

PUBLIC COMMENT

Indian River Addendum

**Substantiated Best Science Based
Support
for
Upgrading Classification of the
West Indian Manatee
2nd Edition, April 2016**

Submitted to:

U.S. Fish and Wildlife Service
Docket Number FWS-R4-ES-2015-0178

April 2016

Submitted and Prepared by



Citizens for Florida's Waterways
P.O. Box 54712
Merritt Island, Florida 32954-1712
www.cffw.org

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FOREWORD

Citizens For Florida's Waterways respectfully submits this standalone ***Indian River Lagoon Addendum***. This addendum can also be considered as an attachment to our consolidated comment ***Substantiated Best Science Based Support for Reclassification of the West Indian Manatee***, 2nd Edition, April 2016. Together, these documents comprise the Public Comment of Citizens for Florida's Waterways, in response to USFWS *Proposed Rule to Reclassify the West Indian Manatee to Threatened*, Docket Number FWS-R4-ES-2015-0178

In September 2014, Citizens for Florida's Waterways (CFFW) respectfully submitted our Public Comment Document titled "***Substantiated Best Science Based Support for Reclassification of the West Indian Manatee***" supporting the USFWS *90-Day Finding on a Petition To Reclassify the West Indian Manatee From Endangered to Threatened*, Docket Number FWS-R4-ES-2014-0024

Submitted and Prepared by:

Citizens for Florida's Waterways
P.O. Box 54712
Merritt Island, Florida 32954-1712
www.cffw.org

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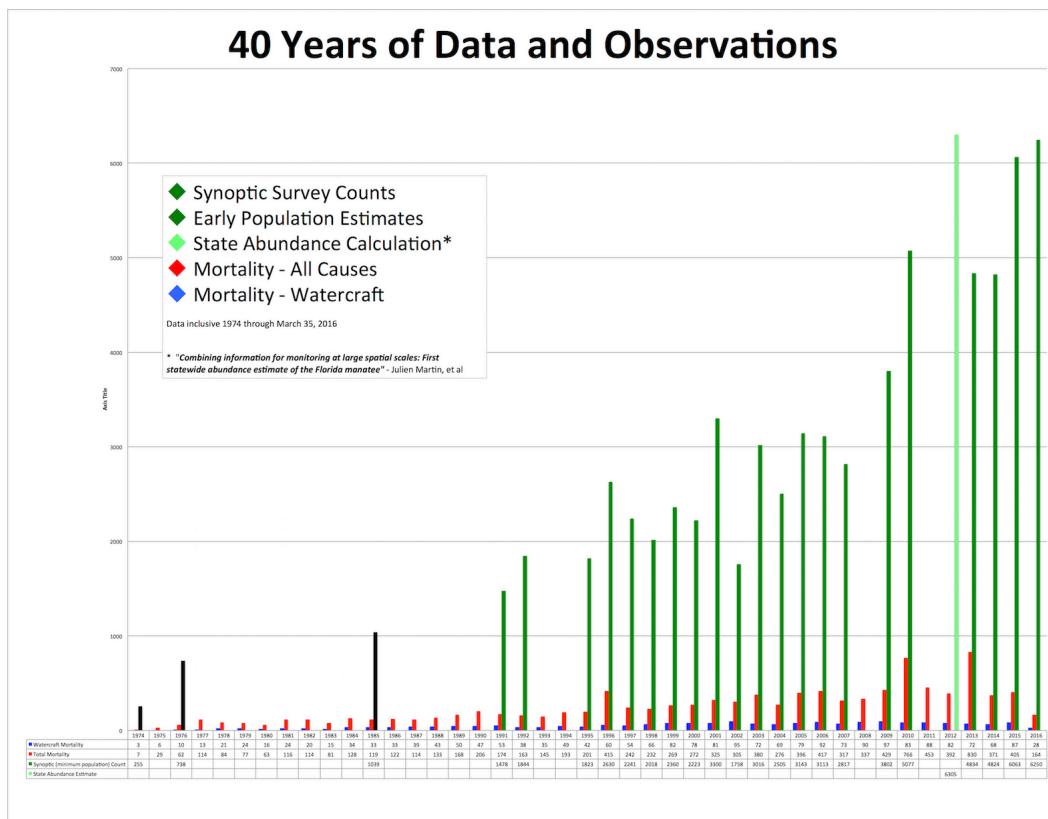
For any clarification, additional information or other needs
associated with the content of this report
contact: info@cffw.org

CFFW Supports Reclassification of the Manatee to Threatened

Reclassify the West Indian Manatee as Threatened so that we can reduce and eliminate the man-made warm water outflow at the Cape Canaveral Energy Center (CCEC) and Save the Indian River Lagoon from a pending destructive manatee population on the verge of exceeding sustainability

We are the Citizen's for Florida's Waterways (CFFW), founded in 1994 and dedicated to our original purpose to advocate and pursue the advancement of public opinion with well-understood data and facts resulting from the application of sound scientific principles and assure these were the basis of manatee management practices.

Manatee management must be re-focused on current issues and threats. Over the years we have been proud to play a major role in the Manatee Forum and through this we have been provided with the opportunity to hear from the experts and understand the depth of knowledge as well as the areas requiring significant additional information to understand. It is our opinion that the much of the concentrated effort of both the State of Florida (FWC) and the Federal (USFWS) wildlife agencies has been focused in areas that have long ago become non-critical (e.g. protecting the species from potential extinction) while subjects that have emerged as critical (e.g. local area carrying capacities and optimum sustainable populations) are not properly addressed. Managing watercraft mortality is distracting too much of our time and resources from more important critical issues.



Public opinion backed by threats of litigation must not be allowed to override science.

We feel the agencies' misplaced priorities are the direct result of undue pressure brought on the agencies through the constant threat of lawsuits from NGO "environmental" organizations. These organizations and their salaried management have a vested financial interest in the illusion of the crisis of manatee endangerment. They operate on contributions, which are almost completely dependent on emotional reaction. The NGOs are vested in this widespread public opinion, which they have propagated and perpetuated with disregard for the complete turnaround in the status of the manatee as a species.

Reclassification is the only possible conclusion. We commend the USFWS for its commitment to reevaluate and recommend reclassification of the manatee in the face of misplaced emotional reaction and a massive campaign of unsubstantiated opinion to the contrary. Although the science and the classification criteria of the ESA demand that the manatee be reclassified as '*recovered*', we accept that the general public will not accept that truth and we therefore support the initial step of reclassification as '*threatened*'. This will initiate the process of reeducating the public and transitioning public opinion to the real status of the manatee, '*recovered*'. Conversely, if the Service does not follow through and actually re-classify the manatee, the NGOs will continue to 'bully' the agencies to maintain management practices based on the outdated 'more is better' approach required by '*endangered*' and the agencies will continue to be defenseless against the threat of litigation.

The time has come to begin the process of determining when and how, not if, we should change our approach to manatee management. The days of fear of impending extinction are far behind us. The level of manatee population that is sustainable must be better understood on a regional, if not local basis. The population has continued to increase at a steady rate in excess of 5% growth per year showing great resilience to significant mortality events caused by red tide and cold over the last five years.

Today's challenge is to completely understand the limiting factors and the level at which the manatee population will begin to self-regulate. When this begins, it will more than likely occur first on the East Coast. The populations on both coasts are similar in number, but the irregular features of the West Coast coastline, multiplicity of islands, number and significance of bays, fresh water river outflows and areas of limited human development, particularly in the important warmer Southwest areas, provide a superior habitat to the East Coast.

Available forage is clearly that limiting factor that will regulate the East Coast manatee population. The analysis provided in the *USFWS Final Report, Carrying Capacity Assessment of Manatee Forage and Warm-water Associated with Eleven Florida Sites* shows that forage is at least 10 times more critical, and therefore the limiting factor, to the manatee population than warm water volume. The Indian River Lagoon System (IRL) is probably the most important source of submerged aquatic vegetation (SAV), the preferred source of manatee vegetation, on the East Coast. Unfortunately, this region does not have nearly the available forage capacity compared to the volume of natural warm water outflows.

Combining the estimated IRL SAV density and growth rates with estimate manatee

CFFW Supports Reclassification of the Manatee to Threatened

consumption we arrive at this calculation:

One (1) average manatee consumes the total productivity of 2.6 to 12.6 acres of IRL seagrass each year.

ONE Manatee is a Gentle, Harmless Herbivore

An Average 1,000lb Manatee Consumes

4-9%* of its Body Weight in Vegetation

Each Day

(* - per FWC)

14,600 – 32,850 lbs Each Year

One acre of IRL Seagrass can produce 2,600 – 5,500** lbs per year

(** - includes density and growth rate per USFWS / SJRWMD)

TWO THOUSAND MANATEES in BREVARD

is a

PROBLEM

They consume the entire productivity of

no less than 5,300 acres per year

and

as many as 25,000 acres per year

of

IRL Seagrass

We offer three important observations about this estimate:

- 1) Farmers and ranchers well understand the need to balance livestock with available forage and recognize that over-grazing can quickly destroy pasture. Denuded pasture is a significant contributor to soil erosion and runoff. The same principle applies to seagrass, yet none of the regulatory / oversight agencies have considered this factor in their decision-making or research.
- 2) CFFW is the only organization that has examined this topic. We have repeatedly invited regulatory / oversight agencies to work with us. We are pleased that the St Johns River Water Management District has begun to take note, and to a lesser extent, the Southwest Florida Water Management District, but FWS and FWC have not yet acted. In our opinion, this is a glaring example of the misaligned priorities of the two primary manatee management agencies.
- 3) Without doubt, overgrazing of seagrass releases nutrients formerly held in place by seagrass roots into the water column, encouraging algae blooms, and reducing sunlight. Without doubt, seagrass that no longer has a “fallow season” to allow regeneration is more susceptible to stress.

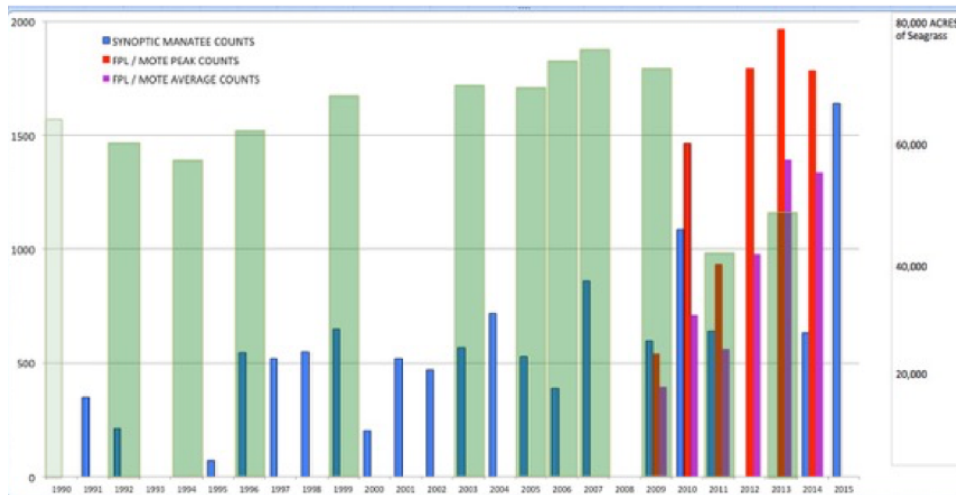
The IRL has suffered significant losses of SAV as well as significant and repetitive algae blooms. The prevailing theory is that the algae blooms have blocked sunlight and this has caused the loss of SAV. While this is a valid theory, the fact is, we have not definitively identified the change in the IRL condition that initiated these recent repetitive massive blooms. We can, however see a potential cause for such a dramatic loss of SAV without considering, and independent of, the complicating factor and additional loss from the algae bloom attributed to blockage of sunlight.

The current state of the IRL is not independent of the significant increase in year round manatee population over the last five years. We now know that the introduction of artificial man-made warm water sources at the IRL power plants has long ago served its purpose as a desperate measure to protect the manatee from extinction. The perpetuation of this practice encourages continued growth of the concentrated manatee population in the north central IRL. The warm water capacity is in direct conflict with the much more limited capacity of the available SAV. In fact, the winter and suspected year round manatee population in this region has reached a level that may have already significantly impacted the SAV acreage.

Without reclassification and the reshaping of public opinion, we will never be able to eliminate the attractive nuisance of man-made thermal pollution source. Fifty five (55) years of manatee training to return each winter to the Brevard County power plant location has likely changed the genetic migratory imprint in many manatees. The fact is that one in three of the entire east coast manatee population congregates each winter in this location, far north of the natural 68F winter gradient in the IRL. Because of this, it is a risky proposition to consider terminating the warm water outflow. What will be the fate of the manatees that return here the first year that the outflow is not active? One could conjecture that there is the possibility of a significant mortality event due to cold stress.

The fate of the IRL may indeed partially depend on the courage to eliminate the man-made outflow. As risky as the proposition to eliminate the warm water outflow is with respect to the fate of the more than 1,000 manatees that have now learned to winter there, the potential consequence associated with the risk of continuing this practice is extremely grave. If the concentrated manatee population continues to increase in numbers at the rate that we have observed over the last 25 years, there is no doubt that the natural level of SAV, which has already shown significant decline, in the area will be diminished to the point that the IRL could be declared a ***dead river***. Because without SAV, the result would not only be the complete loss of habitat the manatee, but for almost every other native species to the ecosystem that is dependent either directly on the SAV or the quality of water that only can be provided by the SAV.

Recent SURGE in IRL MANATEE POPULATION Precedes and Coincides with MASSIVE SEA GRASS LOSS



The save the manatee club would like to have the service believe that the manatee is an innocent victim in the deterioration of the IRL water quality. This victim argument, like all of the arguments that are offered to resist reclassification, simply has no scientific basis. Clearly, the manatee population has been a significant part to the problem to date and the continued presence of this many animals will be significantly more detrimental to any potential recovery of the SAV acreage and the IRL itself. The most probable outcome is that after the manatee have consumed the available SAV in the upper IRL, their basic instinct for survival will push them to other areas where there is both warm water and available forage.

***Reclassify the Manatee
Shut off the CCEC Warm Water Outflow
HELP US Save the IRL
Save the Manatee***