

Unfinished Business

I.1.

1/26/2021

Subject:

Legislative Intent and Permission to Advertise Code Amendment RE: Chapter 62, Article VI, Zoning Regulations, Section #62-2118, Residential Boat Docks and Piers.

Fiscal Impact:

None

Dept/Office:

Planning and Development

Requested Action:

It is requested that the Board grant legislative intent and permission to advertise a code amendment to Chapter 62, Article VI, Zoning Regulations, Section #62-2118, Residential Boat Docks and Piers, to establish more consistent points for measuring dock projection and creating a riparian clear area between residential docks.

Summary Explanation and Background:

On October 27, 2020, the Brevard Board of County Commissioners directed Planning and Development staff to draft a report with proposed code revisions to address dock-related issues throughout the County. The attached staff report addresses two specific issues relating to docks: 1) the landward measurement point for a dock, and 2) clear riparian zones between docks.

The landward measurement point for a dock: The code does not contain a clearly defined point from which a dock's projection into a waterway is measured. Currently, code section 62-2118, states "no boat dock, covered boat dock or pier, together with the watercraft being moored at the structure, shall project into a manmade waterway more than 20 percent of the width of the waterway or 30 feet, whichever is less, including pilings." The code also defines a dock as, "a platform extending from a seawall or the shore which is used to secure or provide access to boats. . ." Since the code does not identify the measurement point, there have been different interpretations of the measurement point over the years which have created inconsistencies with dock projection. A potential solution for the Board's consideration would be to amend the code to establish clearly defined measuring points that take into consideration the lot line and its relationship to the shoreline of the waterway.

Clear riparian zones between docks: Currently, the Code requires docks and pilings maintain 7.5 ft. setback from side lot lines. However, it does not contain provisions that provide a clear area which prevents the placement of navigation obstruction (e.g., mooring boats/watercraft, crab/fish traps, etc.). A potential solution for the Board's consideration would to amend the code to establish clear zones that coincide with current setbacks or increase the setback distance from 7.5 ft.

Options for Board consideration:

- 1. Direct staff to draft code amendments to establish clearly defined measuring points that takes into consideration the lot line and its relationship to the shoreline of the waterway, and to establish clear zones that coincide with current setbacks.
- 2. Direct staff to draft code amendments to establish a clearly defined measuring points that takes into consideration the lot line and its relationship to the shoreline of the waterway, and increase the setback distance from 7.5 ft.
- 3. Provide alternative direction.

It should be noted that the County's Code only applies to dock constructed in canals, public drainage easements and drainage right-of-way's in residential zoning classifications in unincorporated areas of Brevard County. Docks constructed at properties along major waterbodies, such as the Indian River Lagoon and Banana River Lagoon, are regulated and permitted by the State (Florida Department of Environmental Protection and/or the St. Johns River Water Management District), although the County does permit electrical and other improvements associated with these docks.

Clerk to the Board Instructions:

None.



BOARD OF COUNTY COMMISSIONERS

TO:	Brevard County Board of County Commissioners

- FROM: Tad Calkins, Director Planning and Development
- **DATE:** January 26, 2021
- **SUBJECT:** Dock Related Issues Staff Report (Point for Measuring Dock Projection and Clear Riparian Area between Docks at Residential Properties

BACKGROUND: On October 27, 2020, the Brevard Board of County Commissioners directed Planning and Development staff to draft a report with proposed code revisions to address dock-related issues throughout the County. Dock construction in canals, pubic drainage easements and drainage right-of-ways in residential zoning classifications in unincorporated areas of Brevard County is subject to County code Section 62-2118 and requires a building permit. Docks constructed at properties along major waterbodies, such as the Indian River Lagoon and Banana River Lagoon, are regulated and permitted by the State (Florida Department of Environmental Protection and/or the St. Johns River Water Management District). During the past year, ninety-five (95) dock permits and two (2) dock variances were processed by the Planning and Development Department. Additionally, one hundred twenty-nine (129) seawall/bulkhead construction permits and seven (7) Surface Water Permits for revetments were issued in 2020.

In recent months, two specific issues relating to docks have been brought to staff's attention: 1) How manmade waterways are measured, which affects dock length allowance and projection into a waterway; and 2) How clear riparian zones between docks at residential property lines are established.

1. **MEASUREMENT OF MANMADE WATERWAY:** Current County code requires that "no boat dock, covered boat dock or pier, together with the watercraft being moored at the structure, shall project into a manmade waterway more than 20 percent of the width of the waterway or 30 feet, whichever is less, including pilings" Ch 62-2118 (d)(3). In addition, docks are defined as "a fixed or floating structure, including moorings, used for the purpose of berthing buoyant vessels either temporarily or indefinitely" Ch 62-3661.

Issue: Location of landward measurement point is not defined in the current code which may result in conflicting interpretations and confusion regarding measuring the width of manmade waterbodies as well as measuring the length of dock projections into waterways. Three potential landward measurement points have been identified:

• At the property line abutting the waterway, as established by a recorded instrument (plat, deed, etc.)

- ADVANTAGE: A plat is a legal recorded document that is readily available and provides a static measurement point that ensures consistency for application of this code.
- > DISADVANTAGE: Some property plats extend into or across the waterway (Refer to Figure 1).
- At the elevation of land-water interface, i.e., the SUL (safe upland line), the OHWL (ordinary high water line), or the MHWL (mean high water line)
 - > ADVANTAGE: The SUL, OHWL, and MHWL can be determined by a survey.
 - DISADVANTAGE: The land-water interface may not provide a consistent measuring point without survey as water levels can vary spatially and temporally. Water levels in Brevard County can fluctuate seasonally (high-water and low-water seasons).
- o At the face of bulkhead or seawall, if present
 - > ADVANTAGE: Easily identifiable measuring point.
 - DISADVANTAGE: Variable measurement point from property to property as seawalls may exist up to 48 inches waterward of property line. Refer to Section 62-3666 (8)c.iii of the Surface Water code, "If an existing bulkhead cannot be removed due to safety, structural, or other environmental concerns, the waterward extension of the new bulkhead, where practicable, shall meet the least waterward extension of these criteria:
 - a) Shall not exceed a maximum of 18 inches from the existing waterward bulkhead face, except where otherwise permitted by FDEP.

b) Shall be located parallel and in line with adjacent existing and legally permitted bulkheads.

c) A bulkhead shall not extend further than 48 inches into a canal as recorded in the public records.



Figure 1. View of potential measuring points

A review of the Code of Ordinances of twenty (20) municipalities and counties throughout the state of Florida did not disclose a universally common landward measuring point; however, waterline, seawall/bulkhead line, and property line were all referenced as points of measurement, either singularly or in combination. Approximately one-third (1/3) of the entities did not reference a point for measuring dock projection. Refer to Table 1 in Attachment A – Comparison of Dock Code throughout Florida.

Measurement of Manmade Waterway Considerations:

- Option 1 Amend code to establish clearly defined measuring point that takes into consideration aforementioned scenarios.
- Option 2 Amend code per other Board direction
- Option 3 No changes to code at this time
- 2. ESTABLISHING CLEAR RIPARIAN ZONES BETWEEN DOCKS: Current County code requires that "a boat dock, covered boat dock or pier, including pilings, shall extend no closer than seven and one-half feet to the side property line, as projected in a straight line into the waterway." Ch 62-2118 (d)(2)

Issue: Current code provisions do not provide clear area that prevents the placement of navigation obstruction (e.g., mooring boats/watercraft, crab/fish traps, etc.) which are not considered to be regulated by setbacks. See *potential* scenario depicted in Figure 2 below. Two possible options to establish a clear riparian area between docks at residential properties have been identified:

- Establish clear zone including but not limited to moored watercraft or other obstructions to coincide with side setback requirements
 - > ADVANTAGE: Establishes a minimum 15 ft clear area between residential lots for navigation.
 - DISADVANTAGE: Some number of existing docks with moored watercraft and/or other marine improvements (e.g., pilings) may not meet 15 ft clear riparian area between docks and may require alternate mooring location, modification to dock structure, or variance to meet code.
- o Increase side setback distance requirements for docks (currently 7.5 ft)
 - > ADVANTAGE: Increases distance between dock structures to >15 ft.
 - DISADVANTAGE: Does not prevent a moored watercraft from encroaching into setback area. Additionally, some number of existing docks may not meet setback and would require modification to dock structure or variance to meet code requirements.

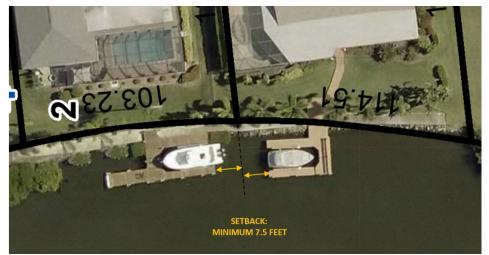


Figure 2. Potential scenario for illustrative purposes only (not to scale) of watercraft encroachment into setback.

Approximately 60% of the Code of Ordinances reviewed (refer to Table 2 in Attachment A - Comparison of Dock Code throughout Florida) include language in their dock code to ensure an area clear from moored watercraft encroachment and/or to provide protection of encroachment upon the riparian rights of other property owners.

In addition, the dock code comparison provided as Table 2 in Attachment A (Comparison of Dock Code throughout Florida) shows side setback requirements for docks range from 5 feet to 25 feet, with the 10 feet as most common (20% of entities). Approximately 25% of entities require same side setbacks for docks as set for zoning district.

Establishing Clear Riparian Zone between Docks Considerations:

- o Option 1 Amend code to include a clear zone that coincides with side setback requirements for docks
- o Option 2 Amend code to increase side setback distance requirements for docks
- Option 3 Amend code per other Board direction
- Option 4 No changes to code at this time

Thank you.

2 Enclosures:

- 1. Attachment A Comparison of Dock Code throughout Florida
- 2. Attachment B Dock and Property Line Scenarios

ATTACHMENT A - Comparison of Dock Code throughout Florida

Staff reviewed the Code of Ordinances of twenty (20) municipalities and counties throughout the state of Florida to compare with current Brevard County code regarding dock related issues (point for measuring dock projection and clear riparian area between docks at residential properties). A comparison matrix of findings is provided as Table 1 below. A summary of code references regarding dock related issues is provided as Table 2.

	No reference	MHWL	MLW	waterline	Seawall / bulkhead	Property line / lot line	Point of installation
1. Brevard County	Х						
2. City of Cocoa Beach	Х						
3. City of Indian Harbor Beach		Х					
4. City of Palm Bay				Х			
5. City of Melbourne				Х			
6. City of Satellite Beach		Х					
7. Volusia County	Х						
8. Indian River County			Х				
9. Orange County	Х						
10. Town of Lantana		Х			Х		
11. Town of Manalapan			Х		Х		
12. Village of Royal Palm Beach				Х	Х		
13. City of Crystal River		Х					
14. Town of North Palm Beach						Х	
15. City of Vero Beach			Х				
16. City of Stuart	Х						
17. City of Palm Coast	Х						
18. Charlotte County		Х					Х
19. City of Marco Island					Х	Х	
20. City of Cape Coral				Х			
21. City of Jupiter	Х						
TOTAL	7	5	3	4	4	2	1

Table 1. Types of Dock Projection Measurement Points referenced in various Code of Ordinances

 Table 2. Summary table of code references regarding dock related issues

	Measurement points – waterway and/or dock projection	Setbacks - side	Moored watercraft setbacks and/or clear zone requirements
Brevard County	no code reference	A boat dock, covered boat dock or pier, including pilings, shall extend no closer than seven and one-half feet to the side property line, as projected in a straight line into the waterway. Where two abutting properties sharing canal frontage submit concurrent permits for dock structures, there is no minimum side setback from the shared property line for each property owner. Sec. 62-2118 (d)(2)	no code reference
City of Cocoa Beach	 The width of any waterway shall be determined by either of the following methods: 1) As indicated on a survey. 2) As determined from an aerial map using data provided by the Brevard County Property Appraiser. Section 3-28 D.2.a 	Side setbacks for any waterside accessory structure shall be twenty (20) percent of the lot width or a minimum of fifteen (15) feet from any side property line, whichever is greater. The property width shall be measured along the rear property line. <i>Section 3-28 D.2.e</i>	If a waterside vehicle is docked or moored within fifteen (15) feet of the side property line, it shall be done so in such a manner that does not significantly impede docking or mooring at an adjacent property. <i>Section 3-</i> <i>28 D.2.g.(4)</i>
City of Indian Harbor Beach	Length of a dock or pier shall mean the distance from the mean high water line at the landward end or landward side of such dock or pier to that point on the dock or pier nearest the center of the waterway in which such dock or pier is located. <i>Sec. 19.(b)(9)</i> Width of an artificial waterway shall mean the distance measured perpendicular to the centerline of	A boat dock, covered boat dock or pier, including pilings, shall extend no closer than to the side property line of the parcel or lot on which such dock or pier is located or parcel boundary line than the minimum side yard distance established in the zoning district in which such lot or parcel is located as projected in a straight line into the waterway. Sec. $19.(d)(2)$	no code reference

	Measurement points – waterway and/or dock projection	Setbacks - side	Moored watercraft setbacks and/or clear zone requirements
	such artificial waterway from the mean high water line on one side thereof to the mean high water line on the opposite side thereof. If either shore of an artificial waterway consists of a bulkhead the width of such waterway shall be measured from the bulkhead. Sec. 19.(b)(13)		
City of Palm Bay	WIDTH OF WATERWAY. The distance measured perpendicular to the centerline of such waterway from the mean or ordinary high water line on one shore thereof to the mean or ordinary high water line on the opposite shore thereof. If either shore consists of a bulkhead or seawall, the width of such waterway shall be measured from the seawall or bulkhead. § 170.140(A)	No piers, docks, or boathouses shall be constructed so as to encroach upon the riparian rights of other property owners. § 170.142	no code reference
	Length. Piers, docks and boathouses, alone or together in combination to include the boat, boat mooring spaces and pilings, shall not project into a waterway more than thirty three percent (33%) of the minimum width of the waterway or two hundred fifty (250) feet, whichever is less, measured from the point at which the pier, dock or boathouse is proposed to be extended into the waterbody. § 170.140(D)		

	Measurement points – waterway and/or dock projection	Setbacks - side	Moored watercraft setbacks and/or clear zone requirements
City of Melbourne	Length—Marine facilities, alone or together in combination to include the boat, boat mooring spaces and pilings, shall not project into a waterway more than 20 percent of the minimum width of the waterway or 250 feet, whichever is less, measured from the point at which the marine facility is proposed to be extended into the water body. The minimum width of the waterway is determined by establishing a line perpendicular to the shoreline at the point of origin of the marine facility and creating two 45-degree radials off the perpendicular line at the point of origin. Each of the 45- degree radials shall be extended until intersecting with another shoreline at which point they shall be connected with a line creating a 90-degree zone of intersection. The shortest distance between shorelines within this 90-degree zone of intersection shall be established as the minimum width of the waterway. Sec. 2 (F)(2)(a)	A side yard setback shall be required for all marine facilities together or in combination to include boat mooring spaces and pilings. Side yard setbacks shall be equal to the side setback of the zoning district in which the marine facility is located or 7.5 feet, whichever is greater. Lot lines shall be extended into the waterway for purposes of the measurement. Sec. 2 (F)(2)(a)	Regardless of setbacks, no marine facility shall be constructed so as to encroach upon the riparian rights of other property owners, unless said riparian property owner shall consent in writing in form and substance acceptable to the city attorney to such encroachment. <i>Sec. 2 (F)(2)(a)</i>

	Measurement points – waterway and/or dock projection	Setbacks - side	Moored watercraft setbacks and/or clear zone requirements
City of Satellite Beach	Structures shall not extend into the water more than 20 feet or 20 percent of the canal's width, measured at mean high water, whichever is less except mooring piles on the Grand Canal may extend into the water no more than 30 feet. Sec. 30-525(a)	Every portion of any structure set forth in section 30-524 shall be set back at least ten feet from the extended side-yard property line. <i>Sec. 30-525(b)</i>	Boats shall maintain a five-foot setback from the extended side- yard property line. Sec. 30-526(b)
Volusia County	The dock area shall not exceed 750 square feet, including any boathouse, but excluding walkway extensions into the water. The area of a boathouse is the square footage under roof. Walkways shall not exceed eight feet in width. Sec. 72-278(1)	No dock shall be permitted within 15 feet of any side lot line, or its extension into the water. Sec. 72-278(5)	no code reference
Indian River County	Docks, including tie-off piles, mooring or dolphin poles, and public piers shall not project outward from the shore more than twenty-five (25) percent of the width of the waterway at a point where they are located. The outward projection of a dock and associated structures shall be measured from the water's edge at mean low tide. Section 932.07(3)(b)1.	Riparian side yard setback encroachment prohibited. No dock, pier, boat shelter or other waterfront structure may encroach on a required riparian side yard setback as extended waterward for the zoning district in which the project is located, unless such an encroachment is necessary for the utilization of riparian rights. <i>Section 932.07(4)</i>	No portion of a watercraft moored at such boatslip shall project into the extended riparian side yard setback, unless necessary to allow the utilization of riparian rights. <i>Section 932.07(2)</i>
Orange County	The dock shall extend only to the point where reasonable water depth for vessel mooring is achieved. <i>Sec. 15-342(a)</i>	no code reference	The dock shall not adversely affect the rights of other persons and property owners' use of, and access to, the water body. <i>Sec.</i> <i>15-342(a)</i>

	Measurement points – waterway and/or dock projection	Setbacks - side	Moored watercraft setbacks and/or clear zone requirements
Town of Lantana	The length of a dock or pier extending from the shore into any water shall not exceed twenty-five (25) percent of the width of the water body at the specific location of construction . However, regardless of the width of the water body, no dock shall exceed one hundred (100) feet in length as measured from the bulkhead line or mean high water line <i>Sec. 23-134(a)(2)</i>	No pier or dock or mooring pilings extending from the shore shall be closer than twenty-five (25) feet from the joint property lines of immediately adjoining property owners, except with the written consent of such adjoining property owners; If the dock is a marginal dock (parallel and immediately adjacent to a bulkhead), the setback restriction shall be ten (10) feet. Sec. 23- 134(a)(5)	no code reference
Town of Manalapan	No dock shall project waterward more than necessary (evidenced by bathymetric surveys) to reach a terminus and mooring area located in a water depth of three (3) feet of water at mean low water (MLW), or more than eighty (80) feet from any lot or lot of record or seawall, whichever is less . § - 151.063(B)(1)	No dock or portion of a dock, including any of its dolphin piling, shall be located closer than twenty-five (25) feet to any other dock or portion thereof or any of its dolphin pilings or to any other lot or lot of record to which such dock is not accessory or to the closest portion of the side lot lines of the lot or lot of record from which the dock projects or the waterward projection or extension of such side lot lines. § - $151.063(B)(12)$	No portion of any docked boat, ship or water vessel shall project closer than twenty-five (25) feet to the closest portions of the side lot line of any lot or lot of record to which such dock is accessory or the waterward projection or extension of such side lot lines or closer than twenty-five (25) feet to any lot or lot of record to which such dock is not accessory. § - $151.063(C)(2)$
Village of Royal Palm Beach	Docks shall extend a maximum of five (5) feet out from the face of the bulkhead wall or from the edge of the water body. In no instance shall any structure extend more	For construction water side of any lot on the water body, a dock shall not be placed within ten (10) feet of the side property line extended;	no code reference

	Measurement points – waterway and/or dock projection	Setbacks - side	Moored watercraft setbacks and/or clear zone requirements
	than twenty (20) percent of the width of the water body; <i>Sec.</i> 7-18(b)(2,3)	Sec. 7-18(b)(1)	
City of Crystal River	No dock shall extend waterward of the mean high water line more than two hundred (200) feet over sovereign , submerged land or more than twenty-five (25) percent of the width of the waterway at that particular location, whichever is less. Sec 5.01.07(M)	All boat docks, boat davits, boat lifts, boathouses, and boat covers shall comply with any applicable side yard setback. Such side yard setback shall be measured from the extension of the side lot line into the water, perpendicular to the shore line, at the point where the side lot line intersects with the mean high water line. Sec 5.01.07(J)	Boats stored on such structures shall not protrude beyond the side yard setback. Such side yard setback shall be measured from the extension of the side lot line into the water, perpendicular to the shoreline, at the point where it intersects with the mean high water line. Sec 5.01.07(K)
Town of North Palm Beach	Docks shall extend a maximum of five (5) feet waterward from the rear property line. <i>Sec. 5-84(5)</i>	In regard to construction waterside of any lot having fifty- foot or less frontage on the water, docks shall not be placed within five (5) feet of the side property line extended. In regard to construction waterside of any lot having greater than fifty-foot frontage on the water, docks shall not be placed within ten (10) feet of the side property line extended. <i>Sec. 5-84</i>	no code reference
City of Vero Beach	Docks may extend into a waterway a maximum of 20 percent of the width of the waterway.	Docks shall be setback a minimum of 15 feet from side property lines. Sec. 31.05(a)(5)	Forty percent (20 percent either side of the centerline) of the width of the waterway shall remain unobstructed by docks,

	Measurement points – waterway and/or dock projection	Setbacks - side	Moored watercraft setbacks and/or clear zone requirements
	Sec. 31.05(a)(3) For the purposes of this section, measurements shall be from the mean low water mark. Sec. 31.05(a)(6)		mooring or dolphin poles, or moored boats. <i>Sec. 31.05(a)(1)</i>
City of Stuart	Docks on canals and creeks shall not extend from the shoreline waterward more than 25 percent of the canal width measured at the narrowest point of the canal adjacent to the lot Sec. 10-171(d)	All residential docks or piers shall be set back a minimum of five feet from both the riparian and side property lines, and shall not impair the use of existing or future dockage, because of proximity. Sec. 10-171(a)	All residential docks or piers shall be set back a minimum of five feet from both the riparian and side property lines, and shall not impair the use of existing or future dockage, because of proximity. Sec. 10-171(a)
City of Palm Coast	The length of all docks, inclusive of all components, shall not exceed 65 percent of the property frontage along the canal. <i>Sec.</i> <i>4.01.05.C.3.b</i>	The minimum setbacks from a projection of the side property line to the structure shall be a minimum of ten feet. <i>Sec. 4.01.05.C.3.a</i>	The size of the vessel and location of adjacent docks shall be considered to ensure that the vessel does not interfere in any manner with the navigation of ingress and egress. <i>Sec.</i> <i>4.01.05.C.3.b</i>
Charlotte County	On manmade bodies of water, such structures shall not extend further seaward than twenty-five (25) percent of the open water span or twenty-five (25) feet from the mean high waterline or seawall at the point of installation, whichever is less. <i>Sec. 3-9- 65(b)(2)</i>	Boating structures are required to meet the minimum side yard requirement set forth in the zoning district in which the property is located <i>Sec. 3-9-65(a)(4)</i>	no code reference

	Measurement points – waterway and/or dock projection	Setbacks - side	Moored watercraft setbacks and/or clear zone requirements
City of Marco Island	Protrusion shall be measured from the face of the seawall. On lots where the property line extends into the water, the protrusion shall be measured from the property line. Sec. 54- 111(a)(4) The platted width of the waterway shall be defined by the recorded plat. Sec. 54-111(a)(5)	Boat docking facilities shall have side yard setbacks equivalent to 15 percent of the seawall length, as measured along the waterfront and from each applicable riparian line. a. The minimum required setback shall be seven and one-half feet. b. The maximum required setback shall be 15 feet Sec. 54-111(b)(1)	The setback shall apply to that portion of the boat dock facility and moored vessel waterward of the property line. <i>Sec. 54-</i> <i>111(b)(1)d.</i>
City of Cape Coral	Marine improvements may extend 25% of the calculated waterway width or 40 feet, whichever is less, as measured from the water frontage line <i>Section 5.4.3A.1</i>	Marine improvements are setback 12 feet from each extended side property line. Section 5.4.3A.1	no code reference
City of Jupiter	Docks which are located on or upon any manmade surface waters (i.e., lakes, retention ponds, or canals), boundaries of such manmade 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 Sec. 27-2626(b)(2)	No dock, boat lift mooring space, mooring piling, davit, other mooring facility, or floating structure (i.e., dock, walkway, floating vessel platform, 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. Sec. 27-2626(b)(6)	boats may be moored without a setback to the extensions of a property's side property line, but no part of the boat shall overhang the vertical plane created by a side property line's extension into the waterway or canal. Sec. 27-2626(b)(6)

Attachment B

Scenarios of Dock and Property Lines

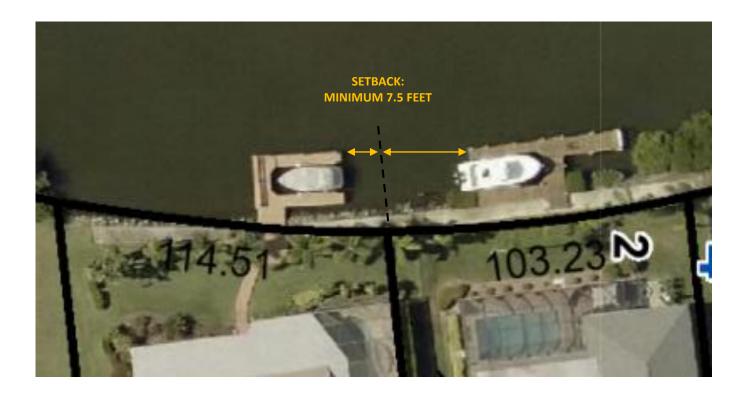
Example scenario showing possible measuring points



Example scenario (altered photo)



Example scenario showing setback area



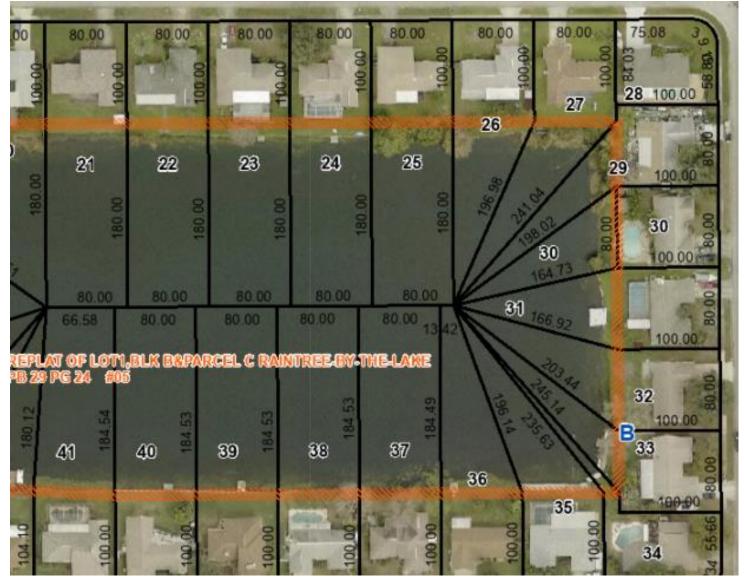
Example scenario showing setback area



Example scenario showing vessel encroachment into setback area



Special situations to consider: Property lines extend into waterbody



Special situations to consider: Property lines extend into waterbody



Special situations to consider: Property lines do not extend to waterline



Special situations to consider: End of canals and corner lots



Special situations to consider: End of canals and corner lots



Special situations to consider: End of canals and corner lots

