Tab 1	SB 178	by R o	odriguez; P	ublic Financing of Construc	ction Projects	
	an and		(T. I	L. 1100072) F :		
Tab 2	SB 326	by Pe	erry; (Identi	cal to H 00073) Environme	ntal Regulation	
412992	Α	S	RCS	EN, Perry	Delete L.45 - 72:	11/04 05:37 PM
Tab 3	SB 332	by St	ewart; Lan	d Acquisition Trust Fund		
Tab 4	SB 200	by M	ontford (Co	O-INTRODUCERS) Stew	art, Rader; Advanced Well Stimulation	on Treatment

The Florida Senate

COMMITTEE MEETING EXPANDED AGENDA

ENVIRONMENT AND NATURAL RESOURCES Senator Montford, Chair Senator Albritton, Vice Chair

MEETING DATE: Monday, November 4, 2019

TIME: 4:00—6:00 p.m.

PLACE: Mallory Horne Committee Room, 37 Senate Building

MEMBERS: Senator Montford, Chair; Senator Albritton, Vice Chair; Senators Berman, Mayfield, and Wright

TAB	BILL NO. and INTRODUCER	BILL DESCRIPTION and SENATE COMMITTEE ACTIONS	COMMITTEE ACTION
1	SB 178 Rodriguez	Public Financing of Construction Projects; Prohibiting state-financed constructors from commencing construction of certain structures in coastal areas without first conducting a sea level impact projection study; requiring the Department of Environmental Protection to develop by rule a standard for such studies; requiring the department to enforce certain requirements and to adopt rules, etc. EN 11/04/2019 Favorable IS AEG AP	Favorable Yeas 5 Nays 0
2	SB 326 Perry (Identical H 73)	Environmental Regulation; Specifying requirements for contracts between residential recycling collectors or recovered materials processing facilities and counties or municipalities for the collection or processing of residential recycling material; prohibiting local governments from requiring further verification from the Department of Environmental Protection for certain projects; revising the types of dock and pier replacements and repairs that are exempt from such verification and certain permitting requirements, etc. EN 11/04/2019 Fav/CS CA RC	Fav/CS Yeas 5 Nays 0
3	SB 332 Stewart	Land Acquisition Trust Fund; Requiring a specified annual appropriation to the Florida Forever Trust Fund; prohibiting moneys from the Land Acquisition Trust Fund from being used for specified costs, etc. EN 11/04/2019 Favorable AEG AP	Favorable Yeas 5 Nays 0

COMMITTEE MEETING EXPANDED AGENDA

Environment and Natural Resources Monday, November 4, 2019, 4:00—6:00 p.m.

TAB	BILL NO. and INTRODUCER	BILL DESCRIPTION and SENATE COMMITTEE ACTIONS	COMMITTEE ACTION
4	SB 200 Montford	Advanced Well Stimulation Treatment; Defining the terms "high-pressure well stimulation" and "matrix acidization"; prohibiting the performance of high-pressure well stimulation or matrix acidization; providing that permits for drilling or for operating a well do not authorize the performance of high-pressure well stimulation or matrix acidization, etc.	Favorable Yeas 5 Nays 0
		EN 11/04/2019 Favorable IT AP	

S-036 (10/2008) Page 2 of 2

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.)

Pre	pared By: The	Professional Staff of the C	ommittee on Enviro	nment and Natural Resources
BILL:	SB 178			
INTRODUCER:	Senator Ro	driguez		
SUBJECT:	Public Fina	ncing of Construction I	Projects	
DATE:	November	1, 2019 REVISED:		
ANAL	YST	STAFF DIRECTOR	REFERENCE	ACTION
Schreiber		Rogers	EN	Favorable
2			IS	
3.			AEG	
ļ.			AP	

I. Summary:

SB 178 requires a public entity that commissions or manages a construction project within the coastal building zone using funds appropriated from the state to conduct a sea level impact projection (SLIP) study prior to commencing construction. The study must be conducted, submitted to the Department of Environmental Protection (DEP), and published on DEP's website before construction can commence.

The bill requires DEP to adopt rules establishing standards for the SLIP studies, and the standards must include certain requirements for how the studies will be conducted and the information they must contain. DEP must publish and maintain a copy of all SLIP studies on its website for ten years after receipt. The bill requires DEP to adopt rules as necessary to administer the section and authorizes DEP to enforce the requirements of the section.

The bill authorizes DEP to bring a civil action to seek injunctive relief to cease construction, enforce the section or rules adopted pursuant thereto, or seek recovery of state funds expended on a coastal structure, if construction commences without complying with the section. The bill states that the section may not be construed to create a cause of action for damages.

II. Present Situation:

Sea Level Rise and Coastal Flooding

With 1,350 miles of coastline and relatively low elevations, Florida is particularly vulnerable to coastal flooding.¹ There are three primary ways that climate change influences coastal flooding: sea level rise, storm surge intensity, and rainfall intensity and frequency.²

Sea level rise is an observed increase in the average local sea level or global sea level trend.³ The two major causes of global sea level rise are thermal expansion caused by the warming of the oceans (water expands as it warms) and the loss of land-based ice (ice sheets and glaciers) due to melting.⁴ Since 1880, the average global sea level has risen about 8 to 9 inches, and the rate of global sea level rise has been accelerating.⁵ The National Oceanic and Atmospheric Administration (NOAA) utilizes tide gauges to measure changes in sea level, and provides data on local sea level rise trends.⁶ Analysis of this data shows some low-lying areas in the southeastern U.S. experience higher local rates of sea level rise than the global average.⁷

¹ Florida Division of Emergency Management, *Enhanced State Hazard Mitigation Plan, State of Florida*, 107-108, 162 (2018) [hereinafter *SHMP*], *available at* https://www.floridadisaster.org/globalassets/dem/mitigation/mitigate-fl-shmp/shmp-2018-full_final_approved.6.11.2018.pdf (last visited Oct. 16, 2019).

² *Id.* at 107.

³ DEP, Florida Adaptation Planning Guidebook, Glossary (2018) [hereinafter DEP Guidebook], available at https://floridadep.gov/sites/default/files/AdaptationPlanningGuidebook.pdf (last visited Oct. 16, 2019); NASA, Facts: Sea Level, https://climate.nasa.gov/vital-signs/sea-level/ (last visited Oct. 16, 2019).

⁴ DEP Guidebook, at Glossary; NOAA, Climate Change: Ocean Heat Content, https://www.climate.gov/news-features/understanding-climate/climate-change-ocean-heat-content (last visited Oct. 16, 2019). More than 90 percent of the warming that has happened on Earth over the past 50 years has occurred in the ocean; IPCC, *The Ocean and Cryosphere in a Changing Climate*, SPM-8, SPM-10, SPM-19, SPM -21, SPM-23, 1-14, 4-3, 4-4, 4-14 (Sept. 2019) [hereinafter *IPCC Ocean and Cryosphere*], available at https://report.ipcc.ch/srocc/pdf/SROCC_FinalDraft_FullReport.pdf (last visited Oct. 16, 2019). Uncertainty regarding projected sea level rise by 2100 is mainly determined by ice sheets, especially in Antarctica and Greenland, which are losing ice at increasing rates.

⁵ U.S. Global Change Research Program, *Fourth National Climate Assessment*, 757 (2018)[hereinafter *NCA4*], *available at* https://nca2018.globalchange.gov/downloads/NCA4 2018 FullReport.pdf (last visited Oct. 31, 2019); *IPCC Ocean and Cryosphere*, at 4-3.

⁶ NOAA, *What is a Tide Gauge?*, https://oceanservice.noaa.gov/facts/tide-gauge.html (last visited Oct. 17, 2019); NOAA, Tides and Currents, *Sea Level Trends*, https://tidesandcurrents.noaa.gov/sltrends/ (last visited Oct. 16, 2019); *see DEP Guidebook*, at 8, 16.

⁷ NCA4, at 757.

Below is a table of projections for future sea level rise, globally and in regions of Florida, by the year 2100:

Se	ea Level Rise Pro	ojections for the Year 2100	
Source	Scale	Low (feet)	High (feet)
Intergovernmental Panel	Global	1.4	2.75
on Climate Change ⁸			
U.S. Global Change	Global	1	4.3
Research Program ⁹			
Southeast Florida	Southeast	2.59	6.75
Regional Climate	Florida		
Change Compact Sea			
Level Rise Work			
Group ¹⁰			
The Tampa Bay Climate	Tampa Bay	2	8.5
Science Advisory	Region		
Panel ¹¹			

Florida's coastal communities are experiencing high-tide flooding events, sometimes referred to as "sunny day" or "nuisance" flooding, with increasing frequency because sea level rise increases the height of high tides. ¹² In Florida, the area at risk from one foot of projected sea level rise contains more than 65,000 homes and 121,909 people, and Florida's 35 coastal counties contain 76% of its population. ¹³ In the U.S., sea level rise and flooding threaten approximately \$1 trillion in national wealth held in coastal real estate, and analyses estimate that there is a chance Florida could lose more than \$300 billion in property value by 2100. ¹⁴ Sea level rise affects the salinity of both surface water and groundwater through saltwater intrusion, posing

⁸ *IPCC Ocean and Cryosphere*, at 1-15, 4-4, CCB9-21. These projections are relative to a period of 1986-2005, and the projected range is based on different "representative concentration pathways," which are scenarios of future concentrations of greenhouse gases and aerosols and chemically active gases, and land use changes.

⁹ NCA4, at 406, 758, available at https://nca2018.globalchange.gov/downloads/NCA4_2018_FullReport.pdf (last visited Oct. 31, 2019).

¹⁰ Southeast Florida Regional Climate Change Compact Sea Level Rise Work Group, *Unified Sea Level Rise Projection*, *Southeast Florida*, 4-5 (2015), *available at* https://southeastfloridaclimatecompact.org/wp-content/uploads/2015/10/2015-Compact-Unified-Sea-Level-Rise-Projection.pdf (last visited Oct. 21, 2019). These projections are compared to the sea level in 1992.

¹¹ Tampa Bay Climate Science Advisory Panel, *Recommended Projections of Sea Level Rise in the Tampa Bay Region*, 1, 7 (Apr. 2019), *available at* http://www.tbrpc.org/wp-content/uploads/2019/05/CSAP_SLR_Recommendation_2019.pdf (last visited Oct. 16, 2019).

¹² SHMP, at 108, available at https://www.floridadisaster.org/globalassets/dem/mitigation/mitigate-fl--shmp/shmp-2018-full_final_approved.6.11.2018.pdf (last visited Oct. 15, 2019); NOAA, High-Tide Flooding, https://toolkit.climate.gov/topics/coastal-flood-risk/shallow-coastal-flooding-nuisance-flooding (last visited Oct. 16, 2019).

https://toolkit.climate.gov/topics/coastal-flood-risk/shallow-coastal-flooding-nuisance-flooding (last visited Oct. 16, 2019).

https://toolkit.climate.gov/topics/coastal-flood-risk/shallow-coastal-flooding-nuisance-flooding (last visited Oct. 16, 2019).

Oct. 16, 2019). ¹⁴ NCA4, at 324, 758; Zillow, Climate Change and Housing: Will a Rising Tide Sink All Homes? (2017),

https://www.zillow.com/research/climate-change-underwater-homes-12890/ (last visited Oct. 31, 2019) (stating that by 2100 \$883 billion in U.S. homes are at risk of being underwater with the total value of potentially underwater properties in Florida at \$413 billion); Union of Concerned Scientists, New Study Finds 1 Million Florida Homes Worth \$351 Billion Will Be At Risk From Tidal Flooding (2018), https://www.ucsusa.org/about/news/1-million-florida-homes-risk-tidal-flooding (last visited Oct. 31, 2019).

a risk particularly for shallow coastal aquifers.¹⁵ Sea level rise also pushes saltwater further upstream in tidal rivers and streams, raises coastal groundwater tables, and pushes saltwater further inland at the margins of coastal wetlands.¹⁶

Storm surge intensity and the intensity and precipitation rates of hurricanes are generally projected to increase.¹⁷ Higher sea levels will cause storm surges to travel farther inland and impact more properties than in the past.¹⁸ Storms and sea level rise are likely to lead to increased coastal erosion.¹⁹

Increases in evaporation rates and water vapor in the atmosphere increase rainfall intensity and precipitation extremes, and the sudden onset of water can overwhelm stormwater infrastructure.²⁰ As sea levels and groundwater levels rise, low areas drain more slowly, and the combined effects of rising sea levels and extreme rainfall events are increasing the frequency and magnitude of coastal and lowland flood events.²¹

Coastal Construction

Coastal Construction Control Line

Under Florida law, coastal construction is regulated by the Department of Environmental Protection (DEP). The state's purpose is to protect Florida's beaches and dunes from imprudent construction that can jeopardize the stability of the beach-dune system, accelerate erosion, provide inadequate protection to upland structures, endanger adjacent properties, or interfere with public beach access. Coastal construction" is defined as any work or activity likely to have a material physical effect on existing coastal conditions or natural shore and inlet processes. Florida's coastal local governments may establish coastal construction zoning and building codes in lieu of the statutory requirements as long as they are approved by DEP.

The coastal construction control line (CCCL) defines the portion of the beach-dune system that is subject to severe fluctuations caused by a 100-year storm surge, storm waves, or other forces

¹⁵ SHMP, at 106, available at https://www.floridadisaster.org/globalassets/dem/mitigation/mitigate-fl--shmp/shmp-2018-full final approved.6.11.2018.pdf (last visited Oct. 31, 2019).

¹⁶ *Id.* at 108.

¹⁷ *Id.* at 106, 141; *IPCC Ocean and Cryosphere*, at 6-21, *available at* https://report.ipcc.ch/srocc/pdf/SROCC FinalDraft FullReport.pdf (last visited Oct. 16, 2019); *NCA4*, at 95, 97, 116-117, 1482, *available at* https://nca2018.globalchange.gov/downloads/NCA4 2018 FullReport.pdf (last visited Oct. 31, 2019).

¹⁸ NCA4, at 758; SHMP, at 107, 112-113, 158-160; see also NOAA, Florida Marine Debris Emergency Response Guide: Comprehensive Guidance Document (Jan. 2019), available at https://marinedebris.noaa.gov/sites/default/files/publications-files/FL_Marine_Debris_Emergency_Response_Guide_2019.pdf (last visited Oct. 16, 2019).

¹⁹ NCA4, 331, 340-341, 833, 1054, 1495; SHMP, at 108; IPCC, Climate Change and Land, 4-44–4-45 (Aug. 2019), available at https://www.ipcc.ch/site/assets/uploads/2019/08/Fullreport-1.pdf (last visited Oct. 17, 2019).

²⁰ SHMP, at 99, 106, 116, 141, 181; NCA4, at 88, 763.

²¹ SHMP, at 106; NCA4, at 763.

²² Chapter 161, F.S.

²³ Section 161.053(1)(a), F.S.

²⁴ Section 161.021(6), F.S.

²⁵ Section 161.053(3), F.S.

such as wind, wave, or water level changes.²⁶ A 100-year storm is a shore-incident hurricane or any other storm with accompanying wind, wave, and storm surge intensity having a one percent chance of being equaled or exceeded in any given year.²⁷ Seaward of the CCCL, new construction and improvements to existing structures generally require a CCCL permit from DEP.²⁸ Due to the potential environmental impacts and greater risk of hazards from wind and flood, the standards for construction seaward of the CCCL are often more stringent than those applied in the rest of the coastal building zone.²⁹ Applicants must show that the proposed project will not result in a significant adverse impact.³⁰ CCCLs are established by DEP on a county-wide basis, and they currently exist for large portions of Florida's coast.³¹

The "mean high-water line" is the point on the shore marking the average height of the high waters over a 19-year period.³² The mean high-water line is generally the boundary between the publically-owned foreshore (the land alternately covered and uncovered by the tide) and the dry sand above the line which may be privately owned.³³ Generally, construction is prohibited within 50 feet of the mean high-water line, and this is known as the 50-foot setback.³⁴ Any structures below the mean high-water line which DEP determines serve no public purpose, endanger human life, health, or welfare, or prove to be undesirable or unnecessary must be adjusted, altered, or removed.³⁵

Above the mean high-water line is the "seasonal high-water line," which accounts for variations in the local mean high water, such as spring tides that occur twice per month.³⁶ The seasonal high-water line is used to create 30-year erosion projections of long-term shoreline recession based on historical measurements.³⁷ DEP makes 30-year erosion projections of the location of the seasonal high-water line on a site-specific basis upon receipt of an application.³⁸ With certain

²⁶ Section 161.053, F.S.; Fla. Admin. Code R. 62B-33.005(1); DEP, *The Homeowner's Guide to the Coastal Construction Control Line Program*, 3 (2017), *available at* https://floridadep.gov/water/coastal-construction-control-line/documents/homeowners-guide-coastal-construction-control-line (last visited Oct. 18, 2019).

²⁷ Fla. Admin. Code R. 62B-33.002(41).

²⁸ Section 161.053, F.S.; Fla. Admin. Code Chapters 62B-33 and 62B-34; DEP, *The Homeowner's Guide to the Coastal Construction Control Line Program*, 2 (2017); DEP, *ASK - Have Questions about the Coastal Construction Control Line (CCCL)*?, https://floridadep.gov/water/coastal-construction-control-line/content/ask-have-questions-about-coastal-construction (last visited Oct. 18, 2019).

²⁹ Fla. Admin. Code Ch. 62B-33.

³⁰ Fla. Admin. Code R. 62B-33.005.

³¹ Section 161.053(2), F.S.; DEP Geospatial Open Data, *Coastal Construction Control Lines (CCCL)*, http://geodata.dep.state.fl.us/datasets/4674ee6d93894168933e99aa2f14b923 2?geometry=-102.41%2C25.011%2C-60.596%2C31.77 (last visited Oct. 18, 2019).

³² Section 177.27(14), (15), F.S.

³³ Section 177.28, F.S.; **ss**. 161.052(1), 161.151(3), 161.161(3)-(5), and 161.191, F.S. Where an "erosion control line" is established, it serves as the mean high-water line when landward of the existing mean high-water line, and all lands seaward of a recorded erosion control line are deemed to be vested in the state.

³⁴ Fla. Admin. Code R. 62B-33.002(17).

³⁵ Section 161.061, F.S.

³⁶ Section 161.053(5)(a)2., F.S. "Seasonal high-water line" is defined as "the line formed by the intersection of the rising shore and the elevation of 150 percent of the local mean tidal range above local mean high water"; NOAA, *What Are Spring and Neap Tides?*, https://oceanservice.noaa.gov/facts/springtide.html (last visited Oct. 17, 2019).

³⁷ Fla. Admin. Code R. 62B-33.024.

³⁸ *Id.* Applicants may submit projections by licensed engineers.

exceptions, DEP or local governments may not issue CCCL permits for major structures that are seaward of the 30-year erosion projection.³⁹



The Coastal Zone Protection Act

The Coastal Zone Protection Act of 1985 (Act) was created to minimize the impacts that activities or construction near the coast have on Florida's coastal areas. ⁴⁰ The Legislature intended the Act to impose strict construction standards in Florida's coastal areas to protect the natural environment, private property, and life. ⁴¹ The Act covers activities and construction within the "coastal building zone:" an area stretching landward from the seasonal high-water line to a line 1,500 feet landward from the CCCL. ⁴² The Act uses the term "construction" to mean either the act of construction or the result of construction, and defines construction as "the carrying out of any building, clearing, filling, excavation, or substantial improvement in the size or use of any structure or the appearance of any land."

The Act defines certain types of structures regulated within the coastal building zone.⁴⁴ "Major structure[s]" are residential, commercial, or public buildings, and other construction having the potential for substantial impact on coastal zones.⁴⁵ "Nonhabitable major structure[s]" are structures that people would generally not dwell in, such as parking garages, drainage structures, electrical power plants, transmission lines, and underground storage tanks.⁴⁶ "Minor structure[s]"

³⁹ Section 161.053(5), F.S.; DEP, *The Homeowner's Guide to the Coastal Construction Control Line Program*, 6 (2017), available at https://floridadep.gov/water/coastal-construction-control-line (last visited Oct. 18, 2019).

⁴⁰ Sections 161.52-161.58, F.S.

⁴¹ Section 161.53(1),(4), and (5), F.S.

⁴² Section 161.54(1), F.S.; s. 161.55(4), F.S. On coastal barrier islands, the coastal building zone stretches 5,000 feet landward from the CCCL.

⁴³ Section 161.54(5), (12) F.S. "Substantial improvement" means "any repair, reconstruction, rehabilitation, or improvement of a structure when the actual cost of the improvement or repair of the structure to its pre-damage condition equals or exceeds 50 percent of the market value of the structure either: (a) Before the improvement or repair is started; or (b) If the structure has been damaged and is being restored, before the damage occurred."

⁴⁴ Section 161.54(6), F.S.

⁴⁵ Section 161.54(6)(a), F.S.

⁴⁶ Section 161.54(6)(c), F.S.

are structures that are considered to be expendable under wind, wave, or storm forces, and examples include walkways, bathhouses, fences, and uncovered paved areas.⁴⁷

The Act generally requires construction to be located a sufficient distance landward of the beach to permit natural shoreline fluctuations and preserve dune stability. As Nonhabitable major structures and minor structures must be designed to produce the minimum adverse impact on the beach and dune system. Minor structures must be designed to produce the minimum adverse impact to adjacent properties and reduce the potential for water or wind-blown material. The Act states that both DEP and local governments have the authority to adopt or enforce standards for construction seaward of the CCCL that are as restrictive or more restrictive than the Act.

At or before the sale of real property located partially or totally seaward of the CCCL, the seller must give prospective purchasers a certain written disclosure statement, which states that the property may be subject to coastal erosion and to federal, state, and local regulations that govern coastal property. The disclosure statement indicates that DEP can provide additional information on whether significant erosion conditions are associated with the shoreline of the property being purchased. The Legislature found it necessary to ensure that purchasers of interests in real property located in coastal areas are fully aware that such lands are subject to frequent and severe fluctuations. 53

Florida Building Code

The Department of Business and Professional Regulation's Florida Building Commission (the Commission) develops, amends, and adopts by rule the Florida Building Code.⁵⁴ The Florida Building Code provides the minimum standard building code which must be applied and enforced by each local government in Florida.⁵⁵ The code contains or incorporates by reference all laws and rules governing the design, construction, and repair of public and private structures in the state. In compliance with statutory requirements, local governments may pass ordinances creating local requirements that are more stringent than the statewide code.⁵⁶

The code contains structural design requirements for the design, construction, improvement, and repair of certain structures seaward of the CCCL or the 50-foot setback line.⁵⁷ Special standards in the code apply in areas such as High-Velocity Hurricane Zones and flood hazard areas.⁵⁸ In

⁴⁷ Section 161.54(6)(b), F.S.

⁴⁸ Section 161.55(3), F.S. The Act makes exceptions for certain structures such as piers, beach access ramps, or shore protection structures.

⁴⁹ Section 161.55(1), (2), F.S. Special requirements for flood proofing nonhabitable major structures exist for sewage treatment plants, public water supply systems, and underground utilities. These are intended to prevent infiltration of surface water from a 100-year storm event, or else loss of function during submersion.

⁵⁰ Section 161.55(1), F.S.

⁵¹ Section 161.56(1), F.S.

⁵² Section 161.57(2), F.S.

⁵³ Section 161.57(1), F.S.

⁵⁴ DBPR, Building Code Information System, https://floridabuilding.org/c/default.aspx (last visited Oct. 18, 2019).

⁵⁵ Section 553.73, F.S.; Fla. Admin. Code R. 61g20-1.001(1).

⁵⁶ Section 553.73 (4)-(5), F.S. Special exemptions apply to ordinances relating to flooding.

⁵⁷ Section 3109, Florida Building Code, Building, 6th Edition (2017), https://codes.iccsafe.org/content/FBC2017/chapter-31-special-construction#FBC2017_Ch31_Sec3109 (last visited Oct. 18, 2019).

⁵⁸ Section 202, Florida Building Code, Building, 6th Edition (2017).

flood hazard areas, if repairing "substantial damage," meaning the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the before-damaged market value, all aspects of the structure must comply with the requirements for new construction for flood design. "Substantial structural damage" means certain damage to the load-carrying structures of a building, and the code has separate requirements for repairing such damage. 60

The Commission updates the code every three years, and the 7th edition will be adopted in 2020.⁶¹ The proposed modifications include changes related to hurricane protection, such as new roofing requirements to mitigate water intrusion, more stringent wind resistance for vinyl siding, additional inspections for exterior wall coverings, and revised wind speed requirements for essential facilities.⁶²

Coastal Resilience

State Programs

Governor DeSantis' Executive Order 19-12 created the Office of Resilience and Coastal Protection to help prepare Florida's coastal communities and habitats for impacts from sea level rise by providing funding, technical assistance, and coordination among state, regional, and local entities. ⁶³ In August of 2019, the Governor appointed Florida's first Chief Resilience Officer, which will report to the Executive Officer of the Governor and collaborate with state agencies, local communities, and stakeholders to prepare for sea level rise and climate change. ⁶⁴

DEP's Florida Resilient Coastlines Program helps prepare coastal communities and habitats for the effects of climate change and sea level rise by offering technical assistance and funding to communities dealing with coastal flooding, erosion, and ecosystem changes. ⁶⁵ In 2019, DEP awarded funding for numerous projects providing assistance for coastal Florida communities. ⁶⁶ Priority areas include implementing statutory requirements and objectives, vulnerability assessments, adaptation plans, regional efforts, and environmental justice. ⁶⁷

⁵⁹ Section 404.5, Florida Building Code, Existing Building, 6th Edition (2017), https://codes.iccsafe.org/content/FEBC2017/chapter-4-prescriptive-compliance-method#FEBC2017 Ch04 Sec404.5 (last visited Oct. 21, 2019).

⁶⁰ Section 404, Florida Building Code, Existing Building, 6th Edition (2017).

⁶¹ Section 553.73(7), F.S.; DBPR, *Materials Related to the 2020 Update, Supplements - Post Commission August 13, 2019*, http://www.floridabuilding.org/fbc/thecode/2020_Code_Development/2020_Code_Development_Process.htm (last visited Oct. 19, 2019). In the top table, under Florida Supplement, the links show modifications approved by the Commission.

⁶² Florida Senate, Committee on Community Affairs, *Video of Committee Meeting on 10/14/2019*, 32:00:00 http://www.flsenate.gov/Media/VideoPlayer?EventId=2443575804_2019101070 (last visited Oct. 19, 2019).

⁶³ State of Florida, Office of the Governor, *Executive Order Number 19-12*, 5 (2019), *available at* https://www.flgov.com/wp-content/uploads/2019/01/EO-19-12-.pdf (last visited Oct. 20, 2019).

⁶⁴ Governor Ron DeSantis, News Releases, *Governor Ron DeSantis Announces Dr. Julia Nesheiwat as Florida's First Chief Resilience Officer* (Aug. 1, 2019), https://flgov.com/2019/08/01/governor-ron-desantis-announces-dr-julia-nesheiwat-as-floridas-first-chief-resilience-officer/ (last visited Oct. 20, 2019).

⁶⁵ DEP, Florida Resilient Coastlines Program, https://floridadep.gov/ResilientCoastlines (last visited Oct. 19, 2019).

⁶⁶ DEP, Funded Projects, https://floridadep.gov/rcp/florida-resilient-coastlines-program/content/funded-projects (last visited Oct 19, 2019).

⁶⁷ DEP, Resiliency Planning Grants, Fiscal Year 2020-2021, *Grant Goals and Priorities*, https://floridadep.gov/sites/default/files/RPG-FY-20-21-Goals-and-Priorities.pdf (last visited Oct. 19, 2019).

The program has published the Florida Adaptation Planning Guidebook to be used by local governments to develop and update adaptation plans for sea level rise.⁶⁸ The guidebook breaks down the adaptation planning process into four steps, and below is a summary:

- <u>Context</u>: organizing and engaging stakeholders, and delineating the geographic boundaries of the planning area, including the assets and structures contained therein.
- <u>Vulnerability Assessment</u>: an exposure analysis to determine how much sea level rise will
 occur and where, a sensitivity analysis to provide an inventory of community assets and
 features located in areas at risk, and assigning focus areas that will receive attention in
 adaptation strategies.
- Adaptation Strategies: assess adaptive capacities such as planning capabilities and fiscal
 capacity, prioritize adaptation needs, and identify adaptation strategies, which may include
 strategies in the following categories:
 - o "Protection" strategies that are structurally defensive measures;
 - o "Accommodation" strategies that alter the design of vulnerable structures so structures or land use can stay in place with modification;
 - "Retreat" strategies; and
 - o "Avoidance" strategies that guide development away from areas subject to coastal hazards, by implementing policies or offering incentives.
- <u>Implementation</u>: survey funding options, create a schedule of activities, actions and actors, and monitor and evaluate adaptation strategies.⁶⁹

DEP's Florida Coastal Management Program implements the Coastal Partnership Initiative, which makes funding from NOAA available to Florida's 35 coastal counties, and municipalities therein, that are required to include a coastal zone protection element in their comprehensive plan. To Grant applications must benefit the management of coastal resources, and meet the purpose of at least one of the initiative's priority areas: resilient communities, coastal resource stewardship, access to coastal resources, and working waterfronts.

DEP issues permits for coastal armoring, defined as manmade structures, such as seawalls or bulkheads, that protect upland properties and structures from erosion, wave action, or currents.⁷² While hardened structures may be necessary in areas of high wave energy, armoring can create problems such as costly construction and maintenance, erosion, and loss of biodiversity and ecosystem services.⁷³ Living shorelines are a nature-based approach to coastal protection, using natural elements such as ecosystems, vegetation, stone, or organic materials to increase coastal

⁶⁸ DEP Guidebook, available at https://floridadep.gov/sites/default/files/AdaptationPlanningGuidebook.pdf (last visited Oct. 19, 2019).

⁶⁹ *Id.* at 1-61.

⁷⁰ DEP, *Florida Coastal Management Program*, https://floridadep.gov/rcp/fcmp (last visited Oct. 19, 2019); DEP, *Coastal Partnership Initiative*, https://floridadep.gov/rcp/fcmp/content/coastal-partnership-initiative (last visited Oct. 19, 2019).

⁷¹ Fla. Admin. Code R. Ch. 62S-4.

⁷² Sections 161.053 and 161.085, F.S.; Fla. Admin. Code Rules 62B-33.0051, 62B-34.010(4), and 62B-41.002(4).

⁷³ DEP, Living Shorelines, https://floridadep.gov/rcp/rcp/content/living-shorelines (last visited Oct. 20, 2019).

resilience and adapt to sea level rise.⁷⁴ DEP provides exemptions from environmental resource permitting for small-scale shoreline stabilization projects including living shorelines projects.⁷⁵

In addition to DEP, other state agencies are working on coastal resilience in Florida. The Department of Transportation plans for resilience to prepare Florida's transportation system for potential hazards. The Department of Economic Opportunity works with DEP on the Community Resiliency Initiative, assisting communities with adaptation planning. The Fish and Wildlife Conservation Commission is Florida's lead agency on addressing the impacts of climate change on fish and wildlife, including adaptation strategies for Florida's coastal ecosystems. The Division of Emergency Management in the Executive Office of the Governor maintains a state-wide emergency management program, and its roles include administering federal mitigation grant programs and serving as Florida's state coordinating agency for the National Flood Insurance Program.

Regional Programs

The water management districts address flood protection as a core part of their respective missions, and many of their activities are related to resilience efforts. For example, the St. John's River Water Management District provides resources and cost-sharing to increase community resilience. The South Florida Water Management District is implementing comprehensive plans for addressing sea level rise, including a flood protection level of service program, incorporating sea level rise projections into planning, conducting vulnerability assessments, and assisting local governments. 81

In 2010, through a proactive regional collaboration to address climate change, the four counties of Broward, Miami-Dade, Monroe, and Palm Beach signed on to the Southeast Florida Regional Climate Change Compact.⁸² The Compact's innovative work has included developing a Regional

⁷⁴ Bilkovic et. al., *Living Shorelines: The Science and Management of Nature-Based Coastal Protection*, Taylor & Francis Group, 11-25 (2017); Florida Living Shorelines, *Home*, http://floridalivingshorelines.com/ (last visited Oct. 20, 2019).

⁷⁵ Fla. Admin. Code R. 62-330.051(12)(e); *see* UF IFAS, *Streamlining Resiliency: Regulatory Considerations in Permitting Small-Scale Living Shorelines in Florida*, 1-3 (Apr. 2018), https://edis.ifas.ufl.edu/pdffiles/SG/SG15500.pdf (last visited Oct. 20, 2019).

⁷⁶ DOT, *Florida Transportation Plan (FTP): Resilience*, http://www.floridatransportationplan.com/resilience.htm (last visited Oct. 25, 2019); DOT, *Florida Transportation Plan (FTP): Resilience Subcommittee Members*, http://www.floridatransportationplan.com/resilience committee.htm (last visited Oct. 31, 2019).

⁷⁷ DEO, *Adaptation Planning*, http://www.floridajobs.org/community-planning-and-development/programs/community-planning-table-of-contents/adaptation-planning (last visited Oct. 19, 2019).

⁷⁸ FWC, What FWC is Doing, https://myfwc.com/conservation/special-initiatives/climate-change/fwc/ (last visited Oct. 19, 2019); FWC, A Guide to Climate Change Adaptation for Conservation, 6-81–6-108, 9-35–9-51 (2016), available at https://myfwc.com/media/5864/adaptation-guide.pdf (last visited Oct. 20, 2019).

⁷⁹ DEM, *Mitigation*, https://www.floridadisaster.org/dem/mitigation/ (last visited Oct. 20, 2019); DEM, *State Flood Plain Management Program*, https://www.floridadisaster.org/dem/mitigation/floodplain/ (last visited Oct. 20, 2019).

⁸⁰ St. John's River Water Management District, *Sea-Level Rise*, https://www.sjrwmd.com/localgovernments/sea-level-rise/#projects (last visited Oct. 30, 2019).

Akintunde Owosina, South Florida Water Management District, Governing Board Meeting, June 13, 2019, Chief, Hydrology and Hydraulics Bureau, *Impact of Sea Level Rise on the SFWMD Mission*, *Focus on Flood Protection*, 2, 6, 7-10 (June 13, 2019) *available at* https://apps.sfwmd.gov/webapps/publicMeetings/viewFile/21964 (last visited Oct. 20, 2019). Regional Climate Leadership Summit, *Southeast Florida Regional Climate Change Compact* (2010), *available at* http://southeastfloridaclimatecompact.org/wp-content/uploads/2014/09/compact.pdf (last visited Oct. 31, 2019). What is the Compact?, http://southeastfloridaclimatecompact.org/about-us/what-is-the-compact/ (last visited Oct. 31, 2019).

Climate Action Plan and developing a Unified Sea Level Rise Projection. 83 One of the many recommendations in the regional plan is for local governments in the region to incorporate the unified sea level rise projections into their comprehensive plans, and at least 45 municipalities have completed this recommendation. 84

Florida's regional planning councils have many programs on resilience initiatives. ⁸⁵ For example, the Tampa Bay Regional Planning Council formed the ONE BAY Resilient Communities program, which advances collaborative resilience in the Tampa Bay region. ⁸⁶ The East Central Florida Regional Planning Council has produced a Regional Resiliency Action Plan and formed the East Central Florida Regional Resilience Collaborative. ⁸⁷ The Northeast Florida Regional Council has provided a Regional Action Plan for sea level rise. ⁸⁸

Local Governments

Florida's local governments in coastal areas must have a coastal management element in their comprehensive plans.⁸⁹ These coastal management elements must use principles to eliminate inappropriate and unsafe development in coastal areas when opportunities arise, and they must:

- Include development and redevelopment principles, strategies, and engineering solutions that reduce the flood risk in coastal areas which results from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea-level rise.
- Encourage the use of best practices development and redevelopment principles, strategies, and engineering solutions that will result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency (FEMA).
- Identify site development techniques and best practices that may reduce losses due to flooding and claims made under flood insurance policies issued in Florida.
- Be consistent with, or more stringent than, the flood-resistant construction requirements in the Florida Building Code and applicable federal flood plain management regulations.
- Require that any construction activities seaward of the coastal construction control lines be consistent with Ch. 161, F.S., which regulates coastal construction.

⁸³ SFRCCC, Regional Climate Action Plan, http://southeastfloridaclimatecompact.org/regional-climate-action-plan/ (last visited Oct. 31, 2019); SFRCCC, Unified Sea Level Rise Projection, Southeast Florida, 5, 11, 13, 33 (2015), available at http://www.southeastfloridaclimatecompact.org/wp-content/uploads/2015/10/2015-Compact-Unified-Sea-Level-Rise-Projection.pdf (last visited Oct. 31, 2019).

⁸⁴ SFRCCC, ST-1: Incorporate Projections Into Plans,

http://southeastfloridaclimatecompact.org/recommendations/incorporate-projections-into-plans/ (last visited Oct. 31, 2019); see also SFRCCC, Integrating the Unified Sea Level Rise Projection into Local Plans, 17-21 (2017), available at https://southeastfloridaclimatecompact.org/wp-content/uploads/2017/01/SLRGuidance-Doc.pdf (last visited Oct. 16, 2019). 85 Peril of Flood - Florida's Coastal Resiliency Portal, https://www.perilofflood.net/ (last visited Oct. 30, 2019).

⁸⁶ Tampa Bay Regional Planning Council, *One Bay Resilient Communities*, http://www.tbrpc.org/onebay/ (last visited Oct. 31, 2019).

⁸⁷ East Central Florida Regional Planning Council, *East Central Florida Regional Resiliency Action Plan* (2018), *available at* http://ftp.ecfrpc.org/Projects/East%20Central%20Florida%20Regional%20Resiliency%20Action%20Plan.pdf (last visited Oct. 31, 2019); East Central Florida Regional Planning Council, *East Central Florida Regional Resilience Collaborative*, https://metroplanorlando.org/wp-content/uploads/CFMPOA-MOU-presentation.pdf (last visited Oct. 31, 2019).

⁸⁸ Northeast Florida Regional Council, *Summary and Regional Action Plan: A Report of the Emergency Preparedness Committee on Sea Level Rise*, http://www.nefrc.org/WiP/PDFs/Resource-Library/Regional-Action-Plan.pdf (last visited Oct. 31, 2019).

⁸⁹ Sections 380.24 and 163.3177(6)(g), F.S.

Encourage local governments to participate in the National Flood Insurance Program
 Community Rating System administered by the FEMA to achieve flood insurance premium
 discounts for their residents.⁹⁰

Florida's Community Planning Act authorizes local governments to establish an "adaptation action area" designation in their comprehensive plan for low-lying coastal zones that are experiencing coastal flooding and are vulnerable to the impacts of sea level rise. ⁹¹ This enables local governments to develop policies and funding priorities that improve coastal resilience and plan for sea level rise.

Flood Insurance

The Federal Emergency Management Act (FEMA) administers the National Flood Insurance Program, created to offer federally subsidized flood insurance to property owners and to encourage land-use controls in floodplains. The National Flood Insurance Program makes flood insurance available to communities that adopt and enforce a floodplain management ordinance to reduce future flood risk to new construction in floodplains. Communities eligible to participate in the National Flood Insurance Program community rating system receive discounts on flood insurance premiums.

An important aspect of the National Flood Insurance Program is the flood maps that FEMA creates to support the program. Flood Insurance Rate Map is an official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community. These maps have many applications relevant to resilience planning, including communicating base flood elevations and flood risk, establishing special flood hazard areas where flood insurance is required, and setting local floodplain and building standards.

III. Effect of Proposed Changes:

Section 1 creates s. 161.551, F.S., titled "Public financing of construction projects within the coastal building zone."

⁹⁰ Section 163.3178(2)(f), F.S. (referencing 44 C.F.R. part 60, relating to insurance and hazard mitigation, criteria for land management and use); Ch. 2015-69, Laws of Fla. This is referred to as the "Peril of Flood" law.

⁹¹ Sections 163.3177(6)(g) and (10) and 163.3164(1), F.S.; Ch. 2011-139, Laws of Fla.

⁹² 42 U.S.C. § 4001 *et seq.*; 44 C.F.R. Ch. I, Subchap. B.; FEMA, *The National Flood Insurance Program*, https://www.fema.gov/national-flood-insurance-program (last visited Oct. 20, 2019).

⁹³ FEMA, *National Flood Insurance Program, Program Description* (Aug. 1, 2002), *available at* https://www.fema.gov/media-library-data/20130726-1447-20490-2156/nfipdescrip_1_.pdf (last visited Oct. 20, 2019).

⁹⁴ FEMA, Fact Sheet: Community Rating System (2017), available at https://www.fema.gov/media-library-data/1507029324530-082938e6607d4d9eba4004890dbad39c/NFIP_CRS_Fact_Sheet_2017_508OK.pdf (last visited Oct. 20, 2019).

⁹⁵ FEMA, FEMA Flood Map Service Center: Welcome!, https://msc.fema.gov/portal/home (last visited Oct. 20, 2019). ⁹⁶ 44 C.F.R. § 59.1.

⁹⁷ FEMA, Flood Maps: Know Your Risk and Take Action Against Flooding, 2, available at https://www.fema.gov/media-library-data/1516468489259-8eb4bfef27ab35159b2f140a2926e809/What_Goes_Into_a_Flood_Map.pdf (last visited Oct. 20, 2019); SHMP, at 102-103, available at https://www.floridadisaster.org/globalassets/dem/mitigation/mitigate-fl--shmp/shmp-2018-full_final_approved.6.11.2018.pdf (last visited Oct. 16, 2019); DEP Guidebook, at 40-41, available at https://floridadep.gov/sites/default/files/AdaptationPlanningGuidebook.pdf (last visited Oct. 16, 2019).

The bill creates definitions for five terms, defining them as they are used in the section:

"Coastal structure" is defined as "a major structure or nonhabitable major structure within the coastal building zone." As used within the section, the term "coastal structure" would generally include residential, commercial, and public buildings that could substantially impact coastal zones, as well as major uninhabited structures such as parking garages or drainage structures, that are located landward of the seasonal high-water line to a line 1,500 feet landward from the coastal construction control line.

- "Public entity" is defined as "the state or any of its political subdivisions, or any municipality, county, agency, special district, authority, or other public body corporate of the state which is demonstrated to perform a public function or to serve a governmental purpose that could properly be performed or served by an appropriate governmental unit."
- "SLIP study" is defined as "a sea level impact projection study" as established by the Department of Environmental Protection (DEP) pursuant to requirements specified in the bill.
- "State-financed constructor" is defined as "a public entity that commissions or manages a construction project using funds appropriated from the state."
- "Substantial flood damage" is defined to mean "flood, inundation, or wave action damage resulting from a single event, such as a flood or tropical weather system, where such damage exceeds 25 percent of the market value of the coastal structure at the time of the event."

The bill requires DEP to develop by rule the standards for a SLIP study. The standards may require that a professional engineer sign off on the study. The standards must require that state-financed constructors, at a minimum, do all of the following for conducting a SLIP study:

- Use a systematic, interdisciplinary, and scientifically accepted approach in the natural sciences and construction design in conducting the study.
- Assess the flooding, inundation, and wave action damage risks relating to the coastal structure over its expected life or 50 years, whichever is less. This assessment must:
 - O Take into account potential sea level rise and increased storm risk during the expected life of the coastal structure or 50 years, whichever is less;
 - Provide scientific and engineering evidence of the risk to the coastal structure and methods used to mitigate, adapt to, or reduce this risk;
 - Use and consider available scientific research and generally accepted industry practices;
 - o Provide the mean average annual chance of substantial flood damage over the expected life of the coastal structure or 50 years, whichever is less; and
 - Analyze potential public safety and environmental impacts resulting from damage to the coastal structure including, but not limited to, leakage of pollutants, electrocution and explosion hazards, and hazards resulting from floating or flying structural debris.
- Provide alternatives for the coastal structure's design and siting, including discussion of how
 such alternatives would affect the potential public safety and environmental impacts assessed
 in the study, as well as the risks and costs associated with maintaining, repairing, and
 constructing the coastal structure.

The bill requires DEP to publish and maintain on its website a copy of all SLIP studies it receives pursuant to the bill for a period of at least 10 years following receipt. However, the bill requires DEP to redact, prior to publication, any portion of a SLIP study containing information

that is exempt from Art. I, s. 24(a) of the State Constitution and s. 119.07(1), F.S., which provide for access to public records.

The bill requires state-financed constructors to conduct SLIP studies pursuant to DEP's standards. The bill prohibits a state-financed constructor from commencing construction of a coastal structure without first doing all of the following:

- Conducting a SLIP study meeting the standards established by DEP.
- Submitting the SLIP study to DEP. If multiple coastal structures are to be built concurrently within one project, a state-financed constructor may conduct and submit one SLIP study for the entire project.
- Receiving notification from DEP that the study was received and published on DEP's website for at least 30 days. The bill states that the state-financed constructor is solely responsible for ensuring that the study submitted to DEP meets the established standards.

If a state-financed constructor begins construction of a coastal structure without first submitting a SLIP study as required under the section, then DEP is authorized to institute a civil action. Such civil action may be brought to:

- Seek injunctive relief to cease further construction of the coastal structure;
- Enforce compliance with s. 161.551, F.S., or rules adopted by DEP pursuant to it; or,
- If the coastal structure has been completed or substantially completed, seek recovery of all or a portion of state funds expended on the coastal structure.

DEP is required to adopt rules as necessary to administer the section. DEP is authorized to enforce the requirements of the section. The section may not be construed to create a cause of action for damages.

Section 2 states that the act shall take effect on July 1, 2020.

IV. Constitutional Issues:

Α.	Municipality/County Mandates Restrictions:
	None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

The bill requires procedures that identify long-term risks to coastal structures, and potentially avoid some of the large costs of mitigating and dealing with future damage to, or even loss of, coastal structures. These coastal structures may be used or owned by residents or private businesses. Therefore, the bill may have a positive, indeterminate impact on the private sector.

C. Government Sector Impact:

The bill requires DEP to promulgate and administer new regulations which may cause DEP to incur additional costs.

Requiring government entities to conduct a sea level impact study prior to construction may result in an indeterminate, negative fiscal impact on the government sector in the short-term. However, the bill requires procedures that identify risks and potentially avoid damage and loss of coastal structures that are constructed, at least in part, using funds appropriated from the state. This may result in state funds, or potentially federal grant money that is appropriated from the state, being used for coastal structures that have less risk of damage or loss over time, or coastal structures that may remain undamaged or intact for a longer period of time. Therefore, the bill may result in an indeterminate, positive impact on the government sector in the long-term.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill creates section 161.551 of the Florida Statutes.

IX. **Additional Information:**

Committee Substitute – Statement of Changes: (Summarizing differences between the Committee Substitute and the prior version of the bill.) A.

None.

B. Amendments:

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.

By Senator Rodriguez

37-00373-20 2020178

A bill to be entitled

An act relating to public financing of construction projects; creating s. 161.551, F.S.; defining terms; prohibiting state-financed constructors from commencing construction of certain structures in coastal areas without first conducting a sea level impact projection study; requiring the Department of Environmental Protection to develop by rule a standard for such studies; requiring the department to publish such studies on its website, subject to certain conditions; requiring the department to enforce certain requirements and to adopt rules; providing for enforcement; providing an effective date.

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

Section 1. Section 161.551, Florida Statutes, is created to read:

161.551 Public financing of construction projects within the coastal building zone.—

- (1) As used in this section, the term:
- (a) "Coastal structure" means a major structure or nonhabitable major structure within the coastal building zone.
- (b) "Public entity" means the state or any of its political subdivisions, or any municipality, county, agency, special district, authority, or other public body corporate of the state which is demonstrated to perform a public function or to serve a governmental purpose that could properly be performed or served by an appropriate governmental unit.

37-00373-20 2020178

(c) "SLIP study" means a sea level impact projection study as established by the department pursuant to subsection (3).

- (d) "State-financed constructor" means a public entity that commissions or manages a construction project using funds appropriated from the state.
- (e) "Substantial flood damage" means flood, inundation, or wave action damage resulting from a single event, such as a flood or tropical weather system, where such damage exceeds 25 percent of the market value of the coastal structure at the time of the event.
- (2) A state-financed constructor may not commence construction of a coastal structure without:
- (a) Conducting a SLIP study that meets the requirements established by the department;
 - (b) Submitting the study to the department; and
- (c) Receiving notification from the department that the study was received and that it has been published on the department's website pursuant to paragraph (6)(a) for at least 30 days. The state-financed constructor is solely responsible for ensuring that the study submitted to the department for publication meets the requirements under subsection (3).
- (3) The department shall develop by rule a standard by which a state-financed constructor must conduct a SLIP study and may require that a professional engineer sign off on the study.

 At a minimum, this standard must require that a state-financed constructor do all of the following:
- (a) Use a systematic, interdisciplinary, and scientifically accepted approach in the natural sciences and construction design in conducting the study.

37-00373-20 2020178

(b) Assess the flooding, inundation, and wave action damage risks relating to the coastal structure over its expected life or 50 years, whichever is less.

- 1. The assessment must take into account potential sea level rise and increased storm risk during the expected life of the coastal structure or 50 years, whichever is less.
- 2. The assessment must provide scientific and engineering evidence of the risk to the coastal structure and methods used to mitigate, adapt to, or reduce this risk.
- 3. The assessment must use and consider available scientific research and generally accepted industry practices.
- 4. The assessment must provide the mean average annual chance of substantial flood damage over the expected life of the coastal structure or 50 years, whichever is less.
- 5. The assessment must analyze potential public safety and environmental impacts resulting from damage to the coastal structure including, but not limited to, leakage of pollutants, electrocution and explosion hazards, and hazards resulting from floating or flying structural debris.
- (c) Provide alternatives for the coastal structure's design and siting, and how such alternatives would impact the risks specified in subparagraph (b) 5. as well as the risk and cost associated with maintaining, repairing, and constructing the coastal structure.

If multiple coastal structures are to be built concurrently within one project, a state-financed constructor may conduct and submit one SLIP study for the entire project for publication by the department.

37-00373-20 2020178

(4) If a state-financed constructor commences construction of a coastal structure but has not complied with the SLIP study requirement under subsection (2), the department may institute a civil action in a court of competent jurisdiction to:

- (a) Seek injunctive relief to cease further construction of the coastal structure or enforce compliance with this section or with rules adopted by the department pursuant to this section.
- (b) If the coastal structure has been completed or has been substantially completed, seek recovery of all or a portion of state funds expended on the coastal structure.
- (5) This section may not be construed to create a cause of action for damages.
 - (6) The department:
- (a) Shall publish and maintain a copy of all SLIP studies submitted pursuant to this section on its website for at least 10 years after receipt. However, any portion of a study containing information that is exempt from s. 119.07(1) and s. 24(a), Art. I of the State Constitution must be redacted by the department before publication.
- (b) Shall adopt rules as necessary to administer this section.
- (7) The department may enforce the requirements of this section.
 - Section 2. This act shall take effect July 1, 2020.

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.)

SILL: NTRODUCER:	CS/SB 326				
INTRODUCER:	E				
	Environment and N	atural Resource	s Committee and	d Senator Peri	cy .
SUBJECT:	Environmental Reg	ulation			
DATE:	November 5, 2019	REVISED:			
ANAL	VOT STAE	F DIRECTOR	REFERENCE		ACTION
1. Schreiber	Rogei		EN	Fav/CS	ACTION
2.			CA		
3.			RC		

COMMITTEE SUBSTITUTE - Substantial Changes

I. Summary:

CS/SB 326 requires local governments to address the contamination of recyclable material in contracts for the collection, transportation, and processing of residential material. The bill applies to contracts between a local government and a residential recycling collector or recovered materials processing facility that are executed or renewed after October 1, 2020. Such contracts are required to define the term "contaminated recyclable material." The bill specifies topics that must be addressed in local government contracts with both residential recycling collectors and recovered materials processing facilities.

The bill prohibits local governments from requiring a person claiming an exemption from environmental resource permitting requirements to provide further verification from the Department of Environmental Protection. The bill also changes the specific criteria for the replacement or repair of a dock or pier that is exempt from environmental resource permitting requirements.

II. Present Situation:

Local Government Solid Waste Responsibilities

Each Florida county has the responsibility and authority to provide for the operation of solid waste disposal facilities to meet the needs of all incorporated and unincorporated areas of the

county. Municipalities are responsible for collecting and transporting solid waste from their jurisdictions to a solid waste disposal facility operated by a county or operated under a contract with a county. Counties may charge reasonable fees for the handling and disposal of solid waste at their facilities. Under Florida law, "recycling" is defined as "any process by which solid waste, or materials that would otherwise become solid waste, are collected, separated, or processed and reused or returned to use in the form of raw materials or intermediate or final products."

Each Florida county must have a recyclable materials recycling program that has a goal of recycling 40 percent of recyclable solid waste by December 31, 2012; 50 percent by December 31, 2014; 60 percent by December 31, 2016; 70 percent by December 31, 2018; and 75 percent by December 31, 2020.⁵ These programs must be designed to recover a significant portion of at least four of the following materials from the solid waste stream prior to final disposal at a solid waste disposal facility and to offer these materials for recycling:

- Newspapers.
- Aluminum cans.
- Steel cans.
- Glass.
- Plastic bottles.
- Cardboard.
- Office paper.
- Yard trash.⁶

Each county must ensure, to the maximum extent possible, that municipalities within its boundaries participate in the preparation and implementation of recycling and solid waste management programs through interlocal agreements or other means provided by law. Counties and municipalities are encouraged to form cooperative arrangements for implementing recycling programs. Certain activities are eligible for special credit towards achieving a county's recycling goals, including the use of solid waste as a fuel in a renewable energy facility, the innovative use of yard trash or other clean wood waste or paper waste, and providing opportunities to recycle in counties with smaller populations. To assess progress, counties must provide information on their solid waste management programs and recycling activities to the Department of Environmental Protection (DEP) by April 1 of each year.

¹ Section 403.706(1), F.S. Municipalities may also be authorized to construct and operate solid waste disposal facilities, if certain statutory requirements are met; Fla. Admin. Code Ch. 62-701.

 $^{^{2}}$ Id.

 $^{^3}$ Id.

⁴ Section 407.703(31), F.S.

⁵ Section 403.706(2)(a), F.S. These are interim goals to help Florida reach the goal of recycling at least 75% of municipal solid waste by 2020; Ch. 2010-143, s. 7, Laws of Fla.; *see* s. 403.7032(2), F.S.

⁶ Section 403.706(2)(f), F.S.

⁷ Section 403.706(3), F.S.

⁸ Section 403.706(2)(a), F.S.

⁹ Section 403.706(4), F.S.

¹⁰ Section 403.706(7), F.S.; Fla. Admin. Code R. 62-716.450.

"Municipal solid waste" includes any solid waste, except for sludge, resulting from the operation of residential, commercial, governmental, or institutional establishments that would normally be collected, processed, and disposed of through a public or private solid waste management service. The term includes yard trash but does not include solid waste from industrial, mining, or agricultural operations. DEP may reduce or modify the municipal solid waste recycling goal that a county is required to achieve if the county demonstrates to DEP that:

- The achievement of the goal would have an adverse effect on the financial obligations of the county that are directly related to the county's waste-to-energy facility; and
- The county cannot remove normally combustible materials from solid waste that is to be
 processed at a waste-to-energy facility because of the need to maintain a sufficient amount of
 solid waste to ensure the financial viability of the facility.¹²

The goal may only be reduced or modified to the extent necessary to alleviate the adverse effects on the financial viability of a county's waste-to-energy facility. ¹³

In the development and implementation of a curbside recyclable materials collection program, a county or municipality must enter into negotiations with a franchisee who is operating to exclusively collect solid waste within a service area of a county or municipality to undertake curbside recyclable materials collection responsibilities for a county or municipality. ¹⁴ Local governments are authorized to enact ordinances that require and direct all residential properties, multifamily dwellings, and apartment complexes and industrial, commercial, and institutional establishments as defined by the local government to establish programs for the separation of recyclable materials designated by the local government. ¹⁵ A market must exist for the recyclable materials and the local government must specifically intend for them to be recycled. ¹⁶ Local governments are authorized to provide for the collection of the recyclable materials. Such ordinances may include, but are not limited to, prohibiting any person from knowingly disposing of recyclable materials designated by the local government and that ensure the collection of recovered materials as necessary to protect public health and safety. ¹⁷

A local government may not:

- Require a commercial establishment that generates source-separated recovered materials to sell or otherwise convey its recovered materials to the local government or to a facility designated by the local government;
- Restrict such a generator's right to sell or otherwise convey such recovered materials to any properly certified recovered materials dealer who has registered with DEP; or
- Enact any ordinance that prevents such a dealer from entering into a contract with a commercial establishment to purchase, collect, transport, process, or receive source-separated recovered materials.¹⁸

¹¹ Section 403.706(5), F.S.

¹² Section 403.706(6), F.S.

¹³ Id.

¹⁴ Section 403.706(9), F.S.

¹⁵ Section 403.706(21), F.S.

¹⁶ *Id*.

¹⁷ Section 403.706(21), F.S.

¹⁸ Section 403.7046(3), F.S.

Local governments may require a commercial establishment to source separate the recovered materials generated on the premises.¹⁹

Florida's Recycling Goal

In 2008, in recognition of the volume of waste generated by Floridians and visitors every year and the value of some of these discarded commodities, the Legislature set a statewide goal to recycle at least 75 percent of the municipal solid waste that would otherwise be disposed of in waste management facilities, landfills, or incineration facilities by 2020.²⁰ DEP has established numerous programs and initiatives to reach that goal.²¹ In 2010, the Legislature established the interim goals that counties must pursue leading up to 2020.²²

In those years when the recycling rate does not meet the statutory thresholds for these interim goals, DEP must provide a report to the President of the Senate and the Speaker of the House of Representatives.²³ This report must identify those additional programs or statutory changes needed to achieve the state's recycling goals.²⁴ Florida achieved the interim recycling goals established for 2012 and 2014, but Florida's recycling rate for 2016 was 56 percent, falling short of the interim recycling goal of 60 percent by 2017.²⁵ DEP submitted the most recent report in 2017.²⁶ The current practices in Florida are not expected to significantly increase the recycling rate beyond the 56 percent rate.²⁷ The most recent interim goal was 70 percent by January 1, 2019, and DEP is expected to submit a report prior to the 2020 session. Without significant changes to Florida's current approach, the state's recycling rate will likely fall short of the 2020 goal of 75 percent.²⁸

DEP, in partnership with material recycling facilities (MRFs) across the state, has developed a statewide public education campaign, entitled "Rethink. Reset. Recycle." The campaign addresses the need to educate Florida residents on how to reduce single stream curbside recycling contamination. Plastic bags, cords, clothing and packaging are causing contamination problems that can shut down MRF operations and cause good loads of recyclables to become trash. The campaign also serves to remind Florida residents of the basics of curbside recycling: clean and dry aluminum and steel cans, plastic bottles and jugs, and paper and cardboard. DEP is also working on the following recycling options:

• Evaluating the implications of shifting from a weight-based recycling goal to sustainable materials management processes.

¹⁹ Section 403.7046(3)(a), F.S.

²⁰ Section 403.7032, F.S.; Ch. 2008-227, s. 95, Laws of Fla.; see DEP, Florida and the 2020 75% Recycling Goal, Volume I - Report, 5 (2017), available at https://floridadep.gov/sites/default/files/FinalRecyclingReportVolume1 0 0.pdf (last visited Oct. 29, 2019).

²¹ DEP, Recycling, http://www.dep.state.fl.us/waste/categories/recycling/default.htm (last visited Oct. 29, 2019).

²² Section 403.706(2)(a), F.S.

²³ Section 403.706(2)(e), F.S.

 $^{^{24}}$ Id

²⁵ DEP, Florida and the 2020 75% Recycling Goal, Volume I - Report, 5 (2017), available at https://floridadep.gov/sites/default/files/FinalRecyclingReportVolume1_0_0.pdf (last visited Oct. 30, 2019).

²⁶ *Id*.

²⁷ *Id*.

²⁸ *Id*.

²⁹ *Id.* at 11.

• Researching the concept of moving from a weight-based recycling goal of 75 percent by 2020, to market specific goals such as a food diversion goal or an organics recycling goal.

- Engaging Florida's state universities and the Florida Department of Education to review potential K-12 curriculum programs emphasizing waste reduction and recycling practices.
- Continuing to work with state agencies to identify recycling/cost saving measures specific to their operations.
- Providing counties not achieving the interim recycling goals with assistance in analyzing, planning and executing opportunities to increase recycling.³⁰

A number of counties and municipalities have instituted single stream recycling programs.³¹ Single stream recycling programs allow all accepted recyclables to be placed in a single, curbside recycling cart, comingling materials from paper and plastic bottles to metal cans and glass containers. Single stream recycling programs have been marginally successful in providing curbside collection efficiency by increasing the amount of recyclables collected and residential participation. While there are many advantages to single stream recycling, it has not consistently yielded positive results for the recycling industry. The unexpected consequence of single stream recycling has been the collection of unwanted materials and poorly sorted recyclables, resulting in increased contamination originating in the curbside recycling cart.³²

Contamination hinders processing at MRFs when unwanted items are placed into recycling carts.³³ For example, plastic bags are often harmful to the automated equipment typically used to process and separate recyclable materials from single stream collections. While MRFs are equipped to handle some non-recyclable materials, excessive contamination can undermine the recycling process resulting in additional sorting, processing, energy consumption, and other increased costs due to equipment downtime, repair or replacement needs. In addition to increased recycling processing costs, contamination also results in poorer quality recyclables, and increased rejection and landfilling of unusable materials. Although some local governments have implemented successful single stream recycling programs with low contamination rates, contamination rates for other programs have continued to rise, in some case reaching contamination rates of more than 30-40 percent by weight.³⁴

Recycling Markets

Until 2017, China consumed over 50 percent of the recycled paper and plastic in the world, including 70 percent of the plastics collected for recycling in the U.S.³⁵ In 2017, China banned the import of 24 recyclable materials, such as post-consumer plastics and mixed paper, and also

<u>ym.com/resource/resmgr/files/issue_brief/China%27s_Changing_Policies_on.pdf</u> (last visited Oct. 29, 2019); Cheryl Katz, *Piling Up: How China's Ban on Importing Waste Has Stalled Global Recycling*, Yale Environment 360 (March 7, 2019), https://e360.yale.edu/features/piling-up-how-chinas-ban-on-importing-waste-has-stalled-global-recycling (last visited Oct. 29, 2019).

³⁰ *Id*.

³¹ *Id.* at 13.

³² *Id*.

³³ *Id*.

³⁴ *Id*.

³⁵ National Waste & Recycling Association, *Issue Brief: China's Changing Policies on Important Recyclables*, 1 (Apr. 2018), available at https://c.ymcdn.com/sites/wasterecycling.site-

announced a 0.5 percent contamination standard for most recyclables not named in the ban.³⁶ In 2018, the ban was expanded to include post-industrial plastics and a variety of scrap metals, and China implemented pre-shipment inspection requirements for inbound loads of scrap material.³⁷ The ban has caused shipments of recyclables to other Southeast Asian countries to increase dramatically, resulting in nations including Malaysia, Indonesia, Thailand, and Vietnam enacting policies restricting the import of recyclable materials.³⁸

China's recycling ban has created substantial challenges around the world for the solid waste and recycling industry.³⁹ The loss of the Chinese export markets has caused recyclable materials to be sent to landfills or burned.⁴⁰ China's ban and higher standards for contamination are leading to higher costs and lower revenues for the U.S. recycling industry.⁴¹ In Florida, local governments are struggling with issues such as rising costs of processing and high contamination rates.⁴² DEP reports that these changes in the markets create challenges for Florida as it tries to increase its recycling rates, because future growth is dependent on healthy markets.⁴³ The increased supply of recyclable materials and decreased demand from end markets has resulted in a depression of commodities prices in the recycling industry.⁴⁴ In response, DEP has utilized state programs and engaged various stakeholders in an effort to develop and grow Florida's recycling markets.⁴⁵

³⁶ Resource Recycling, From Green Fence to Red Alert: A China Timeline, https://resource-recycling.com/recycling/2018/02/13/green-fence-red-alert-china-timeline/ (last visited Oct. 29, 2019); National Waste & Recycling Association, Issue Brief: China's Changing Policies on Important Recyclables, 1 (Apr. 2018), available at https://resource-resource/resmgr/files/issue_brief/China%27s_Changing_Policies_on.pdf (last visited Oct. 29, 2019).

³⁷ *Id.*; see Resource Recycling, China Reiterates Total Ban and Tries to Define "Solid Waste" (Apr. 9, 2019), available at https://resource-recycling.com/recycling/2019/04/09/china-reiterates-total-ban-and-tries-to-define-solid-waste/ (last visited Oct. 31, 2019). China is planning a total ban on virtually all recovered material imports.

³⁸ Resource Recycling, From Green Fence to Red Alert: A China Timeline, https://resource-recycling.com/recycling/2018/02/13/green-fence-red-alert-china-timeline/ (last visited Oct. 29, 2019); Christopher Joyce, Where Will Your Plastic Trash Go Now That China Doesn't Want It?, NPR (Mar. 13, 2019), https://www.npr.org/sections/goatsandsoda/2019/03/13/702501726/where-will-your-plastic-trash-go-now-that-china-doesnt-want-it (last visited Oct. 29, 2019).

³⁹ see Brooks et. al., The Chinese Import Ban and Its Impact on Global Plastic Waste Trade, SCIENCES ADVANCES (Jun. 20, 2019), available at https://advances.sciencemag.org/content/advances/4/6/eaat0131.full.pdf (last visited Oct. 29, 2019).

⁴⁰ Cheryl Katz, *Piling Up: How China's Ban on Importing Waste Has Stalled Global Recycling*, Yale Environment 360 (March 7, 2019), https://e360.yale.edu/features/piling-up-how-chinas-ban-on-importing-waste-has-stalled-global-recycling (last visited Oct. 29, 2019).

⁴¹ National Waste & Recycling Association, *Issue Brief: China's Changing Policies on Important Recyclables*, 1-2 (Apr. 2018), *available at* https://c.ymcdn.com/sites/wasterecycling.site-

ym.com/resource/resmgr/files/issue brief/China%27s Changing Policies on.pdf (last visited Oct. 29, 2019).

⁴² Waste Dive, *How Recycling is Changing in All 50 States* (June 5, 2019), https://www.wastedive.com/news/what-chinese-import-policies-mean-for-all-50-states/510751/ (last visited Oct. 31, 2019).

⁴³ DEP, *Florida and the 2020 75% Recycling Goal*, *Volume I - Report*, 15 (2017), *available at* https://floridadep.gov/sites/default/files/FinalRecyclingReportVolume1_0_0.pdf (last visited Oct. 29, 2019). ⁴⁴ *Id*.

⁴⁵ *Id.* at 15-17.

Exceptions to Requirements for Environmental Resource Permitting

DEP's Environmental Resource Permitting (ERP) program regulates activities involving the alteration of surface water flows. ⁴⁶ The ERP program governs the construction, alteration, operation, maintenance, repair, abandonment, and removal of stormwater management systems, dams, impoundments, reservoirs, appurtenant works, and works (including docks, piers, structures, dredging, and filling located in, on, or over wetlands or other surface waters). ⁴⁷

For a number of low impact activities and projects that are narrow in scope, an ERP permit is not required under state law. Engaging in these activities and projects requires compliance with applicable local requirements, but generally requires no notice to DEP. A broad array of activities are expressly exempted from the ERP program, and these include, but are not limited to: the installation of overhead transmission lines; installation and maintenance of boat ramps; work on seawalls and mooring pilings, swales, and foot bridges; the removal of aquatic plants; construction and operation of floating vessel platforms; and work on county roads and bridges. Included among activities exempt from the requirement to obtain an ERP permit is the replacement or repair of existing docks and piers, if fill material is not used and the replacement or repaired dock or pier is in the same location and of the same configuration and dimensions as the dock or pier being replaced or repaired. Although permitting is not required for these activities, there may be a requirement to obtain permission to use or occupy lands owned by the Board of Trustees of the Internal Improvement Trust Fund or a water management district in its governmental or proprietary capacity.

III. Effect of Proposed Changes:

Section 1 amends s. 403.706, F.S., which establishes the responsibilities and authority of local governments to provide facilities and programs for solid waste management and recycling.

The bill defines "residential recycling collector" as "a for-profit business entity that collects and transports residential recyclable material on behalf of a county or municipality."

The bill states that after a contract is executed a residential recycling collector is not required to collect or transport contaminated recycling material, except pursuant to a contract consistent with the requirements below. The bill requires that each contract between a residential recycling collector and a county or municipality for the collection or transport of waste, and each request for proposal or other solicitation for the collection of residential recycling material, include all of the following:

• A definition of "contaminated recyclable material" that is appropriate for the local community.

⁴⁶ Chapter 373, p. IV, F.S.; Fla. Admin. Code Ch. 62-330; DEP, *DEP 101: Environmental Resource Permitting*, https://floridadep.gov/comm/press-office/content/dep-101-environmental-resource-permitting (last visited Oct. 29, 2019).

⁴⁷ Fla. Admin. Code R. 62-330.010. The responsibilities for implementing the statewide ERP program are partially delegated by DEP to the water management districts and certain local governments.

⁴⁸ Section 403.813, F.S.

⁴⁹ Fla. Admin. Code Rules 62-330.050(1) and 62-330.051(2).

⁵⁰ Section 403.813(1), F.S.; Fla. Admin. Code R. 62-330.051.

⁵¹ Section 403.813(1)(d), F.S.

⁵² Section 403.813(1), F.S.

• The respective strategies and obligations of the local government and residential recycling collector to reduce the amount of contaminated recyclable material being collected.

- The procedures for identifying, documenting, managing, and rejecting residential recycling containers, truck loads, carts, or bins containing contaminated recyclable material.
- The remedies authorized to be used if a container, cart, or bin contains contaminated recyclable material.
- The education and enforcement measures that will be used to reduce the amount of contaminated recyclable material.

The bill states that after a contract is executed a recovered materials processing facility is not required to process contaminated recyclable material, except pursuant to a contract consistent with the requirements below. The bill requires that each contract between a recovered materials processing facility and a county or municipality for processing residential recyclable material, and each request for proposal or other solicitation for processing residential recyclable material, include all of the following:

- A definition of "contaminated recyclable material" that is appropriate for the local community.
- The respective strategies and obligations of the local government and the facility to reduce the amount of contaminated recyclable material being collected and processed.
- The procedures for identifying, documenting, managing, and rejecting residential recycling containers, truck loads, carts, or bins containing contaminated recyclable materials.
- The remedies authorized to be used if a container or truck load contains contaminated recyclable material.

These contractual requirements apply only to the collection and processing of material obtained from residential recycling activities. As used in the bill, the term "contaminated recyclable material" refers only to recyclable material that is comingled or mixed with solid waste or other nonhazardous material. Contaminated recyclable material, as used in the bill, does not include "contamination" as used in programs such as brownfield site cleanup, water quality remediation, drycleaning-solvent-contaminated site cleanup, petroleum-contaminated site cleanup, cattle dipping vat site cleanup, or other hazardous waste remediation.

The contractual requirements apply to each contract between a municipality or county and a residential recycling collector or recovered materials processing facility executed or renewed after October 1, 2020.

Section 2 amends s. 403.813, F.S., which identifies certain activities for which an environmental resource permit is not required.

The bill prohibits a local government from requiring a person claiming an exemption under s. 403.813(1), F.S., to provide further verification from the Department of Environmental Protection.

The bill revises the exemption in current law from environmental resource permitting for the replacement or repair of existing docks or piers. Rather than requiring that the replaced or repaired dock or pier be in the same location and of the same configuration and dimensions as

the dock or pier being replaced or repaired, the bill states that it must be within 5 feet of the same location and no larger in size than the existing dock or pier. No additional aquatic resources may be adversely and permanently impacted by such replacement or repair.

Section 3 states that this act shall take effect on July 1, 2020.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

Indeterminate.

C. Government Sector Impact:

The bill requires local governments to include provisions in their contracts requiring procedures for minimizing contamination and authorizing remedies if contamination exists. Requirements for local governments to perform additional procedures in the collection or transport of residential recyclable material, to establish and enforce new standards for contamination, or to be subject to remedies may cause local governments to incur additional costs. Therefore, this bill may result in an indeterminate, negative fiscal impact on local governments.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill substantially amends the following sections of the Florida Statutes: 403.706, 403.813.

IX. Additional Information:

A. Committee Substitute – Statement of Substantial Changes: (Summarizing differences between the Committee Substitute and the prior version of the bill.)

CS by Environment and Natural Resources Committee on November 4, 2019:

- Deletes the requirement that the definition of "contaminated recyclable material" in certain local government contracts must take into consideration the available markets for recyclable material, available waste composition studies, and other relevant factors.
- Clarifies that after the execution of a contract is when a residential recycling collector
 or recycled material processing facility is not required to collect, transport, or process
 contaminated recyclable material except pursuant to specified contractual
 requirements.

B. Amendments:

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.

LEGISLATIVE ACTION Senate House Comm: RCS 11/04/2019

The Committee on Environment and Natural Resources (Perry) recommended the following:

Senate Amendment (with title amendment)

2 3

5

6 7

8

9

10

1

Delete lines 45 - 72

4 and insert:

material" that is appropriate for the local community.

(b) Each contract between a recovered materials processing facility and a county or municipality for processing residential recyclable material, and each request for proposal or other solicitation for processing residential recyclable material, must include all of the following:

12 13

14

15

16

17 18

19

20

21

22

23

24

25

26

27

28

29

30 31

32

33

34 35

36

37

38

39



1. The respective strategies and obligations of the county or municipality and the facility to reduce the amount of contaminated recyclable material being collected and processed. 2. The procedures for identifying, documenting, managing, and rejecting residential recycling containers, truck loads, carts, or bins that contain contaminated recyclable material. 3. The remedies authorized to be used if a container or truck load contains contaminated recyclable material. 4. A definition of the term "contaminated recyclable material" that is appropriate for the local community. (c) After a contract is executed, a residential recycling collector is not required to collect or transport contaminated recyclable material, except pursuant to a contract consistent with paragraph (a). As used in this subsection, the term "residential recycling collector" means a for-profit business entity that collects and transports residential recyclable material on behalf of a county or municipality. (d) After a contract is executed, a recovered materials processing facility is not ======== T I T L E A M E N D M E N T ========= And the title is amended as follows: Delete lines 7 - 11 and insert: residential recycling material; providing that a residential recycling collector or recovered materials processing facility is not required to collect,

transport, or process contaminated recyclable material

except pursuant to specified contractual requirements



40 after a contract is executed; defining By Senator Perry

8-00240C-20 2020326

A bill to be entitled

An act relating to environmental regulation; amending s. 403.706, F.S.; specifying requirements for contracts between residential recycling collectors or recovered materials processing facilities and counties or municipalities for the collection or processing of residential recycling material; prohibiting counties and municipalities from requiring the collection, transport, or processing of contaminated recyclable material by residential recycling collectors or recovered materials processing facilities; defining the term "residential recycling collector"; providing applicability; amending s. 403.813, F.S.; prohibiting local governments from requiring further verification from the Department of Environmental Protection for certain projects; revising the types of dock and pier replacements and repairs that are exempt from such verification and certain permitting requirements; providing an effective date.

2021

1

2

3

4

5

6 7

8

9

10

11

1213

1415

1617

18

19

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

2223

24

25

Section 1. Subsection (22) of section 403.706, Florida Statutes, is renumbered as subsection (23), and a new subsection (22) is added to that section, to read:

2627

28

29

403.706 Local government solid waste responsibilities.—
(22)(a) Each contract between a residential recycling
collector and a county or municipality for the collection or
transport of residential recyclable material, and each request

8-00240C-20 2020326

for proposal or other solicitation for the collection of residential recyclable material, must include all of the following:

- 1. The respective strategies and obligations of the county or municipality and the residential recycling collector to reduce the amount of contaminated recyclable material being collected.
- 2. The procedures for identifying, documenting, managing, and rejecting residential recycling containers, truck loads, carts, or bins that contain contaminated recyclable material.
- 3. The remedies authorized to be used if a container, cart, or bin contains contaminated recyclable material.
- 4. The education and enforcement measures that will be used to reduce the amount of contaminated recyclable material.
- 5. A definition of the term "contaminated recyclable material" that is appropriate for the local community, taking into consideration available markets for recyclable material, available waste composition studies, and other relevant factors.
- (b) Each contract between a recovered materials processing facility and a county or municipality for processing residential recyclable material, and each request for proposal or other solicitation for processing residential recyclable material, must include all of the following:
- 1. The respective strategies and obligations of the county or municipality and the facility to reduce the amount of contaminated recyclable material being collected and processed.
- 2. The procedures for identifying, documenting, managing, and rejecting residential recycling containers, truck loads, carts, or bins that contain contaminated recyclable material.

8-00240C-20 2020326

3. The remedies authorized to be used if a container or truck load contains contaminated recyclable material.

- 4. A definition of the term "contaminated recyclable material" that is appropriate for the local community, taking into consideration available markets for recyclable material, available waste composition studies, and other relevant factors.
- (c) A residential recycling collector is not required to collect or transport contaminated recyclable material, except pursuant to a contract consistent with paragraph (a). As used in this subsection, the term "residential recycling collector" means a for-profit business entity that collects and transports residential recyclable material on behalf of a county or municipality.
- (d) A recovered materials processing facility is not required to process contaminated recyclable material, except pursuant to a contract consistent with paragraph (b).
- (e) This subsection applies to each contract between a municipality or county and a residential recycling collector or recovered materials processing facility executed or renewed after October 1, 2020.
- (f) This subsection applies only to the collection and processing of material obtained from residential recycling activities. As used in this subsection, the term "contaminated recyclable material" refers only to recyclable material that is comingled or mixed with solid waste or other nonhazardous material. The term does not include contamination as that term or a derivation of that term is used in chapter 376 and other sections of chapter 403, including, but not limited to, brownfield site cleanup, water quality remediation, drycleaning-

8-00240C-20 2020326

solvent-contaminated site cleanup, petroleum-contaminated site cleanup, cattle dipping vat site cleanup, or other hazardous waste remediation.

Section 2. Subsection (1) of section 403.813, Florida Statutes, is amended to read:

403.813 Permits issued at district centers; exceptions.-

- (1) A permit is not required under this chapter, chapter 373, chapter 61-691, Laws of Florida, or chapter 25214 or chapter 25270, 1949, Laws of Florida, and a local government may not require a person claiming this exception to provide further department verification, for activities associated with the following types of projects; however, except as otherwise provided in this subsection, this subsection does not relieve an applicant from any requirement to obtain permission to use or occupy lands owned by the Board of Trustees of the Internal Improvement Trust Fund or a water management district in its governmental or proprietary capacity or from complying with applicable local pollution control programs authorized under this chapter or other requirements of county and municipal governments:
- (a) The installation of overhead transmission lines, <u>having</u> with support structures <u>that</u> which are not constructed in waters of the state and which do not create a navigational hazard.
- (b) The installation and repair of mooring pilings and dolphins associated with private docking facilities or piers and the installation of private docks, piers, and recreational docking facilities, or piers and recreational docking facilities of local governmental entities when the local governmental entity's activities will not take place in any manatee habitat,

8-00240C-20 2020326

any of which docks:

1. Has 500 square feet or less of over-water surface area for a dock which is located in an area designated as Outstanding Florida Waters or 1,000 square feet or less of over-water surface area for a dock which is located in an area that which is not designated as Outstanding Florida Waters;

- 2. Is constructed on or held in place by pilings or is a floating dock which is constructed so as not to involve filling or dredging other than that necessary to install the pilings;
- 3. <u>May Shall</u> not substantially impede the flow of water or create a navigational hazard;
- 4. Is used for recreational, noncommercial activities associated with the mooring or storage of boats and boat paraphernalia; and
- 5. Is the sole dock constructed pursuant to this exemption as measured along the shoreline for a distance of 65 feet, unless the parcel of land or individual lot as platted is less than 65 feet in length along the shoreline, in which case there may be one exempt dock may be allowed per parcel or lot.

Nothing in This paragraph does not shall prohibit the department from taking appropriate enforcement action pursuant to this chapter to abate or prohibit any activity otherwise exempt from permitting pursuant to this paragraph if the department can demonstrate that the exempted activity has caused water pollution in violation of this chapter.

(c) The installation and maintenance to design specifications of boat ramps on artificial bodies of water where navigational access to the proposed ramp exists or the

8-00240C-20 2020326___

installation of boat ramps open to the public in any waters of the state where navigational access to the proposed ramp exists and where the construction of the proposed ramp will be less than 30 feet wide and will involve the removal of less than 25 cubic yards of material from the waters of the state, and the maintenance to design specifications of such ramps.; however, The material to be removed shall be placed on upon a self-contained, upland spoil site which will so as to prevent the escape of the spoil material into the waters of the state.

- (d) The replacement or repair of existing docks and piers, except that fill material may not be used and the replacement or repaired dock or pier must be within 5 feet of the same location and no larger in size than the existing dock or pier, and no additional aquatic resources may be adversely and permanently impacted by such replacement or repair in the same location and of the same configuration and dimensions as the dock or pier being replaced or repaired. This does not preclude the use of different construction materials or minor deviations to allow upgrades to current structural and design standards.
- (e) The restoration of seawalls at their previous locations or upland of, or within 18 inches waterward of, their previous locations. However, This may shall not affect the permitting requirements of chapter 161, and department rules shall clearly indicate that this exception does not constitute an exception from the permitting requirements of chapter 161.
- (f) The performance of maintenance dredging of existing manmade canals, channels, intake and discharge structures, and previously dredged portions of natural water bodies within drainage rights-of-way or drainage easements which have been

176

177

178

179

180181

182

183184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199200

201

202

203

8-00240C-20 2020326

recorded in the public records of the county, when where the spoil material is to be removed and placed deposited on a selfcontained, upland spoil site which will prevent the escape of the spoil material into the waters of the state, provided that no more dredging is to be performed than is necessary to restore the canals, channels, and intake and discharge structures, and previously dredged portions of natural water bodies, to original design specifications or configurations, provided that the work is conducted in compliance with s. 379.2431(2)(d), provided that no significant impacts occur to previously undisturbed natural areas, and provided that control devices for return flow and best management practices for erosion and sediment control are used utilized to prevent bank erosion and scouring and to prevent turbidity, dredged material, and toxic or deleterious substances from discharging into adjacent waters during maintenance dredging. Further, For maintenance dredging of previously dredged portions of natural water bodies within recorded drainage rights-of-way or drainage easements, an entity that seeks an exemption must notify the department or water management district, as applicable, at least 30 days before prior to dredging and provide documentation of original design specifications or configurations when where such exist. This exemption applies to all canals and previously dredged portions of natural water bodies within recorded drainage rights-of-way or drainage easements constructed before prior to April 3, 1970, and to those canals and previously dredged portions of natural water bodies constructed on or after April 3, 1970, pursuant to all necessary state permits. This exemption does not apply to the removal of a natural or manmade barrier separating a canal

205

206

207

208

209

210

211

212213

214

215216

217

218

219

220

221222

223

224

225

226

227

228229

230

231

232

8-00240C-20 2020326

or canal system from adjacent waters. When no previous permit has been issued by the Board of Trustees of the Internal Improvement Trust Fund or the United States Army Corps of Engineers for construction or maintenance dredging of the existing manmade canal or intake or discharge structure, such maintenance dredging shall be limited to a depth of no more than 5 feet below mean low water. The Board of Trustees of the Internal Improvement Trust Fund may fix and recover from the permittee an amount equal to the difference between the fair market value and the actual cost of the maintenance dredging for material removed during such maintenance dredging; $\overline{}$ however, $\underline{}$ $\frac{1}{100}$ charge may not $\frac{1}{100}$ be exacted by the state for material removed during such maintenance dredging by a public port authority. The removing party may subsequently sell such material; however, proceeds from such sale that exceed the costs of maintenance dredging shall be remitted to the state and deposited in the Internal Improvement Trust Fund.

(g) The maintenance of existing insect control structures, dikes, and irrigation and drainage ditches, provided that spoil material is <u>placed</u> deposited on a self-contained, upland spoil site which will prevent the escape of the spoil material into waters of the state. In the case of insect control structures, if the cost of using a self-contained, upland spoil site is so excessive, as determined by the Department of Health, pursuant to s. 403.088(1), that it will inhibit proposed insect control, then-existing spoil sites or dikes may be used, upon notification to the department. In the case of insect control where upland spoil sites are not used pursuant to this exemption, turbidity control devices shall be used to confine

8-00240C-20 2020326

the spoil material discharge to that area previously disturbed when the receiving body of water is used as a potable water supply, is designated as shellfish harvesting waters, or functions as a habitat for commercially or recreationally important shellfish or finfish. In all cases, no more dredging is to be performed than is necessary to restore the dike or irrigation or drainage ditch to its original design specifications.

- (h) The repair or replacement of existing functional pipes or culverts the purpose of which is the discharge or conveyance of stormwater. In all cases, the invert elevation, the diameter, and the length of the culvert <u>may shall</u> not be changed. However, the material used for the culvert may be different from the original.
- (i) The construction of private docks of 1,000 square feet or less of over-water surface area and seawalls in artificially created waterways when where such construction will not violate existing water quality standards, impede navigation, or affect flood control. This exemption does not apply to the construction of vertical seawalls in estuaries or lagoons unless the proposed construction is within an existing manmade canal where the shoreline is currently occupied in whole or part by vertical seawalls.
 - (j) The construction and maintenance of swales.
- (k) The installation of aids to navigation and buoys associated with such aids, provided the devices are marked pursuant to s. 327.40.
- (1) The replacement or repair of existing open-trestle foot bridges and vehicular bridges that are 100 feet or less in

8-00240C-20 2020326

length and two lanes or less in width, provided that no more dredging or filling of submerged lands is performed other than that which is necessary to replace or repair pilings and that the structure to be replaced or repaired is the same length, the same configuration, and in the same location as the original bridge. No Debris from the original bridge may not shall be allowed to remain in the waters of the state.

- (m) The installation of subaqueous transmission and distribution lines laid on, or embedded in, the bottoms of waters in the state, except in Class I and Class II waters and aquatic preserves, provided no dredging or filling is necessary.
- (n) The replacement or repair of subaqueous transmission and distribution lines laid on, or embedded in, the bottoms of waters of the state.
- (o) The construction of private seawalls in wetlands or other surface waters when where such construction is between and adjoins at both ends existing seawalls; follows a continuous and uniform seawall construction line with the existing seawalls; is not no more than 150 feet in length; and does not violate existing water quality standards, impede navigation, or affect flood control. However, in estuaries and lagoons the construction of vertical seawalls is limited to the circumstances and purposes stated in s. 373.414(5)(b)1.-4. This paragraph does not affect the permitting requirements of chapter 161, and department rules must clearly indicate that this exception does not constitute an exception from the permitting requirements of chapter 161.
- (p) The restoration of existing insect control impoundment dikes which are less than 100 feet in length. Such impoundments

8-00240C-20 2020326

shall be connected to tidally influenced waters for 6 months each year beginning September 1 and ending February 28 if feasible or operated in accordance with an impoundment management plan approved by the department. A dike restoration may involve no more dredging than is necessary to restore the dike to its original design specifications. For the purposes of this paragraph, restoration does not include maintenance of impoundment dikes of operating insect control impoundments.

- (q) The construction, operation, or maintenance of stormwater management facilities which are designed to serve single-family residential projects, including duplexes, triplexes, and quadruplexes, if they are less than 10 acres total land and have less than 2 acres of impervious surface and if the facilities:
- 1. Comply with all regulations or ordinances applicable to stormwater management and adopted by a city or county;
- 2. Are not part of a larger common plan of development or sale; and
- 3. Discharge into a stormwater discharge facility exempted or permitted by the department under this chapter which has sufficient capacity and treatment capability as specified in this chapter and is owned, maintained, or operated by a city, county, special district with drainage responsibility, or water management district; however, this exemption does not authorize discharge to a facility without the facility owner's prior written consent.
- (r) The removal of aquatic plants, the removal of tussocks, the associated replanting of indigenous aquatic plants, and the associated removal from lakes of organic detrital material when

8-00240C-20 2020326

320 such planting or removal is performed and authorized by permit or exemption granted under s. 369.20 or s. 369.25, provided 322 that:

- 1. Organic detrital material that exists on the surface of natural mineral substrate shall be allowed to be removed to a depth of 3 feet or to the natural mineral substrate, whichever is less;
- 2. All material removed pursuant to this paragraph shall be placed on a self-contained, deposited in an upland spoil site which in a manner that will prevent the escape reintroduction of the spoil material into waters in the state except when spoil material is permitted to be used to create wildlife islands in freshwater bodies of the state when a governmental entity is permitted pursuant to s. 369.20 to create such islands as a part of a restoration or enhancement project;
- 3. All activities are performed in a manner consistent with state water quality standards; and
- 4. No Activities under this exemption are not conducted in wetland areas, as defined in s. 373.019(27), which are supported by a natural soil as shown in applicable United States Department of Agriculture county soil surveys, except when a governmental entity is permitted pursuant to s. 369.20 to conduct such activities as a part of a restoration or enhancement project.

344 345

346

321

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

The department may not adopt implementing rules for this paragraph, notwithstanding any other provision of law.

(s) The construction, installation, operation, or 347 348 maintenance of floating vessel platforms or floating boat lifts, 8-00240C-20 2020326

provided that such structures:

- 1. Float at all times in the water for the sole purpose of supporting a vessel so that the vessel is out of the water when not in use;
- 2. Are wholly contained within a boat slip previously permitted under ss. 403.91-403.929, 1984 Supplement to the Florida Statutes 1983, as amended, or part IV of chapter 373, or do not exceed a combined total of 500 square feet, or 200 square feet in an Outstanding Florida Water, when associated with a dock that is exempt under this subsection or associated with a permitted dock with no defined boat slip or attached to a bulkhead on a parcel of land where there is no other docking structure;
- 3. Are not used for any commercial purpose or for mooring vessels that remain in the water when not in use, and do not substantially impede the flow of water, create a navigational hazard, or unreasonably infringe upon the riparian rights of adjacent property owners, as defined in s. 253.141;
- 4. Are constructed and used so as to minimize adverse impacts to submerged lands, wetlands, shellfish areas, aquatic plant and animal species, and other biological communities, including locating such structures in areas where seagrasses are least dense adjacent to the dock or bulkhead; and
- 5. Are not constructed in areas specifically prohibited for boat mooring under conditions of a permit issued in accordance with ss. 403.91-403.929, 1984 Supplement to the Florida Statutes 1983, as amended, or part IV of chapter 373, or other form of authorization issued by a local government.

379

380

381

382

383

384

385

386

387

388

389

390

391392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

8-00240C-20 2020326

Structures that qualify for this exemption are relieved from any requirement to obtain permission to use or occupy lands owned by the Board of Trustees of the Internal Improvement Trust Fund and, with the exception of those structures attached to a bulkhead on a parcel of land where there is no docking structure, may shall not be subject to any more stringent permitting requirements, registration requirements, or other regulation by any local government. Local governments may require either permitting or one-time registration of floating vessel platforms to be attached to a bulkhead on a parcel of land where there is no other docking structure as necessary to ensure compliance with local ordinances, codes, or regulations. Local governments may require either permitting or one-time registration of all other floating vessel platforms as necessary to ensure compliance with the exemption criteria in this section; to ensure compliance with local ordinances, codes, or regulations relating to building or zoning, which are no more stringent than the exemption criteria in this section or address subjects other than subjects addressed by the exemption criteria in this section; and to ensure proper installation, maintenance, and precautionary or evacuation action following a tropical storm or hurricane watch of a floating vessel platform or floating boat lift that is proposed to be attached to a bulkhead or parcel of land where there is no other docking structure. The exemption provided in this paragraph shall be in addition to the exemption provided in paragraph (b). The department shall adopt a general permit by rule for the construction, installation, operation, or maintenance of those floating vessel platforms or floating boat lifts that do not qualify for the exemption

408

409

410

411

412

413

414

415416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431432

433

434

435

8-00240C-20 2020326

provided in this paragraph but do not cause significant adverse impacts to occur individually or cumulatively. The issuance of such general permit shall also constitute permission to use or occupy lands owned by the Board of Trustees of the Internal Improvement Trust Fund. No Local governments may not government shall impose a more stringent regulation, permitting requirement, registration requirement, or other regulation covered by such general permit. Local governments may require either permitting or one-time registration of floating vessel platforms as necessary to ensure compliance with the general permit in this section; to ensure compliance with local ordinances, codes, or regulations relating to building or zoning that are no more stringent than the general permit in this section; and to ensure proper installation and maintenance of a floating vessel platform or floating boat lift that is proposed to be attached to a bulkhead or parcel of land where there is no other docking structure.

- (t) The repair, stabilization, or paving of existing county maintained roads and the repair or replacement of bridges that are part of the roadway, within the Northwest Florida Water Management District and the Suwannee River Water Management District, provided:
- 1. The road and associated bridge were in existence and in use as a public road or bridge, and were maintained by the county as a public road or bridge on or before January 1, 2002;
- 2. The construction activity does not realign the road or expand the number of existing traffic lanes of the existing road; however, the work may include the provision of safety shoulders, clearance of vegetation, and other work reasonably

8-00240C-20 2020326

necessary to repair, stabilize, pave, or repave the road, provided that the work is constructed by generally accepted engineering standards;

- 3. The construction activity does not expand the existing width of an existing vehicular bridge in excess of that reasonably necessary to properly connect the bridge with the road being repaired, stabilized, paved, or repaved to safely accommodate the traffic expected on the road, which may include expanding the width of the bridge to match the existing connected road. However, no Debris from the original bridge may not shall be allowed to remain in waters of the state, including wetlands;
- 4. Best management practices for erosion control shall be employed as necessary to prevent water quality violations;
- 5. Roadside swales or other effective means of stormwater treatment must be incorporated as part of the project;
- 6. No more dredging or filling of wetlands or water of the state is performed than that which is reasonably necessary to repair, stabilize, pave, or repave the road or to repair or replace the bridge, in accordance with generally accepted engineering standards; and
- 7. Notice of intent to use the exemption is provided to the department, if the work is to be performed within the Northwest Florida Water Management District, or to the Suwannee River Water Management District, if the work is to be performed within the Suwannee River Water Management District, 30 days before performing any work under the exemption.

Within 30 days after this act becomes a law, the department

8-00240C-20 2020326

shall initiate rulemaking to adopt a no fee general permit for the repair, stabilization, or paving of existing roads that are maintained by the county and the repair or replacement of bridges that are part of the roadway where such activities do not cause significant adverse impacts to occur individually or cumulatively. The general permit shall apply statewide and, with no additional rulemaking required, apply to qualified projects reviewed by the Suwannee River Water Management District, the St. Johns River Water Management District, the Southwest Florida Water Management District, and the South Florida Water Management District under the division of responsibilities contained in the operating agreements applicable to part IV of chapter 373. Upon adoption, this general permit shall, pursuant to the provisions of subsection (2), supersede and replace the exemption in this paragraph.

- (u) Notwithstanding any provision to the contrary in this subsection, a permit or other authorization under chapter 253, chapter 369, chapter 373, or this chapter is not required for an individual residential property owner for the removal of organic detrital material from freshwater rivers or lakes that have a natural sand or rocky substrate and that are not Aquatic Preserves or for the associated removal and replanting of aquatic vegetation for the purpose of environmental enhancement, providing that:
- 1. No activities under this exemption are conducted in wetland areas, as defined in s. 373.019(27), which are supported by a natural soil as shown in applicable United States

 Department of Agriculture county soil surveys.
 - 2. No filling or peat mining is allowed.

495

496

497

498

499

500

501

502

503

504

505506

507

508

509

510

511

512

513

514

515

516

517

518519

520

521

522

8-00240C-20 2020326

3. No removal of native wetland trees, including, but not limited to, ash, bay, cypress, gum, maple, or tupelo, occurs.

- 4. When removing organic detrital material, no portion of the underlying natural mineral substrate or rocky substrate is removed.
- 5. Removed organic detrital material and plant material removed is placed on deposited in an upland spoil site which in a manner that will not cause water quality violations.
- 6. All activities are conducted in such a manner, and with appropriate turbidity controls, so as to prevent any water quality violations outside the immediate work area.
- 7. Replanting with a variety of aquatic plants native to the state shall occur in a minimum of 25 percent of the preexisting vegetated areas where organic detrital material is removed, except for areas where the material is removed to bare rocky substrate; however, an area may be maintained clear of vegetation as an access corridor. The access corridor width may not exceed 50 percent of the property owner's frontage or 50 feet, whichever is less, and may be a sufficient length waterward to create a corridor to allow access for a boat or swimmer to reach open water. Replanting must be at a minimum density of 2 feet on center and be completed within 90 days after removal of existing aquatic vegetation, except that under dewatered conditions replanting must be completed within 90 days after reflooding. The area to be replanted must extend waterward from the ordinary high water line to a point where normal water depth would be 3 feet or the preexisting vegetation line, whichever is less. Individuals are required to make a reasonable effort to maintain planting density for a period of 6 months

8-00240C-20 2020326

after replanting is complete, and the plants, including naturally recruited native aquatic plants, must be allowed to expand and fill in the revegetation area. Native aquatic plants to be used for revegetation must be salvaged from the enhancement project site or obtained from an aquatic plant nursery regulated by the Department of Agriculture and Consumer Services. Plants that are not native to the state may not be used for replanting.

- 8. No activity occurs any farther than 100 feet waterward of the ordinary high water line, and all activities must be designed and conducted in a manner that will not unreasonably restrict or infringe upon the riparian rights of adjacent upland riparian owners.
- 9. The person seeking this exemption notifies the applicable department district office in writing at least 30 days before commencing work and allows the department to conduct a preconstruction site inspection. Notice must include an organic-detrital-material removal and disposal plan and, if applicable, a vegetation-removal and revegetation plan.
- 10. The department is provided written certification of compliance with the terms and conditions of this paragraph within 30 days after completion of any activity occurring under this exemption.
- (v) Notwithstanding any other provision in this chapter, chapter 373, or chapter 161, a permit or other authorization is not required for the following exploratory activities associated with beach restoration and nourishment projects and inlet management activities:
 - 1. The collection of geotechnical, geophysical, and

553

554

555

556

557

558

559

8-00240C-20 2020326__

cultural resource data, including surveys, mapping, acoustic soundings, benthic and other biologic sampling, and coring.

- 2. Oceanographic instrument deployment, including temporary installation on the seabed of coastal and oceanographic data collection equipment.
- 3. Incidental excavation associated with any of the activities listed under subparagraph 1. or subparagraph 2. Section 3. This act shall take effect July 1, 2020.

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.)

Pre	pared By: The	Profession	al Staff of the C	ommittee on Enviro	nment and Natu	ral Resources
BILL:	SB 332					
INTRODUCER:	Senator Stewart					
SUBJECT:	Land Acquisition Trust Fund					
DATE: November 1, 2019 REVISED:						
ANALYST		STAFF DIRECTOR		REFERENCE		ACTION
1. Dyson		Rogers		EN	Favorable	
2.				AEG		
3				AP		

I. Summary:

SB 332 creates a statutory distribution from the Land Acquisition Trust Fund requiring \$100 million to be appropriated annually to the Florida Forever Trust Fund. Funds appropriated into the Florida Forever Trust Fund are required to be distributed in accordance with the Florida Forever Act. The bill also specifies that the Land Acquisition Trust Fund may not be used to fund any costs within the budget entities that provide administrative support for the four state entities receiving these funds.

II. Present Situation:

Florida Forever

As a successor to Preservation 2000, the Legislature created the Florida Forever program in 1999 as the Blueprint for conserving Florida's natural resources. The Florida Forever Act reinforced the state's commitment to conserve its natural and cultural heritage, provide urban open space, and better manage the land acquired by the state. Florida Forever encompasses a wide range of goals including: land acquisition; environmental restoration; water resource development and supply; increased public access; public lands management and maintenance; and increased protection of land through the purchase of conservation easements. The state has acquired more than 2.4 million acres since 1991 under the Preservation 2000 and the Florida Forever programs.

¹ Chapter 99-247, Laws of Fla.

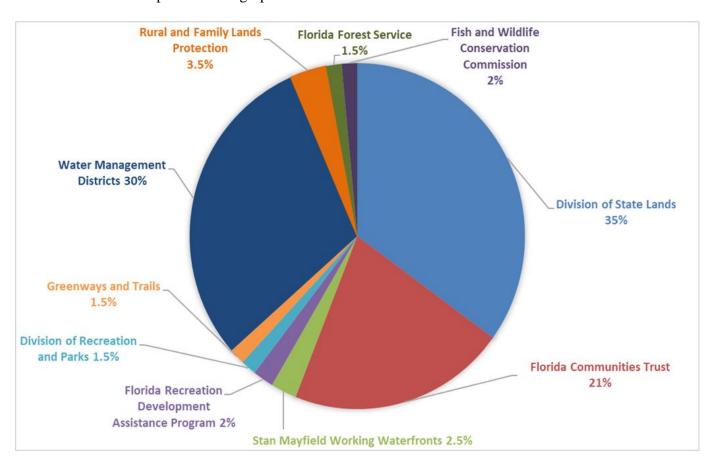
² Department of Environmental Protection (DEP), *Florida Forever Five Year Plan* (2019), *available at* http://publicfiles.dep.state.fl.us/DSL/FFWeb/Current%20Florida%20Forever%20Five-Year%20Plan.pdf (last visited Oct. 31, 2019).

³ Section 259.105, F.S.

⁴ DEP, Frequently Asked Questions about Florida Forever, https://floridadep.gov/lands/environmental-services/content/faq-florida-forever (last visited Oct. 29, 2019). See Florida Natural Areas Inventory, Summary of Florida Conservation Lands (Feb. 2019), available at https://www.fnai.org/PDF/Maacres_201902_FCL_plus_LTF.pdf (last visited Oct. 18, 2019) for a complete summary of the total amount of conservation lands in Florida.

Under Florida Forever, the issuance of up to \$5.3 billion in Florida Forever bonds is authorized to finance or refinance the cost of acquisition and improvement of land, water areas, and related property interests and resources, in urban and rural settings, for the purposes of restoration, conservation, recreation, water resource development, or historical preservation, and for capital improvements⁵ to lands and water areas which accomplish environmental restoration, enhance public access and recreational enjoyment, promote long-term management goals, and facilitate water resource development.⁶

The Florida Forever Trust Fund was created to serve as the repository for Florida Forever bond proceeds to fund the Florida Forever Program. The Florida Forever Trust Fund is administered by the Department of Environmental Protection (DEP). DEP is required to distribute revenues from the Florida Forever Trust Fund in accordance with s. 259.105(3), F.S., which sets forth the allocation of the proceeds of cash payments or bonds deposited into the Florida forever Trust Fund and is depicted in the graph below.



⁵ As defined in s. 259.03, F.S., the terms "capital improvement" or "capital project expenditure" when used in ch. 259, F.S., mean "those activities relating to the acquisition, restoration, public access, and recreational uses of such lands, water areas, and related resources deemed necessary to accomplish the purposes of this chapter. Eligible activities include, but are not limited to: the initial removal of invasive plants; the construction, improvement, enlargement or extension of facilities' signs, firelanes, access roads, and trails; or any other activities that serve to restore, conserve, protect, or provide public access, recreational opportunities, or necessary services for land or water areas. Such activities shall be identified prior to the acquisition of a parcel or the approval of a project. The continued expenditures necessary for a capital improvement approved under this subsection shall not be eligible for funding provided in this chapter."

⁶ Section 215.618, F.S.

Division of State Lands - 35 Percent

The Division of State Lands (DSL) within DEP oversees the Florida Forever program, under which the state has protected over 770,279 acres of land purchased with about \$3 billion in Florida Forever funds. Florida Forever projects and acquisitions are required to contribute to the achievement of one or more of the following program goals:

- Enhance the coordination and completion of land acquisition projects;
- Increase the protection of Florida's biodiversity at the species, natural community, and landscape levels;
- Protect, restore, and maintain the quality and natural functions of land, water, and wetlands systems of the state;
- Ensure that sufficient quantities of water are available to meet the current and future needs of natural systems and the citizens of the state;
- Increase natural resource-based public recreational and educational opportunities;
- Preserve significant archaeological or historic sites;
- Increase the amount of forestland available for sustainable management of natural resources;
- Increase the amount of open space available in urban areas; and
- Mitigate the effects of natural disasters and floods in developed areas.⁸

The Acquisition and Restoration Council (ARC) is a 10-member body⁹ that makes recommendations on the acquisition, management, and disposal of state-owned lands.¹⁰ ARC accepts applications from state agencies, local governments, nonprofit and for-profit organizations, private land trusts, and individuals for project proposals eligible for Florida Forever funding. In evaluating each application, ARC is required to consider whether the project:

- Meets multiple program goals;
- Is part of an ongoing governmental effort to restore, protect, or develop land areas or water resources;
- Enhances or facilitates management of properties already under public ownership;
- Has significant archaeological or historic value;
- Has funding sources that are identified and assured through at least the first 2 years of the project;
- Contributes to the solution of water resource problems on a regional basis;

⁷ DEP, *Florida Forever Five Year Plan*, 51 (2019), *available at* http://publicfiles.dep.state.fl.us/DSL/FFWeb/Current%20Florida%20Forever%20Five-Year%20Plan.pdf (last visited Oct. 31, 2019).

⁸ Section 259.105(4), F.S.

⁹ Section 259.035(1), F.S. Four of ARC's 10 members are appointed by the Governor, three from scientific disciplines related to land, water, or environmental sciences and one with least five years of experience in managing lands for both active and passive types of recreation. Four of the members are the Secretary of Environmental Protection, the director of the Florida Forest Service of the Department of Agriculture and Consumer Services, the executive director of the Fish and Wildlife Conservation Commission, and the director of the Division of Historical Resources of the Department of State, or their respective designees. One member is appointed by the Commissioner of Agriculture from a discipline related to agriculture, including silviculture, and one member is appointed by the Fish and Wildlife Conservation Commission from a discipline related to wildlife management or wildlife ecology.

¹⁰ DEP, Florida Forever Five Year Plan, 49 (2019), available at http://publicfiles.dep.state.fl.us/DSL/FFWeb/Current%20Florida%20Forever%20Five-Year%20Plan.pdf (last visited Oct 31, 2019).

 Has a significant portion of its land area in imminent danger of development, losing its significant natural attributes or recreational open space, or subdivision that would result in multiple ownership and make acquisition of the project more costly or less likely to be accomplished;

- Implements an element from a plan developed by an ecosystem management team;
- Is one of the components of Everglades restoration efforts;
- May be purchased at 80 percent of appraised value;
- May be acquired, in whole or in part, using alternatives to fee simple; and
- Is a joint acquisition. 11

ARC is required to give increased priority to:

- Projects for which matching funds are available;
- Project elements previously identified on an acquisition list which can be acquired at 80 percent or less of appraised value;
- Projects that can be acquired in less than fee ownership (acquiring land at less than fee
 ownership means acquisition of an interest in the property which allows the conservation and
 protection of resources on the property at less cost while keeping the land in private
 ownership);
- Projects that contribute to improving the quality or quantity of surface water or groundwater; and
- Projects that contribute to improving the water quality and flow of springs; and projects for which the state's land conservation plans overlap with the military's need to protect lands, water, and habitat to ensure the sustainability of military missions.¹²

Using its established criteria, ARC develops a priority list of applications submitted. An affirmative vote of at least five members of ARC is required to place a proposed project on the priority list. ARC evaluates and selects projects twice per year, in June and December, and ranks the projects annually. Each project on the priority list is placed in one of the following categories of expenditure for land conservation projects: climate change, critical natural lands, less-than-fee, partnerships or regional incentives, and substantially complete (greater than 85 percent complete). Projects are ranked within each category from highest to lowest priority.

The proposed project list is presented to the Governor and the Cabinet sitting as the Board of Trustees of the Internal Improvement Trust Fund (BOT).¹⁵ The BOT is responsible for acting on ARC's recommendations by approving the acquisition of each parcel.¹⁶ While the BOT is authorized to remove projects from the proposed list, the BOT may not add or rearrange projects on the list.¹⁷

¹¹ Section 259.105(9), F.S.

¹² Section 259.105(10), F.S.

¹³ DEP, Frequently Asked Questions about Florida Forever, https://floridadep.gov/lands/environmental-services/content/faq-florida-forever (last visited Oct. 29, 2019).

¹⁴ Section 259.105(17), F.S.

¹⁵ Section 259.105(14), F.S.

¹⁶ DEP, Florida Forever Five Year Plan, 50 (2019), available at http://publicfiles.dep.state.fl.us/DSL/OESWeb/FF2017/FLDEP_DSL_SOLI_2018FloridaForever5YrPlan_20180706.pdf (last visited Oct. 31, 2019).

¹⁷ Section 259.105(14), F.S.

DSL prepares an annual work plan based on the priority list developed by ARC, which outlines the specific projects and acquisitions within projects that will be negotiated for purchase with Florida Forever funds available for that fiscal year for land acquisition.¹⁸

At least \$5 million of the funds allocated to DSL under Florida Forever, beginning in the 2017-2018 fiscal year and continuing through the 2026-2027 fiscal year, are required to be spent on land acquisition within the Florida Keys Area of Critical State Concern. ¹⁹

Water Management Districts – 30 Percent

The state is divided into five water management districts (WMDs), which are responsible for the administration of water resources at a regional level. Each WMD is required to develop a Florida Forever five-year work plan that identifies projects necessary to promote reclamation, storage, or recovery of water and other properties or activities that would assist in meeting the goals of the Florida Forever program. Each project identified must contribute to the achievement of the Florida Forever goals and be evaluated in accordance with the specific criteria and numeric performance measures developed by the ARC. Hy March 1 of each year, each WMD is required to report to DEP on acquisitions completed during the year together with modifications or additions to its five-year work plan, including:

- A description of land management activity for each property or project area owned by the WMD:
- A list of any lands surplused and the amount of compensation received; and
- The progress of funding, staffing, and resource management of every project funded pursuant to Florida Forever for which the district is responsible.²²

DEP is required to submit each WMD's five-year work plan to the BOT together with ARC's project list.²³ Pursuant to s. 259.105(11), F.S., Florida Forever funds provided to the WMDs are allocated as follows:

- Thirty-five percent to the South Florida WMD;
- Twenty-five percent to the Southwest Florida WMD;
- Twenty-five percent to the St. Johns River WMD;
- Seven and one-half percent to the Suwannee River WMD; and
- Seven and one-half percent to the Northwest Florida WMD.

Florida Communities Trust – 21 Percent

The Florida Communities Trust (FCT) is a multi-faceted program that assists communities in protecting important natural resources, providing recreational opportunities, and preserving the state's traditional working waterfronts through grant programs.²⁴ The FCT is governed by a

¹⁸ Section 259.105(17), F.S.

¹⁹ Section 259.105(3)(b), F.S.

²⁰ Section 373.199, F.S.

²¹ Section 259.105(4), F.S.

²² Section 373.199(7), F.S.

²³ Id.

²⁴ DEP, Florida Communities Trust Annual Report Fiscal Year 2018-2019, 3 (Sept. 30, 2019) available at https://floridadep.gov/sites/default/files/FCT-18-19 Annual Report FINAL 0.pdf (last visited Oct. 31, 2019).

five-member board that includes the Secretary of DEP or his or her designee and four members of the public appointed by the Governor. From the funds available to the FCT and used for land acquisition, 75 percent is required to be matched by local governments on a dollar-for-dollar basis.²⁵

The Parks and Open Space grant program provides funding to local governments and eligible nonprofit organizations for acquisition of community-based parks, open space, and greenways that further outdoor recreation and natural resource protection needs identified in a local government's comprehensive plan. As of June 2017, more than 92,400 acres have been preserved statewide, leveraging \$839 million state dollars of the total \$1.56 billion used to acquire such lands.²⁶

Stan Mayfield Working Waterfronts – 2.5 Percent

The FCT administers the Stan Mayfield Working Waterfront program, which provides funding to acquire parcels of land used directly for commercially harvesting marine organisms or saltwater products.²⁷ Such projects include piers, wharves, docks, and other facilities operated to provide waterfront access to licensed commercial fishermen, aquaculturists, or business entities.²⁸ The funds may also be used for the acquisition of land for exhibitions, demonstrations, educational venues, civic events, and other purposes to promote and educate the public about the economic, cultural, and historic heritage of the state's traditional working waterfronts, including marketing events for the seafood and aquaculture industries.²⁹

Rural and Family Lands Protection Program – 3.5 Percent

The Rural and Family Lands Protection Program within the Department of Agriculture and Consumer Services (DACS) is an agricultural land preservation program designed to protect important agricultural lands through the acquisition of permanent agricultural land conservation easements.³⁰ The purpose of the program is to promote and improve wildlife habitat; protect and enhance water bodies, aquifer recharge areas, wetlands, and watersheds; perpetuate open space on lands with significant natural areas; or protect agricultural lands threatened by conversion to other uses.³¹ Under the program, lands must be acquired pursuant to a priority ranking process developed by DACS, DEP, the WMDs, the Department of Economic Opportunity, and the Fish and Wildlife Conservation Commission (FWC).³² Preference must be given to ranch and timber lands that are managed using sustainable practices.³³

²⁵ Section 259.105(3)(c), F.S.

²⁶ DEP, FCT Parks and Open Space Program Overview, https://floridadep.gov/ooo/land-and-recreation-grants/content/fct-parks-and-open-space-program-overview (last visited Oct. 28, 2019).

²⁷ DEP, FCT Stan Mayfield Working Waterfronts Grant Program Overview, https://floridadep.gov/lands/land-and-recreation-grants/content/fct-stan-mayfield-working-waterfronts-grant-program (last visited Oct. 28, 2019).

²⁸ Id.

²⁹ *Id*.

³⁰ Department of Agriculture and Consumer Services (DACS), *Rural and Family Lands Protection Program*, http://www.freshfromflorida.com/Divisions-Offices/Florida-Forest-Service/Our-Forests/Land-Planning-and-Administration-Section/Rural-and-Family-Lands-Protection-Program2 (last visited Oct. 28, 2019); *see* DEP, *Florida Forever*, https://floridadep.gov/lands/environmental-services/content/florida-forever (last visited Oct. 28, 2019).

³¹ Section 570.71, F.S.

³² Id.; see Fla. Admin. Code Ch. 5I-7.

³³ Section 570.71, F.S.

Florida Recreation Development Assistance Program - 2 Percent

The Florida Recreation Development Assistance Program within DEP provides grants to qualified local governmental entities to acquire or develop land for public outdoor recreation purposes.³⁴ The maximum grant that may be awarded for each project application is \$200,000 in state funds and a local government may not have more than three active projects expending grant funds during a state fiscal year.³⁵ DEP has developed a competitive project selection process designed to maximize outdoor recreation for the public.³⁶ The selection criteria ranks projects, in part, based on the extent to which the project would implement outdoor recreation goals, objectives, and priorities specified in the state comprehensive outdoor recreation plan and the extent to which the project would provide priority resource or facility needs in the region, as specified in the state comprehensive outdoor recreation plan.³⁷

Florida Greenways and Trails Program – 1.5 Percent

The Office of Greenways and Trails (OGT) within DEP provides a comprehensive approach to identify, prioritize, connect, promote, and coordinate the implementation of a statewide system of connected greenways and trails.³⁸ The program serves to integrate natural and human environments using greenways and trails to tie communities together by linking features such as parks, open spaces, historic sites, and residential areas. The Florida Greenways and Trails Council recommends lands for acquisition based on ranking criteria developed by DEP and is not subject to the ranking criteria developed by the ARC.³⁹

Division of Recreation and Parks – 1.5 Percent

The Division of Recreation and Parks (DRP) within DEP administers Florida's Park Service, which consists of 175 state parks, trails, and historic sites spanning nearly 800,000 acres and 100 miles of beaches. DRP is authorized to use Florida Forever funds to purchase inholdings and additions to state parks and for capital expenditure project expenditures. At a minimum, one percent, and no more than 10 percent, must be spent on capital project expenditures identified during the time of acquisition that meet land management planning activities necessary for public access. DRP must develop and utilize a priority acquisition list based on the specific criteria and numeric performance measures developed by ARC for acquisitions under the Florida Forever program.

³⁴ DEP, *Florida Recreation Development Assistance Program*, https://floridadep.gov/lands/land-and-recreation-grants/content/florida-recreation-development-assistance-program (last visited Oct. 28, 2019).

³⁵ Section 375.075, F.S.

³⁶ See Fla. Admin. Code Ch. 62D-5.057.

³⁷ Section 375.075, F.S.

³⁸ DEP, Florida Greenways and Trails System Plan 2019-2023, 6, available at https://floridadep.gov/sites/default/files/FL-Greenway%2BTrails-System-Plan-2019%2C%202023.pdf (last visited Oct. 28, 2019).

³⁹ Section 260.015(1), F.S.

⁴⁰ DEP, Division of Recreation and Parks, https://floridadep.gov/Parks (last visited Oct. 28, 2019).

⁴¹ Section 259.105(3)(e), F.S.

⁴² *Id*.

⁴³ Section 259.105(3)(i)1., F.S.

Florida Forest Service – 1.5 Percent

The Florida Forest Service (FFS) within DACS manages 37 state forests, totaling over one million acres. 44 FFS is authorized to acquire lands, suitable for state forest purposes, by gift, donation, contribution, purchase, or otherwise and is authorized to enter into an agreement with the federal government, or other agency, for acquiring by gift, purchase, or otherwise, such lands as are, in the judgment of FFS, suitable and desirable for state forests. 45 FFS may use Florida Forever funds for the acquisition of state forest inholdings and additions, the implementation of reforestation plans, or sustainable forestry management practices, and for capital project expenditures. 46 At a minimum, one percent, and no more than 10 percent, must be spent on capital project expenditures identified during the time of acquisition that meet land management planning activities necessary for public access. 47

Fish and Wildlife Conservation Commission (FWC) – 1.5 Percent

FWC exercises the regulatory and executive powers of the state with respect to wild animal life and fresh water aquatic life. FWC is authorized to acquire lands and waters suitable for the protection, improvement, and restoration of the state's wild animal life, freshwater aquatic life, and marine life resources. Lands acquired must be managed for recreational and other multiple-use activities that do not impede FWC's ability to perform its constitutional and statutory duties and responsibilities. The lands managed by FWC include lands that are leased to FWC and owned by the state, and lands owned by FWC. FWC is authorized to use Florida Forever funds for the acquisition of inholdings and additions to lands they manage which are important to the conservation of fish and wildlife and for capital project expenditures. At a minimum, one percent, and no more than 10 percent, must be spent on capital project expenditures identified during the time of acquisition that meet land management planning activities necessary for public access.

Land Acquisition Trust Fund

Documentary stamp tax revenues are collected under ch. 201, F.S., which requires an excise tax to be levied on two classes of documents: deeds and other documents related to real property, which are taxed at the rate of 70 cents per \$100; and certificates of indebtedness, promissory notes, wage assignments, and retail charge account agreements, which are taxed at 35 cents per \$100.⁵³

In 2014, Florida voters approved Amendment One, a constitutional amendment to provide a dedicated funding source for land and water conservation and restoration. The amendment

⁴⁴ DACS, *State Forests*, http://www.freshfromflorida.com/Divisions-Offices/Florida-Forest-Service/Our-Forests/State-Forests (last visited Oct. 29, 2019).

⁴⁵ Section 589.07, F.S.

⁴⁶ Section 259.105(3)(f), F.S.

^{4/} *Id*.

⁴⁸ FLA. CONST. art. IV, s. 9.

⁴⁹ Section 20.331(11), F.S.

⁵⁰ *Id*.

⁵¹ Section 259.105(3)(g), F.S.

⁵² I.A

⁵³ See ss. 201.02 and 201.08, F.S.

required that starting on July 1, 2015, and for 20 years thereafter, 33 percent of net revenues derived from documentary stamp taxes be deposited into the Land Acquisition Trust Fund (LATF). Article X, s. 28 of the State Constitution requires that funds in the LATF be expended only for the following purposes:

As provided by law, to finance or refinance: the acquisition and improvement of land, water areas, and related property interests, including conservation easements, and resources for conservation lands including wetlands, forests, and fish and wildlife habitat; wildlife management areas; lands that protect water resources and drinking water sources, including lands protecting the water quality and quantity of rivers, lakes, streams, springsheds, and lands providing recharge for groundwater and aquifer systems; lands in the Everglades Agricultural Area and the Everglades Protection Area, as defined in Article II, Section 7(b); beaches and shores; outdoor recreation lands, including recreational trails, parks, and urban open space; rural landscapes; working farms and ranches; historic or geologic sites; together with management, restoration of natural systems, and the enhancement of public access or recreational enjoyment of conservation lands. ⁵⁴

To implement Art. X, s. 28 of the State Constitution, the Legislature passed ch. 2015-229, Laws of Florida. This act, in part, amended the following sections of law:

- Section 201.15, F.S., to conform to the constitutional requirement that the LATF receive at least 33 percent of net revenues derived from documentary stamp taxes; and
- Section 375.041, F.S., to designate the LATF within the Department of Environmental Protection (DEP) as the trust fund to serve as the constitutionally mandated depository for the percentage of documentary stamp tax revenues.⁵⁵

Under s. 375.041, F.S., funds deposited into the LATF must be distributed in the following order and amounts:

- First, obligations relating to debt service, specifically:
 - Payments relating to debt service on Florida Forever Bonds and Everglades restoration bonds.
- Then, before funds are authorized to be appropriated for other uses:
 - A minimum of the lesser of 25 percent of the funds remaining after the payment of debt service or \$200 million annually for Everglades projects that implement the Comprehensive Everglades Restoration Plan (CERP), the Long-Term Plan, or the Northern Everglades and Estuaries Protection Program (NEEPP), with priority given to Everglades restoration projects that reduce harmful discharges of water from Lake Okeechobee to the St. Lucie or Caloosahatchee estuaries in a timely manner. From these funds, the following specified distributions are required:
 - \$32 million annually through the 2023-2024 Fiscal Year for the Long-Term Plan;

⁵⁵ Ch. 2015-229, ss. 9 and 50, Laws of Fla.

-

⁵⁴ FLA. CONST. art. X, s. 28(b)(1).

 After deducting the \$32 million, the minimum of the lesser of 76.5 percent of the remainder or \$100 million annually through the 2025-2026 Fiscal Year for the CERP; and

- Any remaining funds for Everglades projects under the CERP, the Long-Term Plan, or the NEEPP.
- A minimum of the lesser of 7.6 percent of the funds remaining after the payment of debt service or \$50 million annually for spring restoration, protection, and management projects;
- \$5 million annually through the 2025-2026 Fiscal Year to the St. Johns River Water Management District for projects dedicated to the restoration of Lake Apopka; and
- \$64 million to the Everglades Trust Fund in the 2018-2019 Fiscal Year and each fiscal year thereafter, for the Everglades Agricultural Area reservoir project, and any funds remaining in any fiscal year shall be made available only for Phase II of the C-51 Reservoir Project or projects that implement CERP, the Long Term Plan, or NEEPP.
- Then, any remaining moneys are authorized to be appropriated for the purposes set forth in Art. X, s. 28 of the State Constitution. ⁵⁶

The General Revenue Estimating Conference in August 2019 estimated that for the 2019-2020 Fiscal Year a total of \$2.76 billion would be collected in documentary stamp taxes.⁵⁷ Thirty-three percent of the net revenues collected, or approximately \$907.84 million, must be deposited into the LATF in accordance with Art. X, s. 28 of the State Constitution. Of that number, \$158.21 million is committed to debt service, leaving \$749.63 million to be distributed for the uses specified by s. 375.041, F.S., and other purposes in accordance with the General Appropriations Act.⁵⁸

In 2015, two lawsuits were filed challenging the constitutionality of appropriations from the LATF and expenditures by state agencies.⁵⁹ The cases were consolidated and a hearing was held in June of 2018.⁶⁰ The plaintiffs argued that funds from the LATF were appropriated and expended for general state expenses in ways that were inconsistent with the constitutional language. The court held for the plaintiffs, stating the amendment requires the funds be used for acquiring conservation lands, and for improving, managing, restoring, and enhancing public access to conservation lands acquired after the effective date of the amendment.⁶¹ The decision described how LATF funds may be used, and ruled numerous appropriations from 2015 and 2016 unconstitutional.⁶²

The case was appealed and the First District Court of Appeal overturned the circuit court ruling, holding that LATF funds are not restricted to use on land purchased by the state after the

⁵⁶ Section 375.041(3)-(4), F.S.

⁵⁷ Office of Economic & Demographic Research, Revenue Estimating Conference, *Documentary Stamp Tax*, *Executive Summary*, 3 (Aug. 2019), *available at* http://edr.state.fl.us/Content/conferences/docstamp/docstampexecsummary.pdf (last visited Oct. 29, 2019).

⁵⁸ *Id*.

⁵⁹ Florida Wildlife Federation, Inc. v. Negron, No. 2015-CA-001423 (Fla. 2nd Cir. Ct.); Florida Defenders of the Environment, Inc., v. Detzner, No. 2015-CA-002682 (Fla. 2nd Cir. Ct.).

⁶⁰ Florida Wildlife Federation, Inc. v. Negron, Nos. 2015-CA-001423, 2015-CA-002682 (Fla. 2nd Cir. Ct. June 28, 2018).

⁶¹ *Id.* at 3.

⁶² *Id.* at 7–8.

constitutional amendment took effect in 2015.⁶³ The court also held that the plain language in the Constitution authorizing the use of funds for management, restoration, and enhancement activities would specifically authorize use of the funds on activities beyond land acquisition.⁶⁴ The case is currently on remand to the circuit court to rule on the legality of appropriations made since the enactment of the constitutional amendment.⁶⁵

III. Effect of Proposed Changes:

The bill creates a statutory distribution from the Land Acquisition Trust Fund requiring \$100 million to be appropriated annually to the Florida Forever Trust Fund. In accordance with the current provisions of s. 259.105(3), F.S., the distribution must be allocated as follows:

- Division of State Lands \$35 million, of which \$5 million is dedicated for land acquisition within the Florida Keys Area of Critical State Concern.
- Water Management Districts \$30 million.
- Florida Communities Trust \$21 million.
- Rural and Family Lands Protection Program \$3.5 million.
- Stan Mayfield Working Waterfronts \$2.5 million.
- Florida Recreation Development Assistance Program \$2 million.
- Division of Recreation and Parks \$1.5 million.
- Office of Greenways and Trails \$1.5 million.
- Florida Forest Service \$1.5 million.
- Fish and Wildlife Conservation Commission \$1.5 million.

The bill deletes an obsolete provision relating to an appropriation for the 2019-2020 fiscal year.

The bill provides that moneys distributed from the Land Acquisition Trust Fund may not be used by the following budget entities:

- Executive Direction and Support Services and the Technology and Information Services within the Department of Environmental Protection;
- Executive Direction and Support Services and the Office of Agriculture Technology Services within the Department of Agriculture and Consumer Services;
- Office of Executive Direction and Administrative Support Services within the Fish and Wildlife Conservation Commission; and
- Executive Direction and Support Services within the Department of State.

The bill takes effect July 1, 2020.

⁶³ Oliva v. Florida Wildlife Federation, Inc., 1D18-3141 (Fla. 1st Dist. Ct. App.), available at https://www.1dca.org/content/download/536427/5956785/file/183141_1286_09092019_09211709_i.pdf (last visited Sept. 23, 2019).

⁶⁴ *Id*. at 9-10.

⁶⁵ *Id*. at 11.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

The bill creates a new distribution from LATF to the Florida Forever Trust Fund for distribution for various purposes. LATF has constitutionally restricted uses, which are discussed in the Present situation section of this bill analysis.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

The bill creates a \$100 million annual distribution from the Land Acquisition Trust Fund (LATF) to the Florida Forever Trust Fund. Absent subsequent direction by the legislature to the contrary, these funds are to be distributed as follows:

- Division of State Lands \$35 million, of which \$5 million is dedicated for land acquisition within the Florida Keys Area of Critical State Concern.
- Water Management Districts \$30 million.
- Florida Communities Trust \$21 million.
- Rural and Family Lands Protection Program \$3.5 million.
- Stan Mayfield Working Waterfronts \$2.5 million.
- Florida Recreation Development Assistance Program \$2 million.
- Division of Recreation and Parks \$1.5 million.
- Office of Greenways and Trails \$1.5 million.
- Florida Forest Service \$1.5 million.

Fish and Wildlife Conservation Commission - \$1.5 million.

Agencies that receive funds from LATF are the departments of Environmental Protection, State, and Agriculture and Consumer Services, and the Fish and Wildlife Conservation Commission. These agencies receive legislative appropriations for various items, such as springs restoration, Everglades and Northern Everglades restoration, Lake Apopka restoration, beach restoration, and land management activities. The additional \$100 million in distributions may affect the amount of additional funding available beyond the minimum required appropriation for the other purposes funded from the trust fund. Projections of Fiscal Year 2020-2021 documentary tax revenues deposited into LATF totals \$943.52 million, which is an increase of \$35.68 million. This increase in collections may offset some of the negative fiscal impact to the available funds.

VI. Technical Deficiencies:

None.

VII. Related Issues:

Other allocations from the Land acquisition Trust Fund (LATF) require the allocations to be reduced to the extent of any debt service on bonds issued for the same purpose after a date certain. This bill does not contain language to reduce the distribution based on any debt service paid on bonds issued for the Florida Forever program. As a result, the new \$100 million distribution for the Florida Forever program will be in addition to any payment of debt service for bonds issued for the purposes of the Florida Forever program. If the legislature wants to treat the allocation authorized in this bill similar to other allocations of LATF moneys, the following language could be inserted: "This distribution shall be reduced by an amount equal to the debt service paid pursuant to paragraph (a) on bonds issued after July 1, 2020, for the purposes set forth in this subparagraph."

VIII. Statutes Affected:

This bill substantially amends section 375.041 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.)

None.

B. Amendments:

None.

⁶⁶ Office of Economic & Demographic Research, Revenue Estimating Conference, *Documentary Stamp Tax, Executive Summary*, 3 (Aug. 2019), *available at* http://edr.state.fl.us/Content/conferences/docstamp/docstampexecsummary.pdf (last visited Oct. 29, 2019).

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.

By Senator Stewart

13-00037-20 2020332

A bill to be entitled

An act relating to the Land Acquisition Trust Fund; amending s. 375.041, F.S.; requiring a specified annual appropriation to the Florida Forever Trust Fund; deleting an obsolete provision; prohibiting moneys from the Land Acquisition Trust Fund from being used for specified costs; providing an effective date.

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

Section 1. Subsections (3) and (4) of section 375.041, Florida Statutes, are amended to read:

375.041 Land Acquisition Trust Fund.-

- (3) Funds distributed into the Land Acquisition Trust Fund pursuant to s. 201.15 shall be applied:
- (a) First, to pay debt service or to fund debt service reserve funds, rebate obligations, or other amounts payable with respect to Florida Forever bonds issued under s. 215.618; and pay debt service, provide reserves, and pay rebate obligations and other amounts due with respect to Everglades restoration bonds issued under s. 215.619; and
- (b) Of the funds remaining after the payments required under paragraph (a), but before funds may be appropriated, pledged, or dedicated for other uses:
- 1. A minimum of the lesser of 25 percent or \$200 million shall be appropriated annually for Everglades projects that implement the Comprehensive Everglades Restoration Plan as set forth in s. 373.470, including the Central Everglades Planning Project subject to Congressional authorization; the Long-Term

31

32

3334

3536

37

38 39

40

4142

43

44

4546

47

48 49

50

51

52

53

54

5556

57

58

13-00037-20 2020332

Plan as defined in s. 373.4592(2); and the Northern Everglades and Estuaries Protection Program as set forth in s. 373.4595. From these funds, \$32 million shall be distributed each fiscal year through the 2023-2024 fiscal year to the South Florida Water Management District for the Long-Term Plan as defined in s. 373.4592(2). After deducting the \$32 million distributed under this subparagraph, from the funds remaining, a minimum of the lesser of 76.5 percent or \$100 million shall be appropriated each fiscal year through the 2025-2026 fiscal year for the planning, design, engineering, and construction of the Comprehensive Everglades Restoration Plan as set forth in s. 373.470, including the Central Everglades Planning Project, the Everglades Agricultural Area Storage Reservoir Project, the Lake Okeechobee Watershed Project, the C-43 West Basin Storage Reservoir Project, the Indian River Lagoon-South Project, the Western Everglades Restoration Project, and the Picayune Strand Restoration Project. The Department of Environmental Protection and the South Florida Water Management District shall give preference to those Everglades restoration projects that reduce harmful discharges of water from Lake Okeechobee to the St. Lucie or Caloosahatchee estuaries in a timely manner. For the purpose of performing the calculation provided in this subparagraph, the amount of debt service paid pursuant to paragraph (a) for bonds issued after July 1, 2016, for the purposes set forth under paragraph (b) shall be added to the amount remaining after the payments required under paragraph (a). The amount of the distribution calculated shall then be reduced by an amount equal to the debt service paid pursuant to paragraph (a) on bonds issued after July 1, 2016, for the

13-00037-20 2020332

purposes set forth under this subparagraph.

- 2. A minimum of the lesser of 7.6 percent or \$50 million shall be appropriated annually for spring restoration, protection, and management projects. For the purpose of performing the calculation provided in this subparagraph, the amount of debt service paid pursuant to paragraph (a) for bonds issued after July 1, 2016, for the purposes set forth under paragraph (b) shall be added to the amount remaining after the payments required under paragraph (a). The amount of the distribution calculated shall then be reduced by an amount equal to the debt service paid pursuant to paragraph (a) on bonds issued after July 1, 2016, for the purposes set forth under this subparagraph.
- 3. The sum of \$5 million shall be appropriated annually each fiscal year through the 2025-2026 fiscal year to the St. Johns River Water Management District for projects dedicated to the restoration of Lake Apopka. This distribution shall be reduced by an amount equal to the debt service paid pursuant to paragraph (a) on bonds issued after July 1, 2016, for the purposes set forth in this subparagraph.
- 4. The sum of \$64 million is appropriated and shall be transferred to the Everglades Trust Fund for the 2018-2019 fiscal year, and each fiscal year thereafter, for the EAA reservoir project pursuant to s. 373.4598. Any funds remaining in any fiscal year shall be made available only for Phase II of the C-51 reservoir project or projects identified in subparagraph 1. and must be used in accordance with laws relating to such projects. Any funds made available for such purposes in a fiscal year are in addition to the amount

13-00037-20 2020332

appropriated under subparagraph 1. This distribution shall be reduced by an amount equal to the debt service paid pursuant to paragraph (a) on bonds issued after July 1, 2017, for the purposes set forth in this subparagraph.

- 5. The sum of \$100 million is appropriated annually to the Florida Forever Trust Fund Notwithstanding subparagraph 3., for the 2019-2020 fiscal year, funds shall be appropriated as provided in the General Appropriations Act. This subparagraph expires July 1, 2020.
- (4) Any remaining moneys in the Land Acquisition Trust Fund which are not distributed as provided in subsection (3) may be appropriated from time to time for the purposes set forth in s. 28, Art. X of the State Constitution, except that moneys distributed from the Land Acquisition Trust Fund may not be used for costs associated with any of the following budget entities:
- (a) The Executive Direction and Support Services and the Technology and Information Services within the Department of Environmental Protection.
- (b) The Executive Direction and Support Services and the Office of Agriculture Technology Services within the Department of Agriculture and Consumer Services.
- (c) The Office of Executive Direction and Administrative Support Services within the Fish and Wildlife Conservation Commission.
- (d) The Executive Direction and Support Services within the Department of State.
 - Section 2. This act shall take effect July 1, 2020.

From: Truitt, John < John. Truitt@dep.state.fl.us >

Sent: Friday, October 18, 2019 11:49 AM

To: Rogers, Ellen < ROGERS.ELLEN@flsenate.gov >

Cc: Alvarez, Bryan < Bryan < Bryan < Bryan < Bryan.Alvarez@FloridaDEP.gov; Powell, Frank < Frank.Powell@dep.state.fl.us; Bryan.Alvarez@FloridaDEP.gov; Powell, Frank < Bryan.Alvarez@FloridaDEP.gov; FloridaDEP.gov; Bryan.Alvarez@FloridaDEP.gov; Bryan.Alvarez@FloridaDEP.gov; <a

Schrader, John < John. Schrader@FloridaDEP.gov >

Subject: Follow-up

Ellen,

Here are the follow up answers from our call yesterday:

For the oil and gas questions - How many permits has DEP ever issued that expressly authorize hydraulic fracturing or acidizing?

Absent a permit condition that specifically prohibits it, hydraulic fracturing or acidizing would be allowed under our rules as a workover operation. Accordingly, there are no known past oil and gas permits that have expressly authorized, "fracking or acidizing," as an operation to alter the surrounding formation as may be envisioned for hydraulic fracturing. However, the use of acid may be specified in the drilling plans for a new well as a method to cleanup and repair permeability in the immediate near wellbore vicinity following drilling operations; or may be used for maintenance of an existing wellbore. Rule 62C-25.002, F.A.C., defines workover as, "an operation involving a deepening, plug back, repair, cement squeeze, perforation, hydraulic fracturing, acidizing, or other chemical treatment which is performed in a production, disposal, or injection well in order to restore, sustain, or increase production, disposal, or injection rates."

How many notifications has DEP received that a workover was being done under an existing permit? There are currently a total of 104 active permitted production wells in Florida. During the time period from January 2016 to present, DEP has received a total of 196 workover notifications. Of the 196 notifications, 41 of those workovers involved the use of acid for near wellbore cleanout purposes. There have been no workover notifications/requests to perform hydraulic fracturing since 2013.

Recycling report – we are currently working through final reviews and will definitely meet the 30 days prior to session requirement but may be earlier.

Small sewage treatment systems under DEP, not DOH - 1,214 facilities of less than 100,000 gallons per day categorized as type III wastewater treatment plants. DEP regulated facilities must meet secondary standards prior to discharge, so if there is a drain field on a DEP facility, the sampling applies at the point of discharge prior to the drain field. And DOH regulated facilities cannot have open treatment tanks or any surface discharges.

John J Truitt
Deputy Secretary for Regulatory Programs
Florida Department of Environmental Protection
john.truitt@dep.state.fl.us

Office: 850-245-2037

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.)

Pre	pared By: The	e Profession	al Staff of the C	ommittee on Enviro	nment and Natu	ral Resources
BILL:	SB 200					
INTRODUCER:	Senators Montford, Stewart, and Rader					
SUBJECT:	Advanced Well Stimulation Treatment					
DATE:	November	1, 2019	REVISED:			
ANAL	YST	STAFF	DIRECTOR	REFERENCE		ACTION
. Schreiber		Rogers		EN	Favorable	
··				IT		
				AP		

I. Summary:

SB 200 defines:

- "High-pressure well stimulation" as "all stages of a well intervention performed by injecting fluids into a rock formation at a pressure that equals or exceeds the fracture gradient of the rock formation and the purpose or effect is to fracture the formation to increase production or recovery from an oil or gas well, such as in hydraulic fracturing or acid fracturing."
- "Matrix Acidization" as "all stages of a well intervention performed by injecting fluids into a rock formation at a pressure below the fracture gradient of the rock formation and the purpose or effect is to dissolve the formation to increase production or recovery from an oil or gas well. The term does not include techniques used for routine well cleanout work, well maintenance, removal of formation damage due to drilling or production, or acidizing techniques used to maintain or restore the natural permeability of the formation near the wellbore."

The bill prohibits high-pressure well stimulation and matrix acidization in the state. The bill clarifies that a permit for drilling or operating a well does not authorize the performance of high-pressure well stimulation or matrix acidization. The prohibition only applies to oil and gas wells.

II. Present Situation:

Production of Conventional Versus Unconventional Oil and Gas Resources: The Use of Well Stimulation Techniques

Conventional oil and gas resources are found in porous and permeable sandstone and carbonate reservoirs. Wells have historically been drilled vertically, straight down into a rock formation to extract conventional resources. Whereas conventional resources are found in concentrated underground locations, unconventional resources are highly dispersed through impermeable or "tight" rock formations, such as shales and tight sands. To extract unconventional resources, drilling has generally shifted from vertical to horizontal.

Well stimulation techniques are used in the production of both conventional and unconventional resources. The techniques can be focused solely on the wellbore (drilled hole) for maintenance and remedial purposes or can be used to increase production from the reservoir. The relatively recent development of horizontal or directional drilling in conjunction with the expanded use of well stimulation techniques has increased the production at oil or gas wells and has led to the profitable extraction of unconventional resources. The three main well stimulation techniques are hydraulic fracturing, acid fracturing, and matrix acidizing. Hydraulic fracturing and acid fracturing are commonly referred to as "fracking."

Hydraulic Fracturing

Hydraulic fracturing was developed in the 1940s to increase the production of conventional oil and gas resources. While the technique is not new, the composition of the fracturing fluids used in the process has evolved over time. Initially the fracturing fluids were oil-based and relied on a mixture of petroleum compounds, such as napalm and diesel fuels. Modern hydraulic fracturing involves a fracturing fluid that is composed of: a base fluid, in most cases water; additives, each designed to serve a particular function; and a proppant (such as sand), which holds the fractures open during or following the treatment. The composition of the fracturing fluid varies depending on the permeability and brittleness of the reservoir rock. A hydraulic fracturing

¹ Michael Ratner & Mary Tiemann, Congressional Research Service, R 43148, *An Overview of Unconventional Oil and Natural Gas: Resources and Federal Actions*, 2 (Apr. 22, 2015), *available at https://www.fas.org/sgp/crs/misc/R43148.pdf* (last visited Oct. 25, 2019).

 $^{^{2}}$ Id.

³ U.S. Energy Information Administration (EIA), *Hydraulically Fractured Horizontal Wells Account for Most New Oil and Natural Gas Wells* (Jan. 30, 2018), https://www.eia.gov/todayinenergy/detail.php?id=34732 (last visited Oct. 25, 2019).

⁴ California Council on Science and Technology Lawrence Berkeley National Laboratory, *An Independent Assessment of Well Stimulation in California*, vol. 1, Well stimulation technologies and their past, present, and potential future use in California, 13–14 (January 2015) [hereinafter CA Study], available at https://ccst.us/wp-content/uploads/160708-sb4-vol-l.pdf (last visited Oct. 25, 2019).

 $^{^{5}}$ *Id*. at 2.

⁶ *Id*. at 28.

⁷ Gallegos, T.J., and Varela, B.A., United States Geological Survey, *Trends in Hydraulic Fracturing Distributions and Treatment Fluids, Additives, Proppants, and Water Volumes Applied to Wells Drilled in the United States from 1947 through 2010—Data Analysis and Comparison to the Literature, Scientific Investigations Report 2014–5131, 1 (2015), available at http://pubs.usgs.gov/sir/2014/5131/pdf/sir2014-5131.pdf (last visited Oct. 25, 2019).*

⁸ *Id*. at 7.

⁹ *Id.* at 1, 10–11, 303.

¹⁰ CA Study, at 48, available at https://ccst.us/wp-content/uploads/160708-sb4-vol-I.pdf (last visited Oct. 25, 2019).

operation at a horizontal well involves a four-step process. The first step is the "stage," during which a portion of the well is isolated to focus the fracture fluid pressure. The second is the "pad," during which fracture fluid is injected into the well, first without proppant, to initiate and propagate the fracture in the rock formation. The proppant is then added to keep the fractures open. The third stage is the "flush," during which fluid is injected without proppant to push any remaining proppant into the fractures. The fourth stage is the "flowback," during which the hydraulic fracturing fluids are removed and the fluid pressure dissipates.¹¹

The U.S. Environmental Protection Agency (EPA) estimates that 25,000-30,000 new wells were drilled and hydraulically fractured annually in the United States between 2011 and 2014. ¹² In 2016, hydraulically fractured horizontal wells accounted for 69% of all oil and natural gas wells drilled in the U.S. ¹³ The combination of horizontal drilling and hydraulic fracturing has contributed to increases in crude oil and natural gas production in the U.S. ¹⁴

Acid Fracturing

Acid fracturing is a well stimulation technique that uses acidic fluids. It is sometimes preferred in carbonate reservoirs and can be an effective method for stimulating limestone formations. Well operators pump the acidic fluids into a well at a pressure that exceeds the fracture gradient and, thus, fractures the rock. The acid etches the walls of the fractures and eliminates the need to use a proppant because the fractures remain open after pressure is released. The produced fluids have a much lower acid content than the injected fluids because most of the acid that is injected is neutralized through a reaction with the rock. As compared to hydraulic fracturing, acid fracturing is generally more successful in carbonate reservoirs because of the relatively high degree of natural fractures present.

The purpose of an acid fracturing treatment is to create new or open existing fractures, and dissolve formation material, to create an irregular fracture surface that opens up new flow paths or enhances existing flow paths into the wellbore. ²⁰ As compared to hydraulic fracturing, acid

¹¹CA Study, at 42, 300 available at https://ccst.us/wp-content/uploads/160708-sb4-vol-I.pdf (last visited Oct. 25, 2019). Flowback is defined as "fracturing fluid, perhaps mixed with formation water and traces of hydrocarbon, that flows back to the surface after the completion of hydraulic fracturing."

¹² U.S. Environmental Protection Agency (EPA), *Hydraulic Fracturing for Oil and Gas: Impacts from the Hydraulic Fracturing Water Cycle on Drinking Water Resources in the United States*, 3-1 (Dec. 2016) [hereinafter *EPA Study*], *available at* https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990 (last visited Oct. 25, 2019).

¹³ U.S. Energy Information Administration (EIA), *Hydraulically fractured horizontal wells account for most new oil and natural gas wells* (Jan. 28, 2019), https://www.eia.gov/todayinenergy/detail.php?id=34732 (last visited Oct. 25, 2019).

¹⁴ *Id.*

¹⁵ CA Study, at 25, 56, available at https://ccst.us/wp-content/uploads/160708-sb4-vol-I.pdf (last visited Oct. 25, 2019); see generally Bing Hou, Ruxin Zhang, Mian Chen, Jiawie Kao, and Xin Liu, Investigation on Acid Fracturing Treatment in Limestone Formation Based on True Tri-Axial Experiment, 235 Fuel 473-484 (2019), available at https://www.sciencedirect.com/science/article/pii/S0016236118314273?via%3Dihub#bi005 (last visited Oct. 25, 2019).

¹⁶ CA Study at 348, available at https://ccst.us/wp-content/uploads/160708-sb4-vol-I.pdf (last visited Oct. 25, 2019).

¹⁷ *Id.* at 28.

¹⁸ *Id*. at 14.

¹⁹ *Id*. at 56.

²⁰ American Petroleum Institute, *Acidizing: Treatment in Oil and Gas Operations*, 1–3 (2014), *available at* http://www.api.org/~/media/files/oil-and-natural-gas/hydraulic-fracturing/acidizing-oil-natural-gas-briefing-paper-v2.pdf (last visited Oct. 25, 2019).

fracturing results in fractures that are relatively short in length. ²¹ One of the main factors that adversely affects acid fracture growth is fluid loss, or acid "leakoff." Acid leakoff can result in the enlargement of channels and natural fractures, and can greatly increase the area from which fluid loss occurs, making fluid-loss control difficult and preventing acid from reaching untreated parts of the fracture. ²²

Matrix Acidizing

Well operators have been using matrix acidizing for over 100 years.²³ Drilling and production in oil and gas operations cause damage to the rock formation.²⁴ Formation damage can include the plugging of perforations or the plugging of the rock matrix by debris from the well and well operations, which restrict the flow of hydrocarbons into the wellbore.²⁵ Matrix acidizing is performed by pumping acidic fluids into a well at a pressure that does not exceed the fracture gradient.²⁶ Acidizing is often used for well maintenance and to remediate damage caused by well operation and drilling.²⁷ Operators use acid, which is very effective at dissolving carbonate minerals, to bypass formation damage around the well.²⁸ Most of this acid is neutralized due to reactions with the rock.²⁹ Additionally, various acids are used to clean residential water wells to loosen or dissolve debris so that it can be pumped out of the well.³⁰

If larger volumes of acid are injected into carbonate formations, matrix acidizing can be used to increase the permeability of the formation beyond the zone impacted by drilling or production activities.³¹ Matrix acidizing can result in stimulation of carbonate reservoir permeability beyond the region near the well.³² This technique is not commonly used for stimulation in unconventional reservoirs because it does not increase recovery enough in low permeability reservoirs to make production viable.³³ The penetration into the formation caused by matrix acidizing is typically less extensive than after use of a fracturing technique.³⁴ However, in carbonate reservoirs, matrix acidizing can create deeply penetrating channels, known as wormholes, and lead to deeper acid penetration into more permeable fractures of a naturally fractured reservoir.³⁵ Hydrochloric acid is commonly used for matrix acidizing in carbonate reservoirs.³⁶ To minimize the probability of acid entering into highly permeable sections of the

²¹ CA Study, at 56, available at https://ccst.us/wp-content/uploads/160708-sb4-vol-I.pdf (last visited Oct. 25, 2019).

²² Middle East & Asia Reservoir Review, vol. 4, *Stimulate the Flow*, 46 (Jan. 2003), *available at* https://connect.slb.com/~/media/Files/resources/mearr/num4/stimulate_flow.pdf (last visited Oct. 25, 2019).

²³ CA Study, at 69, available at https://ccst.us/wp-content/uploads/160708-sb4-vol-I.pdf (last visited Oct. 25, 2019).

²⁴ Middle East & Asia Reservoir Review, vol. 4, *Stimulate the Flow*, 42 (Jan. 2003).

 $^{^{25}}$ *Id*

²⁶ CA Study, at 69, available at https://ccst.us/wp-content/uploads/160708-sb4-vol-I.pdf (last visited Oct. 25, 2019).

²⁷ *Id*. at 14.

²⁸ *Id*. at 69.

²⁹ *Id.* at 14.

³⁰ The Groundwater Association, *How Well Systems Are Cleaned*, http://wellowner.org/water-well-maintenance/residential-well-cleaning/ (last visited Oct. 25, 2019).

³¹ CA Study, at 14, available at https://ccst.us/wp-content/uploads/160708-sb4-vol-I.pdf (last visited Oct. 25, 2019).

³² *Id.* at 28.

³³ *Id.* at 14, 69-70.

³⁴ *Id.* at 30.

³⁵ *Id*.

³⁶ Middle East & Asia Reservoir Review, vol. 4, *Stimulate the Flow*, 42, (Jan. 2003), https://connect.slb.com/~/media/Files/resources/mearr/num4/stimulate_flow.pdf (last visited Oct. 25, 2019).

formation, which could create channels into water-producing zones, careful treatment, design, and execution is required when performing a matrix acidizing treatment.³⁷

Production of Oil and Gas Resources in Florida

Northwest and South Florida are the major oil and gas producing areas in the state. Florida's first producing oil well was discovered in 1943 at a wellsite located near present-day Big Cypress Preserve. 38 Oil and gas resources were first discovered in Northwest Florida in 1970, in the town of Jay.³⁹ Annual production of petroleum from these two regions peaked at more than 47 million barrels in 1978 but has subsequently decreased substantially, with annual statewide production dropping to less than 2 million barrels annually since 2016. 40 Florida's natural gas production also peaked in the 1970s, and production in 2017 was less than one-third of peak output in 1978.⁴¹ There are currently two active oil and gas fields in Northwest Florida, and seven active oil and gas fields in South Florida. 42 While geologists believe that there may be oil and natural gas deposits off Florida's western coast, the state enacted a drilling ban for state waters in 1990 and, in 2006, Congress banned the leasing of federal offshore blocks within 125 miles of Florida's western coast until at least 2022.⁴³ Additionally, federal law gives priority use of much of the area to the military for training.⁴⁴ In 2018, the Florida constitution was amended to prohibit drilling for exploration or extraction of oil or natural gas on lands "beneath all state waters which have not been alienated and that lie between the mean high water line and the outermost boundaries of the state's territorial seas."45

In 2018, there were 57 active producer wells in Florida. ⁴⁶ The Department of Environmental Protection's (DEP) 2018 Annual Production Report totaled natural gas production at 816,587 million cubic feet and oil production at 622,359 thousand barrels in the state. ⁴⁷ Proven oil and gas reserves in Northwest and South Florida are composed of carbonate formations (limestone and dolomite reservoirs), which have naturally higher permeability than the tighter shale or similar formations. ⁴⁸ Rather than hydraulic fracturing, well operators in the state have generally preferred washing or flushing the formations, or other alternative methods, to enhance recovery of oil and gas resources. ⁴⁹

³⁷ *Id.* at 44.

³⁸ American Oil & Gas Historical Society, *First Florida Oil Well*, http://aoghs.org/states/first-florida-oil-well/ (last visited Oct. 31, 2019).

³⁹ Lloyd, Jacqueline M., *Information Circular 107*, *Part I: 1988 and 1989 Florida Petroleum Production and Exploration*, 1 (1991), *available at* http://ufdc.ufl.edu/UF00001168/00001/pdf (last visited Oct. 25, 2019).

⁴⁰ EIA, Florida, *Profile Analysis*, http://www.eia.gov/state/analysis.php?sid=FL (last visited Oct. 25, 2019).

⁴¹ *Id*.

⁴² DEP, *State Production Data* (2018), *available at* https://floridadep.gov/water/oil-gas/documents/state-production-data (last visited Oct. 25, 2019).

⁴³ EIA, Florida, *Profile Analysis: Petroleum*, http://www.eia.gov/state/analysis.php?sid=FL (last visited Oct. 25, 2019); see Pub. L. No. 109-432, s. 104(a)(2), 120 Stat. 3003 (2006); see s. 377.242(1), F.S.

⁴⁴ EIA, Florida, *Profile Analysis: Petroleum*, http://www.eia.gov/state/analysis.php?sid=FL (last visited Oct. 25, 2019).

⁴⁵ FLA CONST. art. II, s. 7(c).

⁴⁶ DEP, State Production Data (2018), available at https://floridadep.gov/water/oil-gas/documents/state-production-data (last visited Oct. 25, 2019).

⁴⁷ Id

⁴⁸ DEP, *Hydraulic Fracturing Background and Recommendations*, 2-3 (Sept. 29, 2011) *available at* http://news.caloosahatchee.org/docs/Dep_Fracturing_Response_130118.pdf (last visited Oct. 25, 2019). ⁴⁹ *Id.* at 3.

Regulation of Well Stimulation Techniques

Federal Regulation

There is limited direct federal regulation over oil and gas activities. In 2005, Congress passed the Energy Policy Act amending, in part, the Safe Drinking Water Act (SDWA) and the Clean Water Act (CWA). The SDWA was amended to revise the definition of the term "underground injection" to specifically exclude the underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations. The CWA contains exemptions from stormwater permitting requirements for oil and gas exploration production, processing, or treatment operations or transmission facilities. Although the 2005 Energy Policy Act broadened the exemptions to include "construction activities" in the definition of oil and gas exploration and production, any flows from oil and gas operations which are contaminated or come into contact with overburden, raw material, intermediate products, finished product, byproduct, or waste products remain regulated under the CWA.

In March of 2015, in an attempt to regulate hydraulic fracturing on federal and tribal lands, the Bureau of Land Management (BLM) published final rules governing hydraulic fracturing.⁵⁴ The rules were to take effect on June 24, 2015. However, the United States District Court for the District of Wyoming granted a preliminary injunction and the rule was stayed.⁵⁵ In June of 2016, the court held that the BLM lacked authority to regulate hydraulic fracturing and set aside the final rules.⁵⁶ The court's ruling was appealed to the United States Court of Appeals Tenth Circuit, which dismissed the appeal and remanded with directions to vacate the district court's opinion and dismiss the action without prejudice in light of BLM's decision to rescind the final rules.⁵⁷

⁵⁰ Energy Policy Act of 2005, H.R. 6, 109th Cong. (2005-2006).

⁵¹ 42 U.S.C. s. 300h(d) (2012).

⁵² 33 U.S.C. s 1342 (1)(2) (2012).

⁵³ 33 U.S.C. s. 1362(24) (2012); *NRDC v. U.S. EPA*, 526 F.3d 591, 599, 608 (9th Cir. 2008)(vacating an EPA rule implementing the 2005 amendment); William J. Brady, *Hydraulic Fracturing Regulation in the United States: The Laissez-faire Approach of the Federal Government and Varying State Regulations*, 7–8 (2012), *available at* http://www.law.du.edu/documents/faculty-highlights/Intersol-2012-HydroFracking.pdf (last visited Oct. 31, 2019). Oil and gas construction facilities remain subject to the CWA's permitting requirements for stormwater, and for discharging a pollutant into navigable waters, when applicable.

⁵⁴ Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 80 Fed. Reg. 16,128-16,222 (Oct. 25, 2015). Under the final BLM regulations, the term "hydraulic fracturing" is defined as "those operations conducted in an individual wellbore designed to increase the flow of hydrocarbons from the rock formation to the wellbore through modifying the permeability of reservoir rock by applying fluids under pressure to fracture it. Hydraulic fracturing does not include enhanced secondary recovery such as water flooding, tertiary recovery, recovery through steam injection, or other types of well stimulation operations such as acidizing."

⁵⁵ State of Wyo. vs. U.S. Dept. of the Int., No. 2: 15-CV-043-SWS (D. Wyo. Sept. 30, 2015) (granting a preliminary injunction), available at http://www.wyd.uscourts.gov/pdfforms/orders/15-cv-043%20130%20order.pdf (last visited Oct. 25, 2019).

⁵⁶ State of Wyo. vs. U.S. Dept. of the Int., No. 2: 15-CV-043-SWS (D. Wyo. June 21, 2016), available at http://www.wyd.uscourts.gov/pdfforms/orders/15-cv-043-S%20Order.pdf (last visited Oct. 25, 2019).

⁵⁷ State of Wyo. vs. U.S. Dept. of the Int., No. 16-8068 (10th Cir. Sept. 21, 2017), available at https://www.ca10.uscourts.gov/opinions/16/16-8068.pdf (last visited Oct. 25, 2019).

While direct regulation over well stimulation techniques at the federal level is limited, there are several federal statutes that regulate the indirect impacts of oil and gas extraction. The EPA's Oil and Gas Extraction Effluent Guidelines and Standards regulate wastewater discharges from field exploration, drilling, production, well treatment, and well completion activities. The regulations apply to conventional and unconventional extraction, with the exception of extractions of coalbed methane. These standards are incorporated into the CWA's National Pollutant Discharge Elimination System (NPDES) regulatory framework.

Because oil and gas activities may result in the release of hazardous substances into the environment at or under the surface in a manner that may endanger public health or the environment, these activities are regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).⁶¹ While recovered petroleum or natural gas is exempt from the act, other hazardous substances that result from oil or gas production, such as fracturing fluids, are subject to CERCLA.⁶² If a release of such fluids occurs, the facility owner and operator could face liability under CERCLA.⁶³

To ensure that employees who may be exposed to hazardous chemicals in the workplace are aware of the chemicals' potential dangers, manufacturers and importers must obtain or develop Material Safety Data Sheets (MSDS) for hydraulic fracturing chemicals that are hazardous according to the Occupational Safety and Health Administration (OSHA) standards. ⁶⁴ MSDS must be maintained for hazardous chemicals at each job site and must include the chemical names of substances that are considered hazardous under the OSHA regulations. ⁶⁵

Regulation in Other States

States have primary jurisdiction and authority over the regulation of oil and gas activities. Almost all states with economically viable production wells have extensive regulatory programs in place for permitting and monitoring oil and gas activities. Recent advances in technology and the widespread use of well stimulation techniques, particularly hydraulic fracturing, have motivated some states to update and revise their oil and gas regulations to specifically address such techniques, or to ban certain techniques altogether. ⁶⁶

⁵⁸ EPA, Oil and Gas Extraction Effluent Guidelines, Rule Summary, available at http://www.epa.gov/eg/oil-and-gas-extraction-effluent-guidelines (last visited Oct. 25, 2019).

⁵⁹ *Id*.

⁶⁰ *Id*.

⁶¹ 42 U.S.C. ss. 9601-9675 (2012); Adam Vann, Brandon J. Murrill, & Mary Tiemann, Cong. Research Serv., R 43152, *Hydraulic Fracturing: Selected Legal Issues*, 12-13 (Sept. 26, 2014), *available at* https://www.fas.org/sgp/crs/misc/R43152.pdf (last visited Oct. 28, 2019).

⁶² Adam Vann, Brandon J. Murrill, & Mary Tiemann, Cong. Research Serv., R 43152, *Hydraulic Fracturing: Selected Legal Issues*, 12–13 (Sept. 26, 2014).

⁶³ *Id.* at 13.

⁶⁴ *Id*. at 22.

⁶⁵ *Id*.

⁶⁶ See generally Hannah Wiseman, Untested Waters: The Rise of Hydraulic Fracturing in Oil and Gas Production and the Need to Revisit Regulation, 20 FORDHAM ENVTL. L. REV. 115 (2009), available at http://law.uh.edu/faculty/thester/courses/Emerging%20Tech%202011/Wiseman%20on%20Fracking.pdf (last visited Oct. 25, 2019).

Vermont, New York, Maryland, and Washington prohibit some form of hydraulic fracturing. In 2012, Vermont banned the practice of hydraulic fracturing. ⁶⁷ In 2015, New York's Department of Environmental Conservation found that there were "no feasible or prudent alternatives [other than a ban which] would adequately avoid or minimize adverse environmental impacts and that address the scientific uncertainties and risks to public health from [high-volume hydraulic fracturing]." ⁶⁸ The Findings Statement effectively banned high-volume hydraulic fracturing in the state of New York. ⁶⁹ In 2017, Maryland prohibited hydraulic fracturing for the exploration or production of oil or natural gas. ⁷⁰ In 2019, the state of Washington prohibited hydraulic fracturing for the exploration and production of oil or natural gas. ⁷¹

Regulation in Florida

In Florida, DEP has regulatory authority over oil and gas resources.⁷² DEP's Division of Water Resource Management (Division) oversees the permitting process for drilling, production, and exploration.⁷³ The Division has jurisdiction and authority over all persons and property necessary to administer and enforce all laws relating to the conservation of oil and gas.⁷⁴ Local government approval is required for drilling within municipal boundaries, or in tidal waters or near improved beaches.⁷⁵

When issuing permits for oil and gas exploration or extraction, the Division is required to consider the nature, character, and location of the lands involved; the nature, type, and extent of ownership of the applicant; and the proven or indicated likelihood of the presence of oil, gas, or related minerals on a commercially profitable basis. To DEP is required to issue orders and adopt rules that ensure all precautions are taken to prevent the spillage of oil or any other pollutant in all phases of drilling for and extracting oil, gas, or other petroleum products. The purposes of such rules and orders include preventing the pollution of fresh, salt, or brackish waters or lands

⁶⁷ 29 V.S.A. § 571; 29 V.S.A. § 503(30). The statute defines the term "hydraulic fracturing" as "the process of pumping a fluid into or under the surface of the ground in order to create fractures in rock for the purpose of the production or recovery of oil or gas."

⁶⁸ New York Department of Environmental Conservation, *Final Supplemental Generic Environmental Impact Statement on the Oil, Gas, and Solution Mining Regulatory Program: Regulatory Program for Horizontal Drilling and High-Volume Hydraulic Fracturing to Develop the Marcellus Shale and Other Low-Permeability Gas Reservoirs, Findings Statement, 42* (June 2015), *available at http://www.dec.ny.gov/docs/materials_minerals_pdf/findingstatehvhf62015.pdf* (last visited Oct. 25, 2019)

⁶⁹ See id. at 2. The Findings Statement defined the term "high-volume hydraulic fracturing" as "the stimulation of a well using 300,000 or more gallons of water as the base fluid for hydraulic fracturing for all stages in a well completion, regardless of whether the well is vertical or directional, including horizontal."

⁷⁰ Maryland Code § 14-107.1 (2017). Under Maryland law, the term "hydraulic fracturing" is defined as "a stimulation treatment performed on oil and natural gas wells in low-permeability oil or natural gas reservoirs through which specially engineered fluids are pumped at high pressure and rate into the reservoir interval to be treated, causing fractures to open." ⁷¹ RCWA 78.52.560. Under the prohibition, "hydraulic fracturing" is defined as "the process of pumping a fluid into or under the surface of the ground in order to create fractures in rock for the purpose of the production or recovery of oil or natural gas."

⁷² Chapter 377, pt. I, F.S.; Fla. Admin. Code, Chapters 62C-25–62C-30.

⁷³ DEP, Oil and Gas Program, https://floridadep.gov/water/oil-gas (last visited Oct. 28, 2019).

⁷⁴ Section 377.21(1), F.S.

⁷⁵ Section 377.24, F.S.

⁷⁶ Section 377.241, F.S.

⁷⁷ Section 377.22(2), F.S.

of the state, and preventing the escape of oil or other petroleum products from one stratum to another.⁷⁸

Before any person begins work other than environmental assessments or surveying at the site of a proposed drilling operation, a permit to drill is required and a preliminary site inspection must be conducted by DEP.⁷⁹ In oil and gas wells, the "casing" is a hollow steel pipe used to line the inside of the wellbore, and the casing is usually surrounded by a cement sheath.⁸⁰ An application to DEP for a permit to drill must include a proposed casing and cementing program and a location plat survey.⁸¹ The regulations require the operator to case and cement wells in order to maintain well control and prevent degradation of other natural resources, including water.⁸² Each drilling permit is valid for one year from the date of approval.⁸³ Before a permit is granted, the owner or operator is required to post a bond or other form of security for each well.⁸⁴

Before a well is used for its intended purpose, in addition to the drilling permit, a permit to operate the well must be obtained.⁸⁵ Operating permits are valid for the life of the well, although each operating well and permit must be recertified every five years from the permit date.⁸⁶ Each application and subsequent recertification must include: the appropriate fee; bond or security coverage; a spill prevention and cleanup plan; flowline specifications and an installation plan; containment facility certification; and additional reporting and data submissions, such as driller's logs and monthly well reports.⁸⁷

A separate permit is not required for the performance of well stimulation techniques. Such techniques are regulated as workovers. BEP regulations define the term "workover" as: "an operation involving a deepening, plug back, repair, cement squeeze, perforation, *hydraulic fracturing*, *acidizing*, or other chemical treatment which is performed in a production, disposal, or injection well in order to restore, sustain, or increase production, disposal, or injection rates." An operator is required to notify DEP before commencing a workover procedure and must submit a revised well record to DEP within 30 days of completion of any workover procedure. DEP before commencing a workover procedure.

⁷⁸ *Id*.

⁷⁹ Fla. Admin. Code R. 62C-26.003.

⁸⁰ FracFocus, Well Construction & Groundwater Protection, https://fracfocus.org/hydraulic-fracturing-how-it-works/casing (last visited Oct. 28, 2019).

⁸¹ Fla. Admin. Code R. 62C-26.003.

⁸² Fla. Admin. Code R. 62C-27.005. The regulations specify standards for casing depth and pressure testing.

⁸³ Fla. Admin. Code R. 62C-26.003.

⁸⁴ Fla. Admin. Code R. 62C-26.002.

⁸⁵ Fla. Admin. Code R. 62C-26.008.

⁸⁶ *Id*.

⁸⁷ *Id*.

⁸⁸ See s. 377.22(2)(o)(p), F.S. The division is required to adopt rules to "regulate the 'shooting,' perforating and chemical treatment of wells," and to "regulate secondary recovery methods, including the introduction of gas, air, water, or other substance into producing formations"; see s. 377.26, F.S. In regulating the vertical orientation of the well, the division is required to "take into account technological advances in drilling and production technology, including, but not limited to, horizontal well completions in the producing formation using directional drilling methods."

⁸⁹ Fla. Admin. Code R. 62C-25.002(61).

⁹⁰ Fla. Admin. Code R. 62C-29.006.

196 workover notifications. ⁹¹ Of the 196 notifications, 41 of those workovers involved the use of acid and all of those were for near wellbore cleanout purposes. There have been no workover notifications/requests to perform hydraulic fracturing since 2013. ⁹²

A person that violates any statute, rule, regulation, order, or permit of the division relating to the regulation of oil or gas resources or who refuses inspection by the division is liable for damages caused to the air, waters, or property of the state; for the reasonable costs of tracing the source of the discharge and for controlling and abating the source and the pollutants; and for the costs of restoring the air, waters, and property. 93 Such persons are also subject to judicial imposition of a civil penalty of up to \$10,000 for each offense. 94 Each day during any portion of which a violation occurs constitutes a separate offense. 95

In December of 2013, DEP received a workover notice proposing use of an enhanced extraction procedure and requested that the company that submitted the notice not complete the procedure until DEP could conduct a review. ⁹⁶ When the company commenced with the procedure, DEP issued a cease and desist order. ⁹⁷ DEP fined the company \$25,000 for violating the cease and desist order. ⁹⁸ It was concluded that the workover procedures performed on the well involved hydraulic fracturing, and seemingly also involved acid stimulation. ⁹⁹

Local Regulation

While cities and counties do not operate oil and gas permitting programs in Florida, some, through their land use regulations or zoning ordinances, require special exceptions for oil and gas activities or limit oil and gas activities to certain zoning classifications. When authorizing oil and gas activities, local governments consider factors such as consistency with their comprehensive plan, injuries to communities or the public welfare, and compliance with zoning ordinances. DEP may not issue a permit for drilling within the corporate limits of a municipality unless the municipality first adopts a resolution approving the permit. At least six municipalities (Estero, Bonita Springs, Coconut Creek, Cape Coral, Dade, and Zephyrhills) and thirteen counties (Alachua, Bay, Brevard, Broward, Citrus, Indian River, Martin, Miami-Dade, Osceola, Pinellas, St. Lucie, Volusia, Wakulla, and Walton) have banned one or more forms of

⁹¹ Email from John Truitt, Deputy Secretary for Regulatory Programs, DEP, RE: Follow-Up (Oct. 18. 2019)(on file with the Environment and Natural Resources Committee).

⁹² *Id*.

⁹³ Section 377.37(1)(a), F.S.

⁹⁴ *Id*.

⁹⁵ I.A

⁹⁶ State of Florida Department of Environmental Protection vs. Dan A. Hughes Company, L.P., OGC File No. 14-0012, 2 (April 8, 2014), available at https://www.doah.state.fl.us/FLAID/DEP/2014/DEP_14-0012_05162014_014716.pdf (last visited Oct. 28, 2019).

⁹⁷ *Id*.

⁹⁸ *Id*.

⁹⁹ ALL Consulting, LLC., *Expert Evaluation of the D.A. Hughes Collier-Hogan 20-3H*, *Well Drilling and Workover, Prepared for Florida Department of Environmental Protection*, 3, 4, 25 (2014), *available at* https://assets.documentcloud.org/documents/1507525/allconsulting.pdf (last visited Oct. 28, 2019).

¹⁰⁰ See, e.g., Lee County's Land Development Code § 34-1651 and 34-145.

¹⁰¹ *Id*.

¹⁰² Section 377.24(5), F.S.

well stimulation techniques by ordinance. Additionally, many counties and cities in Florida have passed resolutions supporting bans or moratoriums relating to well stimulation techniques. 104

Environmental Concerns

There are a variety of environmental concerns relating to well stimulation techniques. Potential impacts and concerns include: groundwater or surface water contamination; stress on water supplies; inadequate wastewater management and disposal; and air quality degradation including methane emissions. Because well stimulation techniques are applied to so many types of underground formations using a variety of methods and fluids, environmental impacts vary depending on factors such as the toxicity of the fluid used; the closeness of the fracture zone to underground drinking water; the existence of a barrier between the fracture formation and other formations; and how wastewater is disposed of. 106

Water Quality

The EPA estimated that of the approximately 275,000 wells that have been hydraulically fractured in 25 states between 2000 and 2013, an estimated 21,900, or 8%, were within one mile of at least one public water system groundwater well or surface water intake. ¹⁰⁷ As a result of fracturing, sources of drinking water may be contaminated through the release of gas-phase hydrocarbons, in what is known as stray gas migration, if the well casing or cementing is too weak or if it fails. ¹⁰⁸ The EPA concluded that the "injection of hydraulic fracturing fluids into wells with inadequate mechanical integrity [may allow for] gases or liquids to move to groundwater sources." ¹⁰⁹ While concerns related to inadequate well casing or cementing are not

¹⁰³ Village of Estero, Ordinance No. 2015-19; Bonita Spring's Land Development Code, Chapter 4, Article VI, Division 15, Section 4-1380; Coconut Creek's Land Development Code, Article IV, Section 13-1000; City of Cape Coral, Ordinance §3.23; City of Dade, Ordinance No. 2016-08; City of Zephyrhills, Ordinance No. 1310-16; Alachua County's Code of Ordinances, §77.13.5; Bay County's Land Development Regulation, §311; Brevard County's Code of Ordinances, §46-375; Citrus County's Code of Ordinances, §66-133; Indian River County's Code of Ordinances, §317.03; Osceola County's Land Development Code, §4.12.3; Broward County's Code of Ordinances, §27-193; Martin County's Code of Ordinances, §67.443; Miami-Dade County's Code of Ordinances, §33-437; Pinellas County's Code of Ordinances, §58-489; St. Lucie County's Code of Ordinances, Policy 6.1.5.7; Volusia County's Code of Ordinances, §50-42; Wakulla County's Code of Ordinances, §6-34; Walton County's Code of Ordinances, §9-156.

¹⁰⁴ See Food & Water Watch, Local Regulations Against Fracking, http://www.foodandwaterwatch.org/insight/local-resolutions-against-fracking#florida (last visited Oct. 28, 2019). The page shows a list of local governments that passed resolutions against fracking.

¹⁰⁵ EPA, Unconventional Oil and Natural Gas Development, Providing Regulatory Clarity and Protections Against Known Risks, https://www.epa.gov/uog (last visited Oct. 28, 2018).

¹⁰⁶ Hannah Wiseman, *Untested Waters: The Rise of Hydraulic Fracturing in Oil and Gas Production and the Need to Revisit Regulation*, 20 FORDHAM ENVTL. L. REV. 115, 6 (2009), *available at* http://law.uh.edu/faculty/thester/courses/Emerging%20Tech%202011/Wiseman%20on%20Fracking.pdf (last visited Oct. 28, 2019).

¹⁰⁷ EPA Study, at 2-14, available at https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990 (last visited Oct. 28, 2019).

¹⁰⁸ Avner Vengosh, Robert B. Jackson, Nathaniel Warner, Thomas Darrah, & Andrew Kondash, *A Critical Review of the Risks to Water Resources from Unconventional Shale Gas Development and Hydraulic Fracturing in the United States*, American Chemical Society, 48 Env. Sci. & Technol. 8334-8348, 8335-8336 (C-D) (Mar. 2014), *available at* <a href="https://www.researchgate.net/publication/260643891_A_Critical_Review_of_the_Risks_to_Water_Resources_from_Unconventional_Shale_Gas_Development_and_Hydraulic_Fracturing_in_the_United_States} (last visited Oct. 28, 2019).

¹⁰⁹ EPA Study, at 10-3.

unique to hydraulic fracturing, horizontally drilled, hydraulically fractured wells pose more production challenges because the well casing is subject to greater pressures.¹¹⁰

Mitigating measures, such as extending the casing farther below groundwater resources and pressure testing the well casing before the injection of fluids, may work to prevent well casing failures. Blowout preventers also help control and prevent pressure build-ups. Hydraulically fractured wells in shale formations are usually drilled deeper than vertical wells, which can lead to a greater vertical separation between the formation and the drinking water resource. Thousands of feet of rock layers typically overlay the produced portion of shale and serve as a barrier to contamination. The majority of Florida's public water supply is obtained from groundwater sources, such as the Floridan aquifer system. Areas in which oil and gas have been extracted have an upper confining unit that is generally greater than 100 feet, which may serve as a barrier to contamination.

Fractures created during hydraulic fracturing can intersect nearby wells or their fracture networks, resulting in the flow of fluids into those wells and to underground drinking water resources. These "frac-hits" are more likely to occur if wells are close to each other or are on the same well pad. According to one study, the likelihood of a frac-hit is less than 10% in hydraulically fractured wells more than 4,000 feet apart, while the likelihood is nearly 50% in wells that are less than 1,000 feet apart. In Florida, horizontal wells and associated drilling units that are deeper than 7,000 feet have more stringent spacing requirements.

Surface water contamination may occur because of the inadequate storage and disposal of produced water. Produced water is the water that comes back to the surface as part of the oil and gas production process, and has generally been found to contain salts, metals, organic compounds, radioactive materials, and hydraulic fracturing chemicals. ¹²⁰ For a hydraulically fractured well, the produced water includes the fracturing fluids, or flowback. While the chemicals used will vary by region or between wells, some chemicals used in hydraulic

¹¹⁰ Michael Ratner & Mary Tiemann, Cong. Research Serv., R 43148, *An Overview of Unconventional Oil and Natural Gas: Resources and Federal Actions*, 8 (Apr. 22, 2015), *available at https://fas.org/sgp/crs/misc/R43148.pdf* (last visited Oct. 28, 2019).

¹¹¹ EPA Study, at 6-9, available at https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990 (last visited Oct. 28, 2019).

¹¹² Michael Ratner & Mary Tiemann, Cong. Research Serv., R 43148, *An Overview of Unconventional Oil and Natural Gas: Resources and Federal Actions*, 10 (Apr. 22, 2015), *available at* https://fas.org/sgp/crs/misc/R43148.pdf (last visited Oct. 28, 2019); ScienceDirect, *Preventers: Learn More About Preventers*,

https://www.sciencedirect.com/topics/engineering/preventers (last visited Oct. 28, 2019).

¹¹³ Michael Ratner & Mary Tiemann, Cong. Research Serv., R 43148, *An Overview of Unconventional Oil and Natural Gas: Resources and Federal Actions*, 7 (Apr. 22, 2015).

¹¹⁴ Id.

¹¹⁵ DEP, Aquifers, https://fldep.dep.state.fl.us/swapp/Aquifer.asp (last visited Oct. 28, 2019).

¹¹⁶ U.S. Geological Survey, *Conceptual Model of the Floridan*, http://fl.water.usgs.gov/floridan/conceptual-model.html (last visited Oct. 28, 2019).

¹¹⁷ EPA Study, at 6-71, available at https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990 (last visited Oct. 28, 2019).

¹¹⁸ *Id*. at 10-18.

¹¹⁹ Fla. Admin. Code R. 62C-26.004(5).

¹²⁰ EPA Study, at ES-33, available at https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990 (last visited Oct. 28, 2019).

fracturing are hazardous.¹²¹ It is estimated that approximately 10-40% of the volume of injected fracturing fluids return to the surface after hydraulic fracturing.¹²² In most produced waters, the concentrations of toxic elements, such as radioactive radium, are positively correlated with salinity, which suggests that many of the potential water quality issues associated with produced waters may be attributable to the geochemistry of the brines within the shale formations.¹²³

As the use of hydraulic fracturing has increased, so has the volume of wastewater generated. Spills of produced water do occur and can result in large volumes or high concentrations of chemicals reaching groundwater sources. ¹²⁴ The EPA has reported that spills generally occur at 1-10% of hydraulically fractured or active wells. ¹²⁵ In Florida, any spill of waste material relating to oil or gas wells must be immediately reported to the Division and the appropriate federal agencies, and the owner or operator is responsible for the costs of cleanup or other damage incurred. ¹²⁶

Water Supply

The amount of water used during the performance of a hydraulic fracturing treatment depends on factors such as the well depth, formation geology, and the composition of the fluids injected. In most cases, the large majority of the fracturing fluid is water, and each hydraulically fractured well can require thousands to millions of gallons of water. While the total water use for hydraulic fracturing is relatively low compared to other industrial uses of water, wells that are good candidates for such techniques are usually located near the same water source and, as a result, the collective impact of water withdrawals can be significant. Some states have implemented pilot projects evaluating the feasibility of reusing produced waters or other brackish or wastewaters. The reuse of wastewater, however, is often limited by the amount of wastewater that is available. The volume of produced water from a single well can be relatively small compared to the volume of water needed to fracture a well.

¹²¹ *Id.* at 9-1, 9-16; *see* FracFocus, *What Chemicals Are Used*, https://fracfocus.org/chemical-use/what-chemicals-are-used (last visited Oct. 28, 2019).

¹²² Avner Vengosh, Robert B. Jackson, Nathaniel Warner, Thomas Darrah, & Andrew Kondash, *A Critical Review of the Risks to Water Resources from Unconventional Shale Gas Development and Hydraulic Fracturing in the United States*, American Chemical Society, 48 Env. Sci. & Technol. 8334-8348, 8339 (G) (Mar. 2014), *available at* https://www.researchgate.net/publication/260643891 A Critical Review of the Risks to Water Resources from Unconventional Shale Gas Development and Hydraulic Fracturing in the United States (last visited Oct. 28, 2019).

¹²³ Id.

¹²⁴ EPA Study, at ES-35, 10-3, available at https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990 (last visited Oct. 28, 2019).

¹²⁵ *Id.* at 10-9.

¹²⁶ Section 377.371, F.S.

¹²⁷ EPA Study, at 4-3, 4-11, available at https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990 (last visited Oct. 28, 2019).

¹²⁸ Avner Vengosh, Robert B. Jackson, Nathaniel Warner, Thomas Darrah, & Andrew Kondash, *A Critical Review of the Risks to Water Resources from Unconventional Shale Gas Development and Hydraulic Fracturing in the United States*, American Chemical Society, 48 Env. Sci. & Techol. 8334-8348, 8343 (J) (2014); Hannah Wiseman, *Risk and Response in Fracturing Policy*, 84 UNV. OF COL. L. REV. 729-817, 776 (2009), *available at* http://lawreview.colorado.edu/wpcontent/uploads/2013/11/11.-Wiseman_For-Printer_s.pdf (last visited Oct. 28, 2019).

¹²⁹ Hannah Wiseman, Risk and Response in Fracturing Policy, 84 UNV. OF COL. L. REV. 729-817, 770 (2009).

¹³⁰ EPA Study, at 10-6, available at https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990 (last visited Oct. 28, 2019).

¹³¹ *Id*.

Wastewater Management and Disposal

The majority of produced water is disposed of using injection wells. ¹³² Injection wells are permitted under the federal Underground Injection Control (UIC) program. ¹³³ The goal of the UIC program is the effective isolation of injected fluids from underground sources of drinking water. ¹³⁴ Class II injection wells are designed for injecting fluids associated with the production of oil and natural gas, or fluids used to enhance hydrocarbon recovery. While the injection of fracturing fluids, unless the fluid contains diesel, is exempt from the UIC program, the wastewater from oil and gas operations is not exempt. ¹³⁵ As of 2016, there were about 14 active Class II disposal wells in Florida, with an average disposal rate per well of 246,000 gallons per day. ¹³⁶

Another issue that is developing with the increase in the number of injection wells is the concern that the deep-well disposal of oil and gas production wastewater is responsible for seismic activity in certain areas. The Oklahoma Geological Survey stated that the primary suspected source of triggered seismicity is from the injection of produced water associated with oil and gas production in disposal wells. The likelihood of potentially inducing seismic events differs between regions, based on factors such as geology and the wastewaters produced. The likelihood of potentially inducing seismic events differs between regions, based on factors such as geology and the wastewaters produced.

Additionally, in some states, the produced water is being sent to treatment facilities that are not equipped to treat wastewater from hydraulically fractured wells. ¹⁴⁰ In June of 2016, the EPA, under the authority of the CWA, published final rules for the oil and gas extraction category. ¹⁴¹ The rules establish pretreatment standards that prevent the discharge of pollutants in wastewater from onshore, unconventional oil and gas facilities to publicly owned treatment works. ¹⁴² The

¹³² *Id.* at 8-3.

¹³³ EPA, Underground Injection Control, General Information About Injection Wells, https://www.epa.gov/uic/general-information-about-injection-wells (last visited Oct. 28, 2019).

¹³⁴ Id.

¹³⁵ Watershed Council, *Regulations and Exemptions*, https://www.watershedcouncil.org/hydraulic-fracturing---regulations-and-exemptions.html (last visited Oct. 28, 2019).

¹³⁶ EPA Study, at 8-24, available at https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990 (last visited Oct. 28, 2019).

¹³⁷ See generally Peter Folger & Mary Tiemann, Cong. Research Serv., R 43836, *Human-Induced Earthquakes from Deep-Well Injection: A Brief Overview* (Sept. 30, 2016), *available at* https://www.fas.org/sgp/crs/misc/R43836.pdf (last visited Oct. 28, 2019).

¹³⁸ Oklahoma Geological Survey, *Statement on Oklahoma Seismicity*, 1 (Apr. 21, 2015), http://wichita.ogs.ou.edu/documents/OGS_Statement-Earthquakes-4-21-15.pdf (last visited Oct. 28, 2019).

¹³⁹ Tanya Gallegos, Brian Varela, Seth Haines, & Mark Engle, *Hydraulic Fracturing Water Use Variability in the United States and Potential Environmental Implications*, Water Resour. Res., 5839–5845, 5844 (2015), *available at* https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1002/2015WR017278 (last visited Oct. 28, 2019).

¹⁴⁰ Hannah Wiseman, *Risk and Response in Fracturing Policy*, 84 UNV. OF COL. L. REV. 729-817, 768-769 (2009), *available at* http://lawreview.colorado.edu/wp-content/uploads/2013/11/11.-Wiseman For-Printer s.pdf (last visited Oct. 28, 2019).

¹⁴¹ Effluent Limitations Guidelines and Standards for the Oil and Gas Extraction Point Source Category, 81 Fed. Reg. 41845–41857 (June 28, 2016), *available at* https://www.govinfo.gov/content/pkg/FR-2016-06-28/pdf/2016-14901.pdf (last visited Oct. 28, 2019).

¹⁴² EPA, *Unconventional Extraction in the Oil and Gas Industry*, http://www2.epa.gov/eg/unconventional-extraction-oil-and-gas-industry (last visited Oct. 28, 2019).

compliance date for the rules was extended until 2019 for certain facilities, but the rules are currently in effect. 143

Air Quality

The key aerial emissions associated with unconventional oil and gas production include methane (the main component of natural gas and a potent greenhouse gas), volatile organic compounds (VOCs), nitrogen oxides, sulfur dioxide, particulate matter, and various hazardous air pollutants. In 2012, under the Clean Air Act, the EPA issued the first federal air standards for hydraulically fractured natural gas wells. In New Source Performance Standards required reductions in VOC emissions from hydraulically fractured natural gas wells.

In May of 2016, the EPA issued three rules which together sought to curb emissions of methane, VOCs, toxins, and air pollutants, such as benzene, from new, reconstructed, and modified oil and gas sources. The final rule on new and modified sources required compressor stations to monitor leaks, also known as "fugitive emissions," and required owners or operators to find and repair such leaks, which can be a significant source of both methane and VOC pollution. The rule phased in requirements for a process known as "green completion" to capture aerial emissions from hydraulically fractured wells. The EPA expects that implementation of the rule will reduce air pollutants and toxins, as well as provide health benefits related to reductions in fine particle pollution and ozone toxics, along with improvements in visibility. In October of 2018, the EPA proposed clarifications and amendments regarding details of the rule's implementation.

¹⁴³ 40 C.F.R. ss. 435.33 and 435.34 (2016).

¹⁴⁴ Michael Ratner & Mary Tiemann, Cong. Research Serv., R 43148, *An Overview of Unconventional Oil and Natural Gas: Resources and Federal Actions*, 9 (Apr. 22, 2015), *available at* https://fas.org/sgp/crs/misc/R43148.pdf (last visited Oct. 28, 2019); *see* Richard Lattanzio, R 42986, *Methane and Other Air Pollution Issues in Natural Gas Systems*, 5-6 (Nov. 5, 2018), *available at* https://fas.org/sgp/crs/misc/R42986.pdf (last visited Oct. 29, 2019).

¹⁴⁵ Michael Ratner & Mary Tiemann, Cong. Research Serv., R 43148, *An Overview of Unconventional Oil and Natural Gas: Resources and Federal Actions*, 14 (Apr. 22, 2015).

¹⁴⁶ EPA, Controlling Air Pollution from the Oil and Natural Gas Industry: Actions and Notices About Oil and Natural Gas Air Pollution Standards, https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry/actions-and-notices-about-oil-and-natural-gas#regactions (last visited Oct. 28, 2019).

¹⁴⁷ Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources, 81 Fed. Reg. 35824—35942 (June 3, 2016), available at https://www.govinfo.gov/content/pkg/FR-2016-06-03/pdf/2016-11971.pdf (last visited Oct. 28, 2019); Source Determination for Certain Emission Units in the Oil and Natural Gas Sector, 81 Fed. Reg. 35622—35634 (June 3, 2016), available at https://www.govinfo.gov/content/pkg/FR-2016-06-03/pdf/2016-11968.pdf (last visited Oct. 28, 2019); Federal Implementation Plan for True Minor Sources in Indian Country in the Oil and Natural Gas Production and Natural Gas Processing Segments of the Oil and Natural Gas Sector; Amendments to the Federal Minor New Source Review Program in Indian Country To Address Requirements for True Minor Sources in the Oil and Natural Gas Sector, 81 Fed. Reg. 35944—35981 (June 3, 2019), available at https://www.govinfo.gov/content/pkg/FR-2016-06-03/pdf/2016-11969.pdf (last visited Oct. 28, 2019).

¹⁴⁸ EPA, EPA's Actions to Reduce Methane Emissions from the Oil and Gas Industry: Final Rules and Draft Information Collection Request, 2 (2016), available at https://www.epa.gov/sites/production/files/2016-09/documents/nsps-overview-fs.pdf (last visited Oct. 28, 2019).

¹⁴⁹ *Id.* at 3.

¹⁵⁰ *Id*. at 4.

¹⁵¹ Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Reconsideration, 83 Fed. Reg. 52056–52107 (Oct. 15, 2018), available at https://www.govinfo.gov/content/pkg/FR-2018-10-15/pdf/2018-20961.pdf (last visited Oct. 28, 2019); see EPA, EPA Proposes Amendments to the 2016 New Source Performance Standards for the Oil

Performance Standards, which include rescinding methane emissions limits, while keeping the limits for VOCs, for sources in the production and processing segments of the oil and gas industry such as well completion.¹⁵²

III. Effect of Proposed Changes:

Section 1 amends s. 377.19, F.S., to create two new definitions relating to hydraulic fracturing, acid fracturing, and matrix acidization:

- "High-pressure well stimulation" is defined to mean "all stages of a well intervention performed by injecting fluids into a rock formation at a pressure that equals or exceeds the fracture gradient of the rock formation and the purpose or effect is to fracture the formation to increase production or recovery from an oil or gas well, such as in hydraulic fracturing or acid fracturing."
- "Matrix Acidization" is defined to mean "all stages of a well intervention performed by injecting fluids into a rock formation at a pressure below the fracture gradient of the rock formation and the purpose or effect is to dissolve the formation to increase production or recovery from an oil or gas well. The term does not include techniques used for routine well cleanout work, well maintenance, removal of formation damage due to drilling or production, or acidizing techniques used to maintain or restore the natural permeability of the formation near the wellbore."

Section 2 creates s. 377.2405, F.S., regarding advanced well stimulation treatments. The bill prohibits the performance of high-pressure well stimulation or matrix acidization in the state. The prohibition states that a permit from the Department of Environmental Protection (DEP) allowing drilling or operating an oil or gas well does not authorize high-pressure well stimulation or matrix acidization. The bill clarifies that the prohibition only applies to wells regulated under Ch. 377, F.S., entitled "Energy Resources." The only types of wells regulated under Ch. 377, F.S., relate to the oil and gas industry. The bill would not apply to water wells, or other wells that are not directly related to the oil and gas industry.

Section 3 states that the bill shall take effect upon becoming law.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

and Natural Gas Industry: Fact Sheet (2018), available at https://www.epa.gov/sites/production/files/2018-09/documents/oil and gas technical proposal fact sheet.9.11.18 0.pdf (last visited Oct. 28, 2019).

¹⁵² Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review, 84 Fed. Reg. 50244–50286 (Sept. 24, 2019), available at https://www.govinfo.gov/content/pkg/FR-2019-09-24/pdf/2019-19876.pdf (last visited Oct. 28, 2019); EPA, EPA Proposed Policy Amendments to the 2012 and 2016 New Source Performance Standards for the Oil and Gas Industry, 1-2 (Aug. 28, 2019), available at https://www.epa.gov/sites/production/files/2019-08/documents/fact_sheet_proposed_amendments_to_nsps_for_oil_and_natural_gas_industry.8.28.19.pdf (last visited Oct. 28, 2019).

B. Public Records/Open Meetings Issues	B.	Public Rec	ords/Open	Meetings	Issues
--	----	------------	-----------	----------	--------

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

The bill prohibits certain techniques used to increase production or recovery from an oil or gas well. The fiscal impact of the prohibition on the private sector is indeterminate at this time.

C. Government Sector Impact:

DEP may incur additional costs related to amending Rules 62C-25 through 62C-30 of the Florida Administrative Code to implement the prohibition contained in the bill.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill substantially amends section 377.19 of the Florida Statutes.

This bill creates section 377.2405 of the Florida Statutes.

IX. **Additional Information:**

Committee Substitute – Statement of Changes: (Summarizing differences between the Committee Substitute and the prior version of the bill.) A.

None.

B. Amendments:

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.

By Senator Montford

3-00108A-20 2020200

A bill to be entitled

An act relating to advanced well stimulation treatment; amending s. 377.19, F.S.; defining the terms "high-pressure well stimulation" and "matrix acidization"; creating s. 377.2405, F.S.; prohibiting the performance of high-pressure well stimulation or matrix acidization; providing that permits for drilling or for operating a well do not authorize the performance of high-pressure well stimulation or matrix acidization; providing applicability; providing an effective date.

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

Section 1. Present subsections (6) through (10) and (11) through (32) of section 377.19, Florida Statutes, are redesignated as subsections (7) through (11) and (13) through (34), respectively, new subsections (6) and (12) are added to that section, and subsection (5) of that section is amended, to read:

377.19 Definitions.—As used in ss. 377.06, 377.07, and 377.10-377.40, the term:

- (5) "Gas" means all natural gas, including casinghead gas, and all other hydrocarbons not defined as oil in subsection (17).
- (6) "High-pressure well stimulation" means all stages of a well intervention performed by injecting fluids into a rock formation at a pressure that equals or exceeds the fracture gradient of the rock formation and the purpose or effect is to

3-00108A-20 2020200

fracture the formation to increase production or recovery from an oil or gas well, such as in hydraulic fracturing or acid fracturing.

intervention performed by injecting fluids into a rock formation at a pressure below the fracture gradient of the rock formation and the purpose or effect is to dissolve the formation to increase production or recovery from an oil or gas well. The term does not include techniques used for routine well cleanout work, well maintenance, removal of formation damage due to drilling or production, or acidizing techniques used to maintain or restore the natural permeability of the formation near the wellbore.

Section 2. Section 377.2405, Florida Statutes, is created to read:

- 377.2405 Advanced well stimulation treatments.-
- (1) PROHIBITION.—The performance of high-pressure well stimulation or matrix acidization is prohibited in this state. A permit for drilling or operating a well does not authorize the performance of high-pressure well stimulation or matrix acidization.
- (2) APPLICABILITY.—This section applies only to wells regulated pursuant to this chapter.
 - Section 3. This act shall take effect upon becoming a law.

Senate District 26 – Florida Forever Projects

SEN. BEN ALBRITTON (R-BARTOW)

2020 LEGISLATIVE REQUEST: Dedicate a minimum of \$100 million from the Land Acquisition Trust Fund to the Florida Forever Trust Fund for conservation land acquisition through the Florida Forever program, including the Florida Communities Trust and the Acquisition and Restoration Council's scientifically ranked Florida Forever Priority List.



Lake Wales Ridge

Florida Forever Program (Fee purchases and conservation easements)

Lake Wales Ridge Ecosystem

- 4,439 acres; \$26.2 million Catfish Creek
 - 5,800 acres; \$15.9 million

Greenways and Trails Program

Bartow Trailhead

• 8.7 acres; \$280,000 Lake Wales Trailways

• 3.0 acres; \$230,000

Florida Communities Trust (State funding matched by local

funding)

Bayshore Live Oak Park, Charlotte County

• 40 acres; \$11.2 million

District 26 Yes vote for Amendment 1 (2014):

69% Yes (98,691 Yes votes)

Total acres acquired, and federal, state, and local dollars spent in District 26 (1998-2009):

138,740 acres; \$533.0 million



The Trust for Public Land creates parks and protects land for people, ensuring healthy, livable communities for generations to come.

tpl.org

FOR ADDITIONAL INFORMATION:

Will Abberger Vice President and Director, Conservation Finance 306 North Monroe Street Tallahassee, FL 32301 850.222.7911 will.abberger@tpl.org

PHOTO: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
©2019 THE TRUST FOR PUBLIC LAND

Senate District 31 – Florida Forever Projects

SEN. LORI BERMAN (D-BOYNTON BEACH)

2020 LEGISLATIVE REQUEST: Dedicate a minimum of \$100 million from the Land Acquisition Trust Fund to the Florida Forever Trust Fund for conservation land acquisition through the Florida Forever program, including the Florida Communities Trust and the Acquisition and Restoration Council's scientifically ranked Florida Forever Priority List.



Scrub Ja

Florida Communities Trust (State funding matched by local funding)

Jaycee Park, City of Boynton Beach

• 5 acres; \$1.7 million

Hypoluxo Scrub Scrub Natural Area, Palm Beach County/Town of Hypoluxo

• 97 acres; \$1.7 million

Old School Square Addition, City of Delray Beach

• 5 acres; \$2.0 million

District 31 Yes vote for Amendment 1 (2014): 86% Yes (112,501 Yes votes)

Total acres acquired, and federal, state, and local dollars spent in District 31 (1998-2009): 136.9 acres; \$7.4 million



The Trust for Public Land creates parks and protects land for people, ensuring healthy, livable communities for generations to come.

tpl.org

FOR ADDITIONAL INFORMATION:

Will Abberger Vice President and Director, Conservation Finance 306 North Monroe Street Tallahassee, FL 32301 850.222.7911 will.abberger@tpl.org

PHOTO: BROWARD.ORG ©2019 THE TRUST FOR PUBLIC LAND

Senate District 17 – Florida Forever Projects

SEN. DEBBIE MAYFIELD (R-VERO BEACH)

2020 LEGISLATIVE REQUEST: Dedicate a minimum of \$100 million from the Land Acquisition Trust Fund to the Florida Forever Trust Fund for conservation land acquisition through the Florida Forever program, including the Florida Communities Trust and the Acquisition and Restoration Council's scientifically ranked Florida Forever Priority List.



Maratime Hammock Preserve

Florida Forever Program

(Fee purchases and conservation easements)

Brevard Coastal Scrub Ecosystem

• 3,550 acres; \$4.3 million

Branch Reserve

• 7,700 acres; \$3.7 million

District 17 Yes vote for Amendment 1 (2014):

75% Yes (140,393 Yes votes)

Total acres acquired, and federal, state, and local dollars spent in District 17 (1998-2009): 33,500 acres; \$170 million

Florida Communities Trust (State funding matched by local funding)

Eau Gallie Square Park, City of Melbourne

• 1 acre; \$100,000

Maritime Hammock Preserve, City of Cocoa Beach

• 128 acres; \$600,000

Lost Tree Island, Town of Indian River Shores / City of Vero Beach

• 483 acres; \$5.5 million

Jones Pier, Indian River County

16.5 acres; \$2.6 million



The Trust for Public Land creates parks and protects land for people, ensuring healthy, livable communities for generations to come.

tpl.org

FOR ADDITIONAL INFORMATION:

Will Abberger Vice President and Director, Conservation Finance 306 North Monroe Street Tallahassee, FL 32301 850.222.7911 will.abberger@tpl.org

PHOTO: FLORIDA STATE PARKS ©2019 THE TRUST FOR PUBLIC LAND

Senate District 3 – Florida Forever Projects

SEN. BILL MONTFORD (D-TALLAHASSEE)

2020 LEGISLATIVE REQUEST: Dedicate a minimum of \$100 million from the Land Acquisition Trust Fund to the Florida Forever Trust Fund for conservation land acquisition through the Florida Forever program, including the Florida Communities Trust and the Acquisition and Restoration Council's scientifically ranked Florida Forever Priority List.



Miccosukee Canopy Road Greenway

Florida Forever Program (Fee purchases and conservation easements)

Florida's First Magnitude Springs

- 60 acres: \$3.5 million
- Wacissa / Aucilla River Sinks
 - 14,500 acres; \$8.9 million

State Park and State Forest Additions and Inholdings Program

Dickerson Bay / Bald Point

- 4,500 acres; \$7.8 million
- Lake Talquin State Forest
 - 574 acres; \$1.1 million

Florida Communities Trust (State funding matched by local

funding)

Capital Cascades Trail, City of Tallahassee

- 10 acres; \$980,000
- St. Marks Headwaters, Leon County
 - 450 acres; \$840,000

Fred George Greenway, Leon County

17 acres; \$775,000

District 3 Yes vote for Amendment 1 (2014):

71% Yes (121,063 Yes votes)

Total acres acquired, and federal, state, and local dollars spent in District 3 (1998-2009):

135,870 acres; \$150.1 million



The Trust for Public Land creates parks and protects land for people, ensuring healthy, livable communities for generations to come.

tpl.org

FOR ADDITIONAL INFORMATION:

Will Abberger Vice President and Director, Conservation Finance 306 North Monroe Street Tallahassee, FL 32301 850.222.7911 will.abberger@tpl.org

PHOTO: ANNE NELSON ©2019 THE TRUST FOR PUBLIC LAND

Senate District 14 – Florida Forever Projects

SEN. TOM A. WRIGHT (R-PORT ORANGE)

2020 LEGISLATIVE REQUEST: Dedicate a minimum of \$100 million from the Land Acquisition Trust Fund to the Florida Forever Trust Fund for conservation land acquisition through the Florida Forever program, including the Florida Communities Trust and the Acquisition and Restoration Council's scientifically ranked Florida Forever Priority List.



Spruce Creek Preserve

Florida Forever Program (Fee purchases and conservation easements)

Brevard Coastal Scrub Ecosystem

500 acres: \$4.3 million

Volusia Conservation Corridor

6,400 acres; \$16.3 million

Greenways and Trails Program

East Central Regional Rail Trail

• 600 acres; \$14.1 million

Timucuan Oaks Botanical Garden, Town of Ponce Inlet

• 3.3 acres; \$2.8 million

New Smyrna Beach

Florida Communities Trust

funding)

(State funding matched by local

8 acres; \$2.0 million Russell / Spruce Creek Property, City of Port Orange

Esther Street Beachfront Park, City of

17 acres; \$775,000

District 14 Yes vote for Amendment 1 (2014):

73% Yes (124,732 Yes votes)

Total acres acquired, and federal, state, and local dollars spent in District 14 (1998-2009):

13,100 acres; \$82.7 million



The Trust for Public Land creates parks and protects land for people. ensuring healthy, livable communities for generations to come.

tpl.org

FOR ADDITIONAL INFORMATION:

Will Abberger Vice President and Director, Conservation Finance 306 North Monroe Street Tallahassee, FL 32301 850.222.7911 will.abberger@tpl.org

PHOTO: MICHAEL WRAY ©2019 THE TRUST FOR PUBLIC LAND

Florida Senate

Committee on Environment and Natural Resources

General Information Comments

Provided by: Bruce French

1854 E. Windwood Way Tallahassee, FL 32311 Cell: 850-274-2776

Representing: Self as a citizen of Florida

Mr. Chairman and honorable committee members, it is indeed an honor to have the opportunity to present relevant information and express my concerns on the state of the Florida environment and natural resources.

Mr. Chairman, as you know, I addressed the Florida Legislative Delegation to Leon County on Monday evening, October 28, 2019. My written comments including supporting references were provided to your staff and to the other three Delegation members. I respectfully request that my written comments be read into the minutes of this Committee meeting.

As a retired state employee of the FDEP and DEM-Recovery Office I was required to possess the Knowledge, Skills and Abilities (KSAs) necessary to perform the duties and responsibilities within my respective job descriptions.

2017 Summary of the Job Description of The Senate Environmental Preservation and Conservation Committee (similar to this Senate Committee) reads as follows:

Members are to examine legislation in the following subject areas-

Aquaculture, Basin management and restoration, Beaches, Boating and vessel safety, Brownfields, Clean air and water, Clean and alternative energy initiatives, Coastal management, Consumptive use permitting, Dry cleaning contamination, Environmental land acquisition and protection (Florida Forever, etc.), Environmental resource permitting, Everglades, Hazardous and solid waste, Hunting and fishing, Invasive species management, Mining, Oceans, Oil and gas exploration, Onsite sewage treatment and disposal systems, Petroleum tanks, Power plant siting, Recycling, Sovereignty submerged lands, State parks and preserves, Statewide numeric nutrient criteria, Total maximum daily loads and Water supply (traditional and supplemental).

Florida Senate Committee on Environment and Natural Resources

General Information Comments
Provided by: Bruce French

1854 E. Windwood Way Tallahassee, FL 32311 Cell: 850-274-2776

Representing: Self as a citizen of Florida

Mr. Chairman and honorable committee members, it is indeed an honor to have the opportunity to present relevant information and express my concerns on the state of the Florida environment and natural resources.

Mr. Chairman, as you know, I addressed the Florida Legislative Delegation to Leon County on Monday evening, October 28, 2019. My written comments including supporting references were provided to your staff and to the other three Delegation members. I respectfully request that my written comments be read into the minutes of this Committee meeting.

As a retired state employee of the FDEP and DEM-Recovery Office I was required to possess the Knowledge, Skills and Abilities (KSAs) necessary to perform the duties and responsibilities within my respective job descriptions.

2017 Summary of the Job Description of The Senate Environmental Preservation and Conservation Committee (similar to this Senate Committee) reads as follows:

Members are to examine legislation in the following subject areasAquaculture, Basin management and restoration, Beaches, Boating and vessel safety,
Brownfields, Clean air and water, Clean and alternative energy initiatives, Coastal management,
Consumptive use permitting, Dry cleaning contamination, Environmental land acquisition and
protection (Florida Forever, etc.), Environmental resource permitting, Everglades, Hazardous
and solid waste, Hunting and fishing, Invasive species management, Mining, Oceans, Oil and
gas exploration, Onsite sewage treatment and disposal systems, Petroleum tanks, Power plant
siting, Recycling, Sovereignty submerged lands, State parks and preserves, Statewide numeric
nutrient criteria, Total maximum daily loads and Water supply (traditional and supplemental).

Florida Senate Committee on Environment and Natural Resources

General Information Comments

Provided by: Bruce French

1854 E. Windwood Way Tallahassee, FL 32311 Cell: 850-274-2776

Representing: Self as a citizen of Florida

Mr. Chairman and honorable committee members, it is indeed an honor to have the opportunity to present relevant information and express my concerns on the state of the Florida environment and natural resources.

Mr. Chairman, as you know, I addressed the Florida Legislative Delegation to Leon County on Monday evening, October 28, 2019. My written comments including supporting references were provided to your staff and to the other three Delegation members. I respectfully request that my written comments be read into the minutes of this Committee meeting.

As a retired state employee of the FDEP and DEM-Recovery Office I was required to possess the Knowledge, Skills and Abilities (KSAs) necessary to perform the duties and responsibilities within my respective job descriptions.

2017 Summary of the Job Description of The Senate Environmental Preservation and Conservation Committee (similar to this Senate Committee) reads as follows:

Members are to examine legislation in the following subject areasAquaculture, Basin management and restoration, Beaches, Boating and vessel safety,
Brownfields, Clean air and water, Clean and alternative energy initiatives, Coastal management,
Consumptive use permitting, Dry cleaning contamination, Environmental land acquisition and
protection (Florida Forever, etc.), Environmental resource permitting, Everglades, Hazardous
and solid waste, Hunting and fishing, Invasive species management, Mining, Oceans, Oil and
gas exploration, Onsite sewage treatment and disposal systems, Petroleum tanks, Power plant
siting, Recycling, Sovereignty submerged lands, State parks and preserves, Statewide numeric
nutrient criteria, Total maximum daily loads and Water supply (traditional and supplemental).

Florida Senate Committee on Environment and Natural Resources

General Information Comments

Provided by: Bruce French

1854 E. Windwood Way Tallahassee, FL 32311 Cell: 850-274-2776

Representing: Self as a citizen of Florida

Mr. Chairman and honorable committee members, it is indeed an honor to have the opportunity to present relevant information and express my concerns on the state of the Florida environment and natural resources.

Mr. Chairman, as you know, I addressed the Florida Legislative Delegation to Leon County on Monday evening, October 28, 2019. My written comments including supporting references were provided to your staff and to the other three Delegation members. I respectfully request that my written comments be read into the minutes of this Committee meeting.

As a retired state employee of the FDEP and DEM-Recovery Office I was required to possess the Knowledge, Skills and Abilities (KSAs) necessary to perform the duties and responsibilities within my respective job descriptions.

2017 Summary of the Job Description of The Senate Environmental Preservation and Conservation Committee (similar to this Senate Committee) reads as follows:

Members are to examine legislation in the following subject areasAquaculture, Basin management and restoration, Beaches, Boating and vessel safety,
Brownfields, Clean air and water, Clean and alternative energy initiatives, Coastal management,
Consumptive use permitting, Dry cleaning contamination, Environmental land acquisition and
protection (Florida Forever, etc.), Environmental resource permitting, Everglades, Hazardous
and solid waste, Hunting and fishing, Invasive species management, Mining, Oceans, Oil and
gas exploration, Onsite sewage treatment and disposal systems, Petroleum tanks, Power plant
siting, Recycling, Sovereignty submerged lands, State parks and preserves, Statewide numeric
nutrient criteria, Total maximum daily loads and Water supply (traditional and supplemental).

APPEARANCE RECORD

11-04-2019 (Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)	
Meeting Date Bill Number (if app	plicable)
Topic Climate Change Corrective Action Amendment Barcode (if approximate French	oplicable)
Name Bruce French	
Job Title Refired - FDEP & FDEM-Recovery	
Address 1854 E. Windwood Way Phone 850-274-27:	76
Tallahassee, FL 3231/ Email a1-btrench @ yaho	d, com
Speaking: For Against Information Waive Speaking: In Support Aga (The Chair will read this information into the reco	
Representing Self as a citizen of Florida +60 years	
Appearing at request of Chair: Yes No Lobbyist registered with Legislature: Yes	No
While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.	at this
This form is part of the public record for this meeting	(10/14/14)

THE FLORIDA SENATE

APPEARANCE RECORD

11/4	(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting	
′ Me	eeting Date	Bill Number (if applicable)
Topic _	Public Financing of Constructin Proj. Amer	ndment Barcode (if applicable)
Name _	\mathcal{T}_{\bullet}	
Job Titl	le Coverment Affairs + Political Dir	
Address		533-1798
	Street deborah. [Ulahassee, FL 3230] Email Sici	
	City State Zip	
Speakin	ng: For Against Information Waive Speaking: In S	SupportAgainst mation into the record.)
Rep	presenting	
While it is	ring at request of Chair: Yes No Lobbyist registered with Legisla is a Senate tradition to encourage public testimony, time may not permit all persons wishing to . Those who do speak may be asked to limit their remarks so that as many persons as possible	speak to be heard at this

S-001 (10/14/14)

This form is part of the public record for this meeting.

THE FLORIDA SENATE

APPEARANCE RECORD

Meeting Date (Deliver BOTH copies of this form to the Senator or Senate Professional St	taff conducting the meeting) S Bill Number (if applicable)
Topic Public Financing SLR	Amendment Barcode (if applicable)
Name Lauren Covey	
Job Title ASSOC. Direct of Campaigns, leth	inkEnergy
Address 3129 Middle WOOKS Civ	Phone 860 166 C533
Street FL 32312	Email/
City State Zip Speaking: For Against Information Waive Speaking: (The Chair	peaking: In Support Against ir will read this information into the record.)
Representing	
Appearing at request of Chair: Yes No Lobbyist registe	ered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time may not permit all meeting. Those who do speak may be asked to limit their remarks so that as many	
This form is part of the public record for this meeting.	S-001 (10/14/14)

THE FLORIDA SENATE

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting) Meeting Date Bill Number (if applicable) Job Title Address Phone Street **Email** City State Information In Support Speaking: Against Waive Speaking: (The Chair will read this information into the record.) Lobbyist registered with Legislature: Appearing at request of Chair:

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

S-001 (10/14/14)

(Deliver BOTH copies of this form to the Senator of Senate Pr	olessional Staff Conducting the meeting)
Meeting Date	Bill Number (if applicable)
Topic Public FINANCING of Construction Pros	Amendment Barcode (if applicable)
Name Aliki Moncrief	· \ / /
Job Title Executive Director	
Address 1700 N. Monrae st.	Phone 4850-629-4656
TAllahassee FL 323	Z Linan Title C Total Table
	Waive Speaking: In Support Against (The Chair will read this information into the record.)
Representing FLORIDA CONSERVATION VO	TERS
Appearing at request of Chair: Yes No Lobbyi	st registered with Legislature: XYes No
While it is a Senate tradition to encourage public testimony, time may not meeting. Those who do speak may be asked to limit their remarks so that	
This form is part of the public record for this meeting.	S-001 (10/14/14)

APPEARANCE RECORD

11-4-19	(Deliver BOTH copies of this form to the Sena	tor or Senate Professional Staπ cond	ducting the meeting)
Meeting Date			Bill Number (if applicable)
Topic Sealers	Rue		Amendment Barcode (if applicable)
Name Kin Ros	33		
Job Title Cxcvt.v.	e Di-		
Address 603 N	MLK Jr.	Pho	one <u>850-988-2565</u>
Street		<u>32381</u> Em	ail b. morethinkenergy florida or
<i>City</i> Speaking:	State Against Information	•	ng: In Support Against read this information into the record.)
Representing			
Appearing at request o	of Chair: Yes 📝 No	Lobbyist registered	with Legislature: Yes 💢 No
	n to encourage public testimony, ti eak may be asked to limit their rem		ons wishing to speak to be heard at this ons as possible can be heard.

S-001 (10/14/14)

This form is part of the public record for this meeting.

APPEARANCE RECORD

Meeting Date (Deliver BOTH copies of this form to the Senator of	Senate Professional Staff conducting the meeting) 176 Bill Number (if applicable)
Name Brion Lee	Amendment Barcode (if applicable)
Job Title Legislevin Director	
Address 1203 Buckinghum Dr	Phone <u>450 - 766 - 7309</u>
Street Fl FL	32308 Email Grian lee Tallihissee & gmail
Speaking: For Against Information	Zip Waive Speaking: ∑In Support Against (The Chair will read this information into the record.)
Representing Self	
Appearing at request of Chair: Yes No	Lobbyist registered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time meeting. Those who do speak may be asked to limit their remark	• • •

S-001 (10/14/14)

This form is part of the public record for this meeting.

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting) Bill Number (if applicable) Meeting Date Amendment Barcode (if applicable) **Topic** Name Job Title Address Street **Email** State City Information Waive Speaking: In Support Speaking: For Against (The Chair will read this information into the record.) Representing Lobbyist registered with Legislature: No Appearing at request of Chair: Yes

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

//- // Collver BOTH copies of this	form to the Senator or Senate Professional St	aff conducting the meeting)	178
Meeting Date			Bill Number (if applicable)
Topic TUBLIC Firming	OF CONSTRUCTION	Amend	ment Barcode (if applicable)
Name / AMAR PARTIES	R BIEHC 1		_
Job Title Jir. GOVERNMENT	RELATIONS - (Min	& primate (NEO SA
Address 106, E. Courge A	E Suit 640	Phone 870	-224-1660
I nempose	FL 32301	Email /MILOR	CAPITOLALINA
City Speaking: For Against Info	,	peaking: In Su ir will read this informa	• •
Representing LEAGUE C	SF WOMEN VOTERS	FLORISA	
Appearing at request of Chair: Yes	No Lobbyist registe	ered with Legislatu	ıre: Yes No
While it is a Senate tradition to encourage public meeting. Those who do speak may be asked to	testimony, time may not permit all limit their remarks so that as many	persons wishing to sp persons as possible o	neak to be heard at this can be heard.
This form is part of the public record for this			S-001 (10/14/14)

//- 1/- 19(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the	meeting) 178
Meeting Date	Bill Number (if applicable)
Topic Public Financialy OF Consmuction	Amendment Barcode (if applicable)
1 Aug Park Roul	
Job Title Dir. Government RELATIONS - (Mire Muine	IE (SICOSA)
Address 106, E. (GUEGE /NE SUITE 640 Phone_	8)0-2011000
TRUMASIEE FL 32301 Email 1	MILOR PCAVITALALISM
City State Zip Speaking: For Against Information Waive Speaking: (The Chair will read this	information into the record.)
Representing LEATIVE OF WOMEN VOIERS FLORES	JA /
Appearing at request of Chair: Yes No Lobbyist registered with Le	
While it is a Senate tradition to encourage public testimony, time may not permit all persons wish meeting. Those who do speak may be asked to limit their remarks so that as many persons as po	
This form is part of the public record for this meeting.	S-001 (10/14/14)

(Deliver BOTH copies of this form to the Senator or Senate Professional State	5326
Meeting Date	Bill Number (if applicable) # 412992
Topic Ulmend ment 412992 to 5B326	Amendment Barcode (if applicable)
Name Elizabeth Biser	
Job Title VP, Public Allairs	
Address	Phone
	Email &biser erecycling partners hip
CityState Zip	on
Speaking: For Against Information Waive Speaking: (The Chair	eaking: In Support Against will read this information into the record.)
Representing The Recycling Partnership	
Appearing at request of Chair: Yes No Lobbyist register	red with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time may not permit all p meeting. Those who do speak may be asked to limit their remarks so that as many p	- •
This form is part of the public record for this meeting.	S-001 (10/14/14)

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional St	aff conducting the meeting) 56 326
Meeting Date	Bill Number (if applicable)
Topic RECYCLING	Amendment Barcode (if applicable)
Name CHARUE LATHAM	
Job Title GOVT. AFFAIRS	
Address 6501 GREEN MAND RD.	Phone 904-234-9617
Street JACKSWVIUE FL 37258	Email WLATHAME WM . CVM
City State Zip	
Speaking: For Against Information Waive Speaking: (The Chair	peaking: In Support Against ir will read this information into the record.)
Representing WASTE MANAGEMENT	
Appearing at request of Chair: Yes No Lobbyist register	ered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

11-4-19 (Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting) 326
Meeting Date Bill Number (if applicable)
Topic Environment Refourtion Amendment Barcode (if applicable)
Name /11/2 BIEHL
Job Title Director Government Reusions + (spiral Muinte (720)
Address 19 E. Cocce(JE INE. SUITE 690 Phone 800 001 900
Street NUMPLE JU 3230 Email SHURE (NI IOL MLIMICE City State Zip (Company)
Speaking: For Against Information Waive Speaking: In Support Against (The Chair will read this information into the record.)
Representing LEAGUE OF WOMEN VOICES FLORISA
Appearing at request of Chair: Yes No Lobbyist registered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.
This form is part of the public record for this meeting. S-001 (10/14/14)

APPEARANCE RECORD

(Deliver BOTH copies of this form to	the Senator or Senate Professional Staff conducting the meeting)
Meeting Date	Bill Number (if applicable)
Topic RECYCLING	Amendment Barcode (if applicable)
Name KEYNA CORY	
Job Title LOBOYIST	
Address 730 E. PARK AE	Phone 858 681 1065
Street ANAHASSEE A	32301 Email Keynacry Cpacins Hants in
City Stat	e Zip
Speaking: For Against Informat	tion Waive Speaking:In SupportAgainst (The Chair will read this information into the record.)
Representing NATIONAL WASTE +	RECYCLING ASSN - FR CHAPTER
Appearing at request of Chair: Yes	No Lobbyist registered with Legislature: Yes No
The state of the s	mony, time may not permit all persons wishing to speak to be heard at this heir remarks so that as many persons as possible can be heard.
This form is part of the public record for this meet	<i>ing.</i> S-001 (10/14/14)

APPEARANCE RECORD
(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)
Meeting Date Bill Number (if applicable)
Topic WFRPSRWWR / GYMLS LAND) Amendment Barcode (if applicable)
Name SEX & BUDS CLAY County fl. HOTELS
Job Title SEX 704 & HOULS
Address 2904 - 2910 Huy 21 Phone 909 415 3274
MIDDERBURLY GE 320G Email_
Speaking: For Against Information Waive Speaking: In Support Against (The Chair will read this information into the record.)
Representing James Conto
Appearing at request of Chair: Yes No Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

(Deliver BOTH copies of this form to the Senator or Senate Professional S	Staff conducting the meeting) 332
Meeting Date	Bill Number (if applicable)
Topic LATF	Amendment Barcode (if applicable)
Name Deborah Foote	-
Job Title Gov't Affairs + Pol. Dir	
Address 200 W College Are #314	251-533-1798 Phone debarah: foote a
Tallahassee, FL 32301	Email Siernaulbions
Speaking: For Against Information Waive S	peaking: In Support Against hir will read this information into the record.)
Representing Sierra Club FL	
Appearing at request of Chair: Yes No Lobbyist regist	ered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time may not permit all meeting. Those who do speak may be asked to limit their remarks so that as many	•
This form is part of the public record for this meeting.	S-001 (10/14/14)

APPEARANCE RECORD

Meeting Date (Deliver BOTH copies of this form to the Senator of	r Senate Professional Staff conducting the meeting) 332 Bill Number (if applicable)
Topic Land aquisition Trust Fund	Amendment Barcode (if applicable)
Name TLAVIS MOORR	
Job Title	
Address P.O. Box ZOZO Street	Phone 724.421-6902
St. Pete FL.	33731 Email + ravis@ moder Relations - Com
Speaking: State Speaking: Information	Waive Speaking: In Support Against (The Chair will read this information into the record.)
Representing Defending of Wildlip	
	Lobbyist registered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time meeting. Those who do speak may be asked to limit their remark	
This form is part of the public record for this meeting.	S-001 (10/14/14)

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting) Meeting Date Bill Number (if applicable) **Topic** Amendment Barcode (if applicable) Name Job Title **Address** Street MARCOP **Email** City State Zip Information Waive Speaking: In Support Speaking: Against (The Chair will read this information into the record.) Representing Appearing at request of Chair: Lobbyist registered with Legislature: No Yes While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

S-001 (10/14/14)

This form is part of the public record for this meeting.

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional S	Staff conducting the meeting) 5332
Meeting Date	Bill Number (if applicable)
Topic Florida Farener	Amendment Barcode (if applicable)
Name Lindsay Cross	
Job Title Government Relations Devector	_
Address 545 27th Liel	Phone
Street St Pete Fi 33704	Email
	Speaking: In Support Against Air will read this information into the record.)
Representing Hovida Conservation voters	
Appearing at request of Chair: Yes No Lobbyist regist	tered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time may not permit all meeting. Those who do speak may be asked to limit their remarks so that as many	I persons wishing to speak to be heard at this persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Sen	ate Professional Staff conducting the meeting) SB332 Bill Number (if applicable)
Topic Florida Forever	Amendment Barcode (if applicable)
Name Will Abberger	
Job Title Vice President	
Address 306 M. Monmoe 35	Phone $\frac{850}{294-2008}$
Street Talloy a 3388 FL 32 City State	301 Email Will abberger explore
Speaking: For Against Information	Waive Speaking: In Support Against (The Chair will read this information into the record.)
Representing The Trust for Pub	slie Land
Appearing at request of Chair: Yes No Lot	obyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senato	or or Senate Professional Staff conducting the meeting)
Meeting Date	Bill Number (if applicable)
Topic Florida Forever	Amendment Barcode (if applicable)
Name Paul Owens	
Job Title President	
Address 308 N. Monroe St	Phone
Street / MUSSED FL	Email
Speaking: For Against Information	Zip Waive Speaking: In Support Against (The Chair will read this information into the record.)
Representing 1000 Friends of	- Florida
Appearing at request of Chair: Yes No	Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

	つか ろうと
Meeting Date	Bill Number (if applicable)
Topic ADIANCED WELL SYSTEMS	Amendment Barcode (if applicable)
Name Six & DUDS CAY COUNTY to Up	1615
Job Title ABUCT 704 STORE / HOGECS	
Address 2902/2910 Hw/2/	Phone 904 415 3221
MIDDUISORLY GC 32065 City State Zip	Email SEXBUDS I Co biman, a
Speaking: For Against Information Waive Speaking:	peaking: In Support Against ir will read this information into the record.)
Representing SEX 7045 OF Cay County	If FLI
Appearing at request of Chair: Yes No Lobbyist register	ered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time may not permit all meeting. Those who do speak may be asked to limit their remarks so that as many	persons wishing to speak to be heard at this persons as possible can be heard.
This form is part of the public record for this meeting.	S-001 (10/14/14)

APPEARANCE RECORD
(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)
Meeting Date Bill Number (if applicable)
Topic 10 FRASANOW / GYMLS LAND Amendment Barcode (if applicable
Name SEX & BUDS CLAY County ALHOTECS
Job Title SEX TOY & HOWLS
Address 2904 - 2910 Huy 21 Phone 299 415 3224
MIDDLEBURLY GE 3206 Email
Speaking: For Against Information Waive Speaking: In Support Against (The Chair will read this information into the record.)
Representing James Como
Appearing at request of Chair: Yes No Lobbyist registered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.
This form is part of the public record for this meeting. S-001 (10/14/12

I HE PLORIDA SENATE

//- 4/- /9 (Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meetin	g) 326
Meeting Date	Bill Number (if applicable)
Topic Environmentre REGULTION	ndment Barcode (if applicable)
Name /11/2 BIEHL	. 1
Job Title DiRECTOR GOVERNMENT RELITIONS + (MINCE	(TROUP)
Address 16 E. Course ME. Suite 640 Phone 850	- 224-1660
Transpose je 32301 Email SANUR	PECATIFOL MLIMICE
Speaking: For Against Information State Zip Waive Speaking: In S (The Chair will read this information)	Support Against mation into the record.)
Representing LEAGUE OF WOMEN VOTERS FLORISA	
Appearing at request of Chair: Yes No Lobbyist registered with Legisla	ature: Yes No
While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible	speak to be heard at this e can be heard.
This form is part of the public record for this meeting.	S-001 (10/14/14)

Zypapolimakuriku		(Deliver BOTH co	pies of this form to the	Senator or Senate Profes	ssional Sta	aff conducting the meeting)	200
Mee	ting Date						Bill Number (if applicable)
Topic	Alvan	100 None	Stamplad	FON TREATM	10 M		Import Parada (if applicable)
1 opio	Constitution of the second sec		Control of the second	· (Con 1 h	,,,,,,	Amena	lment Barcode (if applicable)
Name _	1000	X Kieln	special photos of the second s				
Job Title		byist					
Address		East Col	lege Ave	Mue; Ste. 6	90	Phone 950	2221-1660
	Street	Massee	O FL	3430) and the second	Email Dolog (@)	espital Strangerice
Speaking	City : For [Against	State Information		•	<u> </u>	apport Against ation into the record.)
Repre	esenting	Lea	ane of	Women		tacs	
Appearin	ng at reques	t of Chair:	Yes No	Lobbyist ı	registe	ered with Legislate	ure: Yes No
While it is a meeting. T	a Senate tradit hose who do s	tion to encourag speak may be as	e public testimony sked to limit their i	y, time may not per remarks so that as	rmit all p many p	persons wishing to spersons as possible o	peak to be heard at this can be heard.
This form	is part of the	public record f	or this meeting.				S-001 (10/14/14)

11-4-19 (Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)	200
Meeting Date	Bill Number (if applicable
Topic ADVINED WELL STIMLLASTON INSASMENT Amonde	ment Barcode (If applicab
Name TAYLOR BIEHL	
Job Title Dir. GOVERNMENT RELATIONS	
710010	224-1660
	CO (APITOLALL
Speaking: For Against Information Walve Speaking: In Su (The Chair will read this Information)	
Representing LEMOUE OF WOMEN VORERS FLORISA	
Appearing at request of Chair: Yes No Lobbyist registered with Legislatu	ure: Yes _N
While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speed meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible of	
This form is part of the public record for this meeting.	S-001 (10/14

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

(Deliver Bo	OTH copies of this form to the Senator or	Senate Professional S	SB 200
Meeting Date			Bill Number (if applicable)
Topic Advanced Well Stimulat	ion Treatments		Amendment Barcode (if applicable)
Name Jennifer Wilson			
Job Title Lobbyist			
Address 101 East Kennedy B	lvd, Suite 2800		Phone 813-407-0703
Street Tampa	FL	33612	Email_JWilson@shumaker.com
City	State	Zip	
Speaking: For Again	nst Information	Waive S (The Cha	speaking: In Support Against Against will read this information into the record.)
Representing Conservan	cy of Southwest Florida		
Appearing at request of Cha			tered with Legislature: Yes No
While it is a Sonate tradition to an	courage public testimony, time	may not permit a s so that as many	I persons wishing to speak to be heard at this persons as possible can be heard.
This form is part of the public re	ecord for this meeting.		S-001 (10/14/14

(Deliver BOTH copies of this form to the Senator or Senate Professional S	Staff conducting the meeting) 200
Meeting Date	Bill Number (if applicable)
Topic Advanced Well Stimulation	Amendment Barcode (if applicable)
Name Deborah Foote	-
Job Title Government Affairs + Political	Director
Address 200 W College # 34 Street	Phone 251 533 1718
Tallahussee +L 32301	deborah. foote D Email Sicrraclub. Org
City State Zip	
	Speaking:In SupportAgainst air will read this information into the record.)
Representing Sievra Cilub FL	
Appearing at request of Chair: Yes No Lobbyist regis	tered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time may not permit all meeting. Those who do speak may be asked to limit their remarks so that as many	
This form is part of the public record for this meeting.	S-001 (10/14/14)

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting) 11-4-19 Meeting Date Bill Number (if applicable) Topic Amendment Barcode (if applicable) Job Title Phone 850-516-2968 Address \571 33304 Email KZHBOYD@gma' Speaking: Information Waive Speaking: In Support (The Chair will read this information into the record.) Representing Appearing at request of Chair: Lobbyist registered with Legislature: While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard. This form is part of the public record for this meeting.

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting) **SB200** 4-Nov-2019 Bill Number (if applicable) Meeting Date Topic Fracking Ban Amendment Barcode (if applicable) Name Ken Hays Job Title Concerned Citizen 1935 Nanticoke Circle Address Phone Street 32303 FL Tallahassee Email State City Zip Information Waive Speaking: In Support Against Speaking: **Against** (The Chair will read this information into the record.) Representing Lobbyist registered with Legislature: Appearing at request of Chair: While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard. This form is part of the public record for this meeting. S-001 (10/14/14)

THE FLORIDA SENATE APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

11/4/19	TH copies of this form to the Senator	of Seriate Froressional S	tan conducting the meeting)	200
Meeting Date			_	Bill Number (if applicable)
Topic Advanced Well Stimula	tion Treatment		Amendr	nent Barcode (if applicable
Name Brewster Bevis				
Job Title Senior Vice Presider	nt			
Address 516 N. Adams St		30000000 UV 5000 UV	Phone 85022471	73
Street Tallahassee	FL	32301	Email bbevis@ait	f.com
City	State	Zip		
Speaking: For Agains	t Information		peaking:In Supir will read this informa	•
Representing Associated	Industries of Florida	and the second		
Appearing at request of Chair: Yes No Lobbyist registered with Legislature: Yes No				
While it is a Senate tradition to enco meeting. Those who do speak may b	urage public testimony, time be asked to limit their remar	e may not permit al ks so that as many	persons wishing to sp persons as possible c	eak to be heard at this an be heard.
This form is part of the public rec	ord for this meeting.			S-001 (10/14/14)

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

November 4, 2019 200 (2020) Meeting Date Bill Number (if applicable) Topic Fracking Accelerates Climate Change, Increases Pollution, and may Kill Tourism Amendment Barcode (if applicable) Name Sam H. Adams, Jr. Job Title Retired 1906 E. Nelson Cir. Phone (850) 544-3134 Address Street Email samadams32303@comcast.net Tallahassee FL 32303 City State Zip Information In Support Speaking: Against Waive Speaking: (The Chair will read this information into the record.) Representing Lobbyist registered with Legislature: Appearing at request of Chair: While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard. This form is part of the public record for this meeting. S-001 (10/14/14)

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date	SB 20 0 Bill Number (if applicable)
Topic	Amendment Barcode (if applicable)
Name Justin Foley	_
Job Title Vice President, Land	_
Address III Bagby Street	Phone
Honston JX 77002	Email Justin. Holey a marresonuces
Speaking: For Against Information Waive S	speaking: In Support Against Air will read this information into the record.)
Representing Maverick Natural Resources / the Indepen	dent Petroleum Producers Assoc.
Appearing at request of Chair: Yes No Lobbyist regist	tered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time may not permit all meeting. Those who do speak may be asked to limit their remarks so that as many	
This form is part of the public record for this meeting.	S-001 (10/14/14)

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

(Deliver BOTH copies of this form to the Senator or Senate Profession	513 200
Meeting Date	Bill Number (if applicable)
Topic Franking	Amendment Barcode (if applicable)
Name Leighanne Boone	
Job Title	<u> </u>
Address	Phone
Street	Email
	e Speaking: In Support Against Chair will read this information into the record.)
Representing ReThink Energy Action	Fund
Appearing at request of Chair: Yes No Lobbyist reg	gistered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

THE FLORIDA SENATE APPEARANCE RECORD

Deliver BOTH copies of this form to the Senator or Senate Professional S	Staff conducting the meeting) SBZOD
Meeting Date	Bill Number (if applicable)
Topic Fracking Ban Bill	Amendment Barcode (if applicable)
Name Amy Date	_
Job Title Activist.	
Address Street	Phone 850) 372-2599
	Email amalie datz mac.
	Speaking: In Support Against air will read this information into the record.)
Representing Environmental Caucus a	of Florida
Appearing at request of Chair: Yes No Lobbyist regist	tered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

i	4-2019 (Deliver BOTH)	copies of this form to the Senator	or Senate Professional St	aff conducting the meeting)	513200
Meetir	ng Date			•	Bill Number (if applicable)
Topic	SB 200			Amend	ment Barcode (if applicable)
Name	Chris Cols	on	MATERIAL PROPERTY OF THE PARTY		
Job Title _	Project Ges	logist			
Address	812 Hi Lo	Way		Phone 850	-408-1840
S	treet Tallahassee		32308	Email Coolson	@rowedrilling
ā	city	State	Zip		
Speaking:	For Against	Information	Waive Sp (The Chại	peaking:In Sur r will read this informa	
Repres	senting Water	Well Drilling	Company (-	Suez As)	
Appearing	at request of Chair:	Yes No	Lobbyist registe	ered with Legislato	ure: Yes No
While it is a	Senate tradition to encoura	age nublic testimony time	e may not permit all	nersons wishing to s	neak to he heard at this

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Si	Senator or Senate Professional Staff conducting the meeting)
Meeting Date	Bill Number (if applicable)
Topic FACKING	Amendment Barcode (if applicable)
Name OM CTUM	
Job Title Phred Teachor	
Address 914 SW RIWH IM	Phone 3864541916
Street State Street State	30038 Email June 1 m Tatum nat
Speaking: For Against Information	Waive Speaking: In Support Against
Representing Our Santafe	(The Chair will read this information into the record.)
Appearing at request of Chair: Yes No	Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

Meeting Date (Deliver BOTH copies of this form to the Senato	or or Senate Professional Staff conducting the meeting) Bill Number (if applicable)
Topic Ban Fracking	Amendment Barcode (if applicable)
Name Mern'llee Malwitz-J. Job Title Citizen	i pson
Address 2070 SW CR 138	Phone 352-22-8893
Fort White FL City State	32038 Email Merrillecart@gnail.
Speaking: For Against Information	Waive Speaking: In Support Against (The Chair will read this information into the record.)
Representing Our Santa fe River	
Appearing at request of Chair: Yes Vo	Lobbyist registered with Legislature: Yes X No
While it is a Senate tradition to encourage public testimony, timeeting. Those who do speak may be asked to limit their rema	ne may not permit all persons wishing to speak to be heard at this orks so that as many persons as possible can be heard.

S-001 (10/14/14)

This form is part of the public record for this meeting.

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting) 200 Nov 4 2019 Bill Number (if applicable) Meeting Date Topic FRACKING BAN Amendment Barcode (if applicable) Name DAN HENDRICKSON VOLUNTEER, FLA LEAGUE OF CONSERVATION VOTERS ED FUND Job Title Phone 850 570-1967 319 E PARK AVE Address Street DANBHENDRICKSON@COMCAST.NET TALLAHASSEE, FL 32301 Email Zip State City Information Waive Speaking: In Support Speaking: Against (The Chair will read this information into the record.) FLA LEAGUE OF CONSERVATION VOTERS EDUCATION FUND Representing Lobbyist registered with Legislature: Appearing at request of Chair: While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

S-001 (10/14/14)

This form is part of the public record for this meeting.

11 - 04 = 19 (Deliver BOTH copies of this form to the Senator	or Senate Professional Staff conducting the meeting)
Meeting Date	Bill Number (if applicable)
Topic Fracking	Amendment Barcode (if applicable)
Name Kim Ross	
Job Title Executive D:	
Address 603 NMLK Jr Blud.	Phone
Street Tollahassee FL	32301 Email Kin Drethink Energy flored or
Speaking: For Against Information	Waive Speaking: In Support Against (The Chair will read this information into the record.)
Representing	
Appearing at request of Chair: Yes No	Lobbyist registered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time meeting. Those who do speak may be asked to limit their remark	υνφουθ) e may not permit all persons wishing to speak to be heard at this ks so that as many persons as possible can be heard.
This form is part of the public record for this meeting.	S-001 (10/14/14)

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

SB 200

Bill Number (if applicable)

Meeting Date	Bill Number (if applicable)
Topic	Amendment Barcode (if applicable)
Name Gary Hunter	
Job Title Attorney	
Address 1195 Monroe St. Suite 300	Phone 850-222-7500
Tallchassee FL 3230	1 Email gary hangslaw. Love
	Vaive Speaking: In Support Against The Chair will read this information into the record.)
Representing SKIar Exploration Co	LLC
Appearing at request of Chair: Yes No Lobbyist	registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the r	meeting) 200
Meeting Date	Bill Number (if applicable)
Topic Fracking	Amendment Barcode (if applicable)
Name NICOle Knutson	
Job Title Associate Director of Ed.	321-693-9989
Address 603 N. MIK Jr BIVA Phone	550 888
Street Tallahassee FL 32301 Email Ni to	
Speaking: For Against Information Waive Speaking:	In Support Against information into the record.)
Representing	
Appearing at request of Chair: Yes No Lobbyist registered with Le	gislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional St	aff conducting the meeting) SB 200
Meeting Date	Bill Number (if applicable)
Topic FRACKING	Amendment Barcode (if applicable)
Name PUTH CHASE	
Job Title	
Address 9601 Muleosweth PD	Phone
Street TALLAHASSEE FL 32309	Email
Speaking: State Zip Speaking: Information Waive Speaking: (The Chair	peaking: In Support Against ir will read this information into the record.)
Representing SELF	
Appearing at request of Chair: Yes No Lobbyist register	ered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Sepate Professional Staff conducting the meeting) Meeting Date Bill Number (if applicable) Amendment Barcode (if applicable) Name Job Title **Address** Phone Street State Citv Information Waive Speaking: In Support Speaking: Against (The Chair will read this information into the record.) Representing Appearing at request of Chair: Lobbyist registered with Legislature: While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

S-001 (10/14/14)

APPEARANCE RECORD

Meeting Date (Deliver BOTH	copies of this form to the Senat	tor or Senate Professional Si	taff conducting the meeting) Bill Number (if applicable)
	, ,		Dili Nation (ii applicable)
Topic ADVANCED Well	Stimulation	Tacotwat	Amendment Barcode (if applicable)
Name JONATHAN WES	och		
Job Title Depty Director			
Address 1700 N. Meri	oe st #11-	786	Phone 954-593-4449
Street TA llahassec	FC	32303	Email_SWEBBEREFUNTERS, ON
Speaking: For Against	State Information		peaking: In Support Against ir will read this information into the record.)
Representing FLONIDA	CONSERVATIO	~ VOTERS	
Appearing at request of Chair:	Yes No	Lobbyist regist	ered with Legislature: XYes No
While it is a Senate tradition to encountermeeting. Those who do speak may be			persons wishing to speak to be heard at this persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

(Deliver BOT)	H copies of this form to the Senator o	r Senate Professional Sta	aff conducting the meeting)	100
Meeting Date			E	Bill Number (if applicable)
Topic Ban Fral	King		Amendm	ent Barcode (if applicable)
Name Michelle	Allen			
Job Title Honda S	tale Direct	by		
Address 3900 15+ 8	+ N #201		Phone 27-2	7-5135
Street Pefe	FL ?	33703	Email Malley	12 Hwwaten.or
City	State	Zip		
Speaking: For Against	Information	Waive Sp	peaking: In Sup rwill read this informati	•
Representing Food	4 Water L	vatin	wiii read triis iirioiriiad	
Appearing at request of Chair:	Yes No	Lobbyist registe	ered with Legislatur	e: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator	r or Senate Professional S	taff conducting t	he meeting)
Meeting Date			Bill Number (if applicable)
Topic Kreeking			Amendment Barcode (if applicable)
Name Rid Templic			
Job Title			
Address 135 S. Monroe		Phone _	850-224-6926
Street Ta ULhassee Flority State	32301	Email	
Speaking: State Against Information			In Support Against ais information into the record.)
Representing Horida AFZ - C10			
Appearing at request of Chair: Yes X No	Lobbyist registe	ered with	

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

11/4	+ 119	(Deliver BOTH copies	of this form to the Senator	or Senate Professional St	aπ conducting tr	ne meeting)	58 200	
Mee	eting Date						Bill Number (if applicable	∋)
Topic _	fracking.					Amendr	ment Barcode (if applicab	 le)
Name _	Sahma Hi	٠	MANAGEMENT AND	55056AW-				
Job Title	Lesearch	& policy	(OUTLINGTOF,	fesh Mk Energ	74			
	3134 Bay Street	,				850 3	,45-1665	
	TUH		FL	32311	Email			
Speaking	City g: For	Against	State Information	Zip Waive Sp (The Chai	_		oport Against tion into the record.)	
Repr	esenting						Negative and the second	natural spirit
Appearii	ng at request c	of Chair:	Yes No	Lobbyist registe	ered with L	_egislatu	re: Yes No)
		• .	oublic testimony, time ed to limit their reman		•		eak to be heard at this an be heard.	

S-001 (10/14/14)

APPEARANCE RECORD

Meeting Date (Deliver BOTH copies of this form to the Senator or Senate Professional S	Staff conducting the meeting) Staff conducting the meeting) Bill Number (if applicable)
Topic Fracking	Amendment Barcode (if applicable)
Name Lawen Grey	_
Job Title Assoc. Divect of Campuigns, ReThink!	Energy
Address 329 Middlebrooks Cin	Phone 960766633
	Email Speaking: In Support Against air will read this information into the record.)
Representing	
Appearing at request of Chair: Yes No Lobbyist regis	tered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time may not permit a meeting. Those who do speak may be asked to limit their remarks so that as many	Il persons wishing to speak to be heard at this y persons as possible can be heard.
This form is part of the public record for this meeting.	S-001 (10/14/14)

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)	200
Meeting Date	Bill Number (if applicable)
	dment Barcode (if applicable)
Name Lyann hynn	
Job Title Advocate	,
Address 412 w Sefferson St #323 Phone 847-	644-7929
	a rlynn@environmen Florida org
Speaking: For Against Information Waive Speaking: In Section (The Chair will read this information)	
Representing Environment Plovida	
Appearing at request of Chair: Yes No Lobbyist registered with Legislat	ture: Yes No
While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to s meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible	
This form is part of the public record for this meeting.	S-001 (10/14/14)

APPEARANCE RECORD

11/04/19	(Deliver BOTH copies of this form to the Ser	nator or Senate Professional Staff	conducting the meeting)	SR 200
Meeting Date				Bill Number (if applicable)
Topic <u>SB 200</u> {	Fracking		 Amendn	nent Barcode (if applicable)
Name Jackson	Oberlink			
Job Title Prosider	+- FSU Environment	A Service Program		
Address Street	elanie Dr.	F	Phone <u>7725</u>	32 1371
Tallahas	State	32304 E	Email Jacksonc	borline Comail.
Speaking: For	Against Information	, Waive Spe	aking: In Sup will read this informa	. — •
Representing	SU Environmental	Service Prog	yram	
Appearing at request of	of Chair: Yes X No	Lobbyist register	ed with Legislatu	re: Yes No
While it is a Senate tradition meeting. Those who do spe	on to encourage public testimony, beak may be asked to limit their re	time may not permit all pe marks so that as many pe	ersons wishing to spe ersons as possible ca	eak to be heard at this an be heard.

S-001 (10/14/14)

APPEARANÇE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)	() ~~)
Meeting Date (Deliver BOTH copies of this form to the Senator of S	Bill Number (If applicable
	lment Barcode (If applicab
Name Torror BIEHL	
Job Title Dir. GOVERNMENT RELATIONS Address 186 E. COLLEGE AVE SITE 640 Phone 850	-224-1660
Audios	NO CAPITOL PILL
City State Zip Unformation Walve Speaking: In S	upport Against
Representing	nation into the record.)
Appearing at request of Chair: Yes No Lobbyist registered with Legisla	ture: Yes N
While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible	speak to be heard at thi
and the second for the second form	S-001 (10/1

APPEARANCE RECORD

Meeting Date (Deliver BOTH copies of this form to the Senator or Senate Professional St	Bill Number (if applicable)
Topic Fracking	Amendment Barcode (if applicable)
Name Brian Lee	
Job Title LegisliTive Director	
Address 1203 Buchingham Dr	Phone \$50 - 766 - 7309
Jallahigser FL 32308	Email6/ ee@ FWWGTCh.003
Speaking: State Zip Speaking: For Against Information Waive Speaking: (The Chair	peaking: In Support Against fr will read this Information into the record.)
Representing Food and Worer Watch	
Appearing at request of Chair: Yes No Lobbyist register	ered with Legislature: X Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

Meeting Date (Deliver BOTH copies of this form to the Senator	or Senate Professional Staff conducting the meeting) SB 200 Bill Number (if applicable)
Topic <u>Fracking Ban</u> Name <u>Brianna</u> Blastick	Amendment Barcode (if applicable)
Job Title	
Address 1709 W Call Street	Phone (350)532-2603
Street Tallahasser Pl	32304 Email brib1998 @hotmail.com
Speaking: State Against Information	Zip Waive Speaking: In Support Against (The Chair will read this information into the record.)
Representing Rethink Energy	Florida
Appearing at request of Chair: Yes No	Lobbyist registered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time meeting. Those who do speak may be asked to limit their remark	e may not permit all persons wishing to speak to be heard at this ks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

	(Deliver BOTH copies of this form to the Senator	or Senate Professional Staff conducting the meeting)	SB200
Meeti	g Date		Bill Number (if applicable)
Topic	#SBQ00	Amenda	ment Barcode (if applicable)
Name	Falui	et. Thomas	
Job Title _	Toolen teer	<u> </u>	
Address	treet 7 85 Tellon Tr	Phone 3	860-9475
_	ityState	<u> </u>	
Speaking:	For Against Information	Waive Speaking: In Su (The Chair will read this informa	
Repres	senting <u>AFSEME</u>	<u>.</u> >	
Appearing	at request of Chair: Yes No	Lobbyist registered with Legislatu	ıre: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

40CT19	(Deliver BOTH copies of this form to the Sen	ator or Senate Professional Staff of	conducting the meeting) SRZ00
Meeting Date	-		Bill Number (if applicable)
Topic _ SB 20	00		Amendment Barcode (if applicable)
Name Ryan	, BERGER		
Job Title Company	Resorte Dev-	Herdry Potrola	\mathcal{M}
Address 13656	Misting Div, Site	2013 P	hone 239) 189-4747
City	Atró Oxida State	339 17 E	mail our berge There was the
Speaking: For	Against Information	Waive Spea	aking: In Support Against ill read this information into the record.)
Representing	endry Petilolom (er joset 11	,
Appearing at request	of Chair: Yes No	Lobbyist registere	ed with Legislature: Yes No
	on to encourage public testimony, t beak may be asked to limit their ren	• • •	rsons wishing to speak to be heard at this sons as possible can be heard.

S-001 (10/14/14)

APPEARANÇE RECORD

Meeting Date (Deliver BOTH copies of this form to the Senator	For Senate Professional Staff conducting the meeting) Bill Number (if applicable)
Name Theresa Repolds	Amendment Barcode (if applicable)
Job Title	
Address 8 2421 Jackgorbjuff Road	Phone 386 a37 841
Street FL	Email Theresoreund as 4 Committee
City	Zip
Speaking: For Against Information	Waive Speaking: In Support Against (The Chair will read this information into the record.)
Representing	
Appearing at request of Chair: Yes No	Lobbyist registered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time meeting. Those who do speak may be asked to limit their remark	e may not permit all persons wishing to speak to be heard at this ks so that as many persons as possible can be heard.
This form is part of the public record for this meeting.	S-001 (10/14/14)

APPEARANCE RECORD

Meeting Date (Deliver BOTH copies of this form to the Sen	ator or Senate Professional	Staff conducting the meeting) Bill Number (if applicable)
Topic Tracking		
Job Title Studient		_
Address Street DY		Phone 309-778-1911
Tallahassee FL City State	32304 Zip	Email & dane foster 4840 gmail con
Speaking: For Against Information		Speaking: In Support Against air will read this information into the record.)
Representing	***************************************	
Appearing at request of Chair: Yes No	Lobbyist regis	tered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, t meeting. Those who do speak may be asked to limit their ren	•	,
This form is part of the public record for this meeting		\$ 001 (10/14/14)

APPEARANCE RECORD

	2019	ppies of this form to the Senator	or Senate Professional S	taff conducting the meetin	
√Meetin∕g Date					Bill Number (if applicable)
Topic	VEIL Stin	whim T.	reatment	Ame	endment Barcode (if applicable)
Name	dward 6	. Labrado			
Job Title	Legislati	ve Course	l	4 6186 1	
Address 10	OS. Andr	ews Ave. Ma	in Library	Phone 95%	-826-1155
City	landerdale	State	23.30) Zip	Email Das V	ador @ browned. org
Speaking:	For Against	Information	Waive S	• • —	Support Against mation into the record.)
Representir	ng <u>Blov</u>	Vard County			
Appearing at re	quest of Chair:	Yes No	Lobbyist regist	ered with Legisla	ature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD

Meeting Date (Deliver BOTH copies of this form to the Senator or Senate Professional St	taff conducting the meeting) Bill Number (if applicable)
Topic Fracking Bon Name Ann Macmillan	Amendment Barcode (if applicable)
Job Title	
Address 1121/2 Haybort St	Phone 850.508.2424
	Email Connact lan Quality Consider the support Against for will read this information into the record.)
Representing	
Appearing at request of Chair: Yes No Lobbyist register	ered with Legislature: Yes 🗷 No
While it is a Senate tradition to encourage public testimony, time may not permit all meeting. Those who do speak may be asked to limit their remarks so that as many	
This form is part of the public record for this meeting.	S-001 (10/14/14)

APPEARANCE RECORD

11/4/2019	(Deliver BOTH copies of this form to tr	le Seriator of Seriate Professional Star	200
Meeting Date	_		Bill Number (if applicable)
Topic Oil and Gas			Amendment Barcode (if applicable)
Name <u>Andy Palmer</u>			
Job Title Senior Polic	sy Advisor		
Address 119 South M	Monroe, Suite 200		ohone 850-205-9000
Street Tallahassee	FL		 E _{mail} andy.palmer@MHDFirm.com
City Speaking: For	State Against Information		eaking: In Support Against will read this information into the record.)
Representing Col	llier Resources Company	,	
Appearing at request	of Chair: Yes V	b Lobbyist registe	ed with Legislature: Yes No
			ersons wishing to speak to be heard at this ersons as possible can be heard.

S-001 (10/14/14)

APPEARANCE RECORD

1/4/2019	(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)			
Meeting Date			Bill Number (if applicable)	
Topic Fra	cking		Amendment Barcode (if applicable)	
NameSusa	n Mileod			
Job Title	Pharmacist			
Address	801 Chestwood An	Phone _	8502644217	
Street	hesser 3230	3 Email	,	
Speaking: For	State Against Information		In Support Against is information into the record.)	
Representing	self		γ	
Appearing at request	of Chair: Yes No	Lobbyist registered with L	egislature: Yes No	
	on to encourage public testimony, time beak may be asked to limit their remark	• •	0 ,	

This form is part of the public record for this meeting.

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator	or Senate Professional Staff conducting the meeting) 55200
Meeting Date	Bill Number (if applicable)
Topic Stop Fricking fracking Name C. Forfax	Amendment Barcode (if applicable)
Name C. Forfax	
Job Title	
Address 4921 Annette	Phone
	Email
City State Speaking: Against Information	Waive Speaking: In Support Against (The Chair will read this information into the record.)
Representing Indivisible	
Appearing at request of Chair: Yes No	Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

S-001 (10/14/14)

< LAMA

APPEARANCE RECORD

11-4-20	reliver BOTH copies of this form to the Senator of	Senate Professional St	aπ conducting the meeting) -	55200
Meeting Date				Bill Number (if applicable)
Topic ONG GAS	PRODUCTION		Amend	ment Barcode (if applicable)
Name David	TICA			
Job Title Execution	re Director			
Address <u>215 S. W</u>	LONROF ST SUITE 80	00	Phone <u>850</u>	561
TALLAHASSE		32301	Email	
Speaking: For V	State Against Information	Zip Waive Sp (The Chai	peaking: In Su r will read this informa	
Representing <u>F</u> L	ORIDAPETROLEUM Cou	Nal		
Appearing at request of	Chair: Yes No	Lobbyist registe	ered with Legislatu	ıre: Yes No
14/11/11/11		, , , , ,		

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

APPEARANCE RECORD
Meeting Date (Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting) Bill Number (if applicable)
1. Capie (IAND)
Topic 10 PRPS RINGTH / 1991 Amendment Barcode (if applicable)
Name SEX & BUDS CLAY COUNTY ALHOTECS
Job Title SEX TOY & HOWLS
Address 2904 - 2910 Hull 21 Phone 909 416 3224
MIDDLEBURLY GL 3206 Email
Čity State Zip
Speaking: For Against Information Waive Speaking: In Support Against (The Chair will read this information into the record.)
Representing James Conto
Appearing at request of Chair: Yes No Lobbyist registered with Legislature: Yes No
While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

S-001 (10/14/1

CourtSmart Tag Report

Room: LL 37 Case No.: Type: Caption: Senate Environment and Natural Resources Committee Judge:

Started: 11/4/2019 4:00:39 PM

4:12:59 PM

4:13:14 PM

4:13:14 PM

4:13:22 PM

Ends: 11/4/2019 5:00:13 PM Length: 00:59:35 4:00:38 PM Call to Order 4:00:39 PM Roll call 4:00:53 PM Quorum is present 4:01:22 PM Pledge of allegiance Chair Montford with introduction 4:01:33 PM 4:01:43 PM Tab 1 SB 178 Public Financing of Construction Projects by Senator Rodriguez 4:01:46 PM Senator Rodriguez presents the bill 4:02:06 PM SB 178 is explained 4:02:20 PM Chair opens for member questions on the bill 4:02:26 PM No questions, move on to public appearance 4:03:00 PM Deborah Foote 4:03:02 PM Leighanne Boone ReThink Energy Action Fund in support Aliki Moncrief Executive Director Florida Conservation Voters Tallahassee in support 4:03:08 PM 4:03:42 PM Kim Ross ReThink Energy Action Fund in support 4:03:42 PM Brian Lee in support 4:03:46 PM Jeff Sharkey in support 4:03:54 PM Taylor Patrick Biehl in support 4:03:56 PM Continue public testimony Lauren Corey, ReThink Energy Tallahassee in support 4:04:00 PM Debate: Senator Berman in support 4:04:29 PM Recognized to close, Senator Rodriguez Waives close 4:04:46 PM 4:04:52 PM Roll Call on SB 178 By your vote SB 178 reported favorable 4:04:58 PM Tab 2 SB 326 Environmental Regulation by Senator Perry 4:05:05 PM 4:05:47 PM Senator Perry is recognized to explain the bill 4:05:47 PM Senator Perry gives explanation of SB 326 4:06:02 PM Take up Amendment barcode 412992 by Senator Perry 4:06:21 PM Questions on amendment by members- none 4:06:30 PM Appearance cards for amendment 4:06:35 PM Elizabeth Biser VP Public Affairs of the Recycling Partnership in support 4:07:35 PM Senator Perry waives close 4:07:37 PM Amendment barcode 412992 is adopted 4:07:44 PM Member questions on the bill as amended- none Charlie Latham in support 4:08:02 PM 4:08:06 PM Taylor Biehl in support 4:08:10 PM James Orro Sex & Buds Clay County FL Hotels Middleburg FL information 4:08:10 PM Kenya Cory in support 4:09:13 PM Chair Montford opens for debate 4:09:13 PM No debate 4:09:17 PM Senator Perry waive close Roll call on SB 326 4:09:19 PM 4:09:24 PM SB 326 reported favorvable 4:09:38 PM Tab 3 SB 332 Land Acquistion Trust Fund by Senator Stewart 4:09:56 PM Senator Stewart is recognized to explain bill 4:10:31 PM SB 332 Land Acquistion Trust Fund is explained 4:11:32 PM No member questions 4:11:33 PM **Public Appearance** 4:11:38 PM Deborah Foote Govt Affairs & Policy Director Sierra Club FL information

Travis Moore Defenders of Wildlife St. Pete FL in support

Lindsay Cross in support

Taylor Biehl Lobbyist League of Women Voters FL in support

James Orro Sex & Buds Clay County FL Hotels Middleburg FL information

```
4:16:23 PM
               Will Abberger Vice President The Trust for Public Land TLH in support
4:17:21 PM
               Paul Owens President 1000 Friends of Florida TLH in support
4:18:49 PM
               Debate on the bill by Sen Berman in support
4:19:29 PM
               Sen Stewart recognized to close
               Roll Call on SB 332
4:19:41 PM
4:19:48 PM
               SB 332 reported favorable
4:20:10 PM
               Tab 4
4:20:25 PM
               Gavel passed from Chair Montford to Vice Chair Albritton
               Sen Montford recognized and presents SB 200
4:20:46 PM
4:20:58 PM
               SB 200 Advanced Well Stimulation Treatment
4:22:07 PM
               Questions on the bill from members
4:22:20 PM
               No questions
4:22:24 PM
               Move to Public Testimony
4:23:08 PM
               Taylor Biehl in support
4:23:09 PM
               Jennifer Wilson in support
               Deborah Foote for David Cullen in support
4:23:10 PM
4:24:10 PM
               Deborah Foote in support
4:24:25 PM
               Laura Jennigan against
               Ken Hays concerned citizen TLH in support
4:24:35 PM
4:24:45 PM
               Brewster Bevis waives in opposition
4:25:05 PM
               Sam H. Adams retired of TLH in support
4:26:43 PM
               Justin Foley in opposition
4:27:42 PM
               Leighanne Boone in support
4:27:43 PM
               Amy Datz in support
4:29:54 PM
               Chris Colson in opposition
4:31:16 PM
               Jim Tatum in support
4:33:12 PM
               Merilee Malwitz-Jipson in support
4:35:10 PM
               Dan Hendrickson in support
               Kim Ross in support
4:35:55 PM
               Gary Hunter in opposition
4:37:22 PM
4:37:35 PM
               Nicole Knutson in support
                Ruth Chase in support
4:37:56 PM
               Marty Monroe in support
4:38:07 PM
               Jonathon Webber in support
4:38:18 PM
               Michelle Allen in support
4:38:28 PM
4:38:45 PM
4:38:46 PM
               Rick Temple FLorida AFL- CIO in support
4:41:47 PM
               Sabrina Hu in support
4:41:57 PM
               Lauren Corey in support
4:42:30 PM
               Ryann Lynn in support
4:42:42 PM
               Jackson Oberlink in support
4:43:33 PM
               Taylor Beihl League of Womens voters in support
               Michelle Allen in support
4:43:33 PM
4:43:52 PM
               Brian Lee in support
               Brianna Blastick in support
4:43:59 PM
4:44:36 PM
               Patricia T. Thomas in support
4:46:02 PM
               Ryan Berger in opposition
4:48:00 PM
               Theresa Reynolds in support
4:48:04 PM
               Dane Foster in support
               Edward Labrador in support
4:48:11 PM
4:48:22 PM
               Ann Macmillan in support
4:48:34 PM
               Andy Palmer in opposition
4:48:58 PM
               Susan McLeod in support
               C. FoFar in support
4:49:26 PM
4:49:43 PM
               Dave Mica in opposition
               James Orro - information
4:53:37 PM
4:55:53 PM
               Debate
4:55:59 PM
               Senator Berman in debate
4:57:07 PM
               Senator Montford closes on bill
4:58:08 PM
               Call Roll on SB 200
4:59:07 PM
                SB 200 reported Favorably
               Gavel passed back to Senator Montford
4:59:23 PM
```

4:59:32 PM Senator Wright moves we adjourn