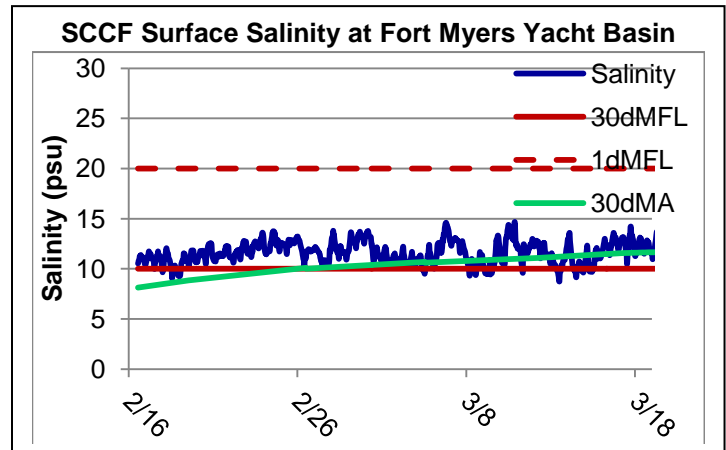


Flow & Water Quality: Flows to the Caloosahatchee Estuary at S-79 during the past seven days averaged **612 cfs**. Over the past 14 days **89,508 AF** of water was discharged from Lake O, **25% to S-77, 2.4% to S-308, 70% of water from Lake O was discharged south to the EAA. Approximately 1% was discharged to the L8 and 1.5% was discharged through S-310.**

ACOE Daily Reports			
Date	S79 Flow (cfs)	S78 Flow (cfs)	S77 Flow (cfs)
3/13/2018	443	146	306
3/14/2018	146	43	309
3/15/2018	19	0	174
3/16/2018	802	750	613
3/17/2018	1299	918	808
3/18/2018	962	589	550
3/19/2018	610	420	356
7 day Avg	612	409	445



Upstream of S-79/Franklin Conditions: On 3/20/18 the Olga Water Treatment plant reported chlorides of **62 mg/l**, apparent color **107 CU** and turbidity **3.47 NTU**. No visible algae was reported at the plant intake the past week. The plant is off line for maintenance.

Upper Estuary Conditions: **The 30 day moving average salinity at the Fort Myers Yacht Basin was 11.7 psu and the weekly average salinity was 12 psu.** These salinities are above the suitable range for tape grass, which is growing between the Caloosahatchee Bridge and Beautiful Island. Water column chlorophyll is elevated at Beautiful Island.

Lower Estuary Conditions: The average salinity at Shell Point, **31 psu**, was above the optimal range for oysters. The phytoplankton community at the Causeway was dominated by *Thalassiosira* sp. (37,500 cells/L) and *Alexandrium* sp. (25,000 cells/L).

J.N. "Ding" Darling NWR:

Monitor Site	Salinity (psu)	Diss O ₂ (mg/L)	FDOM (qsde)	Chlorophyll (µg/L)
Wulfert Flats	31.9 – 35.6	4.6 – 9.3	-----	-----
Wildlife Drive	35.6 – 36.5	1.5 – 10.6	-----	-----
McIntyre Creek	-----	1.9 – 8.8	7.1 – 27.1	1.9 – 5.3

Beach Conditions: Moderate amounts of drift algae and dead fish are along shore and washing up on Sanibel beaches. Algae species include: *Gracilaria*, *Agardhiella*, *Solieria*, *Halymeria*, *Hypnea*, *Polysiphonia*, *Dasya Dictyota*, *Ulva*. Hundreds of dead fish including large black drum and mullet are being cleared from island beaches.

Red Tide: On 3/16/18 the Florida Fish and Wildlife Conservation Commission reports that the Florida red tide organism, *Karenia brevis* was present in Sarasota, Charlotte, Lee and Collier and Monroe Counties with **background to medium concentrations along Lee County**. Numerous fish kills and respiratory irritation were reported the past week. **SCCF sampling found low concentrations of *Karenia* at Tarpon Bay, Estero Bay and the Causeway Islands.**

Wildlife Impacts: The past week, CROW the wildlife hospital on Sanibel treated **24 new patients with red tide symptoms; 21 Double Crested Cormorants, 1 Black Skimmer, 1 Royal Tern and 1 Brown Pelican.**

SCCF reports 5 sea turtle strandings; 1 dead Kemp's Ridley, 2 dead green turtles and 2 loggerheads 1 live and 1 dead. CROW is analyzing tissue and blood for species of red tide.

A dolphin in distress was reported to FWC near lighthouse beach on 3/19/18.

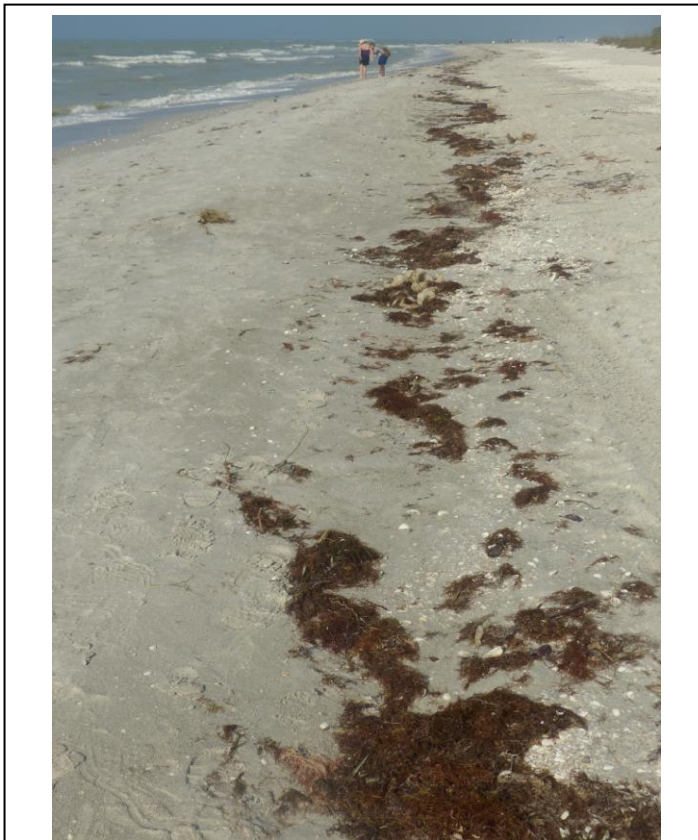
Manatees: Lee County park staff reported up to **280 manatees** in the warm water discharge of the Orange River and FPL canal the past week as a cool front moved through the area dropping temperatures to **66 - 74° F**.

Caloosahatchee Stations	Chlorophyll (µg/L)	fDOM (qse)	Turbidity (NTU)	25% I ₀ depth (meters)
Target Values	< 11	CE <70 SCB <11	CE < 18 SCB < 5	CE = 1 m SCB = 2.2m
Fort Myers	9.5	91.2	4.9	1.19
Shell Point	4.4	48.0	2.2	1.72
Causeway	4.3	18.6	2.1	2.26

Target light penetration: **CE**- Caloosahatchee Estuary =1 m
SCB-San Carlos Bay = 2.2 meters
 Definition of 25% I_z: **z** where **I** is 25% of surface **I**.
 I = irradiance, z= depth



Moderate amounts of drift algae and dead fish along Sanibel beaches from Lighthouse Beach to Blind Pass 3/19/18.
 Photos City of Sanibel



Algae along Tarpon Beach on Sanibel on 3/20/18. Accumulations of drift algae along Summerlin Road include species of *Gracilaria*, *Agardhiella*, *Solieria*, *Halymenia*, *Hypnea*, *Polysiphonia*, *Dasya*, *Dictyota*, *Ulva* that produce a sewage smell. Photo SCCF