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: **May 19- 25, 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 **400 cfs** at **S-79** with a 7-day average of **377 cfs** coming from the lake at **S-77. The 14-day moving average flow at S-79 was 351 cfs** and has been **below the optimum flow envelope** (<750 cfs; RECOVER 2020) for **33 days and for 197 of the past 212 days. The 14-day moving average flow at S-77 was 424 cfs.**

Recommendation: Given the onset of oyster spawning in the CRE, maintaining flows within the optimum 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 been below the optimum flow envelope for **33 days** and for **197 of the past 212 days**. As cited by the SFWMD, salinities have been in the upper stressed range for adult Eastern oysters at Cape Coral, Shell Point and Sanibel. Additionally, the lake stage is projected to remain in Zone D3 with low risk for water supply. 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 May 17, the daily average Lake Okeechobee stage was 10.07 feet NAVD88 (11.38 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 was the same as the preceding 7-day period. ENSO-neutral is favored through April-June. 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 **27,748 AF** with **5,244 AF** to the Caloosahatchee through **S-77**, **-82 AF** to the St. Lucie canal through **S-308** and **22,586 AF** to the EAA through **S-351**, **S-352**, and **S-354**. The total net inflow to the Lake was **2,985 AF** from Fisheating Creek, S-71, S-72, S-84s, S-65EX, and S-65EX1. Water conservation areas received flows of **146 AF**, **-918 AF**, and **3,029 AF** at **WCA1, WCA2, and WCA3**, respectively. Everglades National Park received **2 AF.**

***Data missing from S-310 and L-8 from 5/19- 5/25, from S-80 on 5/21 and from ENP on 5/19.**

Lake Level: 11.23 ft (Zone D3) **Last Week**: **11.38 ft** **Last Year: 10.94 ft**

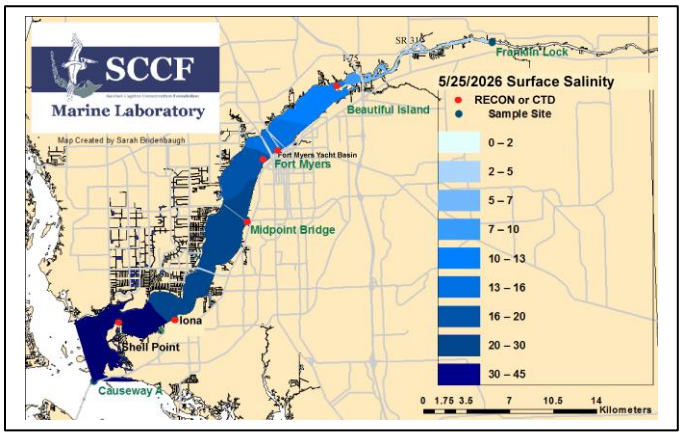
7-Day Lake Recession Rate: -0.15 ft/ wk.

Lake Okeechobee Inflow: 185 cfs **Lake Okeechobee Outflow: 1,780 cfs**

Weekly Rainfall Total: **WP Franklin: 0.45"** **Ortona: 0.46"** **Julian Keen Jr.: 0.27"**

Red Tide: On 5/15/26, the red tide organism, *Karenia brevis*, was observed at background concentrations in two samples from Northwest Florida. In Southwest Florida over the past week, *K. brevis* was not observed.

Cyanobacteria Status: On 5/26/26, sampling for cyanobacteria by the Lee County Environmental Lab reported **abundant** concentrations of *Microcystis, Dolichospermum* and cyano filaments **upstream of the Franklin Locks** and at the **Alva Boat Ramp**, appearing as streaks with accumulation.



Light Penetration

Site	25% Iz	Target Values	Turbidity	Target Values
	meters		NTU	
Fort Myers	**ND**	**> 1**	**ND**	**< 18**
Shell Point	**2.1**	**>2.2**	**2.2**	**< 18**
Causeway	**4.2**	**> 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 **172 days** and was **17 psu, above the suitable range for tape grass**. The weekly average was 18 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**.

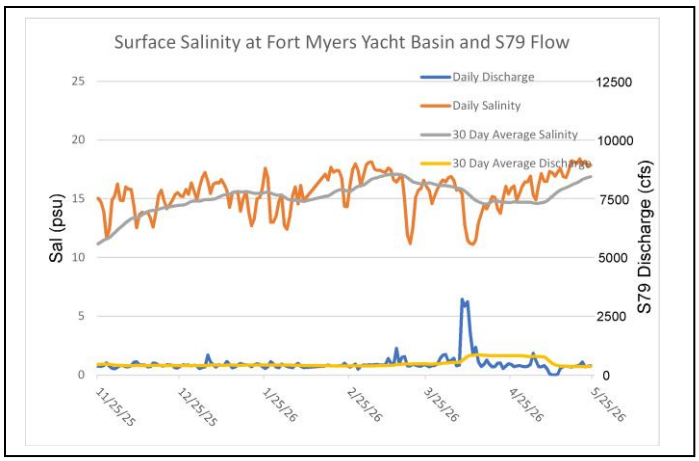
Water Quality Conditions:

Monitor Site	Salinity (psu)[a] [previous week]	Diss O_2 (mg/L)[b]	FDOM (qsde)[c]	Chlorophyll (µg/L)[d]	Temperature (°F)
Beautiful Island	**8.1-11 [7.7 – 11]**	**----**	**105**	**7.5**	**85.7- 92.7**
Fort Myers Yacht Basin	**15 - 20 [15 - 20]**	**----**	**---**	**---**	**81.9 – 88.6**
Shell Point	**30- 37 [30- 36]**	**4.4 - 6.8**	**15**	**1.2**	**82.9– 87.9**
McIntyre Creek	**38.8 – 37.1 [35.2 – 36.8]**	**1.8 – 8.8**	**8.7 – 23.6**	**1.3 – 2.9**	**81.7 – 89.4**
Tarpon Bay	**36.2 – 37.2 [35.3 – 36.6]**	**3.7 - 8.6**	**7.5 – 24.4**	**0.8 – 2.8**	**82.6 – 88.7**
Wulfert Flats	**27.6 – 31.6 [35.5 – 36.8]**	**3.0 – 8.9**	**----**	**5.7 – 14.3**	**81.7 – 88.9**

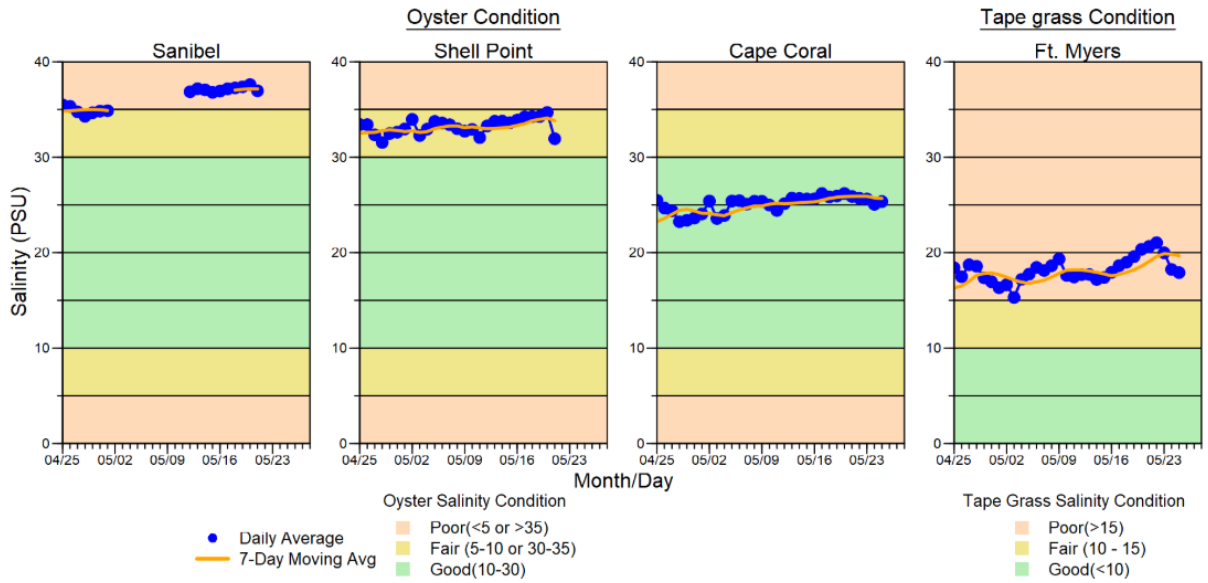
Red values are outside of the preferred range.
[a] Salinity target values: BI < 5, FM < 10, SP = 10 – 30
[b] Dissolved O_2 target values: all sites > 4
[c] FDOM target values: BI < 70, FM < 70, SP < 11
[d] Chlorophyll target values: BI < 11, FM < 11, SP < 11
[f] Temperature target values: < 90
[s] Single 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 **4 patients** for suspected red tide/toxicosis: 1 juvenile semipalmated sandpiper (deceased), 1 adult anhinga (still in care), 1 juvenile osprey (deceased) and 1 adult brown pelican (still in care).

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



USACE Daily Reports			
Date	S79 Flow (cfs)	S78 Flow (cfs)	S77 Flow (cfs)
5/19/26	383	172	288
5/20/26	426	170	446
5/21/26	552	55	418
5/22/26	341	0	400
5/23/26	373	56	354
5/24/26	387	148	372
5/25/26	341	149	362
7-day avg	**400**	**107**	**377**



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