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: C&SF Water Management 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: **September 29- October 5, 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 **1,128 cfs** at **S-79** with a 7-day average of **0 cfs** coming from the lake at **S-77. The 14-day moving average flow at S-79 was 2,039 cfs** and has been **in the optimum flow envelope** (750- 2,100 cfs; RECOVER 2020) for **1 day** after **25 days** above the optimum flow envelope (>2,100 cfs). **The 14-day moving average flow at S-77 was 0 cfs.**

Recommendation: Given the continuation 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. While flows at S-79 are currently within the optimum flow envelope, rainfall and basin runoff projections remain variable. In the event flow from basin runoff is insufficient to maintain between 750- 2,100 cfs at S-79, the release of supplemental lake flows to reach this optimum flow target will protect the salinity gradient required for oyster spawning and tape grass habitat in the CRE.

USACE Action: On September 27, the daily average Lake Okeechobee stage was 10.51 feet NAVD88 (11.82 feet NGVD29), which placed it within the Water Shortage Management Zone (WSMZ) of the Lake Okeechobee System Operating Manual (LOSOM). Lake stage increased by 0.2 feet over the preceding 7-day period. El Niño conditions are present, and will strengthen through the end of the year. 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. Given the estuary salinity conditions, it is recommended that flow targets for the Caloosahatchee Estuary should rely on basin flows only, and not be supplemented with Lake Okeechobee water; flow targets for the St. Lucie Estuary and Lake Worth Lagoon should remain at 0 cfs.

Lake Flows: In the past 7 days the total outflow from Lake Okeechobee was **255 AF** with **12 AF** to the Caloosahatchee through **S-77**, **243** 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 **38,954 AF** from Fisheating Creek, S-71, S-72, S-84s, S-65EX, and S-65EX1. Water conservation areas received flows of **9,852 AF**, **15,135 AF**, and **2,427 AF** at **WCA1, WCA2, and WCA3**, respectively. Everglades National Park received **2,205 AF.**

***Data missing from S-310 and L-8 from 9/29- 10/5 and from S-308 on 10/5.**

Lake Level: 12.04 (WMSZ) **Last Week**: **11.82 ft** **Last Year: 12.23 ft**

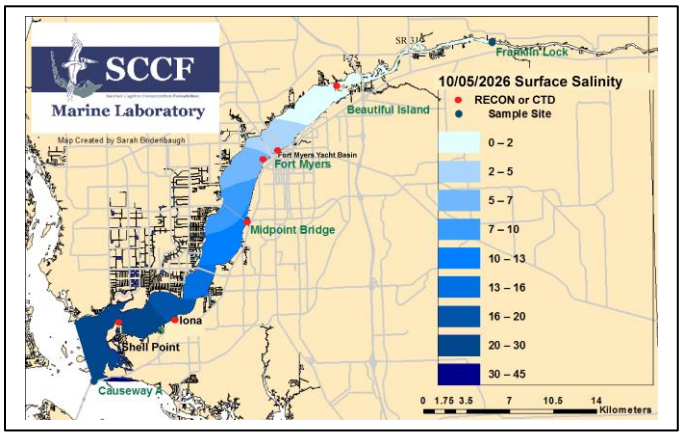
7-Day Lake Recession Rate: +0.19 ft/ wk.

Lake Okeechobee Inflow: 3,793 cfs **Lake Okeechobee Outflow: 226 cfs**

Weekly Rainfall Total: **WP Franklin: 0.32"** **Ortona: 0.17"** **Julian Keen Jr.: 1.29"**

Red Tide: The red tide organism, *Karenia brevis*, was observed at background concentrations in one sample from Southwest Florida over the past week.

Cyanobacteria Status: No significant cyanobacteria blooms are currently being observed in the Caloosahatchee River and Estuary.



Light Penetration

Site	25% Iz	Target Values	Turbidity	Target Values
	meters		NTU	
Fort Myers	--	> 1	--	< 18
Shell Point	1.8	>2.2	2.5	< 18
Causeway	4.2	> 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 was **4.5 psu, within the suitable range for tape grass**. The weekly average was 3.1 psu.

Lower Estuary Conditions: The weekly average salinity at the Shell Point RECON was **25 psu, in the optimal range** for oysters and seagrass. *Margalefidinium* counts decreased to below 100,000 cells/L by 10/2/26.

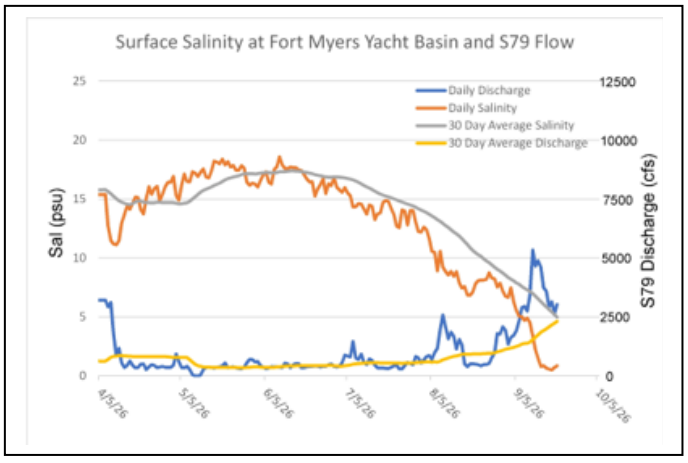
Water Quality Conditions:

Monitor Site	Salinity (psu)[a] [previous week]	Diss O_2 (mg/L)[b]	FDOM (qsde)[c]	Chlorophyll (µg/L)[d]	Temperature (°F)
Beautiful Island	0.2- 1.4 [0.3- 1.3]	----	110	--	82.3 – 88.8
Fort Myers Yacht Basin	0.4 - 6.7 [0.5 - 7.3]	----	90	--	80.4 – 88.8
Shell Point	15 – 33 [14 - 33]	2.6-6.2	40	1.8	80.5 – 86.6
McIntyre Creek	28.5 – 30.8 [26.4 – 31.2]	1.7 – 6.3	23.0 – 31.4	1.4 – 3.3	80.1 – 88.8
Tarpon Bay	28.5 – 35.0 [25.5 – 31.1]	2.9 – 6.9	15.2 – 52.7	1.3 – 5.2	80.6 – 87.7
Wulfert Flats	---- [-----]	----	----	----	----

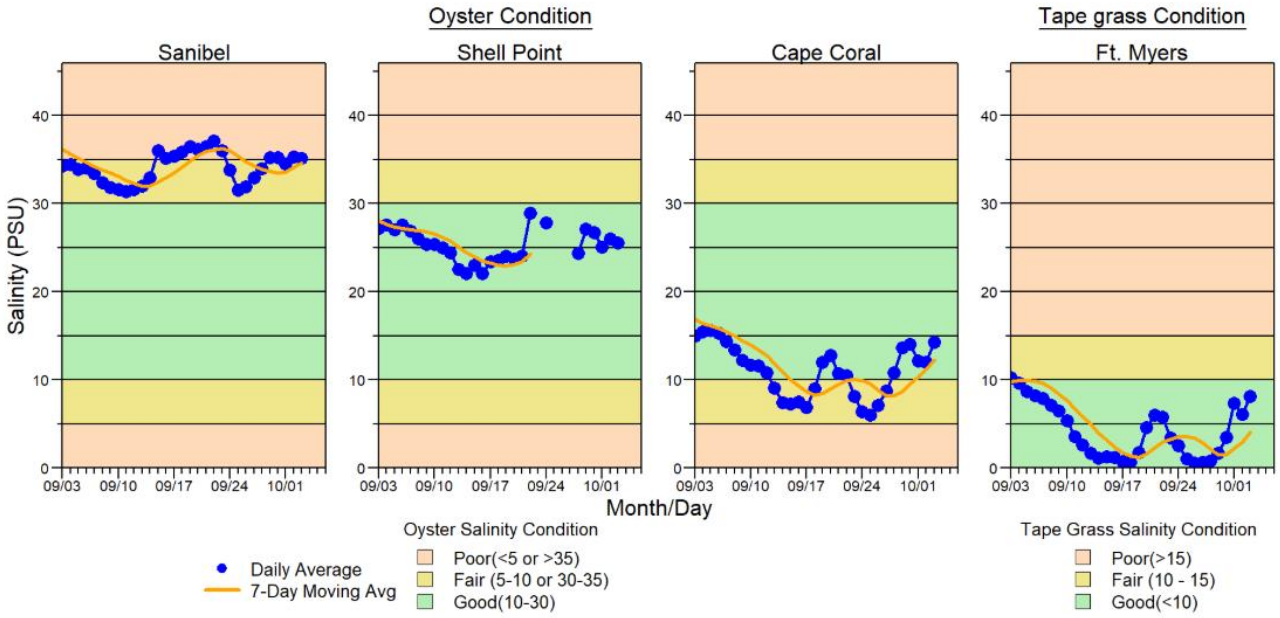
Red values are outside of the preferred range.
[a] Salinity target values: BI < 5, FM < 10, SP = 10 – 30
[b] Dissolved O_2 target values: all sites > 4
[c] FDOM target values: BI < 70, FM < 70, SP < 11
[d] Chlorophyll target values: BI < 11, FM < 11, SP < 11
[f] Temperature target values: < 90
[s] Single 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 **3 patients** for suspected red tide/toxicosis: 1 adult anhinga (still in care), 1 adult laughing gull (still in care) and 1 adult great blue heron (deceased).

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)
9/29/26	396	177	0
9/30/26	1708	819	0
9/31/26	1819	687	0
10/1/26	1276	637	0
10/2/26	1247	308	0
10/3/26	487	118	0
10/4/26	966	324	0
7-day avg	**1128**	**439**	**0**



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