



2017 Manatee Protection Plan Implementation Report



City of Jacksonville
Planning and Development Department
November 2017

Executive Summary

This is a Summary of the **2017** Manatee Protection Plan Implementation Report that reflects on the City of Jacksonville's efforts towards protecting manatees in Duval County. The third revision to the Duval County Manatee Protection Plan (MPP) was adopted by the Jacksonville City Council in 2014 and requires an annual report of the progress on implementation of the MPP. The MPP is a comprehensive planning document that addresses the long-term protection of the Florida manatee through law enforcement, education, boat facility siting, and habitat protection initiatives on a county-wide basis. The purpose of revising the MPP was to collect and evaluate updated information on manatee use and boat activity in the City of Jacksonville (COJ) and provide guidance targeted at reduction of human-related threats to manatees and manatee habitat. The MPP attempts to balance boater access to Jacksonville waterways with impact to manatees from boat traffic, and is intended to increase the predictability of permitting outcomes for boat facility development.

The **2017** MPP Implementation Report is a compilation of the efforts of a wide variety of agencies that reflect the effort expended to protect manatees in Duval County waters. The report is divided into five (5) sections: Meeting Minutes, Law Enforcement Reports, Education, Awareness and Environmental Reports.

The Meeting Minutes subsection report is an assemblage of the appropriate minutes of the Jacksonville (Duval County) Waterways Committee and the Jacksonville Marine Transportation Exchange (JAXMTX) Harbor Safety Committee. This section serves as a good review of the activities of the year and demonstrates the importance that manatee protection has within the City and JAXPORT.

The Law Enforcement Report subsection includes quarterly reports from Jacksonville Sheriff's Office Law Enforcement Task Force, Florida Fish and Wildlife Commission (FWC) Law Enforcement, and Multi-Agency Deployments. The City has improved communication and coordination between federal and state Law Enforcement agencies since the development of a L.E. Task Force in December of 2009 that has fostered improved efforts in manatee protection. The involvement of the City's Waterways Coordinator, a former JSO marine officer, has been very helpful in a variety of ways. His efforts have resulted in the buy-in of all law enforcement agencies and improved the coordinated multi agency deployment weekends.

The Manatee Education Report contains the extensive effort made on behalf of manatee protection within the City of Jacksonville. Included is the COJ's Park Naturalist Education Program, presentations made by Jacksonville University faculty on manatees, and the FWC Northeast Lab outreach programs. The City also completed a 30 second public service announcement, which will be sent to local television stations for broadcast **again in the beginning of manatee season 2018.**

The Awareness subsection contains the Updated Boat Facility Inventory, a list of DEP Dock permits, Manatee Mortality Information, along with Aerial Sighting Maps. It should be noted that three (3) flights/year are funded by the City of Jacksonville.

In summary, the MPP Implementation Report offers an up to date review of manatee protection efforts in the City of Jacksonville (Duval County).

Table of Contents



MPP Section 8.8 Implementation Task Update	page 1
Manatee Data Report Summary.....	page 5
Manatee Mortality Summary.....	page 11
Marine Facilities Inventory Summary.....	page 13
Waterways Meetings Summaries.....	page 25
Law Enforcement Report Summaries.....	page 33
Jacksonville Sheriff's Office	
Florida Fish and Wildlife Commission	
U.S. Coast Guard	
Multi-Agency Deployments	
Education and Awareness Summary.....	page 46



Implementation Summary (Section 8.8 MPP)

MPP Policies and Tasks	Action Items	Progress in 2016-2017	Tasks for 2017-2018
The comprehensive plan will be amended to incorporate the revised MPP	Submit Comprehensive Plan amendment to Department of Economic Development and FWC	Comprehensive Plan changes approved by City Council. Requested an additional 6 months extension from DEO due to downtown DRI request.	Resolve downtown DRI marina request then send Comp changes to DEO by March 2018.
COJ will incorporate the use of the revised MPP in their Planning and Development Department reviews for development	Distribution of revised MPP within COJ once approved	The Planning and Development Department has created a GIS boat facility layer for use by the zoning, land use and developmental services sections.	Continue to use the GIS layer.
Keep the Jacksonville Waterways Commission up to date on manatee related issues	COJ will attend monthly meetings and provide updates on manatee related issues	The City's consultant, JU has attended monthly meetings. See Waterways Commission meeting minutes	JU's 2015-2018 contract has this task identified
Report updated information, manatee mortality, and status of implementing the recommendations in the MPP	Draft and submit an annual MPP Implementation Report	Submitting 1st required report.	Continue to collect and summarize data for 2017 report
COJ will actively engage with the shipping/Port industry	Representatives of COJ will be members of JMTX and the Port Safety Committee, attend meetings and assist with implementing manatee awareness initiatives	City Waterways Coordinator attends quarterly meetings	Continue to attend JMTX meetings

MPP Policies and Tasks	Action Items	Progress in 2016-2017	Tasks for 2017-2018
COJ will actively engage USCG and Special Events Office	Representatives of COJ will monitor and track special events in the waterways and assist with implementing manatee awareness initiatives	City Waterways Coordinator has worked closely with USCG - they now attend the LE Task Force meetings.	Have Waterways Coordinator summarize and report on special events in Duval County.
COJ will create awareness within the County regarding manatee protection issues	COJ will inspect and replace manatee educational signs that are their responsibility, develop a maintenance plan and a database of locations	Sign database completed. Working with other agencies for sign and buoy replacement	Continue to report and work with other agencies for sign and buoy replacement
Manatee education Section	COJ will develop policies or incentives to increase educational signs at private marinas and multi-family docks where signs are not required by permit	New Comp plan policies will help address this issue.	Continue to develop incentives for educational signage
Manatee education Section	COJ will work with FWC-ISM, and FWRI to update the Boating and Angling Guide	Guide is completed and being handed out	Continue to distribute the guides
Manatee education Section	COJ will maintain and document manatee sightings reported through the COJ hotline	The City does not have a hotline. JU does. Info reported by JU	Continue to have JU document calls to the hotline
Manatee education Section	COJ will produce multimedia information such as PSAs, billboards, social media and on a website to promote information and awareness	PSA has been developed	PSA has been given to Public Information Office to promote manatee awareness

MPP Policies and Tasks	Action Items	Progress in 2016-2017	Tasks for 2017-2018
Manatee education Section	COJ or representatives will present manatee awareness programs to local schools, community groups, boating groups and clubs	Information collected from Park Naturalist. Waterways Coordinator also promotes awareness	Continue to provide manatee info through the Parks Department
Law enforcement section	JSO will present manatee awareness programs at JSO safety fairs and all County boat shows; at least 12 education initiatives a year	Number of presentations on LE quarterly report	Continue to document JSO efforts
Law enforcement section	COJ will coordinate with USCG when special manatee messages are needed in the "Notice to Mariners"	On-going	On-going
COJ will facilitate improved law enforcement participation in manatee protection, including improved coordination between multiple agencies	Implementation of the MPP Law Enforcement Plan and the action items within it	Plan has been implemented. Efforts are being documented	Continue to implement plan
Law enforcement Section	JSO commits to a minimum of 25 deployments for only manatee speed zone enforcement	JSO continues deployments to manatee speed zone enforcement	Continue to collect quarterly reports from JSO
Law enforcement section	A minimum of six coordinated, multi-agency weekend deployments from April to October specifically for manatee speed zone enforcement	Completed in 2015. Efforts reported in yearly implementation report	Six deployments have been scheduled for this year.

MPP Policies and Tasks	Action Items	Progress in 2016-2017	Tasks for 2017-2018
COJ will keep the MPP current, with the best available data and wildlife protection practices	Review the MPP periodically in conjunction with FWC and USFWS to determine whether revisions are needed; Requires COJ analysis and compilation of information from the annual reports	Continue to update manatee data through JU contract. Submit yearly implementation reports	Continue to update manatee data through JU contract.
Implementation section	Complete a Manatee Speed Zone Compliance Study	The City is now revising this study protocol suggestions provided by FWC	Work to complete study protocol in 2017-2018 Find funding next year
Implementation section	Develop a Boat Activity Study Protocol between Recreational and Shipping traffic, and complete the Study	The City will send to FWC for approval	Work to complete study when funded.
Implementation section	Marine Facility Inventory Update	Completed through JU contract	In JU contract for this year.
Implementation section	Maintain an up-to-date record of the location and status of foraging habitat, warm water discharges and freshwater sources	On-going	On-going

Manatee Data Report

Aerial Sightings: A synoptic survey was conducted on February 1st 2017 with 6 animals sighted. Subsequent surveys in 2017 occurred in May, and September (3 total). In 2016 a synoptic survey was conducted on February 12th with no animals sighted. Subsequent surveys in 2016 occurred in March, April, May, June, August and September (7 total). In 2015, a State Synoptic Survey was conducted on February 16th, but there were no manatees sighted in the area. Subsequent surveys in 2015 occurred in April, June, August, October and November (6 total).

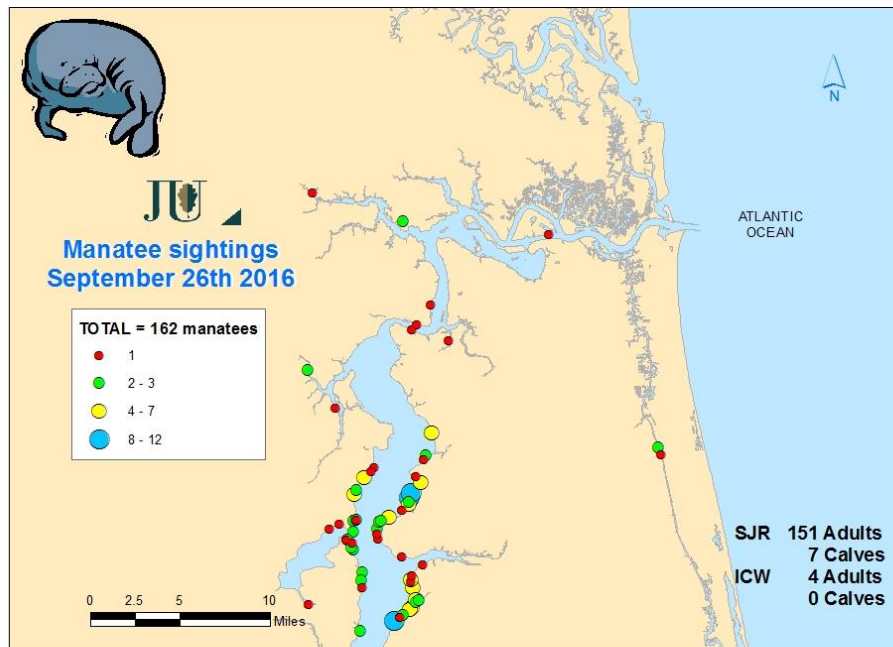
The Single Highest Day Count (SHDC) of manatees represents the highest number of animals counted on a single survey day throughout the year. For the Lower St. Johns River (LSJR), the SHDC for 2017 was 90 animals per survey (May) – which was lower than the previous year and probably due to a severe drought earlier in the year that likely caused manatee to travel more for food outside the study area. In 2016, the SHDC was 217 animals per survey (May) – which was the highest count on recorded. In 2015 the SHDC 155 animals per survey (June), and in 2014 the SHDC was 176 (June), in 2013 was 143 (July), and in 2012 it was 177 animals per survey (May).

In 2017, the mean number of manatees in Duval County was 33 manatee per survey until September (3 surveys). In 2016, the mean number of manatees in Duval County was 102 manatee per survey (8 surveys). In 2015, the mean number of manatees in Duval County was 57 manatee per survey. It is important to note that beginning in 2012 there was a shift in the emphasis of data collection towards assisting the law enforcement effort to protect manatees and educate boaters. As a result, sampling frequency was significantly reduced and now focuses only on those months when manatee presence in the area is considered to be at its highest (5 surveys/year; s.d. \pm 2; range 3-8). As a consequence of this the mean numbers of manatees appear to be higher from 2013-2017 (103, 96, 57, 102, and 33 manatees per survey, respectively). To more accurately reflect the shift in sampling frequency and focus, manatee data in this report was separated into these two time periods (1994-2012 and 2013-2017).

In the Intracoastal Waterway (ICW) the mean number of manatees in Duval County was 2 manatee per survey (2017), 9 manatees per survey (May 2016), 5 manatees per survey (June 2015 and May 2014), 9 (April and July 2013). The time period from 2013-2017 had a survey frequency (4.2 surveys/year; s.d. \pm 2; range 2-6) and returned a mean of 6 manatee per survey (range 2-9 animals).

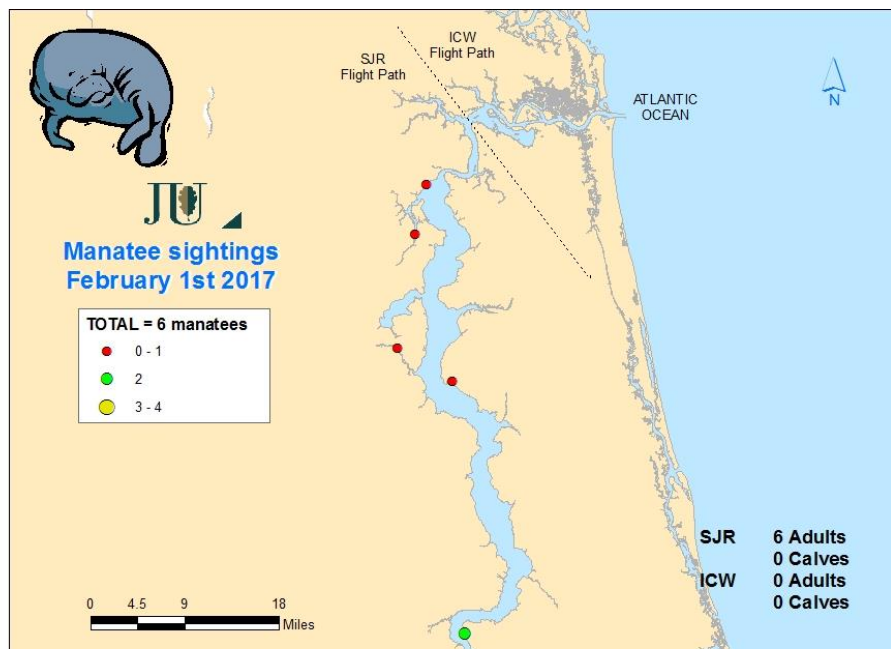
Seasons were generally classified as follows with each map indicating the specific date when a particular aerial survey was conducted: Winter - December – February; spring – March – May; summer - June – August; fall - September – November.

MAP SERIES A – Manatee aerial sightings, Duval Co., FL. (fall, 2016)



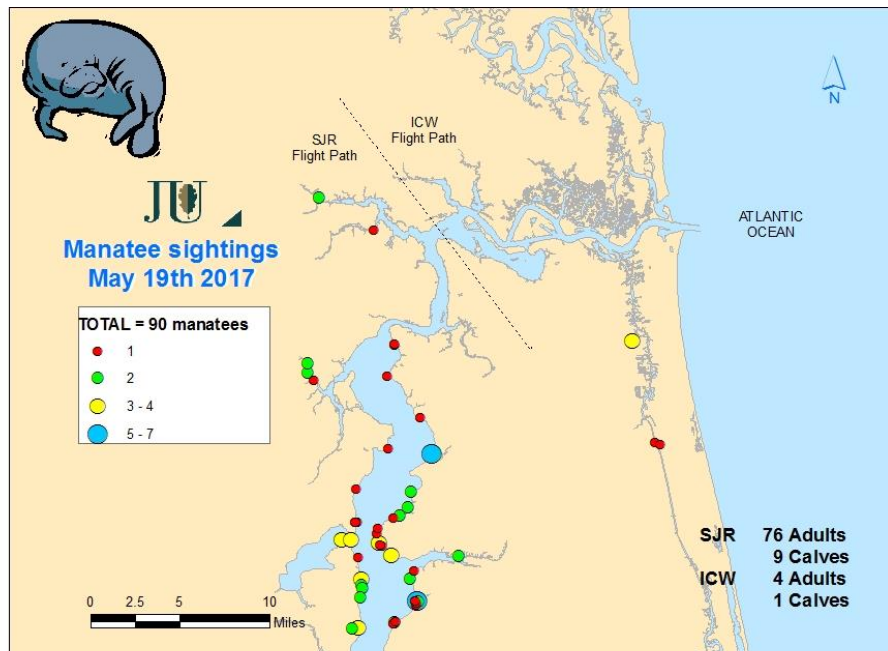
The information contained in this email and the manatee sighting maps are the results of aerial surveys conducted by Jacksonville University under an agreement with USCG AIRAUX. The manatee sightings represent the known minimum number of animals and their location at the time of the flight. The numbers may be higher and the animals change locations frequently. The information is an indication of the number and the location of manatees and subject to change daily.

MAP SERIES A – Manatee aerial sightings, Duval Co., FL. (winter, 2016-2017)



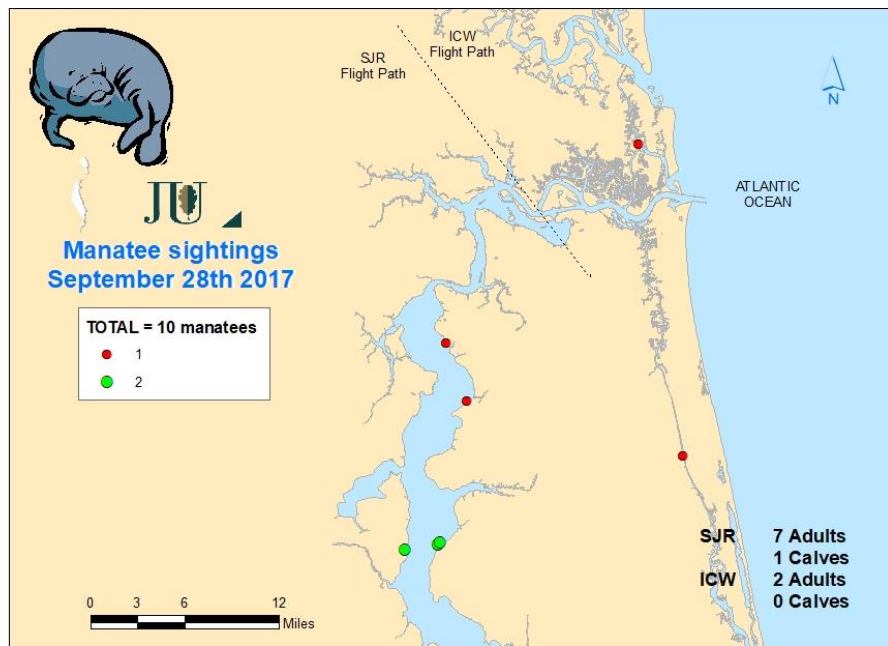
The information contained in this email and the manatee sighting maps are the results of aerial surveys conducted by Jacksonville University under an agreement with COJ. The manatee sightings represent the known minimum number of animals and their location at the time of the flight. The numbers may be higher and the animals change locations frequently. The information is an indication of the number and the location of manatees and subject to change daily.

MAP SERIES A – Manatee aerial sightings, Duval Co., FL. (spring, 2017)



The information contained in this email and the manatee sighting maps are the results of aerial surveys conducted by Jacksonville University under an agreement with COJ. The manatee sightings represent the known minimum number of animals and their location at the time of the flight. The numbers may be higher and the animals change locations frequently. The information is an indication of the number and the location of manatees and subject to change daily.

MAP SERIES A – Manatee aerial sightings, Duval Co., FL. (fall, 2017)



The information contained in this email and the manatee sighting maps are the results of aerial surveys conducted by Jacksonville University under an agreement with COJ. The manatee sightings represent the known minimum number of animals and their location at the time of the flight. The numbers may be higher and the animals change locations frequently. The information is an indication of the number and the location of manatees and subject to change daily.

Habitat: Line transect data from 2004-2011, and 2015-2016 indicated that there was a significant long term decline in the grass bed length, SAV length, total cover percentage, and the proportion of tape grass at sites sampled in Duval County (SJRWMD 2016). Although regrowth of grass beds has occurred recently, recovery is still below historic levels of the late 1990's. Additional observations made during aerial surveys in 2015 and 2016 indicated that SAV returned to some areas previously reported to be devoid of grasses. Moreover, manatees were seen feeding in some of those areas.

In the past, aerial observation indicated that there had been a visible decline in the grass beds since 2005. Toxic algae blooms seen in the St. Johns River from 2013-2016 do not seem to have harmed any manatees.

JEA District # 2 Outfall and North Side Generating Station (NSGS): No manatees were observed at the JEA District # 2 site during aerial surveys conducted by Jacksonville University from spring to fall of 2013 to **2017**. However, manatees continue to be seen in the vicinity of the JEA District # 2 waste water treatment outfall's manatee exclusion barrier by JEA's contractor and others.

Since 2011, JEA has been monitoring manatees at its District #2 outfall and NSGS from October to March. JEA reported sightings over time at District #2 as follows: 190 observations (2011/12); 49 (2012/13); and 46 (2013/14); and 6 (2015/16). JEA reported that monitoring stopped for a period of time at the District #2 outfall after a fence was installed around the outfall. Limited aerial surveys by JU have not observed animals congregating there since (2014/15). JEA reported that the numbers of manatees sighted at JEA NSGS increased over time as follows: 52 observations (2012/13); 60 (2013/14); 87 (2014/15); and 198 individuals were observed, 372 times in (2015/16).

The lower frequency of aerial survey effort, especially during cold weather, was insufficient to document manatees at this site during the years 2009-2017. However, boat and land surveys by independent contractors indicated that manatees consistently make use of the site.

NAS Mayport: In the spring of 2011, Mayport NAS initiated manatee awareness and reporting program. Signs were posted at intervals along Mayport basin, and a data log kept of sightings and actions. **As of September 2017, 58 animals were sighted (range 0-18/month). In 2016, 152 animals were sighted (range 0-48/month), and in 2015, 130 animals (range 0-44/month). Lower numbers were observed during 2013/14 with a mean of 65 (range 0-16), and during 2011/12 with a mean of 35 animals (0-13/month).**

Duval Manatee Rescues: On February 7th 2017, a male manatee was rescued from Ortega River. On March 31st a female manatee was rescued from Pablo Creek, both manatees exhibited symptoms of cold stress. Furthermore, three manatees were assisted and released on 1st June (Pablo Creek), 2nd July (intake canal JEA NSGS), and a calf on September 11th near Wayland Street opposite Talleyrand docks. In 2016, two manatee rescues were performed at JEA's NSGS. "Stokes" was rescued on Jan 27th, and another animal on March 7th, both animals were taken to Sea World of Florida due to cold stress related issues. **On November 30th a female manatee was rescued from a storm drain near Davinci Ave. also transported to Sea World.**

There were no reported assists or rescues as of September 2015. In 2014, six manatee rescues occurred during cold weather from (JEA District #2 outfall, Green Field Creek, Mill Cove, San Carlos Creek, and Cut Creek).

MANATEE MORTALITY

Mortality Calendars

2013

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTALS
Natural deaths	0	0	0	0	0	0	0	0	0	0	0	0	0
watercraft deaths	0	0	0	0	0	2	0	0	2	0	0	0	4
prenatal	0	0	0	0	2	1	0	0	0	0	0	0	3
other human	0	0	0	0	0	0	0	0	0	0	0	0	0
cold stress	3	1	1	0	0	0	0	0	0	0	0	1	7
undetermined	1	1	1	0	0	1	0	0	0	0	0	1	4
total deaths	4	2	2	0	2	4	0	0	2	0	0	2	18

2014

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	TOTALS
Natural deaths	0	0	0	0	0	0	0	0	0	0	0	0	0
watercraft deaths	0	0	0	0	0	0	0	0	0	0	0	0	0
prenatal	0	0	0	0	0	1	0	0	0	0	2	0	3
other human	0	0	0	0	0	0	0	0	0	0	0	0	0
cold stress	1	1	0	0	0	0	0	0	0	0	0	3	5
undetermined	0	0	1	1	0	0	2	0	0	0	0	0	4
total deaths	1	1	1	1	0	1	2	0	0	0	0	0	12

2015

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	TOTALS
Natural deaths	0	0	0	0	0	0	0	0	0	0	0	0	0
watercraft deaths	0	0	0	0	0	0	0	0	1	0	0	0	1
prenatal	0	0	0	1	1	0	0	1	0	0	0	0	3
other human	0	0	0	0	0	0	0	0	0	0	0	0	0
cold stress	2	0	0	0	0	0	0	0	0	0	0	0	2
undetermined	0	0	0	0	0	1	1	0	0	0	0	0	2
total deaths	2	0	0	1	1	1	1	1	1	0	0	0	8

2016

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	TOTALS
Natural deaths	0	0	0	0	0	0	1	1	0	0	0	0	2
watercraft deaths	1	0	0	0	0	0	0	0	0	0	0	0	1
prenatal	0	0	0	0	0	0	0	0	0	0	0	0	0
other human	0	0	0	0	0	0	1	0	0	0	0	0	1
cold stress	1	1	1	0	0	0	0	0	0	0	0	0	3
undetermined	0	0	2	0	0	2	1	0	0	0	0	0	5
total deaths	2	1	3	0	0	2	3	1	0	0	0	0	12

2017

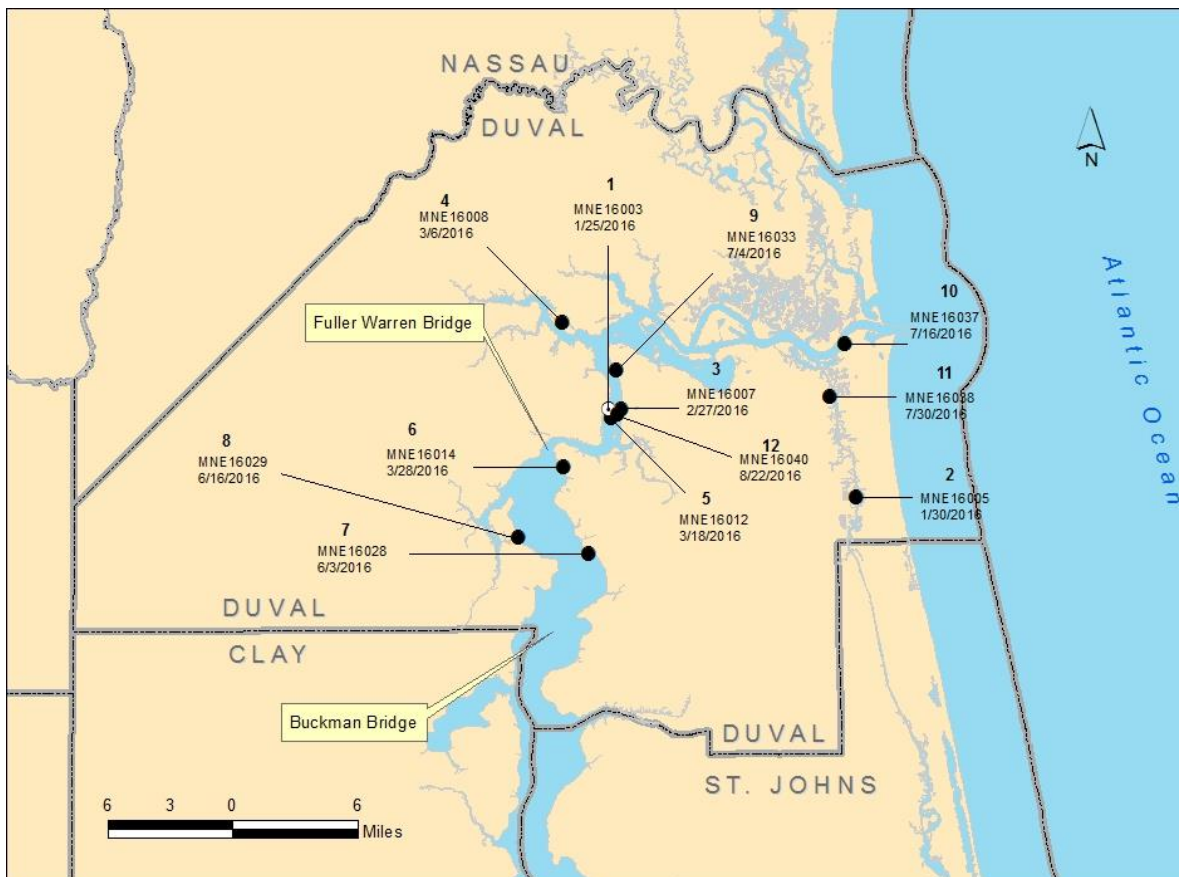
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	TOTALS
Natural deaths	0	0	0	0	1	0	0	0	0				1
watercraft deaths	0	1	0	0	0	2	1	1	0				5
prenatal	0	0	0	0	1	1	1	1	1				5
other human	0	0	0	0	0	0	0	0	0				0
cold stress	1	0	0	0	0	0	0	0	0				1
undetermined	0	0	0	0	2	1	1	0	0				4
total deaths	1	1	0	0	4	4	3	2	1				16

Source: FWC, FWRI 2017 preliminary data.

Manatee Mortality

Manatee Mortality: There has been a decreasing number of watercraft mortality since 2012. As of September 2015, there were a total of 8 reported deaths in Duval County, of which 1 was watercraft related, 3 Perinatal, 2 cold stress, and 2 undetermined. As of September 2014, there were a total of 12 reported deaths in Duval County, of which 3 were Perinatal, 5 cold stress, and 4 undetermined (none watercraft related). As of September 2013, there were a total of 18 reported deaths in Duval County, of which 4 were watercraft related, 3 Perinatal, 7 cold stress, 3 undetermined, and 1 verified but not recovered. In 2012, there were a total of 13 reported deaths in Duval County, of which 4 were watercraft related, 2 Perinatal, 6 cold stress and 1 undetermined (FWRI 2015). However, from 2013 to 2015 no large vessel caused deaths have been reported. From 2009 to 2013, more watercraft deaths were documented towards the mouth of the river, rather than a more county wide spread as in prior years. Manatee deaths seem to have occurred in an area extending from Downtown to the mouth of the St. Johns River. There were no watercraft deaths reported in 2014, but one watercraft mortality was reported as of September 2015 (Map Series B).

SERIES B – Manatee mortality, Duval Co., FL. 2016.



Dots surrounded with a white border are watercraft mortalities.

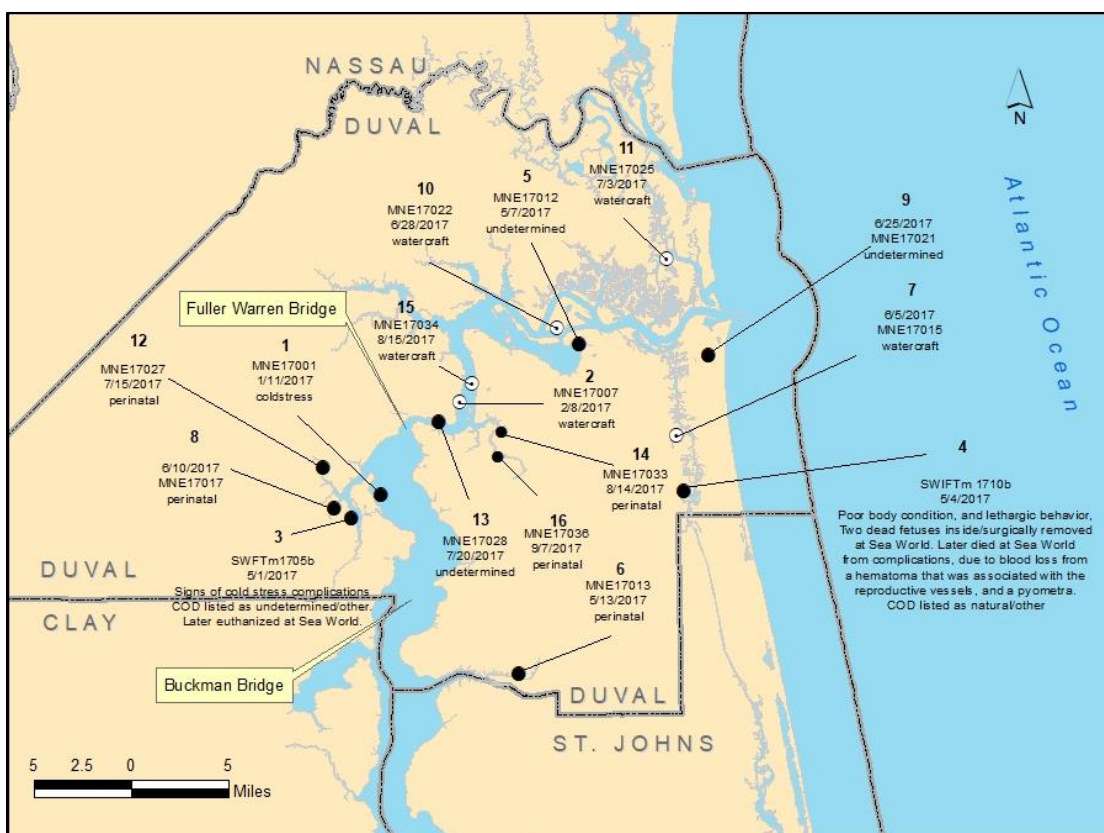
Source: FWRI 2017.

Manatee deaths from all causes 2016, Duval Co., FL.

Count	Date	Manatee field ID	Sex	Total Length	Mortality category
1	1/25/2016	MNE16003	F	295	1-Watercraft
2	1/30/2016	MNE16005	F	201	5-Natural-Cold Stress
3	2/27/2016	MNE16007	F	274	5-Natural-Cold Stress
4	3/6/2016	MNE16008	M	188	5-Natural-Cold Stress
5	3/18/2016	MNE16012	F	320	8-Undetermined
6	3/28/2016	MNE16014	M	241	8-Undetermined
7	6/3/2016	MNE16028	F	335	8-Undetermined
8	6/16/2016	MNE16029	U		7-Verified; Not Recovered
9	7/4/2016	MNE16033	F	333	8-Undetermined
10	7/16/2016	MNE16037	M	329	3-Human, Other
11	7/30/2016	MNE16038	M	303	3-Human, Other
12	8/22/2016	MNE16040	F	344	6-Natural, Other

Source: FWC, FWRI 2017.

SERIES B – Manatee mortality, Duval Co., FL. until September 2017



Dots surrounded with a white border are watercraft mortalities.

Source: FWRI 2017.

Manatee deaths from all causes until September 2017, Duval Co., FL.

Count	Date	Manatee field ID	Sex	Total Length	Mortality category
1	1/11/2017	MNE17001	F	173	5-Natural-Cold Stress
2	2/8/2017	MNE17007	M	212	1-Watercraft
3	5/1/2017	SWFTm1705b	M	285	8-Undetermined, Other
4	5/4/2017	SWFTm1710b	F	264	6-Natural, Other
5	5/7/2017	MNE17012	M	290	8-Undetermined
6	5/13/2017	MNE17013	M	139	Perinatal (=< 150)
7	6/5/2017	MNE17015	M	308	1-Watercraft
8	6/10/2017	MNE17017	F	124	Perinatal (=< 150)
9	6/25/2017	MNE17021	M	220	8-Undetermined
10	6/28/2017	MNE17022	M	288	1-Watercraft
11	7/3/2017	MNE17025	M	291	1-Watercraft
12	7/15/2017	MNE17027	F	138	Perinatal (=< 150)
13	7/20/2017	MNE17028	F	225	8-Undetermined
14	8/14/2017	MNE17033	F	110	Perinatal (=< 150)
15	8/15/2017	MNE17034	M	274	1-Watercraft
16	9/7/2017	MNE17036	F	123	Perinatal (=< 150)

Source: FWC, FWRI 2017 preliminary data.

Marine Facility Inventory Summary

Boat Launch facilities Signage Inventory:

An inventory of signage was completed and there were no changes to report since the previous year. A couple of vandalized signs were attended to including a manatee kiosk sign at Oak Harbor boat ramp that was cleaned, and a manatee informational sign at Goodby's Creek boat ramp that was removed and has not been replaced yet. The database of all local manatee, boating safety signage, and information kiosks at boat ramps in Duval County is current and up to date. Methods: Researchers visited all facilities to record and verify information.

Marine Facilities Inventory:

This inventory includes **187** commercial and multi-family marinas and docks, which were checked over the boating season (June-September). Changes in the number of wet and dry slips from the previous year are highlighted. There was a reduction in the number of wet slips from 4,186 in 2014 to 4,125 in 2015 (change -61); **the number of wet slips decreased in 2016/17 to 3,882 (change -243)**. Dry slips decreased from 2,562 in 2014 to 2,510 in 2015 (change -52), **with a single slip decrease in 2016/17 (2,509)**. There was a total of 69 ramps and 782 parking spaces in 2015. Notes were made about slips that exist only as developments rights, and some reductions are where marinas closed or self-reported a reduction of slips.

Methods: Researchers placed phone calls to individual facilities to obtain information about the occupancy and capacity changes if any. Subsequent to that, researchers visited a subsample of these facilities to verify information.

In addition, 64 single family homes dock permits were issued in Duval County as compared to 65 (2015/16), 59 (2015) and 71 (2014).

No.	Type	Facility name	Wet slips 2015	Dry slips 2015	Wet Slips 2016	Dry Slips 2016	No. of Ramps	No. of Lanes	Paved	Parking Spaces	Additional Notes
1	M	Clark's Fish Camp	10	0	15	0	0	0		0	
2	M	The Marina at Julington Creek	91	226	99	226	0	0		55	
3	M	Mandarin Holiday Marina and Fish Camp	160	0	160	0	1	1	YES	20	
4	M	Beatrice A. Gamble Julington Pier 3	84	8	84	25	0	0		40	
5	M	Bull Bay Pier/ Wiley E. Andreu	84	15	84	0	0	0		30	
6	MF	Old Bull Bay*	6	0	n/a	n/a	0	0		n/a	*contact unavailable
7	MF	Tala Cay HOA	2	0	2	0	0	0		0	
8	MF	Plummers Cove HOA	12	0	14	0	0	0		0	
9	M	Florida's Tackle and Gun Club	32	12	23	16	1	1	YES	0	
10	MF	The Cove at St. John's*	13	0	n/a	n/a	0	0		n/a	*contact unavailable
11	MF	La Terraza	4	0	6	0	0	0		0	
12	M/C	NFL Yacht Sales/ Mandarin Marina/ GC YC	5	208	5	208	1	1	YES	10	
13	M	Epping Forest Yacht Club	73	0	73	0	0	0		0	
14	OT	6006 of Jacksonville Inc*	7	0	7	0	0	0		0	*empty lot with boat lift
15	MF	Club Condominiums	8	0	n/a	n/a	0	0		n/a	contact unavailable
16	M	The Rudder Club of Jacksonville	35	65	35	65	1	1	YES	30	
17	M	NAS/ Jax Marina	152	248	95	248	1	1	YES	40	
18	M	Florida Yacht Club	93	50	80	35	1	1	YES	30	
19	MF	Venitian on the Ortega	43	0	43	0	0	0		0	
20	MF	Confederate Point Apts	10	0	10	0	0	0		0	
21	MF	Preserve at Cedar River/Cedar Cove Apts	4	0	10	0	1	1	YES	0	
22	OT	2509 Blanding Blvd LLC	4	0	4	0	0	0		0	
23	MF	Coastal Creek Condo fka Cedar Shores	24	0	24	0	0	0		0	
24	M	Lighthouse Marine/ Florcal Marina	23	16	20	20	0	0		20	* previously Cedar River Moorings
25	M	Cedar Creek Landing Condos	15	0	7	20	1	1	YES	0	
26	MF	Cantebury Gardens (Londontowne) Apts	0	0	0	0	0	0		0	

C = Commercial; M = Marina; MF = Multifamily; OT= Other; R=Ramp; SBT=Ship/Barge/Tug; T=Transitory

No.	Type	Facility name	Wet slips 2015	Dry slips 2015	Wet Slips 2016	Dry Slips 2016	No. of Ramps	No. of Lanes	Paved	Parking Spaces	Additional Notes
27	MF	Chuck's Boat Yard (Klehm Estate)*	30	0	n/a	n/a	0	0		n/a	*owner deceased, property unoccupied
28	OT	Lakeshore Dry Storage	0	200	0	200	0	0		0	
29	M	Lambs Yacht Center	250	0	248	0	0	0		0	
30	M	Cedar Point Marina	23	0	70	0	0	0		0	
31	M	Huckins Yacht Club	38	0	38	0	0	0		0	
32	M	Sadler Point Marina	66	30	66	30	0	0		35	
33	M	Ortega Yacht Club Marina	99	0	99	0	0	0		0	
34	M	Lakeside Ortega Prtnshp/ Jowens Marina	24	0	24	0	0	0		0	
35	M	Ortega Landing Marina	192	0	192	0	0	0		0	
36	MF	Commander Apt	6	0	6	0	0	0		0	
37	OT	Jerry Stozier Ferguson Estate	12	0	12	0	0	0		0	
38	M	River City Brewing Co	60	0	58	0	0	0		0	
39	M	Berkman Plaza and Marina	54	0	54	0	0	0		0	
40	M	Shipyards*	240	0	240	0	0	0		0	*Development rights/ not constructed
41	M	Metropolitan Park and Marina	78	0	78	0	0	0		0	
42	MF	Colonial Point Condos	14	0	14	0	0	0		0	
43	MF	Carlton at Oak Landing	0	0	0	0	0	0		0	
44	MF	Magnolia Shores Homeowners	7	0	7	0	0	0		0	
45	MF	River Hills Condo	21	0	21	0	0	0		0	
46	OT	Jones College	7	0	7	0	0	0		0	
47	M	Arlington Marina/ MoBro Marine inc	30	135	30	135	0	0		0	
48	MF	St Johns Riverview Homes Condo Assoc	6	0	6	0	0	0		0	
49	MF	Arlington by the River Condo	17	0	17	0	0	0		0	
50	OT	JU Row Cnt and Marine Sci Docl	8	0	8	0	2	2		0	
51	M	Pirates Point Yacht Club & Marina	14	0	14	0	0	0		0	
52	M	William Dye Marina (DynameicYachts)	44	6	44	6	0	0		0	
53	OT	Fire Station #38 (COJ)	12	0	12	0	0	0		0	
54	M	Seafarers Marina	75	0	75	0	0	0		0	
55	M	Edwards Marina (Fisherman's Marina)	23	0	23	0	0	0		0	
56	MF	Eleanor Garrison	8	0	8	0	0	0		0	
57	MF	Loretta Courson	5	0	5	0	1	1	YES	0	
58	MF	Trout River Drive Apts (Strong)	0	7	0	7	1	1	YES	0	
59	MF	Sibbald Road Trust	5	0	5	0	0	0		0	
60	M	Dames Pt Marina (Shafnacker)	23	20	25	0	1	2	NO	0	
61	M	Dames Pt Yacht Club (Nicholas Crk Dev)	6	0	6*	n/a	0	0		0	* tug and barg slips, unable to confirm
62	OT	Safe Harbor Haven (Boys Home)	59	36	59	36	1	0		0	
63	M	Brown's Creek Fish Camp	0	25	0	25	1	1	YES	0	
64	M	Clapboard Creek Marina	30	20	30	20	0	0		0	
65	M	Clapboard Creek Fish Camp	0	30	0	33	1	1	YES	0	
66	M	Mariner Point Yacht Club	50	0	50	0	0	0		0	
67	MF	Harbour North Park Assoc	6	0	6	0	1	1	YES	0	
68	OT	Riverfront RV Park	6	0	6	0	1	1	?	0	
69	M	Sandollar Marina*	12	0	12	0	0	0		0	* marina is closed
70	M	Fort George Harbor Yacht Club	10	128	10	135	0	0		0	
71	OT	Mayport Harbor OPS	16	0	16	0	1	1	YES	0	
72	OT	JPA/ St John's Bar Pilot Assoc	2	0	2	0	0	0		0	
73	M	Morningstar Marinas	10	200	10	200	0	0		0	
74	OT	JPA/ Mayport Tavern	7	0	7	0	0	0		0	
75	OT	JPA/ Mayport Yacht Basin	4	0	4	0	0	0		0	
76	MF	Spanish Point Civic Assoc	0	0	0	0	1	1	YES	0	
77	M	Queens Harbour Yacht and Country Club	60	0	46	0	0	0		0	
78	MF	Harbortown fka Pablo Creek Marina	150	0	150	0	0	0		0	
79	MF	Seven Pines Island Marina Assoc	20	0	20	0	0	0		0	
80	MF	Sunset Point Homeowners Assoc	5	0	5	0	0	0		0	
81	M	Palm Cove Marina	375	438	221	432	1	1	YES	0	
82	M	Beach Marine	350	350	350	350	0	0		0	
83	M	Moorings Condo Assoc	81	0	81	0	0	0		0	
84	MF	Waterside fka Lighthouse Grille/ Cove	24	0	24	0	0	0		0	
85	M	Marina San Pablo	46	0	46	0	0	0		0	
86	R	Hood Landing Boat Ramp	0	0	0	0	1	1	Yes	12	
87	R	Madarin Park Boat Ramp	0	0	0	0	1	2	YES	15	
88	R	Duval County Dock Park	0	0	0	0	1	1	YES	5	
89	R	Goodby's Lake Boat Ramp	0	0	0	0	1	3	YES	43	
90	T	Hooters (Jax has additonal names)	8	0	8	0	0	0		0	
91	T	Timuquana Country Club	0	0	10	0	0	0		0	
92	R	Wayne B Stevens Boat Ramp	0	0	0	0	3	5	YES	49	
93	R	Lighthouse Boat Ramp COJ	0	0	0	0	2	2	YES	16	
94	R	St Johns Marina at Riverwalk Fountn	0	0	0	0	1	2	YES	15	
95	T	COJ @ Friendship Fountn	1	0	1	0	0	0		0	
96	T	COJ @ Jax Landing	1	0	1	0	0	0		0	
97	T	COJ @ Crowne Plaza	1	0	1	0	0	0		0	

C = Commercial; M = Marina; MF = Multifamily; OT= Other; R=Ramp; SBT=Ship/Barge/Tug; T=Transitory

No.	Type	Facility name	Wet slips 2015	Dry slips 2015	Wet Slips 2016	Dry Slips 2016	No. of Ramps	No. of Lanes	Paved	Parking Spaces	Additional Notes
98	T	COJ@ Liberty St	1	0	1	0	0	0		0	
99	T	COJ @ Wyndham	1	0	1	0	0	0		0	
100	T	COJ @ Metropolitan Park	1	0	1	0	0	0		0	
101	R	Beach Blvd Boat Ramp(Pottsburg Crk)	0	0	0	0	1	1	YES	12	
102	R	Arlington Road Boat Ramp	0	0	0	0	1	2	YES	13	
103	R	Arlington Lions Club Park Boat Ramp	0	0	0	0	1	1	YES	61	
104	T	Reddie Pointe Preserve	6	0	6	0	0	0		0	
105	R	Lonnie Wurn Boat Ramp	0	0	0	0	1	1	YES	9	
106	R	Dunn Creek Bridge	0	0	0	0	1	1	NO	5	
107	R	Drummond Point	0	0	0	0	1	1	NO	5	
108	T	Jackies Restaurant (Seafood)	35	0	35	0	0	0		0	
109	R	Bert Maxwell Boat Ramp	0	0	0	0	2	4	YES	45	
110	R	T K Stokes Boatramp	0	0	0	0	1	1	YES	30	
111	R	Harborview Boatramp	0	0	0	0	2	2	YES	7	
112	R	Charles Reese Boatramp	0	0	0	0	1	1	YES	6	
113	R	Dinsmore Boat Ramp	0	0	0	0	1	2	YES	16	
114	R	Brown's Creek Bridge	0	0	0	0	1	1		10	
115	R/MF	St Johns Landing Estates	0	0	0	0	1	1	YES	0	
116	R/MF	St Johns Landing Homeowners Assco	0	0	0	0	1	1	YES	6	
117	R	Palms Fish Camp/COJ	0	0	0	0	1	1	YES	20	
118	R	Fulton Boat Ramp	0	0	0	0	1	1	YES	7	
119	T	Ft Caroline National Memorial Dock	3	0	3	0	0	0		0	
120	R	Gate Petroleum Co	0	0	0	0	1	1	NO	2	
121	R	Pirates Cove Fish Camp	0	0	0	0	1	1	NO	10	
122	R	Joe Carlucci-Sisters Creek Park	0	0	0	0	1	2	YES	47	
123	R	Sisters Creek Marina	0	0	0	0	1	4	YES	94	
124	T	Fort George Island Ferry (North port)	1	0	1	0	0	0		0	
125	T	Singleton's Seafood Shack	2	0	2	0	0	0		0	
126	R	Michael B Scanlan Boat Ramp	0	0	0	0	2	8		75	
127	R	Alimacani Boat Ramp	0	0	0	0	1	1	NO	10	
128	R	Ribault Club @ Ft George	0	0	0	0	1	1		6	
129	T	Kingsley Plantation	4	0	4	0	0	0		0	
130	R	Simpson Creek Park	0	0	0	0	1	1	NO	2	
131	R	Big Talbot Island SP	0	0	0	0	1	1	YES	37	
132	R	Oak Harbor Boat Ramp	0	0	0	0	1	1	YES	28	
133	R	Intracoastal Waterways Boat Ramp	0	0	0	0	2	4	YES	37	
134	C	Weeks Marine	0	0	0	0	1	1	YES	0	
135	C	All Wet Sports/Suzanne Paul	0	25	0	25	0	0		0	
136	SBT	River Cruises	2	0	2	0	0	0		0	
137	SBT	JEA Park (old JEAS site)	2	0	2	0	0	0		0	
138	SBT	Riverfront Dev Group	4	0	4	0	0	0		0	
139	SBT	Commodore Point Prop/N FL Shipyard	1	0	1	0	0	0		0	
140	SBT	Hill Street LLC	5	0	5	0	0	0		0	
141	SBT	Hal Jones Contractor Inc	0	0	0	0	0	0		0	
142	SBT	Cross State Towing Co	3	0	3	0	1	1	YES	0	
143	SBT	1163 Tallyrand Inc/Crowley Liner Serv	18	0	18	0	0	0		0	
144	SBT	JPA Talleyrand Marine Terminal	6	0	6	0	0	0		0	
145	SBT	Standard Oil Co (Chevron)	1	0	1	0	0	0		0	
146	SBT	Coastal Fuels Terminal	1	0	1	0	0	0		0	
147	SBT	JEA/Kennedy Generating Station	6	0	6	0	0	0		0	
148	SBT	Keystone Terminal	1	0	1	0	0	0		0	
149	SBT	White Springs AgChem(GA Sthn/FL RIway)	2	0	2	0	0	0		0	
150	SBT	Support Terminal	1	0	1	0	0	0		0	
151	SBT	NuStar Energy	5	0	5	0	0	0		0	
152	SBT	US Gypsum Company	1	0	1	0	0	0		0	
153	SBT	Southern Belle Frozen Foods	1	0	1	0	0	0		0	
154	C	Trout River Pier 68 Marina	6	0	6	0	0	0		0	
155	SBT	Gate Concrete Co	2	0	2	0	1	0		0	
156	SBT	US Navy Fuel Depot	1	0	1	0	0	1	YES	0	
157	SBT	BP Oil	1	0	1	0	0	0		0	
158	SBT	Amerada Hess Fuel Oil Inc	1	0	1	0	0	0		0	
159	C	One Dock Builders	8	0	8	0	0	0		0	
160	SBT	JaxPort-Ed Austin Marine Terminal	1	0	1	0	0	0		0	
161	SBT	TraPac Terminal	2	0	2	0	0	0		0	
162	SBT	JaxPort Bulk Terminal	7	0	7	0	0	0		0	
163	SBT	Jax Port Authority	4	0	4	0	0	0		0	
164	SBT	JPA/Blount Island	8	0	8	0	0	0		0	
165	SBT	B P B Acquisitions (Formerly Celotex)	1	0	1	0	0	0		0	
166	SBT	ESI of Florida LLC	11	0	11	0	0	0		0	
167	SBT	Terminal Services	4	0	4	0	0	0		0	
168	C	Kenneth Vogelsong	2	0	2	0	0	0		0	

C = Commercial; M = Marina; MF = Multifamily; OT= Other; R=Ramp; SBT=Ship/Barge/Tug; T=Transitory

No.	Type	Facility name	Wet slips 2015	Dry slips 2015	Wet Slips 2016	Dry Slips 2016	No. of Ramps	No. of Lanes	Paved	Parking Spaces	Additional Notes
169	SBT	JEa North Generating Station Dock	1	0	1	0	0	0		0	
170	SBT	Jax Port Authority - 4916	2	0	2	0	3	0		0	
171	C	Florida East Coast Shrimp Producers	9	6	9	6	0	0	YES	0	
172	C	M & M Shrimp Dock Inc	2	0	2	0	0	0		0	
173	SBT	U.S. Marine Corp	3	0	3	0	0	0		0	
174	C/ST	Atlantic Dry Dock Corp	10	6	10	6	0	0		0	
175	C	St Johns Boat Co	6	0	6	0	0	0		0	
176	SBT	Mayport Naval Station	34	0	34	0	0	0		0	
177	SBT	JPA/Mayport Ferry Slip	1	0	1	0	0	0		0	
178	SBT	JPA/Formerly LA Cruise	1	0	1	0	0	0		0	
179	C	JPA/Roland Ice Co	8	0	8	0	0	0		0	
180	C	JPA/Gilmer Pier	7	0	7	0	0	0		0	
181	C	JPA/Hornblower Marine/Ferry Maint Yrd	1	0	1	0	0	0		0	
182	C	JPA/Formerly Atlantic Seafood Co	0	0	0	0	0	0		0	
183	C	JPA/Mat Roland Seafood	0	0	0	0	0	0		0	
184	C	Miss Becky Seafood/Safe Harbor Mrkt	20	0	20	0	0	0		0	
185	C	Rebecca Pack	4	0	4	0	0	0		0	
186	SBT	U.S. Coast Guard - Mayport	6	0	6	0	0	0		0	
187	SBT	Moody Land Co/Bellinger Shipyard	12	0	12	0	0	0		0	

C = Commercial; M = Marina; MF = Multifamily; OT= Other; R=Ramp; SBT=Ship/Barge/Tug; T=Transitory

Figure 63. Table of Marine Facilities in Jacksonville (Duval County) Florida 2017.

Following are a series of letters that document the City's commitments, and the regulatory agencies authorizations for a slip increase in downtown Jacksonville:

- 1) City of Jacksonville's request to increase the number of slips by 175 slips downtown from 789 to 964, and supporting justification measures.**
- 2) Jacksonville Sheriff's Office letter of support, with increased enforcement presence downtown.**
- 3) FWC letter of support with no objection for slip increase downtown.**
- 4) USFWS letter of support authorizing for slip increase downtown.**

PLANNING AND DEVELOPMENT DEPARTMENT



OFFICE OF THE DIRECTOR

April 6, 2017

Carol A. Knox, Section Leader
Florida Fish and Wildlife Conservation Commission
Imperiled Species Management Section
620 South Meridian Street - 6A
Tallahassee, Florida 32399-1600

Re: City Request for Increased Boat Slips Downtown

Dear Ms. Knox:

The City of Jacksonville appreciates the Florida Fish and Wildlife Conservation Commission and the U. S. Fish and Wildlife Service willingness to consider an increase to the downtown DRI's boat slip count. This letter will explain why it is acceptable and expedient to increase the number of downtown slips as well as list the mitigation measures the City is willing to implement to offset the increased slips and perceived threat to manatees.

Why it is acceptable

- Jacksonville's waterways support a primarily seasonal manatee population with greatest abundance during non-winter months. Winter use has decreased in recent years, at least partly due to the decrease of industrial warm-water discharges in Duval County. In the downtown area the industrial warm-water discharge at the Southside Generating Station ended when the plant was decommissioned in 2001.
- In the boat facility siting recommendation section (Sec. 5.2. C), the MPP states: "unforeseen boat facility siting matters that may arise which are not addressed by the boat facility siting strategy will be evaluated on a case by case basis." The opportunity available to Jacksonville with the development of this catalyst site is one of these unforeseen circumstances that the MPP recognized would occur.

- In the current MPP, the Downtown DRI is identified as a "special management" area. The number of slips allowed in the revised plan of 2014 was 789. This number was agreed to during MPP discussions when the economic downturn was affecting downtown development efforts. Clearly the economy has improved and market forces are now driving the need for more boat slips.
- It should be noted that there are other areas of the state where the density of slips in a small area is much higher than in downtown Jacksonville. In addition the St. Johns River is wider than many other waterways, especially in south Florida along the Intracoastal Waterway.
- Due to the more suburban nature of the majority of Duval County waterways, the urban core of Jacksonville is most likely the only area in the county that will experience such an increase in boat slips. As the MPP recognizes, downtown is a special area.
- Speed zones are set up throughout the entire downtown area. The entire river from the Hart Bridge south to the Main Street Bridge is slow speed all year round and only 25 miles per hour in the marked channel. From the Main Street Bridge south to the Fuller Warren Bridge it is slow speed all year long.
- The City of Jacksonville has experienced less watercraft manatee mortalities in the last several years. The revised MPP, with its focus on law enforcement and education/awareness is helping the City of Jacksonville to become more effective in its manatee protection efforts. In addition some of the watercraft-related deaths have been determined to be from interactions with large vessels which most likely are from Jaxport businesses and not smaller recreational boats.

Why it is expedient

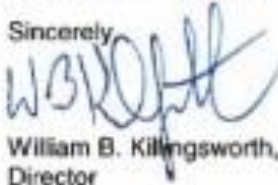
- The 2030 Comprehensive Plan policies regarding manatees need to be amended to reflect the revised MPP language. The Department transmitted the revised MPP related comprehensive plan text amendments to DEO for comment and review and the Department received no comments. Subsequently DEO granted an extension of the deadline for the adoption round while the City negotiates the requested boat slips increase for the downtown urban area within the DRI with FWC and USFWS. In an effort to minimize potential conflicts between the approved MPP and the Comprehensive Plan, the City would like to resolve the Comprehensive Plan language discrepancy as soon as possible.
- The City of Jacksonville thru the Downtown Investment Authority is now negotiating the Development Order for the District. The type of development planned for the project is dependent on knowing if the slips have been approved. What is constructed on the uplands will change depending on the marina. They are expecting to break ground in August 2017.

Mitigation measures

- Increase downtown law enforcement presence. JSO will increase patrols in the downtown area and during the multi-agency deployments. This will begin when the marina is constructed.
- Use PSA announcements several times a year. Public Information Office to disseminate information to T.V and radio.
- The City will add PSA electronic billboard messages several times a year.
- Continue to distribute Duval County Boating Guides.
- Construct manatee information kiosks that provide information on the characteristics of manatees and the potential threat to this endangered species from boat operation, at the District marina.
- DIA will construct manatee information kiosks along the downtown Riverwalks.
- Manatee awareness/education information will be provided to each slip owner of the District marina.
- Require the District Marina to adhere to the Clean Marina Standards.

We appreciate the Florida Fish and Wildlife Commission and the U. S. Fish and Wildlife Service considering the City's request and look forward to working with each agency to assist the City of Jacksonville in facilitating the economic growth of downtown as well as continuing to protect the manatee.

Sincerely,



William B. Killingsworth, AICP
Director



Jacksonville Sheriff's Office

Duval County, Florida

Mike Williams, Sheriff

501 E. Bay Street
Jacksonville, FL 32202

Greetings,

The Jacksonville Sheriff's Office (JSO) recognizes the importance of Marine Enforcement for the safety and security of both the human lives and the wildlife, which inhabit the over 125 miles of shoreline and waterways in Duval County. The JSO Marine Unit is currently in the process of being enhanced after budget cuts in prior years resulted in the downsizing of the Unit. The plan is to increase the Unit from the current two Officers to a total of eight Officers and a Sergeant in two stages. The first addition took place July 8th and included two new officers and Sergeant. In September of 2017 the additional 4 Officers will be added for a total of 8 Officers. Additionally, the added Marine Unit positions will include Dive Team Officers in order to further integrate the two teams and thereby enhance their capabilities and safety.

In order to accommodate these enhancements, we are in the process of acquiring the necessary gear and equipment. Our attempts include the research and pursuit of grants and other funding sources to help enable the purchase of the necessary patrol boats and tow vehicles. Along with the manpower and equipment acquisitions we will also be seeking and conducting some advanced training to enhance their capabilities in areas of marine enforcement tactics and techniques. I have also confirmed that the Marine Unit will be bringing the Smartcop Boating Citations program online so that the offender citations and warnings can be more easily tracked and consistent with the FWC.

The enhancements are being implemented at this time, thus a set schedule for specific patrols and task assignments for the Marine Officers has not yet been solidified. The shift assignments have been set to afford seven day per week continuous coverage, which will definitely increase the number of patrols and deployments they will be doing. As previously noted, JSO is committed to being an active part of the Manatee Task Force and any areas of concern will be considered in their assigned patrol duties. Additionally, the issues with the current and future downtown construction areas have also been identified as current problem areas of concern.

Please feel free to contact me or Sgt. Mickey Mitaly if you have any questions, concerns or requests. We look forward to continuing to work closely with the FWC.

Sincerely,

Shawn McCormick

Lt. Shawn McCormick
Jacksonville Sheriff's Office
501 E. Bay St.
Jacksonville Florida 32202

www.jaxsheriff.org





**Florida Fish
and Wildlife
Conservation
Commission**

Commissioners
Brian Yablonski
 Chairman
 Tallahassee
Aileen P. "Lissy" Priddy
 Vice Chairman
 Immokalee
Ronald W. Bergeson
 Fort Lauderdale
Richard Hanna
 Oviedo
Bo Rivert
 Panama City
Michael W. Sole
 Tarpon
Robert A. Spotswood
 Key West

Executive Staff
Nick Wiley
 Executive Director
Eric Sutton
 Assistant Executive Director
Jennifer Fitzwater
 Chief of Staff

**Division of Habitat and
Species Conservation**
Thomas H. Eason, Ph.D.
 Director

(850) 488-3831
 (850) 922-7733 FAX

Managing fish and wildlife
resources for their long-term
well-being and the benefit
of people

620 South Meridian Street
 Tallahassee, Florida
 32399-1800
 Voice: (850) 488-4876

Hearing/speech-impaired:
 (800) 955-8771 (T)
 (800) 855-8770 (V)

MyFWC.com

November 17, 2017

Mr. William B. Killingsworth, Director
 City of Jacksonville Planning and Development Department
 214 North Hogan Street, Suite 300
 Jacksonville, Florida 32202

Subject: City's Request to Amend the 3rd Edition of the Manatee Protection Plan

Dear Mr. Killingsworth:

The City of Jacksonville's 2012 Consolidated Downtown (DRI) Order limits the number of slips within the DRI area to 789. The Florida Fish and Wildlife Conservation Commission (FWC) has been advised that the City is considering amending the DRI order to include an additional 175 slips for a revised total of 964 slips within the DRI area. The 789 slips are included in section 5.2(G)(i) of the City's Manatee Protection Plan (MPP). The City has proposed that the slip limitation in this section of the MPP also be increased by 175 slips. FWC does not object to the proposed increase in slips being revised in the MPP section 5.2(G)(i) to 964 slips (789 + 175).

The City has suggested taking the following steps (see attached letters) to help offset potential impacts to manatees from additional slips in the downtown DRI area. FWC believes these measures will enhance manatee awareness and protection to offset the additional slips.

- Enhancement of Jacksonville Sheriff's Office (JSO) manatee protection zone enforcement by JSO expansion now in progress.
- The City public information office will increase the level of dissemination of manatee protection information.
- City will require the new marina called "The District" proposed in this area to distribute information to each slip owner about manatees.
- The COJ will construct additional kiosks along the downtown Riverwalk with information on manatees.

Manatee education information and enforcement of the manatee protection zones in the City's waterways are already important elements of the MPP. The proposed expansion of the JSO's manatee protection zone enforcement efforts will be important to reduce the risks to manatees from increasing human activity in the City's waterways. Implementation of these measures and those already in the MPP will be important considerations for future revisions. Please do not hesitate to contact me or Kellie Youmans at (850) 922-4330 if you have any questions.

Sincerely,

Carol A. Knox
 Section Leader
 Imperiled Species Management Section

cc: Jay Herrington, USFWS Jacksonville, jay_herrington@fws.gov



United States Department of the Interior

U. S. FISH AND WILDLIFE SERVICE

7915 BAYMEADOWS WAY, SUITE 200
JACKSONVILLE, FLORIDA 32256-7517

IN REPLY REFER TO:

FWS Log No. 04EF1000-2016-TA-0030

November 16, 2017

Mr. William B. Killingsworth, Director
Planning and Development Department
214 North Hogan Street, Suite 300
Jacksonville, FL 32202-3325

Dear Mr. Killingsworth:

The U.S. Fish and Wildlife Service (Service) has been working with the city of Jacksonville (City) and the Florida Fish and Wildlife Conservation Commission (FWC) to consider the City's request to increase the number of boat slips authorized for the Downtown Development of Regional Impact. The purpose of this letter is to document the Service's position that the proposed increase is acceptable in light of the actions the City has agreed to take as described below.

The City's Manatee Protection Plan (MPP) designates a number of special development areas where the total number of allowable slips within each area is specified. Any changes to the number of authorized slips in these areas require an amendment to the MPP. A total of 789 slips is authorized for the Downtown Development of Regional Impact and all of these slips have been allocated to specific facilities. Two additional projects are being considered so the City requested that the total number of authorized slips be increased by 175.

The City offered to implement a number of actions to help mitigate the potential increased risks that would result from the 175 additional slips. Some actions have already been accomplished while others could be completed before any of the new slips are built.

Completed and ongoing actions include: [1] increased law enforcement presence in the downtown area through the Jacksonville Sheriff's Office (JSO) addition of six new marine law enforcement officers and a sergeant (the previous staffing level was two officers); [2] JSO implementation of the Smartcop Boating Citations program, which makes citation and warning information available to on-water officers in near real-time; and [3] approval for a 25% match of funds for JSO to purchase a new patrol boat.

Additional actions the City would complete before any of the new slips are occupied include: [1] construction of manatee information kiosks along the downtown Riverwalks and at the two new facilities; [2] Distribution of manatee information to each slip owner at the new facilities; [3] use of PSA electronic billboard messages several times per year; and [4] use of other PSA announcements several times per year.

Given the actions and commitments from the City described above, the Service supports amendment of the MPP to authorize an additional 175 slips for the Downtown Development of Regional Impact (new total of 964 slips). For the actions that have not yet been completed, the Service will work with the City and FWC after the MPP has been amended to determine the content, specific number, and placement of kiosks and to discuss activities related to the PSAs. Additional information, including information related to the increase in law enforcement, will be addressed in future MPP annual implementation reports and/or in the MPP when the next 5-year review is performed.

If you have any questions or need additional information, please contact Mr. Scott Calleson of my staff by e-mail at charles_calleson@fws.gov or by calling (904) 731-3326.

Sincerely,



Jay B. Harrington
Field Supervisor

Waterways Commission Meeting Summaries

The Jacksonville Waterways Commission was established in 1984 to study and make recommendations to the City Council with respect to the improvement, development and protection of the St. Johns River and all tidal waters in Duval County. The Commission is charged to formulate an overall plan for dealing with any problems that exist the St. Johns River and Duval County tidal waters and devise methods of developing future uses of those waterways.

The Commission serves as the Duval County committee to review rules proposed by the Florida Fish and Wildlife Conservation Commission governing speed and operation of motorboats to protect manatees. And acts as a coordinating agency and specialized advisor for governmental units and for programs and activities affecting the improvement, development and protection of the St. Johns River and all tidal waters in Duval County.

DATE	DISCUSSION
October 12, 2016	In the monthly status report on the St. Johns River and Manatees, Dr. Quinton White, Jacksonville University, explained that we “dodged a bullet” with regard to Hurricane Matthew. He reported that rainfall is below average. Salinity in the river increased owing to the storm surge that Hurricane Matthew caused. The temperature of the river is steadily dropping because of cooler nights. Dr. White reported that there is considerable concern with the sewage discharge into the river that is the result of the failure of JEA’s lift stations in the course of the hurricane. The system is not designed to handle vast amounts of water. Dr. White feels that people should be cautioned to avoid areas of the river where they will be exposed to e coli and other bacteria. Dr. White reported on the current work on the Maritime Management Plan and its role in the river activation initiative. The October 4 th meeting at the University of North Florida was very successful. There will be a November 1 st meeting at Jacksonville University. Dr. White announced that on October 2 nd there would be Events on the River fete at Jacksonville University’s Marine Science Research Institute. There will be an array of activities. Dr. Gerard Pinto, Jacksonville University, reported that on a September 26 th aerial survey, 162 manatees were sighted in the waterways; he explained that that was a very high number for manatees at this time of the year. Manatees will be leaving the County’s waters fairly soon. Dr. Pinto reported that Hurricane Matthew had little impact on manatees. There were no manatee fatalities to report according to data from the State of Florida.
November 10, 2016	In the monthly update on the status of the St. Johns River, water quality and manatees, Dr. Quinton White reported that we were currently experiencing a lack of rainfall. The water temperature is dropping because of cooler weather. He explained that the evening low temperatures drive the water temperature. The cooler water temperature is why manatees are leaving our area. In an

update on the Maritime Management Plan, Dr. White indicated that he is working with the University of North Florida, Jacksonville University and the Northeast Florida Regional Council on an inventory of water-related facilities and resources in the County. UNF is focusing on a physical assessment. JU is concentrating on available natural resources. The NE Florida Regional Council is doing an economic assessment of resources. The planners are now evaluating information gleaned from the surveys that were taken. It is hoped that work on the management plan will be completed by summer 2017. Lastly, Dr. White commented on an item in the news explaining that there have been reports of a large number of dead fish, primarily catfish, on both sides of the St. Johns River in the Southside and Ortega. The Florida Fish & Wildlife Commission is investigating. In his report on manatees, Dr. Gerard Pinto reported that at last count, there were 162 manatees in the area. He is trying to arrange an aerial survey for the coming weekend. The manatees are currently leaving our area, alluding to the cooler water temperatures that Dr. White had mentioned. Dr. Pinto indicated that there were no new manatee deaths to report. There have been 12 deaths for the year, one of which was watercraft-related.

December 14, 2016 In his monthly status report on the St. Johns River, Dr. White reported that the water temperature had dropped to 65°. The salinity of the river is fluctuating, a residual hurricane effect. He reported that rainfall is below normal. Dolphins are still active in the area. Dr. White reported that he is excited with how the Maritime Management Plan is coming along and indicated that the November meeting at JU was a good one.

In Dr. Gerard Pinto's update on manatees, he reported on an end of November aerial survey where very few manatees (6) were sighted, mostly in the Julington Creek area. No new manatee deaths to report. 12 for year, one of which was watercraft-related. He reported that the manatee rescued in Ortega, and widely covered in the media, is doing well recovering at Sea World.

January 11, 2017 Next on the agenda was the monthly update on the status of the St. Johns River and manatees. Dr. Quinton White said that we are currently in the doldrums. Water temperatures have been dropping and we are not seeing any manatees. He had good news to report about the manatee that had been trapped in an Ortega storm drain. The manatee had been released back into the river after its treatment and recuperation at Sea World.

Dr. White reported that we are behind in rainfall and this affects the salinity in the river. The recent meeting on the Maritime Management Plan, held at the Beaches, was a successful gathering.

February 15, 2017 In his monthly St. Johns River Status report, Dr. Quinton White began by reporting that a Florida Fish and Wildlife Commission grant is working its way through the City Council that seeks funding that would enable Jacksonville University to initiate a study on artificial reefs. Dr. White characterized the recent announcement and news about Ocearch locating its work at Jacksonville University as “exciting news” for the university. He said that the scientific undertaking is not solely about sharks but educating the public on all aspects of ocean life. Dr. White reported that there was not that much happening in the river. There was above average rainfall for January. The river is warmer than normal. Dr. White indicated that the Maritime Management Plan would be on the agenda of Council President Boyer’ river activation working group that meets on February 24th. On that same day, Florida Coastal School of Law would be hosting the 18th annual Northeast Florida Environmental Summit. Dr. Gerard Pinto reported that on a February 1st synoptic aerial survey, six manatees were sighted; he had never seen that many in Jacksonville during the winter before. He reported that there have been two manatee fatalities so far this year. On January 11th, a manatee perished from cold stress in the river near the Ortega River. On February 8th, there was a watercraft-related fatality near the Arlington River boat ramp.

March 15, 2017 Dr. Pinto reported that rainfall is below average and that we are heading into drought conditions. Salinity in the river is slightly higher than normal.

On a recent aerial, the annual synoptic survey, six manatees were sighted. The overall numbers for manatees are up. As the weather warms, dolphins are beginning to move upstream. Dr. Pinto indicated that authorities have begun surveying dolphins. There were no new manatee fatalities to report.

April 12, 2017 Next on the agenda was the St. Johns River Status Report on Water Quality and Manatees.

Dr. Quinton White said that as the weather warms up and Summer returns, he is concerned that toxic algae might return because of the level of nutrients in the river. He reported that salinity in the river is above normal and that the water temperature was somewhat warm for this time of the year. Rain has been a problem. It rains hard and then stops. The increased salinity is a problem for organic life. Dr. White reported that the dolphins in the river remain active.

Dr. White reported that the Jacksonville Sheriff’s Office had been helpful in the efforts underway to monitor the artificial reefs that the City had deployed in the river. Samplings from the submerged artificial reefs showed barnacles that

indicated a healthy environment. The river reefs are a success and drawing fish.

With regard to the Maritime Management Plan, Dr. White reported that the public input phase has been completed. The comments received in the public input phase were all good. The study is working on GIS maps and putting recommendations together.

Dr. Pinto reported that the manatee is no longer on the endangered species list but is still considered a threatened species. He reported that there has been no manatee fatalities reported recently. There have been two (2) manatee fatalities since the beginning of the year. Manatees are beginning to move back to our waterways.

May 10, 2017

Next on the meeting's agenda was the monthly status report on the St. Johns River, water quality and manatees. Dr. Quinton White reported that the lack of rainfall has been significant. The lack of rain has resulted in increased salinity levels in the river. The rainfall is 14" below normal. The water level in the upper basin of the river is approaching severe drought level. Marine species are moving further upstream. Dr. White explained that fresh water plants and grasses are gone. The trees in the Julington Creek area are beginning to die. All of this is caused by the increased salinity level in the river.

Dr. White reported that on the previous day, May 9, 2017, the contract between the City of Jacksonville and Jacksonville University for the latter's monitoring the artificial reefs in the river was signed.

Dr. White reported that the Oearch research vessel will be in Jacksonville until mid-June. The ship will then venture to the coast of New Jersey to track great white sharks. The ship will then head to Long Island.

Dr. Gerard Pinto reported that things are fairly quiet with the manatees; no reports of fatalities. There will be an aerial survey of manatees at the end of May. There are a lot of manatees in the area which enhances the potential for fatalities.

June 14, 2017

In response to a question raised by Commissioner Jill Haskell pertaining to the recommendation to explore possible exemptions to the Manatee Protection Plan's restrictive speed zones, Captain Jim Suber explained that it would take an act of Congress to exempt anyone from the rules that restrict events in the river. Captain Suber said there has always been the suggestion that local officials meet with our Congressional delegation about the issue. He explained that there are certain times of the year, particularly in the winter months, when manatees are not in our waterways or are very sparse.

In urging the Waterways Commission to follow Captain Suber's suggestion, Commissioner Haskell made a motion to have a JWW Subcommittee formed that would explore ways that would enable everyone on the waterways to enjoy the river downtown, and she was not just referring to boaters.

Dr. Quinton White provided some historical background on how the slow speed zones came about. He explained that the federal government has been adamant in not allowing the City to alter the slow speed zone. The U.S. Fish & Wildlife Service regulates the Manatee Protection Zone. The City would have to make an appeal to that body in any effort to have an event that meant exceeding the slow speed zone.

By a unanimous voice vote, the Commission voted to approve the Haskell motion.

In the monthly St. Johns River Status Report on Water Quality and Manatees, Dr. Quinton White remarked that he had previously been reporting on the increased levels of salinity in the river because of the record low rainfall; he now reports that there has been a phenomenal turn around in the past six weeks with record amounts of rainfall. He characterized the rainfall as a "huge flood of rain" that has resulted in a dramatic, steady drop in salinity. Dr. White further noted that, unfortunately, this is the time of year when people are using a considerable amount of fertilizer for their lawns and gardens. The fertilizer, combined with runoff from heavy rains, results in a considerable increase of nutrients in the river. The nutrients trigger the algae blooms. Dr. White reported that there is word that algae blooms have already surfaced in Doctors Lake.

Dr. White reported that with the increased rainfall and the arrival of summer weather, there is the normal concern about mosquitoes. Dr. White reported that Janie Thomas, Executive Director, Shrimp Producers Association, had called him with concerns about the impending massive spraying of pesticides to eradicate mosquitoes that inadvertently kill the larvae of shrimp and crabs. Dr. Quinn explained that there needed to be a balance between the concerns of health and safety and concerns for the environment. As an alternative to spraying pesticides, Dr. White reported that Ms. Thomas raised the idea of installing bat houses in marshes to combat mosquitoes.

Dr. White reported that the Maritime Management Plan work is nearing

completion. Currently, work is underway to put the report together; he expects the report will be ready for reviews in the late fall.

Dr. White reported that the river reefs that the City deployed in the St. Johns River, south of the Fuller Warren Bridge, in December 2014, have been carefully observed. A JSO dive team has retrieved valuable samples of material from the reefs. Dr. White indicated that efforts should probably be made to make people more aware of the existence and location of the river reefs.

In an update on manatees in our waterways, Dr. Gerard Pinto reported on a May 19th aerial survey of manatees and referred to a map that had been distributed depicting the locale and number of mammals seen on the survey. Salinity in the river destroys the grass that manatees feed on. Dr. Pinto noted that from the Buckman Bridge northward, there is no longer any grasses which means there are fewer manatees in that area. Heavy and repeated rainfall would help the return and growth of the underwater grass.

Dr. Pinto reported that there were four manatee deaths reported in May and one manatee rescue in June. Two of the manatee fatalities were reported in the Ortega River and Mill Cove. The cause for both deaths was undetermined. A manatee death in Julington Creek was determined to be perinatal. A manatee rescued in the IntraCoastal Waterway was most unusual in that the manatee had two fetuses; it later died.

Dr. Pinto announced that on June 24th, he would be making a presentation on manatees at the University Park Library on University Boulevard.

July 19, 2017

Dr. Quinton White explained that he has been regularly monitoring the NOAA (National Oceanic Aeronautic Administration) sensors in our area; there are 19 of them.

Dr. White reported that salinity in the St. Johns River is fluctuating. When the tide is high, the salinity is considerable. Conversely, there is less salinity at low tide. He reported that the water temperature is fluctuating as well. Dr. White explained that the recent heavy rainfall has resulted in considerable storm water run-off of fertilizer- related nutrients into the river. The run-off has triggered algae blooms, particularly in Doctors Lake; the bloom will move in our direction in time. In response to a question, Dr. White explained that residential run-off

accounts for at least 80% of the algae blooms; another 20% is linked to agricultural and industrial discharge into the river.

Dr. White indicated that he is continually monitoring the artificial reefs that the City deployed into the St. Johns River south of the Fuller Warren Bridge.

Dr. White reported that there have been no manatee fatalities in the last month. There have been four manatee deaths in the course of the year. Dr. White reported on efforts to rescue a dolphin that had been spotted entangled in a crab trap line. Repeated efforts to track and locate the dolphin were to no avail.

Dr. White reported that work on the Maritime Management Plan is currently in the writing stage. He feels that that the City has to do a better job in publicizing the maritime resources and assets that are already available.

Council Member Boyer requested that Dr. White and Ex-Officio Commissioner Michelle Tappouni, who represents the Environmental Protection Board, meet with the EPB and other bodies to ascertain whether or not water standards are being met. Improved water quality standards in the St. Johns River was a significant goal set by the River Accord in 2006 by the City, JEA, the Florida Department of Environmental Protection and the St. Johns River Water Management District. Ms. Boyer would like to have report at the next Waterways Commission meeting.

August 9, 2017

The Commission next turned to the monthly St. Johns River Status Report on Water Quality and Manatees. Dr. Quinton White commented on the rainfall situation and explained that recent rainfall has been well above the normal average. At high tide in the river, the salinity is considerable. There is less salinity in low tide. Dr. White said the water temperature is very warm and s Dr. White alluded to the algae bloom in Doctors Lake.

Dr. White indicated that the work on the Maritime Master Plan is coming along nicely.

The artificial reefs deployed in the St. Johns River continue to be monitored. Dr. White noted that the dolphin that he had previously reported to have been entangled in a crab trap line was never located.

Dr. Gerard Pinto reported that there had been no recent aerial surveys for manatees in the waterways. There have been 13 manatee fatalities reported so far this year, four of which were water-craft related.

Commissioner Marshall Adkison said that we need to differentiate the cause of watercraft related manatee fatalities. People assume that all watercraft-related manatee deaths are caused by recreational boaters; he had recently read about a

manatee fatality that was the result of the manatee's encounter with a tug boat.

**September 13,
2017**

The Commission voted to recommend approval of Ordinance 2017-590, Auth 4th Amend to Contract with Jacksonville Univ to Renew the Contract for a 4th Addnl Yr for the continuing Manatee Protection Studies for FY 2017-2018. Assistant General Counsel Paige Johnston explained what the measure entailed, namely, the continuation of Drs. Quinton White and Gerard Pinto as consultants for manatee and marine issues.

The St. Johns River Status Report on Water Quality and Manatees was tabled in the absence of Drs. White and Pinto. (A number Commissioners and staff were absent in the aftermath of Hurricane Irma).

The Chair, Council Member Boyer, commented on the handout, *2030 Comprehensive Plan – Conservation/Coastal Management Element Wetlands Categories*, that she had asked City Planner Ed Lukacovic to provide. The document described criteria for land use changes.

John Flowe, Environmental Engineering Manager, Environmental Quality Division, discussed inshore and off-shore artificial reefs that the City had previously deployed.

He explained that the City is currently researching a third site for an artificial reef. Mr. Flowe will report on the status of oyster beds at the next meeting (October) of the Waterways Commission.

Commissioner Ralph Hodges mentioned that Brian Burket, Nature and Marine Resources Division, Parks, Recreation and Community Services Department, had been working on a report that identified potential sites for onshore fishing. The Chair, Council Member Boyer, suggested that Commissioner Hodges work with Mr. Burket on identifying potential onshore locations and how the City could publicize the information that will be in their report.

Note that manatee mortalities reported at waterways meetings are considered to be preliminary data at that time. Designations of the causes of mortality are subject to change pending finalized necropsy reports.

Law Report Summary

Good coordination and communication with the law enforcement agencies responsible for enforcing manatee speed zones within the county is an essential element of manatee protection. Although the City has minimal data to compare to previous years, the continued tracking of law enforcement efforts will allow the City to provide better analysis in future implementation reports.

The L.E. Task Force has become a valuable method for all law enforcement agencies to communicate and coordinate efforts. All federal, state, and local agencies are committed to assisting the City in boating compliance. The meetings are well attended. All agencies attended the JSO Media Awareness Day.

MANATEE ZONE ENFORCEMENT TASK FORCE MINUTES

May 24, 2017, 1400 (2:00pm)

Attendees:

Jody McDaniel, City of Jacksonville (COJ)
Captain Jim Suber, City of Jacksonville (COJ)
Dr. Quint White, Jacksonville University
Dr. Gerry Pinto, Jacksonville University
Officer Pete Goody (JSO)
Officer Shawn McCormick (JSO)
Officer Robert Holmquist (JSO)
Captain Biagio "Blasé" Angiuli (FWCC)
Adonious Duhart (FWCC)
Nadia Gordon (FWCC)
Allison Perna (FWCC)
Jon Ehrmart (USCG)
Juan Rodriguez (USCG)
Robert Scaduto (USCG)
Nicole Bartlett (Sea to Shore)

The meeting started at 1405 (2:05PM)

Welcome

Opening remarks were made by Captain Jim Suber welcoming all the law enforcement agencies who enforce manatee protection efforts in Duval County.

Introduction of all present

Jim Suber and Dr. Quinton White explained the need for the Task Force and the Duval County Manatee Protection Plan. The task force was to review and coordinate enforcement efforts, zone/signage issues, education opportunities and use of innovative technology/shared resources.

The repair and replacement responsibilities for the manatee buoys were discussed by FWC and USFWS. The number to call is 866 405 BUOY. FWCC retrieves the damaged or off station buoys and takes them to the FWCC facilities at the Jacksonville Zoo. Periodically FWCC has a contractor that replaces the buoys.

Regarding the Waterways Signage for Duval and Clay, 2 poles per sign is a safety concern for boaters, 1 is ideal and preferred and *Single-pile markers appear to be the plan.*

The number and preliminary causes of current manatee mortalities were discussed

We have 6 deaths so far this year. 1 from cold stress, 1 from vessel strike, 2 undetermined, 1 natural, and 1 perinatal.

The importance of communication between agencies as well as other agencies was discussed and all agreed to send enforcement reports to Jim Suber or Jody McDaniel. Jody McDaniel, is getting quarterly LE reports from JSO and FWC, but not FWS.

Those on-water regularly enforcing manatee zones report the zones are confusing for boaters, since they are not consistent and easy to retain. (Such as slow speed zones ranging from 100-1,000 ft. from the shoreline.)

JSO would like access to an individual's priors when stopped, so they can determine if they are a repeat offender, which would dictate if they give a warning or citation. *This will be looked at in house by JSO for solutions.*

JSO expects to get additional on-water staff.

The roles of other departments and agencies outside the Law /Enforcement branch were presented. Healthy Town/Life Well Lived Community on Jacksonville's Downtown Southbank has requested 125 new boat slips, which are still being negotiated.

Special events for the year were discussed. Manatee Awareness Media Day will be coordinated by JSO and Sgt. Patricia Grant April 21 at Metropolitan Park Marina

After the formal meeting several groups gathered to discuss issues.

Meeting adjourned at 1455 hrs.

A. Jacksonville Sheriff's Office

In 2014, JSO spent a total of 105 hours patrolling manatee zones in Duval County, issued 5 citations and 41 warnings.

In 2015, the number of hours the JSO had a manatee zone presence increased 25% (421 hrs.) from the previous year. There were 2 fewer citations issued than in 2014, and the number of warnings decreased by 25 to 16.

FOCUS AREA	# of times in area	Citations	Warnings	Manatee Related Incidents 1
Julington Creek	43	4	2	
County Line - Buckman Brg	50			
Buckman Brg - Fuller Warren Brg	83			
Goodbys Creek	31			
Ortega River	19			
Fuller Warren Brg - Main Street Brg	148		5	
Main Street Brg - Hart Brg	233			
Hart Brg - Matthews Brg / Arlington River	222	1		
Matthews Brg - Reddie Pt	365	2	7	
Trout River	60			
Reddie Pt - Blount Island	138			1*
Blount Island - ICW	111			
ICW North	61			
ICW South	58		1	
ICW - Jetties	70		1	
TOTAL	1,692	7	16	1
JSO Sept 2015.				

*On Aug. 4th, FWC recovered a manatee carcass in Jacksonville, just west of the Dames Point Bridge (30.382611, - 81.561023). She had previously been PIT tagged and was identified as a well-known animal, Jessica, who regularly visited Blue Springs State Park. The head and right pectoral flipper were missing, due to a transecting watercraft-related wound. The animal was estimated at over 11' in length (female).

In 2016, JSO spent 1,692 hours patrolling manatee zones. This represented a decrease of 141 hrs (-9%) from the previous year. In addition, JSO issued 11 citations (4 less than in 2015), and 326 warnings (310 more than in 2015). The Marine Unity had 3 patrol officers on duty.

FOCUS AREA	# of times in area	Citations	Warnings	Manatee Related Incidents ¹
Julington Creek	46		12	
County Line - Buckman Brg	52			
Buckman Brg - Fuller Warren Brg	90			
Goodbys Creek	23			
Ortega River	33		3	
Fuller Warren Brg - Main Street Brg	134	3	37	
Main Street Brg - Hart Brg	164		88	a
Hart Brg - Matthews Brg /Arlington River	201	3	25	
Matthews Brg - Reddie Pt	285	4	65	
Trout River	76			
Reddie Pt - Blount Island	119		8	
Blount Island - ICW	100		7	
ICW North	53		39	
ICW South	74	1	33	b
ICW - Jetties	101		9	
TOTAL	1,551	11	326	2
JSO 2016 Sept.				

a=Dead manatee recovered from FWC at Shipyards 03/18/2016 (cause of death unknown)

b= 3 of 4 signs removed during construction project, unenforceable zone.

JSO Marine Unit had 3 officers on duty.

In 2017, JSO spent 1,844 hours patrolling manatee zones. This represented an increase of 293 hrs. (+16%) from the previous year. In addition, JSO issued 8 citations (3 less than in 2016), and 303 warnings (23 less than in 2016). The Marine Unity had 2 patrol officers on duty, (1 less than in 2016).

FOCUS AREA	# of times in area	Citations	Warnings	Manatee Related Incidents 1
Julington Creek	54	3	15	0
County Line - Buckman Brg	72	0	0	0
Buckman Brg - Fuller Warren Brg	89	0	0	0
Goodbys Creek	25	0	1	0
Ortega River	47	0	2	0
Fuller Warren Brg - Main Street Brg	142	0	54	0
Main Street Brg - Hart Brg	204	2	141	0
Hart Brg - Matthews Brg /Arlington River	180	1	11	0
Matthews Brg - Reddie Pt	285	2	41	0
Trout River	53	0	0	0
Reddie Pt - Blount Island	198	0	0	0
Blount Island - ICW	166	0	4	0
ICW North	89	0	14	0
ICW South*	104	0	15	0
ICW - Jetties	136	0	5	0
TOTAL	1,844	8	303	0
JSO 2017 Sept				

*Signage missing, unable to enforce zone

JSO Marine Unit had 2 officers on duty.

In summary, from 2015 to 2017, JSO hours on the water patrolling manatee zones increased from 1,692 to 1,844 Hrs. (+8% or +152 Hrs.); citations issued increased from 7 to 8 +13%); and from 2016 warnings decreased from 326 to 303 (-7% or -23 warnings). In addition, the number of available officers decreased from 3 to 2 in January of 2017.

B. Florida Fish and Wildlife Commission

The City of Jacksonville began to receive quarterly reports from FWC in November 2014. In the 2014-2015 year, FWC gave 161 citations for the Duval County area. FWC cited more boats in the ICW and the downtown area.

FWC 2015	# of times in area	Citations	Warnings
FOCUS AREA			
Julington Creek		15	
County Line - Buckman Brg			
Buckman Brg - Fuller Warren Brg		2	
Goodbys Creek			
Ortega River		5	
Fuller Warren Brg - Main Street Brg		22	
Main Street Brg - Hart Brg		7	
Hart Brg - Matthews Brg / Arlington River		12	
Matthews Brg - Reddie Pt		5	
Trout River			
Reddie Pt - Blount Island		1	
Blount Island - ICW			
ICW North		20	
ICW South		32	
ICW - Jetties		12	
In St. Johns River		23	
not marked location		5	
TOTAL		161	

Source: FDLE 2015

In the 2015-2016 year, FWC gave 68 citations for the Duval County area. FWC cited more boats in the ICW, downtown area, and Julington Creek. There were significantly less citations issued than the previous year, with 93 fewer citations issued as compared to 2015.

FWC 2016	# of times in area	Citations	Warnings
FOCUS AREA			
Julington Creek		11	
County Line - Buckman Brg			
Buckman Brg - Fuller Warren Brg			
Goodbys Creek			
Ortega River		1	
Fuller Warren Brg - Main Street Brg		39	
Main Street Brg - Hart Brg			
Hart Brg - Matthews Brg /Arlington River			
Matthews Brg - Reddie Pt		2	
Trout River			
Reddie Pt - Blount Island			
Blount Island - ICW			
ICW North		7	
ICW South		6	
ICW - Jetties		2	
In St. Johns River			
not marked location			
TOTAL		68	

Source: FDLE 2016

In the 2016-2017 year, FWC gave 22 citations for the Duval County area. FWC cited more boats in the downtown area. There were significantly less citations issued than the previous year, with 46 fewer citations issued as compared to 2016.

FWC 2017	# of times in area	Citations	Warnings
FOCUS AREA			
Julington Creek		1	
County Line - Buckman Brg			
Buckman Brg - Fuller Warren Brg		1	
Goodbys Creek			
Ortega River			
Fuller Warren Brg - Main Street Brg		11	
Main Street Brg - Hart Brg		5	
Hart Brg - Matthews Brg /Arlington River		2	
Matthews Brg - Reddie Pt			
Trout River			
Reddie Pt - Blount Island			
Blount Island - ICW		1	
ICW North			
ICW South		1	
ICW - Jetties			
In St. Johns River			
not marked location			
TOTAL		22	

Source: FDLE 2017

From 2015 to 2017, citations issued by FWC decreased from 161 to 22 (-86%).

C. US Coast Guard

The City of Jacksonville received 2 multi-agency reports from the USCG. The USCG has been willing and active in manatee protection efforts, but the problem is the constant turnover of personnel assigned to Sector Jacksonville. The USCG has been attending the L.E. Task Force meetings.

FOCUS AREA	# of times in area	Citations	Warnings
Julington Creek			
County Line - Buckman Brg			
Buckman Brg - Fuller Warren Brg			
Goodbys Creek			
Ortega River			
Fuller Warren Brg - Main Street Brg	6	1	
Main Street Brg - Hart Brg			
Hart Brg - Matthews Brg / Arlington River			
Matthews Brg - Reddie Pt			
Trout River			
Reddie Pt - Blount Island			
Blount Island - ICW			
ICW North	13		
ICW South	10		
ICW - Jetties	14	5	
TOTAL	43	6	

Source: USCG 2016

FOCUS AREA	# of times in area	Citations	Warnings
Julington Creek	11		0
County Line - Buckman Brg	20		0
Buckman Brg - Fuller Warren Brg	28		0
Goodbys Creek	0		0
Ortega River	12		0
Fuller Warren Brg - Main Street Brg	36		3
Main Street Brg - Hart Brg	36		0
Hart Brg - Matthews Brg and Arlington River	38		0
Matthews Brg - Reddie Pt	50		0
Trout River	17		0
Reddie Pt - Blount Island	50		0
Blount Island - ICW	77		0
ICW North	91		10
ICW South	88		9
ICW - Jetties*	88		19
TOTAL	642		41

*zone still not enforceable due to lack of signage

Source: USCG 2017

USCG significantly increased hours of operation in the area from 43 hrs. (2016) to 642 hrs. (2017). There was an increase in the warnings given from 6 (2016) to 41 (2017). The area of the ICW near the Jetties remains unenforceable due to a lack of signage.

D. Multi agency deployments

Six multi-agency deployments were held in 2015. A combined 259 hours of law enforcement presence was reported during the 6 deployment weekends. A total of 16 citations and 12 warnings were given.

Multi agency USCG / JSO 2015

FOCUS AREA	# of times in area	Citations	Warnings
Julington Creek	7	4	2
County Line - Buckman Brg	12		
Buckman Brg - Fuller Warren Brg	23		
Goodbys Creek	6		
Ortega River	6		
Fuller Warren Brg - Main Street Brg	24		2
Main Street Brg - Hart Brg	36		5
Hart Brg - Matthews Brg / Arlington River	32		
Matthews Brg - Reddie Pt	47	1	1
Trout River	8		
Reddie Pt - Blount Island	14		
Blount Island - ICW	14	1	
ICW North	4	2	
ICW South	16	8	1
ICW - Jetties	10		1
TOTAL	259	16	12

Source: USCG / JSO 2015

In 2016, six multi-agency deployments were held. A combined 244 hours of law enforcement presence was reported during the 6 deployment weekends. A total of 1 citations and 52 warnings were given.

Multi agency USCG / JSO 2016

FOCUS AREA	# of times in area	Citations	Warnings
Julington Creek	3	0	1
County Line - Buckman Brg	7	0	0
Buckman Brg - Fuller Warren Brg	16	0	0
Goodbys Creek	1	0	0
Ortega River	1	0	0
Fuller Warren Brg - Main Street Brg	27	0	8
Main Street Brg - Hart Brg	36	0	9
Hart Brg - Matthews Brg /Arlington River	34	0	6
Matthews Brg - Reddie Pt	42	1	12
Trout River	9	0	0
Reddie Pt - Blount Island	17	0	1
Blount Island - ICW	16	0	3
ICW North	12	0	5
ICW South	12	0	7
ICW - Jetties	11	0	0
TOTAL	244	1	52

Source: USCG / JSO 2016

In 2017, five multi-agency deployments were held. A combined 240 hours of law enforcement presence was reported during the 5 deployment weekends. A total of 3 citations and 112 warnings were given.

Multi agency USCG / JSO 2017

FOCUS AREA	# of times in area	Citations	Warnings
Julington Creek	9	0	4
County Line - Buckman Brg	10	0	0
Buckman Brg - Fuller Warren Brg	15	0	0
Goodbys Creek	6	0	0
Ortega River	2	0	2
Fuller Warren Brg - Main Street Brg	22	1	8
Main Street Brg - Hart Brg	33	0	66
Hart Brg - Matthews Brg /Arlington River	34	1	5
Matthews Brg - Reddie Pt	54	1	12
Trout River	9	0	0
Reddie Pt - Blount Island	16	0	2
Blount Island - ICW	15	0	0
ICW North	9	0	6
ICW South	8	0	4
ICW - Jetties	9	0	1
TOTAL	240	3	112

Source: USCG / JSO 2017

From 2015 to 2017, total hours on the water patrolling manatee zones have decreased from 259 to 240 (-7%); citations have decreased from 16 to 3 (-81%); however, warnings issued have increased from 12 to 112 (+89%).

EDUCATION SUMMARY

Manatee education for both students and adults continues to be an important objective of Duval County's Manatee Protection Program. Education and outreach includes the development and distribution of the Boating and Angling Guides, community manatee educational talks, participation in community festivals and other events, and transmitting information to the public via the PSA on local T.V. **The stations that have the video for their PSA rotation include WJXT4, Fox30, CBS47, and CW17. The PSA is aired when there is available space/time determined by the T.V. stations.**

Florida Fish and Wildlife Commission - Public Outreach

A total of 12,684 people were involved in the FWC Community Outreach programs and events. The events ranged from School based education programs to Zoo summer camps and festivals. Specifically, FWC reported 1,684 attendees (not including 5,000 Right Whale Festival and 6,000 Jacksonville Science Festival).

City of Jacksonville Parks Naturalist Nature Walks and Talks

From October 2016-September 2017, a total of 716 people attended 149 hrs. of walk and talks discussions by the Parks Department Naturalist. Furthermore, large events in March (World of Nations at Metro Park with 23,000 people) and August (Outdoor Safety Fair at Avenues Mall with 5,000 people) were not included in the outreach figures for 2017. In 2015/16, a total of 1,151 people attended 76 walk and talks discussions; and in 2014/15, 919 people attended 84 talks. These lectures were held at 11 different parks throughout Jacksonville. This number is less than the previous year (2013/14) when 1,281 attended 74 park naturalist talks at 13 different locations.

Jacksonville University Public Outreach

3,081 people (excluding digital media, TV, Radio and Times Union newspaper) attended JU manatee education talks for a variety of schools and community groups. This was greater than in 2016, when 1,179 people attended JU manatee education talks for a variety of schools and community groups. In addition, 1,000 people attended the Water Festival at MOSH and about 6,000 people attended the Jacksonville Science Festival (Metro Park). Moreover, attendance at the Right Whale Festival was 5000 (Jacksonville Beach); Manatee Festival 3000 (Jacksonville Zoological Gardens); and Science on the St. Johns 385 (Jacksonville University's Marine Science Research Institute).

AWARENESS SUMMARY

- Created PSA to be aired spring 2016 (**was not aired during 2017**)
- **JSO held Media Day to stress safe boating and to be aware of manatees in the area.**
- **Dr. White does a monthly newspaper column with FTU and has discussed manatees**
- **JU conducted 3 manatee aerial surveys**

- **From October 2016 to September 2017, 64 single family homes dock permits were issued in Duval County as compared to 65 (2015/16), 59 (2014/15) and 71 (2013/14) for the same months.**

A total of **three (3)** manatee sighting flights were conducted over the county to determine movement patterns of manatees, this including one State Synoptic Aerial Survey. The information is provided to stake holders including law enforcement (Federal, State and County). Stake holders included the Jacksonville Marine Transportation Exchange Network (JMTX), Jacksonville Port, P1 boat race that typically runs a race in June in the waters south of downtown, and the media (Florida Time Union, First Coast News and Others). In addition, local FWC Marine Mammal Recovery Unit personnel and Sea to Shore Alliance staff are notified about the latest manatee sightings report and map. **In 2017, fewer manatees were observed on fewer flights than in 2016. Also, 2017, represents an anomalous year with severe drought early on and significant hurricane activity later in the year (Map Series A).** In 2016, the Single highest day count for 2016 was 217 animals per survey (May 2016) – which was the highest count to date, generated media interest worldwide. In 2016, the mean number of manatees in Duval County was 102 manatee per survey. In 2015, the mean number of manatees in Duval County was 57 manatee per survey.

Just like in Lee County, Florida (**Semeyn, et al. 2011**) the manatee count and distribution information in the form of maps is discriminated to local, state and federal law enforcement, maritime industry groups, the port, and the media so that efforts can be focused on raising public awareness through education.

Table of Educational presentations by JU (2016-17).

Speaker	Date	Address	Time	Organization	POC	Number	Ages	Topic
2016 OCTOBER								
Dr. White	10/13/2016	Duval	10:00	UNF OLU	Shannon Blankenship- SJRK	25	Adults	
Dr. Pinto	10/30/2016	Iowa	10:00	Manatee Informational Meeting for First Lego League Team	Nicole Curcija-parent coach - Skype	Interview	4 x 6th graders and 2 teachers	Manatees SJR - reducing watercraft deaths
Dr. Pinto	11/22/2016	Duval	09:00-16:00	Science on the St. Johns	JU MSRI	181	97 adults and 84 children	Manatees SJR
2016 NOVEMBER								
Dr. Pinto	11/3/2016	Duval	11:00	Senior Seminar Debate	Dr. John Enz	10	College	Manatees ESA Pros/Cons downlisting efforts
Dr. Pinto	11/8/2016	Duval	17:00-18:00	Highlands Middle School - First Lego League Team	Angie Kinlder-Stem DCPS - Skype	Interview	5 x 6th graders and 1 teachers	Manatees SJR - reducing watercraft deaths
Dr. White	11/9/2017	SC	12:00- 1:00	USC Graduate Environmental Seminar	Duane Porter	30	College and Adult	
Dr. Pinto	11/14/2016	Duval	19:00-20:00	SWCPAC	Rosmary Wesolowski rosemary@coj.net	50		Manatees SJR grass beds
Dr. Pinto	11/15/2016	Duval	19:00-20:00	Arlington Inc.	Melody Shacter	10	Adults	Manatees SJR grass beds
Dr. Pinto	11/17/2016	Duval	12:00-13:00	SELS Lecture Series JU	Nisee Goldberg	30	College	Manatees SJR grass beds
Dr. Pinto	11/18/2016	Duval	17:00-18:00	Bolles School	Angie Kinlder-Stem DCPS - Skype	30	MS students and 5 adults	Manatees SJR grass beds
2016 DECEMBER								
Dr. Pinto	12/2/2016	Duval	17:00-18:00	Bolles School	Angie Kinlder-Stem DCPS - Skype	Interview		Manatees SJR - reducing watercraft deaths
Dr. Pinto	12/21/2016	Duval	9-10:30	Rogers Towers Assoc		10	Adults	Manatees and SJR
2017 JANUARY								
Dr. Pinto	1/24/2017	Duval	17:00-18:00	J.E.B. Stuart Middle School - First Lego League Team	Avis Collier-Stem DCPS	Interview	5 x 8th graders and 1 teachers	Manatees SJR - reducing watercraft deaths
Dr. White	1/18/2017	Duval	1:00-2:00	UNF- St. Johns River class	James Taylor	20	College	SJR- Manatees and Water Quality
Dr. Pinto/Dr. White/Dr. Stalker Meetings with grad students Sam and Chelsea - ongoing Manatee photoperiod and isotopic analysis of virbrisse								
2017 FEBRUARY								
Dr. White	2/13/2017	Duval	12:00 -1:30 PM	Commodore League	Madison Shelly		40 Adults	Manatee/SJR/OCEARCH
Dr. Pinto/Dr. White	2/18/2017	Duval	09:00-15:30	Manatee Festival Zoo JAX - Critical Care Center Opening	ZOO JAX - Jennifer Paulk Gate attendance was 5,649	175- 1000+	All ages	Manatees/FWC/River Report
Dr. Pinto	2/23/2017	Duval	09:00-12:00	Florida Coastal School of Law	Tiffany Lutterman Busby _ LSJRB BMAP	40	Adults	Manatees/FWC/River Report/Maritime Mgt. Plan/JUMSRI
Dr. Pinto	2/24/2017	Duval	18:00-20:00	Equity and Justice in Education Exhibit	MSRI JSF	20	Adults plus 4 children	JU/MSRI/river/manatees
Dr. Pinto	2/27/2017	Duval	08:30-16:00	Jacksonville Science Festival - Metro Park	Nadia Hionides	175- 1000+	All ages	Manatees/FWC/River Report/JUMSRI
Dr. Pinto/Dr. White	2/29/2017	Duval	10:00-11:00	St. Josephs Catholic School	RK	20	High School plus 2 adults	Manatees/FWC/River Report/JUMSRI/Aquaculture
2017 MARCH								
Dr. White	3/9/2017	Duval	1:00-2:30	Leadership Jacksonville	Nikki Bryan	65	Adults	SJR/Manatees/ Cruise on River
Dr. Pinto	3/15/2017	Duval	16:30-17:30	Boselli Foundation	RK	15	High School plus 1 adults	Manatees/FWC/River Report/JUMSRI/Aquaculture
2017 APRIL								
Dr. Pinto	4/18/2017	Duval	10:00-12:00	WILMAS 4s	Self, Jenine Flakus WILMAS	12+2	4s + 2 Adults	Manatees/river
Dr. Pinto	4/20/2017	Duval	13:30-17:00	MSC114 Lab Class	Self	18	College	Manatees/Critical Care Center
Dr. Pinto	4/21/2017	Duval	10:00-12:00	Manatee Day Press Conference	Law Enforcement Agencies etc.	TV	All ages	Metro Park./River/Enforcement stop
Dr. White	4/26/2017	Duval	6:00-8:00	Professional Businessmen's Association	Madison Shelly	60	Adults	SJR/Manatees/OCEARCH
Dr. Pinto	4/22/2017	Duval	09:00-16:00	Earth Day	Jacksonville Landing	600	All ages	Metro Park./River/Enforcement stop
2017 MAY								
Dr. Pinto	5/3/2017	Duval	10:00-12:00	Kernan Middle School	MSRI	75	6th graders +4 adults	manatees/river/talk and ppt
Dr. White	5/5/2017	Duval	10:00-11:00	UNF OLU	Shannon Blankenship- SJRK	35	Adults	SJR/Manatees
Dr. Pinto	5/6/2017	Duval	09:00-16:00	Aqua Jax Festival	MOSH	800	All ages (460 adult, 268 youth, 29 other, 44 infant)	manatees/river report/OCEARCH/ju msri
Dr. Pinto	5/6/2017	Duval	12:45-13:30	Aqua Jax Festival	MOSH	25	All ages (mostly adult and middle schoolers)	MOSH manatees/river/talk and ppt
Dr. White	5/10/2017	Duval	6:00-7:00	SCUBANAUGHTS	Sue Cook	30	Adults	SJR/
Dr. Pinto	5/18/2017	Duval	12:45-13:30	Mayport MS	Jill Sullivan	24	Middle schoolers plus 2 adults	manatees/river/LARKIN
Dr. Pinto	5/21/2017	Duval	16:00	Dee Mountcastle	Dee Mountcastle <deidredegarmo@icloud.com>	1	Childrens Book about Manatees	manatees
2017 JUNE								
Dr. Pinto	6/1/2016	Duval	various	P1 Boat Race	Azam and Becky	P1 team/racers		Latest manatee data
Dr. Pinto	6/13/2017	Duval	16:00	Vicar's Landing Retirement Community	Janice Richardson Ponte Verda Beach	35		manatees/river/talk and ppt
Dr. Pinto	6/24/2017	Duval	14:00	Jacksonville Branch Library - University nr. JU	Arlington Public Library			manatees/river/talk and ppt
2017 JULY								
2017 AUGUST								
Dr. Pinto	8/26/2017	Duval	09:00-16:00	River Ruckus & RAM	River Keeper Org	150	various	Manatees & SJR
2017 SEPTEMBER								
Dr. Pinto	9/22/2017	Duval	16:30-17:30	Boselli Foundation	RK	15	Middle School plus 1 adults	Manatees & SJR
Dr. Pinto	9/25/2017	Duval	12:00-14:00	Water Policy Group Meeting	Stephanie Friedman - Haskel Building Riverside	8	Adults	SJR Report, Manatees, Grass beds