

## 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 28- May 4, 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 **496 cfs** at **S-79** with a 7-day average of **662 cfs** coming from the lake at **S-77**. **The 14-day moving average flow at S-79 was 449 cfs** and has been **below the optimum flow envelope** (<750 cfs; RECOVER 2020) for **12 days**. **The 14-day moving average flow at S-77 was 587 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 required salinity levels are met for spawning success. Flows at S-79 have fallen again below the optimum flow envelope, with 14- day average flows for **176 of the past 191 days** falling below the optimum level. 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 26 the daily average Lake Okeechobee stage was 10.47 feet NAVD88 (11.78 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 0.19 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 **17,111 AF** with **9,184 AF** to the Caloosahatchee through **S-77**, **-43 AF** to the St. Lucie canal through **S-308** and **7,970 AF** to the EAA through **S-351**, **S-352**, and **S-354**. The total net inflow to the Lake was **3,235 AF** from Fisheating Creek, S-71, S-72, S-84s, S-65EX, and S-65EX1. Water conservation areas received flows of **65 AF**, **18 AF**, and **1,136 AF** at **WCA1**, **WCA2**, and **WCA3**, respectively. Everglades National Park received **0 AF**.

\*Data missing from S-310 and L-8 from 4/28- 5/4, S-80 from 5/3- 5/4 and FEC from 4/28- 4/29.

**Lake Level: 11.60 ft (Zone D3)**

**Last Week: 11.77 ft**

**Last Year: 11.18 ft**

**7-Day Lake Recession Rate: -0.17 ft/ wk.**

**Lake Okeechobee Inflow: 270 cfs**

**Lake Okeechobee Outflow: 699 cfs**

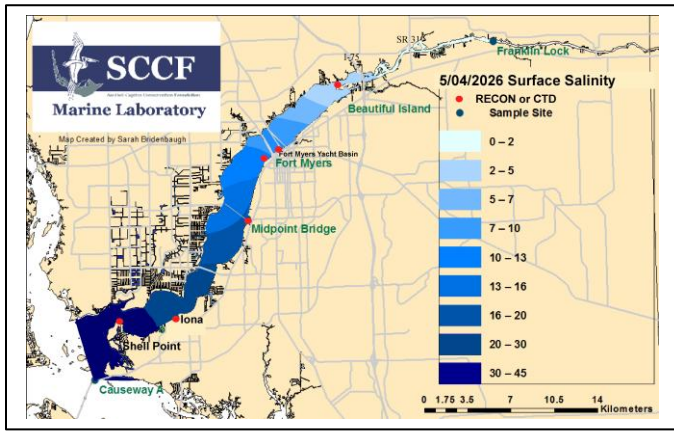
**Weekly Rainfall Total: WP Franklin: 0.55"**

**Ortona: 0.20"**

**Julian Keen Jr.: 0.63"**

**Red Tide:** On 5/1/26, the red tide organism, *Karenia brevis*, was observed at **background concentrations** in one sample from Northwest Florida. In Southwest Florida over the past week, *K. brevis* was not observed.

**Cyanobacteria Status:** On 5/4/26, sampling for cyanobacteria by the Lee County Environmental Lab reported **abundant** concentrations of *Microcystis* at the **Alva Boat Ramp**, appearing as streaks with accumulation and **abundant** concentrations of *Microcystis*, *Dolichospermum*, *Aphanizomenon* and cyano filaments with colonies too numerous to count **upstream of the Franklin Locks**, appearing as streaks with accumulation and clumps. *Microcystis*, *Dolichospermum* and cyano filaments were **moderately abundant** at the **Davis Boat Ramp**, appearing as streaks.



Light Penetration				
Site	25% Iz	Target Values	Turbidity	Target Values
	meters		NTU	
Fort Myers	1.1	> 1	2.5	< 18
Shell Point	2.0	>2.2	1.3	< 18
Causeway	4.0	> 2.2	2.6	< 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 **151 days** and was **15 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.

**Water Quality Conditions:**

Monitor Site	Salinity (psu) <sup>a</sup> [previous week]	Diss O <sub>2</sub> (mg/L) <sup>b</sup>	FDOM (qsde) <sup>c</sup>	Chlorophyll (µg/L) <sup>d</sup>	Temperature (°F)
Beautiful Island	7.5 – 11 [7.0 – 9.2]	----	105	6.0	82.6 - 89.2
Fort Myers Yacht Basin	13 - 18 [12 - 17]	4.5 - 6.7	70	3.8	77.9 – 85.3
Shell Point	28- 36 [25 - 36]	4.2 -7.7	20	1.7	79.2 – 84.4
McIntyre Creek	34.8 – 35.8 [33.8 – 36.1]	3.3 – 8.0	13.8 – 17.0	0.9 – 1.7	77.9 – 86.7
Tarpon Bay	34.9 – 36.6 [33.7 – 35.9]	4.4 – 8.3	----	----	78.8 – 85.1
Wulfert Flats	34.2 – 35.2 [34.3 – 35.5]	3.2 – 8.0	----	1.1 – 7.9	77.2 – 86.7

Red values are outside of the preferred range.

<sup>a</sup> Salinity target values: BI < 5, FM < 10, SP = 10 – 30

<sup>b</sup> Dissolved O<sub>2</sub> target values: all sites > 4

<sup>c</sup> FDOM target values: BI < 70, FM < 70, SP < 11

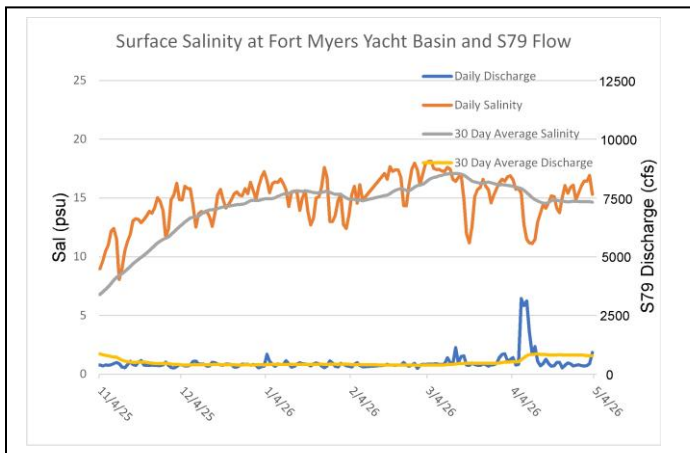
<sup>d</sup> Chlorophyll target values: BI < 11, FM < 11, SP < 11

<sup>f</sup> Temperature target values: < 90

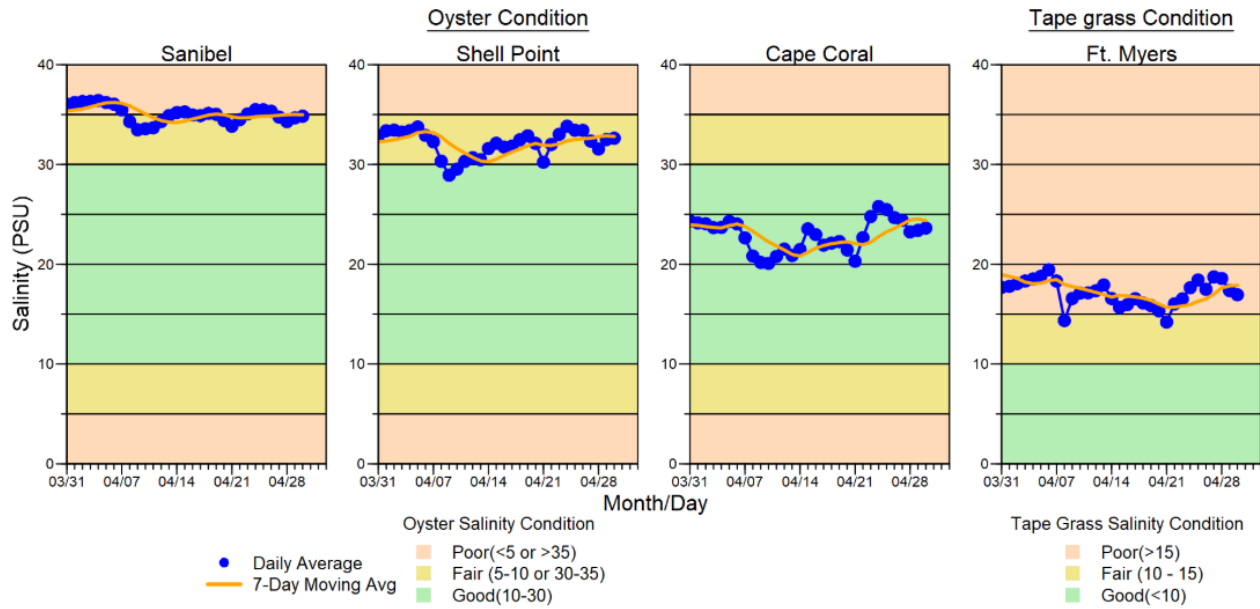
<sup>s</sup> Single sonde lower and surface layer or surface grab lab measurement

ND: no data

**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)
4/28/26	401	236	643
4/29/26	367	291	682
4/30/26	353	307	775
4/31/26	364	346	778
5/1/26	449	281	502
5/2/26	928	176	654
5/3/26	611	177	598
<b>7-day avg</b>	<b>496</b>	<b>259</b>	<b>662</b>



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



Water clarity at Lighthouse Beach Park on 5-6-26 at 1:51 PM on a slack tide (3.0 ft)