMD, and/or the South Florida WMD, depending on the location of the bank and the Operating and Delegation Agreements between DEP and the WMDs.³¹ DEP is responsible for permitting mitigation banks within the Northwest Florida WMD and the Suwannee River WMD.³² Mitigation banks also require federal authorization³³; a number of agencies are involved in processing the federal authorization³⁴ - called a Mitigation Banking Instrument - and the U.S. Army Corps of Engineers (USACE) typically serves as the lead agency.³⁵

Requirements for mitigation bank permits differ between mitigation bank instruments issued by the USACE and state permits issued by DEP or the WMDs. Under the federal process, a mitigation banking instrument serves as the legal document for the establishment, operation and use of a mitigation bank.³⁶ They are approved by an interagency review team, through procedures involving public notice and comment.³⁷ Mitigation banking instruments must include certain detailed elements, such as a comprehensive mitigation plan including financial assurances and a credit release schedule that is tied to the achievement of specific milestones.³⁸

Once mitigation credits have been awarded to a mitigation bank, the permitting agency is required to establish a schedule, in the permit, for the release of credits.³⁹ Once a credit has been released it may be sold or used to offset adverse impacts associated with a permitted project.⁴⁰ The permitting agency is prohibited from releasing all of a mitigation bank’s credits until the bank meets the mitigation success criteria established in its mitigation bank permit.⁴¹ In addition, with certain exceptions, credits may only be withdrawn and used to offset impacts in the mitigation service area.⁴²

²⁶ S. 373.4135(1)(b), F.S.

²⁷ S. 373.4135(1), F.S.

²⁸ S. 373.4135(1)(b), F.S.

²⁹ DEP, *Mitigation and Mitigation Banking*, *supra* note 21.

³⁰ *Id.*

³¹ R. 62-342.100(2), F.A.C.; DEP, *Mitigation Banking Rule and Procedure Synopsis* (last updated Feb. 17, 2023), <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/mitigation-banking-rule-and> (last visited Dec. 20, 2023).

³² DEP, *Mitigation Banks and Mitigation Banking* (last updated Feb. 17, 2023), <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/mitigation-and-mitigation-banking> (last visited Jan. 25, 2024).

³³ DEP, *Mitigation and Mitigation Banking*, *supra* note 21.

³⁴ 33 C.F.R. § 332.8(b)(2).

³⁵ 33 C.F.R. § 332.8(b)(1).

³⁶ 33 C.F.R. s. 332.2.

³⁷ 33 C.F.R. s. 332.8; 40 C.F.R. s. 230.98.

³⁸ *See generally* 33 C.F.R. s. 332.8(d)(6); *see also* 40 C.F.R. s. 230.98(d)(6).

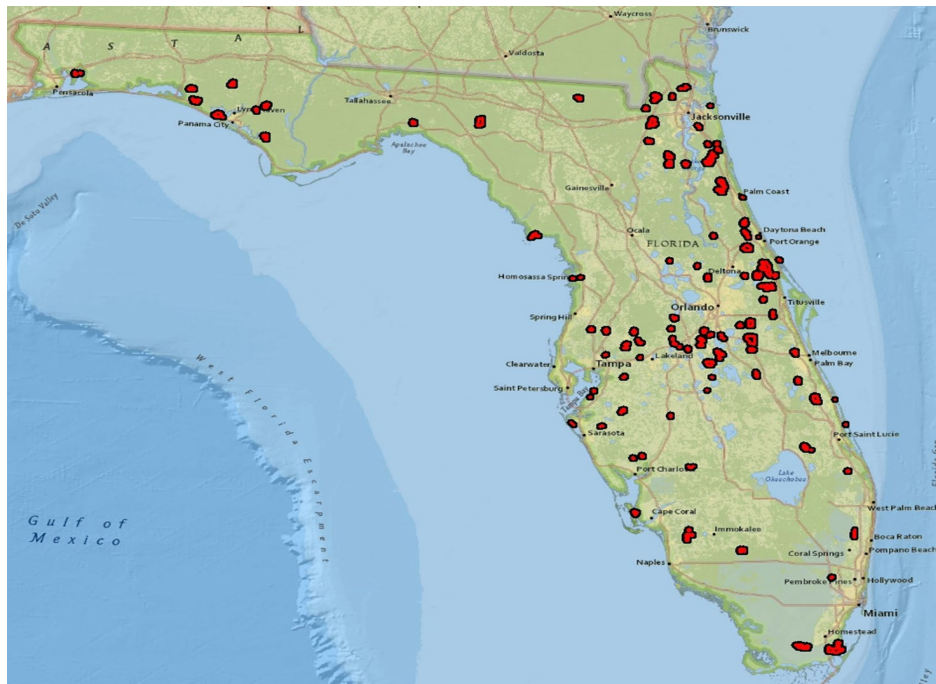
³⁹ S. 373.4136(5), F.S.

⁴⁰ *Id.*

⁴¹ S. 373.4136(5)(b), F.S.

⁴² S. 373.4136(6), F.S.; S. 373.4136(6)(d), F.S.

Currently, there are 131 state-authorized mitigation banks in Florida that cover 227,496 acres.⁴³



44

Water Quality Credit Trading

Water quality credit trading is a market-based approach that can be used to attain water quality improvements.⁴⁵ Water quality credit trading allows one source of pollution to control a pollutant at levels greater than required and sell credits to another source, the buyer, which uses the credits to supplement their level of water treatment in order to comply with regulatory requirements.⁴⁶ Pollutant reductions achieved through water quality credit trading must result in water quality that is as good as or better than what would be achieved through treatment.⁴⁷

DEP is responsible for regulating water quality credit trading.⁴⁸ Water quality credits⁴⁹ can only be traded within the boundaries of a basin management action plan⁵⁰ (BMAP) or a Reasonable Assurance Plan (RAP) area.⁵¹ Credits cannot be generated for a reduction in nutrient loading that is required under a regulatory program, including BMAPs or RAPs, but can be generated if reductions are made beyond what is required in the BMAP or RAP.⁵² Additionally, credits cannot be generated from the

⁴³ Presentation by Christine Wentzel, Regulatory Manager, Environmental Resource Program, St. Johns River WMD, *Mitigation Banks*, to the House Water Quality, Supply & Treatment Subcommittee (Sept. 19, 2023), <https://www.myfloridahouse.gov/Sections/Documents/loadoc.aspx?PublicationType=Committees&CommitteeId=3251&Session=2024&DocumentType=Meeting+Packets&FileName=wst+9-19-23.pdf>, slide 24, (last visited Jan. 25, 2024).

⁴⁴ *Id.*

⁴⁵ EPA, *Water Quality Trading* (last updated Nov. 28, 2023), <https://www.epa.gov/npdes/water-quality-trading> (last visited Jan. 25, 2024).

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ S. 403.067(8), F.S.

⁴⁹ R. 62-306.200(3), F.A.C. defines “credit” to mean the amount of an entity’s nutrient load reduction below the baseline that will be available for trading purposes. Credits are in units of pounds per year or kilograms per year.

⁵⁰ A BMAP is a restoration plan for the watersheds and basins connected to an impaired waterbody. S. 403.067(7)(a)1., F.S.

⁵¹ R. 62-306.300(1), F.A.C. A Reasonable Assurance Plan is a control measure the DEP may implement for Category 4b impaired waterbodies. DEP, *Alternative Restoration Plans*, [Alternative Restoration Plans | Florida Department of Environmental Protection](#) (last visited Jan. 25, 2024).

⁵² R. 62-306.400(2)(a), F.A.C.

implementation of best management practices (BMPs)⁵³ that are required under a BMAP or RAP.⁵⁴ An entity must fully comply with its baseline nutrient load to be eligible for credits resulting from management actions that reduce the nutrient load below the baseline.⁵⁵ In the past, water quality credits have been traded in the state; however, currently there are no water quality credits available for trade.⁵⁶

Water Quality Enhancement Areas⁵⁷

Water quality enhancement areas (WQEAs) are “natural systems constructed, operated, managed, and maintained for the purpose of providing offsite regional treatment for which enhancement credits may be provided pursuant to a WQEA permit. . . .”⁵⁸ Awarded by DEP, an enhancement credit represents a quantity of pollutant removed.⁵⁹ An enhancement credit may be sold only to governmental entities seeking to meet an assigned BMAP or RAP, or for the purpose of achieving net improvement.⁶⁰ It may be sold only after the governmental entity provides reasonable assurance of meeting DEP rules for design and construction of all onsite stormwater management.⁶¹

A WQEA is used to address pollutants in a watershed, basin, sub-basin, targeted restoration area or waterbody in which the WQEA is located that do not meet applicable state water quality criteria.⁶² Construction, operation, management and maintenance of a WQEA must be approved through the ERP permit process⁶³ and must be used to create, improve or use natural systems to improve water quality.⁶⁴ A WQEA permit provides for the assessment, valuation and award of credits based on units of pollutants removed.⁶⁵ DEP must base its determination of the award of enhancement credits on standard numerical models or analytical tools that establish the WQEA’s ability to remove pollutants or constituents.⁶⁶ If the watershed within the WQEA has a BMAP, then the applicant must use the BMAP numerical models and analytical tools.⁶⁷

“To obtain a WQEA permit, the applicant must provide reasonable assurances that the proposed WQEA will be used to:

- Meet the requirements for issuance of an ERP;
- Benefit water quality in the watershed in which the WQEA is located;
- Meet defined performance or success criteria for the reduction of one or more pollutants or other constituents that prevent receiving waters from meeting applicable state water quality criteria;

⁵³ The EPA’s National Pollutant Discharge Elimination System (NPDES) regulations include a definition of BMPs as applied to water quality protection to mean, “[s]chedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of ‘waters of the United States.’ BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.” 40 C.F.R. §122.2

⁵⁴ R. 62-306.400(2)(b), F.A.C.

⁵⁵ R. 62-306.400(4), F.A.C.

⁵⁶ DEP, *Florida Water Quality Credit Trading Registry* (last updated Feb. 21, 2023), <https://floridadep.gov/dear/water-quality-restoration/content/florida-water-quality-credit-trading-registry> (last visited Jan. 25, 2024).

⁵⁷ The Water Quality Enhancement Area Program (Program) was created in Ch. 2022-215, Laws of Fla., and required DEP to initiate rulemaking to implement the Program. DEP held one rule development workshop on Nov. 8, 2023. DEP, *Water Quality Enhancement Area Rulemaking* (last updated Dec. 7, 2023) [Water Quality Enhancement Area Rulemaking | Florida Department of Environmental Protection](#) (last visited Jan. 25, 2024). Until rules are adopted, the Program is not operational.

⁵⁸ S. 373.4134(2)(d), F.S.

⁵⁹ S. 373.434(2)(a), F.S.

⁶⁰ S. 373.4134(3)(b), F.S.

⁶¹ *Id.*

⁶² S. 373.4134(3)(c), F.S.

⁶³ S. 373.4134(3)(a), F.S.

⁶⁴ S. 373.4134(3)(d), F.S.

⁶⁵ S. 373.4134(4)(b), F.S.

⁶⁶ S. 373.4134(4)(c), F.S.

⁶⁷ S. 373.4134(4)(c)1., F.S.

- Ensure long-term pollutant reduction through effective operation and maintenance in perpetuity by designation of a responsible long-term maintenance entity supported by an endowment or other long-term financial assurance sufficient to ensure perpetual operation and maintenance;
- Demonstrate sufficient legal or equitable interest in the property to ensure access and perpetual protection and management of the land within the WQEA; and,
- Provide for permanent preservation of the WQEA⁶⁸

The WQEA permit applicant must propose performance and success criteria monitoring and a verification plan and protocols for once the WQEA is operational.⁶⁹ The protocols must be appropriate for the WQEA and sufficient to demonstrate that the area is meeting defined performance or success criteria for the reduction of pollutants or contaminants for which credits are awarded.⁷⁰ Permit applications must include site-specific water data and conditions information to assist DEP in determining the number of credits to issue.⁷¹ An applicant for a WQEA permit or an applicant proposing to use enhancement credits must comply with all requirements pertaining to adverse impacts to water quality in receiving waters and adjacent lands or wetlands.⁷² If a permittee fails to comply with the conditions of a WQEA, DEP must revoke the ability of the permittee to sell enhancement credits until the WQEA complies with the conditions of the permit.⁷³

DEP must establish a water quality enhancement service area for each WQEA.⁷⁴ Enhancement credits may be withdrawn and used only to address adverse impacts in the enhancement service area.⁷⁵ The boundaries of such enhancement service areas depend on the geographic area in which the WQEA could reasonably be expected to address adverse impacts.⁷⁶

DEP must track the award, release and use of enhancement credits by maintaining a ledger.⁷⁷ If credits are sold or used, the WQEA operator must notify DEP within 30 days after the date the enhancement credit transaction is completed.⁷⁸ A WMD that authorizes applicants seeking permits to use enhancement credits to address water quality impacts must report to DEP the amount of enhancement credits used by the applicants.⁷⁹

A WQEA may not be located on lands purchased for conservation pursuant to the Florida Forever Act or the Florida Preservation 2000 Act.⁸⁰ Pollutant loading reductions required under any state regulatory program are not eligible to be considered as enhancement credits.⁸¹ Credits may not be used by point source dischargers to satisfy regulatory requirements other than those necessary to obtain an ERP for construction and operation of the surface water management system of the site.⁸²

Effect of the Bill

For the purposes of ch. 373, part IV, F.S., relating to management and storage of surface waters, the bill defines “private-sector sponsor” as an individual or entity that establishes and operates a wetland mitigation bank project and is responsible for compliance with any permit or authorization, including, but

⁶⁸ S. 373.4134(4)(a)1.-6., F.S.

⁶⁹ S. 373.4134(6)(a), F.S.

⁷⁰ *Id.*

⁷¹ S. 373.4134(4)(C)4., F.S.

⁷² S. 373.4134(3)(g), F.S.

⁷³ S. 373.4134(6)(b), F.S.

⁷⁴ S. 373.4134(5), F.S.

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ S. 373.4134(7)(d), F.S.

⁷⁸ S. 373.4134(7)(d)2., F.S.

⁷⁹ S. 373.4134(7)(d)1., F.S.

⁸⁰ S. 373.4134(7)(c), F.S.

⁸¹ S. 373.4134(7)(e), F.S.

⁸² S. 373.4134(7)(e) and (f), F.S.

not limited to, funding and undertaking wetland enhancement, restoration or creation activities, and the provision of financial assurances, as well as any required monitoring, reporting, and maintenance of the mitigation bank.

The bill adds “applicants” as eligible entities that may purchase WQEA credits and defines applicants to mean a governmental entity or private sector entity that wishes to purchase water quality enhancement credits to meet an assigned BMAP allocation or RAP or for the purpose of achieving the net improvement performance standard.

The bill directs DEP and the WMDs to encourage the establishment of private mitigation banks and offsite regional mitigation on *private and public lands owned by a local government*. Current law allows DEP and the WMDs to also participate in private and public mitigation banks. The bill removes the authorization for DEP and the WMDs to participate in the establishment of public mitigation banks. When a local government allows a public or private mitigation project to be created on land it has purchased for conservation purposes, the bill clarifies that the exception applies to instances when a local government has allowed a public or private mitigation project, *including permittee-responsible mitigation*, to be created on land it has purchased for conservation purposes.

The bill provides that a local government may, through a public procurement process, solicit proposals from private-sector sponsors for a mitigation bank on public lands purchased for conservation purposes. If such a mitigation bank is to be established and operated on public land, the local government and private-sector sponsor must enter into an agreement requiring the private-sector sponsor to establish and operate the mitigation bank to conform to the mitigation banking permitting requirements. The bill provides that the agreement must require the private-sector sponsor to pay a usage fee to the local government which reflects the market value of the public land, as determined by a competitive process in accordance with state law or such other method of assuring that the cost of the use of the public land is fully accounted for in the pricing of mitigation credits.

The bill provides that, in determining the number of mitigation bank credits assigned to the mitigation bank, DEP or the WMD must reflect the conservation status of the land in the location factor set forth in the uniform mitigation assessment method.⁸³ The bill provides that these requirements apply to drainage basins or corresponding hydrologic units⁸⁴ if the private-sector sponsor demonstrates to DEP or the WMD that in-kind credits are not available. The bill specifies that rulemaking is not required to implement this subsection.

The bill reenacts s. 403.9332(1)(a) and (c), F.S., relating to mitigation and enforcement, for the purpose of incorporating the amendment to s. 373.4135, F.S., relating to mitigation banks and offsite regional mitigation. The bill conforms cross-references in ss. 330.41, 373.414 and 373.461, F.S.

B. SECTION DIRECTORY:

Section 1: Amends s. 373.403, F.S., relating to management and storage of surface waters.

Section 2: Amends s. 373.4134, F.S., relating to water quality enhancement areas.

Section 3: Amends s. 373.4135, F.S., relating to mitigation banks and offsite regional mitigation.

⁸³ The Uniform Mitigation Assessment Method (UMAM) is a methodology in state law to determine the amount of mitigation needed to offset adverse impacts to wetlands and other surface waters and to award and deduct mitigation bank credits. S. 373.414(18), F.S. See also DEP, *The Uniform Mitigation Assessment Method (UMAM)* (last updated Feb. 8, 2022), <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/uniform-mitigation-assessment> (last visited Jan. 25, 2024).

⁸⁴ A hydrologic unit is a geographic area defined by an area’s natural hydrological properties, primarily its drainage patterns. U.S. Geological Survey (USGS), *Hydrologic Unit Maps* (last updated Jan. 9, 2024), <https://water.usgs.gov/GIS/huc.html> (last visited Jan. 25, 2024). The U.S. is divided and sub-divided into successively smaller hydrologic units which are classified into four levels: regions, subregions, accounting units, and cataloging units. *Id.*

- Section 4: Amends s. 330.41, F.S., relating to the Unmanned Aircraft Systems Act.
- Section 5: Amends s. 373.414, F.S., relating to additional criteria for activities in surface waters and wetlands.
- Section 6: Amends s. 373.461, F.S., relating to Lake Apopka improvement and management.
- Section 7: Amends s. 403.9332, F.S., relating to mitigation and enforcement.
- Section 8: Provides an effective date of July 1, 2024.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

The bill may have an indeterminate positive fiscal impact to the state from additional WQEA permitting fees.

2. Expenditures:

The bill may have an insignificant negative fiscal impact relating to the expansion of the WQEA Program. The department has indicated the additional workload can be absorbed within existing resources.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

The bill may have an indeterminate positive fiscal impact on local governments from the collection of usage fees from private sector sponsors who operate a mitigation bank.

2. Expenditures:

The bill may have an indeterminate negative fiscal impact on local governments through the additional workload associated with the procurement process and entering into agreements with private sector sponsors.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

There may be a positive fiscal impact to private entities participating in the expanded WQEA program and maintaining mitigation banks on public lands. The fiscal impact is indeterminate.

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable. This bill does not appear to require counties or municipalities to spend funds or take action requiring the expenditure of funds; reduce the authority that counties or municipalities have to

raise revenues in the aggregate; or reduce the percentage of state tax shared with counties or municipalities.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

None.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE CHANGES

On January 29, 2024, the Water Quality, Supply and Treatment Subcommittee adopted a Proposed Committee Substitute (PCS) and reported the bill favorably as a committee substitute. The PCS:

- Adds a definition of “private sector sponsor” in s. 373.403, F.S., relating to the management and storage of surface waters, and “applicant” to s. 373.4134, F.S., relating to WQEAs, to expand mitigation banking and the Water Quality Enhancement Area Program, respectively, to include private sector entities. For both, the bill requires any participating private sector entities to comply with all laws, regulations, permits and/or authorizations.
 - For a wetland mitigation project permitted pursuant to ch. 373, pt. IV, F.S., the bill requires the private sector sponsor to provide certain financial assurances and any required monitoring, reporting and maintenance of the mitigation bank.
 - For a private entity purchasing WQEA credits, the bill authorizes such an entity to do so to meet an assigned BMAP allocation or RAP or for the purpose of achieving the net improvement performance standard.
- Clarifies that permittee-responsible mitigation may be included in a mitigation project authorized for land a local government purchased for conservation purposes.
- Authorizes a local government, through a public procurement process, to solicit proposals from private-sector sponsors for a mitigation bank on public lands purchased for conservation purposes. If a private-sector sponsor is going to operate a mitigation bank, then the local government and the private-sector sponsor must enter into an agreement that requires the private-sector sponsor to:
 - Establish and operate the mitigation bank according to mitigation banking permitting requirements.
 - Pay a usage fee to the local government which reflects the market value of the public land and assures that the cost of the use of the public land is fully accounted for in the pricing of mitigation credits.
- Reenacts s. 409.9332, F.S., relating to mitigation and enforcement, to incorporate the amendment made by the bill and conforms cross-references in ss. 330.41, 373.414 and 373.461, F.S.

This analysis is drafted to the committee substitute as approved by the Water Quality, Supply and Treatment Subcommittee.

1 A bill to be entitled
2 An act relating to mitigation; amending s. 373.403,
3 F.S.; defining the term "private-sector sponsor";
4 making technical changes; amending s. 373.4134, F.S.;
5 revising legislative findings; defining the term
6 "applicant"; revising the entities to and purposes for
7 which water quality enhancement credits may be sold;
8 requiring the Department of Environmental Protection
9 and water management districts to authorize such sale
10 and use; revising construction; amending s. 373.4135,
11 F.S.; revising legislative findings; authorizing local
12 governments to solicit proposals from private-sector
13 sponsors for mitigation banks on certain public lands;
14 providing requirements for agreements between local
15 governments and private-sector sponsors for such
16 mitigation banks; providing requirements for the
17 department and water management districts in assigning
18 credits to such mitigation banks; providing
19 applicability; providing an exception from rulemaking;
20 amending ss. 330.41, 373.414, and 373.461, F.S.;
21 conforming cross-references; reenacting s.
22 403.9332(1)(a) and (c), F.S., relating to mitigation
23 and enforcement, to incorporate the amendments made to
24 s. 373.4135, F.S., in references thereto; providing an
25 effective date.

26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50

Be It Enacted by the Legislature of the State of Florida:

Section 1. Section 373.403, Florida Statutes, is amended to read:

373.403 Definitions.—When appearing in this part or in any rule, regulation, or order adopted pursuant thereto, the following terms mean:

(1)~~(7)~~ "Alter" means to extend a dam or works beyond maintenance in its original condition, including changes which may increase or diminish the flow or storage of surface water which may affect the safety of such dam or works.

(2) "Appurtenant works" means any artificial improvements to a dam which might affect the safety of such dam or, when employed, might affect the holding capacity of such dam or of the reservoir or impoundment created by such dam.

(3)~~(6)~~ "Closed system" means any reservoir or works located entirely within agricultural lands owned or controlled by the user and which requires water only for the filling, replenishing, and maintaining the water level thereof.

(4)~~(1)~~ "Dam" means any artificial or natural barrier, with appurtenant works, raised to obstruct or impound, or which does obstruct or impound, any of the surface waters of the state.

(5)~~(9)~~ "Drainage basin" means a subdivision of a watershed.

51 ~~(6)-(13)~~ "Dredging" means excavation, by any means, in
 52 surface waters or wetlands, as delineated in s. 373.421(1). The
 53 term ~~It~~ also means the excavation, or creation, of a water body
 54 which is, or is to be, connected to surface waters or wetlands,
 55 as delineated in s. 373.421(1), directly or via an excavated
 56 water body or series of water bodies.

57 ~~(7)-(18)~~ "Ecological value" means the value of functions
 58 performed by uplands, wetlands, and other surface waters to the
 59 abundance, diversity, and habitats of fish, wildlife, and listed
 60 species. These functions include, but are not limited to,
 61 providing cover and refuge; breeding, nesting, denning, and
 62 nursery areas; corridors for wildlife movement; food chain
 63 support; and natural water storage, natural flow attenuation,
 64 and water quality improvement, which enhances fish, wildlife,
 65 and listed species utilization.

66 ~~(8)-(15)~~ "Estuary" means a semienclosed, naturally existing
 67 coastal body of water that ~~which~~ has a free connection with the
 68 open sea and within which seawater is measurably diluted with
 69 fresh water derived from riverine systems.

70 ~~(9)-(14)~~ "Filling" means the deposition, by any means, of
 71 materials in surface waters or wetlands, as delineated in s.
 72 373.421(1).

73 ~~(10)-(3)~~ "Impoundment" means any lake, reservoir, pond, or
 74 other containment of surface water occupying a bed or depression
 75 in the earth's surface and having a discernible shoreline.

76 ~~(11)-(16)~~ "Lagoon" means a naturally existing coastal zone
 77 depression that ~~which~~ is below mean high water and that ~~which~~
 78 has permanent or ephemeral communications with the sea, but that
 79 ~~which~~ is protected from the sea by some type of naturally
 80 existing barrier.

81 ~~(12)-(8)~~ "Maintenance" or "repairs" means remedial work of
 82 a nature as may affect the safety of any dam, impoundment,
 83 reservoir, or appurtenant work or works, but excludes routine
 84 custodial maintenance.

85 ~~(13)-(19)~~ "Mitigation bank" means a project permitted under
 86 s. 373.4136 undertaken to provide for the withdrawal of
 87 mitigation credits to offset adverse impacts authorized by a
 88 permit under this part.

89 ~~(14)-(20)~~ "Mitigation credit" means a standard unit of
 90 measure which represents the increase in ecological value
 91 resulting from restoration, enhancement, preservation, or
 92 creation activities.

93 ~~(15)-(21)~~ "Mitigation service area" means the geographic
 94 area within which mitigation credits from a mitigation bank may
 95 be used to offset adverse impacts of activities regulated under
 96 this part.

97 ~~(16)-(22)~~ "Offsite regional mitigation" means mitigation on
 98 an area of land off the site of an activity permitted under this
 99 part, where an applicant proposes to mitigate the adverse
 100 impacts of only the applicant's specific activity as a

101 requirement of the permit, which provides regional ecological
 102 value, and which is not a mitigation bank permitted under s.
 103 373.4136.

104 (17) "Private-sector sponsor" means an individual or
 105 entity that establishes and operates a wetland mitigation bank
 106 project and is responsible for compliance with any permit or
 107 authorization, including, but not limited to, funding and
 108 undertaking wetland enhancement, restoration or creation
 109 activities, and the provision of financial assurances, as well
 110 as any required monitoring, reporting, and maintenance of the
 111 mitigation bank.

112 ~~(18)-(4)~~ "Reservoir" means any artificial or natural
 113 holding area which contains or will contain the water impounded
 114 by a dam.

115 ~~(19)-(17)~~ "Seawall" means a manmade wall or an
 116 encroachment, except riprap, which is made to break the force of
 117 waves and to protect the shore from erosion.

118 ~~(20)-(11)~~ "State water quality standards" means water
 119 quality standards adopted pursuant to chapter 403.

120 ~~(21)-(10)~~ "Stormwater management system" means a system
 121 ~~which is~~ designed and constructed or implemented to control
 122 discharges ~~which are~~ necessitated by rainfall events,
 123 incorporating methods to collect, convey, store, absorb,
 124 inhibit, treat, use, or reuse water to prevent or reduce
 125 flooding, overdrainage, environmental degradation, and water

126 | pollution or otherwise affect the quantity and quality of
 127 | discharges from the system.

128 | ~~(22)-(12)~~ "Watershed" means the land area that ~~which~~
 129 | contributes to the flow of water into a receiving body of water.

130 | ~~(23)-(5)~~ "Works" means all artificial structures,
 131 | including, but not limited to, ditches, canals, conduits,
 132 | channels, culverts, pipes, and other construction that connects
 133 | to, draws water from, drains water into, or is placed in or
 134 | across the waters in the state.

135 | Section 2. Present paragraphs (a) through (e) of
 136 | subsection (2) of section 373.4134, Florida Statutes, are
 137 | redesignated as paragraphs (b) through (f), respectively, a new
 138 | paragraph (a) is added to that subsection, and paragraphs (b),
 139 | (d), and (e) of subsection (1), paragraph (b) of subsection (3),
 140 | and paragraphs (a) and (j) of subsection (7) of that section are
 141 | amended, to read:

142 | 373.4134 Water quality enhancement areas.—

143 | (1) LEGISLATIVE FINDINGS AND INTENT.—The Legislature finds
 144 | that:

145 | (b) An expansion of existing authority for regional
 146 | treatment to include offsite compensatory treatment in water
 147 | quality enhancement areas to make enhancement credits available
 148 | for purchase by an applicant or a governmental entity ~~entities~~
 149 | to address impacts regulated under this part is needed.

150 | (d) Water quality enhancement areas are a valuable tool to

151 assist an applicant ~~governmental entities~~ in satisfying the net
 152 improvement performance standard under s. 373.414(1)(b)3. to
 153 ensure significant reductions of pollutant loadings.

154 (e) Water quality enhancement areas that provide water
 155 quality enhancement credits to applicants ~~governmental entities~~
 156 seeking permits under this part and to governmental entities
 157 seeking to meet an assigned basin management action plan
 158 allocation or reasonable assurance plan under s. 403.067 are
 159 considered an appropriate and permissible option.

160 (2) DEFINITIONS.—As used in this section, the term:

161 (a) "Applicant" means a governmental entity or private-
 162 sector entity that wishes to purchase water quality enhancement
 163 credits to meet an assigned basin management action plan
 164 allocation or reasonable assurance plan or for the purpose of
 165 achieving the net improvement performance standard under s.
 166 373.414(1)(b)3.

167 (3) WATER QUALITY ENHANCEMENT AREAS.—

168 (b) Water quality enhancement credits may be sold ~~only~~ to
 169 applicants ~~governmental entities~~ seeking to meet an assigned
 170 basin management action plan allocation or reasonable assurance
 171 plan or for the purpose of achieving net improvement performance
 172 standards under s. 373.414(1)(b)3. after ~~the governmental entity~~
 173 ~~has provided~~ reasonable assurances have been provided ~~assurance~~
 174 ~~of meeting department rules~~ for the design and construction of
 175 all onsite stormwater management as required by law.

176 (7) ENHANCEMENT CREDITS.—

177 (a) The department or water management district shall
 178 authorize the sale and use of enhancement credits to applicants
 179 ~~governmental entities~~ to address adverse water quality impacts
 180 of activities regulated under this part or to assist
 181 governmental entities seeking to meet required nonpoint source
 182 contribution reductions assigned in a basin management action
 183 plan or reasonable assurance plan under s. 403.067.

184 (j) Notwithstanding any other law, this section does not
 185 limit or restrict the authority of the department to deny the
 186 use of enhancement credits when the department is not reasonably
 187 assured that the use of the credits will not cause or contribute
 188 to a violation of water quality standards, even if the project
 189 being implemented by the applicant ~~governmental entity~~ is within
 190 the enhancement service area. The department may allow the use
 191 of enhancement credits if the department receives a request for
 192 the use of enhancement credits and determines that such use will
 193 not cause or contribute to a violation of water quality
 194 standards.

195 Section 3. Subsection (1) of section 373.4135, Florida
 196 Statutes, is amended and subsection (8) is added to that section
 197 to read:

198 373.4135 Mitigation banks and offsite regional
 199 mitigation.—

200 (1) The Legislature finds that the adverse impacts of

201 activities regulated under this part may be offset by the
202 creation, maintenance, and use of mitigation banks and offsite
203 regional mitigation. Mitigation banks and offsite regional
204 mitigation can enhance the certainty of mitigation and provide
205 ecological value due to the improved likelihood of environmental
206 success associated with their proper construction, maintenance,
207 and management. Therefore, the department and the water
208 management districts are directed to ~~participate in and~~
209 encourage the establishment of private ~~and public~~ mitigation
210 banks and offsite regional mitigation on private and public
211 lands owned by a local government. Mitigation banks and offsite
212 regional mitigation should emphasize the restoration and
213 enhancement of degraded ecosystems and the preservation of
214 uplands and wetlands as intact ecosystems rather than alteration
215 of landscapes to create wetlands. This is best accomplished
216 through restoration of ecological communities that were
217 historically present.

218 (a) The Legislature intends that the provisions for
219 establishing mitigation banks apply equally to both public and
220 private entities, except that the rules of the department and
221 water management districts may set forth different measures
222 governing financial responsibility, and different measures
223 governing legal interest, needed to ensure the construction and
224 perpetual protection of a mitigation bank.

225 (b) The Legislature recognizes the importance of

226 mitigation banks as an appropriate and allowable mitigation
227 alternative to permittee-responsible mitigation. However, the
228 Legislature also recognizes that certain timing and geographical
229 constraints could result in the unavailability of mitigation
230 bank credits for a certain project upon completion of the
231 project's application. If state and federal mitigation credits
232 are not available to offset the adverse impacts of a project, a
233 local government may allow permittee-responsible mitigation
234 consisting of the restoration or enhancement of lands purchased
235 and owned by a local government for conservation purposes, and
236 such mitigation must conform to the permitting requirements of
237 s. 373.4136. Except when a local government has allowed a public
238 or private mitigation project, including permittee-responsible
239 mitigation, to be created on land it has purchased for
240 conservation purposes pursuant to this paragraph, a governmental
241 entity may not create or provide mitigation for a project other
242 than its own unless the governmental entity uses land that was
243 not previously purchased for conservation and unless the
244 governmental entity provides the same financial assurances as
245 required for mitigation banks permitted under s. 373.4136. This
246 paragraph does not apply to:

- 247 1. Mitigation banks permitted before December 31, 2011,
248 under s. 373.4136;
- 249 2. Offsite regional mitigation areas established before
250 December 31, 2011, under subsection (6) or, when credits are not

251 available at a mitigation bank permitted under s. 373.4136,
 252 mitigation areas created by a local government which were
 253 awarded mitigation credits pursuant to the uniform mitigation
 254 assessment method as provided in chapter 62-345, Florida
 255 Administrative Code, under a permit issued before December 31,
 256 2011;

257 3. Mitigation for transportation projects under ss.
 258 373.4137 and 373.4139;

259 4. Mitigation for impacts from mining activities under s.
 260 373.41492;

261 5. Mitigation provided for single-family lots or
 262 homeowners under subsection (7);

263 6. Entities authorized in chapter 98-492, Laws of Florida;

264 7. Mitigation provided for electric utility impacts
 265 certified under part II of chapter 403; or

266 8. Mitigation provided on sovereign submerged lands under
 267 subsection (6).

268 (c) It is the further intent of the Legislature that
 269 mitigation banks and offsite regional mitigation be considered
 270 appropriate and a permissible mitigation option under the
 271 conditions specified by the rules of the department and water
 272 management districts.

273 (d) Offsite mitigation, including offsite regional
 274 mitigation, may be located outside the regional watershed in
 275 which the adverse impacts of an activity regulated under this

276 part are located, if such adverse impacts are offset by the
277 offsite mitigation.

278 (e) The department or water management district may allow
279 the use of a mitigation bank or offsite regional mitigation
280 alone or in combination with other forms of mitigation to offset
281 adverse impacts of activities regulated under this part.

282 (f) When an applicant seeking ~~for~~ a permit under ~~the~~
283 ~~provisions of~~ this part other than this section and s. 373.4136
284 submits more than one mitigation proposal to the department or a
285 water management district, the department or water management
286 district shall, in evaluating each proposal, ensure that such
287 proposal adequately offsets the adverse impacts.

288 (8) A local government may, through a public procurement
289 process, solicit proposals from private-sector sponsors for a
290 mitigation bank on public lands purchased for conservation
291 purposes. If such a mitigation bank is to be established and
292 operated on public land, the local government and private-sector
293 sponsor must enter into an agreement requiring the private-
294 sector sponsor to establish and operate the mitigation bank to
295 conform to the permitting requirements of s. 373.4136.

296 (a) The agreement must require the private-sector sponsor
297 to pay a usage fee to the local government which reflects the
298 market value of the public land, as determined by a competitive
299 process in accordance with state law or such other method of
300 assuring that the cost of the use of the public land is fully

301 accounted for in the pricing of mitigation credits.

302 (b) In determining the number of mitigation bank credits
303 assigned to the mitigation bank, the department or water
304 management district shall reflect the conservation status of the
305 land in the location factor set forth in the uniform mitigation
306 assessment method.

307 (c) This subsection applies to drainage basins or
308 corresponding hydrologic units if the private-sector sponsor
309 demonstrates to the department or water management district that
310 in-kind credits are not available.

311 (d) Rulemaking is not required to implement this
312 subsection.

313 Section 4. Paragraph (a) of subsection (2) of section
314 330.41, Florida Statutes, is amended to read:

315 330.41 Unmanned Aircraft Systems Act.—

316 (2) DEFINITIONS.—As used in this act, the term:

317 (a) "Critical infrastructure facility" means any of the
318 following, if completely enclosed by a fence or other physical
319 barrier that is obviously designed to exclude intruders, or if
320 clearly marked with a sign or signs which indicate that entry is
321 forbidden and which are posted on the property in a manner
322 reasonably likely to come to the attention of intruders:

- 323 1. A power generation or transmission facility,
324 substation, switching station, or electrical control center.
325 2. A chemical or rubber manufacturing or storage facility.

- 326 3. A water intake structure, water treatment facility,
 327 wastewater treatment plant, or pump station.
- 328 4. A mining facility.
- 329 5. A natural gas or compressed gas compressor station,
 330 storage facility, or natural gas or compressed gas pipeline.
- 331 6. A liquid natural gas or propane gas terminal or storage
 332 facility.
- 333 7. Any portion of an aboveground oil or gas pipeline.
- 334 8. A refinery.
- 335 9. A gas processing plant, including a plant used in the
 336 processing, treatment, or fractionation of natural gas.
- 337 10. A wireless communications facility, including the
 338 tower, antennae, support structures, and all associated ground-
 339 based equipment.
- 340 11. A seaport as listed in s. 311.09(1), which need not be
 341 completely enclosed by a fence or other physical barrier and
 342 need not be marked with a sign or signs indicating that entry is
 343 forbidden.
- 344 12. An inland port or other facility or group of
 345 facilities serving as a point of intermodal transfer of freight
 346 in a specific area physically separated from a seaport.
- 347 13. An airport as defined in s. 330.27.
- 348 14. A spaceport territory as defined in s. 331.303(18).
- 349 15. A military installation as defined in 10 U.S.C. s.
 350 2801(c)(4) and an armory as defined in s. 250.01.

351 16. A dam as defined in s. 373.403 ~~s. 373.403(1)~~ or other
 352 structures, such as locks, floodgates, or dikes, which are
 353 designed to maintain or control the level of navigable
 354 waterways.

355 17. A state correctional institution as defined in s.
 356 944.02 or a private correctional facility authorized under
 357 chapter 957.

358 18. A secure detention center or facility as defined in s.
 359 985.03, or a nonsecure residential facility, a high-risk
 360 residential facility, or a maximum-risk residential facility as
 361 those terms are described in s. 985.03(44).

362 19. A county detention facility as defined in s. 951.23.

363 20. A critical infrastructure facility as defined in s.
 364 692.201.

365 Section 5. Paragraph (a) of subsection (8) of section
 366 373.414, Florida Statutes, is amended to read:

367 373.414 Additional criteria for activities in surface
 368 waters and wetlands.—

369 (8)(a) The governing board or the department, in deciding
 370 whether to grant or deny a permit for an activity regulated
 371 under this part shall consider the cumulative impacts upon
 372 surface water and wetlands, as delineated in s. 373.421(1),
 373 within the same drainage basin as defined in s. 373.403 ~~s.~~
 374 ~~373.403(9)~~, of:

375 1. The activity for which the permit is sought.

376 2. Projects which are existing or activities regulated
 377 under this part which are under construction or projects for
 378 which permits or determinations pursuant to s. 373.421 ~~or s.~~
 379 ~~403.914~~ have been sought.

380 3. Activities which are under review, approved, or vested
 381 pursuant to s. 380.06, or other activities regulated under this
 382 part which may reasonably be expected to be located within
 383 surface waters or wetlands, as delineated in s. 373.421(1), in
 384 the same drainage basin as defined in s. 373.403 ~~s. 373.403(9)~~,
 385 based upon the comprehensive plans, adopted pursuant to chapter
 386 163, of the local governments having jurisdiction over the
 387 activities, or applicable land use restrictions and regulations.

388 Section 6. Paragraph (c) of subsection (2) of section
 389 373.461, Florida Statutes, is amended to read:

390 373.461 Lake Apopka improvement and management.—

391 (2) DEFINITIONS.—As used in this section:

392 (c) "Stormwater management system" has the meaning set
 393 forth in s. 373.403 ~~s. 373.403(10)~~.

394 Section 7. For the purpose of incorporating the amendment
 395 made by this act to section 373.4135, Florida Statutes, in
 396 references thereto, paragraphs (a) and (c) of subsection (1) of
 397 section 403.9332, Florida Statutes, are reenacted to read:

398 403.9332 Mitigation and enforcement.—

399 (1)(a) Any area in which 5 percent or more of the trimmed
 400 mangrove trees have been trimmed below 6 feet in height, except

401 as provided in s. 403.9326(1)(c), (d), (f), (g), and (h),
402 destroyed, defoliated, or removed as a result of trimming
403 conducted under s. 403.9326 or s. 403.9327 must be restored or
404 mitigated. Restoration must be accomplished by replanting
405 mangroves, in the same location and of the same species as each
406 mangrove destroyed, defoliated, removed, or trimmed, to achieve
407 within 5 years a canopy area equivalent to the area destroyed,
408 removed, defoliated, or trimmed; or mitigation must be
409 accomplished by replanting offsite, in areas suitable for
410 mangrove growth, mangroves to achieve within 5 years a canopy
411 area equivalent to the area destroyed, removed, defoliated, or
412 trimmed. Where all or a portion of the restoration or mitigation
413 is not practicable, as determined by the department or delegated
414 local government, the impacts resulting from the destruction,
415 defoliation, removal, or trimming of the mangroves must be
416 offset by donating a sufficient amount of money to offset the
417 impacts, which must be used for the restoration, enhancement,
418 creation, or preservation of mangrove wetlands within a
419 restoration, enhancement, creation, or preservation project
420 approved by the department or delegated local government; or by
421 purchasing credits from a mitigation bank created under s.
422 373.4135 at a mitigation ratio of 2-to-1 credits to affected
423 area. The donation must be equivalent to the cost, as verified
424 by the department or delegated local government, of creating
425 mangrove wetlands at a 2-to-1, created versus affected ratio,

426 based on canopy area. The donation may not be less than \$4 per
427 square foot of created wetland area.

428 (c) If mangroves are to be trimmed or altered under a
429 permit issued under s. 403.9328, the department or delegated
430 local government may require mitigation. The department or
431 delegated local government shall establish reasonable mitigation
432 requirements that must include, as an option, the use of
433 mitigation banks created under s. 373.4135, where appropriate.
434 The department's mitigation requirements must ensure that
435 payments received as mitigation are sufficient to offset impacts
436 and are used for mangrove creation, preservation, protection, or
437 enhancement.

438 Section 8. This act shall take effect July 1, 2024.

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 1565 Florida Red Tide Mitigation and Technology Development Initiative
SPONSOR(S): Grant
TIED BILLS: **IDEN./SIM. BILLS:** SB 1360

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Water Quality, Supply & Treatment Subcommittee	15 Y, 0 N	Curtin	Curtin
2) Agriculture & Natural Resources Appropriations Subcommittee		Byrd	Pigott
3) Infrastructure Strategies Committee			

SUMMARY ANALYSIS

The proliferation of a toxic or nuisance algae, known as a harmful algal bloom (HAB), produces toxic or harmful effects on humans, fish, shellfish, marine mammals, and birds. One of the most commonly known HABs are red tides, which have been documented in the Gulf of Mexico since the 1700s. *Karenia brevis*, the organism that causes red tides, can result in the deaths of marine mammals, sea turtles, and sea birds and, for humans, neurotoxic shellfish poisoning and respiratory impacts, particularly for those with asthma and other chronic respiratory conditions.

The Florida Red Tide Mitigation and Technology Development Initiative (Initiative) was established by the Legislature in 2019 to coordinate efforts amongst public and private entities to develop technologies to address the serious negative impacts of red tide on Florida. The Initiative is a partnership between the Fish and Wildlife Research Institute and Mote Marine Laboratory, and is set to expire on June 30, 2025.

The bill requires the Initiative to, upon successful completion of science-based laboratory testing of prevention, control, and mitigation approaches and technologies, develop field trial deployment technologies for those approaches and technologies, and further requires the Initiative to, when it develops a field trial deployment technology, submit a report with its findings to the Department of Environmental Protection (DEP).

The bill requires DEP to, within 30 business days after receipt of the report submitted by the Initiative, review the technology and approve, approve with conditions, or deny with explanation the use of the technology in state waters exhibiting red tide bloom concentrations of greater than 10,000 cells per liter.

The bill provides that if DEP fails to approve, approve with conditions, or deny with explanation a field trial deployment technology within 30 business days after receipt of the report, the technology shall be deemed approved for use in state waters exhibiting red tide bloom concentrations of greater than 10,000 cells per liter.

The bill extends the expiration date for the Initiative to June 30, 2027.

The bill appropriates \$2 million per year for Fiscal Years 2025-2026 and 2026-2027 from the General Revenue Fund to the Fish and Wildlife Conservation Commission for the purpose of implementing the Initiative.

The bill may have an indeterminate positive fiscal impact on local governments and the private sector.

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

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Background

Florida boasts 825 miles of stunning coastline fronting the Atlantic Ocean, the Gulf of Mexico, and the Straits of Florida.¹ Beaches and the nearby waters are an integral part of Florida's economy and environment.² Residents and tourists³ alike visit the waters adjacent to beaches to engage in boating, fishing, diving and other recreational activities.⁴ In addition, many Floridians depend on those waters for their livelihoods, and Florida's commercial and recreational fishing industries provide thousands of jobs and billions of dollars in economic benefits.⁵

Harmful Algal Blooms

Thousands of algae, simple photosynthetic organisms, live in marine and fresh waters.⁶ These species provide an important source of the oxygen we breathe and form the basis of the food web and while the majority of them are harmless to humans and animals, "a growing number of species are being found worldwide that produce toxins that can make humans sick and cause widespread ecological and economic harm."⁷ The proliferation of a toxic or nuisance algae, known as a harmful algal bloom (HAB),⁸ produces toxic or harmful effects on humans, fish, shellfish, marine mammals, and birds⁹ and, consequently, the economy.

Red Tides

One of the most commonly known HABs are red tides, which have been documented in the southern Gulf of Mexico since the 1700s¹⁰ and along Florida's Gulf coast since the 1840s,¹¹ and even Spanish explorers recorded fish kills near Tampa Bay.¹² Red tides occur nearly every year in the Gulf of Mexico,¹³ generally in late summer or early fall.¹⁴ Red tides develop offshore, are brought inshore by winds and currents, and they may turn water color red to brown.¹⁵ *Karenia brevis* (*K. brevis*), the organism that causes red tides, "can result in:

- massive fish kills;
- the deaths of marine mammals, sea turtles, and sea birds; and

¹ Department of Environmental Protection (DEP), *Beaches*, <https://floridadep.gov/rcp/beaches> (last visited Jan. 20, 2024).

² *Id.*

³ Office of Economic & Demographic Research (EDR), *Economic Evaluation of Florida's Investment in Beaches*, p.9 (Jan. 2015, revised), <http://edr.state.fl.us/Content/returnoninvestment/BeachReport.pdf> (last visited Jan. 20, 2024). The most important feature of Florida's brand are its beaches and, while the state has numerous appealing features, in terms of attracting tourists beaches have the strongest effect. "It may be noted that, while beaches are the most attractive feature to visitors, they generally do not directly generate revenue. Instead, they facilitate an array of expenditures that collectively comprise the cost of the tourism experience."

⁴ *Id.*

⁵ National Oceanic and Atmospheric Administration (NOAA), *Fisheries Economics of the United States 2020*, p. 10 (Feb. 2023), <https://media.fisheries.noaa.gov/2023-09/FEUS-2020-final2-web-0.pdf> (last visited Jan. 21, 2024).

⁶ NOAA, *Harmful Algal Blooms - Tiny Organisms with a Toxic Punch*, <https://oceanservice.noaa.gov/hazards/hab/> (last visited Jan. 21, 2024).

⁷ Mote Marine Laboratory (Mote), *Florida Red Tide*, <https://mote.org/pages/florida-red-tide1> (last visited Jan. 21, 2024).

⁸ Fish and Wildlife Conservation Commission (FWC), *HAB General Information*, <https://myfwc.com/research/redtide/general/> (last visited Jan. 21, 2024).

⁹ NOAA, *supra* note 6.

¹⁰ FWC, *Red Tide FAQ*, <https://myfwc.com/research/redtide/faq/> (last visited Jan. 22, 2024).

¹¹ Department of Health, *Red Tide* (last updated Feb. 24, 2023), <https://sarasota.floridahealth.gov/programs-and-services/our-gulf-env/water-quality/red-tide/index.html> (last visited Jan. 21, 2024).

¹² FWC, *supra* note 10.

¹³ NOAA, *What is a red tide?*, <https://oceanservice.noaa.gov/facts/redtide.html> (last visited Jan. 21, 2024).

¹⁴ FWC, *About Red Tides in Florida*, <https://myfwc.com/research/redtide/general/about/> (last visited Jan. 21, 2024).

¹⁵ FWC, *Karenia brevis Fact Sheet*, <https://myfwc.com/media/12422/karenia-brevis-factsheet.pdf> (last visited Jan. 22, 2024).

- for humans — neurotoxic shellfish poisoning and respiratory impacts, especially for those with asthma and other chronic respiratory conditions.”¹⁶

The “2018 Bloom”

The red tide bloom that began in October of 2017 and lasted until January of 2019 is also referred to as the 2018 bloom.¹⁷ In 2018, then-Governor Scott issued executive orders declaring a state of emergency in 14 counties associated with red tide blooms¹⁸ and designated the Department of Environmental Protection (DEP) the lead agency responsible for crisis management activities related to the emergency.¹⁹

The negative effects from the 2018 bloom were numerous. It took several years for fish stocks to rebound from Anna Maria Island near Tampa Bay south to Ten Thousand Islands,²⁰ and it has been estimated that there were approximately \$184 million in losses in the tourism sector and the consequent contraction in the Airbnb market corresponded to the loss of nearly 2,900 jobs throughout Florida.²¹

A recently released study commissioned by the Conservancy of Southwest Florida, Sanibel-Captiva Conservation Foundation, and Captains for Clean Water analyzed the impacts of poor water quality on Southwest Florida.²² “The study found if what happened surrounding 2018 happens again in 2024 or 2025 it would result in the loss of \$460 million in commercial and recreational fishing, more than 43,000 jobs, \$5.2 billion in local economic output, \$17.8 billion in property values, and the related loss of \$60 million in property tax revenue.”²³

The Florida Red Tide Mitigation and Technology Development Initiative

The Florida Red Tide Mitigation and Technology Development Initiative (Initiative) was established by the Legislature in 2019²⁴ to coordinate efforts amongst public and private entities to develop technologies to address the serious negative impacts of red tide on Florida.²⁵ The Initiative is a partnership between the Fish and Wildlife Research Institute (FWRI) and Mote Marine Laboratory (Mote).²⁶

“The goal of the [I]nitiative is to develop, test, and implement innovative, effective, and environmentally sustainable technologies and approaches for controlling and mitigating the impacts of red tide.”²⁷ The Initiative is required to submit an annual report to the Governor, the President of the Senate, the Speaker of the House of Representatives, the Secretary of DEP, and the executive director of the Fish and Wildlife Conservation Commission (FWC) that provides a synopsis of its accomplishments to date and priorities for coming years.²⁸

The Initiative expires on June 30, 2025.

¹⁶ Mote, *supra* note 7.

¹⁷ Nadine Slimak, *Quantifying the Economic Costs of Red Tide*, Gulf of Mexico Coastal Ocean Observing System (Mar. 17, 2022), <https://gcoos.org/red-tide-costs/> (last visited Jan. 21, 2024). Also occurring in 2018, Lake Okeechobee and the Caloosahatchee River were inundated with blue-green algae.

¹⁸ Fla. Exec. Order Nos. 18-221 (Aug. 13, 2018), 18-275 (Oct. 4, 2018), and 18-282 (Oct. 17, 2018).

¹⁹ Fla. Exec. Order No. 18-221 (Aug. 13, 2018).

²⁰ Tom Bayles, *SWFL environmental groups say economic damage from next major algae bloom will total billions*, WGPU (Jan. 17, 2024), <https://news.wgcu.org/section/environment/2024-01-17/swfl-environmental-groups-say-economic-damage-from-next-major-algae-bloom-will-total-billions> (last visited Jan. 21, 2024).

²¹ Slimak, *supra* note 17.

²² Bayles, *supra* note 20.

²³ *Id.*

²⁴ Ch. 2019-114, Laws of Fla.

²⁵ S. 379.2273(1), F.S.

²⁶ S. 379.2273(2), F.S.

²⁷ S. 379.2273(2)(b), F.S.

²⁸ S. 379.2273(2)(d), F.S.

FWC and the FWRI

The FWRI is the research division within FWC.²⁹ FWC is empowered to exercise a number of the regulatory and executive powers of the state, including those powers related to marine life.³⁰ “FWRI . . . employs more than 600 people who work at its St. Petersburg headquarters and more than 20 field laboratories and offices situated at key inland and coastal locations statewide.”³¹ The FWRI provides research and technical knowledge to a wide array of entities including governments, universities, commercial and recreational fishing interests, and nongovernmental organizations.³² The FWRI employs a number of strategies to advance its mission, including identifying, monitoring, and providing technical support related to red tides and other HABs.³³ FWC is authorized to provide grants and contracts to Mote to conduct research.³⁴

Mote

Mote is a non-profit, independent research institution³⁵ which is funded by foundations, individual donors, and federal, state and local grants.³⁶ For nearly 70 years Mote has conducted cutting-edge marine research³⁷ and it has decades of experience with red tide science.³⁸ What began as a one-room building on Florida’s west coast³⁹ is today a global leader in marine research, with nearly 300 staff members,⁴⁰ and scientists who conduct research on all 7 continents.⁴¹

In 2018, Mote established the Red Tide Institute with a mission to “reduc[e] adverse impacts of Florida red tide on public health, coastal marine ecosystems and Florida’s economy via the rigorous testing and application of a ‘tool box’ of science-based mitigation and control technologies and strategies.” To further its research of red tide, Mote created “a cutting-edge red tide mitigation testing facility . . . [that] uses over 150,000 gallons of treated and recirculated seawater” for research, “along with ample lab space for water quality, marine species, and toxin testing.”⁴² Funding of the Initiative has allowed Mote to continue to expand vital testing of products to find those that kill the algae and minimize the impact of the *K. brevis* toxin.⁴³

Mote operates under the principle that mitigation or control strategies must do no further harm than that already inflicted by red tide.⁴⁴ Many funded projects are ready for field testing.⁴⁵

²⁹ FWC, *About FWRI*, <https://myfwc.com/research/about/> (last visited Jan. 22, 2024).

³⁰ Art. IV s. 9, Fla. Const.; ss. 379.1025 and 20.331, F.S.

³¹ FWC, *History of the Institute*, <https://myfwc.com/research/about/history/> (last visited Jan. 22, 2024)

³² FWC, *Fish and Wildlife Research Institute (FWRI)*, <https://myfwc.com/about/inside-fwc/fwri/> (last visited Jan. 21, 2024).

³³ *Id.*

³⁴ S. 379.2202, F.S.

³⁵ Mote, *About Us*, <https://mote.org/about-us> (last visited Jan. 21, 2024).

³⁶ Mote, *Mote Marine Laboratory & Aquarium*, <https://mote.org/locations/details/mote-marine-laboratory-aquarium> (last visited Jan. 22, 2024).

³⁷ Mote, *Mission and Vision*, <https://mote.org/about-us/mission-vision> (last visited Jan. 21, 2024).

³⁸ Mote, *Florida Red Tide Mitigation & Technology Development Initiative*, <https://mote.org/research/program/florida-red-tide-mitigation-and-technology-development-initiative#:~:text=The%20Florida%20Red%20Tide%20Mitigation%20%26%20Technology%20Development,environment%2C%20economy%20and%20quality%20of%20life%20in%20Florida> (last visited Jan. 21, 2024).

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ Mote, *History*, <https://mote.org/about-us/history> (last visited Jan. 21, 2024).

⁴² Florida Red Tide Mitigation and Technology Development Initiative (Initiative), *Accomplishments and Priorities Report*, p. 2 (Jan. 2023), https://mote.org/media/uploads/files/RedTideInitiative_AccomplishmentsPrioritiesReport2022_ffw.pdf (last visited Jan. 22, 2024).

⁴³ *Id.*, at p. 5.

⁴⁴ Mote, *Red Tide Institute*, <https://mote.org/research/program/red-tide-institute> (last visited Jan. 22, 2024).

⁴⁵ Initiative, *supra* note 42, at p. 5.

Effect of the Bill

The bill requires the Initiative to:

- Upon successful completion of science-based laboratory testing of prevention, control, and mitigation approaches and technologies, develop field trial deployment technologies for those approaches and technologies.
- When it develops a field trial deployment technology for the approaches and technologies, submit a report with its findings to DEP.

The bill requires DEP to, within 30 business days after receipt of the report submitted by the Initiative, review the technology and approve, approve with conditions, or deny with explanation the use of the technology in state waters exhibiting red tide bloom concentrations of greater than 10,000 cells per liter.

The bill provides that if DEP fails to approve, approve with conditions, or deny with explanation a field trial deployment technology within 30 business days after receipt of the report, the technology shall be deemed approved for use in state waters exhibiting red tide bloom concentrations of greater than 10,000 cells per liter.

The bill extends the Initiative for an additional two years, from June 30, 2025 until June 30, 2027.

The bill appropriates \$2 million per year for Fiscal Years 2025-2026 and 2026-2027 from the General Revenue Fund to the Fish and Wildlife Conservation Commission for the purpose of implementing the Initiative.

B. SECTION DIRECTORY:

- Section 1. Redesignates, creates, and amends provisions in s. 379.2273, F.S., relating to the Florida Red Tide Mitigation and Technology Development Initiative; Initiative Technology Advisory Council.
- Section 2. Appropriates funds from the General Revenue Fund for 2025-2026 and 2026-2027 fiscal years.
- Section 3. Provides an effective date of July 1, 2024.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

The bill appropriates \$2 million per year for Fiscal Years 2025-2026 and 2026-2027 from the General Revenue Fund to the Fish and Wildlife Conservation Commission for the purpose of implementing the Initiative.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

Red tide negatively impacts Florida's economy by decreasing property values and tax revenues collected by local governments. If the Initiative creates technologies or approaches that prevent or mitigate red tide and its impacts, it may reduce the negative impacts to tax revenues collected by local governments. Therefore, this bill may have an indeterminate positive fiscal impact on local governments.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

Red tide negatively impacts Florida's economy by harming industries such as commercial fisheries, recreation, and tourism. If the Initiative creates technologies or approaches that prevent or mitigate red tide and its impacts, it may reduce the negative impacts to such industries. Therefore, this bill may have an indeterminate positive fiscal impact on the private sector.

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable. This bill does not appear to require counties or municipalities to spend funds or take action requiring the expenditure of funds; reduce the authority that counties or municipalities have to raise revenues in the aggregate; or reduce the percentage of state tax shared with counties or municipalities.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

None.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE CHANGES

Not applicable.

1 A bill to be entitled
2 An act relating to the Florida Red Tide Mitigation and
3 Technology Development Initiative; amending s.
4 379.2273, F.S.; requiring the initiative to develop
5 certain deployment technologies and submit a report on
6 the technologies to the Department of Environmental
7 Protection; requiring the department to make certain
8 determinations regarding the technologies within a
9 specified time period; providing that the technologies
10 are deemed approved for use in specified state waters
11 under certain circumstances; extending the expiration
12 date of the initiative; providing appropriations;
13 providing an effective date.

14

15 Be It Enacted by the Legislature of the State of Florida:

16

17 Section 1. Paragraphs (c) and (d) of subsection (2) of
18 section 379.2273, Florida Statutes, are redesignated as
19 paragraphs (d) and (e), respectively, and a new paragraph (c) is
20 added to that subsection, and subsection (4) of that section is
21 amended, to read:

22 379.2273 Florida Red Tide Mitigation and Technology
23 Development Initiative; Initiative Technology Advisory Council.—

24 (2) The Florida Red Tide Mitigation and Technology
25 Development Initiative is established as a partnership between

26 | the Fish and Wildlife Research Institute within the commission
27 | and Mote Marine Laboratory.

28 | (c) Upon successful completion of science-based laboratory
29 | testing of prevention, control, and mitigation approaches and
30 | technologies, the initiative shall develop field trial
31 | deployment technologies for the approaches and technologies.
32 | When the initiative develops a field trial deployment
33 | technology, the initiative shall submit a report with its
34 | findings to the department. Within 30 business days after
35 | receipt of the report, the department shall review the
36 | technology and approve, approve with conditions, or deny with
37 | explanation the use of the technology in state waters exhibiting
38 | red tide bloom concentrations of greater than 10,000 cells per
39 | liter. If the department fails to approve, approve with
40 | conditions, or deny with explanation a field trial deployment
41 | technology within 30 business days after receipt of the report,
42 | the technology shall be deemed approved for use in state waters
43 | exhibiting red tide bloom concentrations of greater than 10,000
44 | cells per liter.

45 | (4) This section expires June 30, 2027 ~~2025~~.

46 | Section 2. For the 2025-2026 fiscal year and the 2026-2027
47 | fiscal year, the sum of \$2 million is appropriated from the
48 | General Revenue Fund to the Fish and Wildlife Conservation
49 | Commission for the purpose of implementing s. 329.2273, Florida
50 | Statutes.

HB 1565

2024

51 | Section 3. This act shall take effect July 1, 2024. |

Amendment No.1

COMMITTEE/SUBCOMMITTEE ACTION

ADOPTED	<u> </u>	(Y/N)
ADOPTED AS AMENDED	<u> </u>	(Y/N)
ADOPTED W/O OBJECTION	<u> </u>	(Y/N)
FAILED TO ADOPT	<u> </u>	(Y/N)
WITHDRAWN	<u> </u>	(Y/N)
OTHER	<u> </u>	

1 Committee/Subcommittee hearing bill: Agriculture & Natural
2 Resources Appropriations Subcommittee
3 Representative Grant offered the following:

Amendment (with title amendment)

Remove lines 45-50 and insert:

~~(4) This section expires June 30, 2025.~~

T I T L E A M E N D M E N T

Remove lines 11-13 and insert:

under certain circumstances; removing the expiration date of the
initiative; providing an effective date.

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 1581 Mangrove Replanting and Restoration

SPONSOR(S): Mooney and others

TIED BILLS: **IDEN./SIM. BILLS:** CS/SB 32

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Agriculture, Conservation & Resiliency Subcommittee	17 Y, 0 N	Mamontoff	Moore
2) Agriculture & Natural Resources Appropriations Subcommittee		Byrd	Pigott
3) Infrastructure Strategies Committee			

SUMMARY ANALYSIS

Mangrove forests are distinct saltwater woodlands that thrive in tidal estuaries and low-energy shorelines throughout the tropics and subtropics. They grow in coastal intertidal environments and are able to tolerate a wide range of water salinities, from nearly fresh to very high salt content in coastal waters.

Mangroves protect shorelines from damaging storm and hurricane winds, waves, and floods by functioning as wind breaks and reducing wave action. They also play a significant ecological role as habitats for an array of species. It is estimated that 80 percent of the global fish catch is in some way dependent on mangrove forests at some point in their life cycle. Additionally, the highest quality seagrass beds are associated with mangrove-fringed shorelines. The Department of Environmental Protection (DEP) administers and enforces the regulation of mangroves in the state.

The bill requires DEP to adopt rules for mangrove replanting and restoration.

The bill directs DEP to conduct a statewide feasibility study to determine the value of mangroves and other nature-based solutions for coastal flood risk reduction to reduce insurance premiums and improve local governments' community ratings in the National Flood Insurance Program Community Rating System.

The bill directs DEP to submit a report to the Governor, the President of the Senate, and the Speaker of the House of Representatives by July 1, 2025.

The bill may have an indeterminate negative fiscal impact on the state.

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

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Background

Mangroves

Mangrove forests are distinct saltwater woodlands that thrive in tidal estuaries and low-energy shorelines throughout the tropics and subtropics.¹ They grow in coastal intertidal environments and are able to tolerate a wide range of saline waters, from nearly fresh to very high salt content in coastal waters. In Florida, mangroves are typically found south of Cedar Key on the Gulf Coast and south of Cape Canaveral on the Atlantic Coast. Florida's mangrove forests primarily consist of four trees: red mangrove (*Rhizophora mangle*), black mangrove (*Avicennia germinans*), white mangrove (*Laguncularia racemose*), and buttonwood (*Conocarpus erectus*).²

Mangroves play a significant ecological role as habitats for an array of species, some of which are endangered and threatened species, and species of special concern.³ Mangroves serve as nursery grounds for a variety of marine and estuarine vertebrates and invertebrates. It is estimated that 80 percent of the global fish catch is in some way dependent on mangrove forests at some point in their life cycle.⁴ Almost all fish and shellfish caught by commercial and recreational anglers spend some part of their life cycles in or near mangroves.⁵ Additionally, the highest quality seagrass beds are associated with mangrove-fringed shorelines.⁶ Animals associated with the mangrove and seagrass communities include herbivores, such as green turtles, manatees, sea urchins, blue crabs, fiddler crabs, and a variety of fishes.⁷

Mangroves protect shorelines from damaging storm and hurricane winds, waves, and floods by functioning as wind breaks and reducing wave action.⁸ Mangroves' tangled root systems help prevent erosion by stabilizing sediments and fine substrates and reducing turbidity.⁹ Through a combination of these functions, mangroves contribute significantly to the economy of coastal counties of the state.

Mangrove Loss

Mangroves can be damaged and destroyed by natural events; however, development within estuarine habitats has had the most severe negative impacts on mangrove forests.¹⁰ The pressure to destroy remaining mangrove habitat is increasing due to the continued urban development along Florida's

¹ Fish and Wildlife Conservation Commission (FWC), *Mangrove Forests*, <https://myfwc.com/research/habitat/coastal-wetlands/mangroves/> (last visited Jan. 22, 2024).

² *Id.* Buttonwood trees are not "true" mangrove species because it lacks the distinctive reproduction and root characteristics of red, black, and white mangroves. However, they are frequently found growing in uplands with mangroves and are part of the ecosystem.

³ Florida Museum, *Importance of Mangroves*, <https://www.floridamuseum.ufl.edu/southflorida/habitats/mangroves/importance-mangroves/> (last visited Jan. 22, 2024).

⁴ United States Fish and Wildlife Service (FWS), *Mangroves on the Move: Wetland Habitats Responding to Changes in Climate*, available at <https://storymaps.arcgis.com/stories/ee2242de7aba4c27a62d21e6ec480f83> (last visited Feb. 24, 2024).

⁵ National Oceanic and Atmospheric Administration (NOAA), *Mangroves and seagrass provide habitat for important commercial and recreational species, help stabilize the seafloor, and filter pollutants*, <https://floridakeys.noaa.gov/plants/msbenefits.html> (last visited Jan. 22, 2024).

⁶ *Id.*

⁷ Florida Museum, *Importance of Mangroves*, <https://www.floridamuseum.ufl.edu/southflorida/habitats/mangroves/importance-mangroves/> (last visited Jan. 22, 2024).

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

coastline.¹¹ Scientists have evaluated mangrove loss through aerial photos dating back to the 1940s and 1950s and satellite imagery and aerial photography from the 1980s.¹² Since the 1900s, it is estimated that vital estuary habitats such as Tampa Bay and Charlotte Harbor have lost 50 to 60 percent of their mangrove forests.¹³

However, in other areas, mangroves are expanding into new territory. Continued evaluation of aerial images between 1984 and 2011 have shown that the Florida Atlantic Coast gained more than 3,000 acres of mangroves.¹⁴ Increases occurred north of Palm Beach County, and the acreage between Cape Canaveral and St. Augustine appears to have doubled.¹⁵

Mangrove Protection Rule

Passed in 1996, the Mangrove Trimming and Preservation Act (Act) was enacted to regulate the alteration of mangroves in the state.¹⁶ The Act authorizes the Department of Environmental Protection (DEP) to administer and enforce the regulation of mangroves.¹⁷ Under the Act, mangroves cannot be removed, trimmed, or disturbed without a permit from DEP. The act also bans the use of herbicides and other chemicals that could be used to defoliate mangroves.¹⁸

Under the Act, a permit is generally required to alter or trim mangroves.¹⁹ However, a permit to trim mangroves is not required if homeowners who are located in a riparian mangrove fringe (RMF) follow DEP's trimming guidelines.²⁰ Homeowners may trim mangroves if the mangrove height exceeds six feet but is not taller than 10 feet.²¹ If mangroves are over 24 feet tall, DEP authorization is required. Homeowners may also trim mangroves that were previously legally trimmed so long as they maintain the previous height and configuration.²² If a property's shoreline is greater than 150 feet in length, only 65 percent of the mangrove trees may be trimmed.²³

¹¹ Florida Museum, *Conservation*, <https://www.floridamuseum.ufl.edu/southflorida/habitats/mangroves/conservation/> (last visited Jan. 24, 2024).

¹² FWC, *Mangrove Forests*, <https://myfwc.com/research/habitat/coastal-wetlands/information/mangroves/> (last visited Jan. 22, 2024).

¹³ Florida Museum, *Tell Me About: Threats to Mangroves in Florida*, <https://www.floridamuseum.ufl.edu/earth-systems/blog/tell-me-about-threats-to-mangroves-in-florida> (last visited Jan. 24, 2024).

¹⁴ DEP, *Florida's Mangroves*, <https://floridadep.gov/rcp/rcp/content/floridas-mangroves> (last visited Jan. 24, 2024).

¹⁵ Research is ongoing to determine the impacts, both positive and negative, of this transition. *Id.*

¹⁶ Section 403.9324, F.S.; Florida Museum, *Conservation*, <https://www.floridamuseum.ufl.edu/southflorida/habitats/mangroves/conservation/> (last visited Jan. 24, 2024).

¹⁷ Section 403.9324(1), F.S.

¹⁸ *Id.*

¹⁹ Section 403.9328(1), F.S.

²⁰ RMFs are areas where mangroves extend less than 50 feet deep. RMFs do not include mangroves on uninhabited land that has been set aside for conservation or preservation, or mangroves on lands that have been set aside as mitigation. DEP, *Mangrove Frequently Asked Questions*, <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/mangrove-frequently-asked> (last visited Jan. 22, 2024); DEP, *Trimming Mangroves*, <https://floridadep.gov/sites/default/files/mangrove-trimming-2-08-16.pdf> (last visited Jan. 24, 2024); Sections 403.9324(7) and 403.9325(7), F.S.

²¹ Mangroves cannot be trimmed to be below six feet, and mangroves over ten feet will require a professional mangrove trimmer. There are no limitations on the amount or degree of trimming to be performed by a professional trimmer, other than the requirement of mitigation if the trimming results in the destruction of more than five percent of mangroves in the area. DEP, *Trimming Mangroves*, <https://floridadep.gov/sites/default/files/mangrove-trimming-2-08-16.pdf> (last visited Jan. 24, 2024); Section 403.9326(1)(a), F.S.

²² *Id.*

²³ Section 403.9326(1), F.S.

The Act also authorizes DEP to delegate the authority to regulate mangrove trimming and alteration to a local government upon request.²⁴ DEP has currently delegated this authority to the following local governments:

- Miami-Dade County
- Broward County
- Hillsborough County
- Pinellas County
- Town of Jupiter Island
- City of Sanibel
- Sarasota County²⁵

DEP may review, biannually, the performance of local programs and may revoke their delegated authority if it is determined that the program has failed to be properly administered and enforced.²⁶

Living Shorelines

Living shorelines are a nature-based approach to coastal protection, using natural elements such as ecosystems, vegetation, stone, or organic materials to increase coastal resilience and adapt to sea level rise (SLR).²⁷ When protecting coastlines, a living shoreline approach represents an alternative to traditional hard armoring approaches such as seawalls and bulkheads.²⁸ When constructed correctly, a living shoreline provides erosion control and maintains coastal processes such as reducing wave energy and storm impacts, improving water quality, and providing critical fish and wildlife habitat.²⁹

Resilient Florida Program

Established within DEP in 2021, the Resilient Florida Program (Program) enhances efforts to protect Florida's inland waterways, coastlines, and shores, which serve as invaluable natural defenses against SLR.³⁰ The Program includes a selection of grants that are available to counties, municipalities, water management districts (WMDs), flood control districts, and regional resilience entities.³¹ To effectively address the impacts of flooding and SLR that the state faces, eligible applicants may receive funding assistance to analyze and plan for vulnerabilities as well as implement projects for adaptation and mitigation. The Program creates grant funding opportunities through the Resilient Florida Grant Program and the Statewide Flooding and Sea Level Rise Resilience Plan.³²

Under the Resilient Florida Grant Program, subject to appropriation, DEP may provide grants to a county or municipality to fund:

- Costs of community resilience planning and necessary data collection for such planning, including comprehensive plan amendments and necessary corresponding analyses that address Peril of Flood requirements;
- Vulnerability assessments that identify or address risks of inland or coastal flooding and SLR;
- The development of projects, plans, and policies that allow communities to prepare for threats from flooding and SLR;

²⁴ Section 403.9324(2) - (3), F.S.

²⁵ DEP, *Mangrove Trimming – Delegated Local Governments*, <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/mangrove-trimming-delegated-local> (last visited Jan. 24, 2024).

²⁶ Section 403.9324(5), F.S.

²⁷ Bilkovic et. al., *Living Shorelines: The Science and Management of Nature-Based Coastal Protection*, Taylor & Francis Group, 11- 25 (2017); Florida Living Shorelines, Home, available at <http://floridalivingshorelines.com/> (last visited Jan. 22, 2024).

²⁸ *Id.*

²⁹ *Id.*

³⁰ DEP, *Resilient Florida Program*, <https://floridadep.gov/ResilientFlorida> (last visited Jan. 21, 2024).

³¹ DEP, *Resilient Florida Grants*, <https://floridadep.gov/Resilient-Florida-Program/Grants> (last visited Jan. 20, 2024).

³² Sections 380.093(3) and 380.093(5), F.S.

- Preconstruction activities for projects to be submitted for inclusion in the Statewide Flooding and Sea Level Rise Resilience Plan that are located in a municipality that has a population of 10,000 or fewer or a county that has a population of 50,000 or fewer; and
- Feasibility studies and permitting costs for nature-based solutions that reduce the impact of flooding and SLR.³³

In addition, DEP may provide grants to WMDs to support local government adaptation planning, which may be conducted by the WMD or by a third party on behalf of the WMD. These grants must be used for the express purpose of supporting the Florida Flood Hub for Applied Research and Innovation (Flood Hub) and DEP through data creation and collection, modeling, and the implementation of statewide standards. Priority must be given to filling critical data gaps identified by the Flood Hub.³⁴

National Flood Insurance Program Community Rating System

The National Flood Insurance Program (NFIP) was created by the passage of the National Flood Insurance Act of 1968.³⁵ The NFIP is administered by the Federal Emergency Management Agency (FEMA). The program enables homeowners, business owners, and renters in participating communities to purchase federally backed flood insurance. This insurance offers an alternative option for disaster assistance to meet the escalating costs of repairing flood damage to buildings and their contents.³⁶ Participation in the NFIP is voluntary.³⁷ To join, a community must:

- Complete an application;
- Adopt a resolution of intent to participate and cooperate with FEMA; and
- Adopt and submit a floodplain management ordinance that meets or exceeds the minimum NFIP criteria.³⁸

The Community Rating System (CRS) within the NFIP is a voluntary incentive program that rewards communities for implementing floodplain management practices that exceed the minimum requirements of the NFIP.³⁹ Property owners within communities that participate in the CRS program receive discounts on flood insurance premiums.⁴⁰ Premium discounts range from five to 45 percent based on a community's CRS credit points.⁴¹ Communities earn credit points by implementing FEMA-approved activities or programs, such as:

- Flood damage reduction programs that reduce the flood risk to existing development;
- Public outreach programs advising people about flood hazards, flood insurance, and ways to reduce flood damage;
- Mapping and regulations limiting floodplain development or providing increased protection to new and existing development; or warning and response programs that provide early flood warnings to the public and incorporate substantial damage assessments into flood response operations.⁴²

Areas of Critical State Concern

In 1972, the Florida Environmental Land and Water Management Act was enacted, creating the Areas of Critical State Concern (ACSC) Program. The program is intended to protect resources and public

³³ Section 380.093(3), F.S.

³⁴ *Id.*

³⁵ 42 U.S.C. 4001 et seq.

³⁶ Benefits.gov, National Flood Insurance Program (NFIP), <https://www.benefits.gov/benefit/435> (last visited Jan. 22, 2024).

³⁷ FEMA, Participation in the NFIP, <https://www.fema.gov/glossary/participation-nfip> (last visited Jan. 22, 2024).

³⁸ *Id.*

³⁹ FEMA, Community Rating System, <https://www.fema.gov/floodplain-management/community-rating-system> (last visited Jan. 22, 2024).

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² FEMA, *Community Rating System: A Local Official's Guide to Saving Lives, Preventing Property Damage, and Reducing the Cost of Flood Insurance*, 3-6 (2023), available at https://www.fema.gov/sites/default/files/documents/fema_crs-brochure_032023.pdf.

facilities of major statewide significance, within designated geographic areas, from uncontrolled development that would cause substantial deterioration of such resources.⁴³ The ACSC designation denotes areas that contain natural resources of regional or statewide importance, areas that are or will be significantly affected by major public facilities, or areas of major development potential.⁴⁴

Areas currently designated as ACSCs include the Big Cypress Area,⁴⁵ the Green Swamp Area,⁴⁶ the Florida Keys Area,⁴⁷ the Brevard Barrier Island Area,⁴⁸ and the Apalachicola Bay Area.⁴⁹

Effect of the Bill

The bill requires DEP to adopt rules for mangrove replanting and restoration. The bill requires these rules to:

- Address significant erosion in areas of critical state concern;
- Protect barrier⁵⁰ and spoil islands;⁵¹
- Assist in Everglades restoration and Biscayne Bay revitalization efforts, including the development of living shoreline design options for the Biscayne Bay Aquatic Preserve⁵² which are ecologically acceptable;
- Promote public awareness of the value of mangroves statewide and support mangrove education campaigns conducted by local governmental entities;
- Identify vulnerable public and private properties along the coastline and encourage partnerships with local governmental entities to create local mangrove protection and restoration zone programs for implementing rules developed by DEP;
- Protect and maintain access to and navigation of the marked channel and the right-of-way of the Florida Intracoastal Waterway;⁵³
- Create permitting incentives and approve of and encourage the use of new strategies for living shorelines and nature-based features; and
- Encourage partnerships with local governmental entities to create projects for coastal protection through the Resilient Florida Grant Program.⁵⁴

The bill directs DEP to, in consultation with the Division of Insurance Agent and Agency Services, to conduct a statewide feasibility study to determine the value of mangroves and other nature-based solutions for coastal flood risk reduction within coastal communities to reduce insurance premiums and improve local governments' community ratings in the NFIP CRS.

The bill directs DEP to submit a report to the Governor, the President of the Senate, and the Speaker of the House of Representatives by July 1, 2025.

⁴³ Florida Commerce, *Areas of Critical State Concern Program*, <https://www.floridajobs.org/community-planning-and-development/programs/community-planning-table-of-contents/areas-of-critical-state-concern> (last visited Jan. 25, 2024).

⁴⁴ The Green Swamp, *History*, <https://www4.swfwd.state.fl.us/greenswamp/history> (last visited Jan. 25, 2024).

⁴⁵ Section 380.055, F.S.

⁴⁶ Section 380.0551, F.S.

⁴⁷ Section 380.0552, F.S.

⁴⁸ Section 380.0553, F.S.

⁴⁹ Section 380.0555, F.S.

⁵⁰ Barrier islands are build-ups of sand that form along the coast of larger land-bodies.

⁵¹ A spoil island is an artificial island, often created as a byproduct of channel dredging.

⁵² Section 258.397, F.S.

⁵³ Section 327.02, F.S.

⁵⁴ Section 380.093(3)(b)1.c., F.S.

B. SECTION DIRECTORY:

- Section 1. Amends s. 403.9324, F.S., to require DEP to adopt rules relating to mangrove replanting and restoration.
- Section 2. Provides an effective date of July 1, 2024.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

The bill may have an indeterminate negative fiscal impact on DEP related to the costs associated with the rulemaking requirements of the bill and conducting a statewide feasibility study to determine the value of mangroves for coastal flood risk reduction. However, these costs can be absorbed within existing resources.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

None.

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable. This bill does not appear to require counties or municipalities to spend funds or take action requiring the expenditure of funds; reduce the authority that counties or municipalities have to raise revenues in the aggregate; or reduce the percentage of state tax shared with counties or municipalities.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

The bill requires DEP to adopt rules related to mangrove replanting and restoration.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE CHANGES

None.

26 concern.

27 (b) Protect barrier and spoil islands.

28 (c) Assist Everglades restoration and Biscayne Bay
 29 revitalization efforts, including the development of living
 30 shoreline design options for the Biscayne Bay Aquatic Preserve
 31 which are ecologically acceptable and consistent with s.
 32 258.397.

33 (d) Promote public awareness of the value of mangroves
 34 statewide and support mangrove education campaigns conducted by
 35 local governmental entities.

36 (e) Identify vulnerable public and private properties
 37 along the coastline and encourage partnerships with local
 38 governmental entities to create local mangrove protection and
 39 restoration zone programs for implementing the rules developed
 40 by the department pursuant to this subsection.

41 (f) Protect and maintain access to and navigation of the
 42 marked channel and the right-of-way of the Florida Intracoastal
 43 Waterway as defined in s. 327.02.

44 (g) Create permitting incentives and approve of and
 45 encourage the use of new strategies for living shorelines and
 46 nature-based features, such as mangroves for coastal protection.

47 (h) Encourage partnerships with local governmental
 48 entities to create projects for coastal protection through the
 49 Resilient Florida Grant Program pursuant to s. 380.093(3)(b)1.c.

50 (8) The department, in consultation with the Division of

HB 1581

2024

51 Insurance Agent and Agency Services, shall conduct a statewide
52 feasibility study to determine the value of mangroves and other
53 nature-based solutions for coastal flood risk reduction within
54 coastal communities to reduce insurance premiums and improve
55 local governments' community ratings in the National Flood
56 Insurance Program Community Rating System. The department shall
57 submit a report to the Governor, the President of the Senate,
58 and the Speaker of the House of Representatives by July 1, 2025.

59 Section 2. This act shall take effect July 1, 2024.