

To: The Board of Charlotte County Commissioners.

From: The Charlotte County Manatee Protection Committee

Date: 14 June 2001

Introduction:

- The West Indian manatee has been a protected species in Florida since 1967.
- This species was placed on the Federal Endangered Species List in 1973.
- The U.S. Fish and Wildlife Service (USFWS) establish regulations for manatee protection at the federal level.
- Regulations at the state level are the responsibility of Florida Fish and Wildlife Conservation Commission (FWC)
- In 1989 the Governor and cabinet directed thirteen (13) counties in Florida to develop a state approved Manatee Protection Plan (MPP). Charlotte County was not one of these counties. The neighboring counties of Lee, Collier, and Sarasota are on that list
- Currently the only manatee regulatory area in Charlotte County is located in waters adjacent to the City of Punta Gorda- This manatee regulatory area was mandated by the state in exchange of the necessary permits for Laishley Park in 1995.

Goals and Objectives of the committee:

The goal and objectives of the Charlotte County Manatee Protection Group (MPG) are to develop and recommend a plan to protect manatees while insuring that boaters, citizens, and waterfront property owners have access to Charlotte County waterways and Charlotte Harbor. It should be noted that manatee protection is everyone's responsibility and not solely that of boaters. *At the present time boaters and the boating industry are the only groups being asked to pay for additional enforcement and accept additional restrictions on the water.*

Executive Summary:

The manatee population in Charlotte County waters and in the rest of the State of Florida has shown a steady increase since being placed on the endangered species list in 1973.

In 1976 the estimated population of manatees in Florida was 738

Comprehensive aerial surveys flown in January 2001 documented a total of 3276 manatees in Florida. (See attachment No. I Graph show difference and 25year increase in overall manatee population.)

The current population growth of the manatees in Florida is placed between 6 and 7 percent per year. Continuing at the current rate, the population of manatees would double in the next ten to twelve years.

Charlotte County Surveys:

Aerial survey on manatees in Charlotte County from January 1987 to December 1988 totaled 1775 manatees. (Attachment No. I City of Punta Gorda, Manatee Protection Plan-)

The latest Charlotte County aerial survey conducted by Mote Marine Laboratory from November 1998 Through October 1999 **(twelve month period) documented** 2323 manatees in Charlotte County waters. This is a 30.9 % increase in total number of manatees sighted in Charlotte County. (Mote Marine Aerial Survey, Nov. 98-Nov. 99)

Aerial surveys indicate that the population of manatees in Charlotte County varies considerably during the seasons. These surveys completed by Mote Marine Laboratory indicated a population as low as 22 manatees in January 1999 and a high of 258 in April 1999.

The data verifies the highest population and concentrations of manatees in Charlotte County is in the months of April, May and June. (See attached data)

From 1974 to 2000, there have been 4,043 total manatee mortalities in Florida. (Statistics taken from FMRI data)

Of that number 988 (24.44%) of the mortalities were attributed to be watercraft related

Of the 34 counties in Florida that have manatee populations in the year 2000, 48% of the total mortalities occurred in just three counties, **Brevard, Collier, and Lee.**

In Charlotte County from 1975 to 2000 there were 139 total manatee attributed to watercraft related.

Of all the manatees mortalities in Florida since 1974, only 0.9% are attributed to be boat related Charlotte County.

Boat Registrations, Charlotte County, 1981-2000

Boat registrations in Charlotte County increased from 7,735 in 1981 to 18,505 in 2000. This is a growth rate of 7.3% annually.

The majority of the growth occurred in a ten year period between 1981 and 1991 where it remained steady at 9% per year,

New boat registrations have dropped dramatically since 1991. The rate of growth between 1991 and 2000 was at 3.7 percent.

From 1996 to 2000 the boat registration rate has dropped to 1.9% per year.

The Planning for Public Boating Access section of the county comprehensive plan (April 1997) projected 43,103 registered boats in Charlotte County by the year 2010. Current and projected trends indicate that prediction is in error. This is based on actual figures since the comprehensive plan was submitted and approved in 1997. To reach the projected figures new registrations would have to increase at the rate of ten percent per year. Based on the current trend the projected figure of 43,000 registered boats would not be reached until the year 2024.

88% of all the boats registered in Charlotte County are 26 foot in length or less. (Le., generally relatively shallow draft trailerable watercraft.)

Whereas the fact that manatee populations in Charlotte County are steadily increasing and the number of manatee mortalities that are determined to be watercraft related in the county is so small (.09 percent of the total mortality state wide), the MPG feels that there is little that can be done in Charlotte County that will have a significant impact on total manatee population.

Seagrasses :

The relationship between manatees and the seagrasses has been thoroughly researched. Data cited indicates the average manatee consumes between four and nine percent of their body weight in seagrass each day. That averages approximately 75 pounds of sea grass per manatee per day. Seagrass research and reports published by the Southwest Florida Water Management District (**Dr. Raymond Kurz, Ph.D. and Dr. David Tomasko, Ph.D. This research for the SWFWMD titled: Summary of recent trends in seagrass distributions in southwest Florida coastal waters, 1999**) This research indicates that in 1992 Charlotte County has a total of 17,830 acres of seagrass. By comparison survey completed in 1996 showed 19,225 acres, an increase of 1395 acres of additional seagrass. This is an increase of 7.8% in four years.

The data clearly indicates an increase in seagrass beds and that is evidence of well-fed manatees in Charlotte County. ***The single most important factor affecting sea grass growth is water quality*** (Attachment, SWFWMD Summary of trends in seagrass distributions in Southwest Florida Coastal waters.)

Recommendations to the Charlotte Board of County Commissioners:

Based on the evidence collected and herein contained in the narrative and addendum section of this report, the following recommendations are respectfully forwarded to Charlotte Board of County Commissioners by this Manatee Protection Group.

1. **That at this time no additional manatee protection measures for Charlotte County a warranted or supported by existing data.**
2. Continued manatee education and awareness is necessary for all Charlotte County boating residents and seasonal boaters. Non-boaters also need to be made aware of manatee regulations.
3. That current law enforcement distribution and man-hours spent on the water should be expanded during peak manatee activity months (April, May, and June.) Joint planning and scheduling by all law enforcement agencies to provide expanded coverage is requested.
4. Recognizing the present controversy predicated on the outcome of the existing lawsuit filed by the Save The Manatee Club et al. against the U. S. Fish and Wildlife Service, (USFWS) and the Florida Fish and Game Commission, (FWQ and heightened public interest in Florida concerning additional manatee protection based on the final settlement of this lawsuit, the following actions may apply.

The al settlement stipulation of this lawsuit may cause by court order additional manatee protection areas to be established in various waters of the state including Charlotte County. See attached proposed settlement and targeted areas, including Charlotte County. As a result of this lawsuit and pending settlement, three (3) additional areas in Charlotte County are identified for possible additional manatee protection- These areas are: 1. Lemon Bay 2. Peace River 3. Turtle Bay.

5. Based on the information contained in the above paragraph of this report, the MPG further makes the following recommendations in accordance with the lawsuit settlement agreement relative to specific areas of Charlotte County.

Recommendations for Lemon Bay, Peace River, and Turtle Bay:

Lemon Bay

The geographical boundaries of Lemon Bay are defined as the inland body of water south of Venice in Sarasota County to the Boca Grande Causeway. Charlotte County's portion of Lemon Bay begins just north of the Tom Adams Bridge in Charlotte County. This area has accounted for ten (10) manatee deaths due to watercraft since 1975. The area in general is very narrow with shallow flats adjacent to the Intra Coastal

Waterway. Boaters traversing the bay make heavy use of the dredged and marked intra coastal waterway (ICW).

The current regulations relating to manatee protection in the Sarasota County portion of Lemon Bay consist of a 25 mph maximum speed limit within the confines of ICW and slow-speed/minimum wake zone outside the ICW.

It is the recommendation of the MPG to continue the existing regulations in effect in Sarasota County and extend them through the Lemon Bay portion of Charlotte County, i.e. 25 mph in the entire ICW, slow speed/minimum wake outside of the ICW with the exception of approved marked channels.

It is the intention of the MPG that boaters traversing the ICW between Sarasota and the Boca Grande causeway have a uniform set of regulations (speed limits) that are consistent for the entire passage through Charlotte County. This provision permits the use of the ICW for the purpose it was intended - a safe marked waterway for expedient boat traffic.

The area historically known as "SKI ALLEY" is to be exempt from this provision and should remain in its present unlimited speed status. This area extends from the Slow Speed area near Weston's Resort to and including the Stump Pass channel) Other marked channels leading from the ICW to Stump Pass and privately marked channels leading to Palm Island Resort and other designated areas (channels) are also exempt from this speed limit provision.

Peace River

The Peace River area is an area that has been designated per the lawsuit for additional manatee protection measures. Since 1976 only 11 manatee mortalities have been attributed to boats in that area. A review of the data shows that 26% of all the manatee mortalities in the Peace River were attributed to watercraft. This is consistent with the overall state average of 24.4%. Comparison of this data fully supports that a manatee in the Peace River is in no more danger than other manatees statewide.

The recommendations of the former Manatee Sea Grass Task Force (MSGTF) called for a single channel up the river where boaters would be allowed to travel at a maximum speed of 25 mph- All areas outside of that channel would be slow speed/minimum wake. Local boaters and residents who live adjacent to or boat on the river rejected this plan. The provision was not accepted at by the Charlotte County Board County Commissioners.

The current MPG representatives for the Peace River, Mr. **Joseph Fleming and Captain Dennis Kirk**, recently conducted an open public meeting with property owners, canal maintenance organizations, boating and fishing clubs, and environmentalists in an effort to provide additional public input from residents of this area

The recommendations for the Peace River and the Charlotte County portion of the Myakka River are primary recommendation for this area is a *SLOW SPEED MINIMUM WAKE ZONE extending 150feet from shores of the Peace River, except where the channel of the river infringes on this zone.* The application of this speed zone is applicable to portions of Shell Creek and all of Hunter Creek

Turtle Bay

Turtle Bay is a large protected embayment on the inside of the Cape Haze Peninsula. The area is approximately 3.3 miles long and 1/2 mile wide. The water is relatively shallow approximately 4 foot depth with deeper potholes. Due to the shallowness of the area, boat access is generally limited to shallow draft boats of 24 foot in length or less. Local knowledge is needed to safely navigate into the area. Turtle Bay is a well-known recreational fishing area and has name recognition on a state and national level.

It is important to note that since the state has been keeping records on manatee mortality (1976) there has never been a documented record of a manatee mortality attributed to water craft in Turtle Bay.

Significant numbers of manatees continued to be sighted on the outside edge of the sandbar near the harbor side entrance to Turtle Bay (see Photo aerial photo of Turtle Bay). The former Manatee Sea Grass Task Force recommended this area, which is near the southeast entrance to Turtle Bay, become a "*Voluntary Idle Speed Zone*". The current MPG recommends a *SLOW SPEED MINIMUM WAKE* area for the south cast entrance only. The MPG further recommends that the entire Turtle Bay area become a "MANATEE AWARENESS / CAUTION ZONE " with a maximum speed limit of 25 mph. (Same criteria for boat speed as the ICW),

It is the specific intention of the MPG and our recommendation to the board that all recreational boaters and fishermen continue to have year round access to all of Turtle Bay.

Catfish Creek and Widden Creek:

The MPG recommends these bodies of water be limited to watercraft powered by oars, push poles, paddles, and electric trolling motors only. The original MSGTF also made this recommendation.

These areas are very shallow, support seagrass, and have little boat traffic. It is the intention of the MPG that these limited areas be set aside for seagrass protection, and the use of internal combustion engines prohibited.

Both are protected areas and are ideal for canoes, kayaks, bird watchers, fishermen and all others who want a pure natural outdoor experience in Charlotte County. Similar areas in the Tampa Bay area designated in this manner have met with success and general overall approval.

Summary Conclusion:

- After 20 years of protection, -over \$100 million dollars of taxpayers money and hundreds of research projects, the only plan the Federal and State officials can come up with is to try to get boaters to slow down; then neither manatees or boaters are currently being properly served. (See Dr, Tom Frazer's report, attached)
- The manatee population in Florida has grown for the last 25 years. Increases in manatee populations can be expected to coincide with increasing numbers of mortalities to manatees from all causes including boats. More manatees equal more mortalities.
- Focusing on the increase of manatee deaths while failing to point out the large increases in the manatee population has caused boaters to question the effectiveness of additional manatee protection measures.
- Without the voluntary compliance of boaters all manatee protection measures would be ineffective.
- Manatees in Charlotte County are usually in transit. Charlotte County has no manmade **artificial** warm water discharges from power plants or factories. The county's population of manatees changes drastically with the seasons.

Additional Non-Boater related factors:

There are some very significant natural and manmade non-boating related factors that have a dramatic effect on the manatee population and mortalities in Charlotte County.

Red Tide and cold weather have a dramatic effect on manatee mortality. **** In 1998, 148 reddie related deaths occurred in a 6-week period in the area just south of Charlotte County. This number is greater than all the manatee mortalities from all causes in Charlotte County since 1974. An unusually cold winter has resulted in 32 manatee mortalities in first 90 day of this year.

Special Note: In October 1998 the Lemon Bay area experienced the worst red tide outbreak in thirty years. Between October 1 11th and October, 21" seven (7) manatee mortalities were reported in the Charlotte County portion of Lemon Bay. Three of these were attributed to impact with watercraft.

- 2 At the Florida Power and Light (FPL) plant in Ft. Myers, hundreds of manatees congregate in their warm water discharge during the winter months. FPL has estimated that they spend approximately \$ 100,000 per week during the winter to warm this water. If a disease or virus would break out in area it may result in large manatee mortalities. Some of which would undoubtedly show up in Charlotte County waters.
By having a large number of artificial warm water discharges in the winter we have altered the manatees' natural migration path_ This has cut the Florida manatees off from their neighbors in the West Indies and Puerto Rico.
- 4 This has resulted in a lack of genetic diversity. This ultimately is the biggest threat to the survival of the manatee in Florida. This lack of genetic diversity results in inbreeding and an increase in disease thus causing the manatee to become more sensitive to climate changes.
- 5 Recent governmental decisions can have a detrimental effect on manatee populations. Last fall the water level of Lake Okeechobee was lowered in anticipation of hurricanes and floods. This water was drained into the Caloosahatchee River. This influx of freshwater resulted in the destruction of saltwater sea grass beds. When the manatees arrived in the area during the winter, their normal food source was gone or extremely scarce. Many of them were stressed or starved.
- 6 The effect that an increase in phosphate mining near the Peace River will have on future water quality will have on manatees and future seagrass growth in Charlotte County is an unknown factor.

Immediate implementation measures to improve manatee protection in Charlotte County.

- o Education is the key to a successful program. All resident and especially boaters who use our waters should be aware of where manatees can be expected to be found during various seasons. Charlotte County Boater's Guides should include manatee information and boat ramps should post manatee warnings and regulations. Waterfront property owners should know that it is a federal crime to feed or give fresh water to manatees. This practice makes manatees dependent on man.
- o A link on the Charlotte **County web site should be established** and regularly updated. This information should post the latest manatee regulations and sightings. Maps should be posted that show the seasonal changes in manatee locations in our county. Mortality data showing location and cause should also be available in an easy to understand public format.
- o A greater level of effective communication between county staff, federal and state agencies is necessary
- o A frank and honest dialogue must be established concerning what is expected from Charlotte County and the regulatory agencies to improve manatee protection.

- It is recommended that local Charlotte County resources be used to keep track of the manatee population and locations. The Sheriff's Office, The Civil Air Patrol, and the Coast Guard Auxiliary perform air and water patrols over our waters on a regular basis. They should be encouraged to help keep track of manatees. The county should request that we be included in any statewide manatee surveys. A manatee hotline should be established.
- The county should revisit the study on boat use patterns in the county. The problem is not too many boats or too many manatees. The problem is too many boats and too many manatees at the same place at the same time. We should know what months and times of the week when we have the most boats in our waters. We should study the boater and boating patterns as much as we study the manatee.
- Manatee preservation organizations should be encouraged to head up "On the Water" volunteer groups. Joining special interest groups or buying license plates is not really doing enough to help the manatee. Special interest groups (Save the Manatee Club) should share in the financial responsibility of enacting protective measures. Boaters do not harm manatees intentionally. A system or program to warn boaters that manatees are in the path of their boat deserves consideration
- Currently boaters are the only group being asked to make sacrifices. Boaters must have input into any additional regulations; that will affect their rights. Boaters through their current registrations and additional charge in the boater sur tax generated 4.7 million dollars for manatee study and protection, These funds should be used to pay the required dredging, land purchases, signage, signage maintenance and law enforcement.
- The boaters are already contributing to this cause and this committee does not recommend increasing their contribution for this purpose. Manatees are everyone's responsibility, not just boaters.
- Any restrictive boating regulation enacted should have a measurable goal and a flexible mechanism to modify or delete the regulation if the goal is not achieved. Sunset legislation should be incorporated into this rule making or legislation
- That any future boards and committees formed to address manatee and related issues in Charlotte County be appointed from a pool of qualified Charlotte County residents. These Charlotte County resident members should be the only members of said committee to have voting privileges of that designated body. Ad hoc members of these committees can include staff members of various government organizations, (FWC, USFWS) and special interest groups and organizations who may make written or oral presentations to the committee but have no voting authority on the committee.
- Future manatee protection measures should encourage boaters to use marked channels and direct boating traffic in waters that are safe for manatees, then these primary channels should be permitted to be dredged to a minimum depth of 8 feet (MLW). The main boating channels must be deep enough so that manatees can submerge under moving boats. A boat with a 4-foot draft, and large manatee passing each other in a 5-foot channel is a recipe for disaster. Regulatory agencies that approve necessary permitting have caused undue delay in requested permits to remedy this situation in Charlotte County. The end result has been detrimental to the manatee.

Respectfully Submitted to the Charlotte Board of County Commissioners.

 Gary L. Hoffman, Co Chairman

 Captain Ron Blgo, Co Chairman

 Josph Flemming, Representative Peace River

 Captain Dennis Kirk, Representative Peace River

 Rich Novak, Marine Extension Agent