



City of Stuart

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April 27, 2020

Colonel Andrew Kelly
U.S. Army Corps of Engineers, Jacksonville District
P.O. Box 4970
Jacksonville, FL 32232-0019

Re: City of Stuart adopted Vision Statement for Lake Okeechobee System Operations

Dear Colonel Kelly:

On behalf of the City of Stuart, Florida, we would like to provide the U.S. Army Corps of Engineers with our recently adopted **St. Lucie Estuary Lake Discharge Elimination Vision Statement**. The statement is enclosed with this letter for your reference and we hope it will help your dedicated staff to identify critical goals and necessary steps for future lake management in order to ultimately eliminate any and all damaging discharges to the St. Lucie Estuary.

As our primary goal, we have identified an 11-foot (NGVD) lake elevation target by June 1st each year. We understand and appreciate the complexity of the Lake Okeechobee Operating System, and we realize that reaching an 11-foot elevation of the Lake by end of dry season each year may not always be achievable. However, considering the several decades of destructive discharges to the St. Lucie and the need for long term recovery to our ecology and community, we hope your team will strongly consider the weight of consequences to each community within the operational system, and not simply the consequences alone. We are confident that once the science and historical data are collectively analyzed, it will become increasingly evident how critical an 11-foot lake elevation (by June 1st) each year will be to accomplish the most amount of good for the most amount of people and the environment.

We appreciate the opportunity to share our vision for future lake management and we look forward to further discussing our ideas with the Army Corps in its effort towards achieving greater operational goals while weighing the impacts of water management on communities like the City of Stuart.

Sincerely,

Mike Meier
Mayor

Eula R. Clarke
Vice Mayor

Merritt Matheson
Commissioner

Rebecca S. Bruner
Commissioner

Kelli Glass Leighton
Commissioner



**BEFORE THE CITY COMMISSION
CITY OF STUART, FLORIDA**

RESOLUTION NUMBER 37-2020

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, ADOPTING A SAINT LUCIE ESTUARY LAKE DISCHARGE ELIMINATION VISION STATEMENT FOR THE PURPOSE OF DEFINING A FOCUSED VISION FOR THE CITY IN ALL FUTURE CORRESPONDENCE WITH THE UNITED STATES ARMY CORPS OF ENGINEERS, SOUTH FLORIDA WATER MANAGEMENT DISTRICT, AND OTHER LOCAL, STATE, AND FEDERAL AGENCIES CONCERNING THE MANAGEMENT OF LAKE OKEECHOBEE; REQUESTING THE UNITED STATES ARMY CORPS OF ENGINEERS ADOPT AN OPERATIONAL GOAL TARGETING AN 11 FOOT LAKE OKEECHOBEE ELEVATION (NGVD) BY JUNE 1ST EACH YEAR; PROVIDING FOR AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

* * * * *

WHEREAS, the U.S. Army Corps of Engineers have conveyed destructive freshwater discharges from Lake Okeechobee into the Saint Lucie Estuary since 1923; and

WHEREAS, the City of Stuart was the epicenter of the 2013, 2016, and 2018 algae crises, harmful algal bloom events spurred by decades of manmade conditioning, and proliferated by freshwater discharges from Lake Okeechobee; and

WHEREAS, it is the sense of the City of Stuart that these man-made disasters could have been avoided with a reformed approach to Lake Okeechobee management in which the health and

Resolution No. 37-2020

Resolution adopting a St. Lucie Estuary Lake Discharge Elimination Vision Statement

safety of the people, and the preservation of the natural environment, are paramount to maintaining an overabundance of water supply for agriculture and commercial users; and

WHEREAS, the United States Army Corps of Engineers have the opportunity to undo decades of catastrophic damage to the Saint Lucie Estuary, and to the communities it effects by modifying all future Lake Okeechobee System operations in a way that will allow for the natural ecosystem within the St. Lucie Estuary to reestablish biodiversity and resiliency, a primary objective within the Lake Okeechobee Regulation Schedule; and

WHEREAS, the City of Stuart requests the U.S. Army Corps of Engineers target level of 11 foot elevation (NGVD) of the Lake by June 1st each year as its operational goal, while maximizing beneficial flows west and south of the Lake throughout the dry season, thereby providing the Saint Lucie Estuary, its natural environment and ecology, and the residents of the City of Stuart the critical relief that is so urgently needed.

NOW THEREFORE BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, THAT:

SECTION 1: The foregoing precatory language is adopted as being true and correct and is incorporated herein.

SECTION 2: The City Commission of the City of Stuart, Florida adopts the enclosed vision statement for the purpose of identifying a focus for all future correspondence with the U.S. Army Corps of Engineers, South Florida Water Management District, and other local, state, and federal agencies concerning the management of Lake Okeechobee.

SECTION 3: The City Commission requests the U.S. Army Corps of Engineers adopt an operational goal targeting an 11 foot Lake Okeechobee elevation (NGVD) by June 1st each year, while providing maximum beneficial flows both south and west of the Lake in order to eliminate the need to discharge water to the Saint Lucie Estuary and to provide time for this ecosystem to recover and rebuild its resiliency.

SECTION 4: This Resolution shall become effective upon its adoption.

Resolution No. 37-2020
Resolution adopting a St. Lucie Estuary Lake Discharge Elimination Vision Statement

Commissioner GLASS LEIGHTON offered the foregoing resolution and moved its adoption. The motion was seconded by Commissioner MATHESON and upon being put to a roll call vote, the vote was as follows:

MICHAEL J. MEIER, MAYOR
EULA R. CLARKE, VICE MAYOR
BECKY BRUNER, COMMISSIONER
KELLI GLASS LEIGHTON, COMMISSIONER
MERRITT MATHESON, COMMISSIONER

| YES | NO | ABSENT | ABSTAIN |
|-----|----|--------|---------|
| Y | | | |
| Y | | | |
| Y | | | |
| Y | | | |
| Y | | | |

ADOPTED this 13th day of April, 2020.

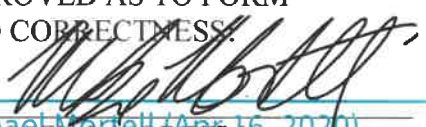
ATTEST:



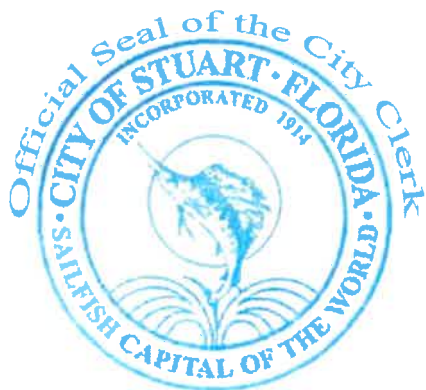
MARY R. KINDEL (Apr 16, 2020)
CITY CLERK



MICHAEL J. MEIER (Apr 16, 2020)
MAYOR

APPROVED AS TO FORM
AND CORRECTNESS.


MICHAEL J. MORTELL (Apr 16, 2020)
CITY ATTORNEY



St. Lucie Estuary Lake Discharge Elimination Vision Statement

Lake Okeechobee discharges have been impacting the City of Stuart since 1923.

Human health has suffered. As a result of harmful, polluted freshwater discharges, the citizens of Stuart and surrounding areas have been exposed to dangerous toxins that have adversely impacted human health. A recent study from The Ohio State University found that our region experiences deaths due to nonalcoholic liver diseases nearly twice that of the national average. This higher rate of death is correlated to Lake Okeechobee discharges containing or otherwise proliferating toxic cyanobacteria in the region (OSU 2015). Other studies raise concerns over potential increased risk of both cancers and neurological and neurodegenerative diseases resulting from human contact with the cyanobacterial toxin microcystin.

Our economy has suffered. In addition, polluted discharges from Lake Okeechobee have adversely impacted the region's economy through depressed retail and commercial business revenue, loss of water-related jobs, and other partial or total losses to businesses that rely on clean water in the St. Lucie Estuary. A recent economic analysis by (Martin County, 2017) determined that not only have both sales revenues and hotel occupancy rates been impacted by algae bloom events, but overall visitations can be reduced regionally for up to 10 years following these environmental and health-related crises.

Our environment has suffered. Furthermore, the region's estuarine and near-shore ecosystems have been significantly degraded with catastrophic impact and potentially irreversible damage caused by the transport and deposition of millions of tons of sediment (muck) and nutrients from Lake Okeechobee, into the Saint Lucie Estuary. Infrequent and intermittent relief from these damaging discharges has failed to allow aquatic life in the Saint Lucie Estuary to rebound to the point of reestablished biodiversity and resiliency, thereby compounding the man-made threat posed to this ecosystem.

The U.S. Army Corps of Engineers (Corps) is primarily responsible for sending polluted water to the St. Lucie Estuary. Since 2008, operations by the Corps have exacerbated the human health, economic, and environmental impacts as a result of discharging greater volumes of polluted lake water during the summer and fall months when toxic algae are more prevalent. However, during 2019, the Corps and the South Florida Water Management District moved enough lake water west and south during the dry season to sufficiently allow the lake to drop below 11.0 ft by June 1st. No Lake Okeechobee Service Area (LOSA) water supply users experienced significant damages by having the lake at that level; in addition, submerged aquatic vegetation in the lake rebounded by fivefold, and further expansion is critical to both the recovery and resiliency of this fragile ecosystem. As a result of achieving this low stage at the beginning of the rainy season, it was not necessary to make damaging releases to the St. Lucie Estuary during the summer and fall of 2019.

Operational Goal. While lake stage on June 1st is not the sole determinant, lowering Lake Okeechobee's water level below the nominal target of 12.5 ft by June 1st will reduce the potential for discharges of potentially toxic lake water to the City of Stuart and the St. Lucie Estuary. *The fastest, simplest, and cheapest way to minimize toxic and damaging discharges to the estuaries is to lower the lake by sending maximum beneficial freshwater flows south to the Everglades National Park and west to the Caloosahatchee River throughout the dry season, and not to the St. Lucie River with a goal of bringing Lake Okeechobee to a target level of 11 feet NGVD or lowest achievable level by June 1st, the start of the wet season. To accomplish this goal, the U.S. Army Corps of Engineers should prioritize sending maximum beneficial flows south and west earlier in the dry season. Any and all freshwater discharges to the St. Lucie Estuary should be identified as a "measure of last resort" in all operational parameters within the Lake Okeechobee water management system.*

This operational goal is within the current operational flexibility of the U.S. Army Corps of Engineers, as defined in the Lake Okeechobee Regulation Schedule (LORS08).

The City of Stuart is committed to continued coordination with the Corps, the District, and other local, state, and federal agencies to achieve this goal.

References:

The Ohio State University, 2015. Zhang, F., Lee, J., Liang, S. *et al.* Cyanobacteria blooms and non-alcoholic liver disease: evidence from a county level ecological study in the United States. *Environ Health* 14, 41 (2015). <https://doi.org/10.1186/s12940-015-0026-7>.

Tourism Economics, An Oxford Economics Company, on behalf of Martin County, FL 2017. The Impact of the 2016 Algae Blooms in Martin County, FL. Losses Suffered by the Tourism Sector and Overall Economy.



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