## N3 Minority Report: Vanderbilt Lagoon: submitted by Susan Snyder 4/26/16

**SPEED RECOMMENDATION:** REPLACE SLOW SPEED/MINIMUM WAKE SHORE-TO-SHORE ZONE WITH IDLE SPEED/ NO WAKE SHORE-TO-SHORE ZONE.

Rationale: Current data supports the need for increased manatee protection from Vanderbilt Lagoon to Wiggins Pass. This area is in the Wiggins Pass Estuarine System, identified by the State of Florida as "Outstanding Florida Water ("OFW)," 62-302.700 F.A.C. An OFW, is designated worthy of special protection because of its natural attributes. This designation demonstrates that the Florida Department of Environmental Protection recognizes this as an area that provides good habitat for marine creatures, including manatees. Given the frequent manatee sightings in the area, the presence of seagrasses, the number of motorized watercraft using the area, the narrow width and shallow depth of much of the channel, and sign confusion, this area is a critical manatee habitat that needs additional protection in order to 1) prevent manatee/ boat collisions, 2) protect seagrass beds, and 3) provide a "safe area where manatees can rest, feed, reproduce, give birth or nurse undisturbed by human activity." (1) (References, indicated with blue numbers throughout this document, are listed on page 3.)

## **Supporting Data:**

1) Evidence of Manatee Use: Although FWC Aerial survey data collected in 2006-2008 lists only four manatees in the warm season and no manatees in the cold season (2), FWC qualifies its findings with: "These surveys are inexact because of changing weather conditions, water clarity, manatee behavior, and other factors. As a result, scientists are reluctant to base their evaluations of the manatee population on these surveys." (3) Also note, this data is 8-10 years old.

More recent anecdotal observations prove manatees are using N3 for mating, nursing, and feeding. Manatees are often observed near the "finger canals" in Vanderbilt Lagoon, and since March, 2008, no fewer than 23 individuals, are known by this LRRC member to have been sighted at Baker-Carroll Point (BCP). BCP is located at the north end of N3, just south of Water Turkey Bay. Twenty manatees were observed in Warm Season (April-October) and 14 in Cold Season (November - March). Seasonal overlap occurred with a 2012 mating herd.

Sightings include: **2008**: March 28, a pair of manatees were swimming near Delnor-Wiggins State Boat ramp. (EXHIBIT A.) **2012**): March 26 - April 2, a mating herd of at least 10 individuals were spotted south of Water Turkey Bay, and reported to Chris Boland (Imperiled Species Division of FWC) on March 27, 2012. (EXHIBITS B - D) **2015**: April 6, a mother nursing her calf was in the lagoon near the Delnor-Wiggins State boat ramp. FWC Law Enforcement and a Collier County Marine Sheriff came to look for what was reported by a BCP resident as a large dead manatee being pushed by a small manatee. November, a manatee was swimming near the seawall. December, a manatee was swimming near the seawall. **2016**: April 1, a manatee was swimming at the BCP Marina entrance. April 11, a manatee was swimming at the northern tip of BCP.

- April 14: a large manatee was swimming south along the seawall. Later that evening it was seen swimming north, April 25, a mating herd of 5 manatees were observed at Delnor-Wiggins State Boat Ramp and later at the small lagoon SW of the ramp. (EXHIBITS E H)
- 2) <u>Seagrass Presence</u>: "Existence of features within the area that are essential to the survival of, or are known to attract manatees, such as seagrasses..." is an item that the Commission utilizes in determining restrictions. (4) Prop wash removes seabed sediments and dislodges seagrasses, therefore, at "idle speed," there is less habitat destruction than at "slow speed". The "destruction of essential manatee habitat" is an item that the Commission utilizes in determining restrictions. (5) Seagrasses are well-documented in N3. In fact, on March 1, 2012, the Collier County Planning Commission determined that a developer, Vanderbilt Partners II LTD., could not build a 49-wet slip marina in N3 because it would adversely affect the seagrass beds.
- 3) Evidence of Boat Use: Numerous motorized watercraft use N3, and many are traveling at fast speed. (EXHIBITS I & J) Collier County Sheriffs with the Marine Division and FWC Law Enforcement have responded when called, and have kept dispatch records. Launching points include Delnor-Wiggins State Park Boat Ramp, single family docks that line "finger canals" of Vanderbilt Lagoon, multiple condominium and hotel docks along the western shore of Vanderbilt Lagoon, the Baker-Carroll Point Marina, and the South Bay Marina (which rents boats).
- 4) Channel Characteristics: A factor the Commission utilizes in determining speed restrictions is "Characteristics of the waterway." (6) Much of the channel between Vanderbilt Lagoon and Wiggins Pass is very narrow and shallow. The width is ~ 50 feet. Two posted signs state that at low tide, the depth of the channel is maintained at 3 feet. When tides are low, most water outside the channel is too shallow to be used by either motorized watercraft or manatees. (EXHIBIT K) Because motorized watercraft and manatees must use the same narrow, shallow channel at these times, it is inevitable that manatees are cut by props and receive blunt-force injuries from collisions. "The faster a boat goes, the more force is applied to a 'strike." (7) Idle speed from the Vanderbilt Lagoon north to Wiggins Pass would reduce the strike force.
- 5) Analysis of FWC Aerial Boat Survey and Mortality Data: The 2006-2007 FWC "Fast" Boat Density and Manatee-Boat Overlap for all months was only .06.(8) This low number can be attributed to the fact that only four manatees were documented in the 2006-2008 survey. (2) As stated earlier, that low manatee count is unsupported by recent observations. In the FWC notebook information for N-3, Table 5 shows there were two perinatal carcasses found and no boat-related mortalities reported. (9) However, absence of boat-related mortality data (really carcass count) does not mean manatees have not been struck. With the present density of boats and manatees using the same narrow, shallow channel, it is likely that manatees are receiving physical damage from collisions in N3, including propeller scars (see EXHIBITS F H) and blunt force injuries. Chronic injuries can linger for days, weeks, or longer before the manatee finally

succumbs from internal bleeding or infection. (7) In such cases, the corpse may be found far from where it was struck.

6) <u>Signage Confusion:</u> A sign at the southern end of Water Turkey Bay, indicates the speed in N3 traveling South from that point is Idle Speed/No Wake. (EXHIBIT M) A sign south of the 111th street bridge facing North indicates the speed is Slow Speed/Minimum Wake. (EXHIBIT N) Thus, based on posted signage, channel speed is different depending on direction of travel. There is no speed sign what-so-ever at the Delnor-Wiggins State Boat Ramp. <u>Solution:</u> Making N3 an IDLE SPEED/NO WAKE ZONE, and posting correct signage, including a speed sign at the state boat ramp, will eliminate speed signage confusion.

- (1) "Florida Fish and Wildlife Conservation Commission... Materials for Collier County LRRC, March 25, 2016," Section 2, page 5, 68C-22.001 Scope and Purpose, (1).
- (2) 'Florida Fish and Wildlife Conservation Commission... Materials for Collier County LRRC, March 25, 2016," Section 3, Table 1, p. 19
- (3) "U.S. Fish & Wildlife Service North Florida Ecological Services Office....Population Status" http://www.fws.gov/northflorida/Manatee/manatee-gen-facts.htm>
- (4) "Florida Fish and Wildlife Conservation Commission... Materials for Collier County LRRC, March 25, 2016," (Section 2, page 5, 68C-22.001 Scope and Purpose item (2) (a) 2 e
- 5) "Florida Fish and Wildlife Conservation Commission... Materials for Collier County LRRC, March 25, 2016," Section 2, page 5, 68C-22.001 Scope and Purpose (2) (a) 1. c
- (6) "Florida Fish and Wildlife Conservation Commission... Materials for Collier County LRRC, March 25, 2016," Section 2, page 5, 68C-22.001 Scope and Purpose, (2) (a) 2. f
- (7) "Information for Boaters and PWC Operators...Causes of Manatee Deaths in Florida" "<a href="http://myfwc.com/education/wildlife/manatee/for-boaters/">http://myfwc.com/education/wildlife/manatee/for-boaters/</a>
- (8) "Florida Fish and Wildlife Conservation Commission... Materials for Collier County LRRC, March 25, 2016," Section 3, Table 4, p. 23.
- (9) "Florida Fish and Wildlife Conservation Commission... Materials for Collier County LRRC, March 25, 2016," Section 3, Table 5, p. 24

N3 Exhibits for this Minority Report begin on the next page.

EXHIBIT A: March 28, 2008: A pair of manatees was sighted near Delnor-Wiggins State Boat Ramp.



EXHIBIT B: March 26, 2012: Four manatees were swimming between Vanderbilt Surf Colony III Condo and Delnor-Wiggins State Boat Ramp.



EXHIBIT C: April 2, 2012: A mating herd of 10 was photographed near Baypoint Condo, Baker-Carroll Point .



EXHIBIT D: This map shows some of the many manatee sightings between March 26 & April 3, 2012. The width of the waterway between the Dunes Condominiums and Baker-Carroll Point is 226 feet. Note the location and width of the narrow Vanderbilt Channel.



EXHIBIT E: April 25, 2016: A mating herd of 5 manatees was at Delnor-Wiggins State Boat Ramp.



EXHIBIT F: April 25, 2016: This closer photograph of the mating herd at Delnor-Wiggins State Park Ramp shows many have fresh propeller scars.



EXHIBIT G: April 25, 2016: The mating herd moved to a lagoon SW of the state boat ramp. Note the scarring on the back and tail of the manatee on the left.



EXHIBIT H: April 25, 2016: A pair is mating within feet of the Delnor-Wiggins State Boat ramp.



EXHIBIT I: These February 11, 2012 PWCs are quite typical of weekend users of N3. These were launched from Delnor-Wiggins State Boat Ramp, where there is no posted speed sign or manatee sign.



EXHIBIT J: Typically on weekends in season, there is a lot of boat traffic. This particular day (April 7, 2012) was also when the mating herd was nearby. Note the location of Channel Marker 13, which is the far right green marker.



EXHIBIT K: This photograph was taken in the early morning at low tide, looking NE into Water Turkey Bay. Note the location of Channel Marker 13 and the sandbar to the right of the marker.



EXHIBIT L: April 7, 2012: A manatee (part of the mating herd) looks at Channel Marker 13. At low tide, this manatee would be on a sandbar, as noted in EXHIBIT K. EXHIBITS J & L were photographed moments apart, proving how close the watercraft are to the mating herd.



EXHIBIT M: This sign facing South from Water Turkey Bay, indicates the channel speed from this point south is ISNW.



EXHIBIT N: This sign facing North from just south of the 111th (Immokalee Rd./Bluebill Ave) street bridge, indicates the channel speed from that point north is SSMW. This sign and the one above are facing one another in the same section of N3.

