

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: **April 21- 27, 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 **401 cfs** at **S-79** with a 7-day average of **512 cfs** coming from the lake at **S-77**. **The 14-day moving average flow at S-79 was 421 cfs** and has been **below the optimum flow envelope** (<750 cfs; RECOVER 2020) for **5 days**. **The 14-day moving average flow at S-77 was 516 cfs**.

Recommendation: Given the onset of oyster spawning in the CRE, maintaining flows within the optimum flow envelope (750- 2,100 cfs) at S-79 is essential to ensure that required salinity levels are met for spawning success. Daily flows and the 14-day moving average at S-79 have fallen again below the optimum flow envelope. Additionally, as [cited by the SFWMD](#), the lake stage is projected to remain in Zone D3 for the next 2 months. While basin runoff remains insufficient to maintain optimum flows, the release of supplemental flows to maintain a targeted steady release between 750- 2,100 cfs at S-79 will protect the salinity gradients required for oyster spawning and tape grass habitat in the CRE.

USACE Action: On April 19 the daily average Lake Okeechobee stage was 10.67 feet NAVD88 (11.97 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 0.11 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 **19,768 AF** with **7,146 AF** to the Caloosahatchee through **S-77**, **-66 AF** to the St. Lucie canal through **S-308** and **12,688 AF** to the EAA through **S-351**, **S-352**, and **S-354**. The total net inflow to the Lake was **4,087 AF** from Fisheating Creek, S-71, S-72, S-84s, S-65EX, and S-65EX1. Water conservation areas received flows of **212 AF**, **-289 AF**, and **850 AF** at **WCA1**, **WCA2**, and **WCA3**, respectively. Everglades National Park received **0 AF**.

*Data missing from S-310 and L-8 from 4/21- 4/27, from S-78 on 4/27 and from FEC from 4/21- 4/27.

Lake Level: 11.77 ft (Zone D3)

Last Week: 11.97 ft

Last Year: 11.44 ft

7-Day Lake Recession Rate: -0.20 ft/ wk.

Lake Okeechobee Inflow: 239 cfs

Lake Okeechobee Outflow: 1,651 cfs

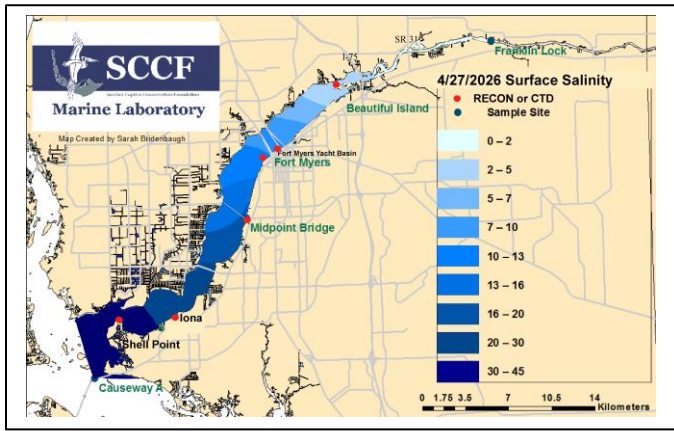
Weekly Rainfall Total: WP Franklin: 0.00"

Ortona: 0.00"

Julian Keen Jr.: 0.28"

Red Tide: On 4/24/26, the red tide organism, *Karenia brevis*, was observed at **background concentrations** in one sample from Northwest Florida and two offshore samples from Southwest Florida, offshore of Pinellas and Hillsborough counties.

Cyanobacteria Status: On 4/27/26, sampling for cyanobacteria by the Lee County Environmental Lab reported **abundant** concentrations of *Microcystis*, *Dolichospermum* and cyano filaments **upstream of the Franklin Locks** appearing as streaks with clumps and accumulation. *Microcystis* was **present** at the **Davis Boat Ramp**, appearing as sparse specks and **moderately abundant** at the **Alva Boat Ramp**, appearing as streaks.



Light Penetration

Site	25% Iz	Target Values	Turbidity	Target Values
	meters			NTU
Fort Myers	1.2	> 1	2.0	< 18
Shell Point	2.0	>2.2	1.2	< 18
Causeway	4.4	> 2.2	1.7	< 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 10 psu for 144 days and was 15 psu, above the suitable range for tape grass. The weekly average was 15 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.

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	7.0 – 9.2 [2.5 - 13]	----	105	6.0	77.0 - 85.3
Fort Myers Yacht Basin	12 - 17 [10 - 17]	5.0 - 7.2	65	3.3	73.3 – 82.3
Shell Point	25- 36 [26- 36]	5.0 - 6.9	25	1.1	74.5 – 82.4
McIntyre Creek	33.8 – 36.1 [33.0 – 35.2]	3.2 – 9.5	13.3 – 26.0	0.7 – 5.8	72.7 – 86.0
Tarpon Bay	33.7 – 35.9 [34.0 – 35.8]	5.0 – 8.5	----	----	73.4 – 83.5
Wulfert Flats	34.3 – 35.5 [33.7 – 35.2]	4.3 – 8.8	----	1.4 – 7.7	71.8 – 84.2

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

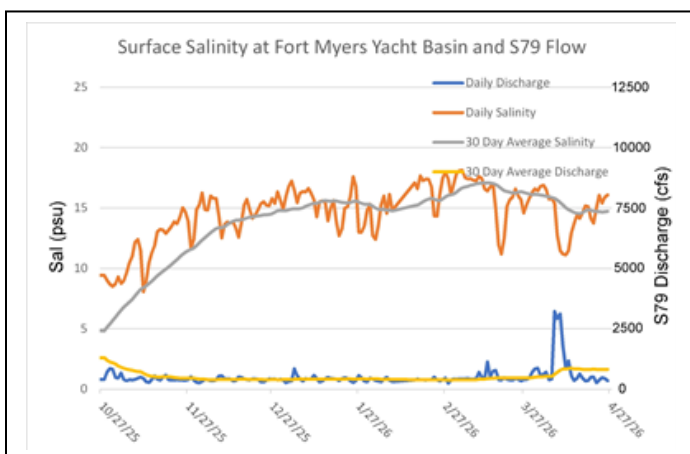
^f Temperature target values: < 90

^s Single sonde lower and surface layer or surface grab lab measurement

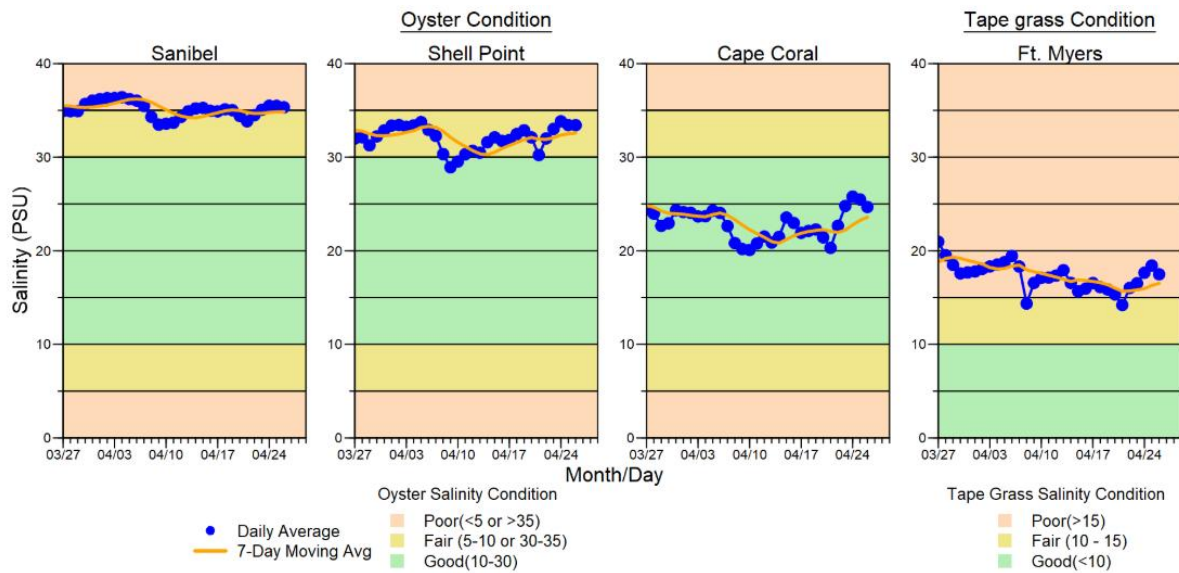
ND: no data

Wildlife Impacts: In the past week, the CROW wildlife hospital on Sanibel admitted 1 patient for suspected red tide/toxicosis: 1 adult double-crested cormorant (still in care).

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)
4/21/26	508	68	122
4/22/26	266	196	559
4/23/26	383	409	651
4/24/26	478	382	618
4/25/26	444	234	568
4/26/26	347	172	486
4/27/26	380	173	580
7-day avg	401	233	512



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