1	ORDINANCE NO. 2020-11
2	AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF BROWARD COUNTY, FLORIDA,
3	PERTAINING TO TIDAL FLOOD PROTECTION;
4	CREATING ARTICLE XXV OF CHAPTER 39 OF THE BROWARD COUNTY CODE OF ORDINANCES ("CODE");
5	ESTABLISHING TIDAL FLOOD BARRIER INFRASTRUCTURE STANDARDS THAT ACCOUNT FOR
6	PROJECTED SEA LEVEL RISE; PROVIDING FOR
	ABATEMENT OF NUISANCE FLOODING; PROVIDING FOR REAL ESTATE SALE DISCLOSURES; AND
7'	PROVIDING FOR SEVERABILITY, INCLUSION IN THE CODE, AND AN EFFECTIVE DATE.
8	(Sponsored by Vice-Mayor Steve Geller)
9	, ,
10	WHEREAS, sea level rise is currently increasing the frequency, depth, and
11	spatial extent of tidal flooding across tidally influenced areas of Broward County;
12	WHEREAS, seawalls and shorelines that are below rising water levels allow the
13	trespass of water onto adjacent properties, causing flooding threats to infrastructure,
14	public health, and safety;
15	WHEREAS, on June 4, 2019, the Broward County Board of County
16	Commissioners ("Board") approved Item 39, a motion to draft an amendment to
17	Chapter 39 of the Broward County Code of Ordinances ("Code") to establish regionally
18	consistent minimum seawall and top-of-bank elevation standards for tidally influenced
19	areas, excluding oceanfront beaches, in the unincorporated area of Broward County to
20	improve flood protection under conditions of sea level rise;
21	WHEREAS, on January 7, 2020, the Board approved Item 32, enacting an
22	amendment to the Broward County Land Use Plan creating Policy 2.21.7, requiring
	tidally influenced municipalities to enact regionally consistent minimum seawall and top-of-bank elevation standards within two (2) years; and

1	WHEREAS, together, Policy 2.21.7 and this proposed amendment creating
2	Article XXV within Chapter 39 of the Code will serve as a model code and planning
3	foundation for municipal adoption of regionally consistent minimum standards and a
4	basis for resilience investments across the community,
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6	BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF
7	BROWARD COUNTY, FLORIDA:
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9	Section 1. Article XXV of Chapter 39 of the Broward County Code of
10	Ordinances is hereby created to read as follows:
11	[Underlining omitted]
12	ARTICLE XXV. RESILIENCY STANDARDS FOR TIDAL FLOOD PROTECTION
13	Sec. 39-404. Purpose and intent.
14	The purpose of this article is to establish a consistent minimum elevation for tidal
15	flood barriers that will:
16	(a) Provide a standard for flood mitigation infrastructure that serves as a
17	barrier to tidal flooding, not seepage, by accounting for water levels predicted under
18	combined conditions of sea level rise, high tides, and high frequency storm surge
19	through the year 2070; and
20	(b) Ensure new shoreline structures and major shoreline improvements are
21	designed for use as tidal flood barriers through application of consistent standards that
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	account for future predicted tidal flood conditions and coastal water levels associated
	with sea level rise in accordance with current regional sea level rise projections, as
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Sec. 39-405. Applicability.

2 This article applies to all new tidal flood barriers, substantial repair or substantial 3 rehabilitation to shorelines and shoreline structures, and the installation of any fixed 4 infrastructure attached to tidal flood barriers (such as mooring structures). This article is 5 not applicable to oceanfront beaches or shorelines seaward of the Coastal Construction 6 Control Line.

7 Sec. 39-406. Definitions.

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8 For the purposes of this article, the following terms, phrases, words, and their 9 derivation shall have the meanings given herein, except when the context clearly indicates a different meaning. In the interpretation and application of this article, the definitions provided for herein shall control over definitions that may be included in other 12 documents or manuals, including, but not limited to, the Florida Building Code. Words 13 used in the present tense include the future tense, words in the plural number include 14 the singular number, and words in the singular number include the plural number. The 15 word "shall" is mandatory and the word "may" is permissive.

16 Bank means the level space separating a waterway from an inland area, often 17 elevated and constructed of compacted soil.

18 Berm means an earthen mound designed with impermeability to resist the flow of 19 tidal waters through it to an adjacent property or public right-of-way.

Green-grey infrastructure or green-grey materials means a combination of engineered and natural features that provide environmental qualities and ecosystem value.

Mooring structure means a boat dock, slip, davit, hoist, lift, floating vessel 24 platform, mooring pile, or similar structure attached to land or to a seawall, to which a vessel can be moored.

1	North American Vertical Datum (NAVD88) means the vertical control for datum of
2	orthometric height established for vertical control surveying in the United States of
3	America based upon the General Adjustment of the North American Datum of 1988.
4	Public nuisance means a condition injurious to the public health or safety of the
5	community or neighborhood, or injurious to any considerable number of persons, or a
6	condition that obstructs the free passage or use, in the customary manner, of any public
7	right-of-way.
8	Rip-rap means a foundation of unconsolidated boulders, stone, rubble, concrete
9	without protruding rebar, or similar materials placed on or near a shoreline to mitigate
10	wave impacts and prevent erosion.
11	Seawall means a vertical or near vertical (often interlocking) structure placed
12	between an upland area and a waterway or waterbody for erosion control.
13	Seawall cap means a concrete box structure (usually reinforced) that connects
14	seawall panels, piles, and anchoring system (if present) together at the top.
15	Shoreline means a tidally influenced area where land meets water.
16	Substantial repair or substantial rehabilitation means:
17	(a) Any modification to the shoreline or a shoreline structure along more than
18	fifty percent (50%) of the length of the property's shoreline; or
19	(b) Any modification, alteration, or installation of an appurtenant structure
20	(such as a mooring structure) that exceeds fifty percent (50%) of the cost of a tidal flood
21	barrier along the property's shoreline.
22	Tidal flood barrier means any structure or shoreline feature including, but not
23	limited to, banks, berms, green-grey infrastructure, seawalls, seawall caps, upland stem
24	walls, or other infrastructure that impedes tidal waters from flowing onto adjacent
	property or public right-of-way, and located within or along a tidally influenced area. This

definition is not meant to include rip-rap, derelict erosion control structures, or 2 permeable earthen mounds that do not provide an impermeable water barrier to tidal 3 flooding. Tidally influenced area means the real property adjacent to, or affected by, a 4 5 waterway with water level changes in response to the daily tide. 6 Sec. 39-407. Minimum elevations for coastal infrastructure within tidally 7 influenced areas. 8 All new or substantially repaired or substantially rehabilitated banks, (a) 9 berms, green-grey infrastructure, seawalls, seawall caps, upland stem walls, or other 10 similar infrastructure shall be designed and constructed to perform as tidal flood barriers. Tidal flood barriers shall have a minimum elevation of five (5) feet NAVD88. 12 Applications for new or substantially repaired or substantially rehabilitated tidal flood 13 barriers submitted prior to January 1, 2035, may be permitted a minimum elevation of 14 four (4) feet NAVD88, if designed and constructed to accommodate a minimum 15 elevation of five (5) feet NAVD88 by January 1, 2050. 16 All property owners must maintain a tidal flood barrier in good repair. A 17 tidal flood barrier is presumed to be in disrepair if it allows tidal waters to flow 18 unimpeded through or over the barrier and onto adjacent property or public right-of-way. 19 Failure to maintain a tidal flood barrier in good repair shall be a citable offense. The 20 owner of the tidal flood barrier shall demonstrate progress towards repairing the cited within defect sixty (60) days after receiving a citation and shall complete repairs within 23 three hundred sixty-five (365) days after receipt of the citation. If the required repair or 24 rehabilitation meets the substantial repair or substantial rehabilitation threshold, no later than three hundred sixty-five (365) days after receipt of the citation, the property owner

Coding:

Words in struck-through type are deletions from existing text. Words in

- 1 shall design, obtain permits, cause to be constructed, and obtain final inspection
- 2 approval of seawall improvements that meet the minimum elevation and design
- 3 requirements.

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- 4 (c) Tidal flood barriers below a minimum five (5) feet NAVD88 elevation shall be improved, designed, and constructed so as to prevent tidal waters from impacting adjacent property or public right-of-way. Causing, suffering, or allowing the trespass of tidal waters onto adjacent property or public right-of-way is hereby declared a public nuisance and a citable offense requiring abatement. The owner shall demonstrate progress toward addressing the cited concern within sixty (60) days after receipt of the citation and complete the construction of an approved remedy no later than three
- 12 (d) Tidal flood barriers shall be designed and constructed to prevent tidal waters from flowing through the barrier, while still allowing for the release of upland 14 hydrostatic pressure.

hundred sixty-five (365) days after receipt of the citation.

- (e) To the extent practicable, tidal flood barriers shall be designed and constructed to adjoin immediately proximate tidal flood barriers to close gaps and prevent trespass of tidal water.
- (f) All tidal flood barriers undergoing substantial repair or substantial rehabilitation shall be constructed along the property's entire shoreline.
 - (g) All tidal flood barriers shall be constructed with natural limerock rip-rap, or other approved habitat enhancement, at the waterward face of the structure.
- (h) Property owners are encouraged to consider approaches and materials that enhance the biological value of traditional (flat surface) seawalls and flood barriers with the incorporation of living shoreline features, use of hybrid green-grey materials, and the use of biological forms, where practicable.

1	(i) This section shall not be construed to require the installation of a seawall
2	where other flood protection measures serve as an equally effective tidal flood barrier.
3	(j) Tidal flood barriers capable of automatically being elevated in advance of
4	high tides to prevent tidal flooding are permissible, provided that automation cannot
5	require daily human intervention.
6	Sec. 39-408. Required disclosure in contracts for sale of real estate.
7	In any contract for the sale of real estate located in tidally influenced areas of
8	Broward County executed after December 31, 2020, the seller shall include in the
9	contract or a rider to the contract the following disclosure in not less than fourteen-point,
10	capitalized, bold-faced type:
11	THIS REAL ESTATE IS LOCATED IN A TIDALLY INFLUENCED AREA. THE
12	OWNER MAY BE REQUIRED BY COUNTY OR MUNICIPAL ORDINANCE TO MEET
13	MINIMUM TIDAL FLOOD BARRIER ELEVATION STANDARDS DURING
14	CONSTRUCTION OR SUBSTANTIAL REPAIR OR SUBSTANTIAL
15	REHABILITATION OF SEAWALLS, BANKS, BERMS, AND SIMILAR
16	INFRASTRUCTURE OR WHEN REQUIRED TO ABATE NUISANCE FLOODING.
17	Section 2. <u>Severability</u> .
18	If any portion of this Ordinance is determined by any court to be invalid, the
19	invalid portion will be stricken, and such striking will not affect the validity of the
20	remainder of this Ordinance. If any court determines that this Ordinance, in whole or in
21	part, cannot be legally applied to any individual, group, entity, property, or circumstance,
22	such determination will not affect the applicability of this Ordinance to any other
	such determination will not affect the applicability of this Ordinance to any other individual, group, entity, property, or circumstance.

Coding:

1	Section 3. Inclusion in the Broward County Code of Ordinances.
2	It is the intention of the Board of County Commissioners that the provisions of
3	this Ordinance become part of the Broward County Code of Ordinances as of the effective
4	date. The sections of this Ordinance may be renumbered or relettered and theword
5	"ordinance" may be changed to "section," "article," or such other appropriate word or
6	phrase to the extent necessary in order to accomplish such intention.
7	Section 4. Effective Date.
8	This Ordinance is effective as of the date provided by law.
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10	ENACTED March 31, 2020
11	FILED WITH THE DEPARTMENT OF STATE April 1, 2020
12	EFFECTIVE April 1, 2020
13	Approved as to form and legal sufficiency:
14	Andrew J. Meyers, County Attorney
15	By /s/ Michael C. Owens 03/31/2020
16	Michael C. Owens (date)
17	Senior Assistant County Attorney
18	By <u>/s/ Maite Azcoitia 03/31/2020</u> Maite Azcoitia (date)
19	Deputy County Attorney
20	MCO/gmb Tidal Flood Protection Ordinance.doc
21	03/31/2020 #41039-0001
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	Coding: Words in struck-through type are deletions from existing text. Words in underscored type are additions.