TOWN OF JUPITER

DATE: May 11, 2015

TO: Honorable Mayor and Members of Town Council

THRU: Andrew D. Lukasik, Town Manager

FROM: John R. Sickler, Director of Planning and Zoning

SUBJECT: **MARINE FACILITIES AND SHORELINE STABLIZATION** – Zoning text amendment to modify Division 17 of Chapter 27, entitled "Marine Facilities" to allow new and replacement shoreline stabilization structures, allow waivers for marine facilities setbacks, and modify language regarding the mooring of boats on natural waterways and canals.

HEARING DATES:	***PZ***	***04/14/15***	***Ordinance #4-15***
	TC	***05/19/15 1st Reading***	***PZ#14-187***
	TC	***06/16/15 2nd Reading***	***GW***

EXECUTIVE SUMMARY:

Consideration of a zoning text amendment to create new definitions, allow new and replacement shoreline stabilization structures, establish a maximum height for bulkheads, allow the reduction of side setbacks for marine facilities, allow a second boatlift, and modify language related to the mooring of boats on natural waterways and canals.

This zoning text amendment was initiated by staff to provide flexibility for property owners to stabilize their shorelines and provide some flexibility for docks and boat mooring, while still maintaining the Town's distinctive coastal character and meeting the goals, objectives and policies of the Comprehensive Plan. Recently, there have been many inquiries made by property owners looking to replace their unpermitted bulkheads. The existing Town code only allows "permitted" seawalls to be replaced. The proposed regulations provide new options to stabilize property.

A public workshop was conducted on February 12, 2015, to present the concepts of the proposed changes and seek input from affected property owners and industry professionals. Positive feedback was received during the process, and some of the suggestions have been incorporated into the text amendment.

The text amendment promotes the preservation of existing mangroves and encourages riprap that fosters a more natural shoreline that will allow mangroves to naturally propagate. Within the Town, there are enough mangrove seedlings that a majority of the riprap along the shoreline would be populated with mangroves if left alone. The proposed regulations allow for the self-population of mangroves overtime where riprap is installed or the option to plant mangroves, if desired, in order to help to secure the shoreline and provide habitat for multiple species. Provisions are included to ensure some mangroves are established after a two year period. If not, 20 percent of the riprap area would be required to be planted with mangroves. Providing an opportunity to establish mangroves is especially significant given the shoreline impacts from waterfront development, as well as the amount of mangrove trimming and removal that occurs.

The proposed zoning text amendment is contingent upon the approval of the proposed Comprehensive plan amendments.

PLANNING AND ZONING COMMISSION RECOMMENDATION:

At their April 14, 2015 meeting, the Planning and Zoning Commission recommended approval (by a 7-0 vote) of staff's recommendation with modifications to the definition of riprap to remove the regulatory requirements within the definition and place them within the regulations.

STAFF RECOMMENDATION:
Staff recommends **approval** of the proposed text amendment.

Strategic Priority:	Green Spaces

Attachments:	
Staff Report	Ord. #4-15

\\Datant\cdev\Staff\WP51\Amendtowncode\Marine Facilities\Shoreline stablization-Sea level rise\PZ 14-187_TC1 Meeting\PZ 14-187_Executive Summary TC1.doc May 12, 2015

TOWN OF JUPITER

TOWN MANAGER'S OFFICE

DATE: May 11, 2015

TO: Honorable Mayor and Members of Town Council

THRU: Andrew D. Lukasik, Town Manager

FROM: John Sickler, Planning and Zoning Director

SUBJECT: **MARINE FACILITIES AND SHORELINE STABLIZATION** – Zoning text amendment to modify Division 17 of Chapter 27, entitled "Marine Facilities" to allow new and replacement shoreline stabilization structures, allow waivers for marine facilities setbacks, and modify language regarding the mooring of boats on natural waterways and canals. (PZ# 14-187)

Ordinance # 4-15	***Meeting dates:***	***PZ***	***04/14/15***
PZ 14-187		***TC***	***05/19/15 – 1st Reading***
GW		***TC***	***06/16/15– 2nd Reading***

Applicant: Town of Jupiter

Request:

- Amend Section 27-1, entitled "Definitions" to add new definitions used in Division 17.
- Amend Section 27-1396, entitled "Intent" to add the intent of providing for an environment conducive for mangrove propagation and clarify which structures need building permits.
- Replace Section 27-1397, entitled "Seawall, retaining wall, and riprap regulations" to rename the section "Shoreline Stabilization" and to create new regulations for the placement of bulkheads and revetments.
- Amend Section 27-1399, entitled "Private dock regulations" to allow waivers for side setbacks for docks, boat lifts, and boat mooring spaces; to allow a small boat on a second boat lift; and to clarify existing language.

Planning and Zoning Recommendation.

At their April 14, 2015 meeting, the Planning and Zoning Commission voted unanimously (7 to 0) to recommend approval of the zoning text amendment with the following modification:

Modify the definition of "Riprap" to remove the regulatory language that was previously proposed which requires the use of filter cloth when placing riprap where no bulkhead exists landward of the riprap. Ordinance No. 4-15 has been modified to update the definition of "riprap" to remove the regulatory requirement for filter cloth within the definition. As a result, the regulations have been modified to include the requirement for the use of filter cloth when placing riprap where no bulkhead exists landward.

The Planning and Zoning Commission also had questions which have been incorporated into the body of the staff report:

- Has staff investigated developing regulations for dead-end canals? (See *Dead-end Canals* section in ***Analysis*** section below)
- What if a combination of shoreline stabilization techniques, or leaving a portion of the shoreline as natural beach, is desired on one property? (see 4. *Armoring an Unarmored Shoreline* in ***Analysis*** section below)
- How would someone know the capacity of a second boat lift? What visible cues are available to easily determine if someone is in compliance or not? (see *Section 27-1399(9)- Second boat lift* section in ***Analysis*** section below)

Staff Recommendation.

Based upon the facts and findings contained herein, staff recommends the **Adoption** of the proposed text amendments, as shown in Ordinance No. 4-15, contingent on the approval of the concurrent Comprehensive Plan amendments.

Background.

The Town of Jupiter is a unique water oriented community. With miles of waterfront properties within the town, comes the need to stabilize the shoreline to protect the built environment on the uplands. There is also a need to balance the built environment with the natural environment

As development boomed in the 1970's, many home owners with water front lots and developers creating new subdivisions with platted canals, began building seawalls to protect their property from erosion. Fast forward to today, and many of those seawalls have approached their life cycle and are in need of repair or replacement. Because many of them were installed without permits or before the Town required permits, many of the walls are unpermitted. Over the years, staff has received building permit applications from property owners requesting replacement seawalls on their property, but they are generally unable to replace them because the existing code requires that they be permitted through the Town in order to be replaced waterward of the existing seawall.

The current code is strict on unpermitted seawalls, requiring them to be removed and replaced with an upland retaining wall five foot landward of the existing wall with the installation of a transitional upland buffer of native plants. With existing structures such as pools, screen enclosures, patios being located near a seawall, this has presented a challenge to many home owners that did not want to lose additional backyard. In the last year, two variances were approved by the Zoning Board of Adjustments on the north side of Elsa Road. Both homes had existing shoreline stabilization made of stacked concrete bags which were constructed at a low elevation. During extreme high tide events, water would go over the top of the concrete bags and wash away part of the backyards. The home owners began to have seawalls constructed without town required permits to replace them. The contractor was cited for working without permits by Code Compliance. The existing code would only allow them to remove the concrete bags and build an upland retaining wall five foot upland of the concrete bags. Due to the homes being located within 20 feet of the wall, and five foot loss in usable property was considered a burden on the property owners. The requested variances were approved to allow a reduced setback for an upland retaining wall from five feet to one foot, provided a buffer of vegetation was placed waterward of the wall.

Staff has been investigating how to provide flexibility within the code, while still maintaining the Town's distinctive coastal character and meeting the goals, objectives and policies of the Comprehensive Plan. Staff is proposing modifications to the regulations in order to help maintain and enhance the unique natural resources of the Town, while allowing property owners protection from sea level rise and stronger storm surges in the future. In doing so, staff contracted with Isiminger and Stubbs Engineering, Inc. who are coastal engineers and Coastal Planting Service, Inc. who are mangrove experts to provide input and advice on the changes proposed. The proposed regulations provide a process to stabilize property with manmade and natural methods. The text amendment promotes preservation of existing mangroves and encourages riprap that fosters a more natural shoreline by allowing mangroves to naturally propagate. Giving property owners the flexibility of using riprap instead of just planting mangroves has been recommended by the Town's Mangrove consultant, Kathleen Baxter (see Attachment B). Her letter addresses the importance of preserving and enhancing mangroves.

The proposed regulations also codify the importance of mangroves in the Town. This is especially significant given the development impacts that have occurred adjacent to the highly desirable waterfront properties, as well as the amount of mangrove trimming and removal that occurs. The Florida Department of Environmental Protection (FDEP) does allow the trimming of mangroves. As long as foliage remains, mangroves can be trimmed by the property owner at a height of six feet above the mean high water line, which generally will not block the views of the water. Larger trees existing may also be stage trimmed to reduce their height or limbed up to created "windows", but must be done so by a certified mangrove trimmer, after approval from FDEP is granted.

Staff presented the ideas of the proposed text amendments to the Planning and Zoning Commission on December 9, 2014. A public workshop was conducted on February 12, 2015, to present the concepts of the proposed changes and seek input from affected property owners and industry professionals. The Department of Environmental Protection and Army Corps of Engineers also presented their requirements so that a comprehensive overview was provided to the public. In addition, staff met with the Jupiter Inlet District representatives to review the changes that were being considered. For the most part, positive feedback was received during the process, and some of the suggestions have been incorporated into the text amendment.

Changes are also proposed to the Comprehensive Plan in order to adapt to the changing conditions waterfront property owners are facing today. The changes to the Conservation and Coastal Management Element address climate change, shoreline stabilization and green design. At their April 7, 2015 meeting, the Town Council approved on first reading the Comprehensive Plan amendments as proposed. The proposed Comprehensive Plan amendments relating to the proposed zoning text amendments are included within the analysis below. The Town Council supported the modified policies which require an environment for native vegetation to create a more natural shoreline.

Analysis.

The Conservation Element and Coastal Management Element of the Comprehensive plan are being updated to enable and guide some of the changes proposed as part of this amendment. Concurrent with the changes, staff has replaced the seawall, retaining wall, and riprap section of the code completely, rather than modifying the existing language. The proposed language allows different options and flexibility to address replacement or new shoreline stabilization

structures based on the different existing conditions. In addition to addressing shoreline stabilization, updates to the private docks regulations are proposed to clarify the existing section and to provide more flexibility in response to issues that have arisen.

Consistency with the Conservation Element and Coastal Management Element of the Comprehensive Plan:

Conservation Element: The following policies are applicable to the proposed land development regulations. The policies below are shown in ~~strike-through~~ and underline format consistent with the changes proposed in the Comprehensive Plan amendments.

- ~~Policy 1.4.10 Bulkheads and seawalls should be discouraged. They should be allowed only in situations where they are replacing an already existing structure that is need of repair. Alternative shoreline stabilization techniques are preferred and encouraged in all instances.~~
- Policy 1.4.10 Coastal bulkheads should only be allowed when an environment for native vegetation is provided waterward of the bulkhead for at least 50 percent of the shoreline. Existing coastal bulkheads in need of repair may be replaced.
- Policy 1.4.11 Coastal ~~B~~bulkheads should be located at, or landward of, coastal wetlands and their ecotones.
- Policy 1.4.12 Sloping revetments, riprap, native vegetation to be inclusive of including but not limited to mangroves, ~~and~~ or interlocking blocks or some combination of the foregoing~~, instead of vertical seawalls, should~~ shall be used in high energy areas to more effectively dissipate wave forces, boat waves and reduce the effects of bottom scouring.
- Policy 1.4.14 Buffer zones of vegetation should be established between any area of urban development and adjacent waterways.

Staff Comments: The above policies directly relate to shoreline stabilization. The existing Comprehensive Plan Policy 1.4.10 discouraged seawalls and bulkheads, but allowed existing bulkheads to be replaced. Many waterfront properties have existing bulkheads (see Attachment A). The previous policy 1.4.10 allowed the replacement of existing bulkheads, but the land development regulations took it one step further by requiring the bulkheads be "permitted" in order to replace them. The proposed amendment to 1.4.10 requires that an environment for native vegetation is provided waterward of replacement bulkheads. The proposed land development regulations are consistent with the existing and proposed Comprehensive Plan amendments with language that ensures an environment for native vegetation is provided along the shoreline, and requiring the use of riprap to help reduce the effects of bottom scouring. In addition, new bulkheads are required to be located upland of coastal wetlands.

- Policy 1.4.21 Docks and piers should not obstruct navigation or public use of waters, and they should be constructed in a manner that does not restrict water flow, nor block views to the water.

Staff Comments: The existing and proposed land development regulations maintain setbacks and criteria to regulate the placement of docks, boat lifts and other marine structures in canals and waterways.

Coastal Management Element: The following policies are applicable to the proposed land development regulations. The policies below are shown in ~~strike-through~~ and underline format consistent with the changes proposed in the Comprehensive Plan amendments.

- Policy 1.5.3 Sloping revetments and interlocking blocks shall be used in high energy areas to more effectively dissipate wave forces, boat wakes and reduce the effects of bottom scouring. New coastal bulkheads ~~and seawalls~~ shall only be used to protect existing development and shall be located at, or landward of, coastal wetlands and their ecotones.
- Policy 1.5.5 Buffer zones of vegetation and/or riprap, to provide for an environment for native vegetation, should be established between any area of urban development and adjacent waterways. The~~is~~ native vegetation should consist of coastal plants such as mangroves, salt wart or sea ox-eye daisy and other coastal plants identified in Section 62-340.450, Florida Administrative Code. ~~of native vegetation adapted to natural conditions~~.
- Policy 1.5.6 A buffer zone of native upland edge (i.e., transitional) vegetation shall be provided and maintained around wetland and deepwater habitats which are constructed or preserved on new development sites. The buffer zone may consist of preserved or planted vegetation, but shall include canopy, understory and ground cover of native species only. The edge habitat shall begin at the upland limit of any wetland or deepwater habitat. As a minimum, ten square feet of such buffer shall be provided for each linear foot of wetland or deepwater habitat perimeter that lies adjacent to uplands. This upland edge habitat shall be located such that no less than 50 percent of the total shoreline is buffered by a minimum width of ten feet of upland habitat. In the U. S. Highway One/Intracoastal Waterway Corridor, where land dedication for the Riverwalk Corridor has occurred, this requirement may be waived by the Town Council. The upland buffer requirement does not apply to those created deepwater habitats (e.g., stormwater management ponds) less than one-half acre in size nor to drainage canals or stormwater conveyance requiring periodic maintenance.

Staff Comments: The above policies directly relate to shoreline stabilization. The proposed land development regulations are consistent with the above policies as amended. The proposed land development regulations propose to require the placement of riprap or mangroves waterward of replacement bulkheads. Policy 1.5.6 specifically references buffer zones created around new development and does not address existing development. Staff is proposing to maintain the intent of the buffer requirement in the Comprehensive Plan by recommending riprap or mangroves along at least 50 percent of the shoreline when constructing new bulkheads or replacing unpermitted bulkheads. It is important to note that there are some properties that will be unable to meet the full buffer requirement due to constraints outside the control of the Town or property owner. The proposed land development regulations address many of these challenges.

- Policy 1.5.10 Docks and piers should not obstruct navigation or public use of waters, and they should be constructed in a manner that does not restrict water flow, nor block views to the water.

Staff Comments: The existing and proposed land development regulations maintain setbacks and criteria to regulate the placement of docks, boat lifts and other marine structures in canals and waterways.

- Policy 1.5.11 The Town shall coordinate review of estuarine shoreline development with appropriate federal, state, regional and local agencies to prevent irreparable or irretrievable loss of natural coastal resources. Intergovernmental coordination shall also provide cost effective utilization of experts in marine biology, coastal engineering, and soil conservation. To this end, as appropriate, the Town shall coordinate with public agencies, including the U.S. Department of Interior, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, National Oceanic and Atmospheric Administration, U.S. Soil Conservation Service, the Florida Department of Environmental Protection, the Florida Game and Freshwater Fish Commission, the South Florida Water Management District, the Treasure Coast Regional Planning Agency, and potentially impacted local governments.

Staff Comments: The above policy relates to the development of shorelines as part of large scale estuary projects that are under the jurisdiction of the listed agencies. While it is important to keep this in mind moving forward with the land development regulations, it is not directly applicable to the proposed land development regulations. Staff has been coordinating with DEP and the USACE on the proposed amendments.

Summary of Proposed Changes (see Ordinance 4-15 for specific recommendations):

Amend Section 27-1, entitled "Definitions". The definitions are shown in ~~strikethrough~~ and underline format below.

Bulkhead shall mean the use of a vertical structure, either a seawall or retaining wall, which is placed on a property for the purpose of stabilizing the shoreline.

Jurisdictional line of the state shall mean the landward extent of wetlands, as defined in F.S. 373.019(27), which generally includes areas covered in surface water which support the growth of native wetland vegetation, including, but not limited to, mangroves, salt wart or sea ox-eye daisy.

Littoral zone shall mean the partially submerged lands within tidal waters between the mean high and mean low water lines. Within non-tidal water, or stormwater retention areas, littoral zone shall mean the area immediately upland of the ordinary water level.

Personal Watercraft shall mean a vessel less than 16 feet in length which uses an inboard motor powering a water jet pump as its primary sources of motive power and which is designed to be operated by a person sitting, standing, or kneeling on the vessel, rather than in the conventional manner of sitting or standing inside of the vessel.

Revetment shall mean the use of a sloping structure, either riprap or the use of other materials that are stacked or placed together (i.e. concrete bags, wood, debris, concrete slabs), which are placed on a property for the purposed of stabilizing the shoreline.

Riprap shall mean loose boulders of native limestone, generally 18 to 24 inches in diameter, rocks, or clean concrete rubble, and may require filter cloth, placed along the water's edge to stabilize the shoreline and disperse the energy of wave action.

Unarmored shoreline shall mean a natural shoreline not containing any man-made structures intended to stabilize the shoreline.

Staff comment: The definitions were added to the code in order to clarify the new terminology being used in the Marine Facilities division. Specifically, staff has elected to combine similar structures into a single definition for simplicity regardless of their location from the mean-high water line. Currently, the code identifies seawalls and retaining walls as different structures, although they both serve the same purpose of shoreline stabilization. This can become confusing when an upland retaining wall is placed one foot landward of the mean high water line. For instance, during high tides, the bottom of the retaining wall could be covered in water, rendering it a seawall. Additionally, if the retaining wall is replaced one time moving a foot waterward, it is now considered a seawall. Furthermore, with expected sea level rise in the future, an upland retaining wall could be considered a seawall as the water level rises. In order to avoid future complications with technical terms based on where the mean high water line exists at the time of permitting, staff proposes to combine those structures and use the new definition for bulkhead. Staff has added a definition for jurisdictional line of the state because the new code requires that new bulkheads and revetments be setback from the line. It should be noted that when riprap is required waterward of a bulkhead, it may be waterward of the jurisdictional line of the state, subject to jurisdictional agency approvals. Furthermore, the definition of a personal watercraft and littoral zone were added and the definition of riprap was modified.

Amend Section 27-1396, entitled "Intent" to add language including: adding boat lifts to the list of marine facilities that require permits; and changing the terminology from seawalls and retaining walls to bulkheads, which is consistent with the new definitions added. In addition, staff has added language that clarifies it is the intent of the regulations to provide a balance between the impacts of marine facilities and the natural an environment by providing for buffer zones of native vegetation, including mangroves.

Replace Section 27-1397, entitled "Seawall, retaining wall, and riprap regulations" to change the title to "**Shoreline Stabilization**" and create new regulations for the construction of bulkheads and revetments with riprap. The proposed language has ten new sections, as follows:

1. Replacing Bulkheads (permitted)	
Existing code	*Proposed Code*
• Replace with a new bulkhead 12" waterward of the existing wall • Can be replaced as many times as requested.	• Replace with a new bulkhead with an 18" waterward extension; and, • Can only replace the bulkhead one time waterward. • If the bulkhead is taller than 3' above mean high water, then 100% of the shoreline shall include riprap or mangroves

1. *Replacing Bulkheads (permitted), see Attachment C - Flowchart:*

- Properties which have a permitted bulkhead will be able to replace the existing bulkhead waterward of the existing bulkhead up to 18 inches. This section has changed in that the existing code requires that new seawalls may replace an existing seawall only 12 inches. Staff is proposing the increase to be consistent with the Department of Environmental Protection (DEP).
- The new language allows a one-time, 18 inch extension from the existing bulkhead. The purpose of allowing only one extension is to maintain navigable canal widths and encourage long term sustainability of the bulkhead. In recent years, vinyl panels have

been used for bulkheads as opposed to the concrete bulkheads. While vinyl is a much cheaper alternative, the life cycle of the wall is significantly reduced. Vinyl has only become popular in the past ten years, and already many walls are beginning to buckle and stress. Rather than replacing a bulkhead every 25-30+ years, walls are being replaced every 10 years. Within narrow canals, the accelerated replacement of bulkheads will quickly lead to the loss in functionality of the canal due to it becoming too narrow. After the one-time replacement, a property owner will be required to construct the wall in the same location, or landward of the existing wall. Staff has the ability to track permitted seawalls and bulkheads, and will be able to look at the walls history when new permits are submitted.

- Replacing with a taller bulkhead is common. It is important that new taller bulkheads be faced with riprap, if mangroves do not already exist, in order to provide additional stability and an environment for mangroves to propagate to achieve characteristics of a natural shoreline buffering the adjacent urban environment. Staff is proposing that new bulkheads that extend more than 3 foot above mean high water are required to install riprap along 100 percent of the bulkhead.

2. Replacing Bulkhead (unpermitted)	
Existing Code	*Proposed Code*
• Remove the existing seawall and build an upland retaining wall 5' upland of the mean-high water line, with a transitional buffer, equal to 50% of the shoreline, between the wall and mean-high water line; or, • Place riprap 5' upland of the mean high water line, with a transitional buffer, equal to 50% of the shoreline, between the riprap and mean-high water line	• Replace with a new bulkhead with an 18" waterward extension; • Can only replace the bulkhead one time waterward; • Augment 50% of shoreline with riprap or mangroves; • If the bulkhead is taller than 3' above mean high water, then 100% of the shoreline shall include riprap or mangroves; • Riprap revetment must extend to the midpoint of the littoral zone, between the mean high and mean low water line

2. *Replacing Bulkhead (unpermitted), see Attachment D - Flowchart*:

- The proposed language will allow properties which have an unpermitted bulkhead, to replace the bulkhead waterward of the existing bulkhead, 18 inches one time, similar to permitted bulkheads. Many of the existing unpermitted bulkheads in town are constructed of concrete, vinyl, or wood. In addition, some properties have unpermitted stacked concrete bags, which staff is not recommending be considered a bulkhead for the purposes of replacement. When replacing an unpermitted bulkhead, 50 percent of the shoreline must be improved with riprap or mangroves. By requiring riprap or mangroves, the new bulkhead will be further strengthened and stabilized, and will provide an environment for marine plants and animals.
- As with permitted bulkheads, replacing an existing bulkhead with a taller one is common since it is easier to construct a new bulkhead around and above an existing structure. Staff is proposing that new bulkheads that are taller than 3 foot above mean high water be required to install riprap along 100 percent of the shoreline. The addition of riprap on taller bulkheads also mitigates the hardened view along the waterfront.
- In certain cases the use of a toe wall in conjunction with riprap may need to be installed when water is deep or slopes are too steep. A recent example of a toe wall is the bulkhead constructed waterward of Guanabana's existing bulkhead. The toe wall helps to keep riprap in place against the base of a bulkhead, and still allows the use of near shore docking by keeping the riprap underneath a marginal dock. The toe wall is

typically built at a height between mean high and mean low water, so it remains underwater half of the time. By building at this height, you can ensure that at least half of the time, the riprap will be partially submerged creating additional habitat for marine animals.

- *Exemptions:* Because there are a large number of property owners who have unpermitted bulkheads that are currently providing shoreline stabilization, staff is proposing a path to allow replacement bulkheads with some exemptions.
  - If the existing unpermitted bulkhead can be verified as existing prior to December 20, 2005, the property owner is exempt from providing the riprap or mangroves required by this section, provided the new bulkhead does not extend higher than three foot above the elevation of the mean high water line. The date was chosen based on the adoption date of the ordinance that required bulkheads to be permitted in order to be replaced. Possible verification can include the use of an old survey identifying the structure, or a dated historical aerial clearly showing the structure existing prior to the date.
  - A second exemption to requiring riprap is if the property is designated on the Shoreline Exemption Map (see Attachment G). This map was generated to recognize that some existing canals have at least 75 percent or more hardened bulkheads. These areas also have deeper water depths along the shoreline and are generally not conducive to installing riprap or planting mangroves, although some currently exist in limited quantities and sporadically. Properties which are designated on this map are exempt from providing riprap or mangroves.
  - Lastly, another exemption from requiring riprap for properties is where the required riprap would reduce the navigable channel width to less than 40 feet, or the placement of riprap is subject to other agency approvals and is not permitted for reasons such as it would impact sea grass beds.

3. Replacing Revetments (permitted and unpermitted)	
Existing code	*Proposed code*
• Build an upland retaining wall 5' back on the property, with a transitional buffer, equal to 50% of the shoreline, between the wall and mean-high water line; or, • Place riprap 5' upland of the mean high water line, with a transitional buffer, equal to 50% of the shoreline, between the riprap and mean-high water line	• New bulkhead setback from the jurisdictional line of the state. Setback is based on 10% of the distance between the closest house or building and the jurisdictional line of the state, or mean high water line; and, • Augment 100% of shoreline with riprap or mangroves; or, • Replace a revetment with riprap in the same location as the existing revetment. If existing materials are not consistent with riprap, they must be removed before replacing.

3. *Replacing Revetments (permitted and unpermitted) with a Bulkhead or Riprap Revetment, see Attachment E - Flowchart* - Within the Town there are properties with either existing permitted riprap, or unpermitted rubble and debris. While they both serve the same purpose of stabilizing the shoreline, staff recognizes that proper replacement with riprap is better for both stabilization purposes and the natural environment.

- If a property owner wants a new bulkhead, it will be allowed provided the bulkhead is installed with 100 percent riprap or mangroves waterward of the wall. The purpose is to provide a more natural sloping shoreline with mangroves and riprap. The riprap will provide the opportunity for habitat when mangrove seedlings voluntarily germinate in the

cracks and crevices of the riprap. Staff recommends 100 percent of the shoreline, because the entire shoreline was previously a revetment with 100 percent coverage.

- The new bulkhead will be required to be setback upland for at least ten percent of the distance between the closest principal building on the property and from the jurisdictional line of the state or mean high water line, whichever is more landward. The required setback is five feet with a reduced setback for areas where an existing home is closer than 50 feet from the mean high water line. The section will allow properties that are trying to protect existing homes or buildings the opportunity to do so, without having to lose a sustainable amount of the backyard. The setback distance was chosen based on looking at existing conditions and setback requirements within the code. In most of the residential districts in town, the rear setback is 15 feet, which would be applied from the property line or mean high water line, whichever is more landward on the waterfront lot. When lots are not very deep, homes can be pushed closer to the water, similar to the existing conditions on the two homes on Elsa Road that received variances. A ten percent setback was chosen rather than a larger setback because the property was previously armored with a revetment, and the expectation was that a home could be built closer to the water safely. In addition, with a ten percent setback requirement, riprap will likely extend into the littoral zone and provide additional habitat for wetland vegetation.
- A new riprap revetment may be constructed in the same location of the existing revetment. Many property owners have existing revetments that are constructed of stacked concrete bags, construction debris, and garbage. While those materials help stabilize the shoreline, they are not healthy for the environment, and do not provide good habitat for native vegetation or wildlife. The proposed code section allows existing revetments constructed with loose boulders, rocks, or clean concrete rubble with no exposed reinforcing rods or protrusions to remain in place and new riprap can be added. Revetments constructed with any other materials must be removed prior to installing any new riprap. This will ensure that old revetments with good materials can be replaced with little cost, and revetments constructed with materials that are bad for the environment are removed and replaced with good riprap which is more ecologically beneficial.

4. Armoring an Unarmored Shoreline	
Existing code	*Proposed code*
• Build an upland retaining wall 5' back on the property, with a transitional buffer, equal to 50% of the shoreline, between the wall and mean-high water line • Place riprap 5' upland of the mean high water line, with a transitional buffer, equal to 50% of the shoreline, between the riprap and mean-high water line	• New bulkhead setback from the jurisdictional line of the state. Setback is based on 20% of the distance between the closest principal building and the jurisdictional line of the state, or mean high water line • Augment 100% of shoreline with riprap or mangroves • Riprap revetment must extend to the midpoint of the littoral zone, between the mean high and mean low water line

4. *Armoring an Unarmored Shoreline, see Attachment F - Flowchart:*

- Unarmored shorelines, or natural shorelines, will be able to be stabilized by allowing new bulkheads or riprap revetments installed landward of wetlands due to changing conditions. Staff recognizes the desire for property owners to stabilize their shorelines to protect against sea level rise and stronger storm surges in the future. Additionally, properties along the waterfront are being redeveloped at a higher elevation which requires the raising of the property based on current building codes. Without the ability to stabilize the shoreline, the upland property could erode into the waterways, introducing

upland sediment into the natural ecosystem. While mangroves alone provide shoreline stabilization when the shoreline slopes gently, steeper slopes are becoming the norm since property owners are raising the elevations of property. Homes existing close to the slope also require a physical barrier to maintain the uplands.

- A new bulkhead will be allowed to stabilize a natural shoreline, provided the bulkhead is installed with 100 percent riprap or mangroves waterward of the wall, similar to replacing unpermitted bulkheads and revetments. The purpose is to again provide a more natural shoreline with mangroves and riprap. The riprap will provide the opportunity for habitat when mangrove seedlings voluntarily germinate in the cracks and crevices of the riprap. Staff recommends 100 percent of the shoreline, because the entire shoreline was previously a natural shoreline.
- Similar to new bulkheads replacing existing revetments, unarmored shorelines replaced with bulkheads are required to be setback 5' from the jurisdictional line of the state or mean high water line. In areas where an existing principal building is setback less than 25' to the jurisdictional line or the mean high water line, the setback for a new bulkhead will be twenty percent of the distance between the closest existing principal building on the property and from the jurisdictional line of the state or mean high water line, whichever is more landward. The setback percentage was doubled, from 10 to 20 percent, based on the nature of an unarmored shoreline. When homes are built on properties with unarmored shorelines, they are generally setback further on the property because there was never an assumption that a wall would be required to retain the soil. The section will allow properties that are trying to protect existing homes the opportunity to do so, without having to lose a sustainable amount of the backyard.
- A new riprap revetment may be constructed extending into the littoral zone, between the mean high and mean low water line. The existing code would require the revetment to be placed five foot landward of the mean high water line. Because a revetment slopes, it takes up much more property than a vertical bulkhead. In order to encourage property owners to place revetments on the property rather than a bulkhead, it is important to allow revetments to be placed within the littoral zone, which will also allow for the opportunity for habitat when mangrove seedlings voluntarily germinate in the cracks and crevices of the riprap.
- At the Planning and Zoning Commission meeting, the commission questioned how a property owner may have multiple types of shoreline stabilization structures on a property. The proposed text amendment would allow a variety of stabilization methods. A likely scenario could be someone with an unarmored shoreline wanting to place a bulkhead on a portion of their property with a beach on the rest of their shoreline. Based on the proposed language, riprap and mangroves would only be required along the portion of the property where shoreline stabilization is proposed, allowing the property owner to maintain their beach.

5. *Bulkheads that require Riprap and "volunteer" Mangroves:*

- In the above four scenarios, there are requirements for riprap that need further clarification specific to the placement and amount of riprap, and the expectations to promote the growth of new mangroves. The intent is to enhance the existing natural resources and provide an environment that promotes the propagation of new mangroves.
- Existing mangroves that occur along the shoreline will count towards the requirement of meeting the minimum percentage along a shoreline.
- If the property owner is required to install riprap in front of the bulkhead, a minimum of 50 percent of the wall, as measured from where the bulkhead intersects the bottom,

extending to the top of the bulkhead cap, must be covered with riprap. If the wall is four feet tall, riprap will be required to be stacked at least two foot up the side of the vertical face of the bulkhead. The riprap will help prevent bottom scouring, break up wave action, and will place lateral pressure on the midpoint of the bulkhead which is the location where many bulkheads begin to bow under pressure.

- Where riprap is required, then 10 percent of the shoreline must have mangroves after two years. Mangroves can either be volunteers which get caught naturally in the cracks of the riprap, or the Owner may want to plant the 10 percent up front. Based upon input from the Town's Mangrove Expert, if left alone approximately 80% of the riprap shoreline could be naturally populated with volunteer mangroves. Staff is recommending this requirement to encourage people to not remove mangroves that populate naturally within the riprap. If, after two years, less than 10 percent of the shoreline is populated with mangroves or the originally planted mangroves did not survive, the Owner would be required to install 20 percent of the shoreline with mangroves. Upon planting the 20 percent mangroves, a five year monitoring period would begin similar to the monitoring period required if the owner elects to plant mangroves initially.

6. *Bulkheads with initial Mangrove planting:*

- In lieu of installing riprap, a property owner may elect to plant mangroves waterward of a bulkhead.
- If a property owner chooses mangroves, then only 50 percent of the shoreline that is required to be covered with riprap is required to be planted with mangroves. For example, if riprap is required for 50 percent of the shoreline, then only 25 percent of the shoreline is required to have mangroves. This will allow some property owners to have a beach along the remainder of the shoreline.
- If a property owner elects to only install mangroves waterward of the wall, five years of monitoring is required from the time of installation. Staff is proposing the monitoring to ensure that the mangroves become established and are not removed.
- Typically, after the five year period, mangroves are well established and thereafter protected by the Florida Department of Environmental Protection (FDEP). The five year period is recommended to provide adequate time for FDEP to consider the mangroves established because planting mangroves is not a requirement by FDEP when replacing a bulkhead. Because monitoring of the mangroves will extend for five years and be a requirement for replacing the bulkhead, the Town will have code compliance authority if the mangroves were removed or failed to survive. It is important to note that in high wake energy areas, riprap may be required to be hand placed around the mangroves in order to protect the mangroves from being washed away.

7. *Riprap* - In all situations, riprap can replace any existing structure (revetment or bulkhead) or even stabilize a natural unarmored shoreline. While staff recognizes that it is not typical for people to remove bulkheads in favor of a revetment or riprap, there may be some property owners who see the long term value of a riprap as being beneficial. Because riprap revetments only need to be maintained periodically with additional riprap stones as the old riprap stones wear down, they are a cheaper, long term alternative to bulkheads.

8. *Maximum height of bulkheads*:

- The Town does not currently restrict the height of bulkheads.
- With properties redeveloping, the minimum flood requirements must be met. Along with raising the home or building on the property, some property owners are raising bulkheads in order to create a level backyard. Staff understands the desire to elevate

properties to help abate flooding; however, adjacent properties can be negatively impacted when neighboring lots are raised significantly and tall bulkheads along the waterfront have an industrial appearance.

- In order to create a static point for all properties, staff is proposing to cap bulkhead height at the required Base Flood Elevation (BFE) based on the current Federal Emergency Management Agency's special flood hazard maps. Pursuant to town code, structures built on a property are required to be built 18 inches above the BFE, which will create a gentle slope toward the wall. Staff chose BFE as opposed to NAVD or NGVD elevations because BFE can be adjusted in the future, whereas an elevation based on NAVD or NGVD would need to be updated more frequently.
- The height bulkheads may be a significantly increased from existing bulkheads while still being under the maximum height. The proposed regulations address taller bulkheads by requiring bulkheads taller than three foot above the mean high water line to be faced 100 percent with riprap extending to cover the bottom 50 percent of the bulkhead. The riprap will help support the taller bulkhead and provide a visual break rather than just seeing a tall vertical wall.
- There are two exceptions to the height maximum for bulkheads. The first are for properties east of the Coastal Construction Control Line (CCCL). Pursuant to Florida Statute, the height of bulkheads east of this line cannot be capped and are subject to other jurisdictional agency review. In addition, properties adjacent to the Riverwalk that have a zero setback are exempt from these regulations. In the event that the abutting building has a zero setback to the Riverwalk, implementing a cap on the bulkhead height could create Americans with Disabilities Act (ADA) access issues. An 18 inch drop over a short horizontal distance would create a slope that will be unable to meet ADA. Because the Riverwalk is a public access and use area, it is required to meet standards and codes beyond the town code. In order to avoid future issues, staff is proposing to exempt applicable properties adjacent to the Riverwalk.

9. *Exemptions based on other jurisdictional agencies:* The proposed regulations include an overall exemption in the case where a jurisdictional agency will not issue a permit where one is required. For example, if the Florida Department of Environmental Protection will not issue a permit for riprap waterward of a replacement bulkhead, the property would be exempt from providing riprap.

10. *Emergency bulkhead:* These regulations previously existed in the code and are being relocated in this section. It allows a new bulkhead to be constructed in extreme cases of erosion that may follow a natural disaster and threatens public safety after a finding that the bulkhead will not adversely impact environmental resources and that no other means of stabilization is feasible.

Amend Section 27-1399, entitled "Private dock regulations" to provide waivers for side setbacks for docks, allow a small boat on a second boat lift, and to clarify language.

Section 27-1399(6)- Reductions to side setbacks:

- The existing code measures side setbacks for docks, boatlifts, and boat mooring spaces based on extensions of side property lines as they intersect the water. This methodology works for most properties in town; however, there are some unique situations when the shoreline curves or property lines intersect the waterline at an angle. The extensions of the property lines can converge, leaving only a small area for docks, boatlifts, and boat mooring.

- Other jurisdictional agencies use different methodology for calculating side setbacks that differ from the town. For instance, the Florida Department of Environmental Protection (FDEP) utilizes approximate riparian lines to calculate setbacks for docks and boat lifts.
- Because riparian law is very complex, and true riparian lines can only be set by a court of competent jurisdiction or by neighbors agreeing to the line, staff was advised not to become involved in determining riparian lines.
- Staff has proposed that if another jurisdictional agency has permitted the placement of a dock based on an alternative method of calculation, the side setback from the property line extension may be reduced or eliminated based on their approval. Similar to FDEP, the Town would require that affected neighboring property owners be notified of the proposed setback reduction.

Section 27-1399(9)- Second boat lift:

- The current code does not allow a second lift for the purposes of lifting a boat, and restricts a second lift to 3,000 pounds for the use of a personal watercraft or Jet Skis only.
- Many people on the waterfront have two boats, one larger and one smaller.
- Staff is proposing to allow small boats on the personal watercraft lift, subject to the 3,000 pound restriction.
- The proposed language restricts the second boat to not having a permanent top or shade canopy, which could block views of the water. If the boat has a retractable top, it must remain down when on the lift. By not allowing permanent tops on small boats, the visual impact will be similar to that of a personal watercraft. This concern was raised at the public workshop.

  At the Planning and Zoning Commission meeting, a comment was made about how the second boat on a lift would be enforced and whether there were visual cues if someone was out of compliance. Based on discussions with marine contractors, the first visual cue is if the lift was built on four pilings like a traditional boat lift. The existing code only allows a second personal watercraft lift limited to two pilings and 3,000 pounds. The proposed code is not modifying the number of pilings the lift can be attached to, or the weight limit, but rather is allowing a second boat to be placed on the personal watercraft lift. Staff would note that even lifts built on two piling systems can exceed the 3,000 pound lift requirement within the code. If a violation is suspected, staff can review the building permit for the personal watercraft lift and check the capacity.

Section 27-1399(11)- Boat mooring:

- The existing code “encourages” certain dock placement and boat mooring on both canals (parallel) and natural waterways (perpendicular).
- The language resulted in an administrative appeal. The outcome of the appeal was that the encouraged orientation was required because there was no compelling reason that it could not be met.
- Staff is proposing to modify the language to clearly restrict docks and mooring spaces in canals to be parallel, and removing the restriction on natural waterways. The restriction is proposed to be removed in natural waterways since natural waterways are wider and provide the opportunity for different mooring options.
- Not all properties are the same and some may not be able to accomplish parallel mooring in canals, specifically in the ends or corners of canals. Staff is providing an opportunity for a waiver in case there are circumstances where some flexibility is needed.

Dead-end Canals:

- Staff investigated the need to develop different standards for dead end canals. The issue related to dead end canals is the placement of docks, boat lifts, and boat mooring spaces where the area allowed for those facilities for two adjacent lots overlap each other. A common strategy is to create a square in the corner of the canals where neither property owner can place marine facilities.
- Within the town, there is only one canal, which is located just south of Elsa Road, which has properties located at the end of a dead end canal. The rest of the canals in Town have right-of-way located at the dead end of the canal, which eliminates the dead end conflict.
- There are a few corners of canals which could be difficult for approving marine facilities; however, staff did not develop a different standard for corners because there are very few corners with issues in Town and they would be more effectively handled through the variance process on a case by case basis.

Conclusion.

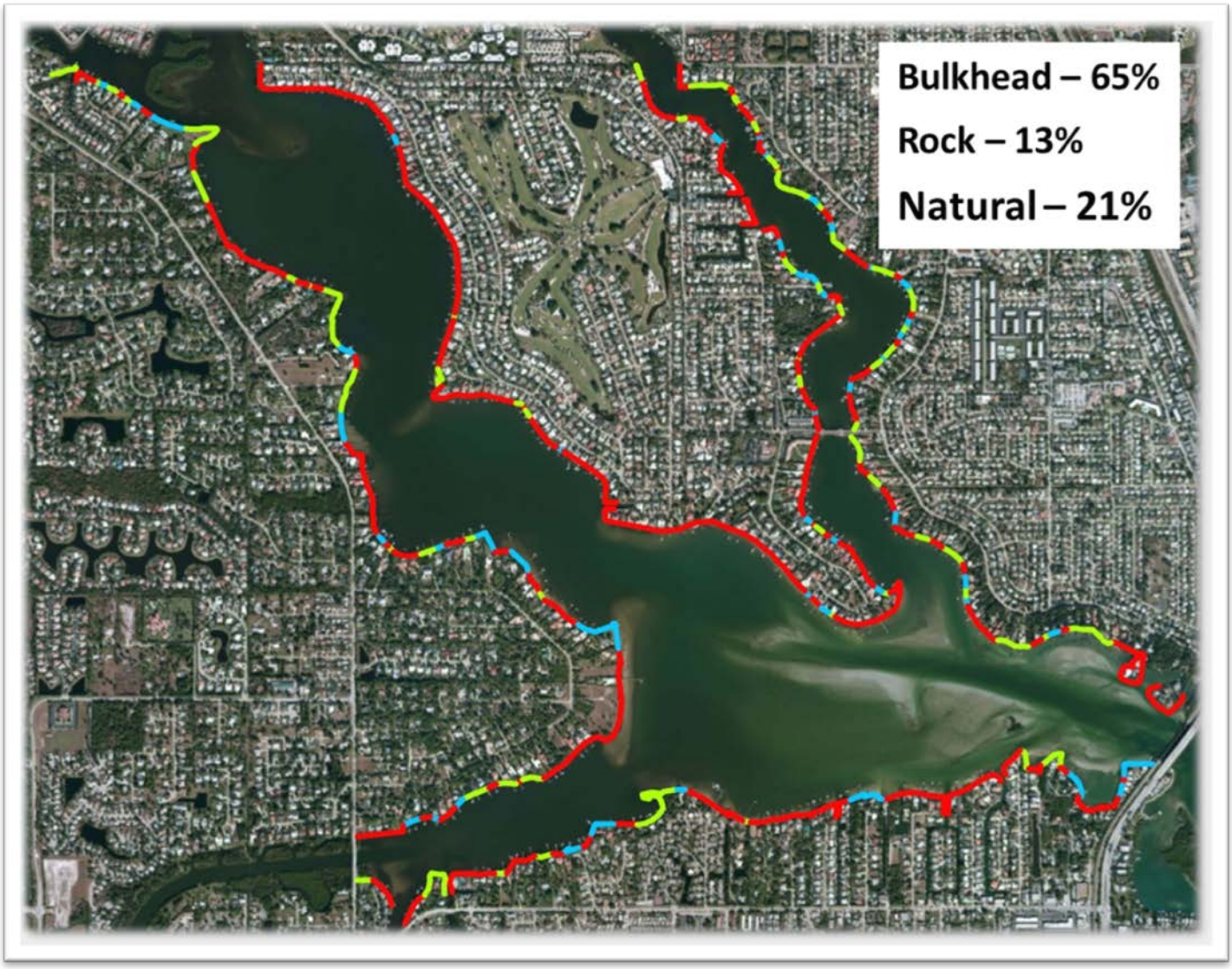
Based on the above reasons, staff recommends **approval** of the zoning text amendment proposed in Ordinance 4-15.

Attachment:

Attachment A - Jupiter Inlet District Map of Existing Conditions
Attachment B - Letter from Kathleen Baxter, Mangrove Consultant
Attachment C - Flowchart (Permitted bulkheads)
Attachment D - Flowchart (Unpermitted bulkheads)
Attachment E - Flowchart (Revetments)
Attachment F - Flowchart (Unarmored shorelines)

Jupiter Inlet District's Map of Existing Conditions

Attachment A



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April 3, 2015

Town of Jupiter
Department of Planning and Zoning
Attn: Garret Watson, Planner
210 Military Trail, Jupiter, FL 33458

RE: Town of Jupiter – Shoreline

Dear Mr. Watson,

First, I would like to express my appreciation to The Town of Jupiter for your environmental awareness. Your effort to keep The Town of Jupiter a "green" and beautiful waterfront community is commendable. Your proposal to require mangrove plantings and/or rip rap waterward of vertical bulkheads will insure, for generations to come, that Jupiter stays a pristine environmental haven for Florida's native species that are dependent on a balanced environment.

Mangroves have been my life's passion. My goal has always been to protect them, while also working with upland land owners so that the worth of the mangroves can be realized. If everyone does their part, we humans can live in harmony with mangroves. It does not have to be "them or us".

Through my 34 years of working with and studying mangroves, I have gathered a wealth of information, and learned much from a number of very knowledgeable people, who also have spent their lives studying mangroves. My own observations have mirrored their knowledge in many ways. The information imparted here is a result of that study and my experience both in the field and academically.

There are over fifty species of mangroves found throughout the world. Three species of mangroves are native to Florida; Red Mangrove (Rhizophora mangle), Black Mangrove (Avicennia germinans) and White Mangrove (Laguncularia racemosa). All Florida species are protected under the 1996 Mangrove Trimming and Preservation Act.

Mangrove ecosystems provide a variety of services that are of great value to society. They stabilize sediments, and provide habitat for a wide range of invertebrates, fishes, amphibians, reptiles, birds, and mammals in Florida. Mangroves are also an important nursery area for sport and commercial fishes and invertebrates, such as the Spiny Lobster, Pink Shrimp, Mullet, Tarpon, Snook, and Mangrove Snapper. Many wading birds nest and roost in

mangroves, such as the endangered Wood Stork, White Ibis, Roseate Spoonbill, and a variety of Egrets and Herons. A 100 square foot area of mangroves can provide a life source to all species referenced; accumulatively even small areas of mangrove can be vastly valuable to the local economy. The critical value of mangrove systems as nursery habitat for fishes and invertebrates is well established (see review by Lewis et al., 1985). Both sport and commercial fisheries decline when mangrove ecosystems are destroyed. Mangroves in waterfront towns add great financial aid to the local economy through fishing, boating, marinas, and as a vacation destination.

While not everyone may appreciate mangroves, one of the greatest values of mangrove swamps in Florida specific to adjacent land owners, is their aesthetic appeal. A lush neatly trimmed green hedge and possible windowing (mid-canopy is removed for view) is much more appealing than a barnacle encrusted, waterline-stained, vertical seawall. Furthermore mangroves are considered to help reduce the strength of storm surges in tropical areas, and add up to 15 years of life to vertical bulkheads where they act as a wave break. Root systems of the mangroves retain soils at the base of the vertical bulkhead to stop or slow erosion of the upland property which inevitably causes the vertical bulkhead to fail.

Typically the hand planting of mangroves in a high energy location is difficult. Mangroves, if given even a small chance, will naturally colonize a shoreline with the diversity of rock, natural grasses, or a sloping littoral shelf. The addition of rip rap, or bolder sized native rock, stacked waterward of a vertical bulkhead, to create a wave break (which also adds to the life of the bulkhead) becomes a natural planter of sorts for the mangroves. Mangrove seeds are adapted for floating and can be widely dispersed by water currents. As they float, the roots begin to sprout and due to both tidal ebb and flow or boat wash, they then become entangled in the rip rap. Rip rap has frequently been used successfully as a wave break in front of seawalls to increase the life span of those structures. These seeds, trapped by the rip rap, are typically then referred to as "volunteers". All species will become volunteers if a suitable shoreline, such as rip rap, is available. Within one to two years the volunteers will become well rooted mangroves which immediately add value to the adjacent ecosystem. Water depths may hinder growth within the local tidal range, however, the leaf shed from mangroves growing immediately adjacent to a water body will still provide a great percentage of expected benefits to the ecosystem. It is virtually impossible for a shoreline with rip rap to be void of mangroves unless they are being physically and intentionally removed or sprayed with herbicide.

It has been said by many citizens that they believe the planting of mangroves, or allowing them to grow naturally, will only increase the cost of their waterfront maintenance. The laws allow, under specific circumstances, for waterfront homeowners to trim their own mangroves. If mangroves "volunteer" or are planted, and remain less than ten feet in height (*pre trimmed* height) as measured from the substrate, the homeowner may under the 1996 Mangrove Trimming and Preservation Act (96MTPA) trim the mangroves themselves once they reach the heights of six feet. Six feet is the minimum height allowable under the 96MTPA ***if all other site criteria are in place.*** This does not mean that all mangrove trees may be cut to six feet, as defoliation may also not occur under the Law, and the mangroves may require incremental reductions to reach the six foot height. It is suggested that a

professional be consulted prior to any cutting. Most professional mangrove trimmers will offer a one-time free visit to provide advice. Additionally, while many waterfront properties qualify for trimming of 100% of the shoreline, areas left untrimmed in their natural configuration are considered significantly more valuable to the adjacent ecosystem. It is suggested these natural areas border the property lines where they are less apt to block waterfront views and may actually block visual access from neighbors' docks into pool areas and back yards giving a more private atmosphere.

While mangroves border more than half of Florida's peninsular shoreline, it is estimated that 23,500 acres of mangroves have been lost through dredging and filling in Florida. Primarily to develop waterfront property, or from trimming to provide a waterfront view, additional unknown acres of mangroves have been altered, filled or removed to install vertical bulkheads, docks, or for commercial waterfront businesses. The decreased availability of sport fishing species has been conclusively linked to the diminishing numbers of mangroves in our estuaries.

It remains to be seen if the citizens of Florida and the people of The Town of Jupiter, have the resolve to continue to preserve, protect, and propagate mangrove ecosystems. If each waterfront property had a minimum of ten to twenty percent of mangrove wetland area, a significant lessening in pollution and increase of fish populations would be noted. From a scientific point of view, continued, stringent preservation, enhancement of our waterways, and public education on the value of mangroves seems to be in the best interest of the environment, the Town of Jupiter, the State of Florida and society in general.

Sincerely,

Kathleen A. Baxter
President
Coastal Planting Service, Inc.

References:
1. Department of Environmental Professional Mangrove Trimmer Qualification MTQ-001
2. Florida Statute 403.9321-403.9334 Mangrove Trimming and Preservation Act
3. Various writings of Benard J. Yokel, PhD, Florida Audubon Society
4. Various writings and teachings of Samuel C. Snedaker PhD, University of Miami, Rosentiel School of Marine and Atmospheric Science, Division of Biology and Living Resources
5. Various writings of R. R. Lewis, III incl "Mangrove Habitat and Fishery Resources of Florida"

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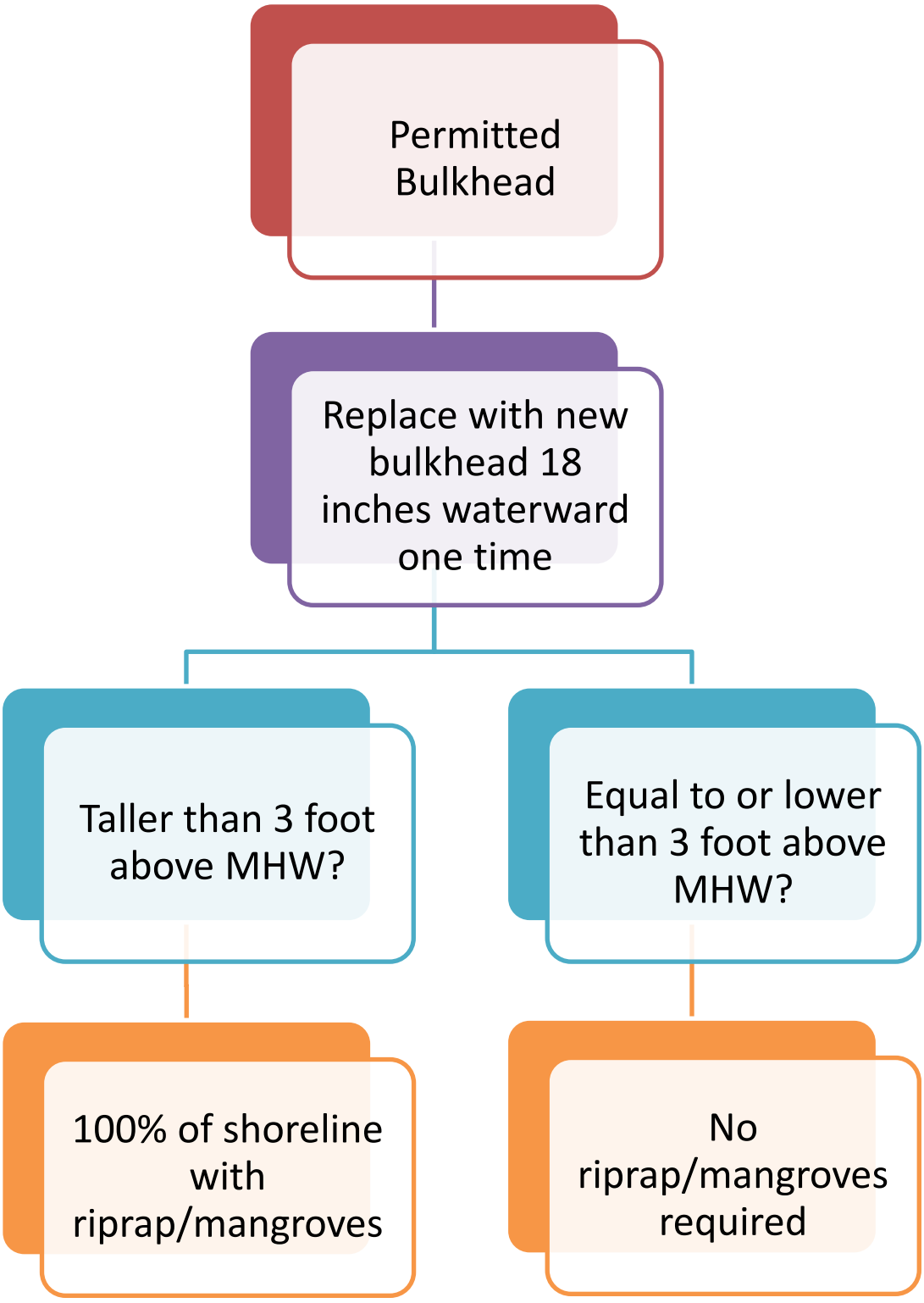
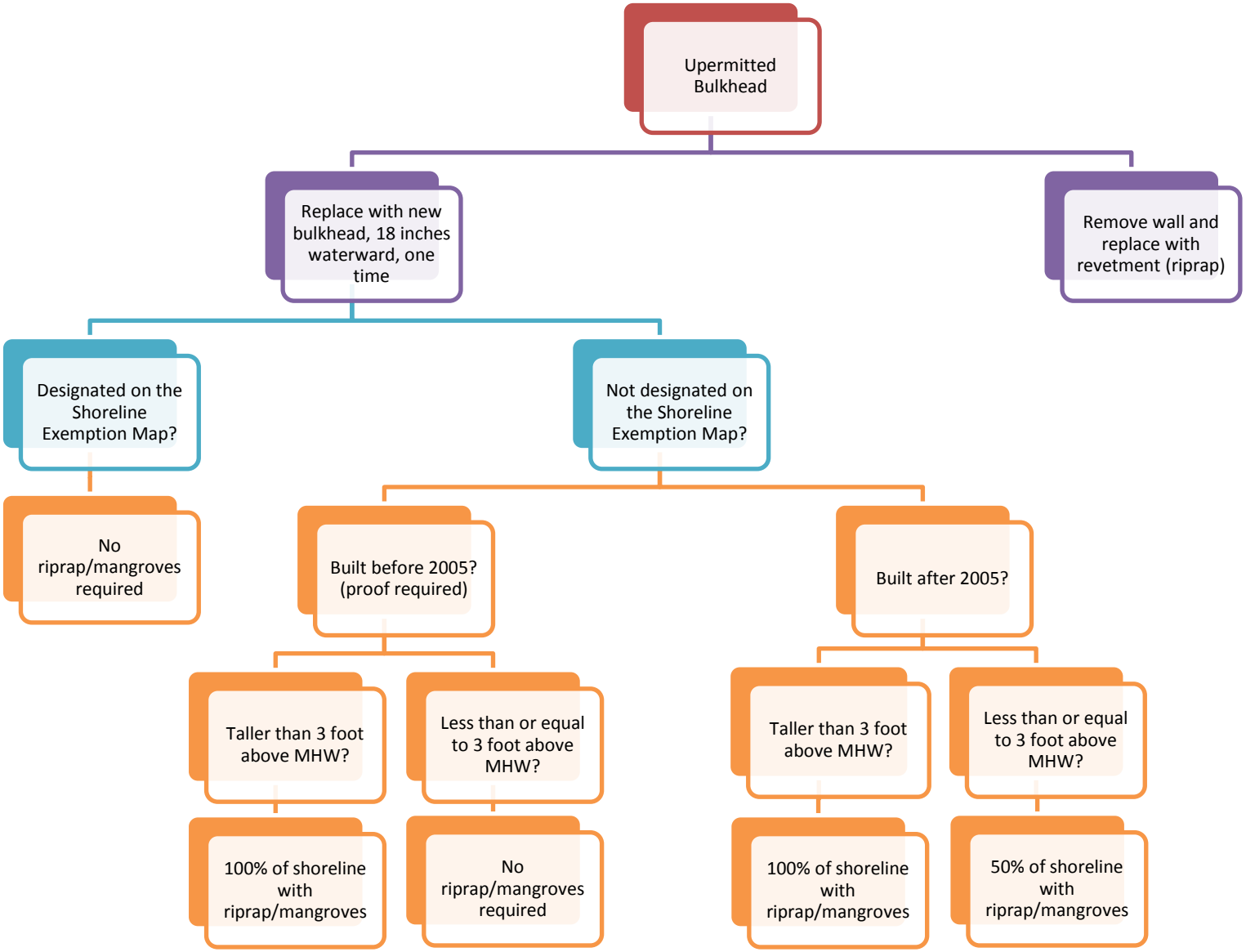
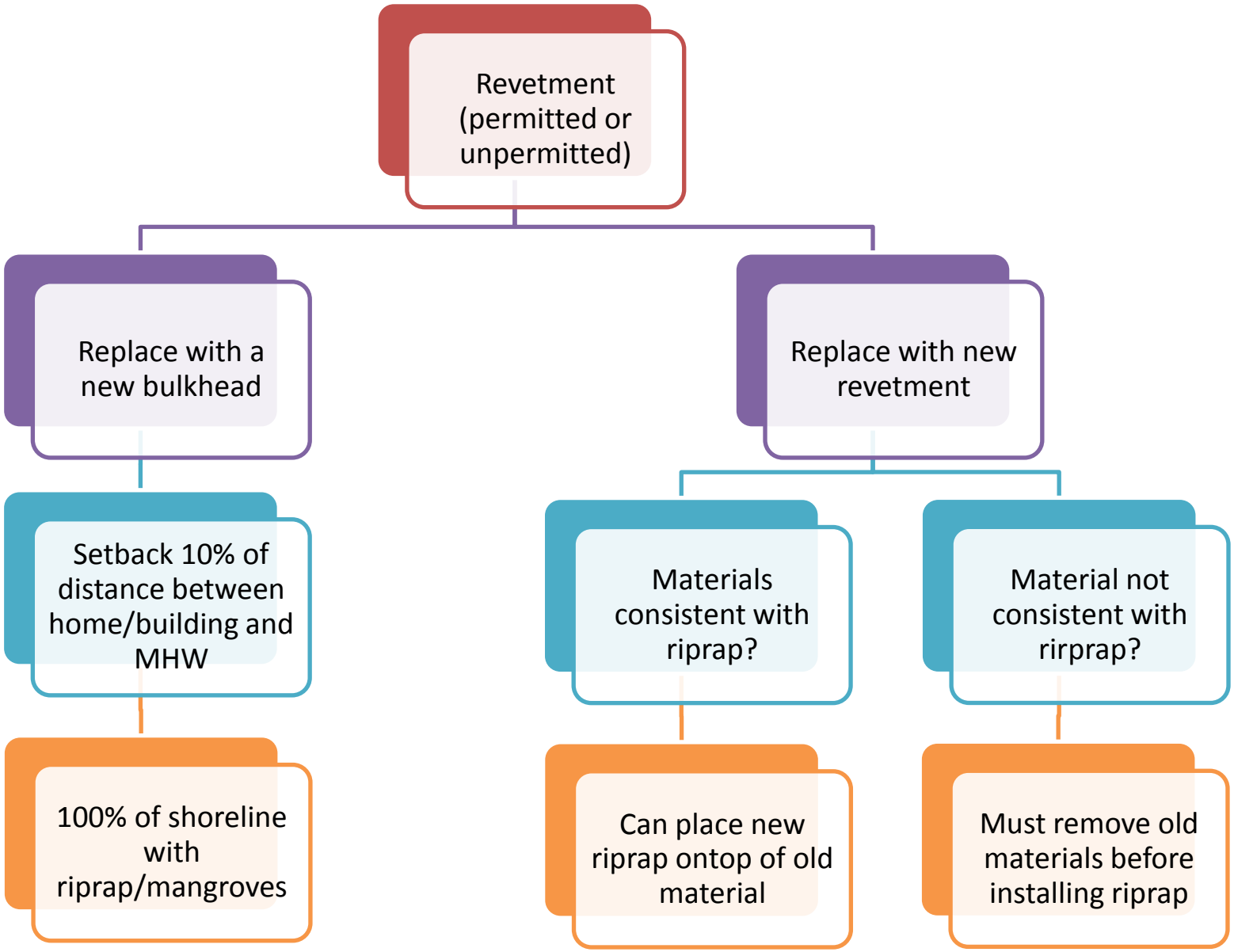
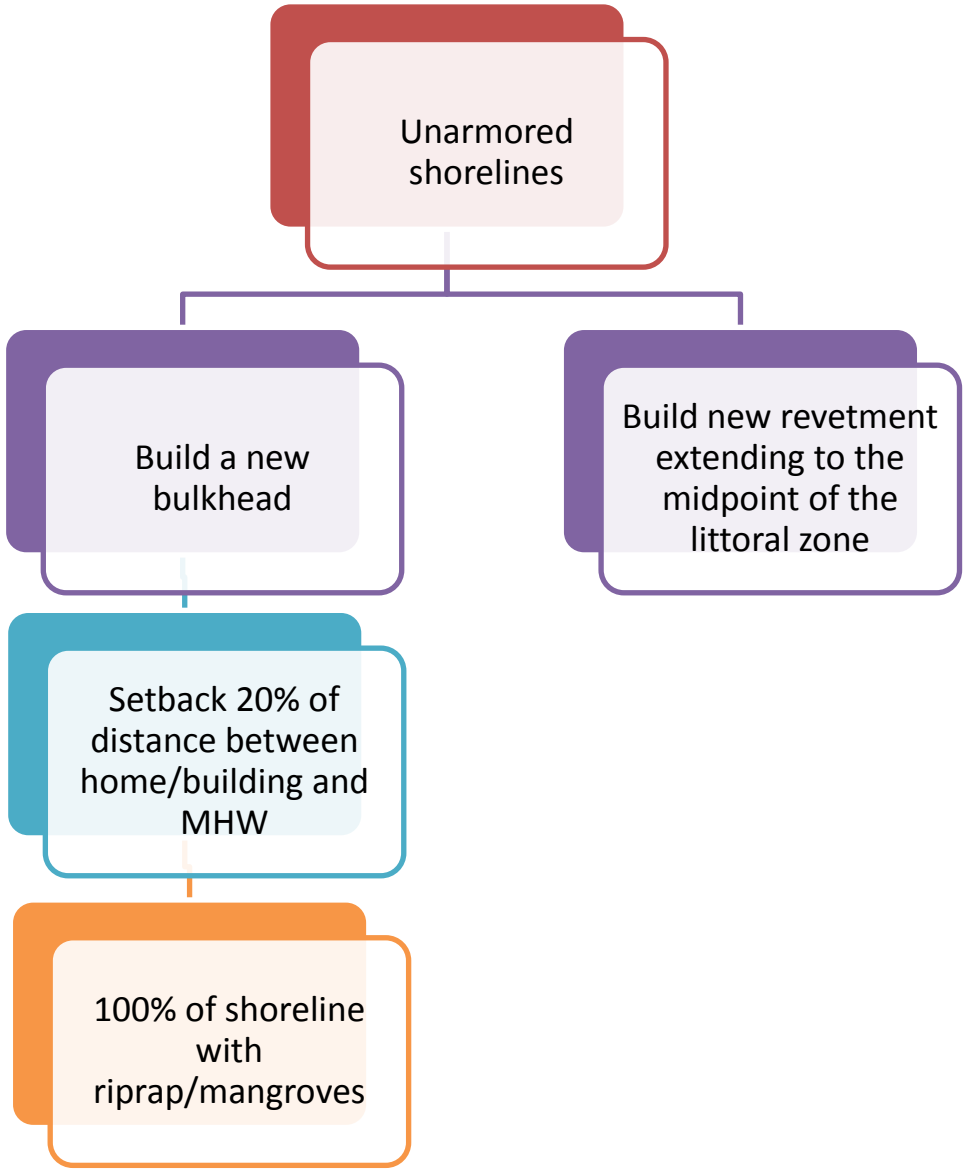
561-747-3436 phone/fax www.mangrovetrimmer.com ladymangrove@aol.com


Permitted Bulkhead
Replace with new bulkhead 18 inches waterward one time
Taller than 3 foot above MHW?
Equal to or lower than 3 foot above MHW?
100% of shoreline with riprap/mangroves
No riprap/mangroves required

Attachment D




Revetment (permitted or unpermitted)
Replace with a new bulkhead
Replace with new revetment
Setback 10% of distance between home/building and MHW
Materials consistent with riprap?
Material not consistent with rirprap?
100% of shoreline with riprap/mangroves
Can place new riprap ontop of old material
Must remove old materials before installing riprap


Unarmored shorelines
Build a new bulkhead
Build new revetment extending to the midpoint of the littoral zone
Setback 20% of distance between home/building and MHW
100% of shoreline with riprap/mangroves

ORDINANCE NO. 4-15

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF JUPITER, FLORIDA, AMENDING VARIOUS SECTIONS OF ARTICLE X, DIVISION 17 OF CHAPTER 27 OF THE TOWN'S CODE OF ORDINANCES, ENTITLED "MARINE FACILITIES"; PROVIDING FOR THE AMENDMENT OF SECTION 27-1 TO ADD DEFINITIONS; PROVIDING FOR THE AMENDMENT OF SECTION 27-1396 PERTAINING TO THE INTENT OF DIVISION 17; PROVIDING FOR THE AMENDMENT OF SECTION 27-1397 TO MODIFY THE REGULATIONS RELATED TO SHORELINE STABLIZATION; PROVIDING FOR THE AMENDMENT OF SECTION 27-1398 TO DESIGNATE THE DISTRICTS WHERE MARINAS ARE PERMITTED; PROVIDING FOR THE AMENDMENT OF SECTION 27-1399 TO ALLOW FOR WAIVERS TO THE SIDE SETBACKS APPLICABLE TO MARINE FACILITIES, AND TO PERMIT A SECOND BOAT LIFT, AND PERTAINING TO THE MOORING OF VESSELS; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL OF LAWS IN CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Town of Jupiter ("Town") has adopted a Comprehensive Plan which has been determined to be in compliance with Chapter 163, Part II, Florida Statutes; and

WHEREAS, pursuant to Section 163.3202(2), Florida Statutes, municipalities are required to provide specific and detailed Land Development Regulations to implement adopted Comprehensive Plans; and

WHEREAS, the Town Council of the Town of Jupiter, Florida, has previously enacted Land Development Regulations which have been codified in the Town Code pertaining to Marine Facilities; and

WHEREAS, the Town Council hereby determines that the amendments herein are necessary to more appropriately regulate the development and re-development of marine facilities; and

WHEREAS, the Town's Planning and Zoning Department staff and the Planning and Zoning Commission have made their respective recommendations regarding the proposed amendments to the Town Council; and

WHEREAS, the Town Council, after due notice and public hearings has determined that the adoption of the proposed amendments would further the public health, safety and general welfare.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF JUPITER, FLORIDA AS FOLLOWS:

Section 1. The whereas clauses are incorporated herein as true and correct and as the legislative findings of the Town Council.

Section 2. Chapter 27, Article I, Section 27-1 is hereby amended to add the following definitions, as follows**:**

Sec. 27-1. Definitions

Bulkhead shall mean the use of a vertical structure including the cap, either a seawall or retaining wall, which is placed on a property for the purpose of stabilizing the shoreline.

Jurisdictional line of the state shall mean the landward extent of wetlands, as defined in F.S. 373.019(27), which generally includes areas covered in surface water which support the growth of native wetland vegetation, including, but not limited to, mangroves, salt wart or sea ox-eye daisy.

Littoral zone shall mean the partially submerged lands within tidal waters between the mean high and mean low water lines. Within non-tidal water, or stormwater retention areas, littoral zone shall mean the area immediately upland of the ordinary water level.

Personal Watercraft shall mean a vessel less than 16 feet in length which uses an inboard motor powering a water jet pump as its primary sources of motive power and which is designed to be operated by a person sitting, standing, or kneeling on the vessel, rather than in the conventional manner of sitting or standing inside of the vessel.

Revetment shall mean the use of a sloping structure, either riprap or the use of other materials that are stacked or placed together (i.e. concrete bags, wood, debris, concrete slabs), which are placed on a property for the purposed of stabilizing the shoreline.

Riprap shall mean loose boulders of native limestone, generally 18 to 24 inches in diameter, rocks, or clean concrete rubble, and may require filter cloth, placed along the water's edge to stabilize the shoreline and disperse the energy of wave action.

Unarmored shoreline shall mean a natural shoreline not containing any man-made structures intended to stabilize the shoreline.

Section 3. Town Code Chapter 27, Article X, Division 17 is hereby amended to read as follows:

DIVISION 17. - MARINE FACILITIES

The installation of the marine facility structures authorized by this division require building permits through the Town of Jupiter and may require permits from the United States Army Corps of Engineers, Florida Department of Environmental Protection, or the South Florida Water Management District.

Section 4. Town Code Chapter 27, Article X, Division 17, Section 27-1396 is hereby amended to read as follows**:**

Sec. 27-1396. Intent.

The regulations and requirements of this division are intended to protect, ~~and~~ preserve, and enhance the natural shoreline, marine ecosystems, and to ensure navigation of the waterways of the Town by regulating and requiring permits for docks, boat lifts, mooring spaces, mooring pilings, installation of ~~riprap~~ bulkheads and revetments, and all other marine associated structures. The intent of these regulations is to provide a balance between the impacts of marine facilities and the natural environment by requiring buffer zones of native vegetation, including mangroves.

Section 5. Town Code Chapter 27, Article X, Section 27-1397 is hereby amended to read as follows**:**

Sec. 27-1397. Shoreline Stabilization. ~~Seawall, retaining wall, and riprap regulations~~.

~~(a) *Seawalls are permitted only under the following circumstances:*~~

~~(1) A new seawall may be constructed to replace an existing seawall provided the location of the new seawall is within one foot of the location of an existing permitted seawall that the new seawall is replacing.~~

~~(2) A new seawall may be constructed between and connecting the ends of two existing permitted seawalls which are separated from each other by no more 150 feet in length.~~

~~(3) An existing permitted seawall may remain in place if constructed prior to December 20, 2005, and may be repaired or improved provided the location of the seawall remains unchanged or meets the current regulations.~~

~~(4) A new seawall may be constructed in extreme circumstances of erosion, such as erosion that may follow a natural disaster and which threatens public safety, subject to the approval of any other jurisdictional agency and a finding by the Director of Planning and Zoning that the seawall will not adversely impact environmental resources and that no other means of stabilization is feasible.~~

~~(b) *Retaining walls are permitted only under the following circumstances:*~~

~~(1) A new retaining wall may be constructed on property where no retaining wall existed previously if all structural elements of the retaining wall are located landward of both the mean high waterline and any wetlands on or immediately adjacent to the property. Retaining walls shall be located an average of five feet landward of the mean high water line consistent with the transitional buffer of native vegetation.~~

~~(2) A new retaining wall may be constructed to replace an existing permitted retaining wall provided the location of the new retaining wall is within one foot of the existing permitted retaining wall it is replacing.~~

~~(3) Construction of a new retaining wall shall require the planting of a transitional buffer of native vegetation within the ecotone, between the mean high waterline and the retaining wall, in order to provide for stabilization, to prevent erosion, and to provide suitable habitat for native terrestrial and aquatic animals. A transitional buffer of native vegetation may consist of preserved or planted vegetation, but shall include canopy, understory and groundcover of native species only. A minimum of five square feet of buffer shall be provided for each linear foot of the wetland or deepwater habitat perimeter that lies adjacent to uplands. The upland edge habitat shall be located such that no less than 50 percent of the total shoreline is buffered by a minimum of five feet landward of the mean high water line, with no less than two feet of upland habitat. A list of required native plants shall be maintained by the Planning and Zoning Department.~~

~~(4) Construction of a new retaining wall may require the placement of rip rap, between the mean high waterline and the retaining wall, if needed to provide stabilization or to prevent erosion.~~

~~(5) An existing permitted retaining wall may remain in place if constructed prior to May 15, 2007, and may be replaced or improved provided the location of the retaining wall remains unchanged or meets the current regulations.~~

~~(c) *Riprap is permitted only under the following circumstances:*~~

~~(1) New rip-rap may be placed along the shoreline of a property where no riprap existed previously if all portions of the riprap are located landward of both the mean high waterline, and any wetlands on or immediately adjacent to the property where the riprap is to be installed. Riprap shall be located an average of five feet landward of the mean high water line consistent with the transitional buffer of native vegetation. No filling or dredging is permitted in connection with the installation of any permitted placement of riprap, unless all required and applicable issued permits are submitted by the applicant to the Town for review, including but not limited to, permits from the following agencies: United States Army Corps of Engineers ("ACOE"), Florida Department of Environmental Protection ("FDEP") and the South Florida Water Management District ("SFWMD").~~

~~(2) The Town may, in its sole discretion, permit new riprap to be installed to replace or restore existing permitted rip-rap, provided that the location of the proposed new rip-rap is either to be located in: (a) the exact same prior location of the riprap to be replaced, (b) or will be further upland from the prior location of the riprap to be replaced, or (c) inside the location of the existing riprap and provided that the replacement riprap does not extend under any circumstances~~

~~more than one foot from the previously approved and permitted riprap which is to be replaced. Filling and/or, dredging of surface waters is strictly prohibited except when the Town in its sole discretion, determines that it is appropriate to permit the restoration of the previously existing and previously permitted riprap.~~

~~(3) All installation of new riprap requires the planting of a transitional buffer of native vegetation within the ecotone, between the mean high waterline and the riprap, in order to provide for stabilization, to prevent erosion, and to provide suitable habitat for native terrestrial and aquatic animals, and when necessary to further other legitimate environmental concerns and protections. A transitional buffer of Town required/approved native vegetation may consist of preserved or planted vegetation, but shall in all instances, include canopy, understory and groundcover comprised of only native species approved in advance and in writing by the Town Planning and Zoning Director. A minimum of five square feet of buffer shall be provided for each linear foot of the wetland or deepwater habitat perimeter that lies adjacent to uplands. The upland edge habitat shall be located such that not less than 50 percent of the total shoreline is buffered by a minimum of five feet landward of the mean high water line, with not less than two feet of upland habitat. Applicants shall consult the list of required native plants maintained by the Town's Planning and Zoning Department to determine acceptable native vegetation prior to the submission to the Town of any application for riprap approval.~~

~~(4) Existing, Town-permitted riprap may remain in place if the riprap was constructed prior to August 19, 2008.~~

<u>These shoreline stabilization regulations apply to all properties within the Town which are located adjacent to tidal waters.</u>

(1) Existing permitted bulkheads may be replaced provided the location of the new bulkhead is within 18 inches waterward of an existing permitted bulkhead or landward.

a. Replacement bulkheads constructed in the same location or landward of an existing bulkhead may be replaced.

b. Replacement bulkheads constructed waterward of an existing bulkhead shall only be permitted one time, as of [INSERT date of adoption of this ordinance]. After the one time construction waterward is permitted, a replacement bulkhead shall be constructed in the same location or landward of the existing bulkhead.

c. If the top of the new bulkhead extends higher than three feet above the elevation of the mean high water line, then 100 percent of the bulkhead shall be faced with riprap or mangroves in accordance with the regulations set forth in subsections (5) or (6) below. Properties designated on the Shoreline Exemption Map (Figure 1) shall be exempt from installing riprap or mangroves. The exemption only applies to that portion of the property at the mouth of the canal as shown on the Shoreline Exemption Map and shall not apply to the portion of property along the natural waterway.

d. In lieu of a replacement bulkhead, a revetment may be constructed to replace an existing bulkhead in accordance with subsection (7) below.

(2) Existing unpermitted bulkheads may be replaced provided the new bulkhead is within 18 inches waterward of an existing bulkhead or landward.

a. Replacement bulkheads constructed in the same location or landward of an existing bulkhead may be replaced.

b. Replacement bulkheads constructed waterward of an existing bulkhead shall only be permitted one time, as of [INSERT date of adoption of this ordinance].

After the one time construction waterward is permitted, a replacement bulkhead shall be constructed in the same location or landward of the existing bulkhead.

c. At least 50 percent of the bulkhead shall be faced with riprap or mangroves waterward of the new bulkhead in accordance with the regulations set forth in subsections (5) or (6) below.

d. If the top of the new bulkhead extends higher than three feet above the elevation of the mean high water line, then 100 percent of the bulkhead shall be faced with riprap or mangroves in accordance with the regulations set forth in subsection (5) or (6) below.

e. A toe wall to hold in riprap may be required where the water depths adjacent to the bulkhead are too deep.

f. Existing bulkheads constructed of wood or other degradable materials shall be removed prior to completion of the replacement shoreline stabilization structure.

g. In lieu of a replacement bulkhead, a revetment may be constructed to replace an existing bulkhead in accordance with subsection (7) below.

h. Exemptions.

1. Properties designated on the Shoreline Exemption Map (Figure 1) are not required to install riprap or mangroves. This exemption only applies to that portion of the property located at the mouth of the canal as shown on the Shoreline Exemption Map and shall not apply to the portion of property along the natural waterway.

2. A property owner who provides a dated survey or historical aerial documenting that a bulkhead existed prior to (December 20, 2005) shall not be required to install riprap or mangroves, provided the new bulkhead

does not extend higher than three feet above the elevation of the mean high water line.

3. Where the placement of riprap or mangroves would reduce the width of a canal to less than 40 feet, the property owner shall not be required to install riprap or mangroves.

4. Where the placement of riprap would result in the destruction of sea grasses, the property owner shall not be required to install riprap or mangroves. The property owner must submit a sea grass study, not more than 6 months old, documenting the location of the sea grasses.

(3) Existing revetments, either permitted or unpermitted, may be replaced with a new bulkhead or revetment provided they meet the following standards:

a. Bulkheads:

1. The setback shall be five feet from the jurisdictional line of the state, or the mean high water line, whichever is more landward. In those areas where an existing principal building is set back less than 50' to the jurisdictional line of the state, or the mean high water line, whichever is more landward, the setback may be reduced. The setback reduction shall be equal to 10 percent of the distance between the existing principal building and the jurisdictional line of the state or mean high water line, whichever is more landward. In no case shall the setback be less than one foot.

2. 100 percent of the bulkhead shall be faced with riprap or mangroves waterward of the new bulkhead in accordance with the regulations set forth in subsections (5) or (6) below.

3. Properties designated on the Shoreline Exemption Map (Figure 1) shall not be required to install riprap or mangroves. This exemption only applies to that portion of the property at the mouth of a canal as shown on the Shoreline Exemption Map and shall not apply to that portion of the property along the natural waterway.

4. A toe wall to hold in riprap may be required where water depths adjacent to the bulkhead are too deep.

b. Revetment:

1. Shall be constructed in the same place as the existing revetment.

2. An existing revetment which was constructed with loose boulders, rocks, or clean concrete rubble with no exposed reinforcing rods or protrusions may remain and riprap may be placed over top of the existing materials.

3. A revetment constructed of material not consistent with loose boulders, rocks, or clean concrete rubble with no exposed reinforcing rods or protrusions shall be removed prior to replacement.

4. Mangroves shall be planted in accordance with the regulations set forth in subsections (5) or (6) below.

(4) Existing unarmored shorelines may be armored with a new bulkhead or revetment provided they meet the following standards:

a. Bulkheads:

1. The setback shall be five feet from the jurisdictional line of the state, or the mean high water line, whichever is more landward. In those areas where an existing principal building is set back less than 25' to the jurisdictional line of the state, or the mean high water line, whichever is more landward, the setback may be reduced. The setback reduction shall

be equal to 20 percent of the distance between the existing principal building from the jurisdictional line of the state or mean high water line, whichever is more landward. In no case shall the bulkhead setback be less than one foot.

2. 100 percent of the bulkhead shall be faced with riprap or mangroves waterward of the new bulkhead in accordance with the regulations set forth in subsections (5) or (6) below.

3. Properties designated on the Shoreline Exemption Map (Figure 1) shall not be required to install riprap or mangroves. This exemption only applies to that portion of a property at the mouth of the canal as shown on the Shoreline Exemption Map and shall not apply to that portion of a property along the natural waterway.

4. A toe wall to hold in riprap may be required where the water depths adjacent to the bulkhead are too deep.

b. A riprap revetment may be constructed in accordance with the regulations set forth in subsection (7) below.

(5) These regulations shall apply when riprap is required to be installed with the construction of a bulkhead:

a. Existing mangroves on the property shall count towards meeting the percentage of shoreline requirement.

b. Riprap shall be placed such that the bottom 50 percent of the bulkhead is covered, and sloped at a maximum two to one, vertical to horizontal ratio. At no point shall riprap extend more than eight feet waterward of the mean high water line or jurisdictional line of the state. Riprap placed waterward of bulkheads does not require filter cloth.

c. Within two years of the final inspection of the bulkhead or riprap, mangroves shall be established on at least 10 percent of the shoreline faced with riprap.

d. If, after two years from the final inspection, less than 10 percent of the shoreline faced with riprap contains mangroves, then 20 percent of the shoreline shall be planted with mangroves. The mangroves to be planted shall meet the standards of subsection (6)c. below. If some mangroves have been established, but the minimum requirement of 10 percent has not been met, staff may grant a one-year extension to the monitoring period.

(6) These regulations shall apply when riprap is required to be installed with the construction of a bulkhead and the property owner elects to plant mangroves along the shoreline as an alternative to riprap.

a. 50 percent of the face of the required riprap shall be planted with mangroves waterward of the bulkhead. For example, if 50 percent riprap is required to face the bulkhead, then only 25 percent mangroves are required.

b. Existing mangroves shall count towards meeting the percentage of shoreline requirement.

c. Following an inspection of the bulkhead or the installation of mangroves, the property owner shall submit a mangrove planting plan to the Town, and it shall be subject to the review and approval of the Natural Resources Coordinator.

1. The mangrove planting plan shall include;

(a) the species of mangroves appropriate given the location;

(b) the size, species, number, and spacing of mangroves to be planted;

(c) the identification of the location of at least two photo stations which shall be the designated photo stations from which photos will be provided for each monitoring report;

(d) photos clearly showing the mangrove plantings in their entirety;

(e) The location of bulkheads, docks or other structures relative to plantings;

2. The property owner shall submit a time zero monitoring report to the town within 30 days from the town's initial inspection, marking the beginning of the monitoring period.

3. The property owner shall monitor the mangroves annually for survivability for five years. On or before the anniversary date of the annual time zero report each year, the property owner shall submit at least two photographs taken from each of the designated photo stations and submit these photos to the Town for its review and approval. The report shall also identify the number and location of the mangroves which have been planted. If less than 80 percent of originally planted mangroves have survived, the property owner shall replant the number of mangroves which have expired. If photographs are not received by the required date, an inspection will be conducted by Natural Resources in order to inspect the condition of the mangroves.

4. The town may require that hand placed riprap be installed to support the growth of mangroves which have been planted in high wave energy areas.

(7) A riprap revetment may be constructed, extending to the midpoint of the littoral zone, between the mean high and mean low water mark. Riprap shall be hand placed over a

filter cloth with a minimum 30 year lifespan designed to retain soils while allowing water to flow through. Mangroves shall be planted or established in accordance with the regulations set forth in subsections (5)c and (5)d above.

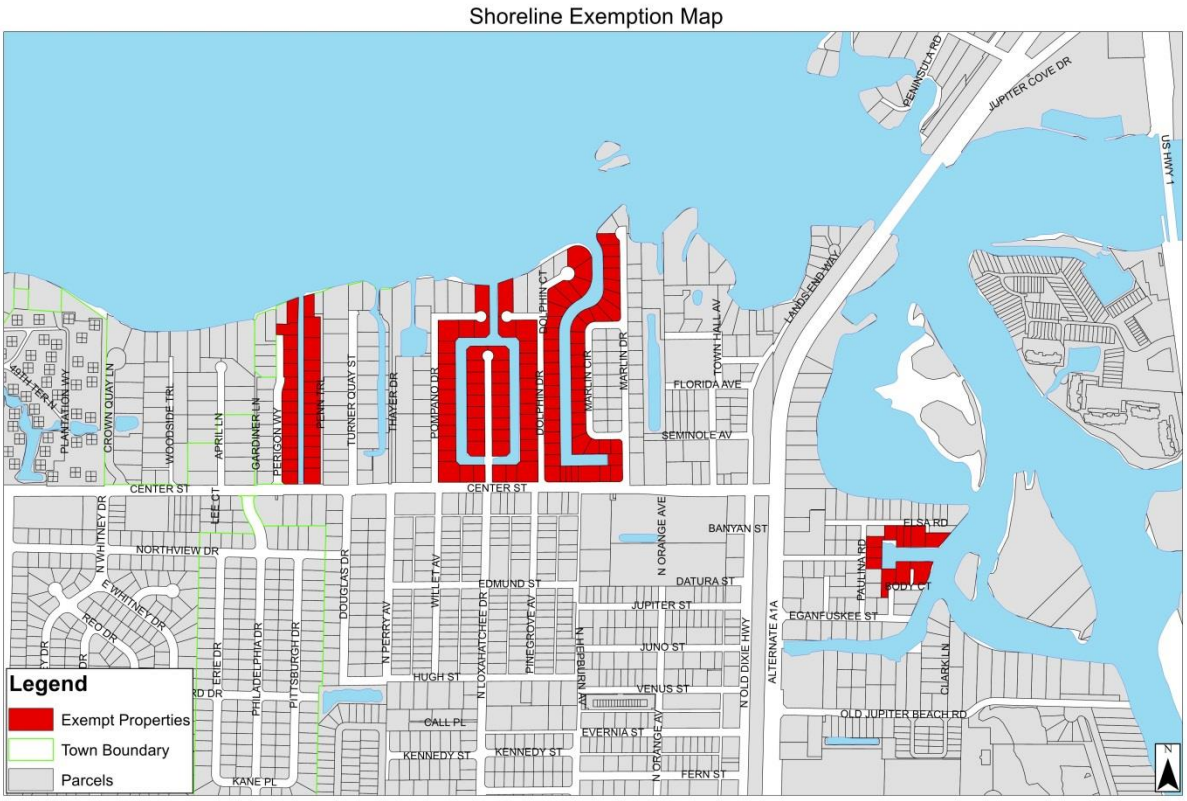
(8) The maximum height to the top of a new bulkhead shall be equal to or below a property's required base flood elevation as recorded on the current Federal Emergency Management Agency special flood hazard maps.

a. Exemptions.

1. Properties east of the Coast Construction Control Line established pursuant to F.S. 161.053.
2. For those properties where buildings abut the Riverwalk, the above requirement may be waived if the height difference between the bulkhead and adjacent building on the Riverwalk would create a slope between the bulkhead and the building that does not meet minimum Americans with Disabilities Act slope requirements.
3. In the event a jurisdictional agency requires a permit for the placement of riprap within their jurisdiction, but will not issue the permit, then the property shall be exempt from providing riprap in the jurisdictional area.

(9) A new bulkhead may be constructed where there has been severe erosion creating a public safety issue, such as that which may occur as the result of a natural disaster. The construction of the new bulkhead is subject to the approval of any agency with jurisdiction and a finding by the Director of Planning and Zoning that the bulkhead will not adversely impact environmental resources and that no other means of stabilization is feasible.

Figure 1



Section 6. Town Code Chapter 27, Article X, Division 17, Section 27-1398, is hereby amended to read as follows**:**

Sec. 27-1398. Marinas.

(a) Marinas are defined as facilities intended to provide dockage or secure mooring for marine vessels, and are permitted as special exceptions in A-1, R-R, R-3, US-1/ICW, C-2, ~~and~~ I-2, and Inlet Village districts and as an approved portion of a PUD. Standards for dock structures in marinas shall be established on a case by case basis as part of the review and approval of a special exception by the Town Council.

(b) Ancillary uses associated with marina operations, such as fueling, repairs and maintenance, hauling and storage, retail sales and yacht club facilities, including

restaurant and/or lounge, may be permitted within certain zoning districts as indicated below:

(1) In A-1, R-R and R-3 districts, only fueling may be allowed as an ancillary use if approved as part of the special exception. Live aboard accommodations are not permitted in these districts.

(2) In US-1/ICW, C-2, ~~and~~ I-2, and Inlet Village districts and approved PUD's, all ancillary uses listed above may be allowed. Marinas offering permanent, seasonal or transient liveaboard accommodations shall provide hook-up service to approved on-shore waste water treatment systems and potable water sources.

Section 7. Town Code Chapter 27, Article X, Division 17, Section 27-1399, is hereby amended to read as follows**:**

Sec. 27-1399. Private dock regulations.

Individual private docks, for the exclusive use of an adjacent residential unit, are permitted as an accessory use in all residential districts. The mooring of commercial vessels is prohibited in all residential districts. A single private dock for the exclusive use of a commercial building may be permitted as an accessory structure in all commercial districts provided the dock serves only the occupants of the commercial building. A dock that has more than two boat mooring spaces shall be considered a marina.

In addition to the regulations set forth within the district in which the use is located, the following minimum regulations shall apply:

(1) No dock, boat mooring space, or mooring pilings shall be built out into a natural waterway by more than 50 feet from the mean high water line; nor shall any dock, boat mooring space, or mooring pilings exceed 20 percent of the ~~width of the~~ natural

waterway width, whichever is less. The above regulation may be waived by the Planning and Zoning Director for docks, boat mooring spaces, or mooring pilings to be located in bodies of water in which other agencies also have regulatory jurisdiction have permitting conditions which allow projections into the natural waterway that are greater than the above maximums, provided that the greater extension does not adversely impact navigation, safety, environmental resource protection, or other similar concerns. In order to qualify for the issuance of a building permit for a dock, boat mooring spaces, or mooring pilings, the applicant must submit with the application a signed and sealed survey showing the location of the proposed improvements. The survey must not be more than six months older than the date of the application for a permit, must accurately depict that the single family lot or duplex lot, which is the subject of the permit application, extends to the mean high water line, or must reflect that the landowner has riparian rights attached to the uplands for which each landowner holds title.

(2) Docks which are located on or upon any man-made surface waters (i.e. lakes, retention ponds, or canal), boundaries of such man made surface waters being totally within a residential area, shall not project more than five feet or ten percent of the width of the waterway, whichever is greater nor extend nearer than the side setback required for the district within which the property is located. In man-made surface waters which are wider than 50 feet, boat mooring spaces may project up to 25 percent of the width of the waterway. In order to qualify for the issuance of a building permit for a dock, boat mooring spaces, or mooring pilings, the applicant must submit with the application a signed and sealed survey showing the location of the proposed improvements. The survey must not be more than six months older than the date of the application for a permit, must accurately depict that each single

family lot or duplex lot extends to the mean high water line which is the subject of the permit application or must reflect that the landowner has riparian rights attached to the uplands for which each landowner holds title.

(3) Shared private docks may be permitted on two contiguous, single family, or duplex lots located on either a natural waterway, or a man-made surface water, provided that the single family lot landowners, and the duplex lot landowners, submit a legally sufficient Mutual Dock Maintenance and Cross Access Easement Agreement, that is in a form which is legally sufficient to the Town Attorney and which is approved for consistency with these regulations by pertinent Town staff. The Mutual Dock Maintenance and Cross Access Easement Agreement shall be recorded in Palm Beach County, Florida at the sole expense of the applicant, and the applicant shall provide the Town with a certified copy of the recorded instrument. In order to qualify for the issuance of a building permit for a shared dock, each landowner of a single family lot and each landowner of a duplex lot who are proposing to share a private dock, must have ownership rights to the property which extends to the mean high water line, or must have legally documentable riparian rights that are attached to the uplands for which each participating landowner holds title. The shared private dock shall be considered the one dock allowed for each lot. No additional docks shall be permitted.

(4) Dock access walkway shall not exceed four feet in width.

(5) The terminal platform or marginal dock shall have a maximum area of 200 square feet. If the dock is constructed over known sea grass beds, the terminal platform or marginal dock shall have a maximum area of 160 square feet.

(6) No dock, boat mooring space, mooring piling, davit, other mooring facility, or floating structure (i.e. dock, walkway, etc.) shall be located nearer to the side lot line than the

side setback required for the district within which the property is located as measured from a line that extends out from the side property lines into the waterway or canal.

a. Where the extension of the side property lines converge within a waterway, the Director of Planning and Zoning may grant a waiver or reduction to the required setback for docks, boatlifts, or boat mooring spaces to ensure that a property owner has reasonable access to a navigable channel. The Director's approval of a waiver may be permitted provided all of the following are met:

1. Other jurisdictional agencies having permitted the proposed dock, boat mooring space, mooring piling, davit, other mooring facility, or floating structure with reduced setbacks, based on using alternative methods of calculations for setbacks;
2. Documentation is provided to the Department that written notification was sent to the affected neighboring property owner(s) making them aware of the setback waiver.

b. In order to qualify for a building permit for a dock, boat mooring spaces, or mooring pilings, the applicant shall submit with the building permit application:

1. A signed and sealed survey, not more than six months older than the date of the application for a permit, indicating; the location of the proposed improvements;; the location of the mean high water line; and shall reflect that the landowner has riparian rights attached to the uplands for which the landowner holds title.
2. A copy of a permit from the Florida Department of Environmental Protection, US Army Corps of Engineer, or South Florida Water Management District.

(7) The side setback for docks may be waived by the Planning and Zoning Director, if two contiguous single family or duplex lots, which ~~that~~ qualify under the provisions of this Code, are permitted to share one dock [See section 27-1399(3)] and its associated mooring spaces, boat lift, and pilings. The above setback waiver may apply to docks, mooring spaces, boat lifts, and pilings which are associated with each individual portion of the shared dock under the specific use of each single family or duplex lot. All other setback requirements for the district that are not related to the location of the dock still apply.

(~~7~~8) Any "T" or "L" terminal platform shall have a maximum length of 20 feet and shall not project into the side setback required for the district within which the property is located. A "U" shaped terminal platform may be allowed for shared docks. The "U" shaped terminal platform shall also be limited to a maximum length of 20 feet.

(~~8~~9) No more than one dock per lot shall be permitted in an R-1 or R-2 residential district, except in an approved PUD. No dock shall be permitted with more than two boat mooring spaces. One boat lift plus one personal watercraft lift shall be allowed per dock in an R-1 or R-2 residential district. The personal watercraft lift shall have no more than a 3,000 lb. lift capacity, and shall be limited to two mooring pilings. In lieu of two personal watercrafts, a property owner may store one small boat on the personal watercraft lift, provided the boat does not have a permanent rigid canopy structure (i.e. T-top, tower, or shade structure) extending above the boat's gunwale. A small boat that is stored on the personal watercraft lift, shall retract, lower, or remove any shade structures. Two personal watercrafts may be stored on one personal watercraft lift at one boat mooring space. If two contiguous, single family and/or duplex lots, that qualify under the provisions of section 27-1399(3), share one permitted dock and its associated mooring spaces, boat lift, and pilings, each

individual property owner may be permitted to have one boat lift and one personal watercraft lift on the portion of the dock that benefits each individual lot owner.

(~~9~~10) Except for rectangular shaped, "T" shaped and "L" shaped docks, and shared docks approved with "U" shaped terminal platforms, no other configuration shall be allowed, unless another configuration is approved by the Director of Planning and Zoning as being beneficial for navigation, safety, or environmental resources protection.

(11) Docks, boat lifts and personal watercraft lifts in canals ~~are encouraged to~~ shall be parallel to the bulkhead ~~seawall~~ in order to promote ~~to~~ parallel mooring. ~~Docks in natural waterways are encouraged to promote perpendicular mooring to shoreline.~~ The Director of the Planning and Zoning Department may permit another configuration provided it is determined that the configuration would be beneficial for navigation, safety, environmental resources protection, or views.

(~~10~~12) If there is documentation of known sea grass beds that would be directly impacted by the construction of the dock, the following regulations shall be applied. Height of pier shall be a minimum of five feet above MHW as measured from the top of surface of the decking. Material used to construct the walkway surface shall be no wider than eight inches and shall be spaced a minimum of one-half inch apart.

(~~11~~13) Night time reflectors shall be affixed to any dock, mooring piling, or davit and elevator structures extending more than five feet into any waterway. Three reflective devices shall be installed above the established mean high waterline on each side of all of the mooring pilings. The intent is to provide three devices facing both directions of the waterway.

(~~12~~14) Covered boat lifts and docks are not permitted. Boat lifts shall not be modified (i.e. installation of decking, planking, etc.) to serve any other use than for the purpose of

elevating a boat or vessel out of the water. There shall be no mooring of any vessel on the waterward side of a boat mooring space.

(~~13~~15) At all times, the minimum centerline channel width of 50 percent of the waterway width must remain unobstructed. Where the 50 percent can not ~~can not~~ be met, alternative solutions may be approved by the Director of Planning and Zoning provided a 15' channel is maintained. Alternative solutions shall be evaluated based on the proximity of adjacent, existing and future marine facilities, the proximity of natural ecosystems and resources, and the navigability of a waterway in order to provide adequate setbacks that are equitable to adjacent properties.

(~~14~~16) A four-foot dock walkway is allowed to pass through the rear setback area in order to connect with a deck, patio or sidewalk.

(~~15~~17) The re-decking of any portion of a private dock, even if it is in the same configuration and in the same location of an existing, permitted dock, shall require a building permit.

Section 8. Severability. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions thereof.

Section 9. Repeal of laws in conflict. All Ordinances or parts of Ordinances in conflict herewith are hereby repealed to the extent of such conflict.

Section 10. Codification. The Sections of the Ordinance may be renumbered or re-lettered to accomplish such, and the word "Ordinance" may be changed to "Section", "Article", or any other appropriate word.

Section 11. Effective Date. This Ordinance shall take effect immediately upon adoption.

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May 6, 2015