Disclaimer: Information contained in the report addresses environmental conditions only and is not the official South Florida Water Management District operations recommendation or decision.

MEMORANDUM

TO: John Mitnik, Assistant Executive Director, Executive Office Staff

FROM: SFWMD Staff Environmental Advisory Team

DATE: October 1, 2025

SUBJECT: Weekly Environmental Conditions for Systems Operations

Summary

Weather Conditions and Forecast

A cold front is expected to stall north of Lake Okeechobee by Wednesday morning. Next, an upper-air disturbance will move toward Florida late Wednesday. A conveyor of increasing moisture will spread across the SFWMD, especially along the east coast. In combination with the stalled frontal boundary, this moisture could increase rainfall, especially on the east coast with numerous showers and scattered thunderstorms, some of which could spread into the eastern interior. Activity should begin along the middle and upper east coast Wednesday, strengthening and spreading south-to-north along the entire coast Thursday and Friday. This event could produce half an inch to one inch of area-averaged rainfall in east-coast basins each day. Inland areas will see less rainfall overall, though localized higher amounts are possible in the southwestern interior Wednesday and Thursday as northeasterly steering winds intensify across the SFWMD. The heaviest rains are most likely Thursday and Friday.

By the weekend, the weather pattern becomes increasingly complex. The nearly stationary front will lift north as a warm front between Saturday and Sunday, shifting the heaviest rains northward. However, forecast confidence is low. Current guidance supports heavier rains across the northeastern/eastern half of the SFWMD and lighter amounts elsewhere. Early next week, moisture from a tropical wave in the western Caribbean will spread northward favoring afternoon rainfall over the eastern half of the SFWMD and northeast of Lake Okeechobee. For the week ending next Tuesday morning, SFWMD rainfall is forecast to be above to much above the long-term average. The highest weekly amounts are most likely along and near the east coast, with area-averaged rainfall decreasing westward. However, given the complexity of the evolving pattern, forecast confidence remains unusually low.

Kissimmee

Last week, releases were made from East Lake Toho and Lake Toho to keep lake stage at the regulation schedule line. Releases from Kissimmee-Cypress-Hatchineha followed the Headwaters Revitalization Schedule Increment 1 Temporary Deviation Discharge Plan. Weekly average discharge on September 28, 2025, was 2,200 cfs at S-65 and 2,600

cfs at S-65A, respectively. Mean weekly water depth on the Kissimmee River floodplain decreased by 0.20 feet to 1.31 feet. The weekly average concentration of dissolved oxygen in the Kissimmee River increased from 0.4 mg/L the previous week to 0.7 mg/L and remained in the lethal zone for Florida bass and other species (**Figure KB-6**).

Lake Okeechobee

Lake Okeechobee stage was 12.19 feet NAVD88 (13.50 ft NGVD29) on September 28, 2025, which was 0.32 feet higher than the previous week and 1.08 feet higher than a month ago. Average daily inflows (excluding rainfall) decreased from 5,730 cfs the previous week to 5,380 cfs. There were no outflows (excluding evapotranspiration). The most recent non-obscured satellite image from September 21, 2025, NOAA's Harmful Algal Bloom Monitoring System suggests moderate cyanobacteria potental in the southwestern region of the lake.

Estuaries

Total inflow to the St. Lucie Estuary averaged 2,341 cfs over the past week with no flow coming from Lake Okeechobee. Mean salinities decreased at all sites. Salinity in the middle estuary was in the optimal range (10-25) for adult eastern oysters.

Total inflow to the Caloosahatchee Estuary averaged 5,779 cfs over the past week with no flow coming from Lake Okeechobee. Over the past week, salinities remained below 1 at S-79, Val I-75, and Ft. Myers. Mean surface salinities increased at Cape Coral and Shell point and decreased at Sanibel. Mean salinities were in the optimal range (0-10) for tape grass in the upper estuary. Salinities were in the optimal range (10-25) for adult oysters at Shell Point, were in the damaging range (0-5) at Cape Coral, and were in the upper stressful range at Sanibel (>25).

Stormwater Treatment Areas

Last week, no Lake Okeechobee water was delivered to the FEBs/STAs. The total amount of Lake releases sent to the FEBs/STAs in WY2026 is approximately 32,000 acfeet. The total amount of inflows to the STAs in WY2026 is approximately 415,000 acfeet. Online STA treatment cells are above target stage. STA-1E Central Flow-way is offline for construction activities. Operational restrictions are in effect in STA-1E Western Flow-way, STA-2 Flow-ways 2 and 4, and STA-3/4 Eastern Flow-way for vegetation management activities. Additional restrictions are in place in STA-2 Flow-way 3 for post-drawdown vegetation grow-in. This week, if LOSOM recommends Lake releases to the WCAs and conditions allow, releases will be sent to STA-2.

Everglades

Near average rainfall was experienced across all basins, with the local maxima averaging over 4.5 inches. Ascension rates at all gauge locations were generally good this week. However, water depths in southeastern WCA-2A have increased dramatically over the last three weeks and are now exceptionally high for this time of year. Conversely, water depths in WCA-3A South remain well below average (in the 10th percentile) with dry conditions also persisting in northeastern WCA-3A. Taylor Slough stages remained above the recent average for this time of year. Florida Bay salinities decreased on average, with the central and western regions now near the 50th percentile and the eastern region close to the 75th percentile. All regions remain below the hypersalinity threshold.

Supporting Information

Kissimmee Basin

Upper Kissimmee

On September 28, 2025, mean daily lake stages were 56.0 feet NAVD88 (at schedule) in East Lake Toho, 52.9 feet NAVD88 (0.1 feet above schedule) in Lake Toho, and 50.2 feet NAVD88 (0.6 feet below the Increment 1 Temporary Deviation schedule) in Lakes Kissimmee-Cypress-Hatchineha (KCH) (**Table KB-1**, **Figures KB-1-3**).

Lower Kissimmee

For the week ending September 28, 2025, mean weekly discharge was 2,200 cfs at S-65 and 2,600 cfs at S-65A, respectively. Mean weekly discharge from the Kissimmee River was 3,600 cfs and 3,500 cfs at S-65D and S-65E, respectively (**Table KB-2**). Mean weekly headwater stages were 45.1 feet NAVD88 at S-65A and 26.6 feet NAVD88 at S-65D. Mean weekly river channel stage decreased by 0.3 feet from the previous week's value to 37.1 feet NAVD88 (**Figure KB-4**). Mean weekly water depth on the Kissimmee River floodplain decreased by 0.20 feet to 1.31 feet (**Table KB-2**, **Figure KB-5**). The weekly average concentration of dissolved oxygen in the Kissimmee River increased from 0.4 mg/L the previous week to 0.7 mg/L (**Table KB-2**, **Figure KB-6**). A fish kill in the Kissimmee River was reported previously during this low DO event.

Water Management Recommendations

In KCH, follow the Headwaters Revitalization Schedule (HRS) Increment 1 Temporary Deviation Discharge Plan for S-65/S-65A (**Figure KB-7**). With KCH stage in Zone B1, use the Increment 1 Interpolation Tool to determine discharge relative to stage in KCH. When stage decreases into Zone B2, target flows of 1,400 cfs at S-65A.

Table KB-1. Average discharge for the preceding seven days, Sunday's average daily stage and Sunday's average daily departure from Kissimmee Chain of Lakes (KCOL) flood regulation lines or temporary schedules. All data are provisional.

Water Body	Structure	Stage Monitoring	Weekly (7-Day) Average Discharge (cfs)	Stage		Sunday Schedule Stage (feet NAVD88)	Sunday Departure from Regulation (feet)	
							9/28/25	9/21/25
Lakes Hart and Mary Jane	S-62	LKMJ	120	58.9	R	58.9	0.0	0.1
Lakes Myrtle, Preston and Joel	S-57	S-57	59	60.1	R	60.0	0.1	0.0
Alligator Chain	S-60	ALLI	56	62.2	R	62.2	0.0	0.0
Lake Gentry	S-63	LKGT	100	59.9	R	59.9	0.0	0.0
East Lake Toho	S-59	TOHOE	220	56.0	R	56.0	0.0	0.2
Lake Toho	S-61	TOHOW	260	52.9	R	52.8	0.1	0.1
Lakes Kissimmee, Cypress and Hatchineha	S-65	KUB011 LKIS5B	2200	50.2	Т	50.8	-0.6	-0.1

a. Names of in-lake monitoring sites and structures used to determine lake stage. If more than one site is listed, an average is reported.

b. A: projected recession line; R: USACE regulation schedule; S: temporary recession target line; T: temporary schedule; NA: not applicable or not available.

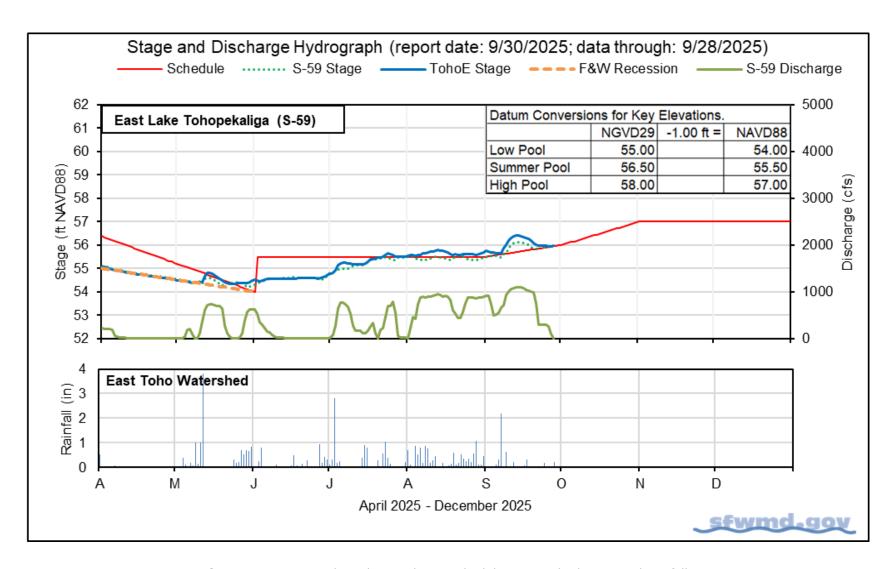


Figure KB-1. East Lake Toho regulation schedule, stage, discharge, and rainfall.

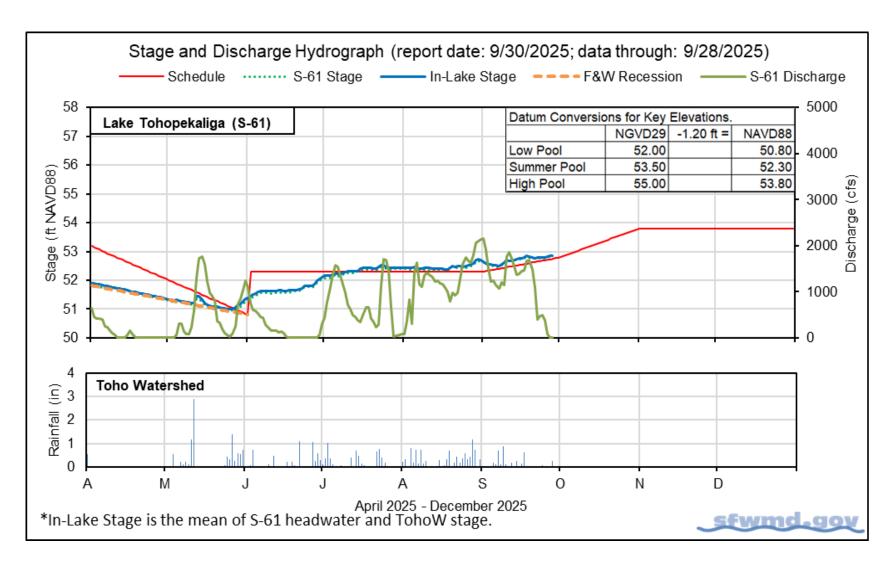


Figure KB-2. Lake Toho regulation schedule, stage, discharge, and rainfall.

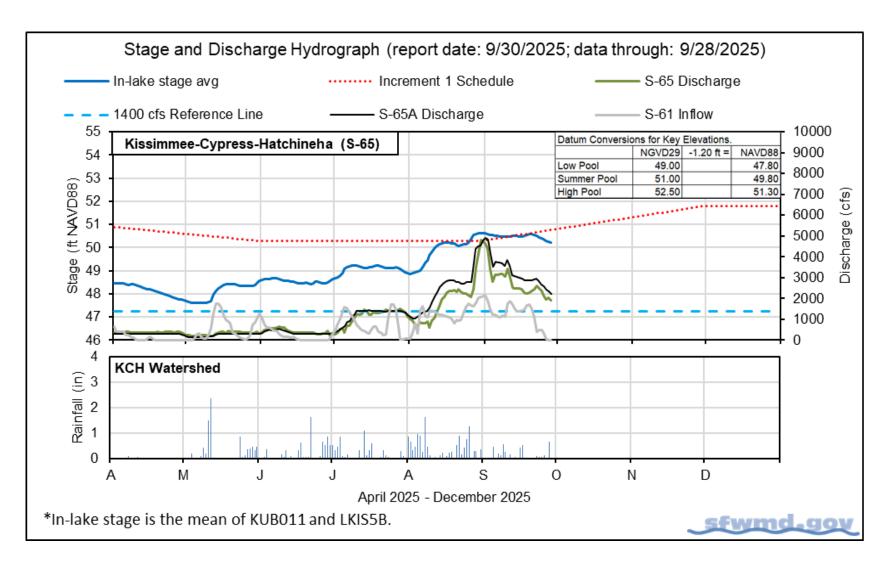


Figure KB-3. Lakes Kissimmee, Cypress and Hatchineha regulation schedule, stage, discharge, and rainfall.

Table KB-2. One- and seven-day average discharge and stage at Lower Kissimmee basin structures, river channel dissolved oxygen concentrations and water depths in the Phase I area floodplain. All data are provisional.

Metric	Location	Sunday Daily Average	Weekly Average for Previous Seven Day Periods			
		9/28/25	9/28/25	9/21/25	9/14/25	9/7/25
Discharge	S-65	1,900	2,200	2,400	2,900	3,500
Discharge	S-65A ^a	2,200	2,600	2,900	3,400	4,100
Headwater Stage (feet NAVD88)	S-65A	45.2	45.1	45.0	45.3	45.9
Discharge	S-65D ^b	3,500	3,600	4,100	4,800	3,600
Headwater Stage (feet NAVD88)	S-65D°	26.3	26.6	26.9	27.0	27.0
Discharge (cfs)	S-65E ^d	3,400	3,500	3,900	4,600	3,400
Discharge (cfs)	S-67	0	0	0	0	0
Dissolved Oxygen (mg/L) ^e	Phase I, II/III river channel	0.4	0.7	0.4	0.3	0.1
River channel mean stage (feet NAVD88) ^f	Phase I river channel	36.9	37.1	37.4	37.9	38.0
Mean depth (feet) ^g	Phase I floodplain	1.23	1.31	1.51	1.80	3.06

a. Combined discharge from main and auxiliary structures.

b. Combined discharge from S-65D, S-65DX1, and S-65DX2.

c. Average stage from S-65D and S-65DX1.

d. Combined discharge from S-65E and S-65EX1.

e. Dissolved oxygen is the average of values from sondes KRBN, PC62, PC33, PD62R, and PD42R.

f. Mean of five river channel stations (PC62, KRDR02, KRBN, PC33, PC11) in the Phase I area.

g. One-day spatial average obtained from the South Florida Water Depth Assessment Tool (SFWDAT).

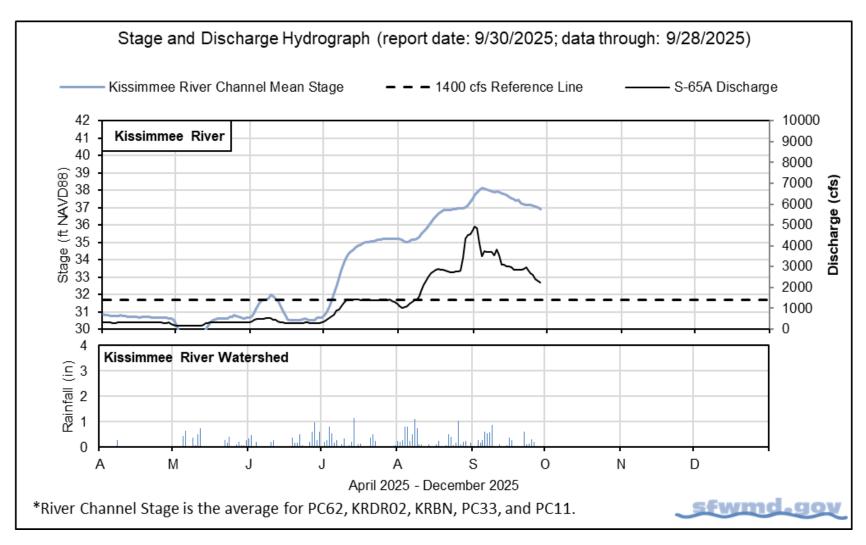
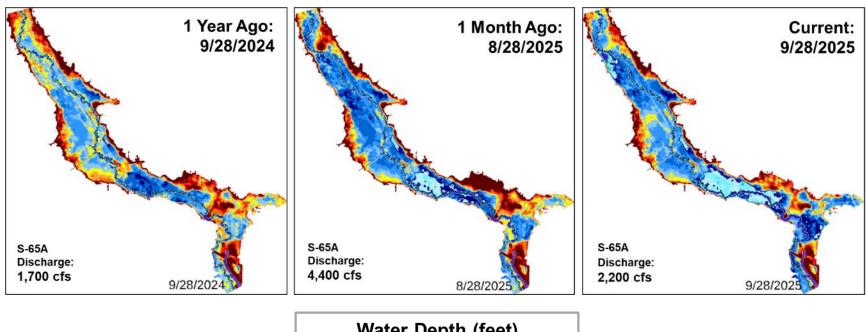


Figure KB-4. Kissimmee River stage, discharge, and rainfall.



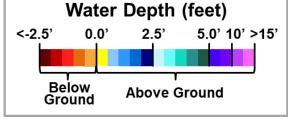


Figure KB-5. Phase I-II-III area Kissimmee River floodplain water depths (from left to right) one year ago, one month ago, and current.

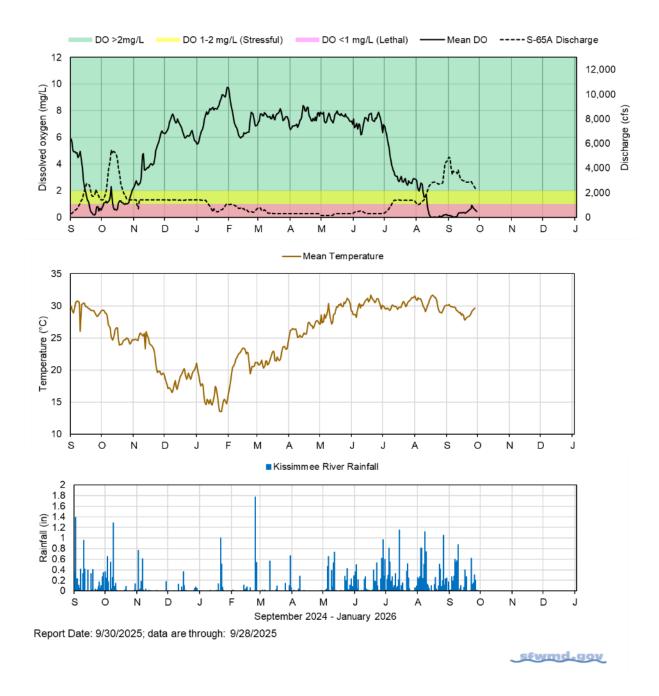


Figure KB-6. Kissimmee River channel mean daily dissolved oxygen concentration (mg/L), S-65A discharge (cfs), temperature (°C) and rainfall (inches). Dissolved oxygen (DO) and temperature are mean daily values averaged for PC62, KRDR02, KRBN, PC33, PC11, PD62R, and PD42R with an average of five stations reporting this week. Rainfall values are daily totals for Kissimmee River (Pool BCD) AHED watershed.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT HRS Increment 1 Temporary Deviation Discharge Plan for S-65/S-65A Discharge Guidance for Increment I Temporary Deviation Discharge Plan ZONE S-65 RELEASES S-65A TARGET FLOWS 53 Releases for Flood Risk Management up to 52 maximum structure capcity Zone A ZONE A as determined by downstream constraints with a firm capacity of 3,000 cfs. Zone B1 Zone B2 S-65A releases between 1,400 cfs 1,400 cfs minimum ramp to ZONE B1 and 3,000 cfs at Zone A Zone B3 3,000 cfs at Zone A boundary boundary based on Table 1 Zone B4 Releases as needed to target | Target S-65A flows of 1,400 cfs to Zone B5 ZONE B2 flows at S-65A meet ecological needs Zone C Releases as needed to target S-65A flows between 300 cfs and flows at S-65A 46 Releases as needed to target 1-Jan 1-Mar 1-Apr 1-May 1-Jun 1-Jul 1-Aug 1-Sep 1-Oct 1-Nov ZONE B4 Target S-65A flows of 300 cfs flows at S-65A S-65 RELEASES Releases for Flood Risk Managemento maximum structure capcity as determined by downstream construction for the property of 2009-61. CENTRAL AND SOUTHERN FLORIDA PROJECT Releases as needed to target ZONE B5 Target S-65A flows of 150 cfs flows at S-65A 2024 LAKE KISSIMMEE, HATCHINEHA & CYPRESS with a firm capacity of 3,000 cfs. Flow as needed to maintain ZONE C 0 cfs Temporary Deviation (Increment 1) optimum S-65A headwater DATED: May 2024 Table KB-3. Maximum Rate of Change Limits for S-65A DEPARTMENT OF THE ARMY, JACKSONVILLE DISTRICT CORPS OF ENGINEERS, JACKSONVILLE, FLORIDA MAXIMUM Release Rate of Chane Limits for S-65A. In general ZONE B5 recommended rates of change will be slower than shown in this table. Maximum rate of INCREASE | Maximum rate of DECREASE Q (cfs) (cfs/day) (cfs/day) **Other Considerations** 50 -50 0-300 • When possible, limit lake ascension rate in the Jun 1 - Aug 15 window to 0.25 ft per 7 days in Lakes 301-650 75 -75 651-1400 150 -150 Kissimmee, Cypress, Hatchineha (S-65), East Toho (S-59) and Toho (S-61). 300 1401-3000 -600 • If outlook is for extreme dry conditions meet with KB staff to discuss modifications to this plan. 1000 -2000 >3000 sfwmd.gov Slide Revised 7/29/2024

Figure KB-7. Headwaters Revitalization Schedule (HRS) Increment 1 Temporary Deviation Discharge Plan for S-65/S-65A.

Lake Okeechobee

Lake Okeechobee stage was 12.19 feet NAVD88 (13.50 ft NGVD29) on September 28, 2025, which was 0.32 feet higher than the previous week and 1.08 feet higher than a month ago (**Figure LO-1**). Lake stage is in Zone D of the regulation schedule (**Figure LO-2**), is within the recovery ecological envelope, and is 0.53 feet above the water shortage management band (**Figure LO-3**). According to NEXRAD, 1.81 inches of rain fell directly over the lake during the previous week, while 0.60 inches were lost to evapotranspiration.

Average daily inflows (excluding rainfall) decreased from 5,730 cfs the previous week to 5,380 cfs. The highest inflows came from the Kissimmee River (3,500 cfs via S-65E(X1)). There were no outflows (excluding evapotranspiration). **Figures LO-4 and LO-5** show the combined average daily inflows and outflows for the lake over the past eight weeks, and average inflows and outflows last week, respectively.

In the most recent non-obscured satellite image from September 27, 2025, NOAA's Harmful Algal Bloom Monitoring System suggests moderate cyanobacteria potential in the southwestern region of the lake, with patchy activity elsewhere withing the lake (**Figure LO-6**).

Note: All data presented in this report are provisional and are subject to change.

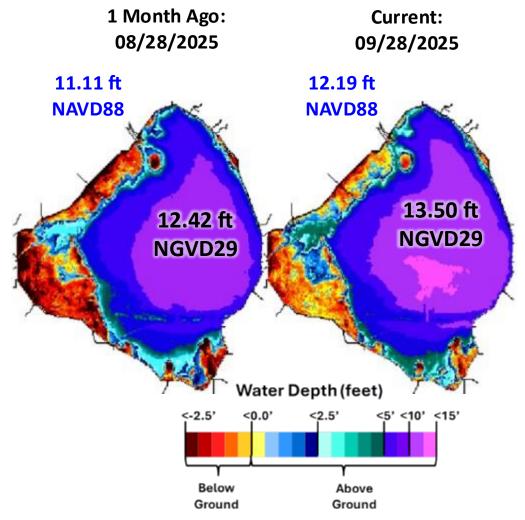


Figure LO-1. Lake Okeechobee water depth estimates based on South Florida Water Depth Assessment Tool (SFWDAT).

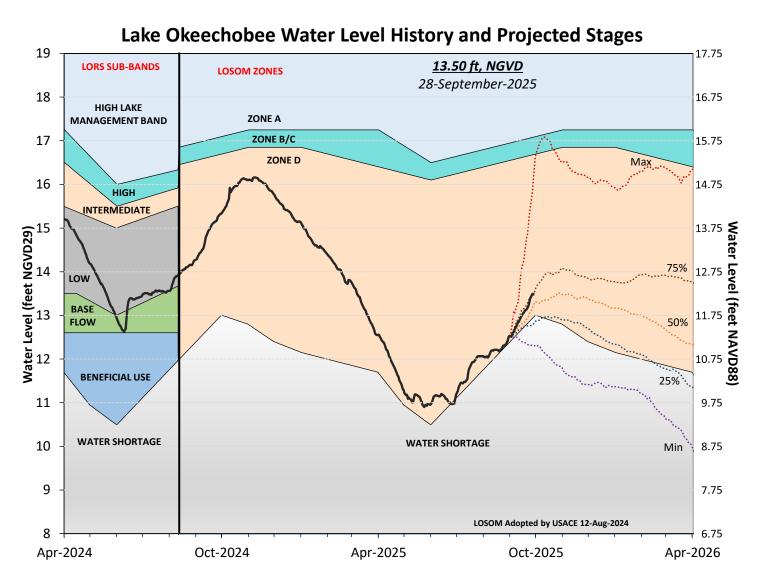


Figure LO-2. Recent Lake Okeechobee stages with projected stages based on a dynamic position analysis. Note: stages are in NGVD29, approximate NAVD88 values are shown for reference.

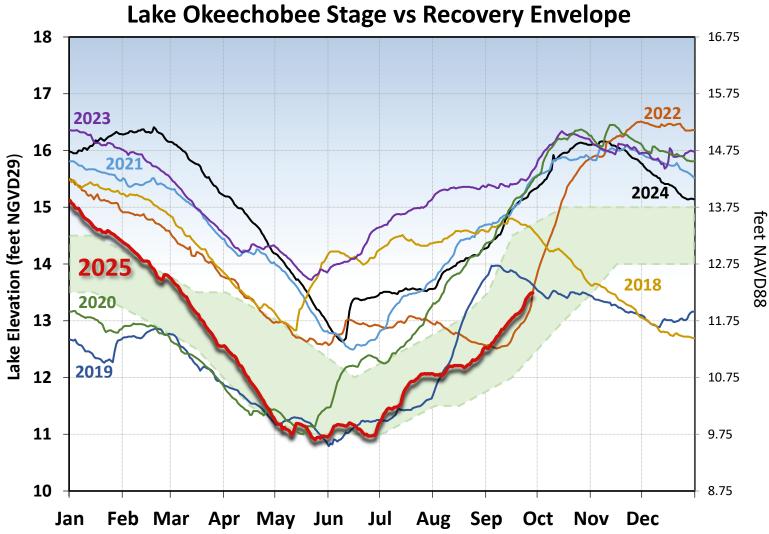


Figure LO-3. The current and seven prior year's annual stage hydrographs for Lake Okeechobee in comparison to the recovery envelope (light green). A shift from the normal to the recovery envelope occurred because the 30-day minimum lake stage (elevations exposed for at least 30 days, nonconsecutively) in the June 1 – July 31, 2023 (and 2024), window was >13 ft NGVD29 (11.75 ft NAVD88).

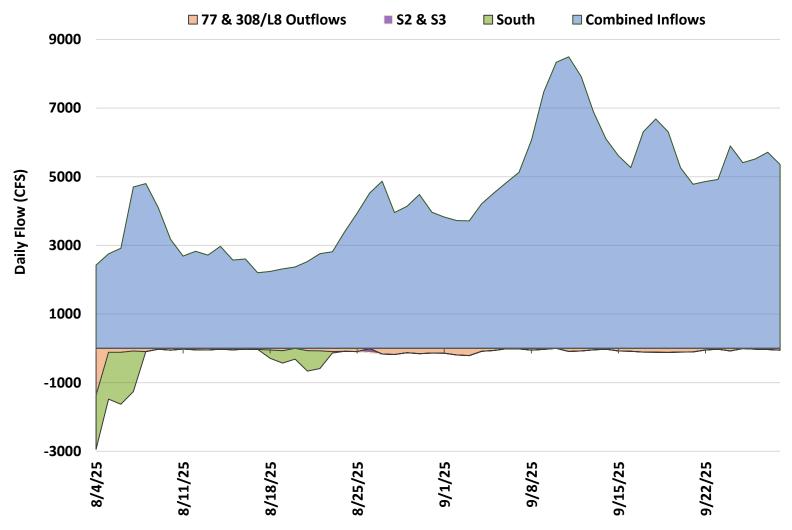


Figure LO-4. Major inflows (orange) to and outflows east and west (blue) from Lake Okeechobee. Outflows south are shown in green. Flows into Lake Okeechobee from the L-8 canal through S-271 (formerly Culvert 10A) or from the C-44 canal through the S-308 are included as inflows. Conversely, flows from Lake Okeechobee into the L-8 or C-44 canals are included with outflows. Inflows are shown as positive values; outflows are negative. Outflows through the S-77 (Caloosahatchee) and S-308 (C-44 Canal) structures are based on downstream gauges to include flows to lock openings for navigation.

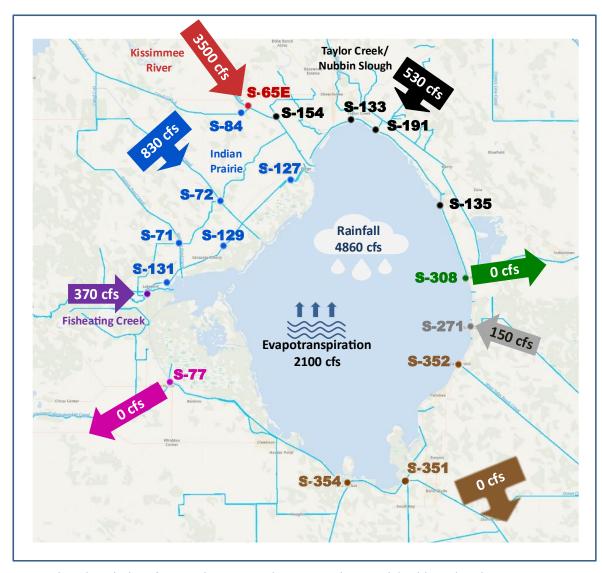


Figure LO-5. Inflows into Lake Okeechobee from Indian Prairie basins, Taylor Creek/Nubbin Slough, Kissimmee River and Fisheating Creek (currently no flow data available for FECR), and outflows to the west via S-77, to the east via S-308, to the south via S-351, S-352, S-354, and to southeast via S-271 (formerly Culvert 10A) for the week of Sep 22 – 28, 2025.

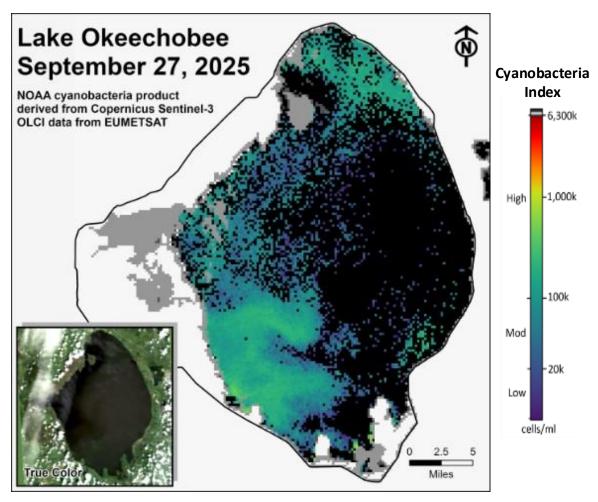


Figure LO-6. Cyanobacteria bloom index level on Lake Okeechobee, based on NOAA's harmful algal bloom monitoring system. Gray color indicates cloud cover. *Provisional NOAA image, subject to change*.

Estuaries

St. Lucie Estuary

Over the past week, mean total inflow to the St. Lucie Estuary was 2,341 cfs (**Figures ES-1** and **ES-2**), and the previous 30-day mean inflow was 1,544 cfs. For comparison, the historical provisional mean inflows from contributing areas are shown in **Figure ES-2**.

Over the past week, salinities decreased at all sites within the estuary (**Table ES-1** and **Figure ES-3**). The seven-day moving average of the surface and bottom salinities at the US1 Bridge was 13.8. Salinity conditions in the middle estuary were estimated to be within the optimal range for adult eastern oysters (**Figure ES-4**). The mean larval oyster recruitment rate reported by the Fish and Wildlife Research Institute (FWRI) for August was 0.3 spat/shell at Rio, showing a decrease from the previous month. This decline reflects a pattern typically observed in the summer months, when recruitment rates decrease following a late spring to early summer peak (**Figure ES-5**).

Caloosahatchee River Estuary

Over the past week, mean total inflow to the Caloosahatchee River Estuary was 5,779 cfs (**Figures ES-6** and **ES-7**), and the previous 30-day mean inflow was 5,635 cfs. For comparison, the historical provisional mean inflows from the contributing areas are shown in **Figure ES-7**.

Over the past week, salinities remained below 1 at S-79, Val I-75, and Fort Myers, increased at Cape Coral and Shell Point, and decreased at Sanibel (**Table ES-2** and **Figures ES-8** and **ES-9**). The seven-day mean salinities (**Table ES-2**) were in the optimal range (0-10) for tape grass in the upper estuary. The seven-day mean salinity values were within the optimal range for adult eastern oysters at Shell Point, in the upper stressful range at Sanibel, and in the damaging range at Cape Coral (**Figure ES-10**). The mean larval oyster recruitment rates reported by the FWRI in August were 39.1 spat/shell at lona Cove and 27.7 spat/shell at Bird Island, which is an increase from the previous month (**Figures ES-11 and ES-12**).

Surface salinity at Val I-75 was forecast for the next two weeks using an autoregression model (Qiu and Wan, 2013¹) coupled with a linear reservoir model for the tidal basin. Model scenarios included pulse releases at S-79 ranging from 450 to 2,000 cfs, with estimated tidal basin inflows of 680 cfs. Model results from all scenarios predict daily salinity to be 0.3 and the 30-day moving average surface salinity to be 0.2 at Val I-75 at the end of the two-week period (**Table ES-3** and **Figure ES-13**). This keeps predicted salinities in the upper estuary within the optimal salinity range (0-10) for tape grass.

¹ Qui, C., and Y. Wan. 2013. Time series modeling and prediction of salinity in the Caloosahatchee River Estuary. *Water Resources Research* 49:5804-5816.

Red Tide

The FWRI reported on September 26, 2025, that *Karenia brevis*, the Florida red tide dinoflagellate, was not observed at bloom concentrations in any samples collected within the District region.

Water Management Recommendations

Lake stage is in Zone D. Current climatological conditions are normal, and hydrological conditions are wet. The LOSOM release guidance suggests up to 2,000 cfs release at S-79 to the Caloosahatchee River Estuary and no releases at S-80 to the St. Lucie Estuary.

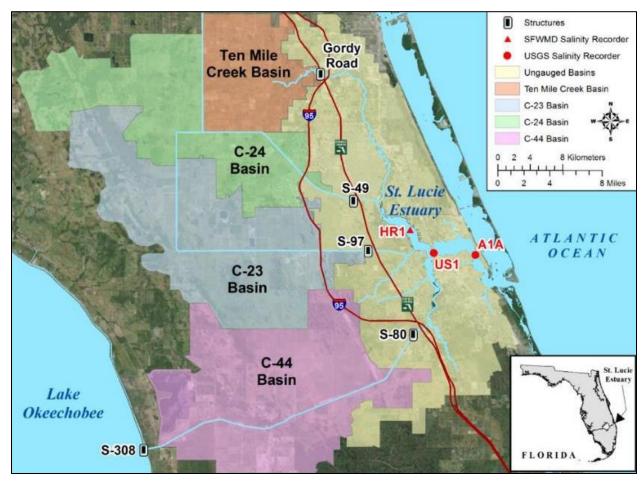


Figure ES-1. Basins, water control structures and salinity monitoring sites in the St. Lucie Estuary.

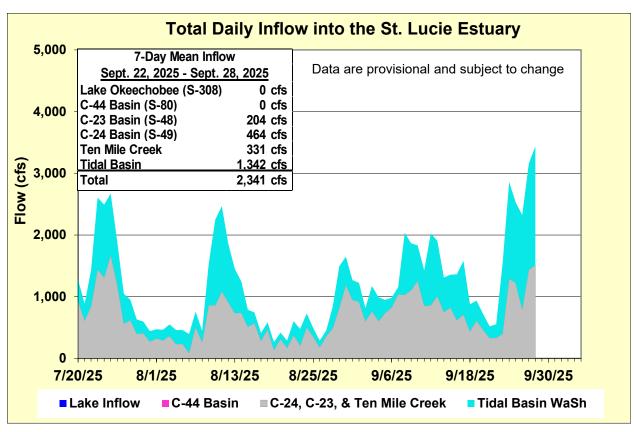


Figure ES-2. Total daily inflows from Lake Okeechobee and runoff from the C-44, C-23, C-24, Ten Mile Creek, and Tidal Basins into the St. Lucie Estuary.

Table ES-1. Seven-day mean salinity at oyster monitoring sites in the St. Lucie Estuary. Current means are in bold font; previous week's means are in parentheses. The envelope reflects the optimum salinity range for adult eastern oysters (*Crassostrea virginica*) in the estuary. Data are provisional.

Sampling Site	Surface	Bottom	Optimum Envelope
HR1 (North Fork)	7.8 (10.6)	14.1 (15.2)	10.0 – 25.0
US1 Bridge	12.6 (14.1)	15.0 (15.4)	10.0 – 25.0
A1A Bridge	19.7 (22.6)	24.6 (26.6)	10.0 – 25.0

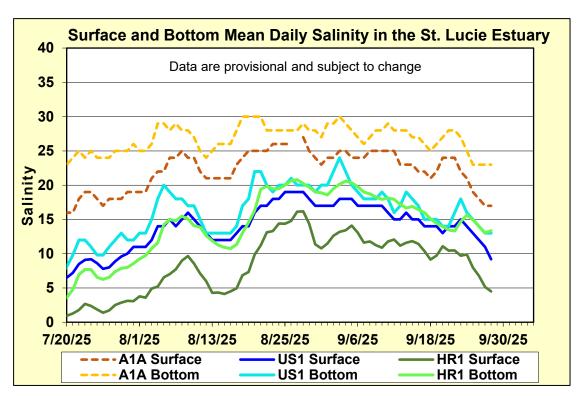


Figure ES-3. Mean daily salinity at the A1A, US1, and HR1 sites in the St. Lucie Estuary.

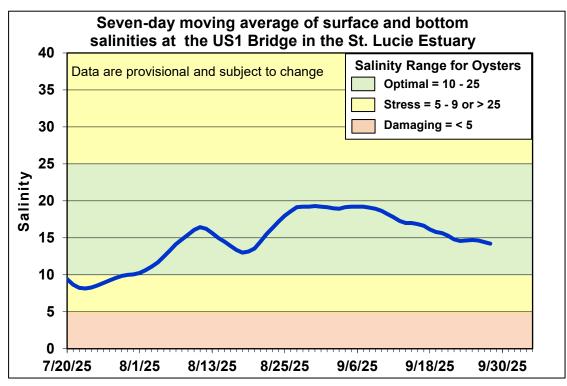


Figure ES-4. Seven-day moving average of the surface and bottom salinities at the US1 Bridge in the St. Lucie Estuary.

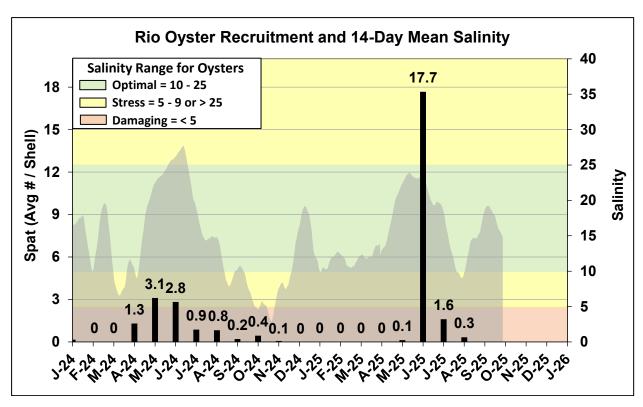


Figure ES-5. Mean oyster recruitment at the Rio oyster monitoring station and 14-day mean salinity at US1 Bridge.

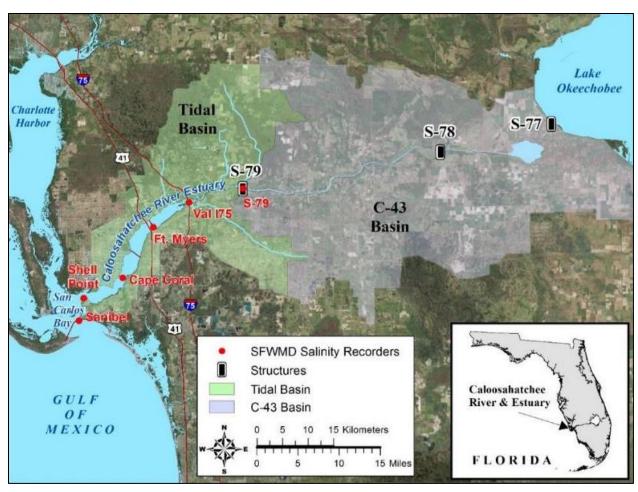


Figure ES-6. Basins, water control structures, and salinity monitoring sites in the Caloosahatchee River Estuary.

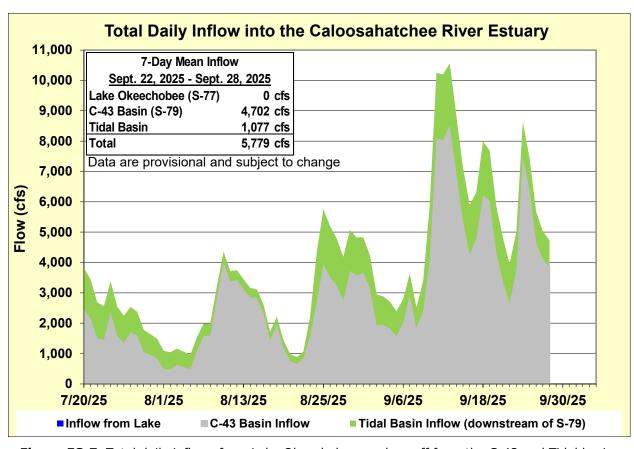


Figure ES-7. Total daily inflows from Lake Okeechobee, and runoff from the C-43 and Tidal basins into the Caloosahatchee River Estuary.

Table ES-2. Seven-day mean salinity at six monitoring sites in the Caloosahatchee River Estuary. Current means are in bold font; previous week's means are in parentheses. The envelope in the upper estuary sites is for the protection of tape grass and the envelope in the lower estuary is the optimum salinity range for adult eastern oysters (*Crassostrea virginica*). Data are provisional.

Sampling Site	Surface	Bottom	Optimum Envelope
S-79 (Franklin Lock)	0.2 (0.1)	0.2 (0.1)	0.0 – 10.0
Val I-75	0.2 (0.2)	0.2 (0.2)	0.0 – 10.0
Fort Myers Yacht Basin	0.2 (0.2)	0.2 (0.2)	0.0 – 10.0
Cape Coral	1.8 (1.4)	2.6 (2.2)	10.0 – 25.0
Shell Point	16.2 (15.8)	18.7 (18.1)	10.0 – 25.0
Sanibel	23.6 (24.5)	26.9 (26.8)	10.0 – 25.0

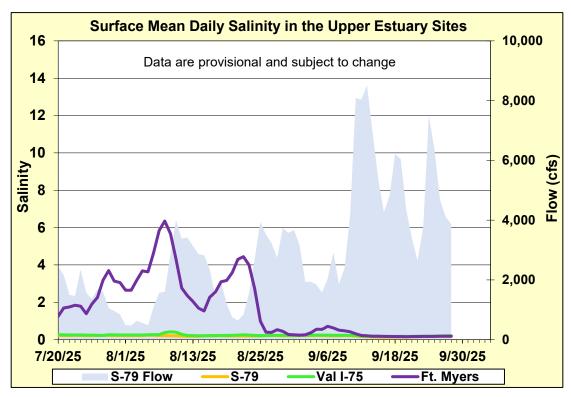


Figure ES-8. Mean daily salinity at upper Caloosahatchee River Estuary monitoring sites and mean daily flow at S-79.

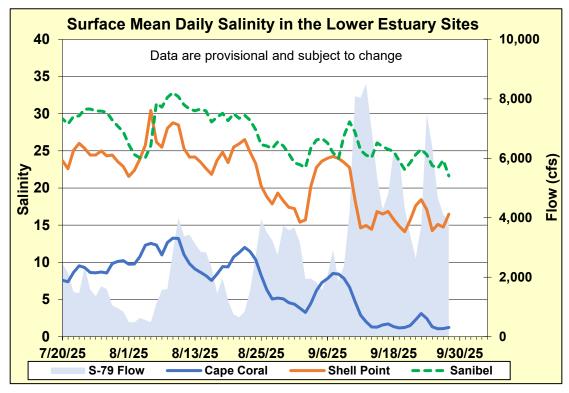


Figure ES-9. Mean daily surface salinity at lower Caloosahatchee River Estuary monitoring sites and mean daily flow at S-79.

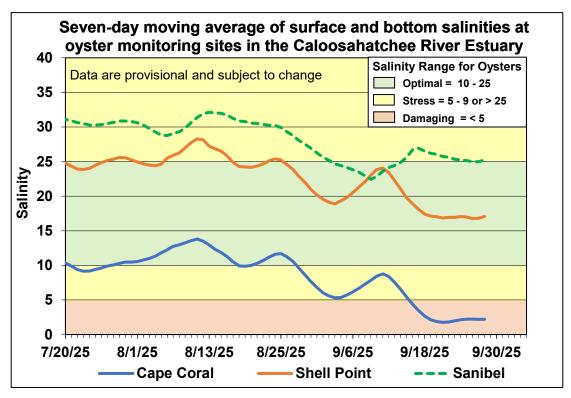


Figure ES-10. Seven-day moving average of surface and bottom salinities at Cape Coral, Shell Point, and Sanibel monitoring sites in the Caloosahatchee River Estuary.

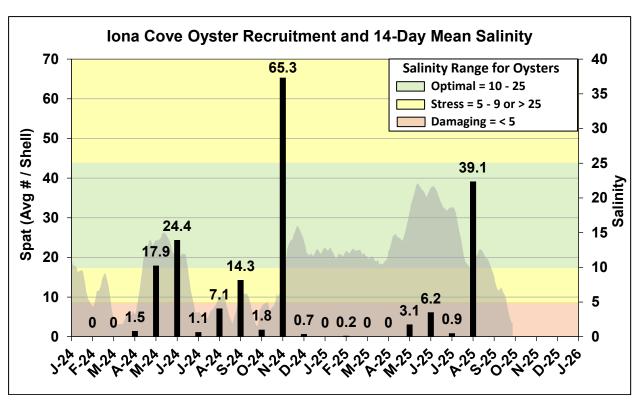


Figure ES-11. Mean oyster recruitment at the Iona Cove oyster monitoring station and 14-day mean salinity at Cape Coral.

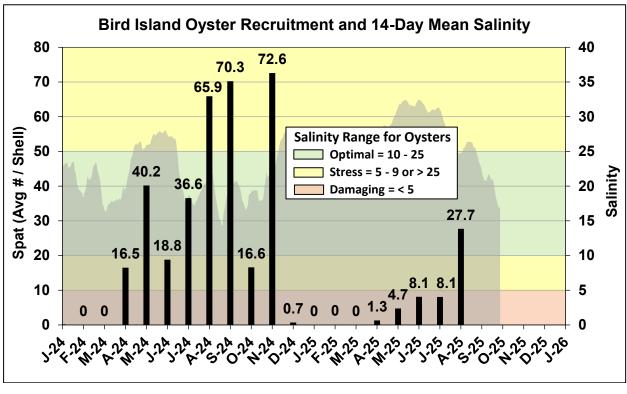


Figure ES-12. Mean oyster recruitment at the Bird Island oyster monitoring station and 14-day mean salinity at Shell Point.

Table ES-3. Predicted salinity at Val I-75 in the Caloosahatchee River Estuary at the end of the forecast period for various S-79 flow release scenarios.

Scenario	Simulated S-79 Flow (cfs)	Tidal Basin Runoff (cfs)	Daily Salinity	30-Day Mean Salinity
Α	450	680	0.3	0.2
В	750	680	0.3	0.2
С	1,000	680	0.3	0.2
D	1,500	680	0.3	0.2
Е	2,000	680	0.3	0.2

Observed and Forecasted Flow at S-79 and Salinity at Val I-75

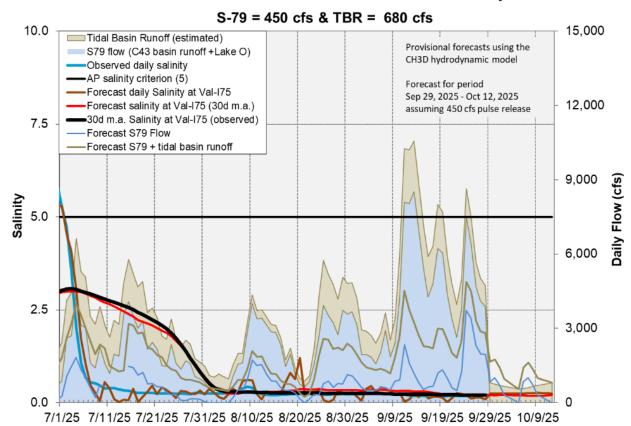


Figure ES-13. Surface salinity forecast at the Val I-75 site assuming a 450 cfs pulse release at S-79.

Stormwater Treatment Areas

- **STA-1E:** STA-1E Central Flow-way is offline for construction activities. An operational restriction is in place in the Western Flow-way for post-construction vegetation grow-in. Online SAV treatment cells at target stage, EAV cells are slightly above target stage. The 365-day PLR for the Western and Eastern Flow-way is below 1.0 g/m²/year (**Figure S-2**).
- **STA-1W:** STA-1W Eastern Flow-way is online with restrictions for G-253 structure replacements. Treatment cells are slightly above target stage. Vegetation in the Western and Eastern Flow-ways is highly stressed. The 365-day PLRs for the Eastern and Northern Flow-ways are below 1.0 g/m²/year. The 365-day PLR for the Western Flow-way is high (**Figure S-2**).
- **STA-2:** Operational restrictions are in place in Flow-ways 2 and 4 for vegetation management activities and in Flow-way 3 for post-drawdown vegetation grow-in. Treatment cells are above target stage. The 365-day PLRs for all Flow-ways are below 1.0 g/m²/year (**Figure S-3**).
- **STA-3/4:** An operational restriction is in place in the Eastern Flow-way for post-drawdown vegetation grow-in. Treatment cells are above target stage. Vegetation in the Central Flow-way is highly stressed. The 365-day PLR for the Eastern, Central, and Western Flow-ways are below 1.0 g/m²/year (**Figure S-3**).
- **STA-5/6:** All treatment cells are above target stage. All treatment cells have highly stressed or stressed vegetation conditions. The 365-day PLRs for Flow-ways 1, 2, 3, 5, 6, 7, and 8 are below 1.0 g/m²/year, and the 365-day PLR for Flow-way 4 is high. (**Figure S-4**).

For definitions on STA operational language see glossary following figures

Estimated Inflow and Outflow Volumes

Sept. 22 – Sept. 28, 2025 Includes preliminary data

- Total WY2026 inflows to STAs (5/1/2025 to 9/28/2025): ~415,000 ac-ft
- Lake Okeechobee releases to FEBs/STAs
 - 9/22/2025 to 9/28/2025: 0 ac-ft
 - WY2026: ~ 32,000 ac-ft
- Extensive vegetation management activities underway to address stressed and highly stressed vegetation in EAV cells
- All treatment cells are at or above target water depth

Sept. 22 Sept. 20, 2025 Metades pren					
	Total Inflow (acre-feet)	Total Outflow (acre-feet)			
STA-1E	80	630			
STA-1W	1,700	1,450			
STA-2	16,000	14,400			
STA-3/4	16,400	13,400			
STA-5/6	5,400	4,700			

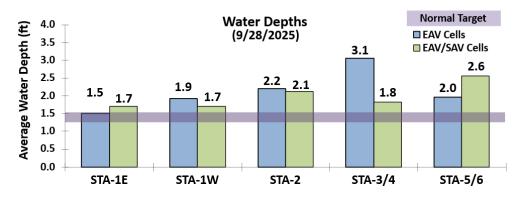


Figure S-1. STA depths and flow volumes

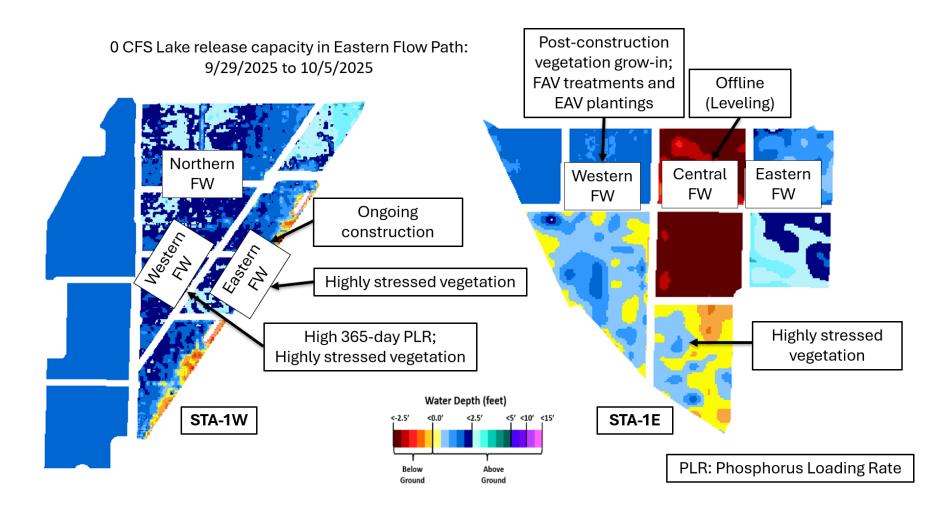


Figure S-2. Eastern Flow Path Weekly Status Report

100 CFS Lake release capacity in Central Flow Path: 9/29/2025 to 10/5/2025

- 100 CFS in STA-2
- Subject to change weekly as wet season progresses

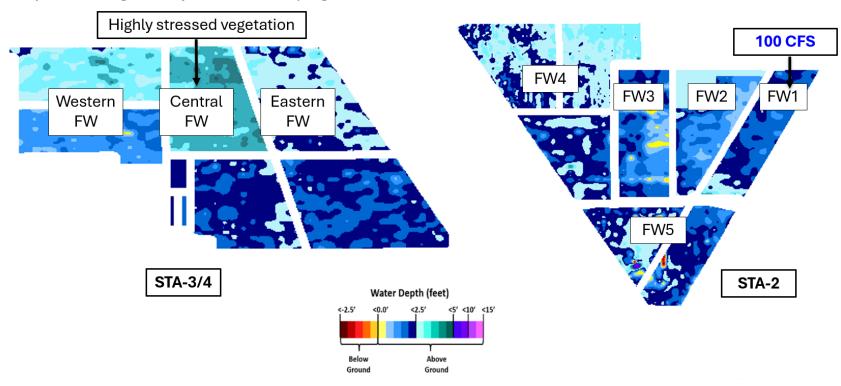


Figure S-3. Central Flow Path Weekly Status Report

0 CFS Lake release capacity in Western Flow Path: 9/29/2025 to 10/5/2025

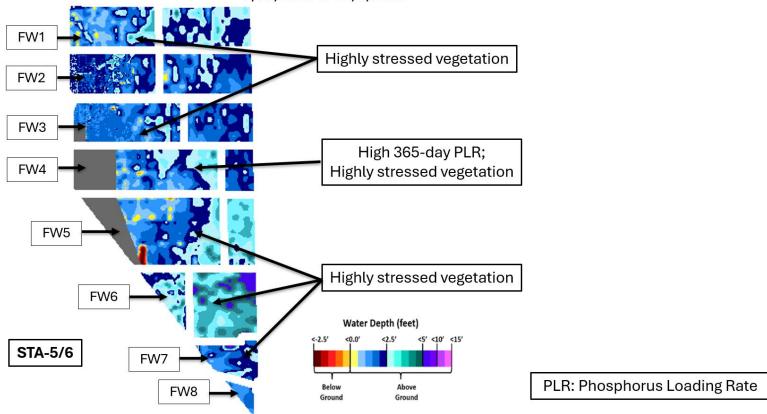


Figure S-4. Western Flow Path Weekly Status Report

Basic Concepts and Definitions for STA Weekly Status Report

- Inflow: Sum of flow volume at all inflow structures to an STA.
- Lake Inflow: Portion of the STA total inflow volume that originates from Lake Okeechobee.
- Outflow: Sum of flow volume at outflow structures from an STA.
- Total Phosphorus (TP): Total mass of phosphorus in all its forms; including particulate, dissolved, etc.
- Inflow Concentration: TP concentration is the mass of TP in micrograms per liter of water, µg/L or ppb. Inflow concentration refers to the flow-weighted mean TP from all inflow structures over a period of time.
- Outflow Concentration: The flow-weighted mean TP from all outflow structures over a period of time. The outflow concentration represents the reduction of inflow TP achieved by STA treatment of the inflow water.
- WQBEL: The STA outflow concentration that is required upon completion of the Restoration Strategies projects by December 2025. The outflow concentration shall not exceed 13 ppb as an annual flow weighted mean in more than 3 out of 5 water years on a rolling basis and shall not exceed 19 ppb as an annual flow weighted in any water year.
- Flow-Way (FW): One or more treatment cells connected in series. Cells typically have emergent aquatic vegetation (EAV) in the front portion of the flow-way followed by a mix of EAV and submerged aquatic vegetation (SAV)
- Vegetation Status: Healthy means the vegetation condition is good and will allow the STA to perform as designed. Stressed means the vegetation is showing signs of poor health, such as browning or areas of vegetation die-off, or the cell contains undesirable vegetation such as floating exotic vegetation requiring treatment. The TP reduction capability of the STA is affected when the vegetation condition is poor.
- Phosphorus Loading Rate (PLR): Mass of inflow TP in grams, divided by total treatment area of STA in square meters, per year. In general, a 365-day value of less than 1.0 is needed for an STA to perform optimally. A PLR of 2.0 is considered very high and a PLR of 3.0 is considered extremely high. The TP reduction capability of the STA is affected when the PLR is high, very high and extremely high.
- Online: Online status means the FW can receive and treat inflow.
- Online with Restriction: The FW can receive and treat inflow, but the amount of flow or water level may be limited temporarily. For example, a vegetation rehabilitation effort may require reduced flows through an area while the new plants are establishing, or nesting by protected species may require a certain water level not to be exceeded.
- Offline: The FW is unable to receive and treat inflow due to repairs, construction, or other prohibitive reasons.
- **Depth**: Difference between the average surface water level in a cell and the average ground elevation in that cell. Target depths, or depths between flow events, are between 1.25 ft to 1.5 ft. As depth approaches or drops below zero, an increasing percentage of the cell is considered dry and STA conditions deteriorate. An increase in depth above target depth is expected with increasing flow. However, as depth increases much above the target depth and is sustained over a period of time, it can be detrimental to vegetation health and overall STA treatment performance.
- Note: The data provided in this summary report were developed using a combination of provisional and quality-assured flow and water quality data. In some cases, best professional judgment was used to estimate missing data and revise questionable data. Values provided are not considered final but are appropriate for use in STA operational decision-making.

Everglades

Water Conservation Area

Regulation Schedules

WCA-1: Stage at the 3-gauge average continues to increase and was 0.7 feet below the A1 Zone regulation line on Sunday, September 28, 2025. WCA-2A: Stage continues to rise, trending away from the A1 Zone regulation line at the 2-17 gauge and was above the line by 1.02 feet on Sunday. WCA-3A: The 3-gauge average remains in Zone B but continues to slowly ascend. On Sunday, stages were 0.79 feet below the Zone A regulation line. WCA-3A North: Stage at Gauge 62 (NW corner) increased last week and remains below the Upper Schedule regulation line. On Sunday, stage was 0.51 feet below the line. See **Figures EV-1** through **EV-4**.

Water Depths

The SFWDAT model output for September 28, 2025, illustrates a continued rehydration of WCA-1. The southern half of WCA-2A is very deep for this time of year. Drier conditions persist in Northeastern WCA-3A along the L-38W canal. Depths increased in WCA-3A but remain relatively low in WCA-3A South and northeastern WCA-3A North, which may limit prey production for next year's wading bird nesting season. Big Cypress Basin near Tamiami trail is now slightly wetter than last month. Hydrologic connectivity has improved compared to one month ago in all three of the major sloughs within Everglades National Park. Conditions remain in the 10th percentile across WCA-3A South. WCA-1 and WCA-3A North remain below average. Everglades National Park exhibits both below (west) and above average water depths (east). WCA-2A is at or above average across most of that basin except for the southeast portion which is approaching the 90th percentile. See **Figures EV-5** through **EV-6**.

Taylor Slough and Florida Bay

Stage changes were variable across Taylor Slough over the past week, with no change in the average for the week. Changes ranged from -0.09 feet at P37 in the southern slough to +0.12 feet E112 in the northern slough (**Figure EV-7 and Figure EV-8**). Taylor Slough water levels remain above the recent average (WY1993-2016) for this time of year by 3.6 inches compared to before the Florida Bay Initiative (starting in 2017), a decrease of 0.2 inches relative to last week. The Craighead Pond (CP) and Taylor Slough Bridge (TSB) stages remain below the estimated historical average (circa 1900) by 0.55 and 1.01 feet, respectively.

Average Florida Bay salinity was 26.2, a decrease of 0.3 from last week. Salinity changes ranged from -2.5 at Joe Bay (JB) in the eastern nearshore region to +0.9 at Duck Key (DK) and Buoy Key (BK), in the eastern and western regions, respectively (**Figure EV-7**). Salinity is above the estimated historical average (circa 1900) and is within the WY2001-2016 Interquartile Range (IQR) in all three regions (**Figure EV-9**). Average Florida Bay salinity remains above its recent average (WY1993-2016) for this time of year by 2.0, an increase of 0.8 relative to last week.

Salinity at the Taylor River (TR) station in the mangrove zone (tracked for the Florida Bay MFL) was 9.3, a decrease of 4.4 from last week (**Figure EV-10**). The 365-day moving sum of flow from the five major creeks (McCormick Creek, Taylor River, Mud Creek, Trout Creek, West Highway Creek) was 241,420 acre-feet, an increase of 15,984 acre-feet from last week (**Figure EV-10**).

Average rainfall across Taylor Slough and Florida Bay was approximately 0.82 inches over the past week, based on the 18 gauges used for this report. Rainfall ranged from 0.12 inches at Little Madeira Bay (LM) in the eastern nearshore region to 3.26 inches Johnson Key (JK) in the western region (**Figure EV-11**). Wind directions and speeds in Florida Bay ranged from 0.4 mph W on September 25th to 18.8 mph N on September 28th (**Figure EV-11**).

Average daily flow from the five major creeks totaled 2,889 acre-feet, with net positive flows for the week. Total daily creek flow ranged from 2,357 acre-feet on September 26th to 3,404 acre-feet on September 24th (**Figure EV-12**). Average daily flow was 2,418 acre-feet below estimated historical levels (circa 1900). Average daily flow from Alligator creek was 134 acre-feet, with net positive flows for the week (**Figure EV-12**).

Implications/considerations for water management.

- Average to above average rainfall within the Everglades Protection Area the last three weeks has increased water depths across the region. Continued increases in depth (and associated hydroperiod) are required this wet season to support aquatic fauna recovery in the central Everglades.
 - WCA-3A South and WCA-3A North, east of the Miami canal, continue to experience unseasonably dry conditions.
 - Populations of prey, already heavily depleted by the extended dry down in the last dry season, are unlikely to recover for another year or even longer if water levels do not return to more average or above average conditions. This has the potential to further extend the recent run of 4 consecutive poor wading bird nesting years into the 2026 and 2027 nesting seasons.
 - With the potential for another La Niña dry season, conserving water within the WCAs in the latter half of the wet season may prove ecologically beneficial to aquatic fauna and the predators that feed on them, as well as protect peat soil and facilitate post-wildfire recovery in those areas.
- Taylor Slough water depths remain above the recent averages as do average salinities in Florida Bay.
 - Salinities in all regions of the Bay are now plateauing within the recent years' IQR and are below the hypersalinity threshold.
 - Salinities in the central and western regions of the Bay approach the 50th percentile, while the eastern region remains just below the 75th percentile.
 - Florida Bay ecology will benefit from freshwater input to the system and direct rainfall.

 Conserving water in the WCAs while providing freshwater input to the sloughs of Everglades National Park will require careful consideration of a balance between the upstream and downstream ecological needs of the system.

Individual regional recommendations can be found in Table EV-2.

Table EV-2. Previous week's rainfall and water depth changes in Everglades basins.

Everglades Region	Rainfall (inches)	Stage change (feet)
WCA-1	2.05	+0.08
WCA-2A	2.04	+0.20
WCA-2B	2.58	+0.24
WCA-3A	1.51	+0.09
WCA-3B	1.37	+0.04
ENP	1.88	+0.09

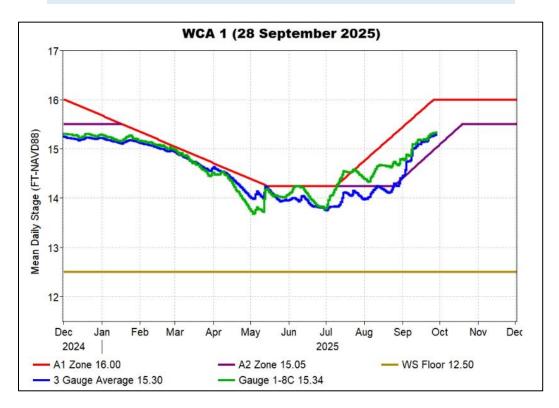


Figure EV-1. WCA-1 stage hydrographs and regulation schedule.

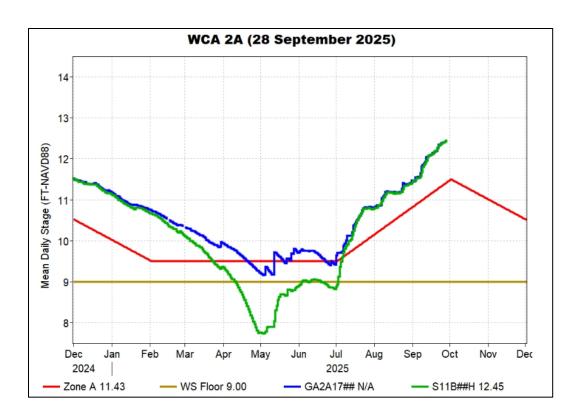


Figure EV-2. WCA-2A stage hydrographs and regulation schedule.

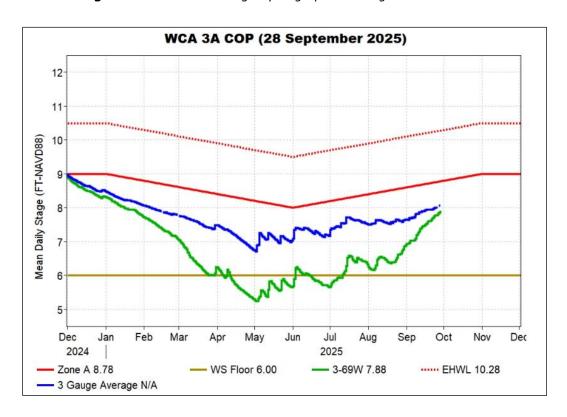


Figure EV-3. WCA-3A stage hydrographs (three-gauge average, 3-69W) and regulation schedule.

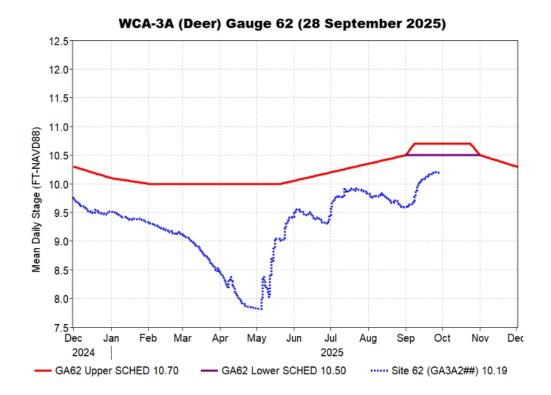


Figure EV-4. WCA-3A stage hydrograph (Deer gauge; Site 62) and GA62 regulation schedule.

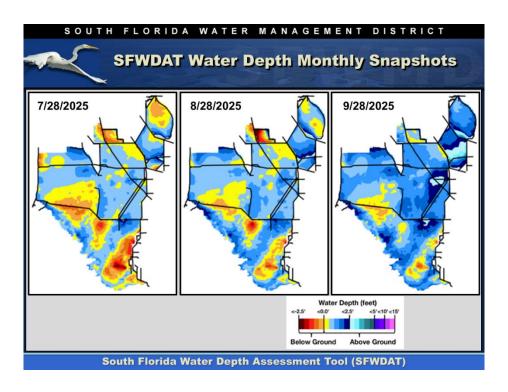


Figure EV-5. Everglades water depths from two months ago (left), one month ago (center) and present (right), based on SFWDAT.

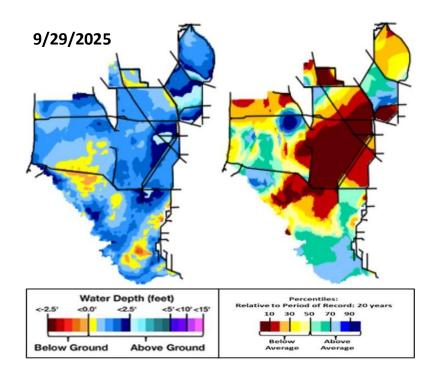


Figure EV-6. Present water depths (September 29, 2025) compared to the day of year relative to average (percentile) over the previous 20 years.

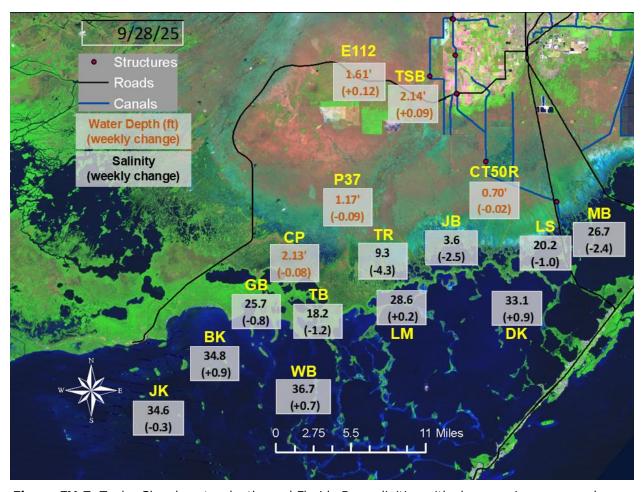


Figure EV-7. Taylor Slough water depths and Florida Bay salinities with changes since one week ago.

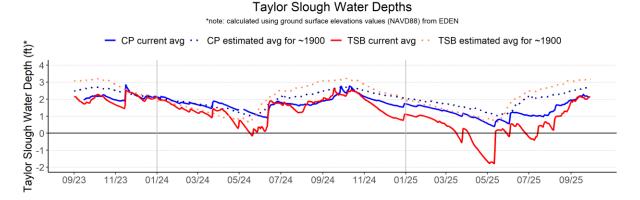


Figure EV-8. Taylor Slough water depth time series for Taylor Slough Bridge (TSB; northern slough) and Craighead Pond (CP; southern slough).

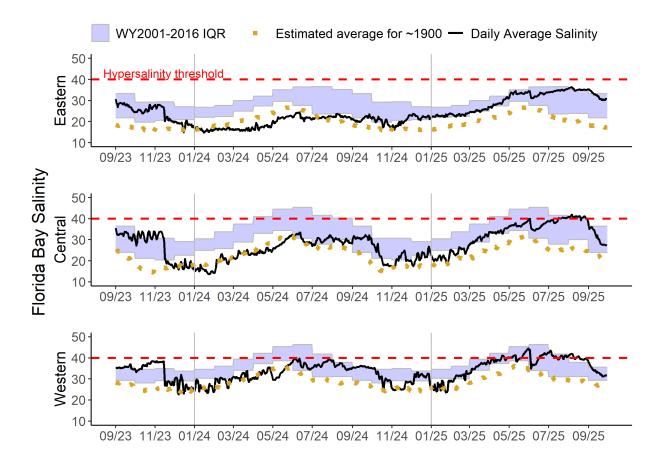


Figure EV-9. Eastern (top panel), Central (middle panel) and Western (bottom panel) Florida Bay daily average salinities with WY2001-2016 interquartile (25-75 percentile) ranges (IQR) and estimated historical daily average salinities. The hypersalinity threshold indicates the level at which salinities start to become harmful to seagrass.

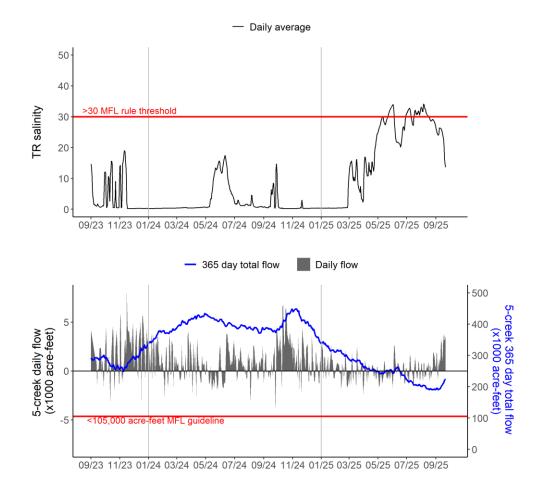


Figure EV-10. Salinity at Taylor River (TR; top) and creek inflow to Florida Bay (bottom) from the five major creeks (McCormick Creek, Taylor River, Mud Creek, Trout Creek, and West Highway Creek). The daily average salinity and 365-day total creek flow are tracked for the Florida Bay MFL criteria.

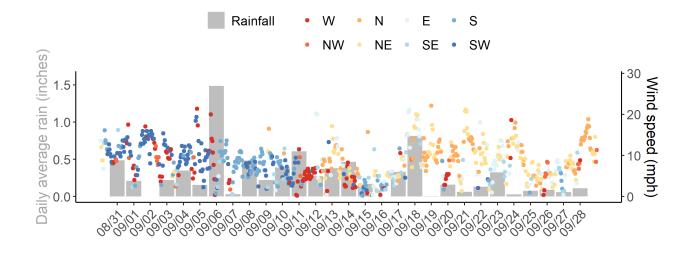


Figure EV-11. Daily average rain across Taylor Slough and Florida Bay, along with hourly average wind speed and direction (measured at Long Key) in Florida Bay over the past four weeks.

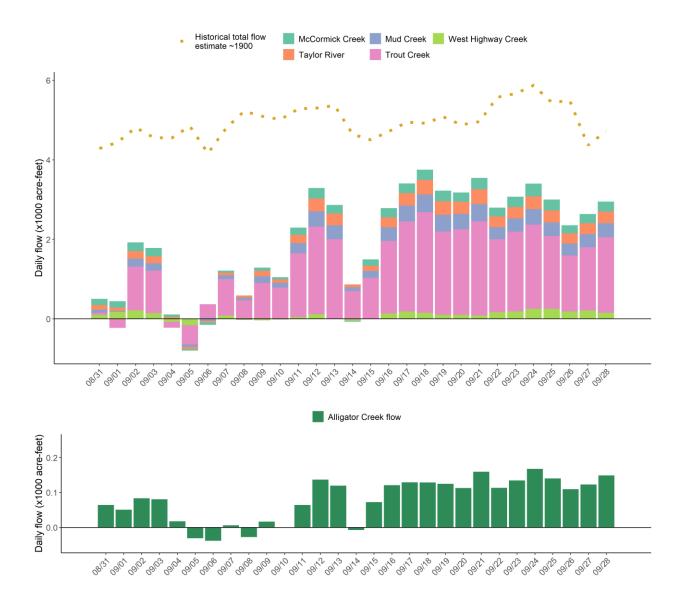


Figure EV-12. Top: daily average creek flow summed between the five major creeks with estimated historical daily flow over the past four weeks. Bottom: daily average creek flow from Alligator Creek over the past four weeks.

Table EV-2. Weekly water depth changes and water management recommendations

	Weekly change	Recommendation	Reasons
WCA-1	Stage increased by 0.08 feet	No recession and ascension rate no faster than 0.18 feet per week, or 0.36 feet per two weeks.	Protect within basin and downstream habitat and wildlife.
WCA-2A	Stage increased by 0.20 feet	No recession and ascension rate no faster than 0.18 feet per week, or 0.36 feet per two weeks.	Protect within basin and downstream habitat and wildlife.
WCA-2B	Stage increased by 0.24 feet	No recession and ascension rate no faster than 0.18 feet per week or 0.36 feet per two weeks.	Protect within basin and downstream habitat and wildlife.
WCA-3A NE	Stage increased by 0.03 feet	No recession and ascension rate no faster than 0.18 feet per week or 0.36 feet per two weeks.	Protect within basin and downstream habitat and wildlife.
WCA-3A NW	Stage increased by 0.02 feet	No recession and ascension rate no faster than 0.18 feet per week or 0.36 feet per two weeks.	
Central WCA-3A S	Stage increased by 0.15 feet	No recession and ascension rate no faster than 0.18 feet per week or 0.36 feet per two	Protect within basin and downstream habitat and wildlife.
Southern WCA-3A S	Stage decreased by 0.18 feet	weeks.	
WCA-3B	Stage increased by 0.04 feet	No recession and ascension rate no faster than 0.18 feet per week or 0.36 feet per two weeks.	Protect within basin and downstream habitat and wildlife.
ENP-SRS	Stage increased by 0.09 feet.	Make discharges to ENP according to COP and TTFF protocol while considering upstream and downstream ecological conditions.	Protect within basin and upstream habitat and wildlife.
Taylor Slough	Stage changes ranged from - 0.09 feet to +0.12 feet	Move water southward as possible.	When available, provide freshwater to promote water movement.
FB- Salinity	Salinity changes ranged from -2.5 to +0.9	Move water southward as possible.	When available, provide freshwater to promote water movement.