

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/CS/HB 1489 Designation of Brevard Barrier Island Area as Area of Critical State Concern
SPONSOR(S): Infrastructure Strategies Committee, Agriculture, Conservation & Resiliency Subcommittee, Altman
TIED BILLS: **IDEN./SIM. BILLS:** CS/SB 1686

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Agriculture, Conservation & Resiliency Subcommittee	15 Y, 0 N, As CS	Mamontoff	Moore
2) Infrastructure Strategies Committee	18 Y, 0 N, As CS	Mamontoff	Harrington

SUMMARY ANALYSIS

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 facilities of major statewide significance, within designated geographic areas, from uncontrolled development that would cause substantial deterioration of such resources. Areas currently designated as ACSC include the Big Cypress Area, the Green Swamp Area, the Florida Keys Area, and the Apalachicola Bay Area.

The Brevard Barrier Island Area is one of the most fragile and endangered coastal ecosystems in North America. Its beaches, dunes, coastal scrub, and maritime hammock areas represent one of the most fragile and endangered natural upland communities in the state and the nation. Its beaches are important nesting grounds for threatened and endangered sea turtles and are home to the largest nesting aggregation of loggerhead sea turtles in the world. The barrier island is bordered by the Indian River Lagoon and its ecosystem helps protect the water quality and ecological productivity of the lagoon.

The bill designates the Brevard Barrier Island Area as an ACSC.

The bill outlines the guiding principles for development within the area.

The bill authorizes DEO to recommend removal of the ACSC designation upon fulfillment of the legislative intent and completion of all the work program tasks specified in the rules of the Administration Commission.

The bill does not appear to have a fiscal impact on state or local government.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Background

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 facilities of major statewide significance, within designated geographic areas, from uncontrolled development that would cause substantial deterioration of such resources.¹ 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.²

The Department of Economic Development's (DEO) ensures that the state's goals and policies relating to economic development, workforce development, community planning and development, and affordable housing are fully integrated with appropriate implementation strategies.³

DEO may recommend to the Governor and Cabinet, sitting as the Administration Commission (Commission),⁴ areas for designation as ACSCs.⁵ The recommendation must include the following:

- Recommendations with respect to the purchase of lands situated within the boundaries of the proposed area as environmentally endangered lands and outdoor recreation lands under the Land Conservation Program;
- Any report or recommendation of an appointed resource planning and management committee;
- The dangers that would result from uncontrolled or inadequate development of the area and the advantages that would be achieved from the development of the area in a coordinated manner;
- A detailed boundary description of the proposed area;
- Specific principles for guiding development within the area;
- An inventory of lands owned by the state, federal, county, and municipal governments within the proposed area; and
- A list of the state agencies with programs that affect the purpose of the designation.⁶

Within 45 days, the Commission must either reject or adopt the recommendation, with or without modification, and by rule designate the ACSC.⁷ If the rule is adopted, it is then submitted to the President of the Senate and the Speaker of the House of Representatives no later than 30 days prior to the next regular session of the Legislature.⁸ The Legislature may reject, modify, or take no action relative to the adopted rule.

An ACSC may only be designated for:⁹

- An area containing, or having a significant impact upon, environmental or natural resources of regional or statewide importance, including, but not limited to, state or federal parks, forests, wildlife refuges, wilderness areas, aquatic preserves, major rivers and estuaries, state

¹ Department of Economic Opportunity (DEO), *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#:~:text=The%20Areas%20of%20Critical%20State,development%20that%20would%20cause%20substantial> (last visited March 15, 2023).

² The Green Swamp, *History*, <https://www4.swfwmd.state.fl.us/greenswamp/history> (last visited March 16, 2023).

³ Office of Program Policy Analysis and Government Accountability, *Department of Economic Opportunity*, <https://oppaga.fl.gov/ProgramSummary/ProgramDetail?programNumber=6101> (last visited March 16, 2023).

⁴ See ss. 14.202 and 380.031(1), F.S.

⁵ Section 380.05(1)(a), F.S.

⁶ *Id.*

⁷ Section 380.05(1)(b), F.S.

⁸ Section 380.05(1)(c), F.S.

⁹ Section 380.05(2), F.S.

environmentally endangered lands, Outstanding Florida Waters, and aquifer recharge areas, the uncontrolled private or public development of which would cause substantial deterioration of such resources;

- An area containing, or having a significant impact upon, historical or archaeological resources, sites, or statutorily defined historical or archaeological districts, the private or public development of which would cause substantial deterioration or complete loss of such resources, sites, or districts; or
- An area having a significant impact upon, or being significantly impacted by, an existing or proposed major public facility or other area of major public investment including, but not limited to, highways, ports, airports, energy facilities, and water management projects.

Once an area is designated as an ACSC, DEO reviews all local development projects within the designated area and may appeal to the Florida Land and Water Adjudicatory Commission any local development orders that are inconsistent with state guidelines and local comprehensive plans and regulations. DEO is also responsible for reviewing and approving amendments to comprehensive plans and land development regulations proposed and adopted by local governments within the designated area.¹⁰

Areas currently designated as ACSCs include the Big Cypress Area,¹¹ the Green Swamp Area,¹² the Florida Keys Area,¹³ and the Apalachicola Bay Area.¹⁴

Archie Carr National Wildlife Preserve and Sea Turtles

In North America, sea turtles primarily nest from North Carolina through Florida, with over 90 percent of nesting occurring in Florida.¹⁵ Within that range is the Archie Carr National Wildlife Refuge (Carr Refuge), a 20.5-mile section of shoreline between Melbourne Beach and Wabasso, along Florida's east central coast. Since its establishment by Congress in 1989, the Carr Refuge, named after the Sea Turtle Conservancy's founding scientific director, has been a major success. The stretch of beach within the Refuge boundary is the most important sea turtle nesting habitat in the United States.¹⁶

Sea turtles are large, air-breathing reptiles that inhabit tropical and subtropical seas throughout the world.¹⁷ Their shells consist of an upper part (*carapace*) and a lower section (*plastron*). Hard scales (or scutes) cover all but the leatherback turtle, and the number and arrangement of these scutes can be used to determine the species.

Only female sea turtles come ashore to nest as males rarely ever return to land after crawling into the sea as hatchlings. Most females return to nest on the beach where they were born. Nesting seasons occur at different times around the world. In the U.S., nesting occurs from April through October. Most females nest at least twice during each mating season; some may nest up to ten times in a season. However, a female will not nest in consecutive years, typically skipping one or two years before returning.¹⁸

¹⁰ DEO, *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#:~:text=The%20Areas%20of%20Critical%20State,development%20that%20would%20cause%20substantial> (last visited March 15, 2023).

¹¹ Section 380.055, F.S.

¹² Section 380.0551, F.S.

¹³ Section 380.0552, F.S.

¹⁴ Section 380.0555, F.S.

¹⁵ Sea Turtle Conservancy, *Barrier Island Education Center*, <https://conserveturtles.org/barrier-island-education-center/> (last visited March 15, 2023).

¹⁶ *Id.*

¹⁷ Sea Turtle Conservancy, *Information About Sea Turtles, Their Habitats and Threats to Their Survival*, <https://conserveturtles.org/information-about-sea-turtles-their-habitats-and-threats-to-their-survival/> (last visited March 15, 2023).

¹⁸ *Id.*

Researchers do not yet know how long baby turtles spend in the open sea, or exactly where they go, but once they reach the size of a dinner-plate, they appear at feeding grounds in nearshore waters. They grow slowly and take between 15 and 50 years to reach reproductive maturity, depending on the species. There is no way to determine the age of a sea turtle from its physical appearance. It is theorized that some species can live over 100 years.¹⁹

Green, leatherback, and hawksbill sea turtles are classified as endangered in the U.S. under the Endangered Species Act.²⁰ More loggerheads nest within the Carr Refuge than anywhere else in the Western Hemisphere. Over the past several years, there has been an observed increase in both green turtle and leatherback nesting in the Carr Refuge, indicating that the protection of these beaches is essential to the survival and recovery of these three species.²¹

Indian River Lagoon

The Indian River Lagoon (IRL) is an estuary in which freshwater from uplands and tributaries meets and mixes with saltwater from the ocean to create an estuarine environment.²² The resulting brackish water is moved more by the wind than by the tide and does not flow from headwaters to a mouth like a river. The width of the lagoon varies from one-half mile to five miles, with an average depth of four feet.²³

The Brevard Barrier Island's natural habitats and ecosystem protect the lagoon's water quality and ecological productivity.²⁴ Considered one of the most biologically diverse estuaries in North America, the lagoon has been designated an Outstanding Florida Water and an Estuary of National Significance.²⁵ The site's mangrove wetlands and salt marshes provide breeding, nursery, and feeding areas for a variety of organisms. It is home to more than 2,000 species of plants, 600 species of fish, 300 species of birds, and endangered or threatened species.²⁶

The IRL is also responsible for one-seventh of the region's economy. The overall economic value of the lagoon was estimated at \$7.6 billion in 2014. Lagoon fisheries generate an estimated \$30 million in revenues annually, and the lagoon provides approximately 50 percent of the annual fish harvest along the east coast of Florida.²⁷

Much of the IRL ecosystem has been disturbed by increased development in the area which has led to an increase in nonpoint source pollution.²⁸ The harmful levels of nutrients and sediments entering the lagoon as a result of stormwater runoff from urban and agricultural areas, wastewater treatment facility discharges, septic systems, and excess fertilizer applications have negatively impacted the ecology of

¹⁹ *Id.*

²⁰ The Endangered Species Act (ESA) defines an endangered species as any species which is in danger of extinction throughout all or a significant portion of its range. Endangered species are automatically protected by prohibitions of several types of "take," including harming, harassing, collecting, or killing, under Section 9 of the ESA. National Oceanic and Atmospheric Association (NOAA), *What is the difference between a threatened and endangered species?*, <https://oceanservice.noaa.gov/facts/endangered.html> (last visited March 15, 2023); Sea Turtle Conservancy, *Information About Sea Turtles, Their Habitats and Threats to Their Survival*, <https://conserveturtles.org/information-about-sea-turtles-their-habitats-and-threats-to-their-survival/> (last visited March 15, 2023).

²¹ Sea Turtle Conservancy, *Barrier Island Education Center*, <https://conserveturtles.org/barrier-island-education-center/> (last visited March 15, 2023).

²² St. Johns River Water Management District, *Fast Facts about the Indian River Lagoon*, <https://www.sjrwmd.com/waterways/indian-river-lagoon/facts/> (last visited March 15, 2023).

²³ *Id.*

²⁴ Florida State Parks, *Ecology of the Indian River Lagoon*, <https://www.floridastateparks.org/learn/ecology-indian-river-lagoon> (last visited March 15, 2023).

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*

²⁸ Nonpoint source pollution is the result of runoff from stormwater picking up and carrying natural and human-made pollutants from diffuse sources and depositing them into lakes, rivers, springs, wetlands, coastal waters, and ground water. Common nonpoint source pollution sources include sediment, leaf litter, pet waste, landscape inputs such as fertilizers, herbicides and insecticides, and nutrients from septic systems. DEP, *Nonpoint source pollution education*, <https://floridadep.gov/wra/319-tmdl-fund/content/nonpoint-source-pollution-education> (last visited March 15, 2023).

the lagoon. For example, the lagoon's seatrout numbers are estimated to be 90 to 95 percent below historic levels.²⁹ The species, an indicator of water quality, has dwindled in the wake of a decade-long series of severe algal blooms. Additionally, about 75 percent of the lagoon's seagrass acreage has vanished since 2011, with a near-total loss in some areas.³⁰ The lagoon's ailments were in the national spotlight amid 2021's record 1,101 manatee deaths. Many manatees starved in the absence of seagrass, their dietary staple.

Brevard Barrier Island Area

Barrier islands form as waves repeatedly deposit sediment parallel to the shoreline. As wind and waves shift according to weather patterns and local geographic features, these islands constantly move, erode, and grow.³¹ They are generally separated from the mainland by tidal creeks, bays, and lagoons. Beaches and sand dune systems form on the side of the island facing the ocean; the side facing the shore often contains marshes, tidal flats, and maritime forests. These areas are important habitat for seabirds, fish and shellfish, and nesting sea turtles.³²

These islands are critical to protecting coastal communities and ecosystems from extreme weather. Beach dunes and grasses on barrier islands absorb wave energy before the wave hits the mainland. This generally means smaller storm surge and less flooding on the coast.³³ Today, barrier islands are disappearing at a high rate.

The Brevard Barrier Island Area is one of the most fragile and endangered coastal ecosystems in North America. Its beaches, dunes, coastal scrub, and maritime hammock areas represent one of the most fragile and endangered natural upland communities in the state and the nation.³⁴ Its beaches are important nesting grounds for threatened and endangered sea turtles and are home to the largest nesting aggregation of loggerhead sea turtles in the world. The barrier island is bordered by the IRL, and its ecosystem helps protect the water quality and ecological productivity of the lagoon.³⁵

Effect of the Bill

The bill designates the Brevard Barrier Island Area as an ACSC for the following reasons:

- The southern barrier island of Brevard County represents one of the most fragile and endangered coastal ecosystems in North America and the beaches, dunes, coastal scrub, and maritime hammock areas of the barrier island ecosystem represent some of the most fragile and endangered natural upland communities in the state and nation.
- The beaches of the region are among the most important nesting grounds for threatened and endangered sea turtles in the Western Hemisphere and the beach running the length of the southern barrier island is home to the largest nesting aggregation of loggerhead sea turtles in the world.
- The Archie Carr National Wildlife Refuge is located within the barrier island and is a significant conservation area designated to protect habitat at the most significant area for loggerhead sea turtle nesting in the world, at the most significant area for green turtle nesting in North America, and for a diverse array of plant and animal species.

²⁹ WUSF Public Media, *After a decade of intense algal blooms, the Indian River Lagoon is making fragile gains*, <https://wusfnews.wusf.usf.edu/environment/2022-11-12/after-a-decade-of-intense-algal-blooms-the-indian-river-lagoon-is-making-fragile-gains> (last visited March 15, 2023).

³⁰ *Id.*

³¹ National Oceanic and Atmospheric Association, *What is a barrier island?*, <https://oceanservice.noaa.gov/facts/barrier-islands.html#:~:text=These%20islands%20are%20critical%20to,less%20flooding%20on%20the%20coast>. (last visited March 17, 2023).

³² *Id.*

³³ *Id.*

³⁴ Sea Turtle Conservancy, *Information About Sea Turtles: Habitats: Beach*, <https://conserveturtles.org/information-sea-turtles-habitats-beach/> (last visited March 17, 2023).

³⁵ Indian River Lagoon Species Inventory, *Barrier Islands*, <https://irlspecies.org/misc/BarrierIsld.php> (last visited March 17, 2023).

- The IRL, designated as an Estuary of National Significance by the U.S. Environmental Protection Agency in 1990, borders the western shore of the barrier island and the natural habitats of the barrier island ecosystem protect the water quality and productivity of the IRL.
- The salt water recreational fishery of the IRL generates hundreds of millions of dollars per year in local economic benefit.
- Density limitations and natural resource protection on the barrier island has decreased public tax burdens associated with the provision of services, building and maintenance of infrastructure for barrier island residential developments, and public costs for rebuilding public and private structures following severe erosion events.
- Protection of the primary dune system of the barrier island provides the only protective buffer for local development from storm surges associated with tropical storms and hurricanes.
- The entirety of the barrier island lies within a zone that is the first to be subject to mandatory evacuation protocols due to the vulnerability of the barrier island in hurricane events and the adverse impacts of such vulnerability on evacuating safely.

The bill specifies that the intent of the Legislature is to:

- Establish a land use management system that protects the natural environment of the southern Brevard Barrier Island Area;
- Establish a land use management system promoting orderly and balanced growth in accordance with the capacity of existing public facilities and services;
- Protect and improve the IRL ecosystem, including improving water quality of the area through federal, state, and local funding of water quality improvement projects; and
- Ensure that the population of the Brevard Barrier Island can be safely evacuated in the event of a hurricane.

The bill specifies the geographic location of the Brevard Barrier Island Area as that portion of Brevard County formed by the southern boundary of the Town of Melbourne Beach, the Indian River as the western boundary, the Atlantic Ocean as the eastern boundary, extending south to the southern boundary of the Sebastian Inlet State Park.

The bill requires state, regional, and local agencies and governmental units in the Brevard Barrier Island Area to coordinate their plans and conduct their programs and regulatory activities to be consistent with the following guiding principles:

- Preventing the adverse impacts of development on resources critical to sea turtle habitat by prohibiting new shoreline hardening structures and enforcing existing state and county coastal construction regulations.
- Prioritizing water quality restoration projects in the IRL.
- Reducing nutrient contributions from septic tanks and wastewater facilities, stormwater discharges, and agriculture non-point sources into the IRL.
- Supporting innovative, nature-based solutions, including living shorelines and freshwater and coastal wetland restoration.
- Safeguarding against adverse economic, social, environmental, and public health and safety impacts posed by flooding and storm surge by protecting identified critical assets.
- Protecting shoreline and marine resources, including mangroves, seagrass beds, wetlands, sea turtles, manatees, fish and wildlife, and related habitats.
- Protecting upland resources, including dune ridges, beaches, wildlife, and related habitats.
- Limiting the adverse impacts of development on the quality of water throughout the Brevard Barrier Island Area and the IRL.
- Enhancing natural scenic resources to promote the aesthetic benefits of the natural environment.
- Ensuring that development is compatible with the unique barrier island characteristics.

The bill directs DEO to submit an annual report, beginning November 30, 2030, to the Administration Commission describing the progress of the Brevard Barrier Island Area toward completing the work program tasks specified in the commission rules. DEO may recommend removal of the Brevard County as an ACSC if the agency determines the following:

- Adequate restoration and renourishment programs are in place to preserve the beaches and dunes of the southern barrier island in Brevard County for nesting sea turtles;
- Seagrass replanting in the IRL extending the length of the Brevard Barrier Island Protection Area is in a coverage volume that would establish recovery to scientifically defensible reference targets;
- Nonpoint pollution sources into the IRL that contribute to total phosphorus, total nitrogen, chlorophyll-a, fecal coliform, and metals have been sufficiently reduced to meet water quality criteria standards resulting in the removal of the IRL from the impaired waters list;
- The green sea turtle, loggerhead sea turtle, and leatherback sea turtle have been delisted from the Florida Endangered and Threatened Species rule and the Florida Marine Turtle Protection Act;
- All local comprehensive plans and land development regulations and the administration of such plans and regulations are adequate to protect the Brevard Barrier Island Area, fulfill the legislative intent, and are consistent with and further the principles guiding development; and
- A local government has adopted a resolution at a public hearing recommending the removal of the designation.

The bill specifies that any existing zoning or use of land in effect within the Brevard Barrier Island Area before July 1, 2023, is not affected by the bill.

B. SECTION DIRECTORY:

Section 1. Creates s. 380.0553, F.S., relating to the designation of the Brevard Barrier Island Area as an ACSC.

Section 2. Provides an effective date of July 1, 2023.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

None.

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:

None.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE CHANGES

On March 21, 2023, the Agriculture, Conservation & Resiliency Subcommittee adopted an amendment and reported the bill favorably as a committee substitute. The amendment corrected a drafting error.

On April 17, 2023, the Infrastructure Strategies Committee adopted an amendment and reported the bill favorably as a committee substitute. The amendment specified that existing zoning or use of land in effect within the Brevard Barrier Island Area before July 1, 2023, is not affected by the bill.

This analysis is drafted to the committee substitute as approved by the Infrastructure Strategies Committee.