

PROPOSED

ORDINANCE NO. 2020-

AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF BROWARD COUNTY, FLORIDA, PERTAINING TO TIDAL FLOOD PROTECTION; CREATING ARTICLE XXV OF CHAPTER 39 OF THE BROWARD COUNTY CODE OF ORDINANCES ("CODE"); ESTABLISHING TIDAL FLOOD BARRIER INFRASTRUCTURE STANDARDS THAT ACCOUNT FOR PROJECTED SEA LEVEL RISE; PROVIDING FOR ABATEMENT OF NUISANCE FLOODING; PROVIDING FOR REAL ESTATE SALE DISCLOSURES; AND PROVIDING FOR SEVERABILITY, INCLUSION IN THE CODE, AND AN EFFECTIVE DATE.

(Sponsored by Vice-Mayor Steve Geller)

WHEREAS, sea level rise is currently increasing the frequency, depth, and spatial extent of tidal flooding across tidally influenced areas of Broward County;

WHEREAS, seawalls and shorelines that are below rising water levels allow the trespass of water onto adjacent properties, causing flooding threats to infrastructure, public health, and safety;

WHEREAS, on June 4, 2019, the Broward County Board of County Commissioners ("Board") approved Item 39, a motion to draft an amendment to Chapter 39 of the Broward County Code of Ordinances ("Code") to establish regionally consistent minimum seawall and top-of-bank elevation standards for tidally influenced areas, excluding oceanfront beaches, in the unincorporated area of Broward County to improve flood protection under conditions of sea level rise;

WHEREAS, on January 7, 2020, the Board approved Item 32, enacting an 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

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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 basis
4 for resilience investments across the community,

5
6 BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF
7 BROWARD COUNTY, FLORIDA:

8
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 barrier
17 to tidal flooding, not seepage, by accounting for water levels predicted under combined
18 conditions of sea level rise, high tides, and high frequency storm surge through the year
19 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
22 account for future predicted tidal flood conditions and coastal water levels associated with
23 sea level rise in accordance with current regional sea level rise projections, as updated
24 and adopted by the Broward County Board of County Commissioners.

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1 **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.**

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
10 indicates a different meaning. In the interpretation and application of this article, the
11 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 the
14 singular number, and words in the singular number include the plural number. The word
15 "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.

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

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

4 *North American Vertical Datum (NAVD88)* means the vertical control for datum of
5 orthometric height established for vertical control surveying in the United States of
6 America based upon the General Adjustment of the North American Datum of 1988.

7 *Public nuisance* means a condition injurious to the public health or safety of the
8 community or neighborhood, or injurious to any considerable number of persons, or a
9 condition that obstructs the free passage or use, in the customary manner, of any public
10 right-of-way.

11 *Rip-rap* means a foundation of unconsolidated boulders, stone, rubble, concrete
12 without protruding rebar, or similar materials placed on or near a shoreline to mitigate
13 wave impacts and prevent erosion.

14 *Seawall* means a vertical or near vertical (often interlocking) structure placed
15 between an upland area and a waterway or waterbody for erosion control.

16 *Seawall cap* means a concrete box structure (usually reinforced) that connects
17 seawall panels, piles, and anchoring system (if present) together at the top.

18 *Shoreline* means a tidally influenced area where land meets water.

19 *Substantial repair or substantial rehabilitation* means:

20 (a) Any modification to the shoreline or a shoreline structure along more than
21 fifty percent (50%) of the length of the property's shoreline; or

22 (b) Any modification, alteration, or installation of an appurtenant structure (such
23 as a mooring structure) that exceeds fifty percent (50%) of the cost of a tidal flood barrier
24 along the property's shoreline.

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1 *Tidal flood barrier* means any structure or shoreline feature including, but not
2 limited to, banks, berms, green-grey infrastructure, seawalls, seawall caps, upland stem
3 walls, or other infrastructure that impedes tidal waters from flowing onto adjacent property
4 or public right-of-way, and located within or along a tidally influenced area. This definition
5 is not meant to include rip-rap, derelict erosion control structures, or permeable earthen
6 mounds that do not provide an impermeable water barrier to tidal flooding.

7 *Tidally influenced area* means the real property adjacent to, or affected by, a
8 waterway with water level changes in response to the daily tide.

9 **Sec. 39-407. Minimum elevations for coastal infrastructure within tidally influenced**
10 **areas.**

11 (a) All new or substantially repaired or substantially rehabilitated banks, berms,
12 green-grey infrastructure, seawalls, seawall caps, upland stem walls, or other similar
13 infrastructure shall be designed and constructed to perform as tidal flood barriers. Tidal
14 flood barriers shall have a minimum elevation of five (5) feet NAVD88. Applications for
15 new or substantially repaired or substantially rehabilitated tidal flood barriers submitted
16 prior to January 1, 2035, may be permitted a minimum elevation of four (4) feet NAVD88,
17 if designed and constructed to accommodate a minimum elevation of five (5) feet
18 NAVD88 by January 1, 2050.

19 (b) All property owners must maintain a tidal flood barrier in good repair. A tidal
20 flood barrier is presumed to be in disrepair if it allows tidal waters to flow unimpeded
21 through or over the barrier and onto adjacent property or public right-of-way. Failure to
22 maintain a tidal flood barrier in good repair shall be a citable offense. The owner of the
23 tidal flood barrier shall demonstrate progress towards repairing the cited defect within
24 sixty (60) days after receiving a citation and shall complete repairs within

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1 three hundred sixty-five (365) days after receipt of the citation. If the required repair or
2 rehabilitation meets the substantial repair or substantial rehabilitation threshold, no later
3 than three hundred sixty-five (365) days after receipt of the citation, the property owner
4 shall design, obtain permits, cause to be constructed, and obtain final inspection approval
5 of seawall improvements that meet the minimum elevation and design requirements.

6 (c) Tidal flood barriers below a minimum five (5) feet NAVD88 elevation shall
7 be improved, designed, and constructed so as to prevent tidal waters from impacting
8 adjacent property or public right-of-way. Causing, suffering, or allowing the trespass of
9 tidal waters onto adjacent property or public right-of-way is hereby declared a public
10 nuisance and a citable offense requiring abatement. The owner shall demonstrate
11 progress toward addressing the cited concern within sixty (60) days after receipt of the
12 citation and complete the construction of an approved remedy no later than three hundred
13 sixty-five (365) days after receipt of the citation.

14 (d) Tidal flood barriers shall be designed and constructed to prevent tidal
15 waters from flowing through the barrier, while still allowing for the release of upland
16 hydrostatic pressure.

17 (e) To the extent practicable, tidal flood barriers shall be designed and
18 constructed to adjoin immediately proximate tidal flood barriers to close gaps and prevent
19 trespass of tidal water.

20 (f) All tidal flood barriers undergoing substantial repair or substantial
21 rehabilitation shall be constructed along the property's entire shoreline.

22 (g) All tidal flood barriers shall be constructed with natural limerock rip-rap, or
23 other approved habitat enhancement, at the waterward face of the structure.

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1 (h) Property owners are encouraged to consider approaches and materials that
2 enhance the biological value of traditional (flat surface) seawalls and flood barriers with
3 the incorporation of living shoreline features, use of hybrid green-grey materials, and the
4 use of biological forms, where practicable.

5 (i) This section shall not be construed to require the installation of a seawall
6 where other flood protection measures serve as an equally effective tidal flood barrier.

7 (j) Tidal flood barriers capable of automatically being elevated in advance of
8 high tides to prevent tidal flooding are permissible, provided that automation cannot
9 require daily human intervention.

10 **Sec. 39-408. Required disclosure in contracts for sale of real estate.**

11 In any contract for the sale of real estate located in tidally influenced areas of
12 Broward County, the seller shall include in the contract or a rider to the contract the
13 following disclosure in not less than ten-point, capitalized, bold-faced type:

14 **THIS REAL ESTATE IS LOCATED IN A TIDALLY INFLUENCED AREA. THE**
15 **OWNER MAY BE REQUIRED BY COUNTY OR MUNICIPAL ORDINANCE TO MEET**
16 **MINIMUM TIDAL FLOOD BARRIER ELEVATION STANDARDS DURING**
17 **CONSTRUCTION OR SUBSTANTIAL REPAIR OR SUBSTANTIAL REHABILITATION**
18 **OF SEAWALLS, BANKS, BERMS, AND SIMILAR INFRASTRUCTURE OR WHEN**
19 **REQUIRED TO ABATE NUISANCE FLOODING.**

20 Section 2. Severability.

21 If any portion of this Ordinance is determined by any court to be invalid, the invalid
22 portion will be stricken, and such striking will not affect the validity of the remainder of this
23 Ordinance. If any court determines that this Ordinance, in whole or in part, cannot be
24 legally applied to any individual, group, entity, property, or circumstance, such

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1 determination will not affect the applicability of this Ordinance to any other individual,
2 group, entity, property, or circumstance.

3 Section 3. Inclusion in the Broward County Code of Ordinances.

4 It is the intention of the Board of County Commissioners that the provisions of this
5 Ordinance become part of the Broward County Code of Ordinances as of the effective
6 date. The sections of this Ordinance may be renumbered or relettered and the word
7 "ordinance" may be changed to "section," "article," or such other appropriate word or
8 phrase to the extent necessary in order to accomplish such intention.

9 Section 4. Effective Date.

10 This Ordinance is effective as of the date provided by law.

11

12 ENACTED

PROPOSED

13 FILED WITH THE DEPARTMENT OF STATE

14 EFFECTIVE

15

16 Approved as to form and legal sufficiency:
Andrew J. Meyers, County Attorney

17

18 By /s/ Michael C. Owens 02/21/2020
Michael C. Owens (date)
Senior Assistant County Attorney

19

20 By /s/ Maite Azcoitia 02/21/2020
Maite Azcoitia (date)
Deputy County Attorney

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23 MCO/gmb
Tidal Flood Protection Ordinance.doc
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