

Light Penetration				
Site	25% I _z	Target Values	Turbidity	Target Values
	meters		NTU	
Fort Myers	ND	> 1	ND	< 18
Shell Point	ND	>2.2	ND	< 18
Causeway	3.80	> 2.2	1.7	< 5

25% I_z is the depth (z) where irradiance (I) is 25% of surface irradiance. Target values indicate the depth of light penetration needed for healthy seagrass.
^m measured, ^c calculated

Cyanobacteria Status: On 5/22/23 sampling for cyanobacteria by the Lee County Environmental Lab reported the presence of *Microcystis* and *Dolichospermum* at the Alva Boat Ramp as visible specks. *Microcystis* and *Dolichospermum* were moderately abundant upstream of the Franklin Locks as some streaks and wind driven accumulation along the shore/lock. *Dolichospermum* and *Microcystis* were moderately abundant at the Davis Boat Ramp as some streaks and accumulation along the seawall.

Upper Estuary Conditions: The 30-day average surface salinity at the Fort Myers Yacht Basin was 5.6 psu, within the suitable range for tape grass.

Lower Estuary Conditions: The average salinity at Shell Point RECON was 28 psu, in the optimal range for seagrass and oysters.

Water Quality Conditions:

Monitor Site	Salinity (psu) ^a [previous week]	Diss O ₂ (mg/L) ^b	FDOM (qsde) ^c	Chlorophyll (µg/L) ^d
Beautiful Island	0.6 – 2.5 [0.3 – 1.9]	2.6 – 9.1	-----	7.4
Fort Myers Yacht Basin	----- [-----]	-----	-----	-----
Shell Point	19 – 35 [17 – 33]	-----	-----	-----
McIntyre Creek	31.4 – 33.5 [31.3 – 33.6]	2.4 – 8.3	-----	-----
Tarpon Bay	31.9 – 33.8 [31.0 – 34.0]	3.3 – 10.4	2.4 – 3.7	0.9 – 1.8
Wulfert Flats	32.5 – 33.8 [32.5 – 34.5]	2.3 – 9.1	-----	2.1 – 34.7

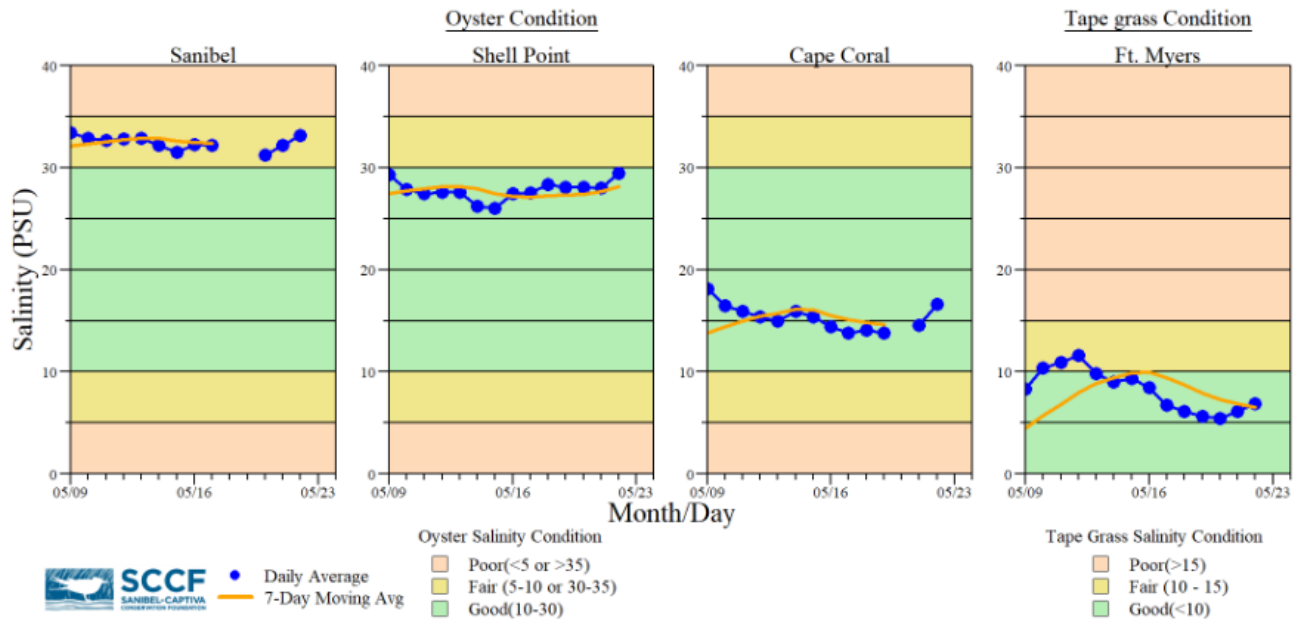
- Red values are outside of the preferred range.
- ^a Salinity target values: BI < 5, FM < 10, SP = 10 – 30
- ^b Dissolved O₂ target values: all sites > 4
- ^c FDOM target values: BI < 70, FM < 70, SP < 11
- ^d Chlorophyll target values: BI < 11, FM < 11, SP < 11
- ^s Single sonde lower and surface layer or surface grab lab measurement
- no data

Red Tide: On 5/19/23, the FWC reported that over the past week the red tide organism, *Karenia brevis*, was detected in 30 samples collected from Florida’s Gulf Coast. **Bloom concentrations (>100,000 cells/liter) were not observed.** Water discoloration along Pinellas County’s Gulf Coast this past week was attributed to a bloom of the marine cyanobacterium *Trichodesmium* by using a combination of satellite imagery and water sampling for microscopy analysis; this alga typically blooms in summer months in the Gulf of Mexico and was observed in other Southwest Florida counties (Manatee and Collier counties) as well.

In Southwest Florida over the past week, *K. brevis* was observed at background to low concentrations in Sarasota County, background to low concentrations in Charlotte County, **background to very low concentrations in and offshore of Lee County**, and background to very low concentrations in and offshore of Collier County.

Wildlife Impacts: In the past week, the CROW wildlife hospital on Sanibel received 1 patient with toxicosis symptoms: 1 adult sanderling (still at CROW).

Beach Conditions: Extensive, thick mats of the benthic macroalgae *Caulerpa* are floating to the surface in Matlacha Pass and accumulating on the shoreline and in the mangroves. On Sanibel, the cyanobacteria *Trichodesmium* was reported on the west end beaches in the surf and along the shoreline.



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

Data are provisional and subject to change.



Water clarity at Lighthouse Beach Park on 5/22/23 at 1:40 PM on a high tide (3.2 ft). [Lighthouse Beach Park Virtual Tour.](#)



The cyanobacteria *Trichodesmium* in the surf on 5/18/23 on Sanibel. *Sanibel Resident.*



Mats of the benthic macroalga *Caulerpa* floating to the surface and accumulating in the mangroves in Matlacha Pass on 5/18/23. *The City of Cape Coral.*