



October 24, 2022 Meeting Backup Materials

Contents:

- Presentation: *Urban Farming* {Leann Barber, Made in Broward}
- Presentation: *Tidal Barrier Ordinance* {Stefan Perritano, Sustainability Coordinator}



The Vision

Our vision is where Fort Lauderdale residents are within walking distance of a public food forest garden space. There they can join with friends, learn and teach others how to grow and prepare their own food.



The Vision Payoff

By doing so, we build resilient, caring neighbors and youth with a purpose. We will have cool, beautiful, tranquil meeting places with abundant food and wildlife. We will build healthy soils, mitigate climate change, filter and store storm water, and educate and support each other.



Towards the vision

- Residents' knowledge of permaculture principals, including food forests, is small but growing.
- The City's Green Your Routine (GYR) program has succeeded in identifying volunteers in almost every neighborhood that have an interest in ecology, sustainability, and hands on cultivation.
- Snyder Park, since 2011, has a maturing food forest and butterfly demonstration garden, and a track record of collaborating with GYR.
- At least 5 other food forests in or near Fort Lauderdale have been started in the past 3 years.
- Broward Schools have started 20+ food forests in the past 2 years (Deluca Foundation).
- Heightened interest in nature, growing healthy food, and environmental stewardship.



Realizing the vision

- Accelerate knowledge of permaculture food forest principles through city-sponsored education.
- Expand the City's Green your routine (GYR) program to include support for building food forests (tools, plants, mulch, advice).
- Expand Snyder Park capability to further educate volunteers and propagate food forest plants for the City's neighborhood food forests.
- Partner with UF/IFAS Extension and 4-H to educate the public on growing and preparing food.
- Develop capability to share knowledge, volunteer opportunities, tips, online.
- Celebrate success together through community events / block parties.

The Roadmap

- Develop a generic project plan aka starter guide for implementation of a food forest in a Fort Lauderdale neighborhood.
- Solicit neighborhoods to apply to implement a food forest; 1 per district to start. Identify locations to be utilized.
- Document the process along the way, research and resolve difficulties, share.
- Support the installations; mulch, seaweed, manure, plants, onsite advice, recipes, events.
- Celebrate the installations, support through block parties, encourage more installations.
- Identify connections with schools in the neighborhoods as next opportunity for community collaboration.



Monarch Food Forest

**Build a caring community
one garden at a time.**



“THE MOST MEANINGFUL ASPECT OF THE FOOD FOREST IS THE COMMUNITY. THERE’S A VERY PEACEFUL WAY OF DEALING WITH EACH OTHER. THE COMMUNITY SUPPORTS YOU IN WORKING ON WHATEVER YOU’RE EXCITED ABOUT. EVERYONE IS THERE FOR EACH OTHER.”

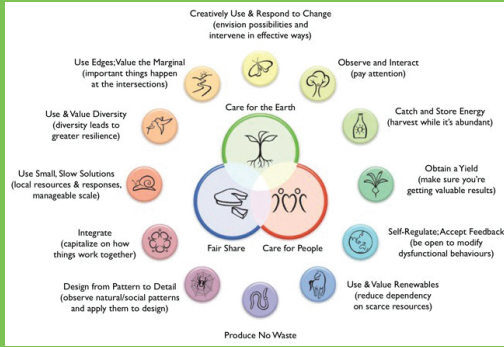
FOOD FOREST VOLUNTEER

DISCUSSION

APPENDIX

Permaculture Principals

DEVELOPED IN AUSTRALIA IN 70'S IN RESPONSE TO AGRICULTURAL CRISIS



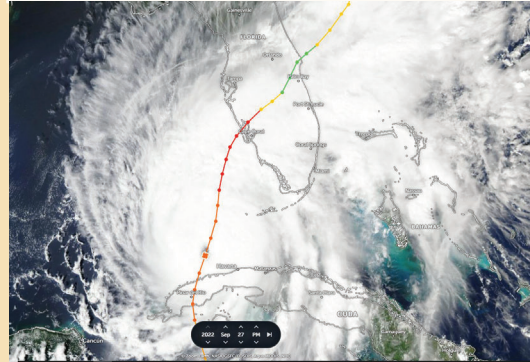


PROPOSED CHANGES ULDR SECTION 47-19.3 - BOAT SLIPS, DOCKS, BOAT DAVITS, HOISTS AND SIMILAR MOORING STRUCTURES

OCTOBER 24, 2022
SUSTAINABILITY ADVISORY BOARD

Stefan Perritano, M.S., Sustainability Coordinator

SEAWALLS AND FLOOD PROTECTION



Date	Time	Type	Wind mph	Pressure mb
Sep 29	11 PM	TS	85	985
Sep 29	8 PM	TS	80	986
Sep 29	5 PM	TS	75	986
Sep 29	2 PM	TS	75	987
Sep 29	11 AM	TS	70	986
Sep 29	8 AM	TS	70	987
Sep 29	5 AM	TS	70	986
Sep 29	2 AM	TS	65	986
Sep 28	11 PM	TS	90	971
Sep 28	8 PM	TS	90	960
Sep 28	5 PM	TS	135	949
Sep 28	2 PM	TS	140	938
Sep 28	11 AM	TS	144	937
Sep 28	8 AM	TS	155	937
Sep 28	5 AM	TS	145	941
Sep 28	2 AM	TS	144	945
Sep 27	11 PM	TS	130	946
Sep 27	8 PM	TS	120	947
Sep 27	5 PM	TS	120	949
Sep 27	2 PM	TS	143	931
Sep 27	11 AM	TS	115	957
Sep 27	8 AM	TS	115	963
Sep 27	5 AM	TS	125	948

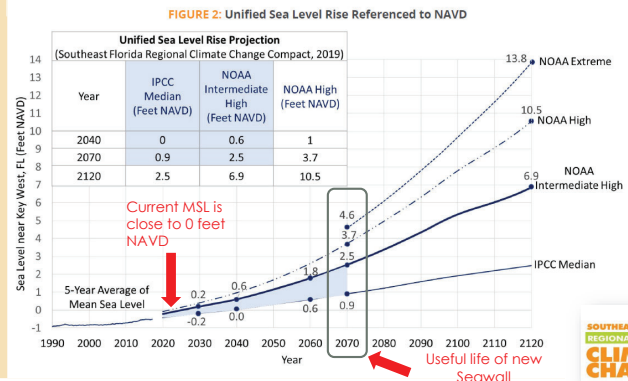
Category 3 Major Hurricane
120 mph winds

EXISTING SEAWALL ORDINANCE MODIFICATIONS ADDED IN 2016



- Sets a **minimum seawall elevation at 3.9 feet NAVD88**;
- Recommends **design of seawall for future height adjustment** up to 5.0 feet NAVD88;
- Sets an allowable **maximum height** of the seawall and dock based on a property's base flood elevation;
- Requires seawall reconstruction to the minimum elevation if the **substantial repair threshold (50%)** is triggered;
- Requires **maintaining seawalls in good repair** and sets a timeline of 365 days for completion of repairs if cited;
- Requires **owners to prevent tidal waters entering their property from impacting others** and sets a timeline of 365 days for remedy if cited;
- Allows **fixed docks to extend 10 inches** above the adjacent seawall; and
- Addresses **floating docks**.

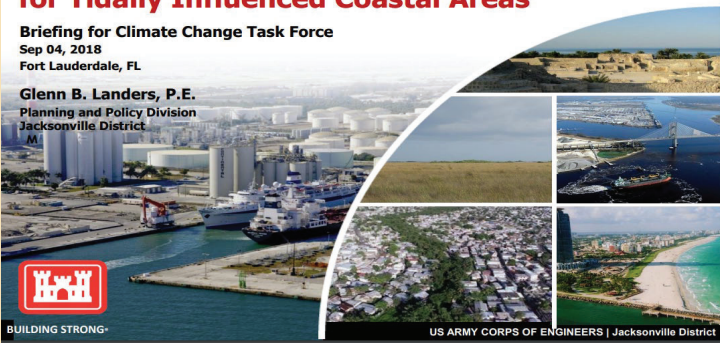
REGIONAL SEA LEVEL RISE PROJECTION (NAVD 88)



USACE/Broward County Flood Risk Management Study for Tidally Influenced Coastal Areas

Briefing for Climate Change Task Force
Sep 04, 2018
Fort Lauderdale, FL

Glenn B. Landers, P.E.
Planning and Policy Division
Jacksonville District



BROWARD COUNTY - REGIONAL TIDAL BARRIER STANDARD



Sea level rise is increasing the frequency and severity of tidal flooding across Broward communities. Recently, increased flooding has prompted both public and private investment in seawall improvements. The additional protection has not fully addressed the need for flood protection across the county. The need for additional protection is increasing as the frequency of severe weather events increases. Effective community flood protection requires a holistic approach.

Coastline erosion highlights the necessity to protect the community from resulting impacts. Broward County has created regional guidance so that coastal flood barriers will continue to provide protection, even under future sea level rise conditions.

What is the new Regional Standard?

For all new tidal flood barriers and substantial improvements to shorelines and shoreline structures:
Minimum seawall and top-of-bank elevation = 5 feet by 2050

An ordinance of Broward County, effective 2020, requires the reconstruction of a project to be designed and constructed to accommodate a minimum elevation of 5 feet NAVD88 by July 1, 2020.

This rule is not applicable to seawall berms or shorelines owned by the Central Governmental Land Use. The rule applies to all existing public, private, and all other improvements on County land and all new improvements. Land improvements are required to adopt a local ordinance implementing the regional standard by February 15, 2022.

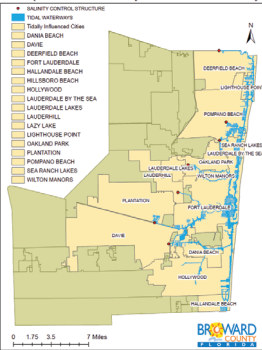
The regional standard was adopted by the following local jurisdictions with support from the U.S. Army Corps of Engineers (USACE) as part of the joint USACE/Broward County Flood Risk Management Study on Tidal Influenced Coastal Areas authorized under the Broward Assistance for Storm Program.

For complete details on the regional standard and associated policies, please go to Broward Land Use Policy 2.21.7 at bit.ly/2918383 and Broward County Code of Ordinances Section 24-404.01(3)(b)(2)(B).

What is the new Regional Standard?

For all new tidal flood barriers and substantial improvements to shorelines and shoreline structures:
Minimum seawall and top-of-bank elevation = 5 feet by 2050

Municipalities with Tidally Influenced Waterways



BROWARD COMPREHENSIVE PLAN/LAND USE PLAN REQUIREMENT



Policy 2.21.7 of the Broward Comprehensive Plan (adopted Jan 7, 2020, item 32) requires that **tidally-influenced municipalities adopt regionally consistent top elevations for seawalls, banks, and berms...** consistent with Broward County Chapter 39, Article XXV by March 31, 2022.

- Broward code based on **FTL seawall ordinance**
- Major change is **minimum elevation of five (5) feet NAVD88.**

ELEVATION STANDARD FOR ALL CITY SEAWALL PROJECTS IS 5 FEET NAVD



Isle of Palm Seawall Completed Aug 2020
Elevated from 1.25 to 5 feet

COMPLIANCE WITH COMPREHENSIVE PLAN



- POLICY CC 2.2.3a: To ensure coordination, consistency and maximum effectiveness of coastal improvements necessary to mitigate high tide flooding associated with realized and additional sea level rise through the year 2070, **the City will adopt and update as necessary regionally consistent top elevations standards for seawalls**, banks and berms, and other appurtenant coastal infrastructure (e.g., boat ramps) consistent with the findings and recommendations of the United States Army Corps of Engineers/Broward County Flood Risk Management Study for Tidally Influenced Coastal Areas. **These standards shall be consistent with Chapter 39, Article XXV – Resiliency Standards for Flood Protection - of the Broward County Code of Ordinances.**

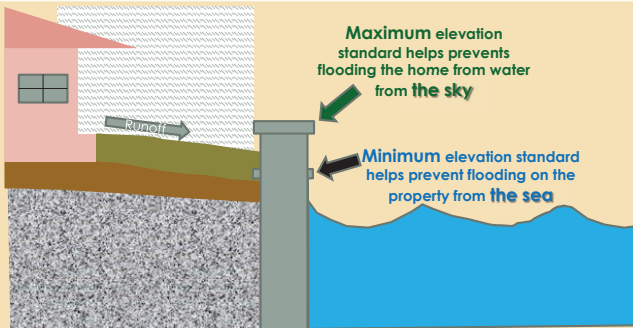
KEY MODIFICATIONS

ULDR SECTION 47-19.13 - RESILIENCY STANDARDS FOR TIDAL FLOOD PROTECTION



- Establishes terms, phrases, words for definition and interpretation purposes of this section;
- Extends the elevation requirement from only seawalls to all tidal flood barriers;
- Increases the minimum elevation from 3.9 feet to 5 feet National American Vertical Datum (NAVD88) for new or substantially repaired tidal barriers;
- Allows for structures permitted before Jan 1, 2035 to be built at four (4) feet NAVD88 but they must be designed to be elevated to five (5) feet NAVD88 by Jan 1, 2050;
- Establishes a maximum elevation for tidal barriers related to the base flood elevation (BFE) of the property or 6 feet which ever is lower;
(continued)...

SEAWALL ELEVATIONS – WHY PROVIDE A RANGE?



KEY MODIFICATIONS

ULDR SECTION 47-19.13 - RESILIENCY STANDARDS FOR TIDAL FLOOD PROTECTION (CONT)



- Requires tidal structures built where no previous seawall existed to provide habitat enhancement at the waterward face of the bulkhead or seawall;
- Encourages incorporation of living shoreline features;
- Provides for the City Engineer's ability to issue a waiver from the top elevation requirement for waterfront properties containing a principal structure with a habitable finished floor elevation of less than 4.0 feet NAVD88; and

(continued)...

KEY MODIFICATIONS

ULDR SECTION 47-19.13 - - RESILIENCY STANDARDS FOR TIDAL FLOOD PROTECTION



- Required disclosure in contracts for sale of real estate after December 31, 2022.

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

WHAT HAS NOT CHANGED?



- Required **ONLY** for **new** seawall/tidal barrier construction OR for reconstruction if the **substantial repair threshold (50%)** is triggered OR **if cited**;
- Requires maintaining seawalls/tidal barriers in good repair** and sets a timeline of 365 days for completion of repairs if cited;
- Requires owners to prevent tidal waters entering their property from impacting others** and sets a timeline of 365 days for remedy if cited; and
- Provides guidance for **minimum and maximum top elevations**.



RESILIENT ENVIRONMENT DEPARTMENT
115 S. Andrews Avenue, Room 204 Fort Lauderdale, Florida 33301 • 954.327.6612 • FAX: 954.327.6925

August 17, 2022

Nancy Gossman
Assistant Director of Public Works
330 N. Andrews Ave.
Fort Lauderdale, FL 33301

Re: Tidal Barrier Ordinance

Dear Dr. Gossman,

Thank you for the opportunity to review and provide comment regarding the City's proposed Tidal Flood Barrier Ordinance dated June 30, 2022. The draft proposal contains several critical considerations and drafting in its development and anticipated implementation. I also appreciate the ability to discuss in detail specific provisions of the City's proposed ordinance in our conversation on August 8, 2022.

In summary of this conversation, we reviewed Section 2.21.7, second paragraph, on page 7 of the draft document, which pertains to the process by which the City Engineer could issue a waiver for properties with a habitable finished floor elevation below 4.0 feet MSL+0.00. This paragraph also includes the following text: "The waiver shall be issued only after the City Engineer has established the potential length of term. If an agency's recommendation the City will need to limit the length of term, the proposed finding the term to a not to exceed date of January 1, 2025, consistent with the date referenced in the first paragraph of the same section. Additionally, it was suggested that the City incorporate language for expiration of the waiver at the time of title transfer or sale of the property."

With these anticipated amendments, the County's Resilient List (in consultation with the Office of the County Attorney) is prepared to find the City's ordinance substantially consistent with the County's Land Use Plan - Policy 2.21.7 within the context of any proposed service amendments contained in properties within the City and falling within designated Priority Planning Areas. Please anticipate that, during such review, our agency would likely request additional information pertaining to the precise date of title and location of all properties for which such waivers have been issued.

Thank you again for the opportunity to review the City's proposed ordinance and please do let know if you have any questions.

Sincerely,

Cheryl J. Jorjido
County Director and CEO
Broward County

Broward County Board of County Commissioners
Tanya Alden - Alan B. Bogen - Lance P. Frazier - Brent H. Gandy - David H. Haddad - Ron A. Rice - Tim Ryan - Michael Vance
www.broward.org

A COMPLIANT ORDINANCE



Broward County comments:

- Amend waiver language to define the length of term
 - Language amended
- Finding:
 - "...the City's ordinance (is) substantially consistent with the County's Land Use Plan - Policy 2.21.7.

SUPPORTED BY

ULDR SECTION 47-19.13 - - RESILIENCY STANDARDS FOR TIDAL FLOOD PROTECTION



- Broward County (August 17, 2022)
- Rio Vista Civic Association (March 17, 2021)
- Marine Advisory Board (September 1, 2022)
- Presented to the Council of Fort Lauderdale Civic Association (Oct 11, 2022)
- Presented to the Central Broward Alliance (October 20, 2022)

NEXT STEPS



- Presentation to Planning and Zoning Board (Nov)
- Post public notice and first reading before the City Commission (Jan)
- Second reading and approval by City Commission (Jan)
- Implement within 10 days of approval

REQUEST FOR COMMUNICATION SUPPORTING PROPOSED ORDINANCE



**Communication supporting changes to
the City of Fort Lauderdale ULDR
Sections adopting a regionally-
consistent standard for Tidal Flood
Protection and related amendments.**