

MEMORANDUM

To: USACE Colonel Brandon L. Bowman, Major Cory Bell, Richard McMillen, SFWMD Governing Board,
Executive Director Drew Bartlett, Jennifer Reynolds, DEP Secretary Alexis Lambert

From: Periodic Scientists Conference Call Participants

Kevin Godsea & Avery Renshaw - J.N. "Ding" Darling National Wildlife Refuge (NWR) Complex
Holly Milbrandt & Dana Dettmar - City of Sanibel
Allie Pecenka, Rick Bartleson PhD & Matt DePaolis- Sanibel-Captiva Conservation Foundation
With contributions from Harry Phillips & Maya Robert PhD- City of Cape Coral

Subject: Caloosahatchee & Estuary Conditions Report

Reporting Period: **March 31- April 6, 2026**

This report provides a scientific assessment of Caloosahatchee River and Estuary conditions and how these conditions affect the health, productivity, and function of the system.

Caloosahatchee Conditions Summary: Flow to the Caloosahatchee Estuary had a 7-day average of **629 cfs** at **S-79** with a 7-day average of **16 cfs** coming from the lake at **S-77**. **The 14-day moving average flow at S-79 was 541 cfs** and has been **below the optimum flow envelope** (<750 cfs) for **163 days**. **The 14-day moving average flow at S-77 was 294 cfs.**

Recommendation: The 14-day moving average flow at S-79 has remained below the optimum flow envelope (750- 2,100 cfs) for the past **163 days**. Salinity levels have risen above the optimum range for tape grass (<10 psu) in the upper estuary and above the optimum range for oysters (10-25 psu) in the lower estuary (RECOVER 2020). We recommend that supplemental releases from S-77 be made to ensure S-79 flows remain above a targeted steady release of at least 750 cfs to maintain necessary salinity levels in the Caloosahatchee estuary.

USACE Action: On March 29 the daily average Lake Okeechobee stage was 10.69 feet NAVD88 (12.00 feet NGVD29), which placed it within the lower portion of Zone D (Zone D3 of the PA25 simulation) of the Lake Okeechobee System Operating Manual (LOSOM). Lake stage decreased by 0.05 feet over the preceding 7-day period. A transition from La Niña to ENSO-neutral is expected in April. The District will continue to monitor conditions in the estuaries, as well as the systemwide conditions. Normal Lake Operations continue pursuant to the considerations in LOSOM as informed by PA25. It is recommended that flow targets for the Caloosahatchee Estuary should rely on basin flows to ensure the delivery of the Minimum Flow and Level, but use Lake Okeechobee flows from S-77 to ensure S-79 flows remain above a targeted steady release of 350 cfs; flow targets for the St. Lucie Estuary and Lake Worth Lagoon should remain at 0 cfs consistent with Normal Operations within Zone D.

Lake Flows: In the past 7 days the total outflow from Lake Okeechobee was **215 AF** with **237 AF** to the Caloosahatchee through **S-77**, **-22 AF** to the St. Lucie canal through **S-308** and **0 AF** to the EAA through **S-351**, **S-352**, and **S-354**. The total net inflow to the Lake was **10,743 AF** from Fisheating Creek, S-71, S-72, S-84s, S-65EX, and S-65EX1. Water conservation areas received flows of **10,828 AF**, **11,546 AF**, and **3,427 AF** at **WCA1**, **WCA2**, and **WCA3**, respectively. Everglades National Park received **283 AF**.

*Data missing from S-310 and L-8 from 3/31- 4/6.

Lake Level: 12.00 ft (Zone D3)

Last Week: 12.00 ft

Last Year: 12.38 ft

7-Day Lake Recession Rate: -0.00 ft/ wk.

Lake Okeechobee Inflow: 299 cfs

Lake Okeechobee Outflow: 104 cfs

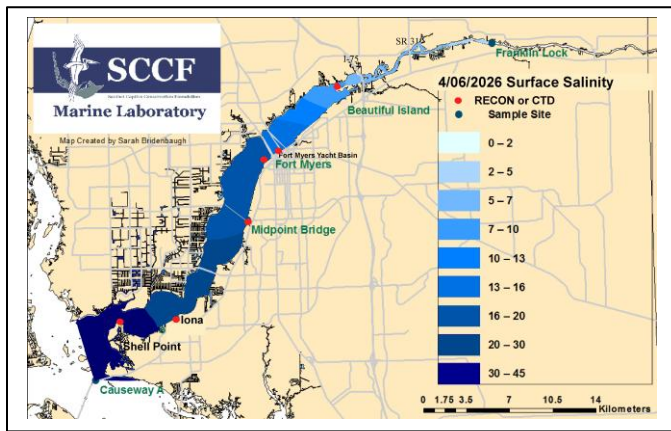
Weekly Rainfall Total: WP Franklin: 1.03"

Ortona: 1.97"

Julian Keen Jr.: 0.61"

Red Tide: On 4/3/26, the red tide organism, *Karenia brevis*, was observed at background concentrations in one sample from Southwest Florida, offshore of Monroe County.

Cyanobacteria Status: On 4/6/26, sampling for cyanobacteria by the Lee County Environmental Lab reported *Microcystis* as present at the **Alva Boat Ramp** and **Davis Boat Ramp**, appearing as sparse specks at both locations. *Microcystis* was **abundant upstream of the Franklin Locks**, appearing as streaks with accumulation.



Light Penetration

Site	25% Iz	Target Values	Turbidity	Target Values
	meters		NTU	
Fort Myers	1.1	> 1	3.3	< 18
Shell Point	2.1	>2.2	1.5	< 18
Causeway	4.2	> 2.2	1.8	< 5

25% Iz is the depth (z) where irradiance (I) is 25% of surface irradiance. Target values indicate the depth of light penetration needed for healthy seagrass.

Upper Estuary Conditions: The 30-day moving average surface salinity at the Fort Myers Yacht Basin has been over was over 10 psu for **123 days** and was **16 psu, above the suitable range for tape grass**. The weekly average was 16 psu.

Lower Estuary Conditions: The weekly average Salinity at the Shell Point RECON was **33 psu**, in the optimal range for seagrass but **above optimal for oysters**. The phytoplankton in SCCF samples from Sanibel beaches during the week included mainly small diatoms, few *Pseudo-nitzschia* and no *Karenia*.

Water Quality Conditions:

Monitor Site	Salinity (psu) ^a [previous week]	Diss O ₂ (mg/L) ^b	FDOM (qsde) ^c	Chlorophyll (µg/L) ^d	Temperature (°F)
Beautiful Island	7.5 - 11 [6.1 - 9.8]	----	105	7.5	77.9 - 86.5
Fort Myers Yacht Basin	13- 18 [12- 19]	5.6 - 7.5	70	3.3	74.4 – 80.6
Shell Point	28- 36 [28- 35]	5.3 - 7.7	25	1.2	74.8 – 80.4
McIntyre Creek	34.6 – 36.0 [35.0 – 36.2]	3.6 – 8.4	9.5 – 19.2	0.7 – 1.9	74.2 – 82.8
Tarpon Bay	35.2 – 36.1 [34.5 – 35.8]	5.2 – 8.4	10.2 – 27.1	0.7 – 2.8	74.3 – 82.4
Wulfert Flats	---- [----]	----	----	----	----

Red values are outside of the preferred range.

^a Salinity target values: BI < 5, FM < 10, SP = 10 – 30

^b Dissolved O₂ target values: all sites > 4

^c FDOM target values: BI < 70, FM < 70, SP < 11

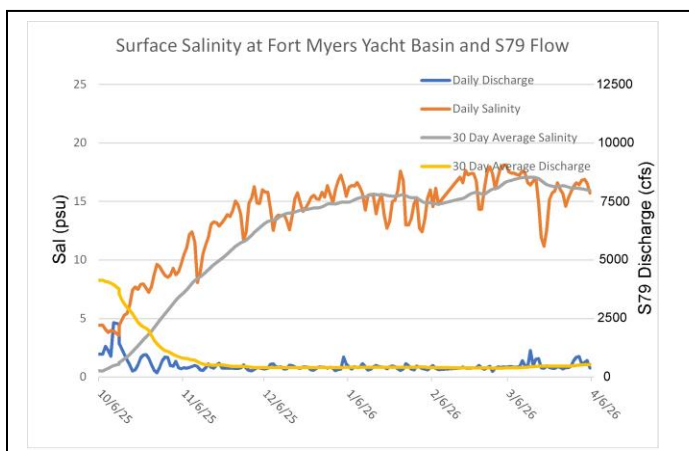
^d Chlorophyll target values: BI < 11, FM < 11, SP < 11

^f Temperature target values: < 90

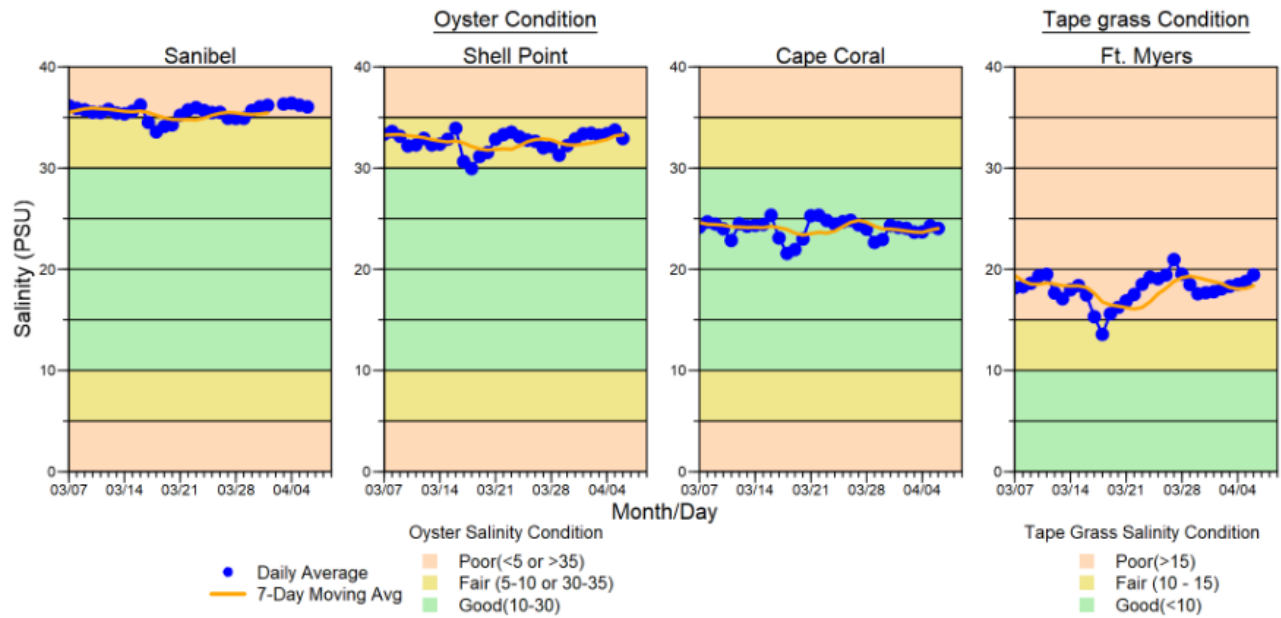
^s Single sonde lower and surface layer or surface grab lab measurement
ND: no data

Wildlife Impacts: In the past week, the CROW wildlife hospital on Sanibel admitted **1 patient** for suspected red tide/toxicosis: 1 adult great blue heron.

Shellfish Advisory: Shellfish harvest area #6212 (Pine Island Sound Section 1); Aquaculture Lease and Public Reef is **OPEN** by the Florida Department of Agriculture and Consumer Services (FDACS). SHA #6222 (North Matlacha Pass) and SHA #6232 (South Matlacha Pass) are also **OPEN**.



USACE Daily Reports			
Date	S79 Flow (cfs)	S78 Flow (cfs)	S77 Flow (cfs)
3/31/26	844	652	0
4/1/26	874	482	0
4/2/26	556	222	0
4/3/26	622	172	0
4/4/26	706	173	0
4/5/26	387	173	60
4/6/26	414	232	51
7-day avg	629	301	16



Daily average bottom salinity data for the last 14-days from sampling locations within the tidal Caloosahatchee River Estuary relative to oyster health (Sanibel, Shell Point and Cape Coral) and tape grass (*Vallisneria americana*) health (Ft. Myers only) conditions.

*Ft. Myers sensor is in the lower strata