



## Frequently Asked Questions Seawall Ordinance Implementation

You have received a citation under the authority of the Unified Land Development Regulations (ULDR) of the City of Fort Lauderdale Section 47-19.3 Boat Slips, Docks, Boat Davits, Hoists, and Similar Mooring Structures. Commonly referred to as the “seawall ordinance,” this section of the ULDR was updated in June 2016 and again in December 2016 to improve Fort Lauderdale’s coastal resilience and mitigate the effects of tidal flooding and sea level rise. This document is intended to answer some of the frequently asked questions about receiving a citation under this section of the code and your responsibilities as a property owner. Additional questions can be directed to Customer Service at 954-828-8000 or to subject matter experts as listed in question 8 below.

### **1. Why was the City of Fort Lauderdale seawall ordinance updated?**

In September 2015, the City of Fort Lauderdale experienced King Tides that were approximately 18” above the average high tide. The unprecedented flooding prompted the City to work with our neighbors to determine how the ordinance could be improved to protect our community from tidal flooding and anticipated sea level rise. This ordinance was adopted in June 2016 and revised in December 2016. In the fall of 2016, the City again experienced an extreme high tide which caused widespread flooding and began to enforce the new seawall ordinance.

From installing more than 123 tidal valves, improving our drainage systems, developing a stormwater master plan and completing a seawall master plan, the City is committed to investing resources necessary to protect the long-term viability of our community. While the City is taking significant steps to reduce tidal flooding, our neighbors also are also part of the solution. We have to work together to fulfill the citywide vision of creating a resilient and safe coastal community

### **2. Why did I receive a citation under Section 47-19.3 Boat Slips, Docks, Boat Davits, Hoists, and Similar Mooring Structures?**

Homeowners are responsible for maintaining their seawall in good repair and ensuring that their property is not the source of flooding into their neighborhoods. A seawall is considered to be in disrepair if it is substantially cracked, leaning, crumbling or showing evidence of upland erosion. In addition, the seawall should not allow tidal waters to flow through or over it, especially into adjacent properties or the public Right-of-Way. If either of these conditions is met (disrepair or tidal waters leaving the property), the owner may be cited and must take corrective action.

### **3. What do I have to do to comply if I was cited for having a seawall in disrepair?**

Upon being cited, you are required to take corrective action. Within 60 days of receiving notice from the City, you have to begin to address the problem and to demonstrate progress toward repairing the cited defect. Progress could include a variety of activities such as getting quotes, hiring a contractor, or submitting a building permit. If a property owner is not able to demonstrate progress within 60 days, the case could be scheduled to go before the Special Magistrate to determine a course of action.

We understand that the process to repair or construct a seawall can take time. Neighbors have 365 days from the day the property was cited to bring their seawall into compliance.

Also note that if the required repair meets the substantial repair threshold (See Question 4), you will have to construct the seawall to meet the minimum height requirement (3.9 feet NAVD88). NAVD88 stands for North American Vertical Datum. It is a reference point for the measurement of elevation. This value will be important for your surveyor, marine engineer, and seawall contractor.

Finally, if your seawall is in disrepair AND is allowing tidal waters to flow through or over it causing flooding on adjacent properties or right of ways, you may also have to address the conditions discussed in Question 5.

### **4. What is the substantial repair threshold?**

The substantial repair threshold is defined by ordinance in Section 47-3.6B.3. as:

- (1) any improvement to the seawall of more than 50% of the length of the structure, which for the purposes of this section, shall include both the seawall and cap; or
- (2) any improvement to the seawall which results in an elevation change along more than 50% of the length of the structure.

Seawall improvements constituting substantial repair at the time of permit application must be constructed to the minimum elevation of 3.9 feet NAVD88 for the continuous seawall for the length of the property. If the finished floor of the property is less than 3.9 feet NAVD88, a waiver to meet the minimum height can be requested from the City Engineer.

### **5. What do I have to do to comply if I was cited for failing to prevent tidal waters from flowing overland and leaving my property?**

Upon being cited, you are required to take corrective action. Within 60 days of receiving notice from the City, you have to begin to address the problem and to demonstrate progress toward a proposed remedy. Progress could include a variety of activities such as getting quotes, hiring a

contractor, or submitting a building permit. The remedy may include, but is not limited to, raising your seawall to meet the minimum elevation requirement (3.9 feet NAVD88), adding a retaining wall, or repairing an existing defect. We understand that the process to repair or construct a seawall can take time. Neighbors have 365 days from the day the property was cited to bring their seawall into compliance.

While this citation may have resulted from having a seawall built at a low elevation, if your seawall is in disrepair, you may also have to address the conditions discussed in Question 3.

#### **6. What are the other options other than raising my seawall?**

If tidal waters are coming THROUGH your seawall, you may only have to repair cracks or holes. If water is coming OVER your seawall AND leaving your property, you must provide a solution to the flooding that is permanent and is eligible to receive a permit. This may include mitigation solutions such as, but not limited to, adding retaining walls or creating depressed landscape areas on the site. This flexibility was included in the ordinance because the City recognized that there may be reasonable alternatives to addressing the flooding other than raising the seawalls.

#### **7. I don't have a seawall, why was I cited?**

Waterway properties that may have permeable erosion barriers such as rip rap or a natural shoreline may be cited by a code enforcement officer observing tidal waters exiting their property and impacting adjacent properties or public Rights-of-Way. If cited, those property owners have to pursue a remedy to prevent the tidal waters from leaving their properties which may include installing a new seawall or another solution.

#### **8. Where can I get more information?**

For more information, visit [www.fortlauderdale.gov/seawall](http://www.fortlauderdale.gov/seawall). On that webpage, you will find the ordinance, extensive FAQs, a list of contractors who have recently permitted seawall construction projects in the City of Fort Lauderdale (Question 9), and relevant King Tide information.

If you have specific questions, please use the following contact numbers

For Code Compliance questions: 954-828-6248

For Permitting questions: 954-828-6520

For Design and Engineering questions: 954-828-5772

#### **9. Can the City provide a list of licensed contractors?**

The City has set up a dedicated web page ([www.fortlauderdale.gov/seawall](http://www.fortlauderdale.gov/seawall)) for seawall issues.

The page has a link to a list of licensed contractors who have recently permitted seawall construction projects in the City of Fort Lauderdale. The list does not suggest endorsement of these or another seawall engineering and construction company nor is it intended to exclude any other companies that may be providing these services in South Florida who did not conduct work in Fort Lauderdale in the time frame listed. It is the responsibility of the property owner to select and hire a reputable and licensed company to perform the seawall repair or construction work.

For detailed information, checklists and requirements for Building Permits, please refer to the Interactive Map located at the following link:

<http://www.fortlauderdale.gov/departments/sustainable-development/building-services/building-permit-general-info>

The list below includes all companies (in alphabetical order) submitting a dock or seawall permit involving construction, enhancement or repair of a seawall between 8/15/2016-8/15/2017.

<b>Contractor</b>	<b>Contractor</b>
A & B DOCK AND DECK	FOULKE CONSTRUCTION
ADMIRAL BOATLIFTS	LOVELL BUILT
ALLPHASE CONSTRUCTION OF S FLA	MORRISON CONTRACTORS
AMERICAN PAVERS CONTRACTORS	PELLONI VOLLMAN & SULFLOW MARINE
AMERICAN SEAWALL MARINE CONSTR	PILING PLUS INC
B & M MARINE CONSTRUCTION	PRM ENGINEERING
BETANCOURT CONSTR	RAY QUALMANN MARINE
BOAT LIFTS & DOCKS OF S FLA	RRC DEVELOPMENT
BROWARD DOCK & SEAWALL	S FL DOCK & SEAWALL
CANNATELLI BUILDERS INC	SEATECH CONST
DIVERSIFIED DIVING SERVICE	SOUTHEAST MARINE CONST INC
EBC CONSTR	TOM KRIPS CONSTR
F&F ENGINEERING CONTRACTOR	

**10. Under what conditions would property owners be required to raise their seawall to the new minimum height of 3.9 feet NAVD88?**

Under the ordinance, a seawall would have to be raised if:

- a. The owner is installing a brand new seawall; or
- b. The owner comes in for a repair permit and it is determined that the damage to the seawall triggers substantial repair threshold; or
- c. The owner is cited for having a seawall in disrepair and it is determined that the damage to the seawall triggers substantial repair threshold; or
- d. The owner is cited for allowing tidal waters entering their property to impact adjacent properties or a public right-of-way and the owner elects to install a new seawall or to raise their seawall to come into compliance.

**11. Can I build my seawall higher than the minimum elevation of 3.9 feet NAVD?**

Yes. The minimum seawall elevation is based on the current level of the sea, impacts from King tides and projected sea level rise which may occur over the life of a seawall (~50 years). The maximum seawall elevation is based on the elevation of the property in the context of the property’s Base Flood Elevation (BFE). This is important to prevent rain water runoff from impacting the house. BFEs are provided in the Federal Emergency Management Agency Flood Insurance Rate Maps (FEMA FIRM) as whole numbers (e.g. 4 feet or 5 feet, not 4.2 feet or 5.7 feet NAVD88). This value was used to set a maximum to ensure that new seawalls are lower than the finished flood elevation and will not result in grading of the property in a manner that would cause flooding into the home.

<b>Property’s FEMA Flood Insurance Rate Map Location</b>	<b>Minimum Seawall Elevation</b>	<b>Maximum Seawall or Dock Elevation</b>
<b>In a floodplain, BFE &gt;= 5.0 feet NAVD88</b>	<b>3.9 feet NAVD88</b>	<b>Base Flood Elevation (BFE) of the property</b>
<b>In a floodplain, BFE = 4.0 feet NAVD88</b>		<b>5 feet NAVD88</b>
<b>In an X zone, not in a floodplain</b>		<b>Meet the definition of grade</b>

**12. My seawall is cracked. Do I have to replace the whole wall and bring it up to the new elevation?**

Not necessarily. With a proper permit, the seawall can be repaired without requiring it to be elevated depending on the state of the seawall. However, if more than 50% of the seawall is impacted, the entire seawall must be repaired and meet the new elevation requirement.

**13. Can I just add a cap to my existing seawall?**

That will depend on if the seawall is structurally sound and can bear the additional weight of the cap. You will need to have a marine or structural engineer examine your seawall to determine if this is possible.

**14. What if my finished floor is below 3.9 feet NAVD88 and I have to raise my seawall to that elevation?**

Waterfront properties with a habitable finished floor elevation of less than 3.9 feet NAVD88 have site conditions which may not be able to accommodate raising their seawall to the

minimum required elevations. For this reason, the ordinance contains a provision which will allow some flexibility for a seawall to be constructed at less than the stated minimum elevation if a waiver is granted by the City Engineer.

### **15. What is the cost of seawall replacement or repair?**

The City surveyed a number of seawall contractors in May-June 2016. Seawall contractors quoted \$650-\$2000 per linear foot depending on the depth of the waterway and location of the seawall. In addition, engineering and permitting services were quoted as \$2000-\$5000 per job. Repair of broken/spalled concrete areas in the cap was quoted at \$60 per cubic foot of epoxy mortar. To add a 12” cap to an existing seawall was estimated at \$75 - \$125 per linear foot. Cost will vary by the type and condition of the seawall in question.

### **16. Does the city, county, state or federal government offer funding for private property owners to repair their seawalls?**

Not currently. The Federal Emergency Management Agency is considering funding raising seawalls as a form of hazard mitigation.

### **17. Can I use Property Assessed Clean Energy (PACE) funding to repair or replace my seawalls?**

Under state law, the City of Fort Lauderdale participates in PACE programs to fund energy efficiency, renewable energy, and wind resistance improvements on private property. The City of Fort Lauderdale has entered into agreements to join two PACE programs. One of these, Green Corridor Property Assessment Clean Energy (PACE) District operated by Ygrene Energy Fund Florida, has made a legal determination that seawalls being replaced (but not repaired) *may* be eligible for PACE funding.

PACE programs use the equity in your home to secure the upfront costs for qualifying improvements which are paid off over time with a voluntary assessment on your property tax bill. The annual savings on your utility and/or insurance bill can be used to support the voluntary non-ad valorem assessment. Debts incurred through this financing program are tied to the property and are transferred to the new property owner should the property be sold. In order to qualify, you must have paid your property taxes for the preceding three years and the improvements may not exceed 20% of the just value of your property.

More information is available on the City’s website at:

<http://gyr.fortlauderdale.gov/greener-government/conservation-efficiency/energy-conservation-and-efficiency/reducing-electricity-usage/property-assessed-clean-energy>

**18. What are the consequences for not complying following citation for a seawall violation?**

If the property owner is making progress toward a remedy, the City can provide the property owner with a reasonable extension of time to comply. However, if the property owner still does not cure the violation, then the cases are taken to the special magistrate for adjudication. The special magistrate order will grant the property owner the numbers of days to comply and a daily fine if compliance is not achieved within the ordered timeframe. If the property owner meets the adjusted timeframe, compliance is achieved and the case is closed. If compliance is not met within the timeframe of the special magistrate order, the case is presented to the special magistrate who can either impose fines or abate fines that may have accrued at the hearing. A lien is placed on the property if the property continues to remain out of compliance. The City cannot foreclose on a lien on homesteaded property.

The City may in the public interest complete the work when the property owner does not comply with the order. In those cases, the property owner would be “liened” for those costs and the costs may be placed as a non-ad valorem assessment in the property tax roll.

**19. Does the City assume any responsibility for seawall maintenance/repairs when public infrastructure (such as an outfall pipe) passes through a privately owned wall?**

City infrastructure penetrating a private seawall serves a public benefit usually tied directly to the neighborhood in which the property is located. The City is responsible for maintaining its infrastructure. On a case by case basis, property owners should work with the City if there are concerns with the repair or maintenance of City assets that may have an impact on the private seawall.

**20. How is the City addressing flooding over its seawalls?**

The City is working aggressively to identify problem areas in their own seawalls and to address them proactively. We expect to complete a Seawall Master Plan by October 2017. Staff has made a recommendation for prioritizing select seawalls that are contributing to tidal flooding concerns. Staff has already started the conversation with the City Commission related to funding improvements on breached seawalls and have engaged an engineering consultant to initiate design of city-owned seawalls prioritized for repair or replacement. In addition, the City has installed earthen berms along Las Olas Blvd as a pilot to determine if these structures can be effective in reducing tidal flows until funding is available to raise the seawalls in this location.

**21. When will the City raise its seawalls?**

The City has 4.8 miles of seawall in various conditions as identified in the Seawall Master Plan

expected to be finalized shortly. Design work has already begun on selected priority seawalls which are currently breeching during king tides. In this fiscal year, the City is repairing/replacing its seawall on Bayshore Drive. Funding for several seawall repairs was requested and approved in the FY18 Community Investment Plan (CIP). Construction of prioritized city seawall improvements is expected to take 18-24 months to complete. In addition, the City Commission appointed an Infrastructure Task Force to advise the Commission on key infrastructure concerns (including seawalls) and identification of additional funding,

## **22. Why does it take the City so long to repair or replace a seawall?**

To begin with, the City has mandated requirements for government activities such as procurement. This results in government construction projects taking longer to complete than private construction activities. For example, the City has strict procurement requirements that include advertising for qualified companies, vendor vetting protocols, Commission approval of the low bidder, and government specific contract standards. These examples and many others add time to a construction project to ensure that the government is getting the best and most cost effective contractor using a fair and competitive procurement process. This process is not perfect but is intended to ensure government transparency and accountability.

The existing process to fund these types of large projects is the development of the Community Investment Plan. It is conducted once per year and requires two public hearings prior to approval by the City Commission. Critical projects are scored to determine priority to compete for limited capital improvements dollars.

With regard to the repair or construction of seawalls, the City's faces unique conditions. For example, most of the City-owned seawalls parallel a roadway. Many are hundreds to thousands of feet long. The City has to provide a comprehensive design and construction project that addresses the right of way, road surface, adjoining bridges, and stormwater infrastructure. In addition, in order to repair or replace a seawall, the City may have to remove abandoned docks and/or give permitted dock owners notice and time to remove their docks etc. Once again, this adds time and cost compared to the process and complexity of repair or construction of a 75 foot residential seawall in someone's backyard.

All of these processes take time and often include public input. These checks and balances are put in place in every government to ensure that city management and elected officials are good stewards of the taxpayers' dollars.