

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 24- 30, 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 **452 cfs** at **S-79** with a 7-day average of **573 cfs** coming from the lake at **S-77**. **The 14-day moving average flow at S-79 was 454 cfs** and has been **below the optimum flow envelope** (<750 cfs) for **156 days**. **The 14-day moving average flow at S-77 was 468 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 **156 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 22 the daily average Lake Okeechobee stage was 10.74 feet NAVD88 (12.05 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 **20,326 AF** with **7,913 AF** to the Caloosahatchee through **S-77**, **2,007 AF** to the St. Lucie canal through **S-308** and **10,406 AF** to the EAA through **S-351**, **S-352**, and **S-354**. The total net inflow to the Lake was **4,537 AF** from Fisheating Creek, S-71, S-72, S-84s, S-65EX, and S-65EX1. Water conservation areas received flows of **266 AF**, **-143 AF**, and **1,701 AF** at **WCA1**, **WCA2**, and **WCA3**, respectively. Everglades National Park received **184 AF**.

\*Data missing from S-310 and L-8 from 3/24- 3/30, from S-80 from 3/25- 3/30 and from ENP from 3/27- 3/30.

**Lake Level: 12.00 ft (Zone D3)**

**Last Week: 12.05 ft**

**Last Year: 12.55 ft**

**7-Day Lake Recession Rate: -0.05 ft/ wk.**

**Lake Okeechobee Inflow: 405 cfs**

**Lake Okeechobee Outflow: 459 cfs**

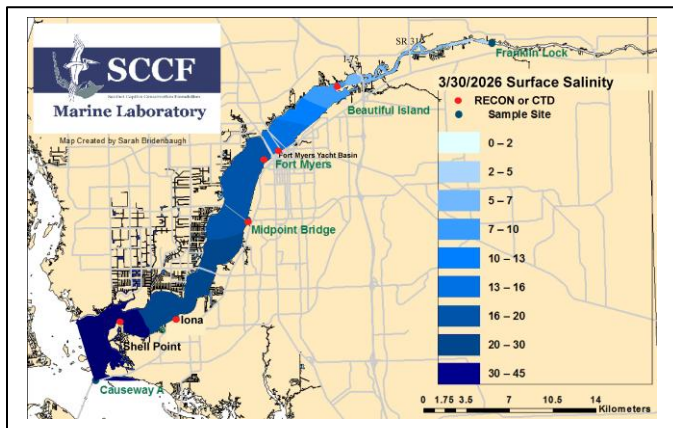
**Weekly Rainfall Total: WP Franklin: 1.27"**

**Ortona: 2.10"**

**Julian Keen Jr.: 2.50"**

**Red Tide:** On 3/27/26, the red tide organism, *Karenia brevis*, was observed at background concentrations in nine samples collected from Northwest Florida and very low concentrations in one sample collected from Florida's East Coast. In **Southwest Florida** over the past week, *K. brevis* was **not observed**.

**Cyanobacteria Status:** On 3/30/26, sampling for cyanobacteria by the Lee County Environmental Lab reported *Microcystis* and cyano filaments as **moderately abundant** at the **Alva Boat Ramp**, appearing as specks with some slight accumulation. *Microcystis* was **abundant upstream of the Franklin Locks**, appearing as streaks with accumulation and **present** at the **Davis Boat Ramp**, appearing as specks.



Light Penetration

Site	25% Iz	Target Values	Turbidity	Target Values
	meters		NTU	
Fort Myers	1.1	> 1	3.0	< 18
Shell Point	2.1	>2.2	2.2	< 18
Causeway	4.1	> 2.2	2.0	< 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 116 days and was 16 psu, above the suitable range for tape grass. The weekly average was 16 psu. Dinoflagellates were the dominant phytoplankton at Beautiful Island on 3/24/26.

**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) <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	6.1 - 9.8 [7.8-12]	----	105	7.5	76.7 - 86.1
Fort Myers Yacht Basin	12- 19 [14- 19]	----	70	3.6	69.8 – 83.7
Shell Point	28- 35 [27- 35]	5.7 - 7.2	30	1.7	70.4 – 79.7
McIntyre Creek	35.0 – 36.2 [34.7 – 35.4]	2.8– 8.4	12.1 – 20.9	0.9 – 1.9	70.4 – 81.7
Tarpon Bay	34.5 – 35.8 [34.6 – 35.7]	4.4 – 7.2	19.9 – 56.2	0.5 - 3.0	- 80.6
Wulfert Flats	---- [----]	----	----	---	----

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

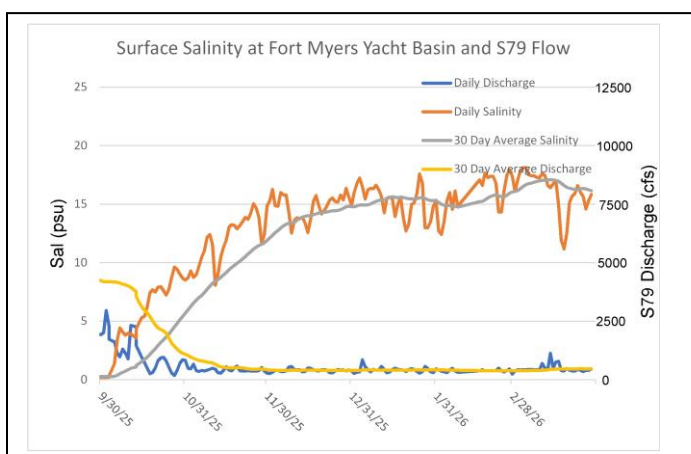
<sup>c</sup> FDOM target values: BI < 70, FM < 70, SP < 11

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

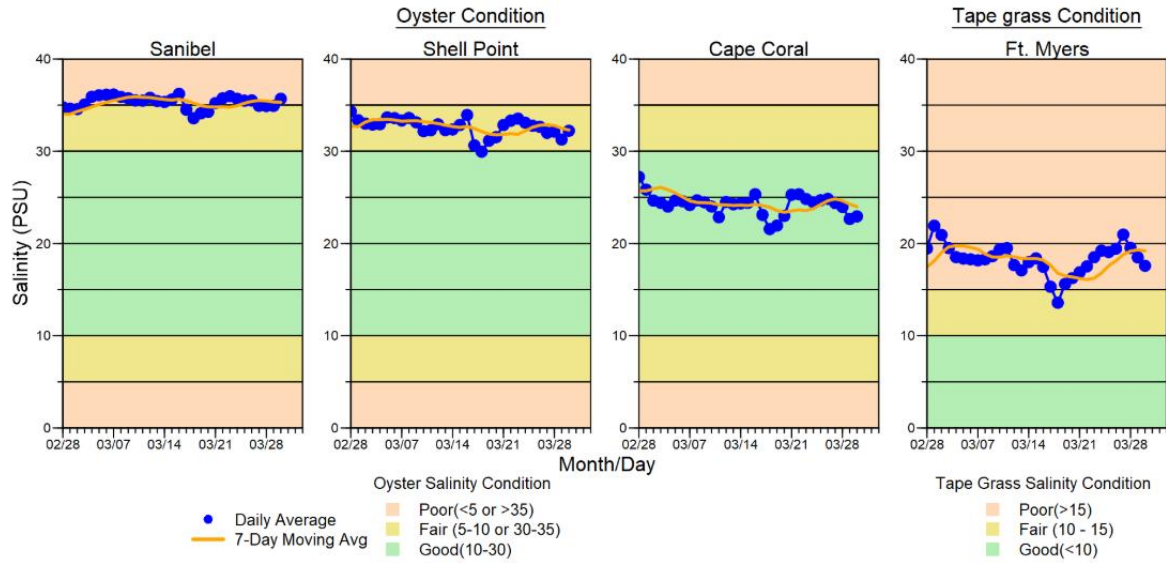
<sup>f</sup> Temperature target values: < 90

<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) as of 9/24/25. SHA #6222 (North Matlacha Pass) and SHA #6232 (South Matlacha Pass) are OPEN as of 12/6/25.



USACE Daily Reports			
Date	S79 Flow (cfs)	S78 Flow (cfs)	S77 Flow (cfs)
3/24/26	442	342	751
3/25/26	407	350	799
3/26/26	343	327	708
3/27/26	398	297	660
3/28/26	402	295	679
3/29/26	468	150	411
3/30/26	707	283	0
<b>7-day avg</b>	<b>452</b>	<b>292</b>	<b>573</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 4-1-26 at 1:58 PM on a falling tide (2.2 ft).