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M E M O R A N D U M

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

FROM: SFWMD Staff Environmental Advisory Team

DATE: August 20, 2025

SUBJECT: Weekly Environmental Conditions for Systems Operations

Summary

Weather Conditions and Forecast

While Hurricane Erin remains well east of the SFWMD, its expansive circulation stretches into the eastern Gulf of Mexico and is already influencing the regional steering wind flow. Erin will be accelerating northward several hundred miles offshore of the southeastern U.S. coast, and its large circulation, still exerting influence over the Florida Peninsula, will continue to modulate the steering winds over the SFWMD so that they shift into a relatively strong westerly to northwesterly flow. This will shift rainfall from the western interior and west coast toward the central interior and east coast. Scattered to numerous afternoon showers and thunderstorms are forecast, with the heaviest concentrated north and east of Lake Okeechobee. The westerly flow will leave the west coast comparatively drier, with only a few morning showers. Overall, total area-averaged rainfall across the SFWMD will likely be below or well below the daily climatological average. Thursday, an upper-air disturbance will drop southeastward supporting a broad coverage of rainfall from the central interior to the east coast, with the heaviest near the east coast. Some morning or overnight showers will also be possible along portions of the west coast. From Friday through Sunday, a good or widespread coverage of rainfall is possible each afternoon, concentrated over the eastern half of the SFWMD, though some early-day or overnight activity may occur in the west. Saturday and Sunday look to be the wettest days of the week. However, forecast confidence on Sunday is low due to the westward spread of a well-defined Saharan Air Layer (SAL) from the north-central into northwestern Caribbean Sea, likely reaching into the Florida Keys. If the SAL reaches the southern SFWMD, its stabilizing and drying effects could further suppress rainfall in that region, beyond what is depicted in the Day-6 QPF. By Monday, a cold front will move deep into the southeastern U.S., supporting a good coverage of rainfall from the central interior to the east coast, extending into areas northwest of Lake Okeechobee. The SAL may continue to suppress rainfall in the far southern SFWMD and could extend farther north, introducing additional uncertainty into the forecast. For the seven-day period ending next Tuesday morning, area-averaged rainfall across the SFWMD is forecast to be below the daily climatological average, with a lower chance of reaching near-average. Still, some areas from the central interior to the east coast could experience above-average rainfall.

Kissimmee

In the past week, releases were made from East Lake Toho and Lake Toho to keep lake stage at the regulation schedule line. Releases from Lakes Kissimmee-Cypress-Hatchineha (KCH) followed the Headwaters Revitalization Schedule (HRS) Increment 1 Temporary Deviation Discharge Plan. Weekly average discharge on August 17, 2025, was 1,800 cfs at S-65 and 2,600 cfs at S-65A, respectively. Mean weekly water depth on the Kissimmee River floodplain increased by 0.34 feet to 0.97 feet. The weekly average concentration of dissolved oxygen in the Kissimmee River decreased from 2.0 mg/L the previous week to 0.3 mg/L which is below both the potentially lethal level of 1.0 mg/L and the stressful level of 2.0 mg/L (**Figure KB-6**).

Lake Okeechobee

Lake Okeechobee stage was 10.91 feet NAVD88 (12.22 ft NGVD29) on August 17, 2025, which was 0.02 feet higher than the previous week and 0.31 feet higher than a month ago. Average daily inflows (excluding rainfall) decreased from 3,550 cfs the previous week to 2,620 cfs. Average daily outflows (excluding evapotranspiration) decreased from 840 cfs the previous week to 0 cfs. The most recent non-obscured satellite image from August 17, 2025, NOAA's Harmful Algal Bloom Monitoring System suggests broad coverage of moderate to high cyanobacteria potential around much of the lake, especially around Fisheating Bay and along the northwestern shoreline. Provisional phytoplankton sampling results showed 21 of 30 sites had detectable cyanotoxins, with 3 sites exceeding the microcystin USEPA recreational guideline of 8 µg/L.

Estuaries

Total inflow to the St. Lucie Estuary averaged 1,282 cfs over the past week with no flow coming from Lake Okeechobee. Mean salinities decreased at all sites over the past week. Salinity in the middle estuary was in the optimal range (10-25) for adult eastern oysters.

Total inflow to the Caloosahatchee Estuary averaged 3,074 cfs over the past week with no flow coming from Lake Okeechobee. Over the past week, salinities remained below 1 at S-79 and Val I-75, increased at Sanibel, and decreased at the remaining sites in the estuary. Mean salinities were in the optimal range (0-10) for tape grass in the upper estuary. Salinities were in the optimal range for adult oysters at Cape Coral and Shell Point, and in the upper stressed range at Sanibel.

Stormwater Treatment Areas

For the week ending Sunday, August 17, 2025, 0 ac ft of Lake Okeechobee water was delivered to the FEBs/STAs. The total amount of Lake releases sent to the FEBs/STAs in WY2026 is approximately 31,200 ac-feet. The total amount of inflows to the STAs in WY2026 is approximately 282,300 ac-feet. STA cells are at or near 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 and STA-3/4.

Everglades

Below average rainfall over the past week led to recessions across the system, except in Everglades National Park which received much more precipitation. Most regions were categorized as having a poor or fair rate of stage change as a result. Depths continue to remain well below average for this time of year across the Everglades Protection Area with few exceptions; all the major basins have regions in the 10th percentile. Only the Big Cypress National Preserve does not, but it is still only near the 30th percentile. The 30-day moving average of salinity at the Taylor River station exceeded the Minimum Flows and Levels threshold on August 15, 2025, but conditions are now below that metric. Salinities on average remained unchanged in Florida Bay (FB) last week, however the western and central regions remain above the hypersalinity threshold. Average daily flow from the five major creeks into FB was slightly net positive over the past week.

Supporting Information

Kissimmee Basin

Upper Kissimmee

On August 17, 2025, mean daily lake stages were 55.7 feet NAVD88 (0.2 feet above schedule) in East Lake Toho, 52.4 feet NAVD88 (0.1 feet above schedule) in Lake Toho, and 50.2 feet NAVD88 (0.1 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 August 17, 2025, mean weekly discharge was 1,800 cfs at S-65 and 2,600 cfs at S-65A, respectively. Mean weekly discharge from the Kissimmee River was 1,400 cfs and 1,300 cfs at S-65D and S-65E, respectively (**Table KB-2**). Mean weekly headwater stages were 45.2 feet NAVD88 at S-65A and 25.5 feet NAVD88 at S-65D. Mean weekly river channel stage increased by 1.0 feet from the previous week's value of 35.2 feet NAVD88 (**Figure KB-4**). Mean weekly water depth on the Kissimmee River floodplain increased by 0.34 feet to 0.97 feet (**Table KB-2, Figure KB-5**). The weekly average concentration of dissolved oxygen in the Kissimmee River decreased from 2.0 mg/L the previous week to 0.3 mg/L (**Table KB-2, Figure KB-6**).

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 of Increment 1, 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 S65A.

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 Site	Weekly (7-Day) Average Discharge (cfs)	Sunday Lake Stage (feet NAVD88) ^a	Schedule Type ^b	Sunday Schedule Stage (feet NAVD88)	Sunday Departure from Regulation (feet)	
							8/17/25	8/10/25
Lakes Hart and Mary Jane	S-62	LKMJ	480	59.0	R	58.9	0.1	0.4
Lakes Myrtle, Preston and Joel	S-57	S-57	110	60.1	R	60.0	0.1	0.5
Alligator Chain	S-60	ALLI	400	62.2	R	62.2	0.0	0.1
Lake Gentry	S-63	LKGT	460	59.9	R	59.9	0.0	0.0
East Lake Toho	S-59	TOHOE	920	55.7	R	55.5	0.2	0.2
Lake Toho	S-61	TOHOW S-61	1200	52.4	R	52.3	0.1	0.1
Lakes Kissimmee, Cypress and Hatchineha	S-65	KUB011 LKIS5B	1800	50.2	T	50.3	-0.1	-0.5

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.

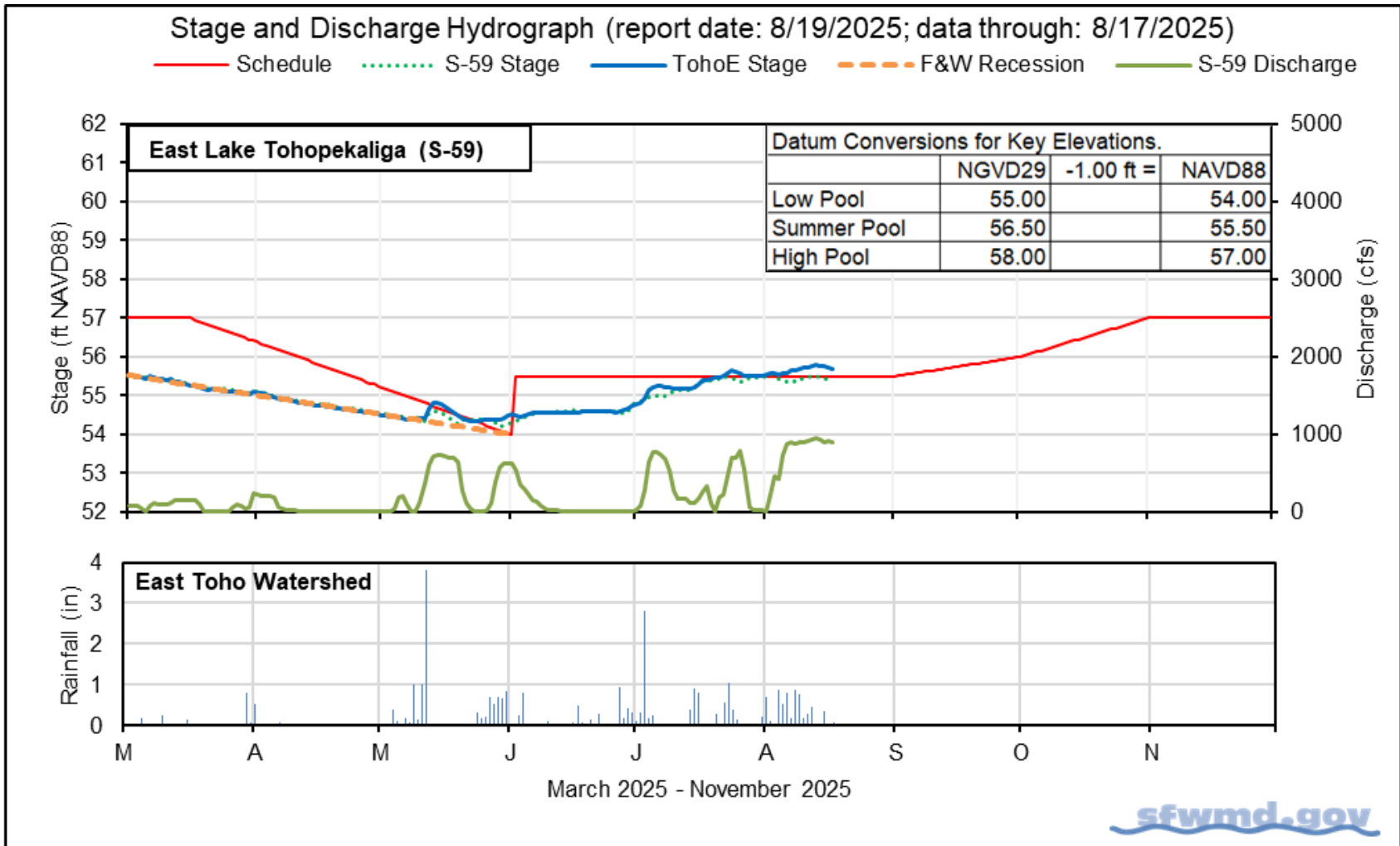


Figure KB-1. East Lake Toho regulation schedule, stage, discharge, and rainfall.

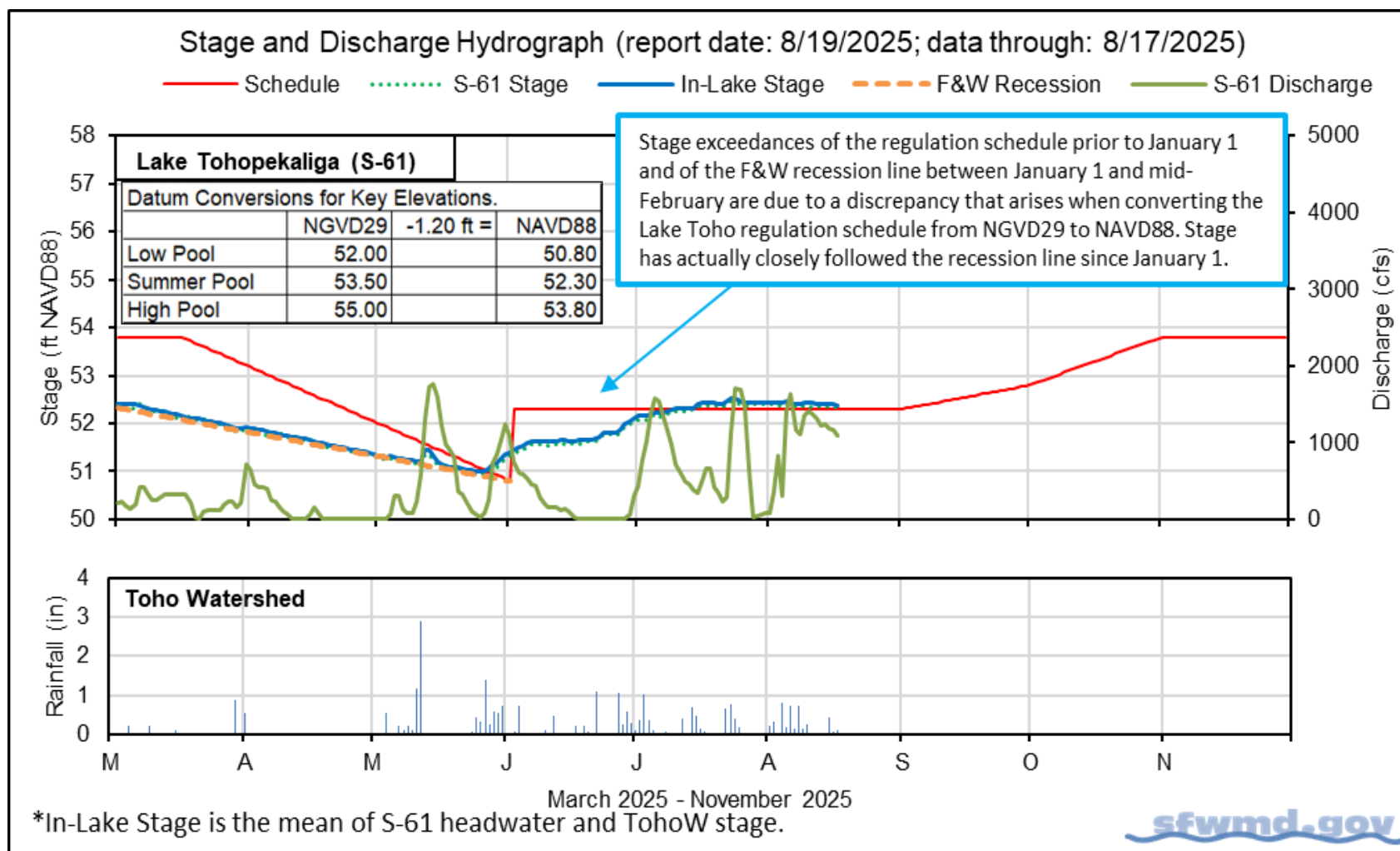


Figure KB-2. Lake Toho regulation schedule, stage, discharge, and rainfall.

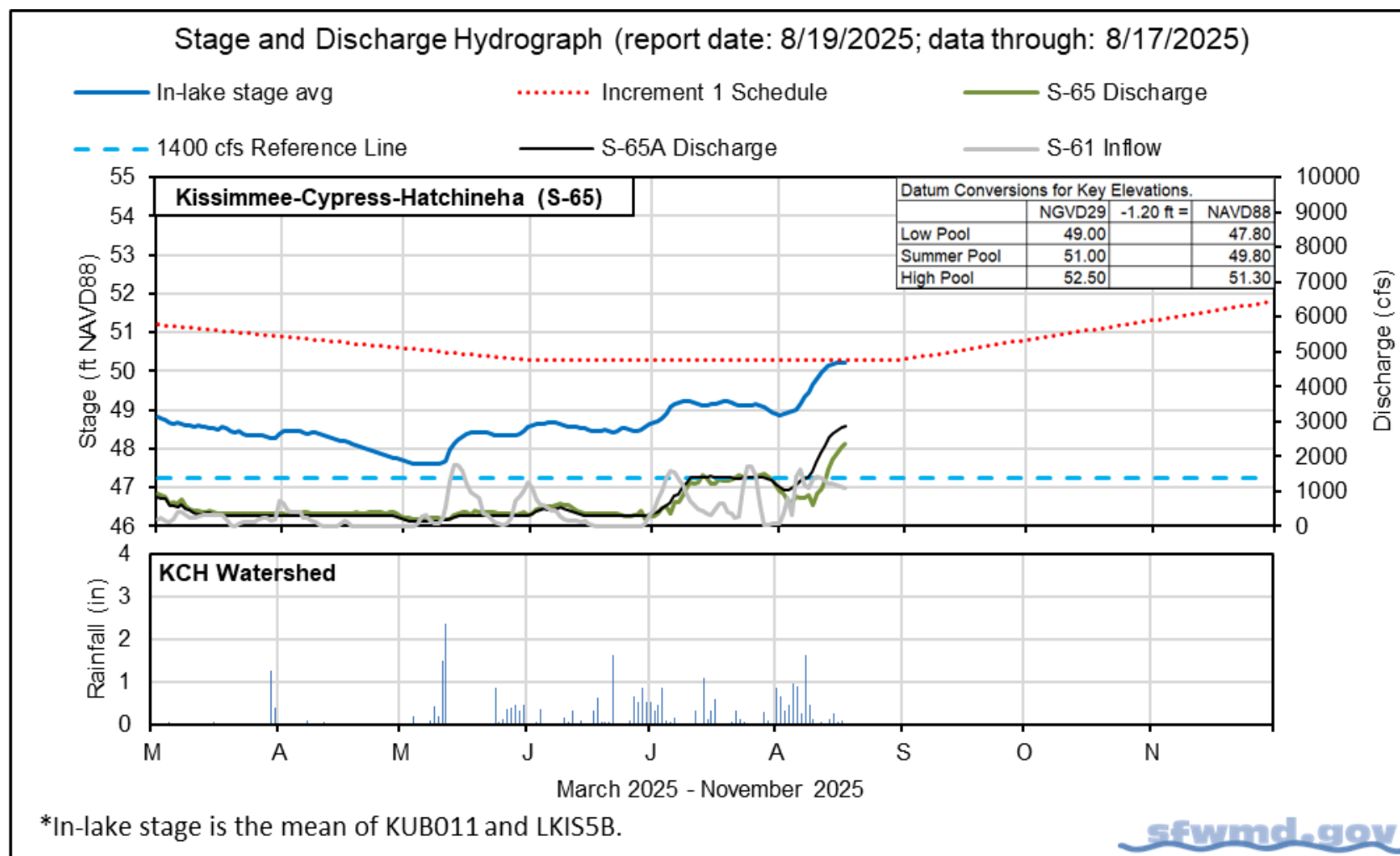


Figure KB-3. Lakes Kissimmee, Cypress and Hatchineha regulation schedule, stage, discharge, and rainfall.

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			
		8/17/25	8/17/25	8/10/25	8/3/25	7/27/25
Discharge	S-65	2,400	1,800	800	1,200	1,400
Discharge	S-65A ^a	2,900	2,600	1,400	1,200	1,400
Headwater Stage (feet NAVD88)	S-65A	45.1	45.2	45.3	45.4	45.3
Discharge	S-65D ^b	1,600	1,400	1,400	1,300	1,200
Headwater Stage (feet NAVD88)	S-65D ^c	25.7	25.5	24.7	24.6	24.6
Discharge (cfs)	S-65E ^d	1,500	1,300	1,200	1,100	1,200
Discharge (cfs)	S-67	0	0	0	0	0
Dissolved Oxygen (mg/L) ^e	Phase I, II/III river channel	0.0	0.3	2.0	2.6	2.6
River channel mean stage (feet NAVD88) ^f	Phase I river channel	36.6	36.2	35.2	35.2	35.1
Mean depth (feet) ^g	Phase I floodplain	1.16	0.97	0.63	0.60	0.56

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.

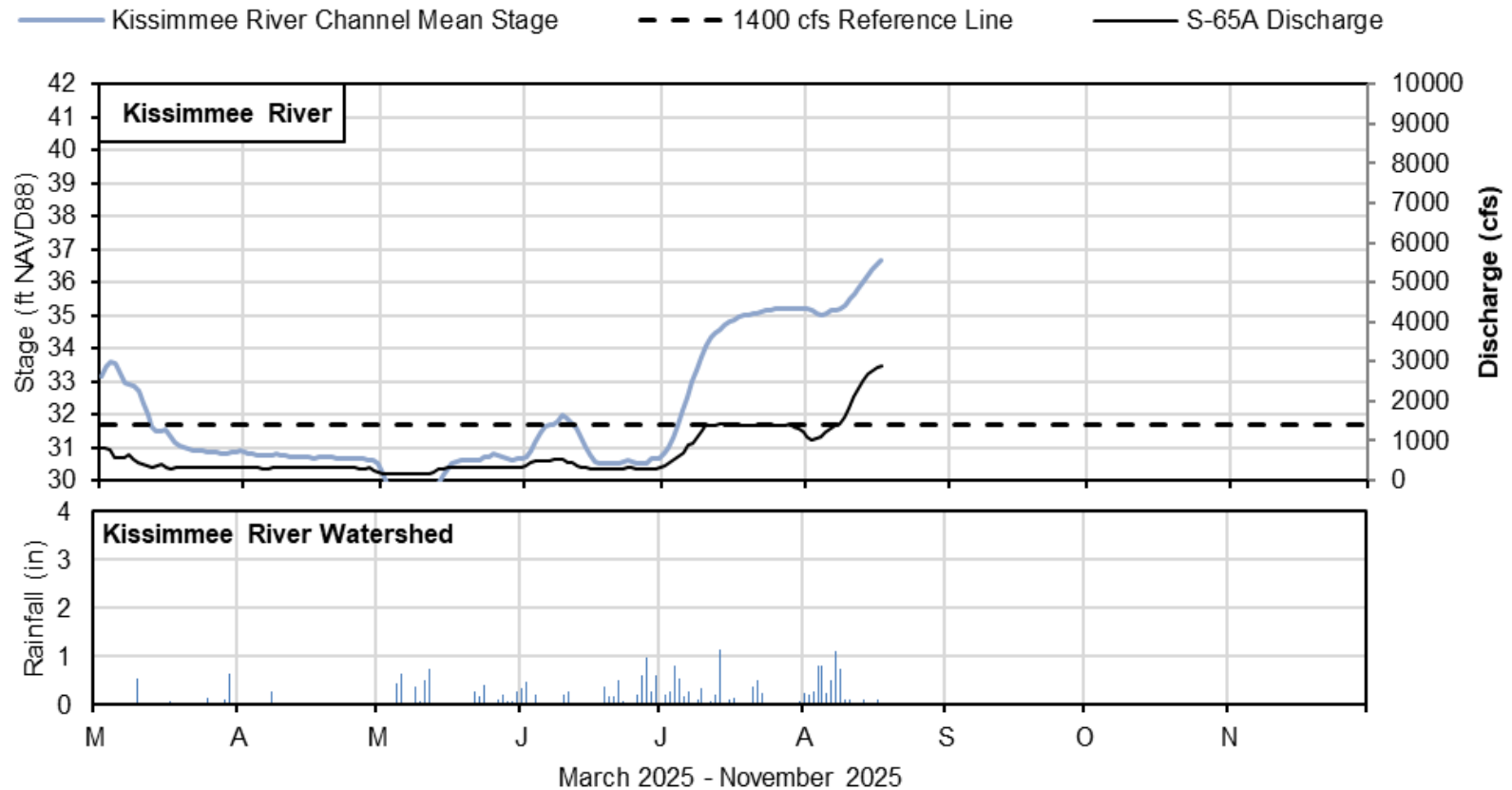
d. Combined discharge from S-65E and S-65EX1.

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).

Stage and Discharge Hydrograph (report date: 8/19/2025; data through: 8/17/2025)



*River Channel Stage is the average for PC62, KRDR02, KRBN, PC33, and PC11.

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

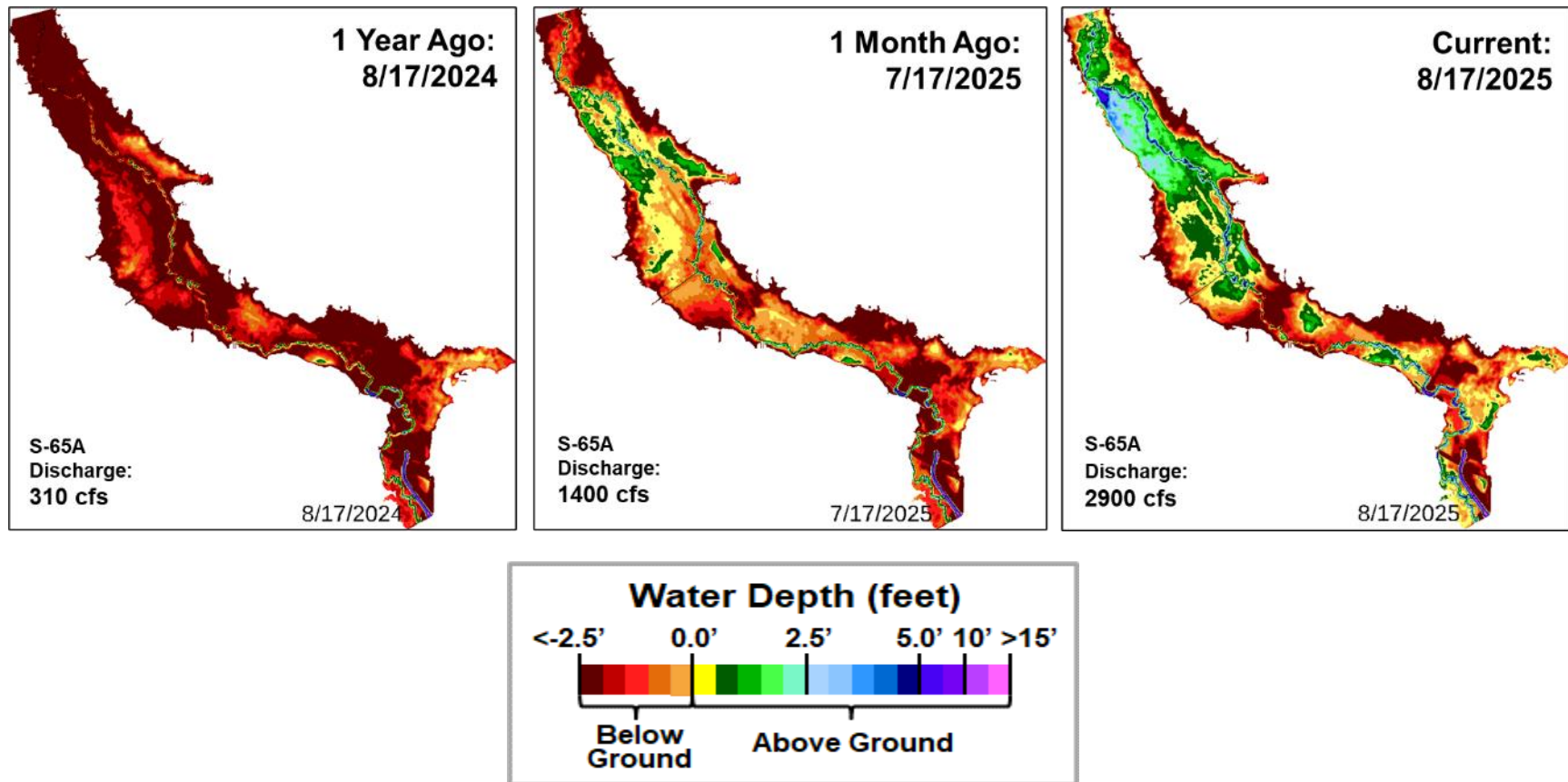
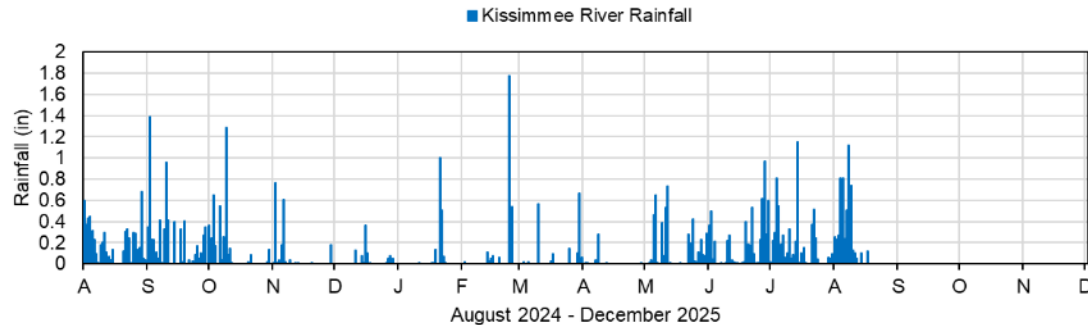
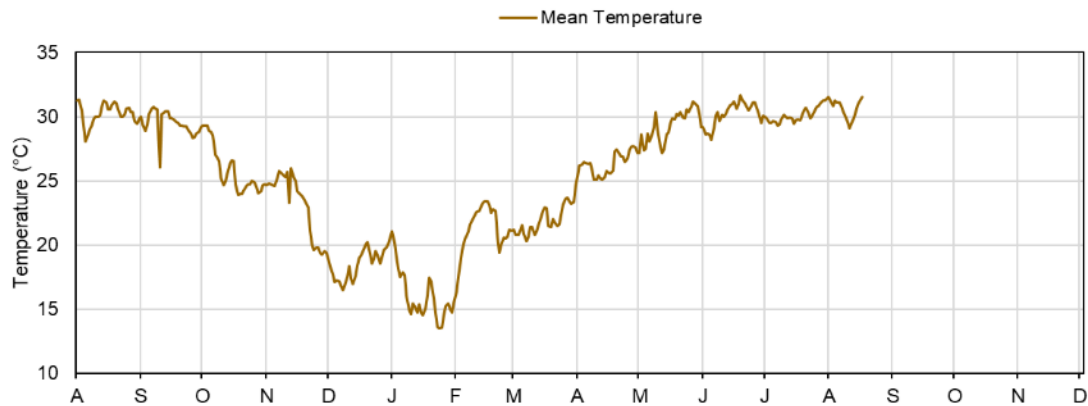
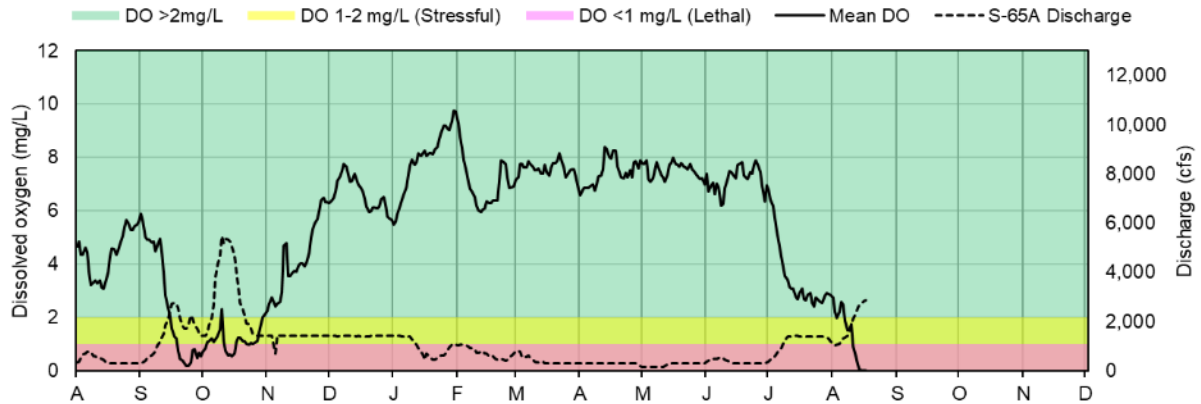


Figure KB-5. Phase I-II-III area Kissimmee River floodplain water depths (from left to right) one year ago, one month ago, and current.



Report Date: 8/19/2025; data are through: 8/17/2025

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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 1 Temporary Deviation Discharge Plan

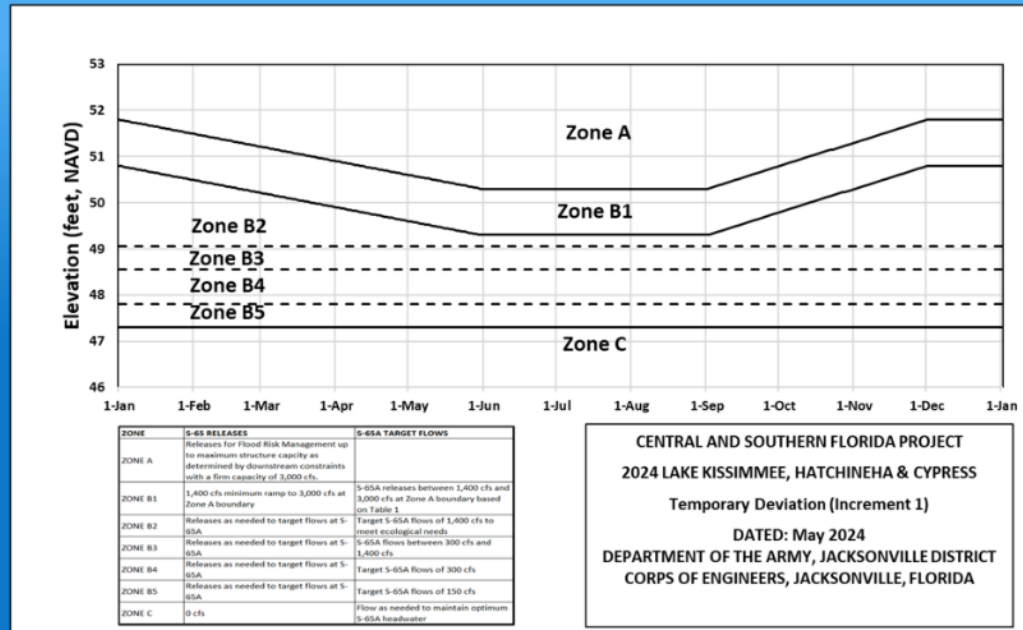
ZONE	S-65 RELEASES	S-65A TARGET FLOWS
ZONE A	Releases for Flood Risk Management up to maximum structure capacity as determined by downstream constraints with a firm capacity of 3,000 cfs.	
ZONE B1	1,400 cfs minimum ramp to 3,000 cfs at Zone A boundary	S-65A releases between 1,400 cfs and 3,000 cfs at Zone A boundary based on Table 1
ZONE B2	Releases as needed to target flows at S-65A	Target S-65A flows of 1,400 cfs to meet ecological needs
ZONE B3	Releases as needed to target flows at S-65A	S-65A flows between 300 cfs and 1,400 cfs
ZONE B4	Releases as needed to target flows at S-65A	Target S-65A flows of 300 cfs
ZONE B5	Releases as needed to target flows at S-65A	Target S-65A flows of 150 cfs
ZONE C	0 cfs	Flow as needed to maintain optimum S-65A headwater

Table KB-3. Maximum Rate of Change Limits for S-65A

MAXIMUM Release Rate of Change Limits for S-65A. In general recommended rates of change will be slower than shown in this table.

Q (cfs)	Maximum rate of INCREASE (cfs/day)	Maximum rate of DECREASE (cfs/day)
0-300	50	-50
301-650	75	-75
651-1400	150	-150
1401-3000	300	-600
>3000	1000	-2000

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Other Considerations

- When possible, limit lake ascension rate in the Jun 1 - Aug 15 window to 0.25 ft per 7 days in Lakes Kissimmee, Cypress, Hatchineha (S-65), East Toho (S-59) and Toho (S-61).
- If outlook is for extreme dry conditions meet with KB staff to discuss modifications to this plan.

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 10.91 feet NAVD88 (12.22 ft NGVD29) on August 17, 2025, which was 0.02 feet higher than the previous week and 0.31 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 0.12 feet above the water shortage management band (**Figure LO-3**). According to NEXRAD, 0.13 inches of rain fell directly over the lake during the previous week, while 1.4 inches were lost to evapotranspiration.

Average daily inflows (excluding rainfall) decreased from 3,550 cfs the previous week to 2,620 cfs. The highest inflows came from the Kissimmee River (1,320 cfs via S-65E(X1)). Average daily outflows (excluding evapotranspiration) decreased from 840 cfs the previous week to 0 cfs. **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 August 17, 2025, NOAA's Harmful Algal Bloom Monitoring System suggests broad coverage of moderate to high cyanobacteria potential around much of the lake, especially around Fisheating Bay and along the northwestern shoreline (**Figure LO-6**).

The routine water quality and phytoplankton monitoring sampling trips are now on the bloom season (May-Nov) schedule and occur twice per month. Provisional phytoplankton results from the August 4-6 sampling showed 21 of the 30 phytoplankton samples had detectable levels of cyanotoxins. Nine sites had detectable levels of cylindrospermopsin and 12 had microcystins. None of the samples exceeded the USEPA recreational standards for cylindrospermopsin (15 µg/L), but 3 of the sites (LZ40, L004, Eastshore) exceeded the microcystin limit of 8 µg/L (**Figure LO-7**).

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

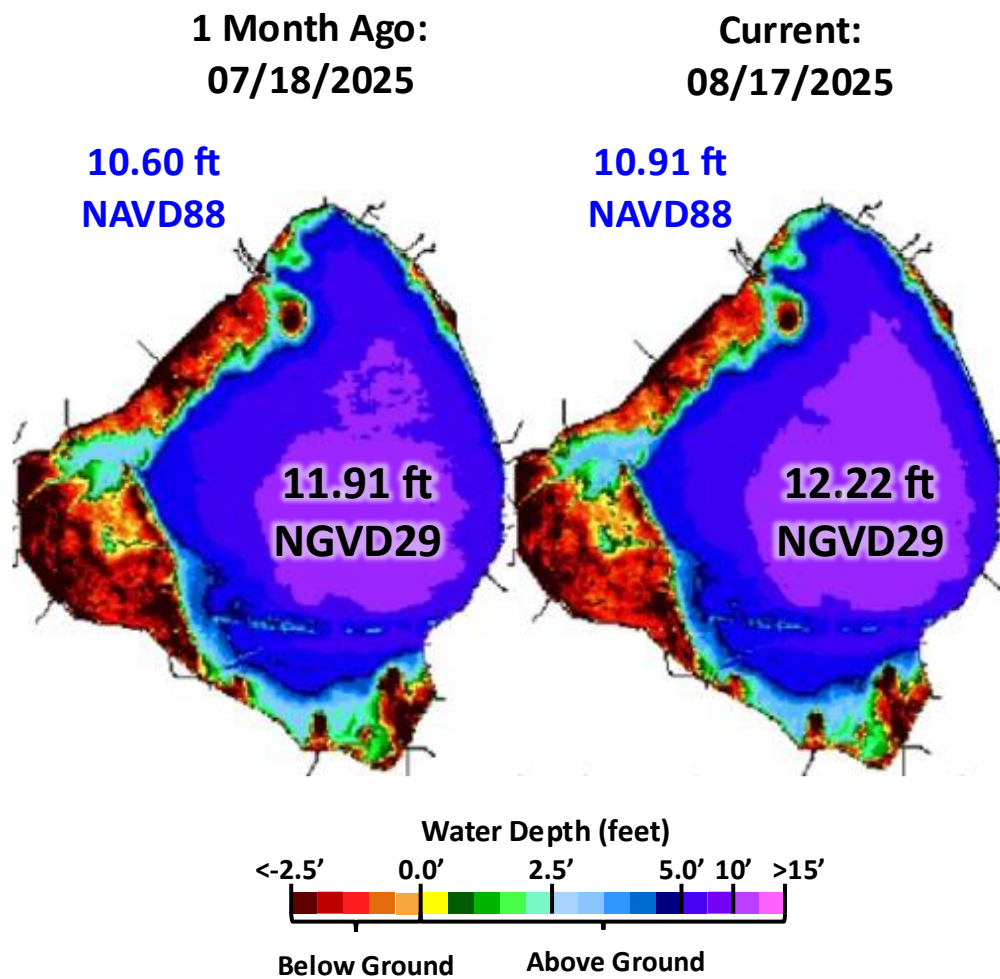


Figure LO-1. Lake Okeechobee water depth estimates based on South Florida Water Depth Assessment Tool (SFWDAT).

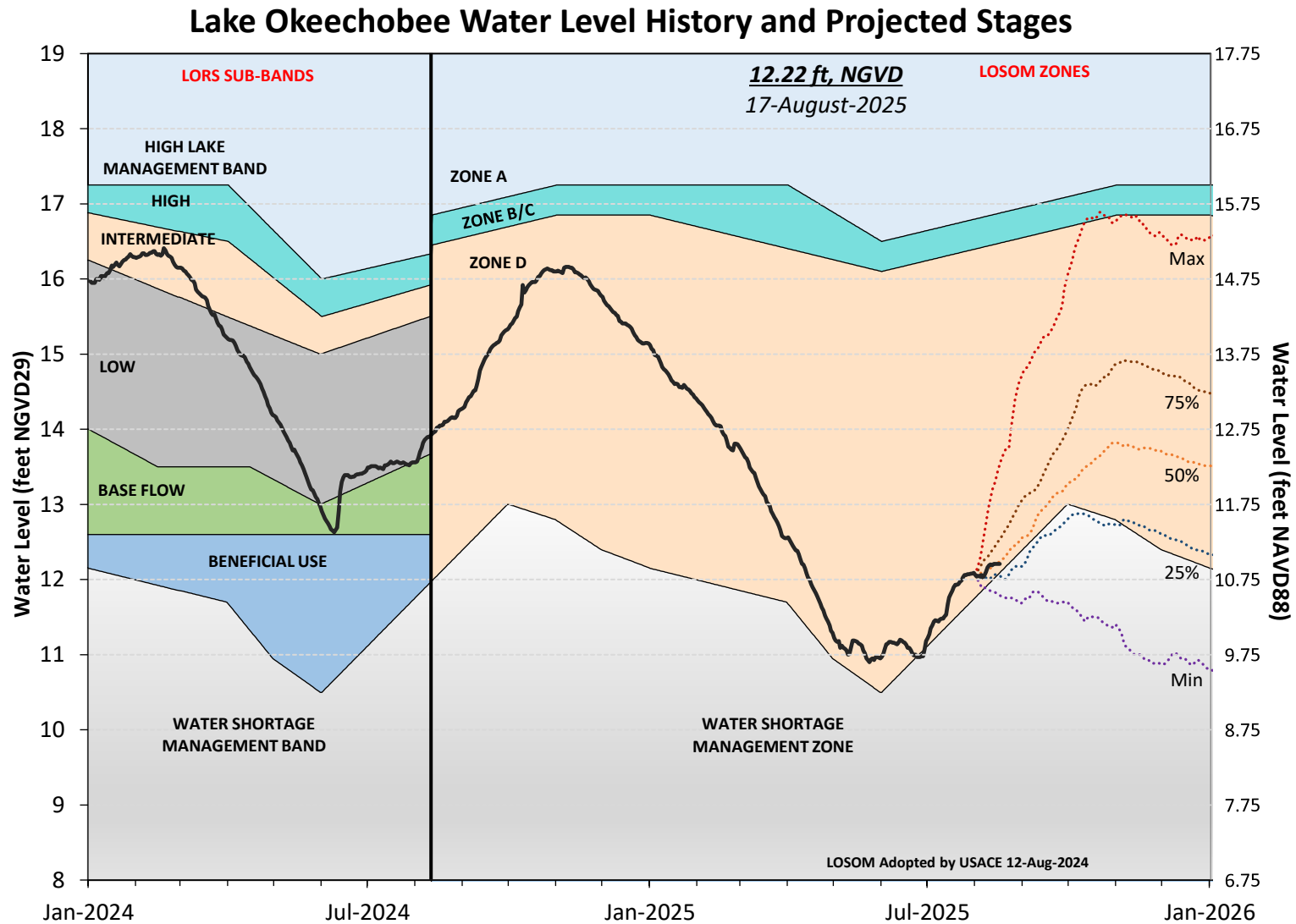


Figure LO-2. Recent Lake Okeechobee stages with projected stages based on a dynamic position analysis.
Note: stages are in NGVD29, approximate NAVD88 values are shown for reference.

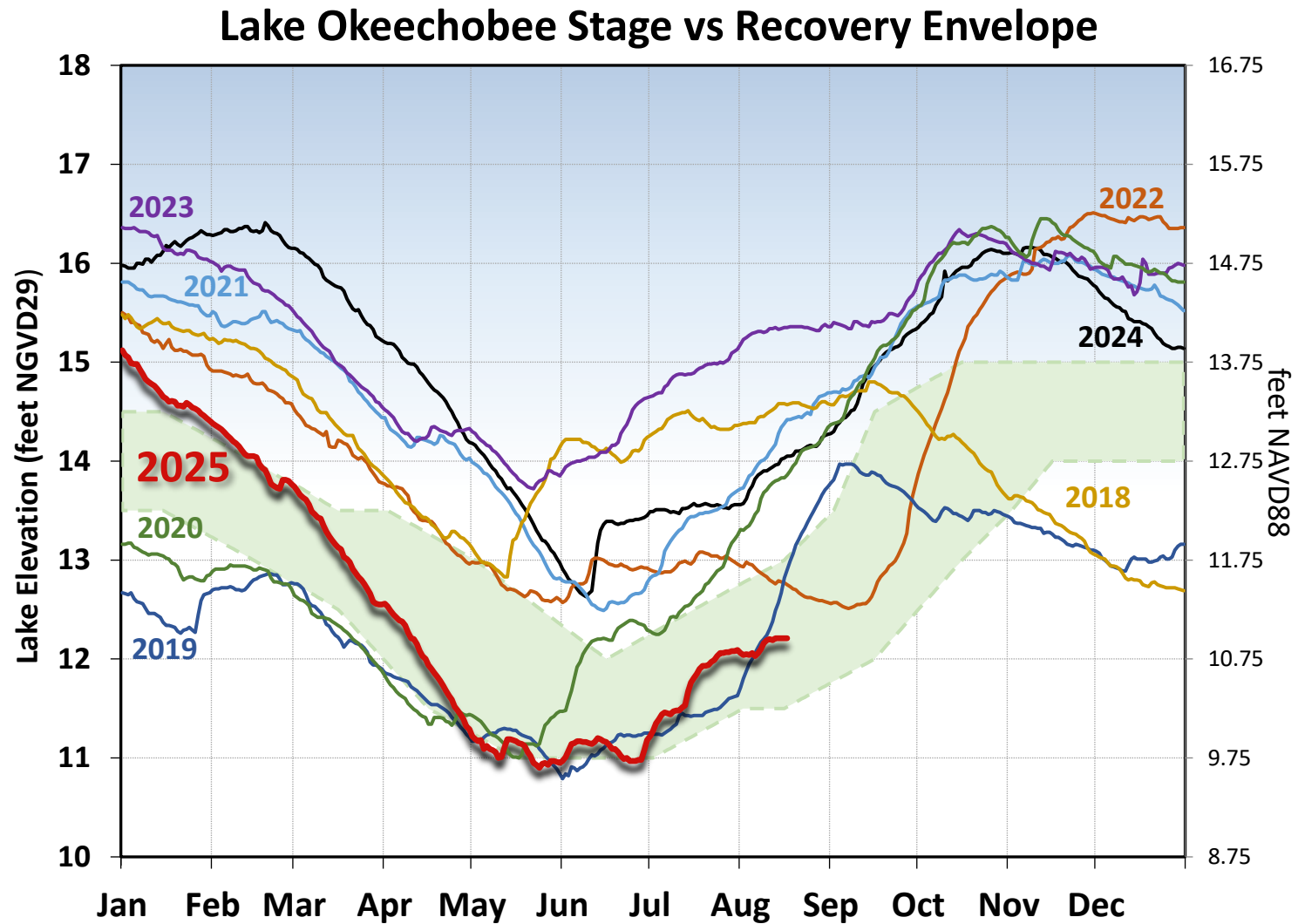


Figure LO-3. The current and seven prior year's annual stage hydrographs for Lake Okeechobee in comparison to the recovery envelope (light green). A shift from the normal ecological envelope to the recovery envelope occurred because the 30-day minimum lake stage (elevations exposed for at least 30 days,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

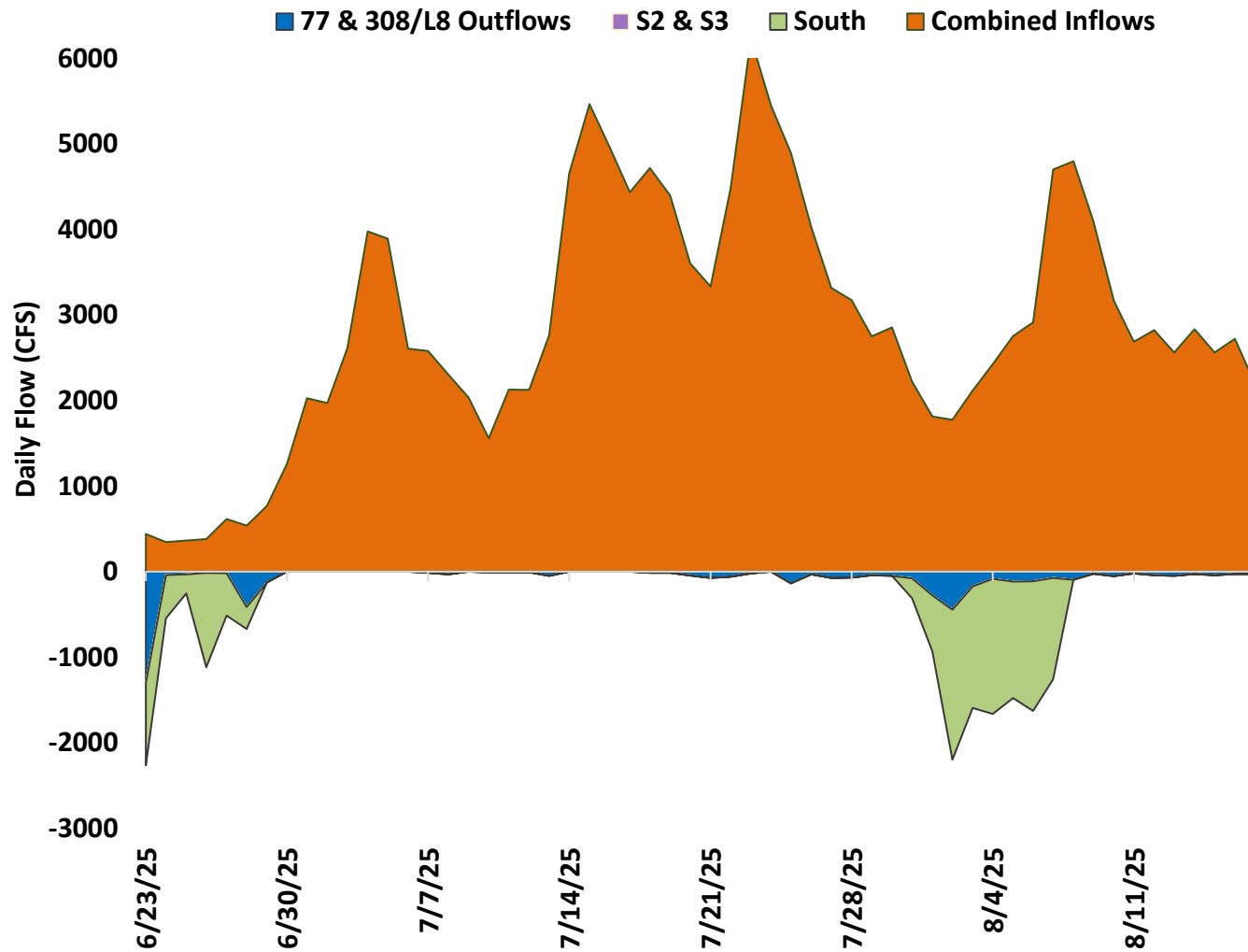


Figure LO-4. Major inflows (orange) to and outflows east and west (blue) from Lake Okeechobee. Outflows south are shown in green. Flows into Lake Okeechobee from the L-8 canal through S-271 (formerly Culvert 10A) or from the C-44 canal through the S-308 are included as inflows. Conversely, flows from 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.

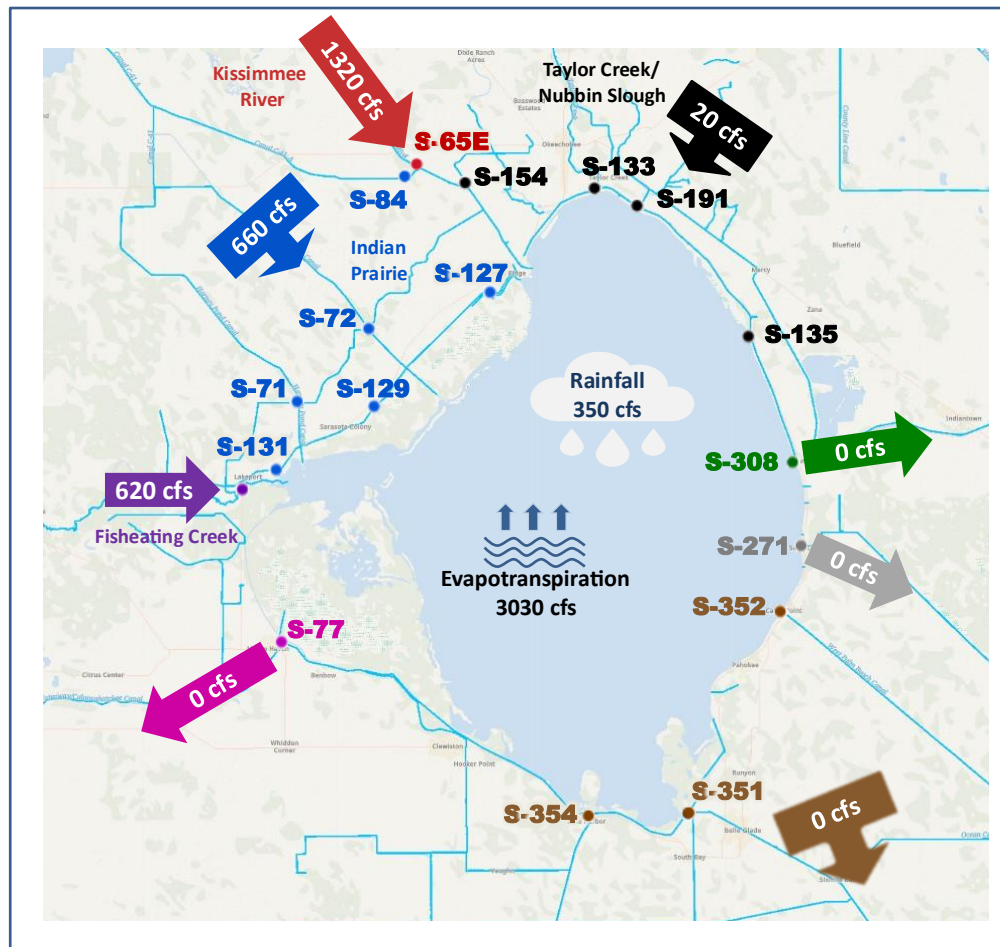


Figure LO-5. Inflows into Lake Okeechobee from Indian Prairie basins, Taylor Creek/Nubbin Slough, Kissimmee River and Fisheating Creek (currently no flow data available for FECR), and outflows to the west via S-77, to the east via S-308, to the south via S-351, S-352, S-354, and to southeast via S-271 (formerly Culvert 10A) for the week of Aug 11 - 17, 2025.

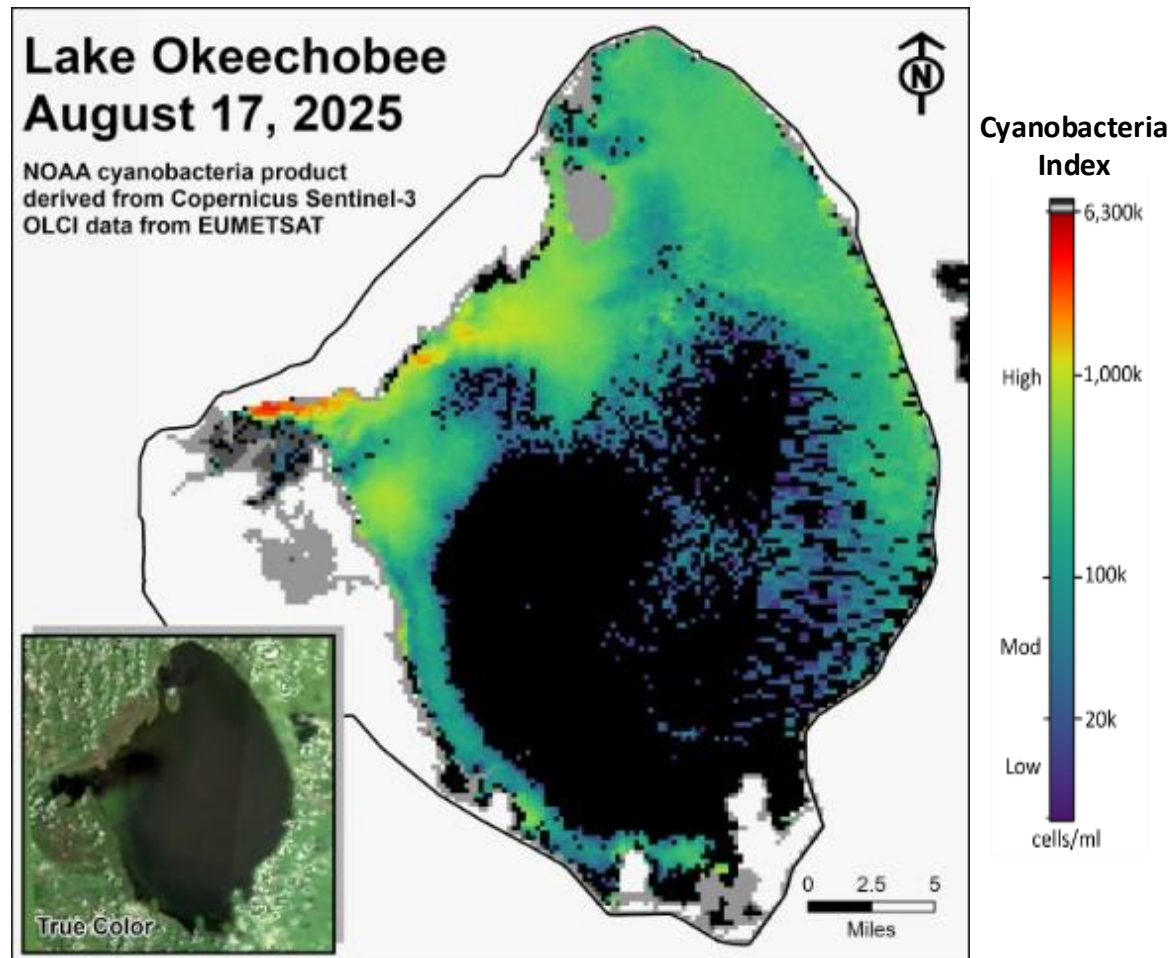


Figure LO-6. Cyanobacteria bloom index level on Lake Okeechobee, based on NOAA's harmful algal bloom monitoring system. Gray color indicates cloud cover. *Provisional NOAA image, subject to change*.

Collection Date: August 04-06, 2025

Station	CHLa (ug/L)	TOXIN (ug/L)	TAXA	Station	CHLa (ug/L)	TOXIN (ug/L)	TAXA
FEBIN	NS	NS	NS	L001	P	0.4 *	Raphidio
FEBOUT	NS	NS	NS	L004	P	8.0	Microcys
KISSR0.0	P	BDL	Micro/Micro	L006	P	2.7	Microcys
L005	P	BDL	Dolichos	L007	P	1.1	Microcys
LZ2	P	0.2 *	Raphi/Plank	L008	P	0.5	Microcys
KBARSE	P	0.3 *	Planktol	LZ30	P	0.5	Dolichos
RITTAE2	P	1.1 *	mixed	LZ40	P	12.0	Microcys
PELBAY3	P	0.1 *	Micro/Dolic	CLV10A	P	1.5	Microcys
POLE3S	P	2.3 *	mixed	NCENTER	P	0.4 *	Micro/Raphi
LZ25A	P	BDL	Micro/Dolic				
PALMOUT	P	0.6 *	mixed	S308C	P	0.4	Microcys
PALMOUT1	P	BDL	Dolichos	S77	P	BDL	mixed
PALMOUT2	P	1.3	Dolichos	<ul style="list-style-type: none"> SFWMD considers >40 µg/L Chlorophyll <i>a</i> (Chla) an algal bloom BDL – Below Detectable Limit of 0.25 µg/L ND – No Dominant taxa P – Pending NS – Not Sampled Station bold font – crew observed possible BGA Chlorophyll <i>a</i> analyzed by SFWMD Toxin & Taxa analyzed by FDEP: Microcys = Microcystis; Cylindro = Cylindrospermopsis; Planktol = Planktolyngbya; Dolicho = Dolichospermum; Pseud = Pseudonabaena; Raphi = Raphidiopsis 			
PALMOUT3	P	2.2	Microcys				
POLESOUT	P	BDL	Dolichos				
POLESOUT1	P	BDL	Dolic/Plank				
POLESOUT2	P	BDL	Dolic/Plank				
POLESOUT3	P	BDL	Dolic/Plank				
EASTSHORE	P	16.1	Micro/Plank				
NES135	P	0.8	Micro/Plank				
NES191	P	0.4 *	Raphi/Plank				

Toxins include both cylindrospermopsin (*) and microcystin

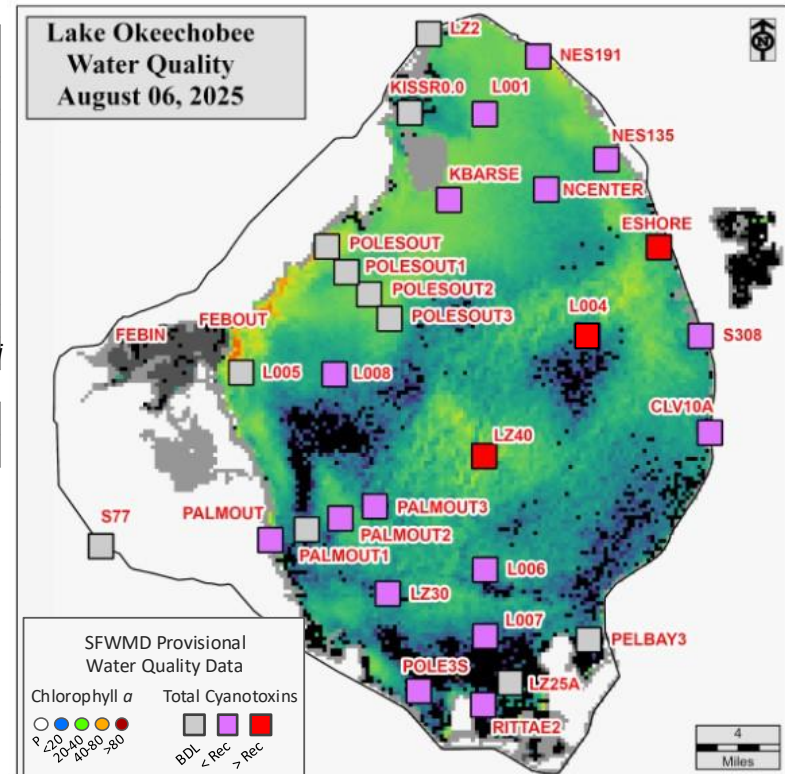


Figure LO-7. Dominant taxa, cyanotoxins (µg/L) and chlorophyll *a* (µg/L) concentration data from August 4 - 6, 2025. Sampling locations, chlorophyll *a*, and total toxin concentrations are overlaid on the August 6, 2025, image from NOAA's harmful algal bloom monitoring system. Gray color indicates cloud cover.

Estuaries

St. Lucie Estuary

Over the past week, mean total inflow to the St. Lucie Estuary was 1,282 cfs (**Figures ES-1 and ES-2**), and the previous 30-day mean inflow was 1,177 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 in 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 13.0. 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 July was 1.6 spat/shell at Rio (**Figure ES-5**).

Caloosahatchee River Estuary

Over the past week, the mean total inflow to the Caloosahatchee River Estuary was 3,074 cfs (**Figures ES-6 and ES-7**), and the previous 30-day mean inflow was 2,470 cfs. For comparison, the historical provisional mean inflows from the contributing areas are shown in **Figure ES-7**.

Over the past week, surface salinities remained below 1 at S-79 and Val I-75, increased at Sanibel, and decreased at the remaining sites in the estuary (**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 Cape Coral and Shell Point and in the upper stressful range at Sanibel (**Figure ES-10**). The mean larval oyster recruitment rates reported by the FWRI in July were 0.9 spat/shell at Iona Cove and 8.1 spat/shell at Bird Island (**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 342 cfs. Model results from all scenarios predict daily salinity to be 0.5 or lower and the 30-day moving average surface salinity to be 0.3 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 Qiu, 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 August 15th, 2025, that *Karenia brevis*, the Florida red tide dinoflagellate, was not observed in any samples collected within the District region over the past week.

Water Management Recommendations

Lake stage is in Zone D. Current climatological and hydrological conditions are normal. 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.

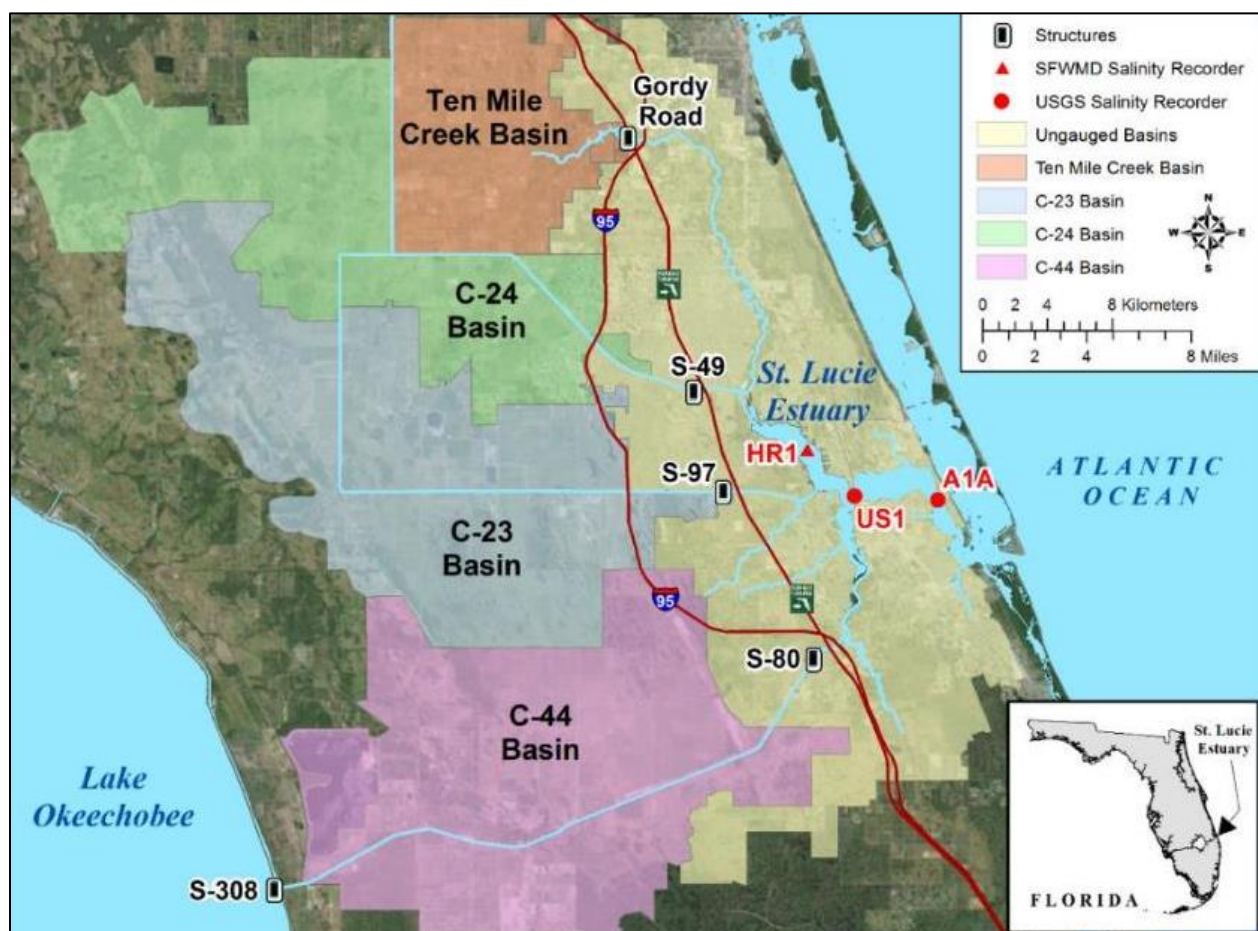


Figure ES-1. Basins, water control structures and salinity monitoring sites in the St. Lucie Estuary.

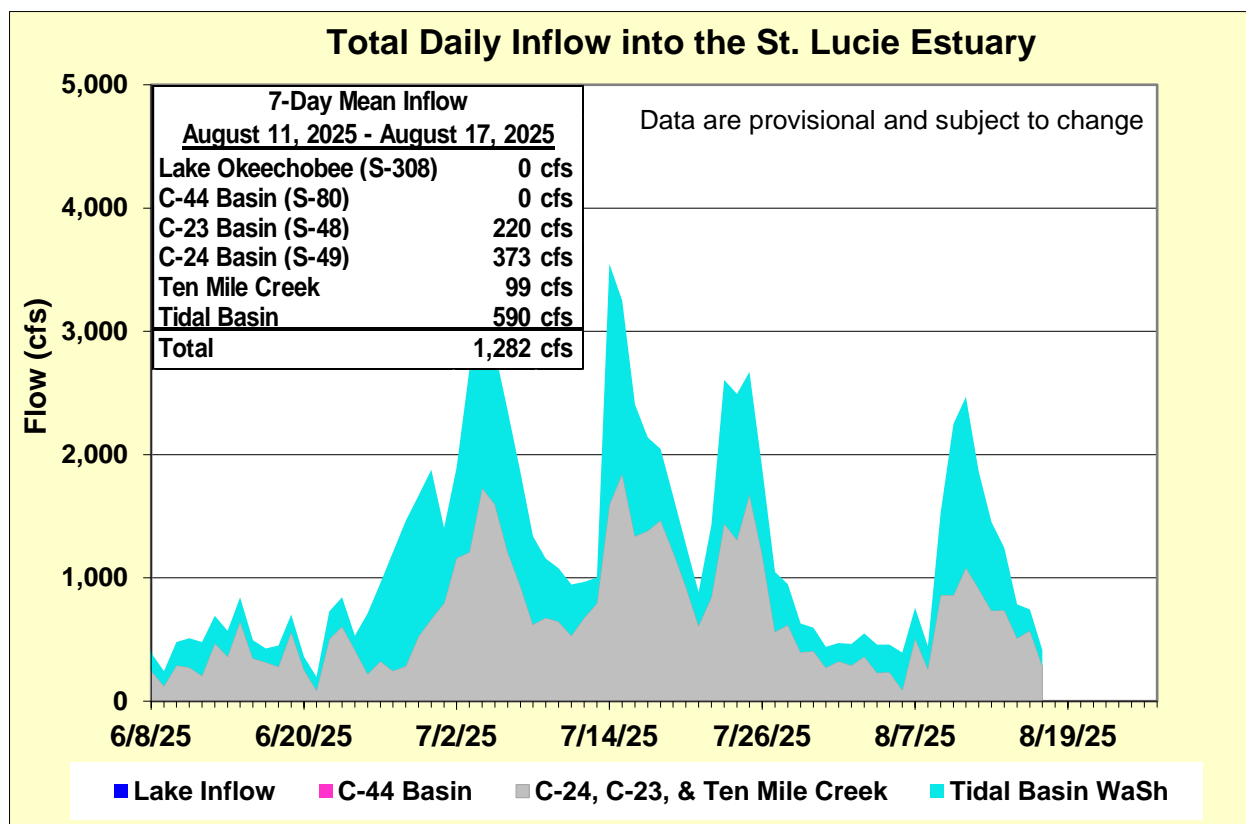


Figure ES-2. Total daily inflows from Lake Okeechobee and runoff from the C-44, C-23, C-24, Ten Mile Creek, and Tidal Basins into the St. Lucie Estuary.

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)	5.0 (7.7)	11.8 (14.3)	10.0 – 25.0
US1 Bridge	12.6 (14.7)	13.4 (18.1)	10.0 – 25.0
A1A Bridge	21.4 (23.6)	25.7 (28.3)	10.0 – 25.0

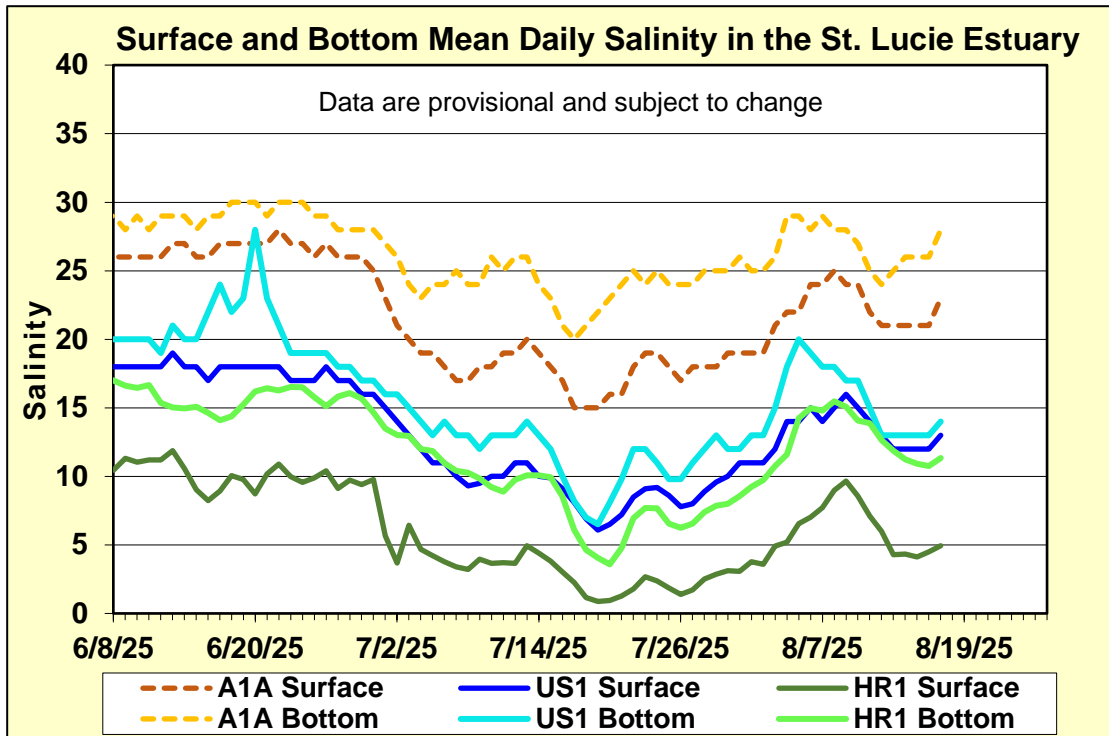


Figure ES-3. Mean daily salinity at the A1A, US1, and HR1 sites in the St. Lucie Estuary.

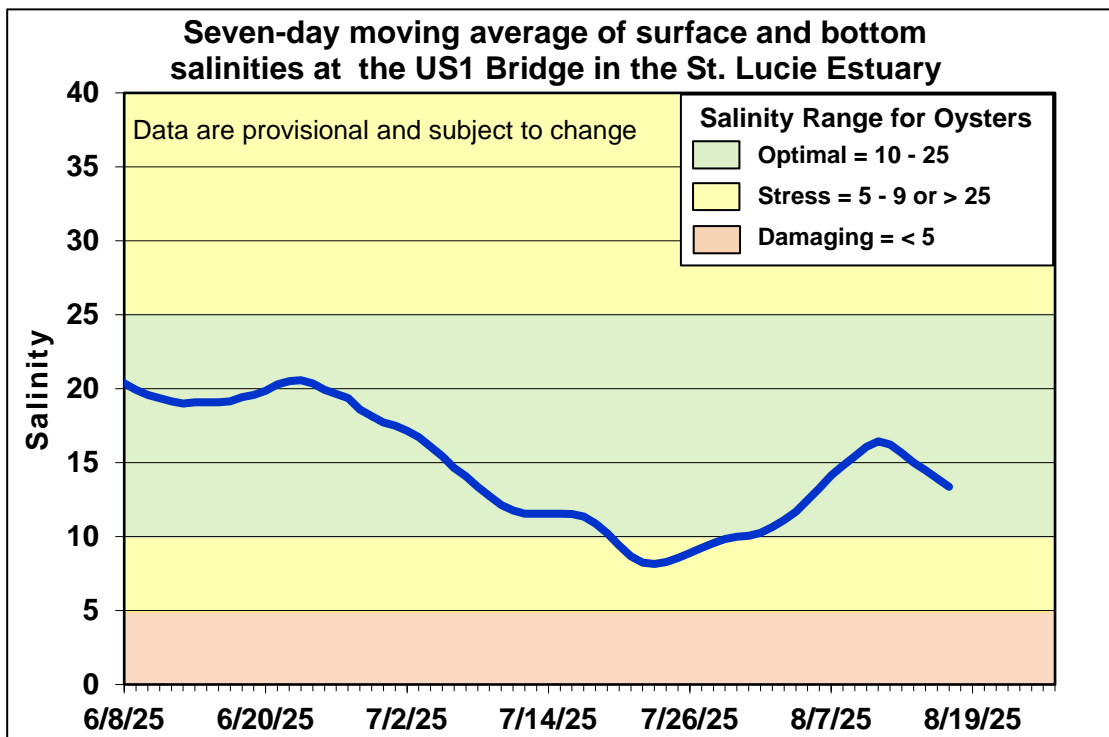


Figure ES-4. Seven-day moving average of the surface and bottom salinities at the US1 Bridge in the St. Lucie Estuary.

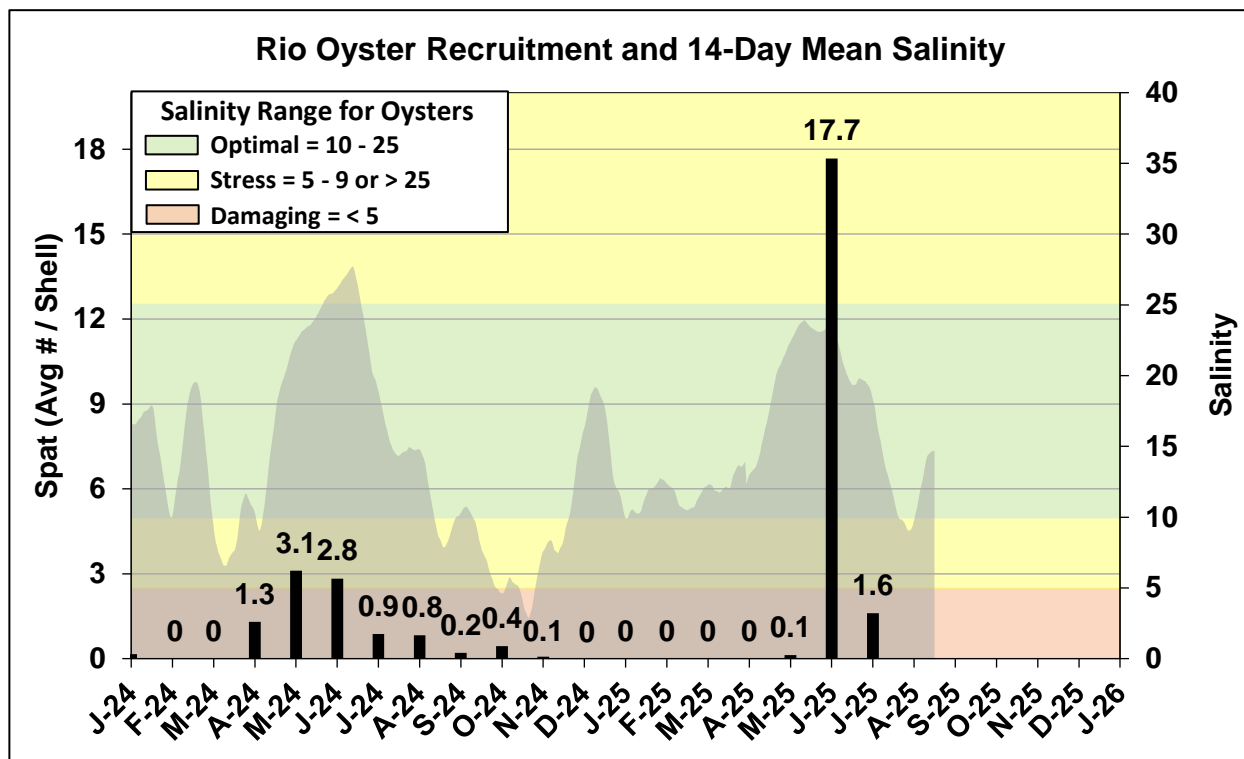


Figure ES-5. Mean oyster recruitment at the Rio oyster monitoring station and 14-day mean salinity at US1 Bridge.

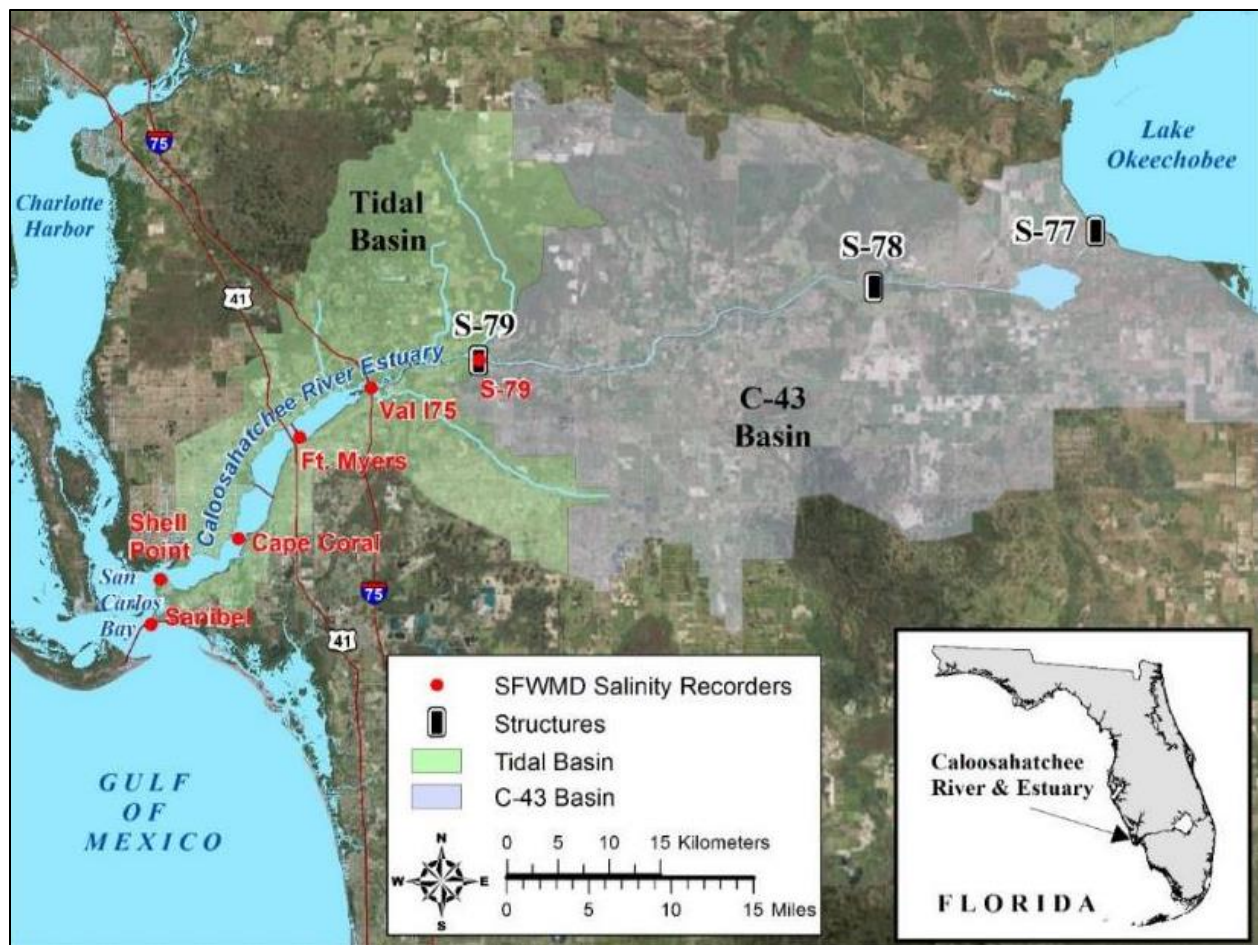


Figure ES-6. Basins, water control structures, and salinity monitoring sites in the Caloosahatchee River Estuary.

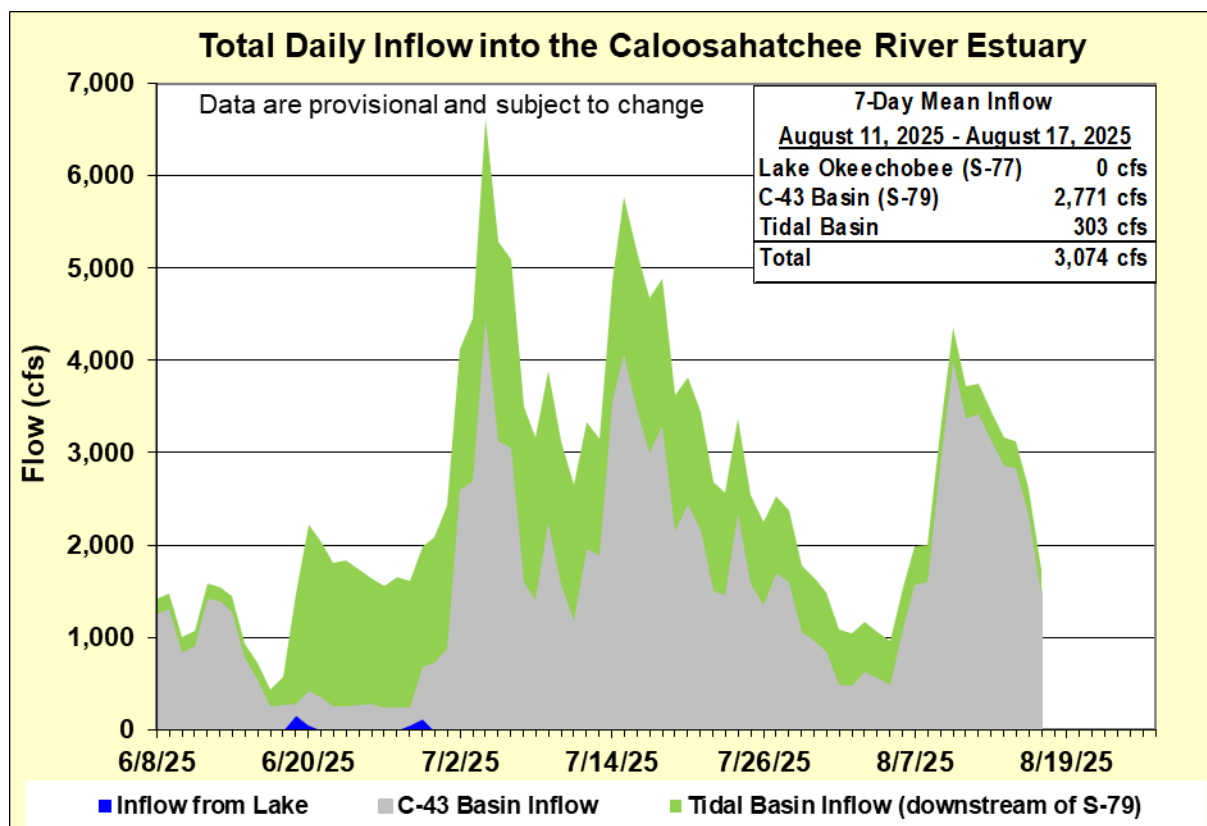


Figure ES-7. Total daily inflows from Lake Okeechobee, and runoff from the C-43 and Tidal basins into the Caloosahatchee River Estuary.

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 (0.2)	0.2 (0.2)	0.0 – 10.0
Val I-75	0.2 (0.3)	0.2 (0.5)	0.0 – 10.0
Fort Myers Yacht Basin	2.2 (4.9)	3.0 (7.1)	0.0 – 10.0
Cape Coral	9.0 (12.5)	10.9 (15.1)	10.0 – 25.0
Shell Point	23.6 (27.6)	24.9 (29.0)	10.0 – 25.0
Sanibel	30.2 (29.9)	31.5 (32.8)	10.0 – 25.0

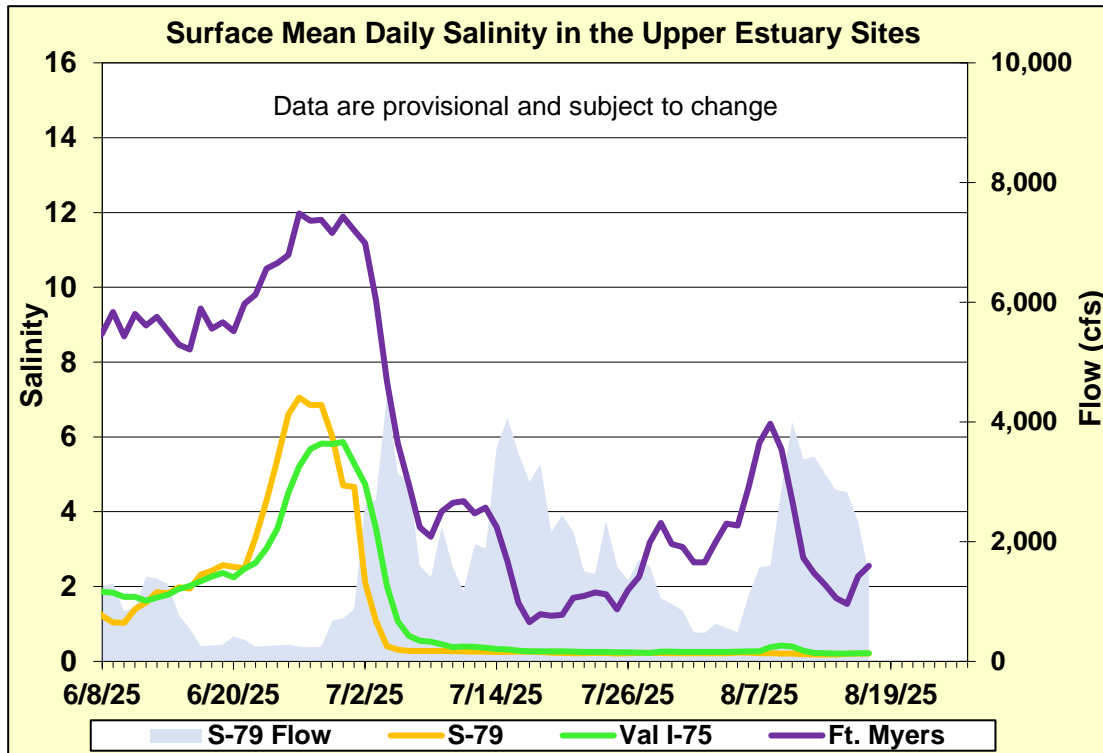


Figure ES-8. Mean daily salinity at upper Caloosahatchee River Estuary monitoring sites and mean daily flow at S-79.

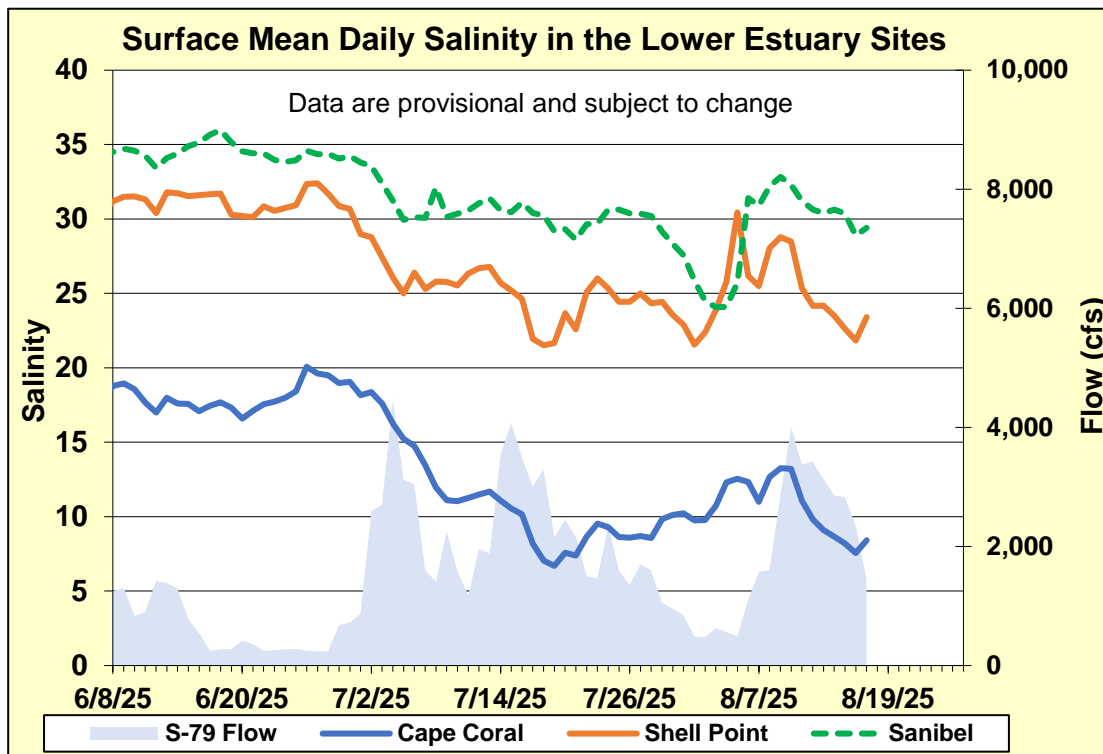


Figure ES-9. Mean daily surface salinity at lower Caloosahatchee River Estuary monitoring sites and mean daily flow at S-79.

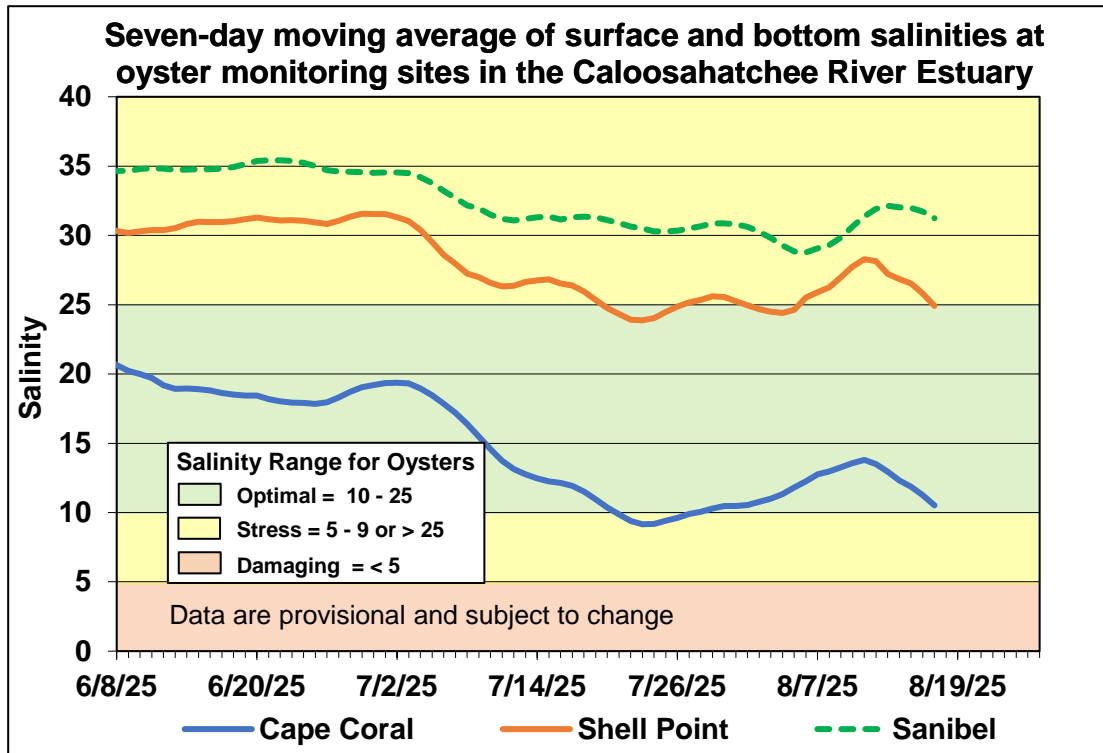


Figure ES-10. Seven-day moving average of surface and bottom salinities at Cape Coral, Shell Point, and Sanibel monitoring sites in the Caloosahatchee River Estuary.

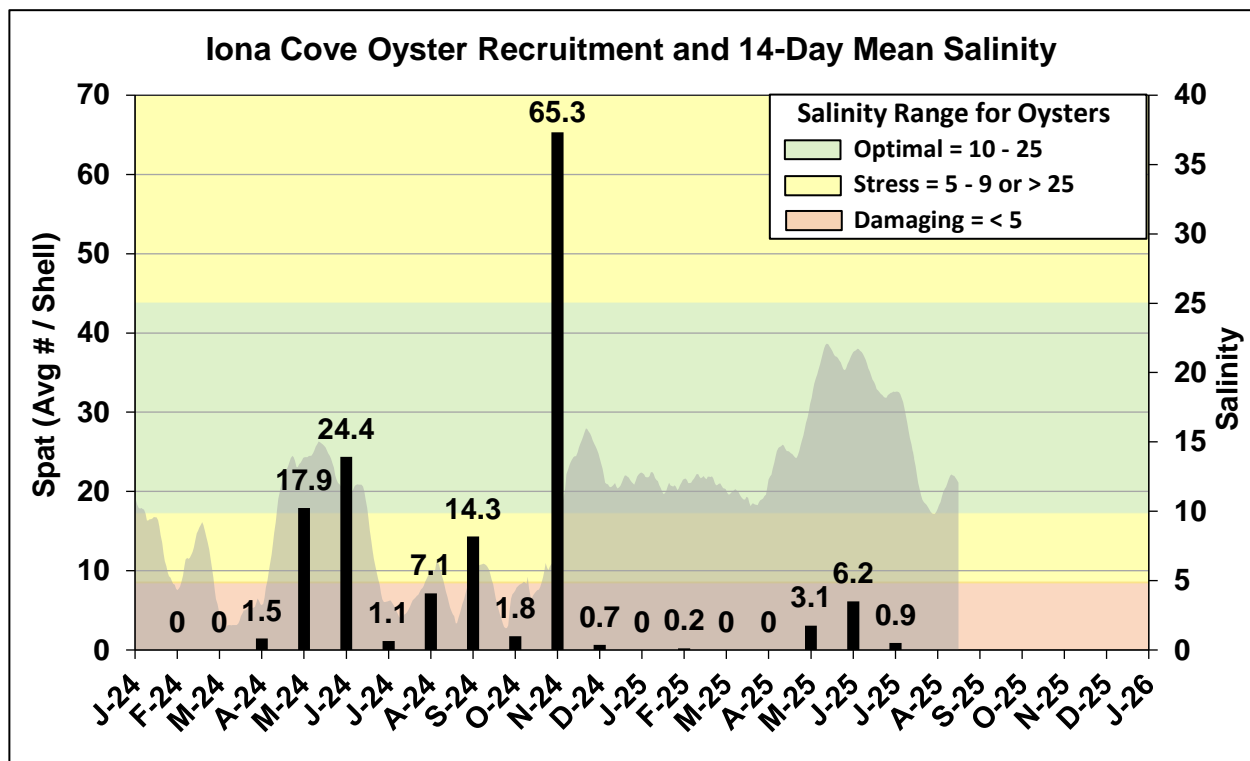


Figure ES-11. Mean oyster recruitment at the Iona Cove oyster monitoring station and 14-day mean salinity at Cape Coral.

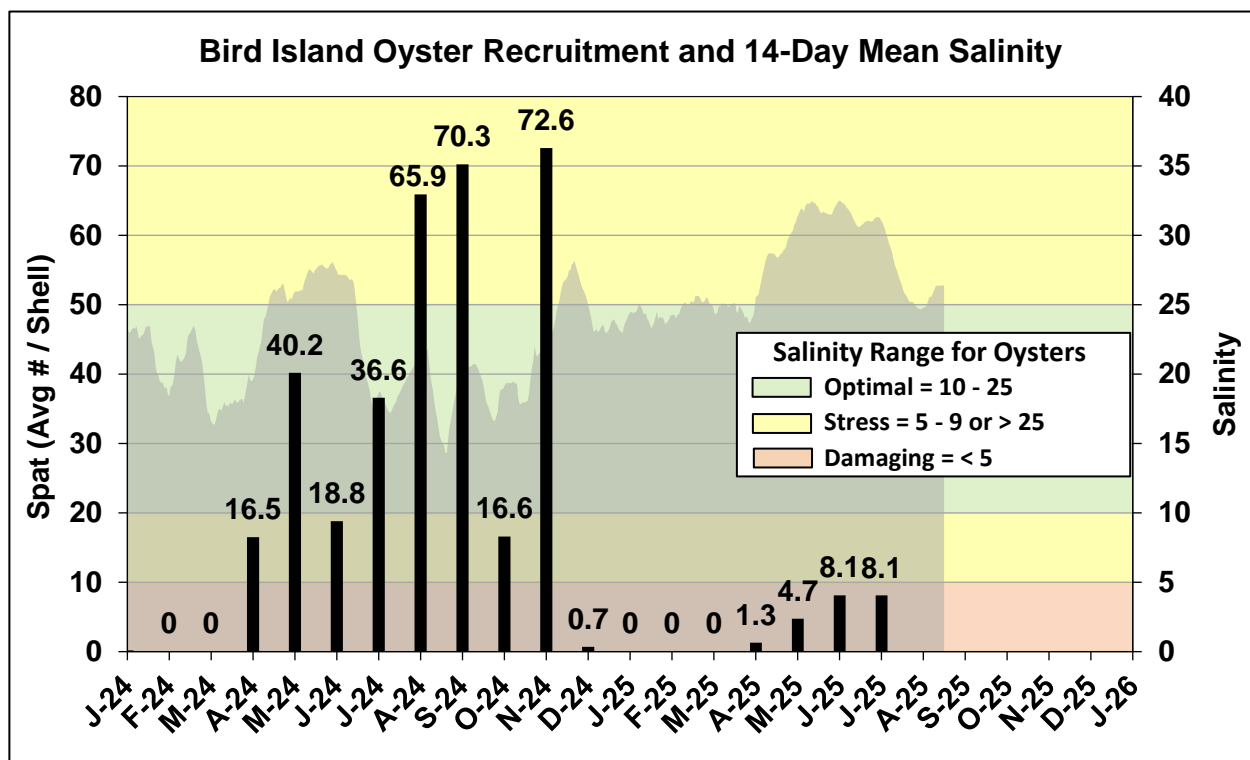


Figure ES-12. Mean oyster recruitment at the Bird Island oyster monitoring station and 14-day mean salinity at Shell Point.

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
A	450	342	0.5	0.3
B	750	342	0.3	0.3
C	1,000	342	0.3	0.3
D	1,500	342	0.3	0.3
E	2,000	342	0.3	0.3

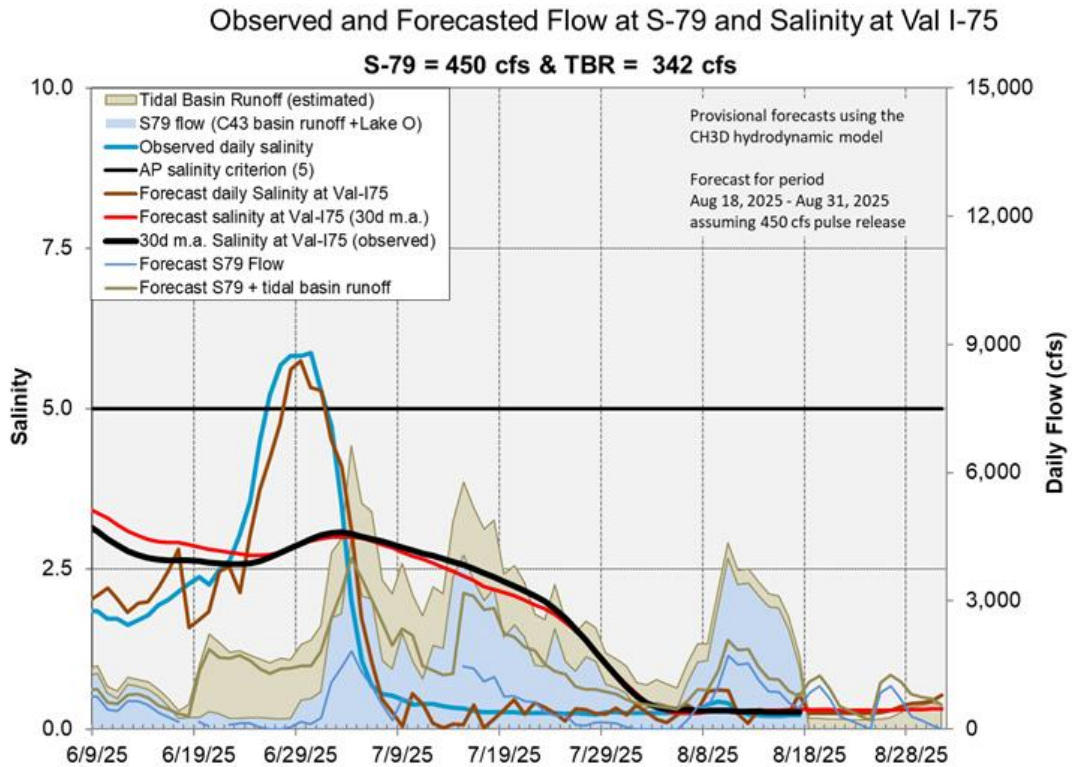


Figure ES-13. Surface salinity forecast at the Val I-75 site assuming a 450 cfs pulse release at S-79.

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 treatment cells are at or near target stage. The 365-day PLR for the Western and Eastern Flow-way is below $1.0 \text{ g/m}^2/\text{year}$ (**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 $1.0 \text{ g/m}^2/\text{year}$. 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. Online treatment cells are at or near target stage. The 365-day PLRs for all Flow-ways are below $1.0 \text{ g/m}^2/\text{year}$ (**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 $1.0 \text{ g/m}^2/\text{year}$ (**Figure S-3**).

STA-5/6: Most treatment cells are at 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 $1.0 \text{ g/m}^2/\text{year}$, and the 365-day PLRs for Flow-way 4 is high. (**Figure S-4**).

For definitions on STA operational language see glossary following figures

Everglades Stormwater Treatment Areas - STAs

Estimated Inflow and Outflow Volumes

Aug. 11– Aug. 17, 2025

Includes preliminary data

- Total WY2026 inflows to STAs (5/1/2025 to 8/17/2025): ~ 282,300 ac-ft
- Lake Okeechobee releases to FEBs/STAs
 - 8/11/2025 to 8/17/2025: 0 ac-ft
 - WY2026: ~31,200 ac-ft
- Extensive vegetation management activities underway to address stressed and highly stressed vegetation in EAV cells
- Most treatment cells are near or above target water depth

	Total Inflow (acre-feet)	Total Outflow (acre-feet)
STA-1E	0	800
STA-1W	4,300	5,000
STA-2	0	1,500
STA-3/4	2,600	4,700
STA-5/6	4,300	0

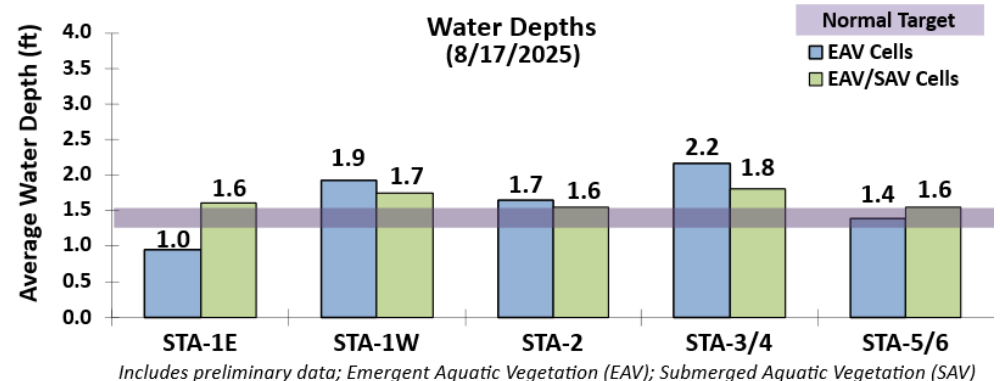


Figure S-1. STA depths and flow volumes

0 CFS Lake release capacity in Eastern Flow Path:
8/18/2025 to 8/24/2025
Subject to change weekly as wet season progresses

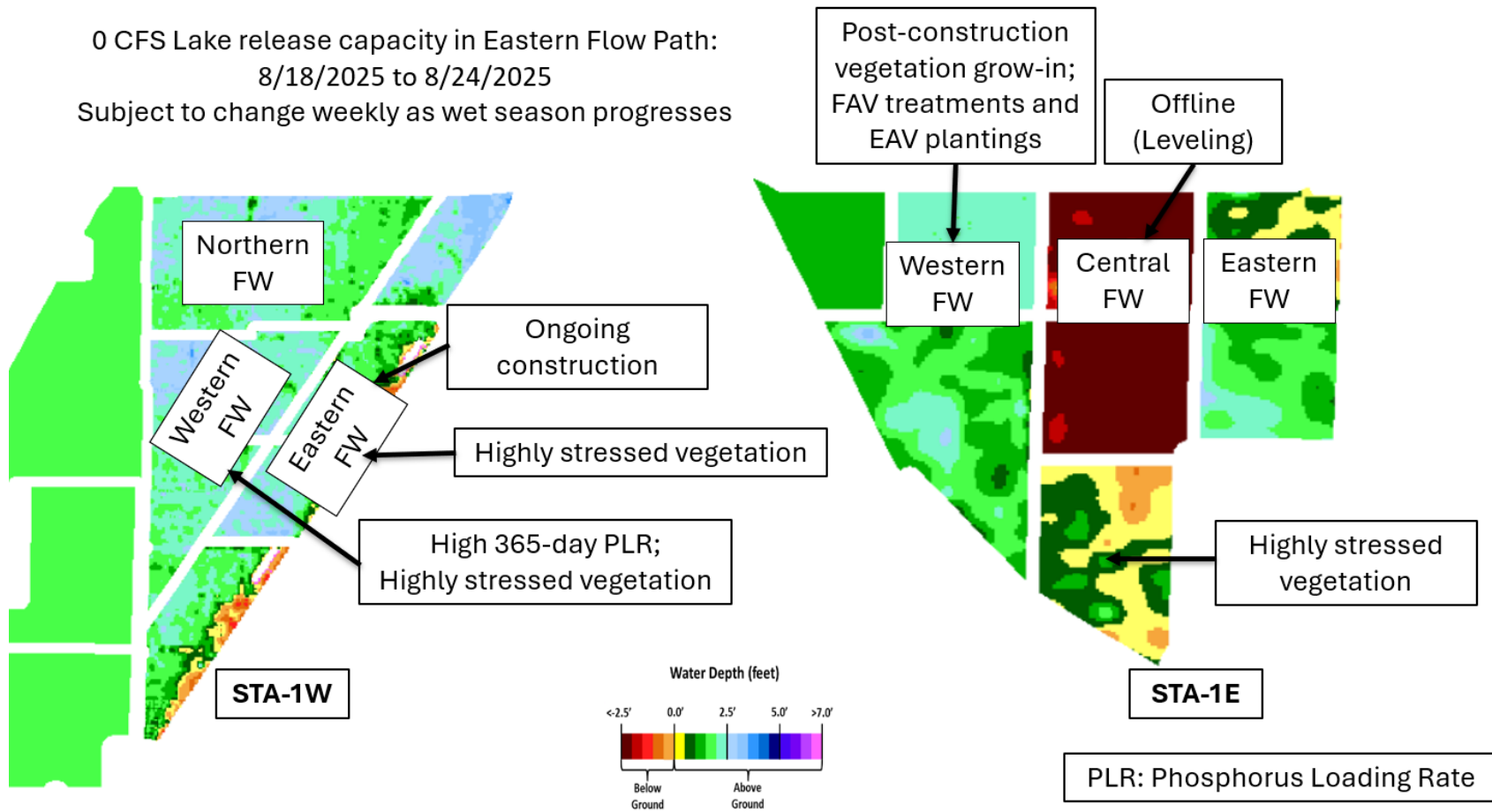


Figure S-2. Eastern Flow Path Weekly Status Report

300 CFS Lake release capacity in Central Flow Path:
8/18/2025 to 8/24/2025

- 100 CFS in STA-2
- 200 CFS in STA-34
- Subject to change weekly as wet season progresses

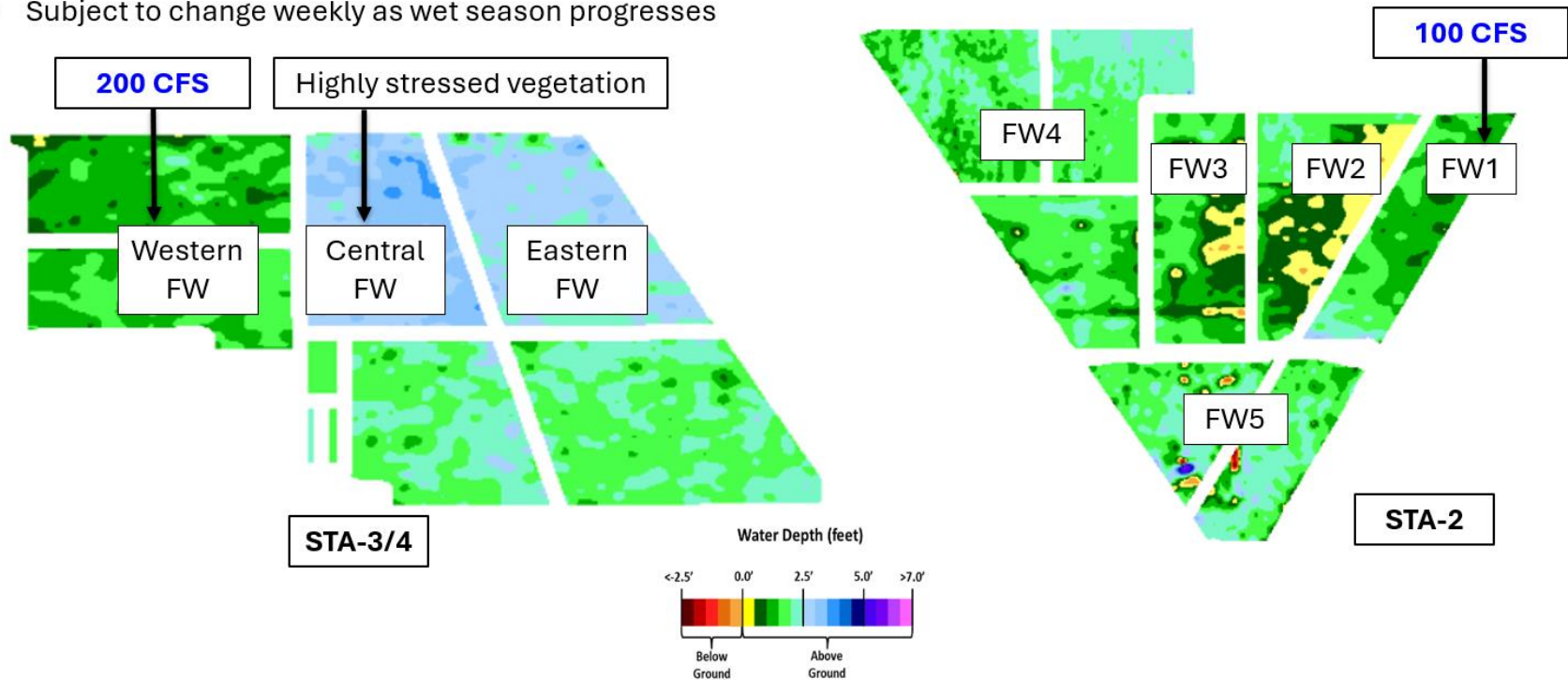


Figure S-3. Central Flow Path Weekly Status Report

0 CFS Lake release capacity in Western Flow Path:
8/18/2025 to 8/24/2025

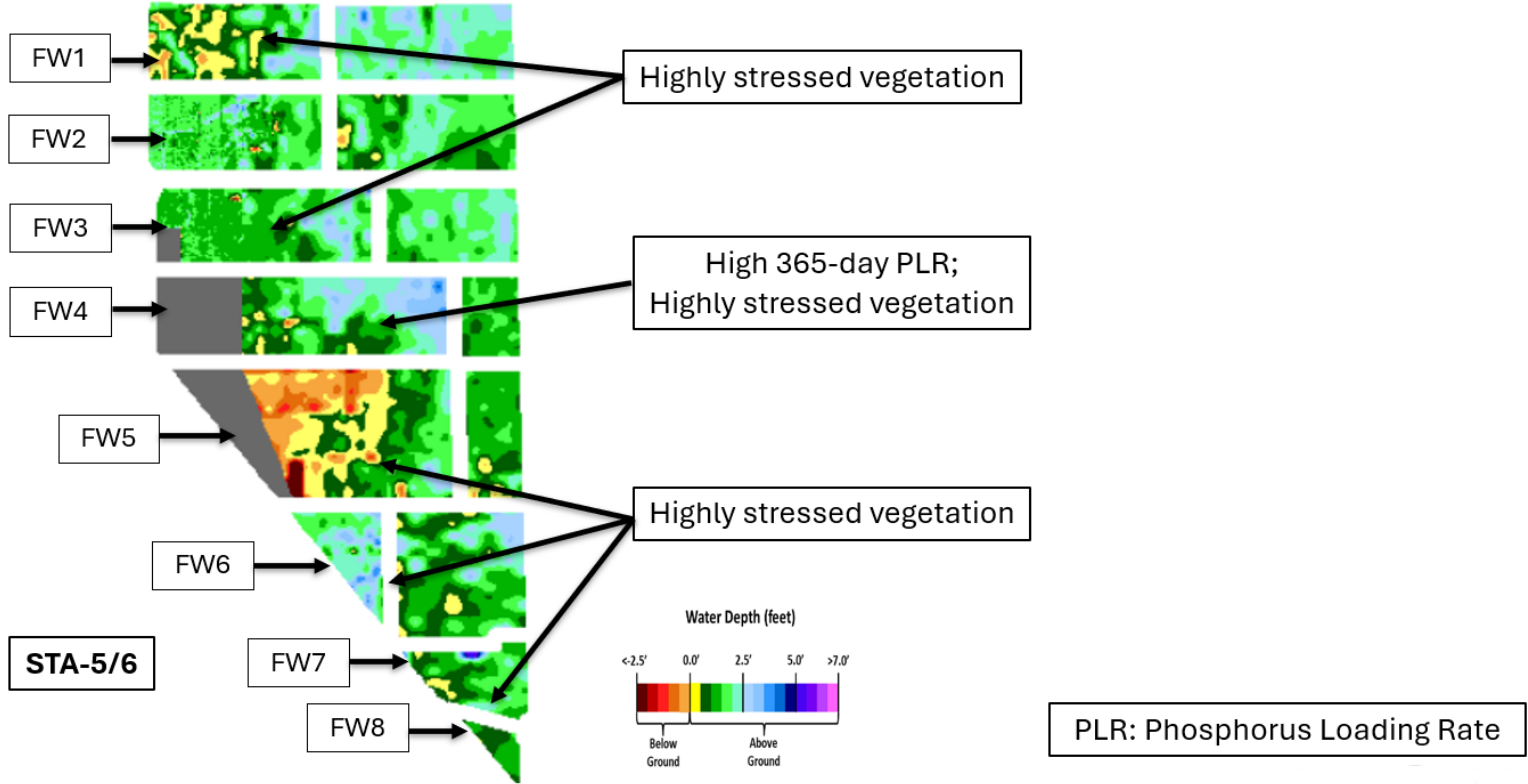


Figure S-4. Western Flow Path Weekly Status Report

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, $\mu\text{g/L}$ 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 decreased over the last week and was 0.97 feet below the rising A1 zone regulation line on Sunday, August 17, 2025. WCA-2A: There was little stage change at the 2-17 gauge last week and remains above the A1 zone regulation line at 0.69 feet on Sunday. WCA-3A: The 3-gauge average remains in zone B and receded last week. On Sunday, stages were about 0.98 feet below the zone A regulation line. WCA-3A North: Stage at Gauge 62 (NW corner) fell slightly last week and remains below the rising Upper Schedule regulation line. On Sunday, stage was 0.70 feet below that line. See **Figures EV-1 through EV-4**.

Water Depths

The SFWDAT model output for August 17, 2025, indicates continued dry conditions in WCA-1, with increased water depths in the northern area. WCA-2A depths have risen quickly over the last month in the southern area but remain relatively dry in the northern area. Water depths have fallen in northern and central WCA-3A limiting prey recovery in these key areas for wading bird foraging. Big Cypress Basin water depths have risen over the last two months, but dry conditions remain near Tamiami trail. Hydrologic connectivity has improved compared to one month ago in both Shark River Slough (SRS) and Taylor Slough; conditions remain drier to the west, and Lostman's slough is lower than it was one month ago. Conditions across the Everglades Protection Area (EPA) remain very dry relative to this time of year. Only northeast SRS and southern WCA-2A are near average. In contrast, a large region in WCA-1 and a majority of WCA-3A are in the 10th percentile. See **Figures EV-5 through EV-6**.

Taylor Slough and Florida Bay

Most stages increased across Taylor Slough over the past week, but the average change was a decrease of 0.03 feet. Changes ranged from -0.11 feet CT50R in the C-111 area to 0.05 feet at E112 in the northern slough (**Figure EV-8 and Figure EV-9**). Taylor Slough water levels remain just below the recent average (WY1993-2016) for this time of year by 0.9 inches compared to before the Florida Bay initiative (starting in 2017), a decrease of 0.7 inches relative to last week's comparison. The Craighead Pond (CP) and Taylor Slough Bridge (TSB) stages remain below the estimated average for 1900 by 0.66 and 1.88 feet, respectively.

Average Florida Bay salinity was 36.8, with no change from last week. Salinity changes ranged from -2.4 at Joe Bay in the eastern nearshore region to +1.6 at Terrapin Bay in the central nearshore region (**Figure EV-8**). Salinity is above the estimated average for 1900 and at or above the WY2001-2016 Interquartile Range (IQR) 75th percentile in all three regions. Salinity is at the hypersalinity threshold in the central and western regions (**Figure EV-10**). Average Florida Bay salinity remains above its recent average (WY1993-2016) for this time of year by 7.3, an increase of 0.2 relative to last week's comparison.

Salinity at the Taylor River (TR) station in the mangrove zone (tracked for the Florida Bay MFL) was 29.9, a decrease of 2.2 from last week (**Figure EV-11**). As of August 15th, TR salinity was above 30 for 30 days, resulting in an MFL exceedance. The 365-day moving sum of flow from the five major creeks (McCormick Creek, Taylor River, Mud Creek, Trout Creek, West Highway Creek) was 191,982 acre-feet, a decrease of 7,594 acre-feet from last week (**Figure EV-11**).

Average rainfall across Taylor Slough and Florida Bay was approximately 0.44 inches over the past week, based on the 18 gauges used for this report. Rainfall ranged from 0.01 inches at Little Madeira Bay in the eastern nearshore region to 1.56 inches at Royal Palm Lake in the northern slough (**Figure EV-12**). Wind directions and speeds in Florida Bay ranged from 0.7 mph W on August 17th to 19.8 mph E on August 12th (**Figure EV-12**).

Average daily flow from the five major creeks totaled 261 acre-feet, with net positive flows over the past week. Total daily creek flow ranged from –516 acre-feet on August 11th to 857 acre-feet on August 16th (**Figure EV-13**). Average daily flow was 3,766 acre-feet below estimated historical levels (circa 1900). Average daily flow from Alligator creek was –39 acre-feet, with net negative flows for the week (**Figure EV-13**).

Implications for water management.

The EPA continues to experience unseasonably dry conditions. Without significant rainfall another year of short hydroperiods in the central Everglades could limit prey production necessary for wading bird nesting success next dry season (which would be the fifth year in a row of low productivity). Florida Bay salinity remains at or above the hypersalinity thresholds in the central and western regions above which harmful ecological conditions can develop. Florida Bay will benefit from freshwater input to the system and direct rainfall. 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	0.36	–0.09
WCA-2A	0.47	+0.00
WCA-2B	0.54	+0.13
WCA-3A	0.34	–0.11
WCA-3B	1.07	–0.04
ENP	1.52	+0.03

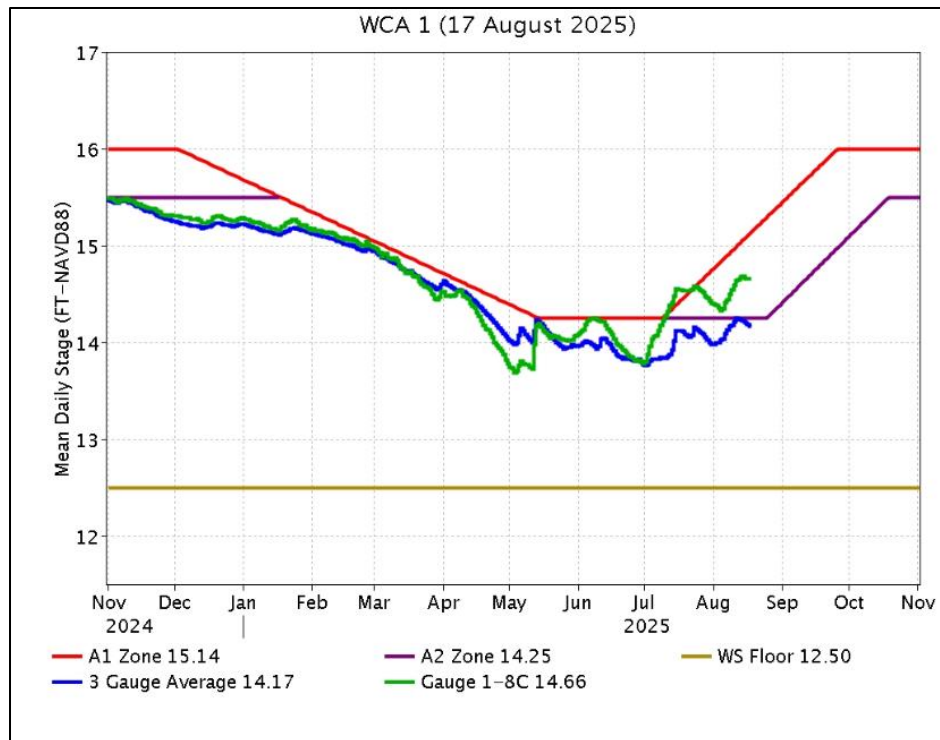


Figure EV-1. WCA-1 stage hydrographs and regulation schedule.

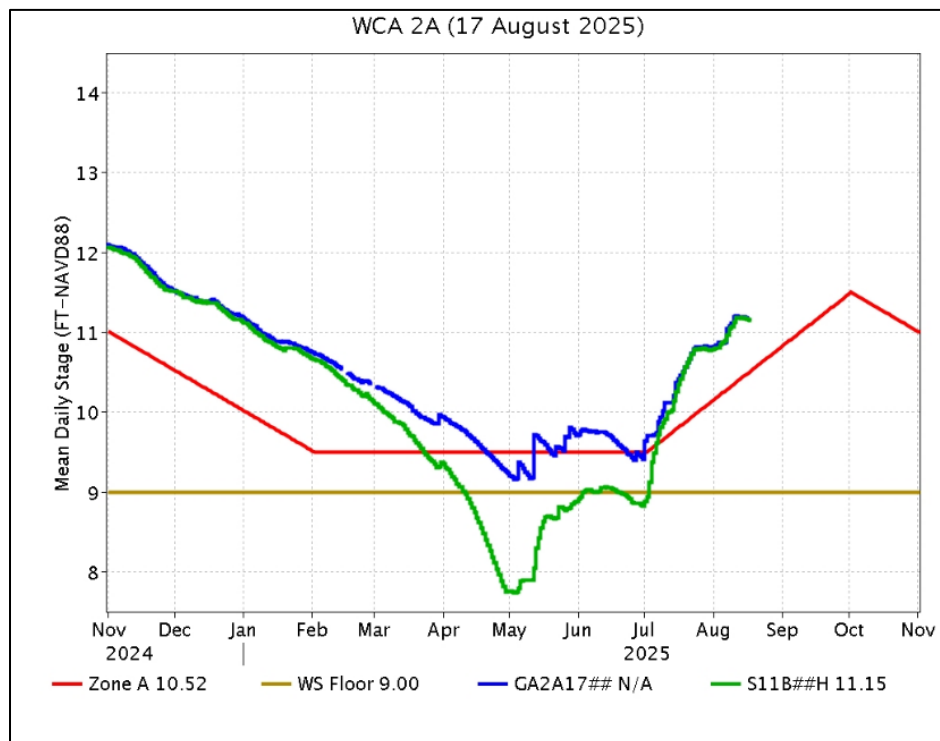


Figure EV-2. WCA-2A stage hydrographs and regulation schedule.

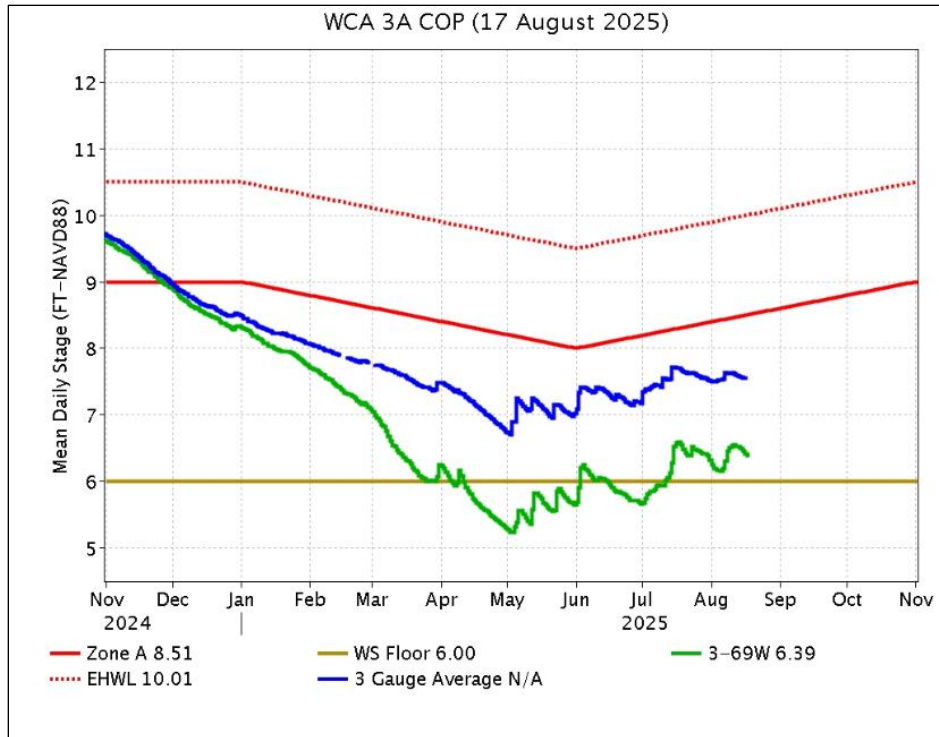


Figure EV-3. WCA-3A stage hydrographs (three-gauge average, 3-69W) and regulation schedule.

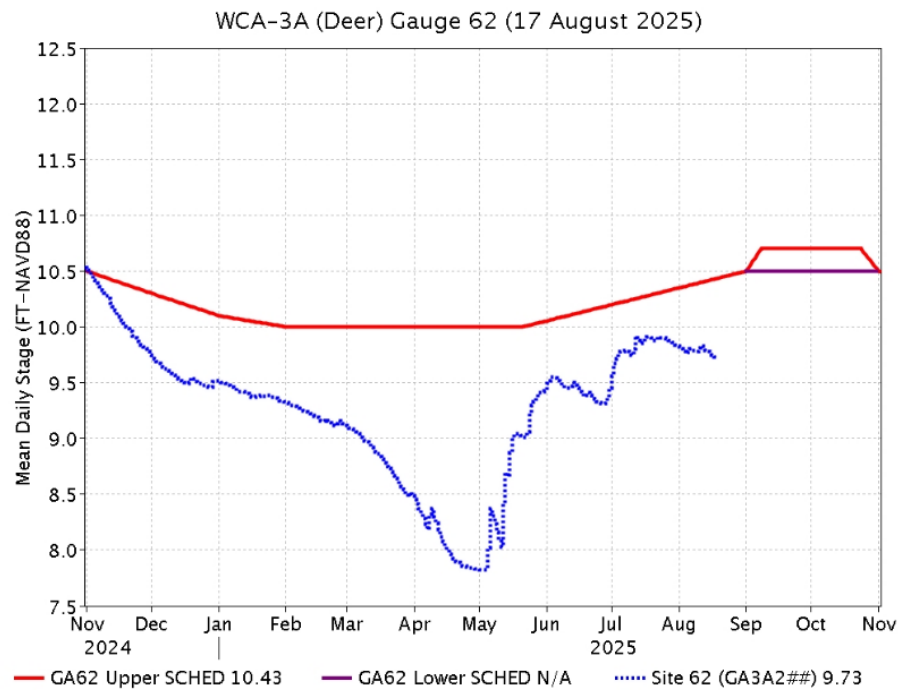


Figure EV-4. WCA-3A stage hydrograph (Deer gauge; Site 62) and GA62 regulation schedule.

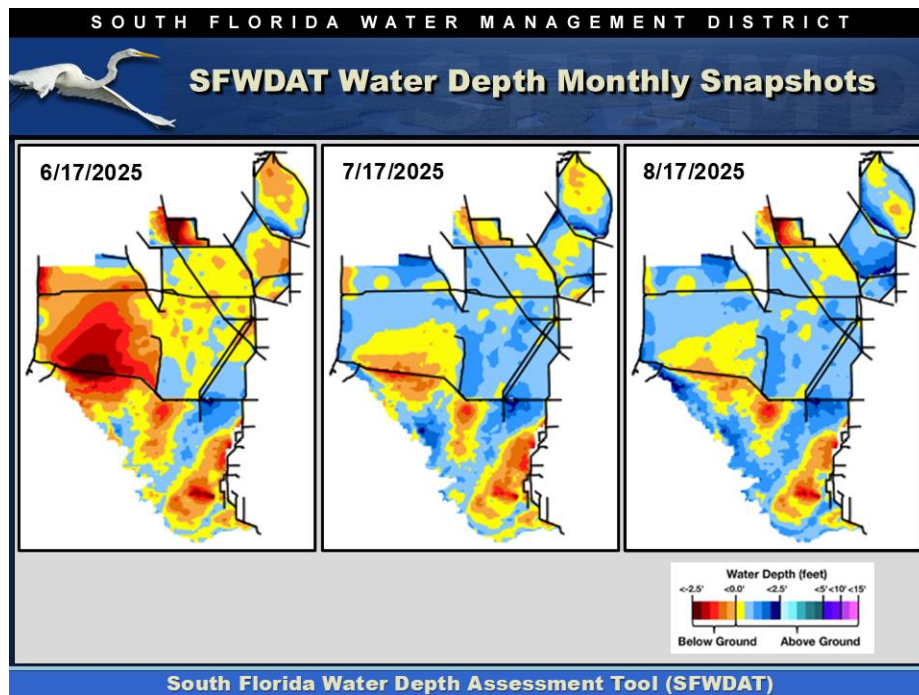


Figure EV-5. Everglades water depths from two months ago (left), one month ago (center) and present (right), based on SFWDAT.

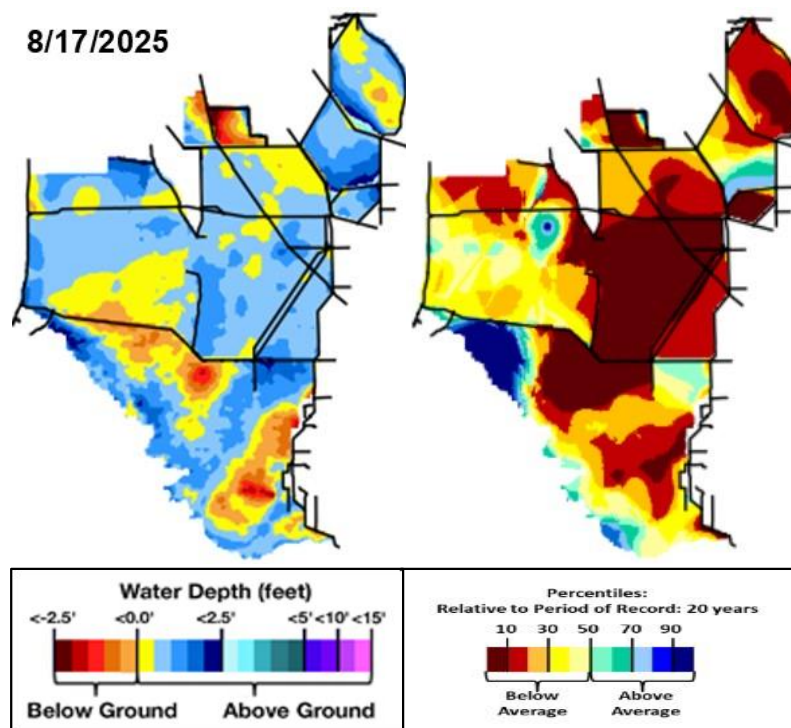


Figure EV-6. Present water depths (August 17, 2025) compared to the day of year relative to average (percentile) over the previous 20 years.

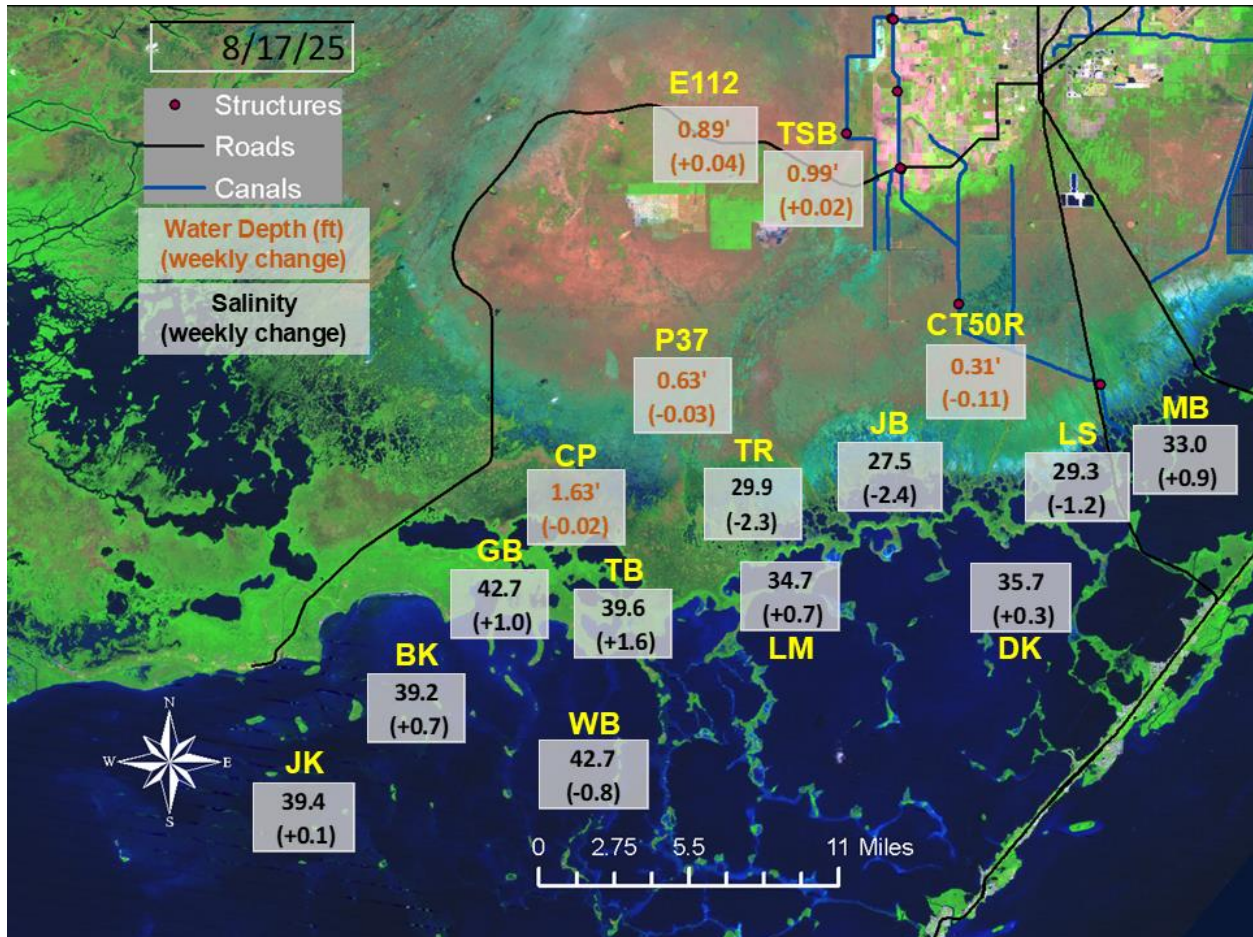


Figure EV-7. Taylor Slough water depths and Florida Bay salinities with changes since a week ago.

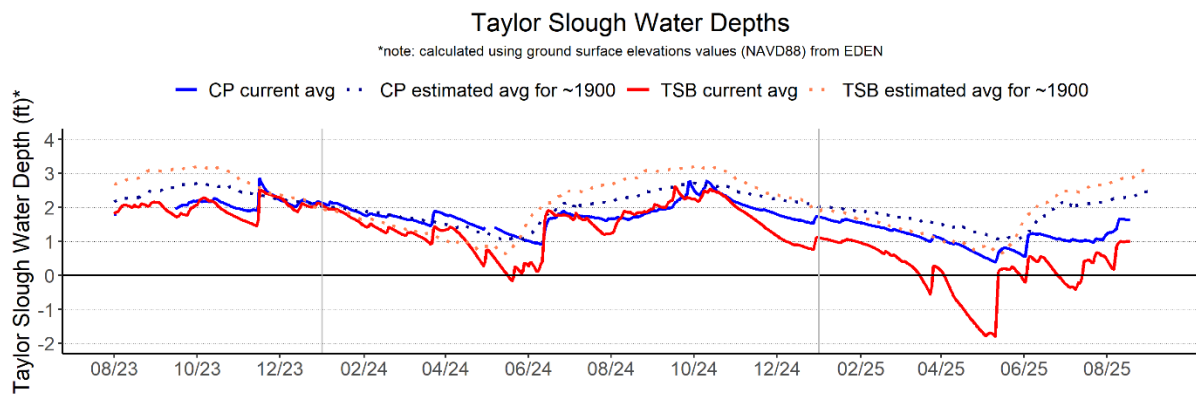


Figure EV-8. Taylor Slough water depth time series for Taylor Slough Bridge (TSB; northern slough) and Craighead Pond (CP; southern slough).

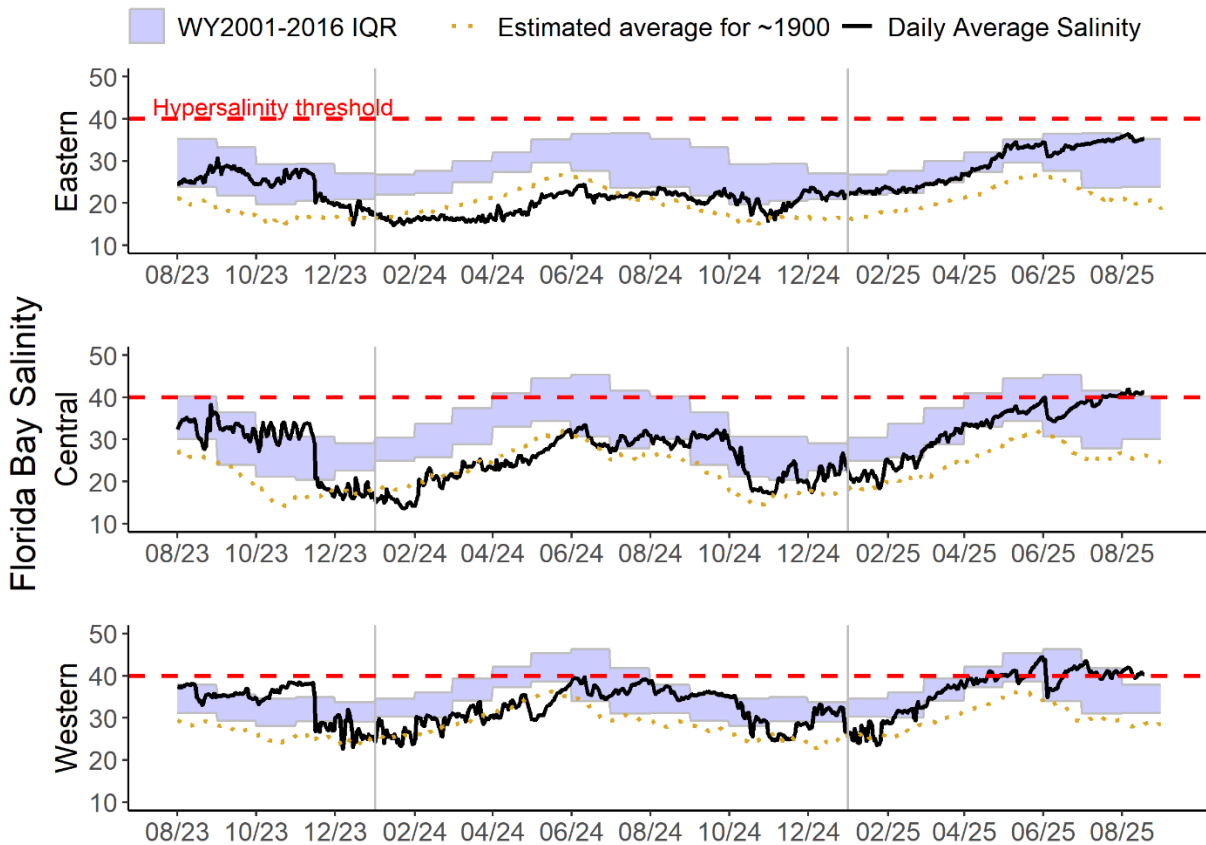


Figure EV-9. Eastern (top panel), Central (middle panel) and Western (bottom panel) Florida Bay daily average salinities with WY2001-2016 interquartile (25-75 percentile) ranges (IQR) and estimated historical daily average salinities. The hypersalinity threshold indicates the level at which salinities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

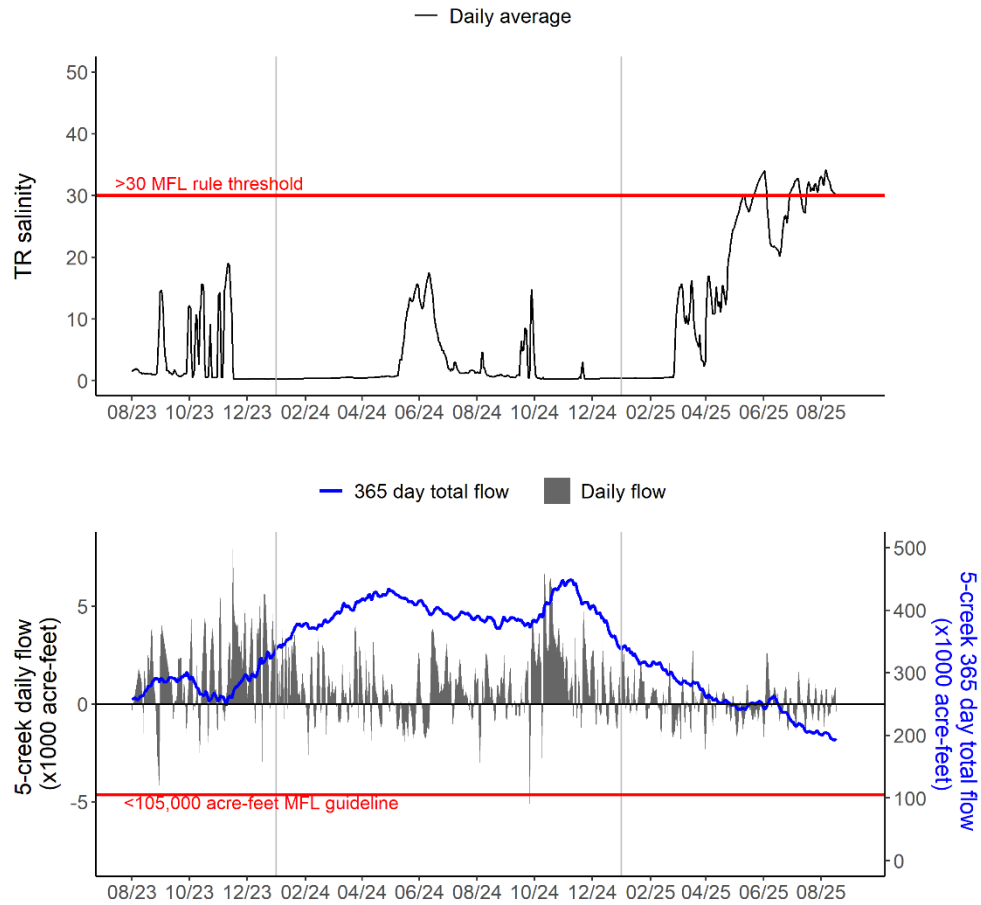


Figure EV-10. Salinity at Taylor River (TR; top) and creek inflow to Florida Bay (bottom) from the five major creeks (McCormick Creek, Taylor River, Mud Creek, Trout Creek, and West Highway Creek). The 30-day moving average salinity and 365-day total creek flow are tracked for the Florida Bay MFL criteria.

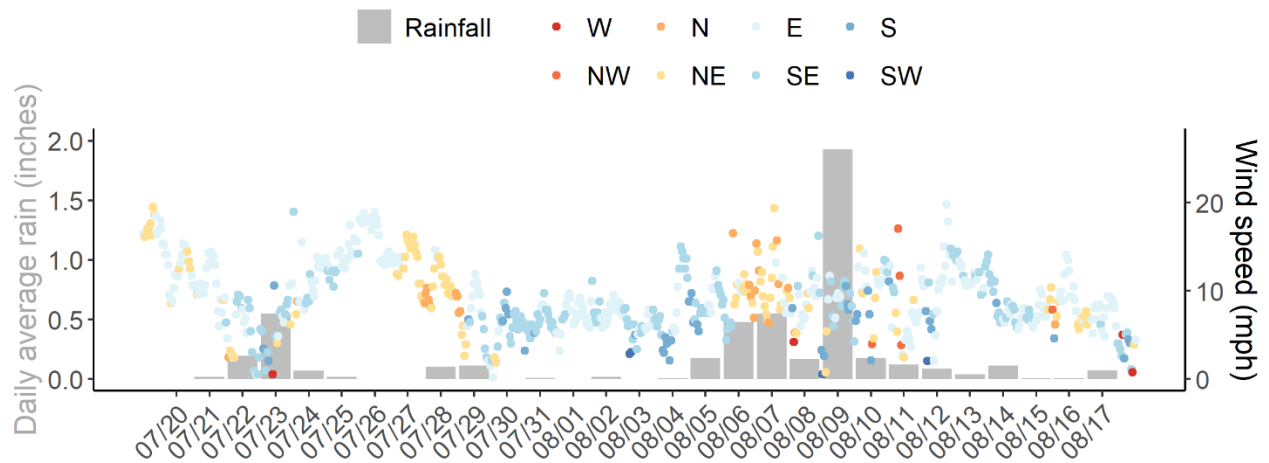


Figure EV-11. Daily average rain across Taylor Slough and Florida Bay, along with hourly average wind speed and direction (measured at Long Key) in Florida Bay over the past four weeks.

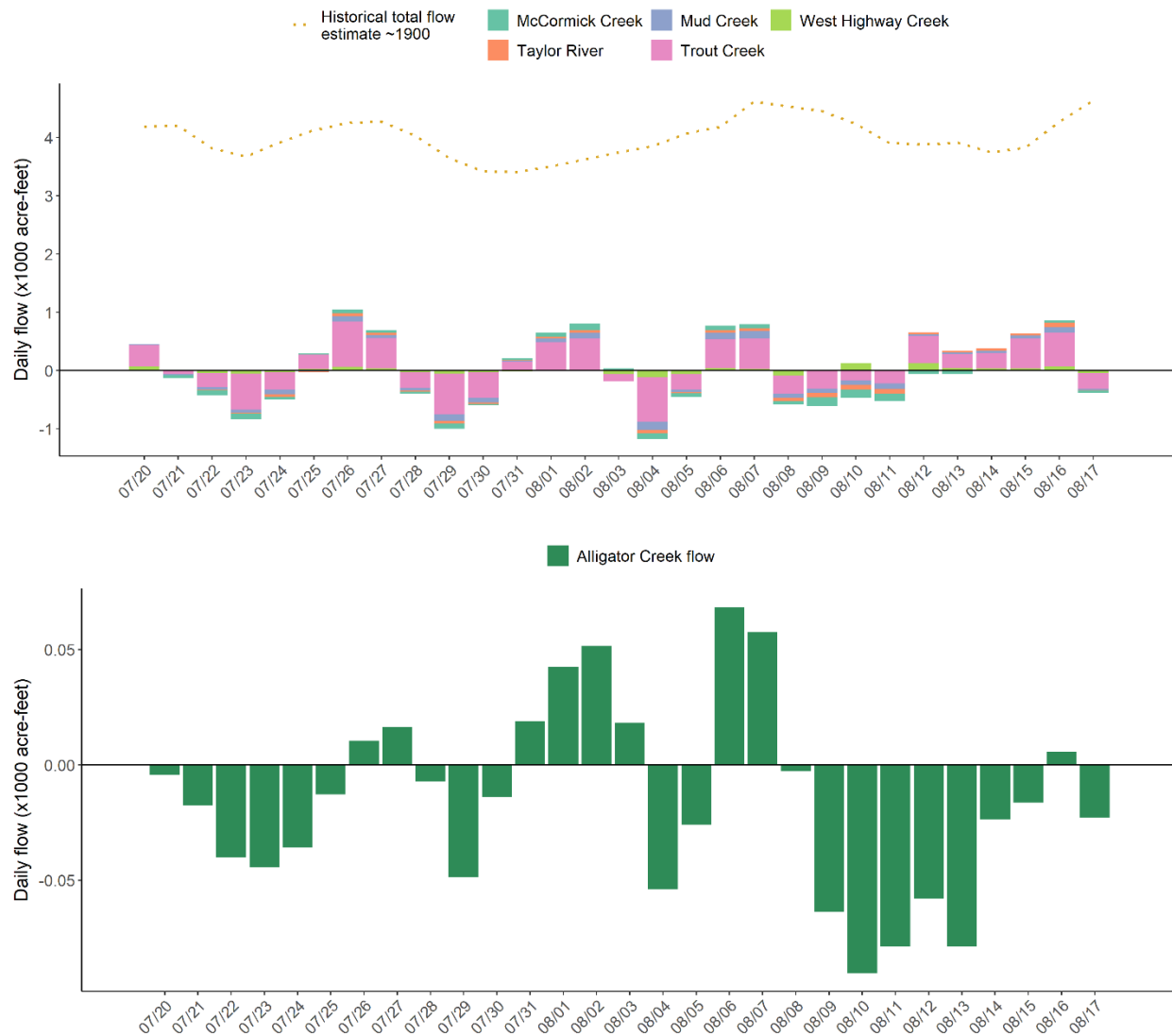


Figure EV-12. Top: daily average creek flow summed between the five major creeks with estimated historical daily flow over the past four weeks. Bottom: daily average creek flow from Alligator Creek over the past four weeks.

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

SFWMD Everglades Ecological Recommendations, August 19, 2025 (red is new)			
	Weekly change	Recommendation	Reasons
WCA-1	Stage decreased by 0.09 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 remained unchanged	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 0.13 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 decreased by 0.12 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 decreased by 0.13 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 decreased by 0.11 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.
Southern WCA-3A S	Stage decreased by 0.09 feet		
WCA-3B	Stage decreased 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 0.03 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 - 0.11 feet to +0.05 feet	Move water southward as possible.	When available, provide freshwater to promote water movement.
FB- Salinity	Salinity changes ranged from -2.4 to +1.6	Move water southward as possible.	When available, provide freshwater to promote water movement.