The Florida Senate BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

| Prepare | d By: The Profes | sional Staff of the Comm | ittee on Environme | ntal Preservation | n and Conservation | | |
|-------------|---|--------------------------|--------------------|-------------------|--------------------|--|--|
| BILL: | CS/SB 1304 | | | | | | |
| INTRODUCER: | Environmental Preservation and Conservation Committee and Senators Stewart and Torres | | | | | | |
| SUBJECT: | Florida Black Bears | | | | | | |
| DATE: | April 20, 201 | 7 REVISED: | | | | | |
| ANALYST | | STAFF DIRECTOR | REFERENCE | | ACTION | | |
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I. Summary:

CS/SB 1304 creates the Florida Black Bear Habitat Restoration Act which:

- Authorizes the Florida Fish and Wildlife Commission (FWC) to designate on state lands and update as necessary using a science-based approach:
 - Florida black bear habitats in which female bears are likely to be denning during the month of February; and
 - Sensitive habitats containing critical food sources for Florida black bears;
- Prohibits the FWC from allowing a person issued a recreational hunting permit that authorizes the hunting of a Florida black bear to kill a Florida black bear mothering cubs under 100 pounds pursuant to such permit;
- Provides that a personal unlawfully harvesting saw palmetto berries on state lands, regardless of the value of berries stolen, commits petit theft of the second degree, punishable by up to 60 days imprisonment or up to a \$500 fine; and
- Prohibits prescribed burns during the month of February in a habitat designated by the FWC as habitat in which female Florida black bears are likely to be denning.

II. Present Situation:

Florida Black Bear

The Florida black bear (*Ursus americanus floridanus*) is one of 16 recognized subspecies of the American black bear and is one of the three subspecies of black bear in the southeastern United States. ¹ The Florida black bear historically roamed throughout the state, but now lives in several

¹ Florida Fish and Wildlife Conservation Commission (FWC), *Florida Black Bear Management Plan, Ursus americanus floridanus*, 5 (June 27, 2012), *available at http://myfwc.com/media/3059469/bear-management-plan.pdf* (last visited April 14, 2017).

fragmented areas across the state.² Due to loss of habitat and unregulated hunting the population was reduced to an estimated 300-500 bears in the 1970s.³ As a result of the population decline, the Florida Fish and Wildlife Conservation Commission (FWC) classified the Florida black bear as a threatened species in 1974.⁴

After more than 35 years of strict statewide protection and management, the FWC conducted an evaluation of the Florida black bear and determined that the Florida black bear was no longer found to be at high risk of extinction. As a result, the FWC removed the Florida black bear from the state list in 2012.⁵

Population

Today, the Florida black bear population is comprised of 7 distinct sub-populations within the state, including Apalachicola, Eglin, Osceola, Ocala/St. Johns, Chassahowitzka, Highland/Glades, and Big Cypress. During 2014-2015, the FWC conducted a statewide population assessment for Florida black bears using DNA collected at barbed-wire hair sampling sites. The study found that bear populations increased substantially in certain sub-populations and increased by approximately 53 percent statewide. The Florida black bear population is growing across the state and its occupied range is expanding, but the populations still only occur in 7 relatively disconnected sub-groups across the state.

For management purposes, each sub-population is separated into a bear management unit (BMU). A BMU is a geographic location bounded by county or state borders with one of the seven Florida black bear sub-populations within it. ¹⁰ The goals of establishing BMUs is to provide a defined area within which the FWC can have a community-focused effort to effectively manage and conserve Florida black bears. ¹¹ The FWC manages each BMU to meet specific goals related to bear sub-population size, potential habitat, human-bear conflicts, and potential threats, such as vehicle related mortality. ¹²

² FWC, *Black Bears Appearance*, http://myfwc.com/wildlifehabitats/managed/bear/facts/appearance/ (last visited April 14, 2017).

³ FWC, *Black Bear Research*, http://myfwc.com/research/wildlife/terrestrial-mammals/bear/research/ (last visited April 14, 2017).

⁴ *Id*.

⁵ Jacob Humm, J. Walter McCown, Brian K. Scheick, Joseph D. Clark, *Black Bear Population Size and Density in Apalachicola, Big Cypress, Eglin, Ocala/St. Johns, and Osceola Study Area, Florida*, 4 (Aug. 18, 2016), *available at* http://myfwc.com/media/4062317/florida-black-bear-finalreport.pdf (last visited April 14, 2017).

⁶ *Id*. at 2.

⁷ *Id*. at 1.

⁸ FWC, *Florida Black Bear Populations*, http://myfwc.com/media/4067213/bear-pop-infographic.jpg (last visited April 14, 2017).

⁹ Dana L. Karelus, J. Walter McCown, Brian K. Scheick, Madelon van de Kerk, and Madan K. Oli, *Home Ranges and Habitat Selection by Black Bears in a Newly Colonized Population in Florida*, 347 SOUTHEASTERN NATURALIST Vol. 15, No. 2: 346-364 (2016), *available at*

 $[\]underline{\text{http://www.wec.ufl.edu/faculty/olim/Karelus\%20et\%20al.\%202016\%20black\%20bear\%20home\%20range\%20and\%20habit} \\ \underline{\text{at\%20selection\%20SENat.pdf}} \text{ (last visited April 14, 2017)}.$

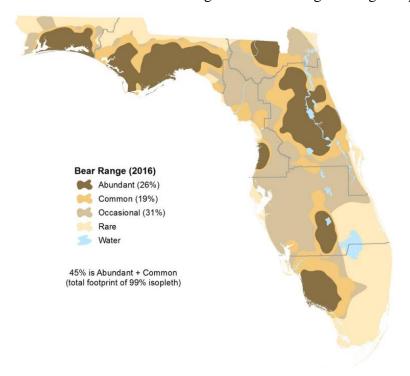
¹⁰ FWC, What is a BMU?, http://myfwc.com/wildlifehabitats/managed/bear/bmu/ (last visited April 14, 2017).

¹¹ *Id*.

¹² *Id*.

Habitat

In Florida, black bears range from the Northeast to the Southwest of Florida. Bears are abundant or common in approximately 45 percent of the state, which is an increase from 17 percent in 1993. The map below depicts the bear ranges in 2016. Updated ranges are important for managing and predicting human-bear conflicts, estimating potential areas for improving linkages between sub-populations, employing conservation plans, implementing public outreach, and monitoring listing criteria. Some of the sub-populations are small and are impacted by habitat fragmentation, which restricts movements and genetic interchange among sub-populations.



The Florida black bear is adaptable and inhabits a variety of forested habitats, but thrives in habitats that provide an annual supply of seasonally available foods, secluded areas for denning, and some degree of protection from humans.¹⁷ The optimal bear habitat in Florida is a mixture of flatwoods, swamps, scrub oak ridges, bayheads, and hammock habitats, thoroughly interspersed.¹⁸ Self-sustaining and secure sub-populations of bears are typically found within large contiguous forested tracts that contain understories of mast¹⁹ or berry-producing shrubs or trees.²⁰

¹³ FWC, *Black Bear Research*, http://myfwc.com/research/wildlife/terrestrial-mammals/bear/research/ (last visited April 14, 2017).

¹⁴ FWC, *Florida Black Bear Range*, http://myfwc.com/media/3654721/Blackbear-Range.pdf (last visited April 14, 2017). ¹⁵ *Id*.

¹⁶ Jacob Humm, J. Walter McCown, Brian K. Scheick, Joseph D. Clark, *Black Bear Population Size and Density in Apalachicola, Big Cypress, Eglin, Ocala/St. Johns, and Osceola Study Area, Florida*, 2 (Aug. 18, 2016).

¹⁷ FWC, Florida Black Bear Management Plan, Ursus americanus floridanus, 8 (June 27, 2012).

¹⁸ Id.

¹⁹ The term "mast" is a general term for edible fruit when eaten by wildlife. Hard mast includes acorn, hickory, pecan, and other nuts while soft mast includes fleshy berries such as palmetto berries, blueberries, and grapes; *see* FWC, *Florida Black Bear Management Plan, Ursus americanus floridanus*, xvi (June 27, 2012).

²⁰ FWC, Florida Black Bear Management Plan, Ursus americanus floridanus, 8 (June 27, 2012).

Florida black bears are omnivores and opportunistic feeders, but plant material makes up approximately 80 percent of their diet.²¹ Food items typically consumed are fruits, berries, acorns, and insects.²² One type of berries that black bears forage on are saw palmetto berries. While sixty-six different plant species have been identified in bear diets, the fruits and fiber of saw palmetto are important throughout the year.²³

Saw palmetto berries

In recent years, demand for saw palmetto berries has increased because they are a source of certain medicinal compounds used in herbal and alternative medical treatments.²⁴ Palmetto berry harvesting for commercial purposes has the potential to remove important food sources for bears.²⁵ The FWC prohibits the possession or removal of saw palmetto berries without written permission from any wildlife and environmental area, where the FWC is the landowner or the lead managing agency.²⁶

The Florida Forest Service within the Florida Department of Agriculture and Consumer Services, is authorized to issue permits for harvesting palmetto berries pursuant to rule.²⁷ The permit cost \$10 per day and was issued between July and November to users who were interested in harvesting palmetto berries on state forest lands.²⁸ The permit authorized the holder to harvest berries in a specific area.²⁹ The Florida Forest Service issues permits provided the proposed use does not interfere with the management objectives of that forest as provided in the forest's management plan; create a nuisance to wildlife, or other forest users, or service staff; pose a threat to public safety; or create a risk of wildfire.³⁰ In June of 2015, the Florida Forest Service discontinued the issuance of permits for harvesting saw palmetto berries on state forest lands until further notice in recognition that saw palmetto berries are a primary source of food for black bears.³¹

Human-bear conflicts

As the population of both humans and bears has expanded, there has been an increase in human-bear conflicts, particularly in residential areas, where bears often search for food.³²

²¹ Mark A. Barrett, David J. Telesco, Sarah E. Barrett, Katelyn M. Widness, and Erin H. Leone, *Testing Bear-Resistant Trash Cans in Residential Areas of Florida*, 27 SOUTHEASTERN NATURALIST Vol. 13, No. 1: 26-39 (2014), *available at* http://wingfieldreserve.org/wp-content/uploads/2014/06/SEN bear urban trashcans.pdf (last visited April 14, 2017).

²³ FWC, Florida Black Bear Management Plan, Ursus americanus floridanus, 10 (June 27, 2012).

²⁴ Florida Department of Agriculture and Consumer Services (FDACS), *Market Outlook Saw Palmetto Berries*, http://www.freshfromflorida.com/Divisions-Offices/Florida-Forest-Service/Our-Forests/Working-Forest/Non-Timber-Forest-Products-NTFP (last visited April 14, 2017).

²⁵ FWC, Florida Black Bear Management Plan, Ursus americanus floridanus, 32 (June 27, 2012).

²⁶ See Fla. Admin. Code R. 68A-17.004.

²⁷ Fla. Admin. Code R. 5I-4.005.

²⁸ Florida Forest Service, FDACS, *Letter to Senator Bullard*, (July 20, 2015)(on file with the Senate Environmental Preservation and Conservation Commission).

²⁹ Fla. Admin. Code R. 5I-4.005.

³⁰ *Id*.

³¹ Florida Forest Service, FDACS, Letter to Senator Bullard, (July 20, 2015).

³² Mark A. Barrett, David J. Telesco, Sarah E. Barrett, Katelyn M. Widness, and Erin H. Leone, *Testing Bear-Resistant Trash Cans in Residential Areas of Florida*, 27 SOUTHEASTERN NATURALIST Vol. 13, No. 1: 26-39 (2014).

Between 2007 and 2011, the FWC euthanized an average of 15 bears annually due to the bear's conflict behavior.³³ Of the bears euthanized during that time, 68 percent were associated with seeking out unsecured garbage or other human-provided food sources.³⁴ In 2016, the FWC received 1,553 calls relating to bears.³⁵ In response to these calls, 14 bears were captured, 5 were released, and 8 were euthanized.³⁶

Communities that commit to learning to coexist with bears, knowing when and how to report bear activity, and securing potential food sources are referred to as BearWise Communities.³⁷ Proactive measures, such as securing trash and providing education, to change or manage human behavior are more efficient than other methods at reducing human-bear conflicts.³⁸ The FWC passed a statewide resolution in 2015 highlighting the importance of securing attractants.³⁹

Additionally, in 2015, the state increased penalties for feeding bears. ⁴⁰ Section 379.412, F.S., provides enhanced penalties for:

- Feeding wildlife with food or garbage;
- Attracting or enticing wildlife with food or garbage; or
- Allowing the placement of food or garbage in a manner that attracts or entices wildlife.

The FWC also updated its bear feeding rule to include a provision that allows law enforcement officers to issue notifications to people who have been in contact with the FWC regarding securing their garbage or other attractants and have failed to do so.⁴¹ The notification serves as a formal reminder that the person's actions could be in violation of the law.⁴²

The Legislature for the 2016-2017 fiscal year appropriated \$500,000 to the FWC for cost-sharing with local governments in areas with the highest level of human-bear conflicts. Some of the funds (\$376,900) came from proceeds from permit sales from the 2015 bear hunt. He proviso language for the appropriation required at least 60 percent of the money appropriated to go to local governments that implemented ordinances requiring trash be kept secure from bears.

³³ FWC, Florida Black Bear Management Plan, Ursus americanus floridanus, 12 (June 27, 2012).

³⁴ Id.

³⁵ Dr. Thomas Eason, Director, Division of Habitat and Species Conservation, FWC, *Bear Management Update*, Slide 24 (June 2016), *available at* http://myfwc.com/media/3814603/3B-BearManagementPresentation.pdf (last visited April 14, 2017).

³⁶ *Id*.

³⁷ FWC, Florida's BearWise, http://myfwc.com/wildlifehabitats/managed/bear/wise/ (last visited April 14, 2017).

³⁸ Mark A. Barrett, David J. Telesco, Sarah E. Barrett, Katelyn M. Widness, and Erin H. Leone, *Testing Bear-Resistant Trash Cans in Residential Areas of Florida*, 36 SOUTHEASTERN NATURALIST Vol. 13, No. 1: 26-39 (2014).

³⁹ See http://myfwc.com/media/3057987/11b-blackbearresolution.pdf, for the entire FWC black bear resolution.

⁴⁰ Chapter 2015-161, s. 12, Laws of Fla.

⁴¹ See Fla. Admin. Code R. 68A-4.001.

⁴² Dr. Thomas Eason, Director, Division of Habitat and Species Conservation, FWC, *Bear Management Update*, Slide 25 (June 2016).

⁴³ Chapter 2016-66, Laws of Fla.

⁴⁴ FWC, Frequently Asked Questions, FY 16-17 BearWise Funding, http://myfwc.com/media/4048285/BearWiseFundingFAQs.pdf (last visited April 14, 2017).

⁴⁵ Chapter 2016-66, Laws of Fla.

Seminole, Lake, Santa Rosa, and Orange counties passed such ordinances and received at least \$150,000 each to provide bear-resistant trash cans to residents at a discounted cost. 46

Hunting as a management tool

As a component of the FWC's overall bear management strategy, the FWC established a regulatory framework for bear hunting and in October of 2015 authorized a bear hunt.⁴⁷ Four of the 7 BMUs were opened to bear hunting. Each BMU had an established harvest objective, which was based on taking 20 percent of the estimated BMU population and subtracting the annual known mortality.⁴⁸ The table below depicts the harvest objectives and the actual harvest numbers.⁴⁹

| Bear Management Unit | Population Estimate (Estimate Year) | 20% of Population Estimate | Known Mortality (3 Year Average) | Harvest Objective | Actual Harvest |
|-------------------------|---|----------------------------------|-------------------------------------|----------------------|-------------------|
| East Panhandle | 600 ('02) | 120 | 80 | 40 | 114 |
| North | 550 ('14) | 110 | 10 | 100 | 25 |
| Central | 1,300 ('14) | 260 | 160 | 100 | 143 |
| South | 700 ('02) | 140 | 20 | 80 | 22 |
| TOTALS | 3,150 | 630 | 270 | 320 | 304 |

The hunt was authorized to begin on October 24, 2015, and the FWC had the ability to close the season by means of a daily cut-off mechanism within each BMU and statewide. ⁵⁰ The hunt was spread across 26 counties with 78 percent of bears taken on private lands. ⁵¹ The East Panhandle and the Central BMUs were closed beginning on October 25, 2015, while the North and South BMUs were closed beginning on October 26, 2015. ⁵²

For the 2016 season, the FWC staff presented 4 options relating to the Florida black bear hunt for the commission to consider.⁵³ The FWC staff recommended the option to continue to use hunting to manage the growth of black bear populations, but with a modified, more conservative hunt format.⁵⁴ Under the staff recommendation, more restrictions would be placed on hunters who choose to participate in the hunt. Such restrictions included:

⁴⁶ FWC, FWC awards \$825,000 to local governments to reduce human-bear conflicts (Dec. 13 2016), available at http://myfwc.com/news/news-releases/2016/december/13/funding-announcement/ (last visited April 14, 2017).

⁴⁷ FWC, 2015 Florida Black Bear Hunt Summary Report, 1 http://myfwc.com/media/3358561/2015-Florida-Black-Bear-Hunt-Report.pdf (last visited April 14, 2017).

⁴⁸ *Id*. at 2.

⁴⁹ *Id*. at 3.

⁵⁰ *Id*.

⁵¹ *Id*.

⁵² *Id*.

⁵³ FWC, FWC to Consider Staff Recommendation for Florida Bear Hunt, Four Options on How to Move Forward, (June 10, 2016), available at http://myfwc.com/news/news-releases/2016/june/10/florida-bear-hunt/ (last visited April 14, 2017).

⁵⁴ Diane Eggeman, Director, Division of Hunting and Game Management, FWC, *Black Bear Management*, (June 22, 2016), *available at* http://myfwc.com/media/3814609/3B-SM-Bear.pdf (last visited April 14, 2017).

 Reducing the area open to hunting to correspond with areas of the state where human-bear conflicts are most prevalent;

- The prohibition of hunting a bear with any other bear present, including cubs;
- Further restrictions on hunting near game feeding stations;
- Limiting the number of permits;
- Increased enforcement measures requiring hunters to tag bears immediately; and
- Limiting the number of hunters in each area of the state or BMU.⁵⁵

While the FWC staff recommended the option for continuing the hunt, the commission voted to adopt the option to postpone the bear hunt in the state by creating a zero hunt objective for 2016.⁵⁶

Prescribed Burning

Approximately 6 out of every 10 acres in Florida or nearly 22 million acres are considered fire-dependent.⁵⁷ In these ecosystems, the interaction between fire and the landscape is critical to nutrient cycling, perpetuates a biologically diverse and healthy forest, and renews and restores habitat for many species of wildlife. There are about 2 million acres that are permitted for burning each year.⁵⁸ In addition to its environmental benefits, prescribed burning also reduces the risk of catastrophic wildfires and aids in controlling and preventing wildfires by reducing the dangerous build-up of brush and forest litter which is a fuel source for fires.⁵⁹

Florida black bears typically use ground nests for denning and require dense understory vegetation for protection from disturbance. Intensively managed forests often have little understory and do not provide adequate cover for denning sites. Prescribed fire at frequent intervals or performed during winter seasons may decrease food production and cover for bears. 1

III. Effect of Proposed Changes:

CS/SB 1304 creates the Florida Black Bear Habitat Restoration Act and defines the following terms:

• "Florida black bear" to mean the subspecies *Ursus americanus floridanus*; and

⁵⁵ *Id*.

⁵⁶ FWC, Commission Meeting Eastpoint, FL, Minutes, 11 (June 22-23, 2016), available at http://myfwc.com/media/4064584/june16-commission-minutes.pdf (last visited April 14, 2017).

⁵⁷ FDACS, *Prescribed Fire in Florida Strategic Plan 2013-2020*, 1, *available at* http://www.freshfromflorida.com/content/download/32026/788335/Rx Fire Strategic Plan 2013-small.pdf (last visited April 14, 2017).

⁵⁸ *Id*.

⁵⁹ *Id*.

⁶⁰ Dana L. Karelus, J. Walter McCown, Brian K. Scheick, Madelon van de Kerk, and Madan K. Oli, *Home Ranges and Habitat Selection by Black Bears in a Newly Colonized Population in Florida*, 347 SOUTHEASTERN NATURALIST Vol. 15, No. 2: 346-364 (2016), *available at*

http://www.wec.ufl.edu/faculty/olim/Karelus%20et%20al.%202016%20black%20bear%20home%20range%20and%20habitat%20selection%20SENat.pdf (last visited April 14, 2017).

⁶¹ FWC, Florida Black Bear Management Plan, Ursus americanus floridanus, 32 (June 27, 2012).

• "State lands" to mean all lands under public ownership or control, including state forests, state parks, and conservation easements authorized by the state.

The bill prohibits the Florida Fish and Wildlife Conservation Commission (FWC) from allowing a person issued a recreational hunting permit that authorizes the hunting of a Florida black bear to kill a Florida black bear mothering cubs under 100 pounds pursuant to such permit.

The bill provides that a person unlawfully harvesting saw palmetto berries on state lands, regardless of the value of berries stolen, commits petit theft of the second degree, which is punishable by a maximum of 60 days imprisonment or a fine of up to \$500.

The bill authorizes the FWC to designate, on state lands, and update as necessary using a science-based approach:

- Florida black bear habitats in which female bears are likely to be denning during the month of February; and
- Sensitive habitats containing critical food sources for Florida black bears.

The bill prohibits prescribed burning from being conducted during the month of February in a habitat designated by the FWC as Florida black bear habitat in which female black bears are likely to be denning.

The bill takes effect July 1, 2017.

IV. Constitutional Issues:

| Α. | Municipality/County Mandates Restrictions: |
|----|--|
| | |

B. Public Records/Open Meetings Issues:

None.

None.

C. Trust Funds Restrictions:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

If the FWC designates Florida black bear habitat, the FWC may incur costs. However, such costs would likely be insignificant.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill substantially amends section 590.125 of the Florida Statutes.

This bill creates section 379.3018 of the Florida Statutes.

IX. Additional Information:

A. Committee Substitute – Statement of Changes:

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

CS by Environmental Preservation and Conservation on April 19, 2017: The CS:

- Removes the provisions relating to the sale of timber rights, bear-resistant trash cans, roller chopping, and sales certificates for saw palmetto berries.
- Revises the 10-year moratorium on hunting to only prohibiting the FWC from issuing a permit that authorizes the hunting of a Florida black bear mothering cubs under 100 pounds.
- Providing that a person unlawfully harvesting saw palmetto berries on state lands commits petit theft of the second degree, regardless of the value of berries stolen.
- Authorizes the FWC to designate, on state lands, and update as necessary using a science-based approach Florida black bear habitats in which female bears are likely to be denning during the month of February and sensitive habitats containing critical food sources for Florida black bears.
- Prohibits prescribed burns from being conducted during the month of February in a
 habitat designated by the FWC as Florida black bear habitat in which female bears are
 likely to be denning.

B. Amendments:

None.