



 **Balancing manatee protection zones and boating access in western Pinellas County**
November 2014
Florida Fish and Wildlife Conservation Commission
Division of Habitat and Species Conservation

Version 2

Version 2 deleted two slide pages and made some minor edits to fonts and spacings.

Today we bring a draft rule proposal for manatee protection zones in western Pinellas County. I will provide some background information on our efforts to ensure long term manatee protection with strong consideration of impacts to waterway users. Striking the right balance of conservation and use is our main intent.

Manatees listed as endangered on both federal and state lists



The Florida manatee is one of two subspecies of the West Indian manatee and is native to Florida based on 45 million year old fossil records. The other subspecies is the Antillean manatee that ranges from Brazil to Mexico, including the Caribbean islands. The Florida manatee is found in the southeastern United States, with the core of its range in Florida.

Adult manatees are typically 9-10 feet long and weigh around 1000 pounds but may grow to over 13 feet and weigh more than 3500 pounds. Manatees are herbivores and are also called "sea cows." They typically spend up to eight hours a day grazing on seagrasses and other aquatic plants.

The most recent minimum count was 4824 (in January 2014). While this is substantially more than were seen 10-20 years ago and a positive sign for manatees, manatees are susceptible to high mortality from both natural and man-made causes. There was very high mortality in two recent years, in 2010 (766) and 2013 (830), largely related to cold weather and red tide.

Manatee Protection Laws

Federal:

- Marine Mammal Protection Act 1972
- Endangered Species Act 1973

State:

- First protected by law in 1893
- Florida Manatee Sanctuary Act (1978)
- Chapter 379 Florida Statutes
- Law is implemented by rules in 68C-22 F.A.C.



The federal Endangered Species Preservation Act of 1966 first listed manatees as an endangered species. Further federal protection was implemented under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973.

Manatee protection in Florida began in 1893 when state law prohibiting the hunting of manatees was established. In 1907, Florida state law imposed a fine of \$500 and/or six months' imprisonment for killing or molesting a manatee.

The Florida Manatee Sanctuary Act was enacted by the Florida Legislature in 1978. Designates the entire state a manatee sanctuary. The FWC authority for management actions comes from statutes and not the constitution, as it does with many other species. The statutes provide authority to adopt rules for boat speed and operation.

Program History

- Direction provided by Governor and Cabinet (1989)
- Identified 13 “key” counties
- Federal litigation and settlement (2001)
- Formed Manatee Forum (2004)

Counties with Manatee Protection Zones

- 13 “Key” Counties
- Rules per settlement: Charlotte, Hillsborough, Manatee, & East Pinellas
- Reviewed under MMP: Flagler

Recognizing that manatee protection efforts needed more focus, the Governor and Cabinet directed Department of Natural Resources (DNR predecessor agency where the manatee program was previously located) to make recommendations to protect the manatee and its habitat and to make the state’s waterways safer for the boating public. Agency staff identified necessary actions to improve boating safety and manatee protection and provided it as a report entitled, “Recommendations to Improve Boating Safety and Manatee Protection for Florida Waterways.”

This report, approved by the Governor and Cabinet in October 1989, identified 13 high-priority counties requiring manatee protection. It directed the agency to focus on these “key” counties and establish countywide protection zones and various other activities.

By 1999 zones in all 13 counties were completed. In 2001, based on federal court litigation, a settlement agreement was reached and 13 areas were identified to evaluate for additional protection zones and several other actions. All settlement obligations were completed in June 2006.

In 2004, in an effort to reduce litigation and increase communication and understanding among the various manatee stakeholders the executive director of FWC and the Southeast regional director of the U.S. Fish & Wildlife Service worked together to form a manatee forum made up of equal representation of boating advocates and environmental advocates. The Manatee Forum provides an opportunity for staff to discuss upcoming actions and research projects and results as well as hear perspectives of the various stakeholders.

FWC Manatee Management Plan

- FWC blueprint for long-term manatee conservation
- Developed with extensive stakeholder input
- Supported for approval by the Manatee Forum
- Commission approved in 2007

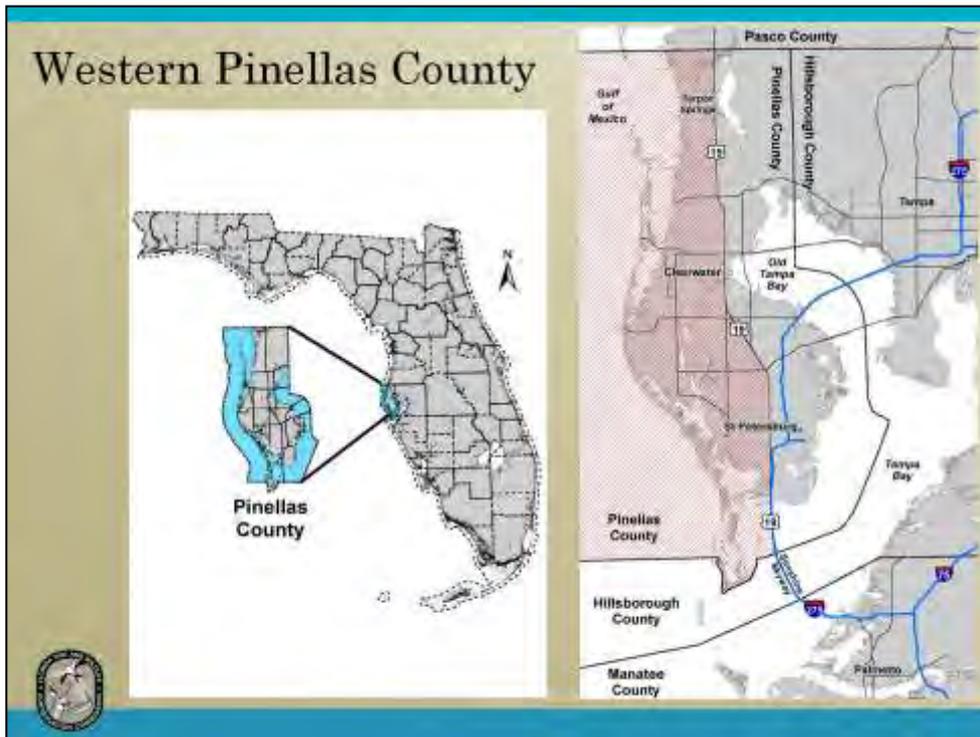
- One task is to evaluate remaining areas that might need zones
 - St. Johns County (2010) – No zones proposed
 - Flagler County (2012)
 - Western Pinellas County (ongoing)



The Manatee Management Plan (MMP) approved in 2007 is our blueprint for achieving and maintaining long term conservation of manatees. The Plan was developed over 18 months and included significant input from the public, NGOs and user groups. With regard to manatee protection zones, two tasks were identified: review existing rules using newer data to determine if changes are needed and review a few new areas to see if zones are warranted. So far we have completed reviews of two existing rules (in Sarasota County and Broward County) that resulted in minor changes. For new areas not previously evaluated for manatee protection, we have reviewed coastal St. Johns County and Flagler County and implemented new zones in Flagler County but not St. Johns County.

Of the places that have not been evaluated for manatee protection zones, western Pinellas County is the next area identified for review in FWC's plan.

Staff began reviewing data for this review in 2012 and today we are presenting recommendations for proposed zones. If directed to move forward, we will publish a Notice of Proposed Rule and gather public comment before bringing the rule back for final action at a Commission meeting in 2015.



This shows you the location of Pinellas County. The eastern (Tampa Bay) side of the county was evaluated in 2003-2004. The western side had never been evaluated by FWC.

Background

- Increasing risks related to boat collisions
 - 87% of boat-related deaths occurred since 2000
 - Pinellas County ranks 6th in the state for the number of boat-related deaths since 2000
- Boat facility permitting issues
- Evaluation of manatee use and risks
 - Manatee data collected in 2008-2010
 - Boating data collected in 2009



Review of western Pinellas County was included in the Manatee Management Plan because it was an important area for manatees that had never been evaluated and because staff noted increasing risks related to boat collisions. In the 26 years between 1974 and 1999, there had been only six boat-related deaths in western Pinellas County, whereas there were 39 boat-related deaths in the 13 years between 2000 and 2012.

The average number of boat-related deaths in western Pinellas County between 2000 and 2012 was six times greater than the average number for the 1990s. It also was about 3.5 times the average for eastern Pinellas County even though the two areas had almost equal averages for the 1990s. (All other deaths besides boat-related increased by a factor of 2.1 or less in each of the three Tampa Bay counties.) The six-fold increase in western Pinellas County is significantly greater than in any other area of the state, with the next highest increase being by a factor of 2.2.

More boat-related deaths have been documented in Pinellas County since 2000 than have been documented in all but five of the 13 key counties that were identified in 1989 as most in need of manatee protection. For the 2008-2012 period, Pinellas County exceeds all but four of the key counties. Western Pinellas County by itself exceeds all but five of the key counties for the 2008-2012 period. Pinellas County ranked behind all of the 13 counties for the 1980-89 period and behind all but one for the 1990-99 period.

Increasing risks have affected federal and state reviews of proposed boating facilities. In 2007, the USFWS issued a biological opinion stating that under currently existing conditions proposed projects in Boca Ciega Bay could not be authorized as the area was too risky.

Data compilation and analysis

- Preliminary analysis completed in Dec. 2012
- Reviewed various data including:
 - Manatee and boat distribution
 - Manatee mortality
 - Tagged manatee movements
 - Seagrass distribution and water depths
 - Boat facility locations
 - Sign posting consideration
- Greatest emphasis placed on review of manatee use and boating use



Our analysis focused on areas with high manatee use that also had significant boating use. These are critical factors in determining where manatees are most at risk of being struck by boats. Other factors and data also were considered, such as: manatee telemetry data; mortality data; water depth; habitat availability (e.g., seagrass); locations of existing zones, boat access facilities, and marked channels; sign-posting considerations; and issues related to overall zone complexity and the ease with which boaters would be able to understand the zones.

The process being used is consistent with the statutory authority, which calls for establishing zones where the best available information indicates they are needed to protect manatees from harmful collisions with boats, while providing lanes or corridors for higher speed boat operation whenever consistent with manatee protection needs.

All areas identified as potentially needing protection had relatively high manatee use, contained substantial seagrass, and/or exhibited relatively high manatee-boat spatial overlap. Most of the areas were proposed only during the warmer months rather than year-round. The intent was to minimize impacts on boaters while still providing appropriate protection to manatees and their habitat, being particularly mindful of limiting restrictions on the Intracoastal Waterway (ICW).

Manatee zones are proposed where the data supports the need for zones and we have proposed them over existing state boating safety zones and local zones in some locations because the other zones could be removed or modified in the future. In that case, we would want the manatee zones to still be present.

Review process

- Preliminary meetings and input
- Notice to Pinellas County January 2014
- Local Rule Review Committee (LRRC)
 - LRRC met 7 times
 - LRRC provided their response to FWC June 2014
 - Supported zones in 20 of the 21 areas identified, with some modifications suggested



Multiple meetings with County staff, USFWS, Law Enforcement, and others. Presentations to Barrier Islands Governmental Council (BIG C) and Agency on Bay Management. Several contacts with local and state elected officials.

Based on the preliminary data review and the input provided at multiple meetings, FWC staff identified 21 areas where zones might be warranted.

The statute requires FWC to notify a county where we are considering the need for protection zones. The county then identifies members of a Local Rule Review Committee (LRRC) which can be of any size as long as half are boat users/advocates and half are manatee advocates. This process ensures local input early in the process of developing potential zones.

FWC formally notified Pinellas County in January 2014 that potential zones were being considered and, as required by statute, the County then formed a 12-member Local Rule Review Committee (LRRC) in March 2014.

FWC staff provided the LRRC with data and other information and the LRRC met seven times between April 22 and June 4. The LRRC submitted its final report on June 18. By either unanimous or majority votes, the LRRC supported adding zones in 20 of the 21 identified areas. In nine of the areas, the LRRC position contained some modification to the potential zone suggested by FWC.

Review process

- FWC staff response to LRRC report August 2014

- Additional informal meetings
 - Tampa Bay Beaches Chamber of Commerce
 - City mayors and other elected officials
 - Area business owners

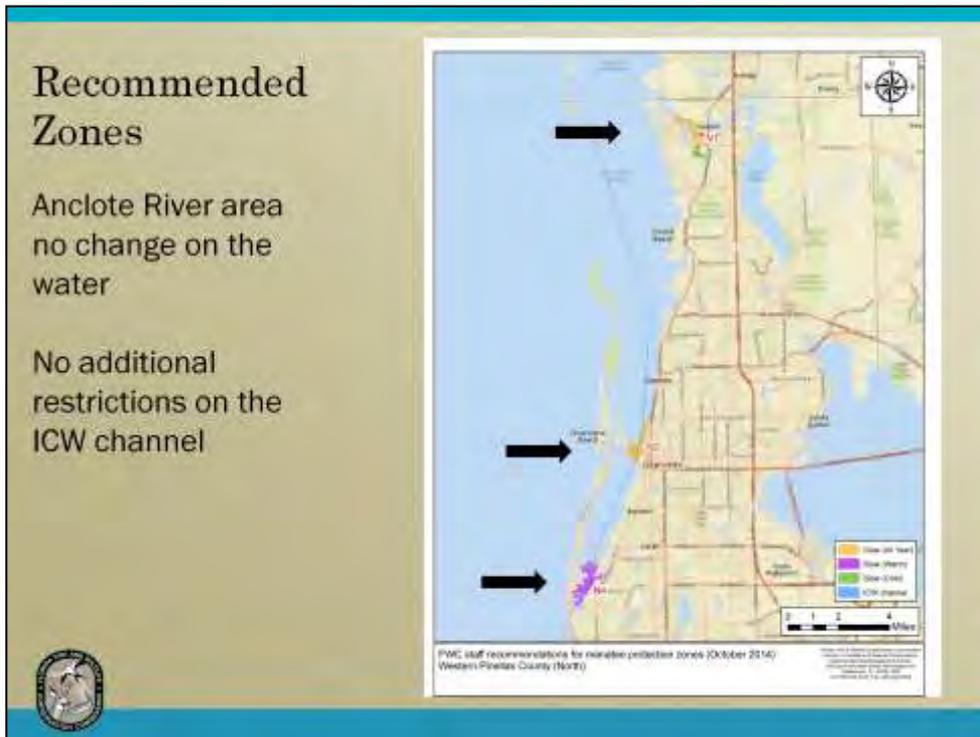
- Rule Development Workshop
 - September 25 in Treasure Island
 - 50-60 attendees from the general public, plus representatives from various agencies and legislators



FWC staff re-evaluated all areas in light of the LRRC recommendations and consulted again with USFWS and FWC Law Enforcement. The staff response to the LRRC report was sent to County staff in August. Staff concurs with the LRRC position (majority or unanimous) in 15 cases (some with small changes to simplify zone marking). In five of the other six cases, staff concurs with the LRRC position for most of the area. In one case, staff disagrees entirely with staff recommending no FWC zone where the LRRC supported one. The staff response to the LRRC report provides a discussion of each potential zone that was identified and the rationale for the FWC staff position.

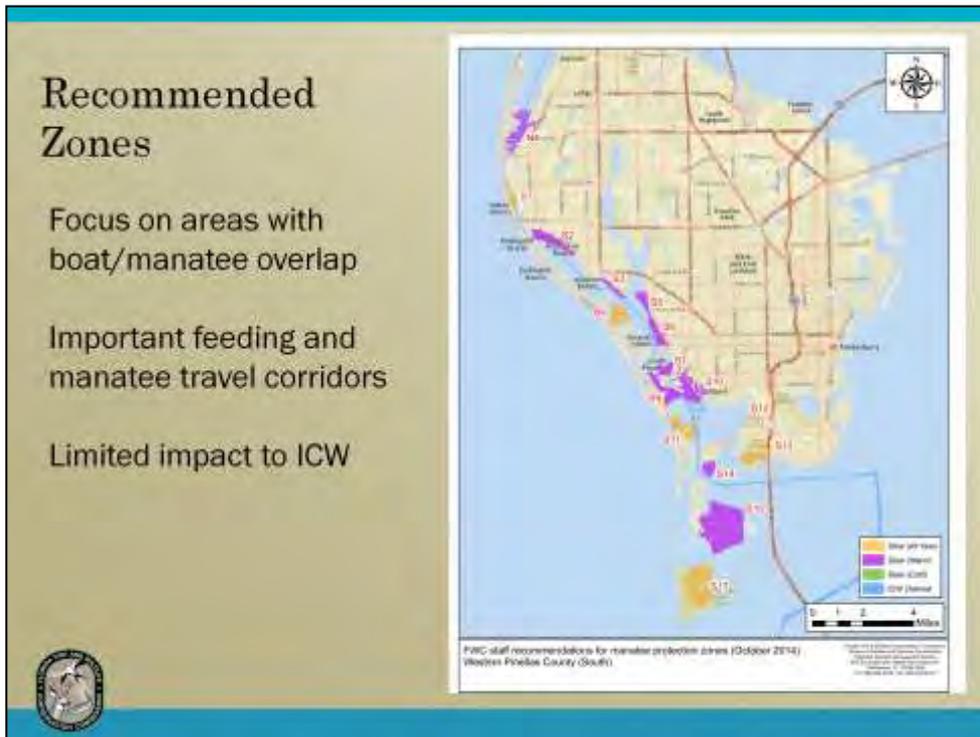
Since the FWC staff response to the LRRC report was sent to the County, staff has continued to meet with various local governments and interested parties. In early September, staff met with the Tampa Bay Beaches Chamber of Commerce and a legislator. The Chamber then assisted staff with arranging several other meetings and securing the venue for the public workshop.

Staff held a Rule Development Workshop in Treasure Island on September 25. Approximately 60 members of the public attended the workshop. Some attendees expressed concerns about specific zones or questioned the overall need to add protection. Other attendees expressed support for the staff recommendations or requested zones be added in other areas. No changes were made to the staff recommendations after the workshop but staff will re-evaluate all recommendations as the process moves forward.



This map shows the three areas in the northern section of western Pinellas County that are recommended for zones. Warm season zones would be in effect April through October. Cold season zones would be in effect November through March.

The zones in the Anclote River (Area N1) overlay more restrictive existing zones so there would be no on-water effect in this area. The same is true for a portion of the zone in the Clearwater area (N3) and a small portion of the area of Indian Rocks Beach (N4). The only portion of the Intracoastal Waterway (ICW) included in these zones is in the Clearwater area (N3) and it is already covered by the existing state boating safety zones.



This map shows the recommended zones in the southern section of western Pinellas County, where we are proposing most of the new zones. Warm season zones would be in effect April through October.

For a large portion of the zone in Johns Pass (S4) and small portions of areas, S2, S9, S12, and S13 these zones would have limited effect as existing zones are more restrictive.

The zone east of Tierra Verde (S15) overlays an existing (non-regulatory) caution zone.

Portions of the Intracoastal Waterway (ICW) included in these zones are already regulated as boating safety zones.

The most southern zone in the Fort De Soto area (Area S17) overlays more restrictive existing zones so there would be no on-water effect in this area.

Summary of recommended zones

- Size of protected area
 - Existing boating zones on approximately 14% of inshore waters in western Pinellas County
 - Recommended zones would add 8.2% more (total of 22% of inshore waters)
 - Most zones warm season only (April – October)
 - Half a mile of ICW included during warm season
- Amount of protection provided
 - Existing and new zones would cover about 22% of the inshore waters and capture over 62% of the manatee sightings



Areas recommended for inclusion in a proposed rule encompass 6,144 acres (11.6% of the 53,132 acres of inshore water in western Pinellas County). This total is 1,273 acres less than what was originally identified for review by the LRRC. Of the recommended areas, 4,339 acres (8.2% of inshore waters) would be newly protected (i.e., the remaining areas overlay more restrictive existing local or state zones). Existing zones encompass approximately 7,318 acres (13.8% of inshore waters). Including the new recommended areas, the total amount of area within zones would be 11,657 acres (22% of inshore waters).

Recommended areas include some year-round zones (2,413 acres – 942 of which would be newly protected), some warm season (Apr-Oct) zones (3,669 acres – 3,397 of which would be newly protected), and one cold season (Nov-Mar) zone (62 acres – all are already covered by existing zones). Of the 46.4 linear miles of Intracoastal Waterway (ICW) channel in Pinellas County, 8.2 linear miles are within existing year-round boating safety zones. The recommended zones would add 0.5 linear miles for manatee protection, but only during the warm season.

Stakeholder and Partner Engagement

- U.S. Fish and Wildlife Service (USFWS)
 - Supports recommended zones as the minimum level necessary
- Pinellas County
 - County staff provided letter of support for LRRC process and the FWC proposal
- Local Municipalities
 - City of St. Pete Beach requested we include a zone in Blind Pass
 - Informal input provided by several mayors and revisions made to address concerns
 - Public input received as well as from residents



FWC Law Enforcement has indicated the recommended zones could be marked and enforced and that the zones would not be expected to create any boating safety or navigation problems. USFWS has expressed support for the recommended zones but indicated they would be the minimum necessary to address its concerns about the need for zones in this area.

Pinellas County staff provided a letter of support for the FWC proposal and the LRRC process.

The City of St. Pete Beach on a unanimous vote requested that we include a warm season zone in Blind Pass. Also FWC staff has been in contact with several mayors who have expressed support for the zones in their jurisdictions. Changes were made earlier in the process to address many of the concerns that were raised. If staff is directed to proceed, we will reach out again to all local governments to determine if any have comments or concerns.

Requested Action

- Staff requests Commission approval to publish a Notice of Proposed Rule, and conduct at least one public hearing in Pinellas County



Staff requests Commission approval to publish a Notice of Proposed Rule in the Florida Administrative Register, with the proposed zones being those described in the staff response to the LRRRC report. If the Commission desires to overlay more of the existing boating safety zones (as recommended by USFWS) or add a proposed zone in Blind Pass (as recommended by the City of St. Pete Beach, staff will add those zones as appropriate.

Staff will conduct at least one public hearing in Pinellas County and collect other public comments on the proposal and then evaluate proposed changes based on public comments and other input provided during the comment period. Staff will then bring a recommended final rule back to the Commission for final action in 2015.

The following slides are back up material

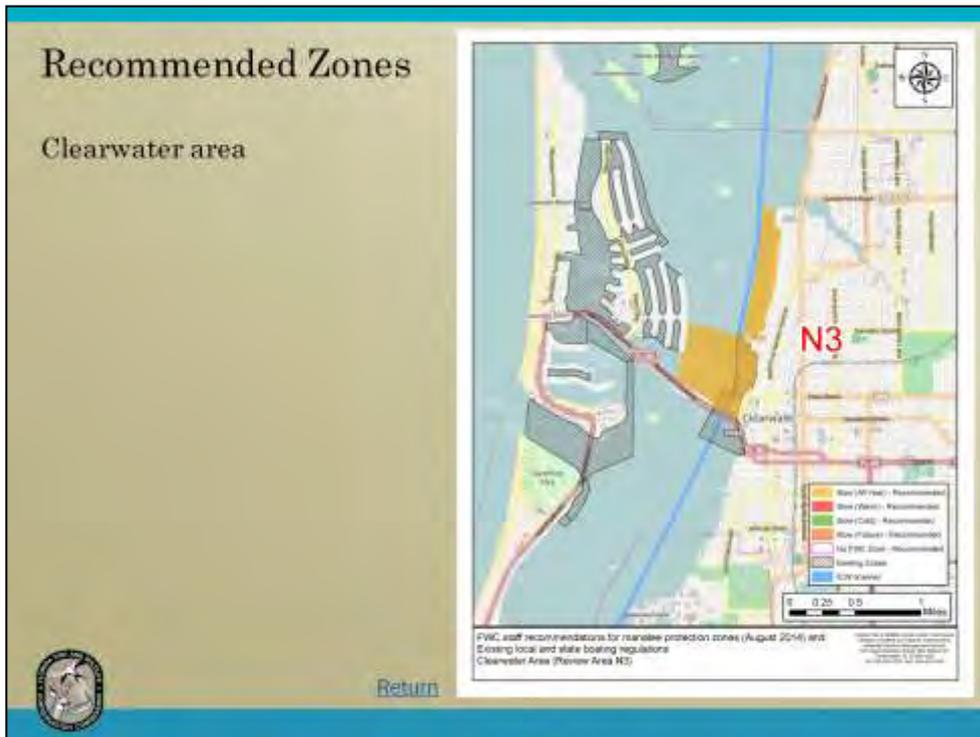




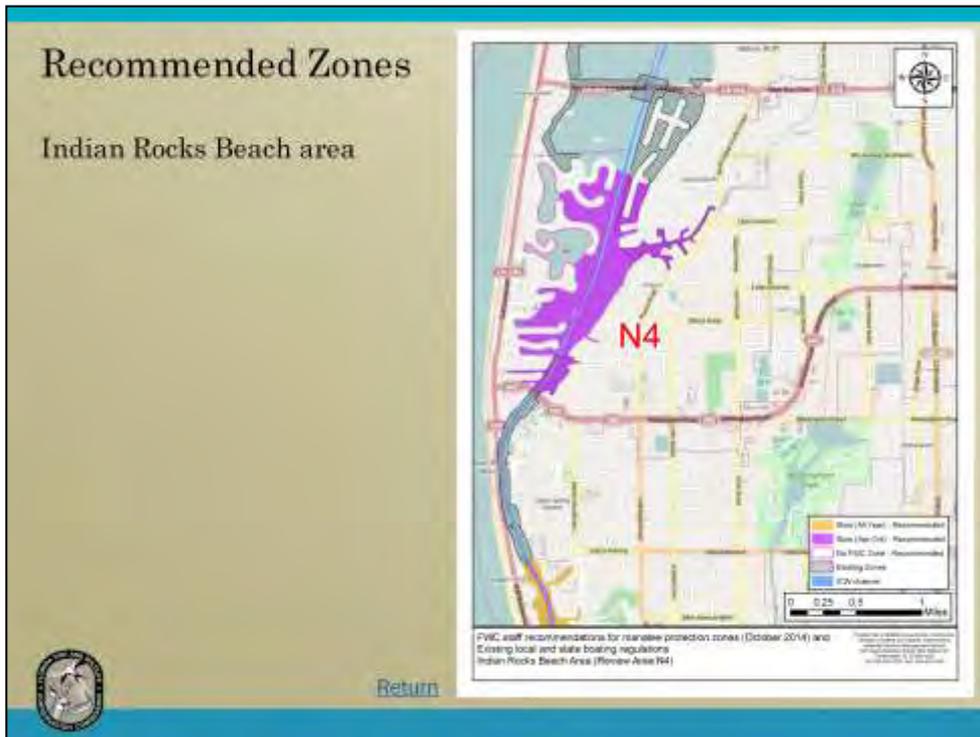
Staff recommendations for the Anclote River area:

Spring Bayou Area (N1): Add a year-round Slow Speed zone to overlay the more restrictive existing zones, including the adjacent section of the Anclote River, but with only a cold season zone in Whitcomb Bayou. These zones were supported by an LRRC majority.

Anclote River Mouth (N2): Add a year-round Slow Speed zone west of Area N1, but delay proposing this zone until zones in Pasco County are considered. Because this area is bisected by the boundary between Pinellas and Pasco counties, the zone cannot be added until an LRRC is convened for Pasco County. There is no timetable for when this could occur. This zone was unanimously supported by the LRRC, with the comment that it should be a priority of the FWC and Pasco County to address this issue.



Staff recommendation for the Clearwater area (N3): Add a year-round Slow Speed zone that partially overlays the existing boating safety zone. This zone was unanimously supported by the LRRC. The only portion of the ICW channel included within this zone is the 0.6 mile section that is already a part of the existing zone.



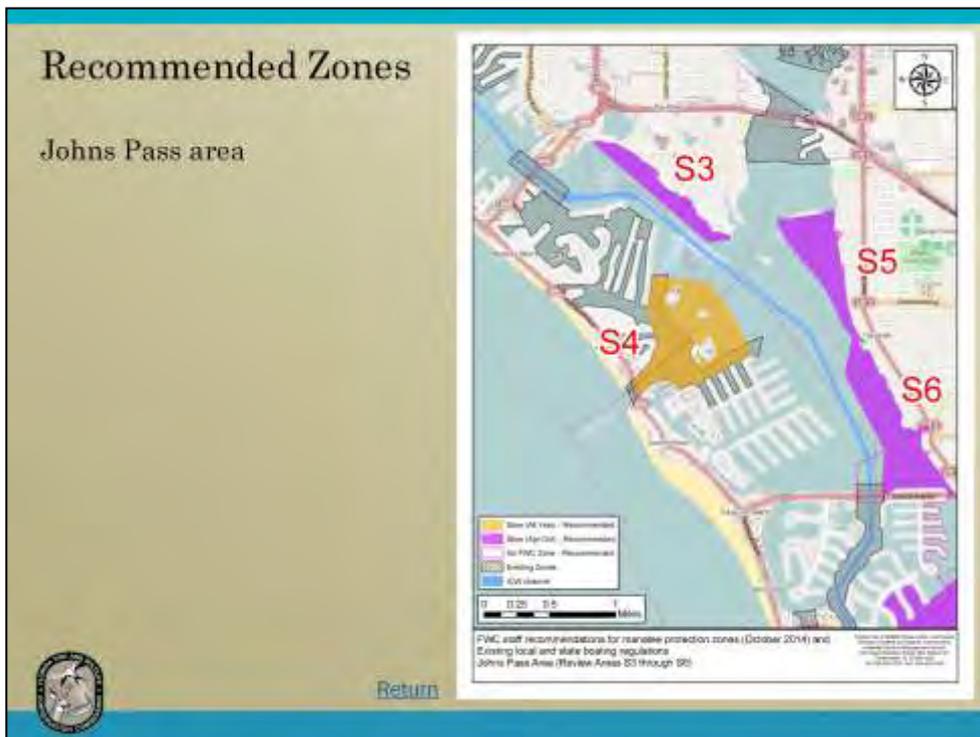
Staff recommendation for the Indian Rocks Beach area (N4): Add a warm season Slow Speed zone in most of the area outside of the ICW, with two historical water sports areas excluded. This zone was supported by an LRRC majority.



Staff recommendations for the Narrows / Redington Shores area:

Narrows (S1): Add a year-round Slow Speed zone with the ICW channel excluded. This zone was supported by an LRRC majority but with the ICW having a 25 mph limit rather than being excluded. Staff excluded the ICW (rather than recommend it for a 25 mph limit) at the suggestion of FWC Law Enforcement.

Redington Shores Area (S2): Add a warm season Slow Speed zone north of the ICW. The only portion of the ICW channel included in this zone is the 0.3 mile section that is already a part of the existing state boating safety zone. This recommended zone excludes an area at the southern end that the LRRC removed before unanimously supporting a zone in this area. To address concerns raised by one of the mayors, staff excluded some additional area north of the area the LRRC excluded.



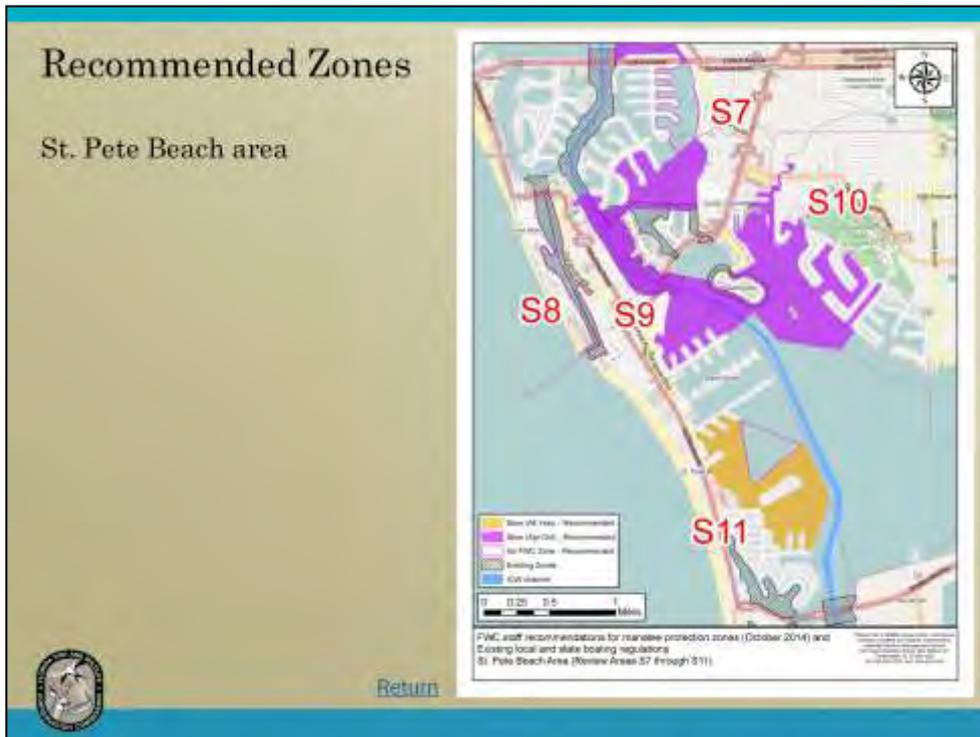
Staff recommendations for the Johns Pass area:

Bay Pines West (S3): Add a warm season Slow Speed zone. This zone was unanimously supported by the LRRC. Staff straightened the western boundary at the suggestion of FWC Law Enforcement (to simplify zone marking).

Johns Pass (S4): Add a year-round Slow Speed zone that partially overlays the existing local boating safety zones. This zone was unanimously supported by the LRRC.

Long Bayou South (S5): Add a warm season Slow Speed zone. This zone was unanimously supported by the LRRC.

Treasure Island Causeway North (S6): Add a warm season Slow Speed zone. The LRRC unanimously supported a zone in this area after excluding the originally identified area in and around the ICW and an east-west corridor immediately north of the causeway (extending to under the bridge in the southeast corner). The staff-recommended zone excludes the area in and around the ICW, as supported by the LRRC, but includes the east-west corridor as part of the zone. FWC Law Enforcement and USFWS support the staff recommendation. FWC Law Enforcement supports excluding the area in and around the ICW (to simplify zone marking) but not the east-west corridor (due to zone marking and boating safety concerns). USFWS has some concerns with excluding the area in and around the ICW but can support this exclusion. USFWS does not support excluding the east-west corridor.



Staff recommendations for the St. Petersburg Beach area:

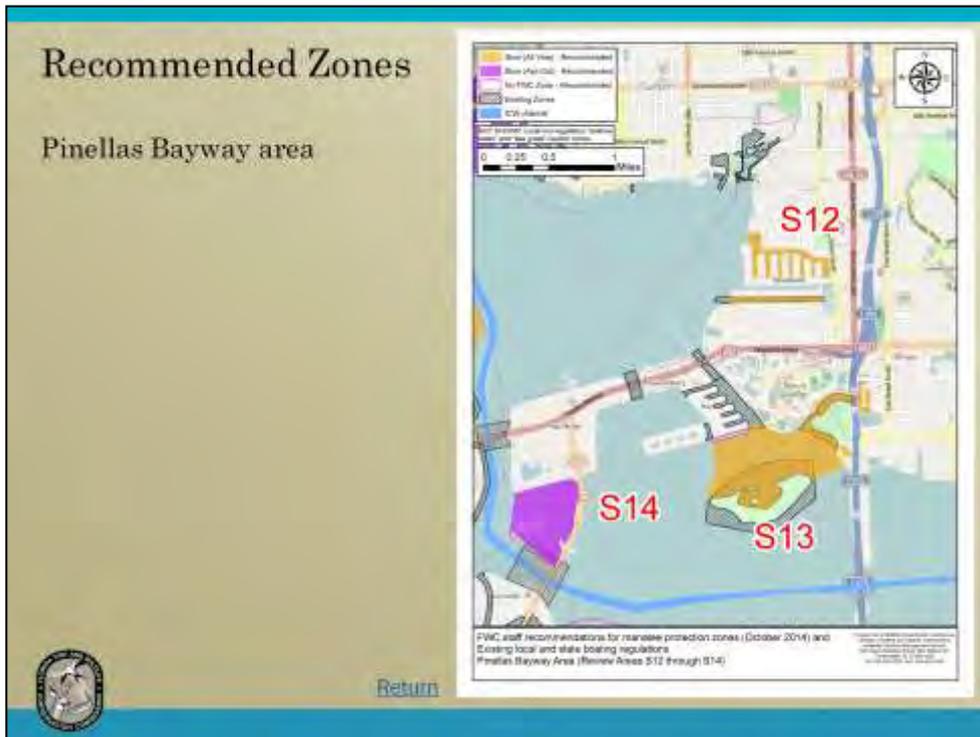
Treasure Island Causeway South (S7): Add a warm season Slow Speed zone. This zone was unanimously supported by the LRRC. Staff included the two basins in the northwest corner at the suggestion of FWC Law Enforcement (to simplify zone marking). These basins were not included in the zone supported by the LRRC.

Blind Pass (S8): No FWC zone. The LRRC unanimously supported a warm season zone, as was included in the preliminary proposal. FWC Law Enforcement does not support a FWC zone in this area because of the existing year-round, weekend and holiday, local boating safety zone and how adding a FWC zone would affect zone marking. USFWS supports not having a FWC zone but believes something needs to be done to improve compliance with the local zones.

Pasadena Avenue Area (S9): Add a warm season Slow Speed zone that partially overlays the existing boating safety zone. The LRRC unanimously supported a zone in this area but with the ICW channel excluded south of the boating safety zone. The staff-recommended zone includes the 0.5 mile section of ICW south of the boating safety zone. USFWS strongly supports including the ICW south of the boating safety zone.

Pasadena Golf Club (S10): Add a warm season Slow Speed zone. This zone was unanimously supported by the LRRC.

Boca Ciega Isles (S11): Add a year-round Slow Speed zone that excludes the originally identified triangular area of deeper water. This zone was unanimously supported by the LRRC.

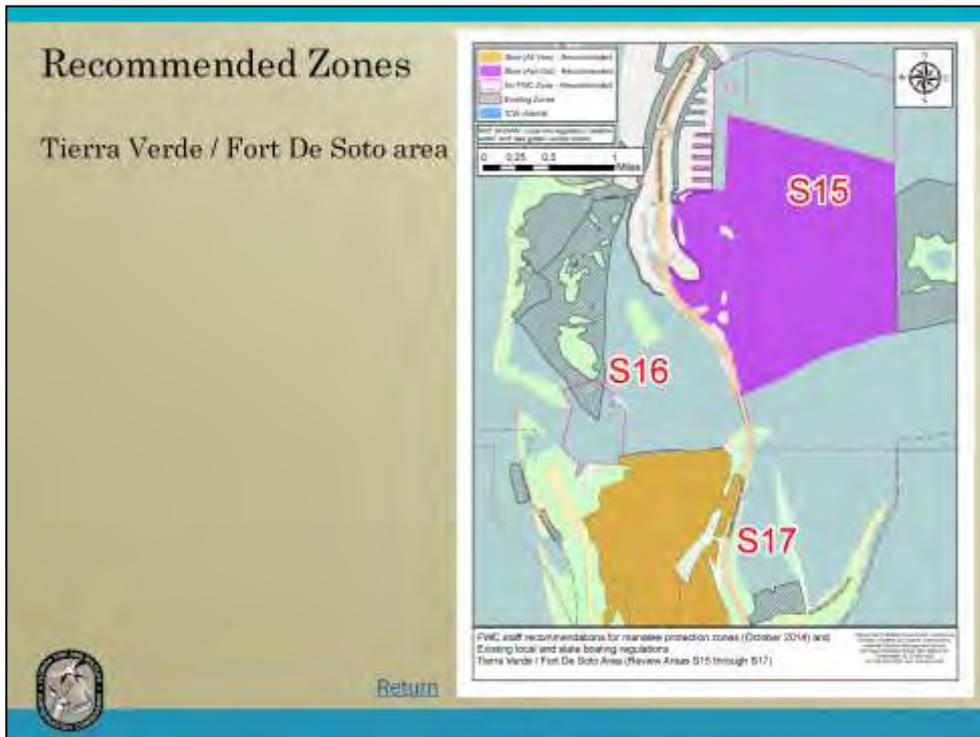


Staff recommendations for the Pinellas Bayway area:

Marina Harbour Area (S12): Add a year-round Slow Speed zone. This zone was unanimously supported by the LRRC.

Indian Key Area (S13): Add a year-round Slow Speed zone that excludes an east-west corridor immediately south of the Bayway Isles. An LRRC majority supported a zone in this area after excluding the main channel and the east-west corridor immediately south of the Bayway Isles. The staff-recommended zone includes the main channel as part of the zone. USFWS strongly supports including the main channel in the Slow Speed area.

Isla del Sol (S14): Add a warm season Slow Speed zone. This zone was unanimously supported by the LRRC. Staff slightly modified the southern boundary at the suggestion of FWC Law Enforcement (to simplify zone marking).

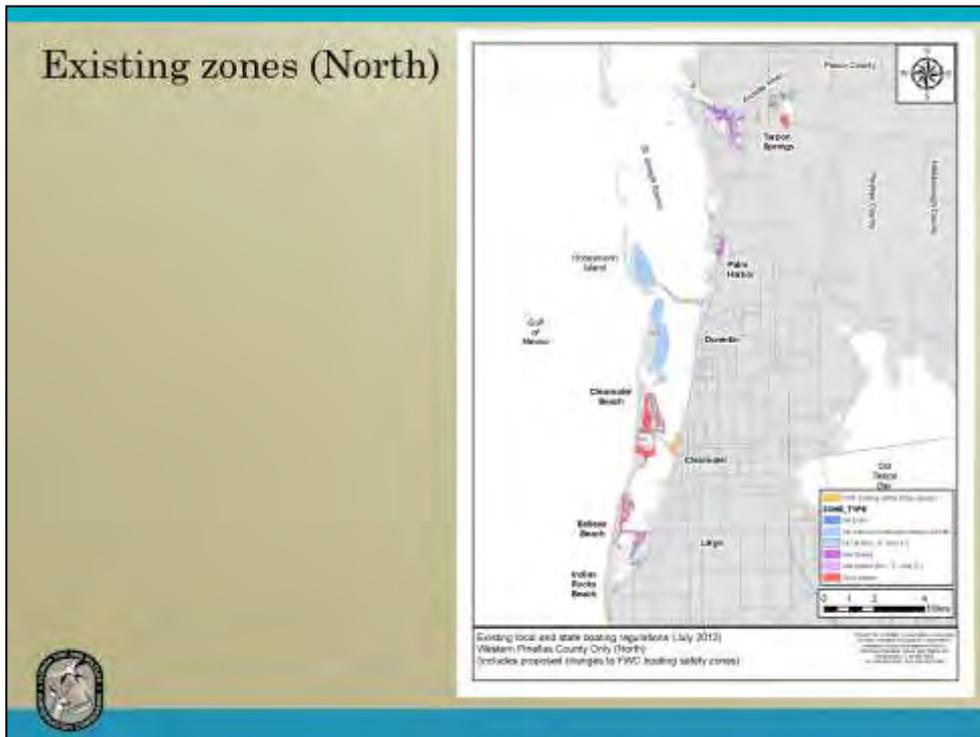


Staff recommendations for the Tierra Verde / Fort De Soto area:

Tierra Verde Area (S15): Add a warm season Slow Speed zone that excludes the originally-identified area in and north of “The Pit” as well as the deeper water area immediately east of Tierra Verde. This zone was supported by an LRRC majority. Staff slightly modified the northern boundary at the suggestion of FWC Law Enforcement (to simplify zone marking).

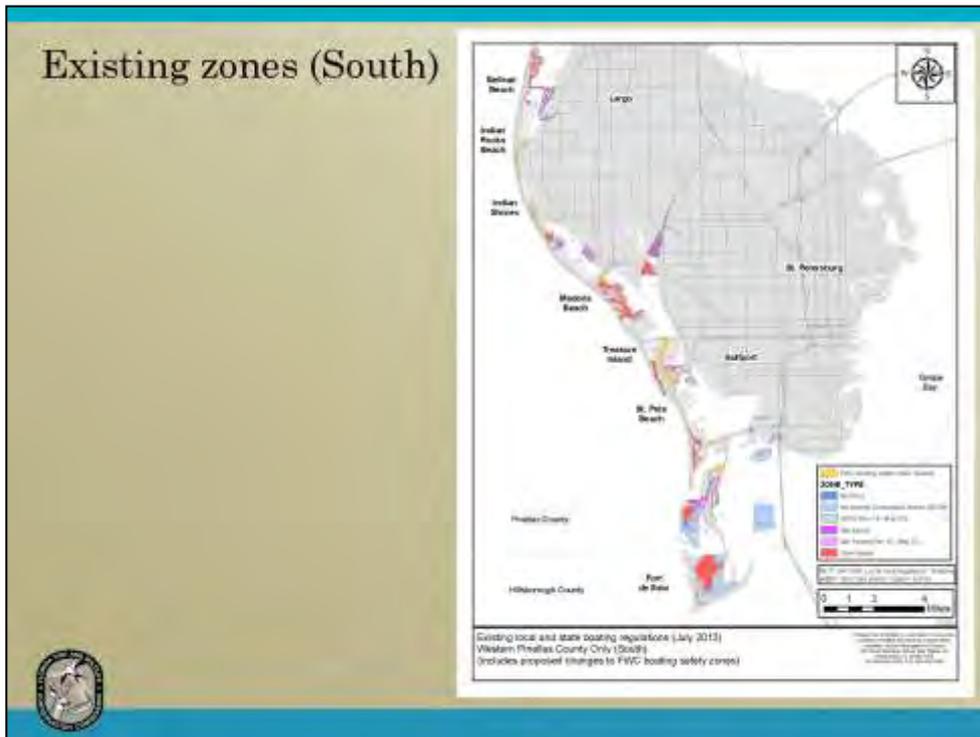
Sister Key Area (S16): No FWC zone. An LRRC majority did not support having a FWC zone in this area. FWC Law Enforcement also did not support a zone due to boating safety and navigation issues.

Fort De Soto Area (S17): Add a year-round Slow Speed zone to overlay the more restrictive existing zones. This zone was unanimously supported by the LRRC.



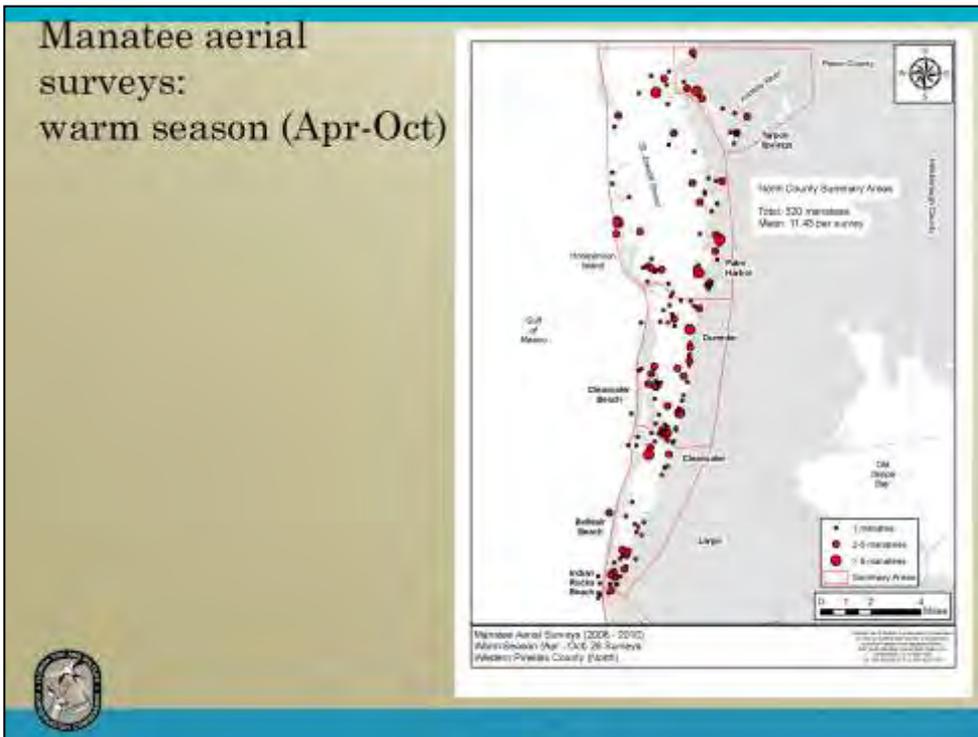
There are existing local and state zones in various locations throughout western Pinellas County. This map shows the northern section.

Most of the existing local and state zones are for boating safety purposes although a few are for resource protection, such as the no internal combustion zones around Honeymoon Island State Park. None of the existing zones are specifically intended to protect manatees but they do provide some protection nonetheless.



This map shows the existing zones in the southern section. The “shallow water” and “sea grass caution” zones in the southern Boca Ciega Bay are not shown because they are voluntary, non-regulatory zones.

Manatee aerial surveys: warm season (Apr-Oct)



Aerial surveys were flown in 2008 – 2010 to collect manatee distribution data. This map shows where sightings occurred in the northern section during the warm season (Apr – Oct).

Similar data were collected for boat traffic in 2008 – 2009.

Manatee aerial surveys: cold season (Nov-Mar)



This map shows where sightings occurred in the northern section during the cold season (Nov - Mar).

Manatee aerial surveys: cold season (Nov-Mar)



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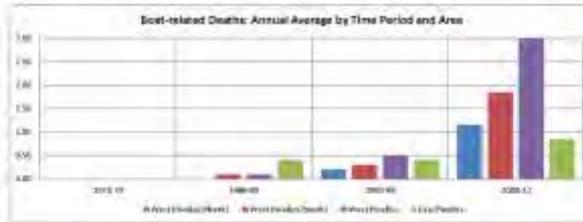
This map shows where sightings occurred in the southern section during the cold season (Nov – Mar).

Summary Table: Mortality by Area and Period

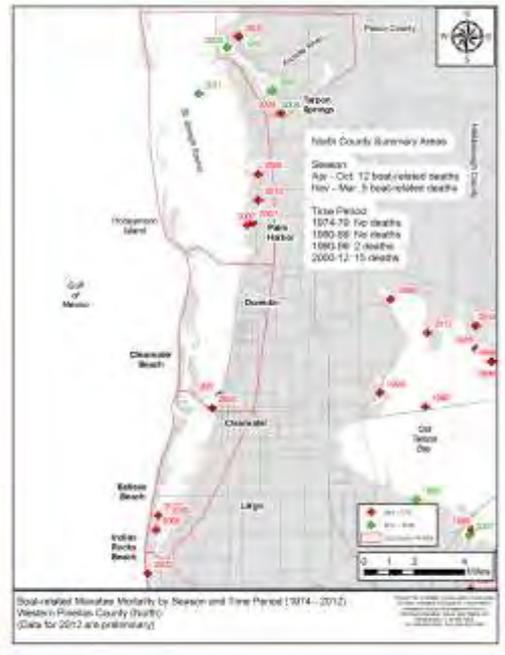
Boat-Related Marine Mortality by Area and Time Period (Pinellas County)

Location	Total	Time Period							
		1974-79		1980-89		1990-99		2000-12	
		Annual Avg	Total	Annual Avg	Total	Annual Avg	Total	Annual Avg	Total
North County (a)	17	0.68	6	0.68	6	0.29	9	1.15	15
Other than boat-related	15	0.00	0	0.20	2	0.20	0	0.00	0
South County	28	0.00	0	0.16	1	0.36	3	0.85	10
Other than boat-related	28	0.00	0	0.16	1	0.36	3	0.85	10
Western Pinellas County (a)	45	0.00	0	0.16	1	0.28	5	1.00	19
Other than boat-related (a) (b)	35	0.00	0	0.40	4	0.20	22	0.54	33
Eastern Pinellas County	19	0.00	0	0.48	4	0.28	4	0.83	11
Other than boat-related	19	0.00	0	0.48	4	0.28	4	0.83	11
Pinellas County (a)	84	0.00	0	0.56	15	0.88	9	1.83	59
Other than boat-related (a) (b)	144	0.00	0	0.70	7	4.88	40	8.17	90

(a) Includes small portion of southern Pasco County (4 boat-related and 20 deaths total) in the Anclote River area.
 (b) Includes a "other category" (accidents) recovered outside of the summary areas (in the Gulf of Mexico).

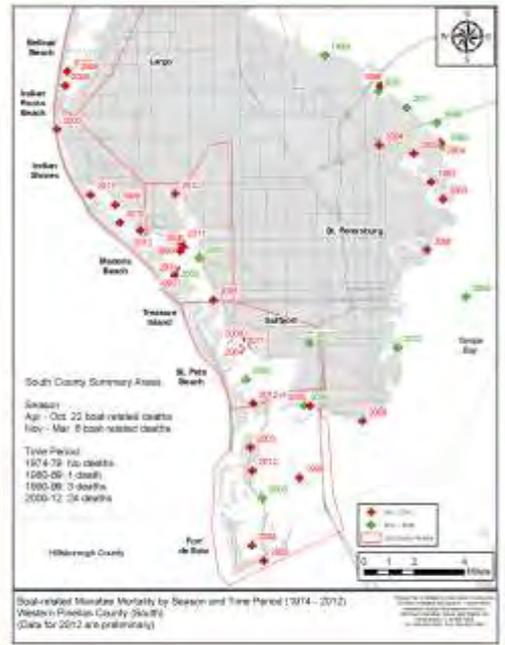


Manatee mortality



This map shows the carcass recovery locations for boat-related manatee deaths in the northern section.

Manatee mortality



This map shows the carcass recovery locations for boat-related manatee deaths in the southern section.

Additional information

Pinellas County:

<http://www.pinellascounty.org/statemanateeplan/default.htm>

FWC manatee protection rule information:

<http://myfwc.com/wildlifehabitats/managed/manatee/rulemaking/>



All of the other information FWC provided to the LRRC is available on the Pinellas County website.

Additional information on manatee protection rules is available on the FWC website.