Volume 28 – Issue 4

Julv/ Auaust 2021

Citizens For Florida's Waterways promotes the need for responsible use of Florida's waterways. Our primary objective is to encourage coexistence among recreational and commercial boaters, the marine industry, property owners and the environment. Citizens for Florida's Waterways advocates education in the safe and considerate use of watercraft with respect for the marine environment.

President's Message

Author's Aside – No one denies that the IRL suffers from many ills and there are plenty of folks involved in the very valid runoff/sewer/septic discussions and corrective actions. But a healthy lagoon is not sustainable without a healthy abundance of seagrass to balance the nutrient loading. Currently there is very little being accomplished or proposed to recover and restore seagrass. This is an area that needs our attention and the focus of the following.

When Will We Shut-Off the Hot Water?

Why do we perpetuate the grossly negligent man-made flow of heated water into the IRL from the power plant locations near Port St. John (PSJ)? You can trace the roots of this marginally legal and currently LETHAL practice back to the highly suspicious crisis of impending manatee extinction raised by literally a handful of people in the mid 70s.

It has been clear for at least a decade that the increasing local herd size is due to the warm water outflow. The decreasing abundance of their main food source, seagrass, had put us on the path of an impending train wreck. The number of manatees continuing to die from starvation indicates that we have reached the site of impact.

Yet the agencies refuse to shut-off the hot water and return the animals to natural migration. Years ago, I was as blunt with them as possible. I presented them with two choices:

- -Turn of the water and risk some manatees not returning to a natural migration and succumbing to the cold OR
- -Leave the water flowing and attract more and more manatees till they deplete the seagrass and the whole river and most everything in it dies including a LOT of manatees.

They kept looking for a third option that doesn't exist and we are now looking squarely at a strong possibility of the latter.

How did we get here?

The two original power plants at PSJ were brought on-line around 1960. Just like most of the current power plant sites in Florida from that initial growth era, the PSJ sites were chosen adjacent to a large body of water. The water was needed to keep the generating machinery from overheating. Water was pumped out of the IRL and flowed through the machinery and dumped directly back in to the IRL. No attempt was made to cool the water that became heated in the process.

The Federal Clean Water Act passed in 1974. The Act declared discharges of large masses of heated water as

CFFW Officers

President

Bob Atkins ratkins@cffw.org

Vice President

Kelly Haugh 321-543-6970

Secretary

Peggy Wehrman

Treasurer

Karen Dignan

Newsletter Editor

Kelly Haugh
cffwcovergirl@gmail.com



Board of Directors

Gary Haugh
Sandy Reynolds
Robin Turner
David Zimmerman

Membership

Sandy Reynolds sreynolds@cffw.org

Government Liason

Steven Webster swebster@cffw.org

Please Mark Your Calendars!



- » August 19:Brevard Marine Advisory Council 6:00 pm Viera Government Center, Bldg. C, 3rd Floor. Open to the public.
- » September 1: District 2 Dredging Committee Meeting 6:00 pm at Kiwanis Island, Merritt Island. Open to the public.
- » September 16: Brevard Marine Advisory Council 6:00 pm Viera Government Center, Bldg. C, 3rd Floor. Open to the public.
- » September 27: Board of Directors Meeting 6:30 pm Lighthouse Christian Church on N. Banana River Dr. Open to the public
- » October 6: District 2 Dredging Committee Meeting 6:00 pm at Kiwanis Island, Merritt Island. Open to the public.
- » October 21: Brevard Marine Advisory Council 6:00 pm Viera Government Center, Bldg. C, 3rd Floor. Open to the public.

Newsletter Delivery Mode E-Newsletters Now Available

CFFW is offering all members the option to receive all future newsletters by email instead of a hard copy by mail.

If you wish to save your club money on printing and postage, please reply to info@cffw.org and we will add you to the email list for your newsletters!.

You can view the same exact version online at CFFW.org and click on "newsletters" tab and the issue you would like to view. �



Continued from Page 1

(thermal) pollution and just as dangerous as discharges of chemicals into our natural waterways. The power plants throughout Florida were in violation.

It was going to cost millions to bring each of the existing plants into compliance with these new thermal parameters. By 1974, manatees had begun stopping short of their natural migration to naturally warmer waters south of Brevard and were staying safe from hyperthermia in the PSJ outflows.

The manatee extinction crisis was building momentum. With little or no basis other than counting dead animals, the manatee population was guessed to be around 800 in 1976 and dwindling. No practice that might save the animal from the impending extinction could be wrong. The USFWS got waivers to the clean water act to preserve the hot outflows at PSJ and a few other coastal plants around Florida as manatee sanctuaries. In fact, the plant operators were compelled to provide a hot outflow whenever the ambient waters dipped to 68 degrees — whether the plant needed the cooling or not. The Endangered Species Act had trumped the clean water act. The survival of the manatee was more important than the natural temperature of the IRL.

As a matter of record, the latest (2017) official estimate of the manatee population is over 8,800 and growing.

Who Is to blame for current manatee starvation?

Ironically, the blame falls on the very people who are responsible for protecting the manatee - or their choice of words - "SAVING" the manatee. It is the "saviors" that triggered this tragic set of events through their continual defense and

perpetuation of the PSJ warm water outflow that has resulted in a concentrated distribution of the manatee population into an area that can no longer sustain the dietary requirements of the local herd.

It disgusts me every time I see or hear one of these "experts" address the current situation and blame it on loss of seagrass due to algae blooms caused by pollution (and then mention boats — of course - in their next breath). These "saviors" have been blaming everyone but themselves for decades. It is their own misguided manatee management that shoulders a significant share of the blame for the current situation. They may even share some of the blame for the algae blooms and ultimately the state of the IRL.

This is more than just an opinion. Believe me, I care. We all care. I care enough to have been warning the responsible representatives of the state and federal agencies (FWC, USFWS) that this day was coming for over 10 years. In 2014 and again in 2016, I compiled, analyzed, and formally presented the cognitive and responsible agencies' best available data with respect to the abundance (tons) of seagrass in the IRL, the number of manatees in Brevard each winter (2,000)

... (Continued on Page 4)



Continued from Page 3

and the amount of seagrass (tons) required to sustain the health of the local heard.

It's time for everyone to see the numbers

After counting dead animals for nearly 20 years and conjecturing about how many manatees there really were, we finally attempted to physically count manatees for the first time in 1991. Thereafter, these counts (synoptic surveys) were to be conducted annually and always on cold winter days and mostly focus on warm water areas where manatees congregated to seek refuge from the cold. That first count found 319 animals at the PSJ plants.

By 2010, the steadily increasing number of animals found at PSJ was 958 and a total 1,087 were counted within Brevard. This was more than double the number of animals counted in all but one of the previous 20 years. A relative population explosion. 2010 was also the year that we experienced that first lethal algae bloom that originated near the lush seagrass meadows of Turnbull Basin, an easy manatee swim from PSJ for a meal and not a heavily populated area north of Titusville up near Haulover. This was also the year that the depletion of SAV in the IRL was drastic. Brevard county SAV coverage went from nearly 60,000 acres in 2009 to less than 30,000 acres in 2011.

The St Johns River Water Management District (SJRWMD) is the source for seagrass monitoring in Brevard (and the IRL). Their pre 2010 estimate for seagrass density in the IRL was 1,466 lbs/acre with a winter growth rate of about 0.5% to 1.0% per day. (Summer growth is nearly 5 times the winter rate). But it is winter when we have an UNNATURAL abundance of manatees residing in Brevard. Including growth, the pre 2010 wintertime production of an acre of SAV was between 2,000 and 4,000lbs. Today, not only are the number of acres greatly depleted but the density

of SAV on those acres is also. I do not know how much less but I believe it is significantly less that 1,466lbs/acre – but without an update from SJRWMD, I feel compelled to stick with the pre 2010 density value.

The agencies use 1,000lbs as an average manatee weight across the population and estimate a manatee's daily SAV consumption averages 4 to 9% of its body weight – or on average, 40 to 90lbs per manatee per day. The "winter" period is 120 days (Nov 15 – Mar 15). Each manatee is capable of consuming 4,800 to 10,800lbs of SAV in that time. That is the total production of at least one acre of SAV per animal and as many as 5 acres per animal each winter.

Of the 2,037 manatees counted in Brevard in 2017, 1,448 were huddled nearly flipper to flipper in the warmth of the PSJ outflow. The following year 1,527 manatees crammed into the outflow. Those 2,000 winter-time resident manatees need the total production of somewhere between 2,000 and 10,000 acres of IRL SAV to survive each winter — and that is based on pre-2010 SAV density estimates. The actual acreage is probably higher due to lower density.

All of this and more was presented at the Manatee Forum in October 2016. That package was an update of a presentation made in May of 2014. You can easily access the entire presentation and see the details on our web page. Go to www.cffw.org and select "LIBRARY" at the top. Once on the LIBRARY page, scroll down to the link

"IRL Carrying Capacity Assessment-102516"
The direct link to the package is:
https://cffw.org/wp-content/uploads/2016/11/
IRLCarryCapacity-1016.pdf

... (Continued on Page 5)

Continued from Page 4

An Updated Assessment of Manatee Carrying Capacity in the IRL



Presented to the Manatee Forum by Bob Atkins, President Citizens for Florida's Waterways (CFFW)

October 2016

DENIAL

The "saviors" are in a state of **DENIAL** an several fronts.

- -The fact that the PSJ outflows are one of the root causes of the IRL problem
- -The significant role that manatees have had on seagrass losses
- -The potential that seagrass loss from manatee consumption contributed to, or maybe caused the algal blooms
- -The fact that manatees uproot and destroy a percentage of the seagrass they consume

All Denied

The state and federal agencies collaborated on and released the "Florida Manatee Warm-Water Habitat Action Plan" in October 2020. It had been advertised as FINALLY including a road map for removing the artificial warm water outflows. IT DID NOT contain ANY actions to do that. So we continue on the path to starving even more manatees and potentially killing the IRL.

The seagrasses will not recover until the overgrazing pressure is eliminated. But it's not just the consumption of the seagrasses that is an issue. Those same seagrasses serve as the primary containment for nitrogen and phosphorous – the nutrients the plants need for health and growth in the water. In fact, seagrass is the critical factor in the balance of those nutrients in the aquatic system. The seagrass is vital to nearly every species in the IRL and some of those are species that only visit the IRL for breeding.

What we are experiencing with this local over-population of manatees is not only consumption of massive amounts of seagrass but maybe even worse, the loss of the ability of the waterway to maintain a healthy nutrient balance. Seagrass consumption by manatees not only reduces the vegetation and the absorption of nutrients, but the nitrogen and phosphorous returns to the waterway after digestion and further contributes to the nutrification imbalance. Ultimately, the algae blooms thrive in an over-nutrified body of water. The algae blocks sunlight which kills more seagrass and those rotting plants release their once absorbed nutrients back into the water. This is the definition of a death spiral.

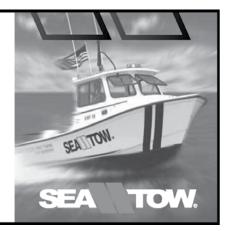
We all know that manatees don't bite. They have no front teeth. They yank vegetation out of the lagoon and then use their molars, their only teeth, to chew. They generally disturb and many times even remove the roots in the process.

... (Continued on Page 6

Sea Tow Port Canaveral

Serving Port Canaveral, Indian & Banana Rivers 321.868.4900

800-4-SEATOW seatow.com



Continued from Page 5

We have all seen formerly lush seagrass beds turned to bare bottom. How long does it take for grasses to return to abundance. I witnessed a total area wipeout by a small herd in a single weekend in the 90s. That area where we maintained a slalom course near "Ski" Island has not yet fully recovered.

Frustration

So now we find ourselves focused on saving the starving manatees as much or more than saving the IRL. The "saviors" are screaming CRISIS all over again. They are claiming the manatees as the canaries of the IRL – and yet – maybe just maybe - they are part of the problem. Not through any fault of their own – it's usually a manmade problem – and I think this one clearly is.

We all know that any attempt to plant seagrass will meet the same fate as all previous attempts. CONSUMED unless walled off. Can you imagine trying to conduct a seagrass restoration project without fencing the manatees out? Can you imagine the outcry form the masses if we dare deny access to plantings by the starving manatees?

But the road to recovery and long-term sustainability of a healthy IRL begins with

TURN OFF THE HOT WATER

2022 CFFW Board of Directors Slate

All CFFW Members are eligible and encouraged to vote. Please turn in your ballot at the 2021 CFFW annual meeting in September or mail in before September 15, 2021.

You may mail this ballot to:

CFFW

P.O. Box 541712

Merritt Island, FL 32954-1712

Write-ins are encouraged. Nominations from the floor during the October meeting are encouraged.

YOUR INVOLVEMENT ON THE BOARD IS ENCOURAGED!

2022 BALLOT

The ballot includes 8 Candidates. You may vote for up to 11 Candidates, which means you are encouraged to write-in at least one name.

Standing For Re-Election: Check the ☐ next to the candidates

Bob Atkins	President
Kelly Haugh	Vice President
Peggy Wehrman	Secretary
Karen Dignan	Treasurer
Gary Haugh	Director
Dave	Director
Zimmerman	
Sandy Reynolds	Director
Robin Turner	Director

Write-Ins: You may write in as many candidates as you wish. Please include their name and phone number. If elected, write-ins may decline the honor.

Name	Phone

CFFW Member Recognition

Diamond Level (\$100 per year)

Bob & Sherry Atkins

Ben Blythe

Jack & Karen Dignan

John Farley

Charles & Susan Frazier

Jay Humphreys Gary & Kelly Haugh

Keith & Tamasine Houston

Doug Jaren Frank Jones

Troy & Genese Launay

George & Majel Legters

Mike & Kris Moehle

Tom Mott

Don Nesbitt/Waterfront Solutions

Jim & Ann O'Malley

John & Merri Mulkey

Paul & Tammarra Mycoskie

Cloud & Frances Pawtowski

Chuck & Susan Reed

Sandy Reynolds Richard Sproc

Wayne & Pat Stratford

Robin & Kathy Turner

Debra Warner

Willie & Peggy Wehrman

Bill & Eileen Wetzel

Robert Wille Gerd Zeiler

Dave & Bonnie Zimmerman

Gold Level (\$50 per year):

Skip & Ruth Bateman

Vincent Barro

Helen & William Bennett

Marie Bridges

Harold D. Casleton

Iva & Linda Chamless

Don & Annette Doerr

Glen & Sherry DeJong

Scott Ellis

John .C. Farley

Derek Ferguson

Ed French

Joe Fust

Gus & Bobbie Gostel

Harry Highstone

Tad Jackson

John & Elizabeth Picardi

Robert Rusk

Brian & Angela O"Neal

Gary & Debra Sawicki

Orson Tarver

Jim & Pam Urick

Jess H. Yates, DMD

New Member:

Wayne Butler

Mandatory Equipment

For Your Boat:

A CFFW Family Membership!

If you own a boat or live by the water, you can't afford not to join Citizens For Florida's Waterways!

J	\$25	Silver	Family <a>□	\$100	Diamond	Family
---	------	--------	-----------------	-------	---------	--------

Donation (3)	\$)
--------------	-----

Date	Check

Credit Card #

Exp. Date

Name

Address

City

State Zip

Phone

Email

Company

'Join by Check OR Credit Card!'

Clip and mail to:

Citizens For Florida's Waterways

PO Box 541712 Merritt Island, FL 32954-1712

or join with your

credit card on ou

secure web site at cffw.org
CFFW is a 501(c)4 organization. Donations and

^{□ \$50} Gold Family □ \$500 Platinum Family



Citizens For Florida's Waterways

Post Office Box 541712 Merritt Island, FL 32954-1712

If you're not a member... please join. Your membership dues provide the financial support needed to save family boating from the million-dollar enviro-businesses.

Please join online at cffw.org or by mailing the enclosed membership form.

Is it time to renew your membership? Please note your membership is valid thru:



Get the Good Stuff for your trailer & tow vehicle Locally-owned locations in Cocoa, Merritt Island, Melbourne & Palm Bay napaonline.com

Dan Dvorak, Owner, Past CFFW President



Seawalls Lifts Repairs

DON NESBITT 321.454.9100

615 Azalea Avenue Merritt Island, FL 32952 P:453-3582 F:454-9102

CBC 1251647 docks@cfl.rr.com



CFFW members are entitled to a full Membership in Boat US for 50% off the regular annual dues! Please use discount code **GA84884B** to receive your discounted membership.



BoatUS and BoatUS ANGLER Member benefits include Member Rewards at West Marine stores. discounts at marinas nationwide on fuel, repairs, and overnight slips, on-the-water Towing Services, highly-respected Marine Insurance, a subscription to BoatUS Magazine or BoatUS ANGLER.