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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: September 17, 2025

SUBJECT: Weekly Environmental Conditions for Systems Operations

Summary

Weather Conditions and Forecast

From Wednesday into Thursday, favorable environmental conditions will exist for widespread heavy rains near and southeast of a frontal boundary, which is forecast to extend roughly from the Upper East Coast of the SFWMD to the Southwest Coast. Across this region, area-averaged rainfall to 0.75 inches is expected, with a reasonable worst-case scenario of 1.25 to 1.50 inches across east-coast basins. Rainfall coverage will generally decrease west and north of Lake Okeechobee, though scattered activity remains likely, with the lowest amounts across the far northern SFWMD. From Friday through Sunday, moisture will shift as a weak frontal wave develops, bringing a relatively drier pattern. Scattered to locally numerous showers and isolated thunderstorms will still affect the east coast, while afternoon activity concentrates from the Everglades to the Southwest Coast. However, one-quarter of model results indicate the eastern half of the SFWMD could receive higher rainfall amounts than currently projected. By Saturday, a moist, unstable air mass will be drawn into the SFWMD favoring another increase in rainfall across the area. Afternoon activity would likely be concentrated over the interior. For the week ending next Tuesday morning, rainfall across the SFWMD is forecast to be above normal, and at least near-normal. The greatest weekly rainfall is expected south and east of Lake Okeechobee.

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 Kissimmee-Cypress-Hatchineha followed the Headwaters Revitalization Schedule (HRS) Increment 1 Temporary Deviation Discharge Plan. Weekly average discharge on September 14, 2025, was 2,900 cfs at S-65 and 3,400 cfs at S-65A, respectively. Mean weekly water depth on the Kissimmee River floodplain decreased by 0.05 feet to 1.93 feet. The weekly average concentration of dissolved oxygen in the Kissimmee River increased from the previous week's value of 0.1 mg/L to 0.3 mg/L and remained in the lethal zone for Florida bass and other species.

Lake Okeechobee

Lake Okeechobee stage was 11.67 feet NAVD88 (12.98 ft NGVD29) on September 14, 2025, which was 0.25 feet higher than the previous week and 0.77 feet higher than a month ago. Average daily inflows (excluding rainfall) increased from 4,240 cfs the previous week to 7,320 cfs. There was no average daily outflow (excluding evapotranspiration). The most recent non-obscured satellite image from August 22, 2025, NOAA's Harmful Algal Bloom Monitoring System suggests moderate cyanobacteria potential along most of the nearshore areas of the lake. The September 2-4 sampling showed 9 of the 30 sites had bloom level chlorophyll *a* concentrations ($>40 \mu\text{g/L}$), two of which exceeded $80 \mu\text{g/L}$. Twenty three samples had detectable levels of cyanotoxins below the USEPA recreational standards.

Estuaries

Total inflow to the St. Lucie Estuary averaged 1,770 cfs over the past week with no flow coming from Lake Okeechobee. Mean surface salinities increased at the A1A Bridge site and decreased at the HR1 and US1 Bridge sites. Salinity in the middle estuary was in the optimal range (10-25) for adult eastern oysters.

Total inflow to the Caloosahatchee Estuary averaged 7,381 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. Salinities decreased at Cape Coral and Shell Point and increased 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, in the lower stressed range at Cape Coral (5-10) and in the upper stressed range at Sanibel.

Stormwater Treatment Areas

For the week ending Sunday, September 14th, 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 32,000 ac-feet. The total amount of inflows to the STAs in WY2026 is approximately 359,300 ac-feet. Online STA treatment cells are at or 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

Well above average rainfall was experienced in every basin with local maxima over 6 inches in every basin but WCA-2B. The within basin and upstream rainfall led to increased ascension rates across the system. Ascension rates were considered fair or good due to the current dry conditions across the Everglades Protection Area. Depths are well below average for this time of year in WCA-3A South. Taylor Slough stages increased last week and are above the recent average for this time of year. Florida Bay salinities decreased on average last week and are below the hypersalinity threshold.

Supporting Information

Kissimmee Basin

Upper Kissimmee

On September 14, 2025, mean daily lake stages were 56.4 feet NAVD88 (0.7 feet above schedule) in East Lake Toho, 52.7 feet NAVD88 (0.2 feet above schedule) in Lake Toho, and 50.5 feet NAVD88 (at 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 14, 2025, mean weekly discharge was 2,900 cfs at S-65 and 3,400 cfs at S-65A, respectively. Mean weekly discharge from the Kissimmee River was 4,800 cfs and 4,600 cfs at S-65D and S-65E, respectively (**Table KB-2**). Mean weekly headwater stages were 45.3 feet NAVD88 at S-65A and 27.0 feet NAVD88 at S-65D. Mean weekly river channel stage decreased by 0.1 feet from the previous week's value to 37.9 feet NAVD88 (**Figure KB-4**). Mean weekly water depth on the Kissimmee River floodplain decreased by 0.05 feet to 1.93 feet (**Table KB-2, Figure KB-5**). The weekly average concentration of dissolved oxygen in the Kissimmee River increased from 0.1 mg/L the previous week to 0.3 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 A of Increment 1, make releases as needed for flood risk management. When stage decreases into Zone B1, use the Increment 1 Interpolation Tool to determine discharge relative to stage in KCH.

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)	
							9/14/25	9/7/25
Lakes Hart and Mary Jane	S-62	LKMJ	490	59.3	R	58.9	0.4	0.1
Lakes Myrtle, Preston and Joel	S-57	S-57	150	60.3	R	60.0	0.3	0.1
Alligator Chain	S-60	ALLI	310	62.3	R	62.2	0.1	0.0
Lake Gentry	S-63	LKGT	360	60.1	R	59.9	0.2	-0.1
East Lake Toho	S-59	TOHOE	1000	56.4	R	55.7	0.7	0.1
Lake Toho	S-61	TOHOW S-61	1500	52.7	R	52.5	0.2	0.1
Lakes Kissimmee, Cypress and Hatchineha	S-65	KUB011 LKIS5B	2900	50.5	T	50.5	0.0	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.

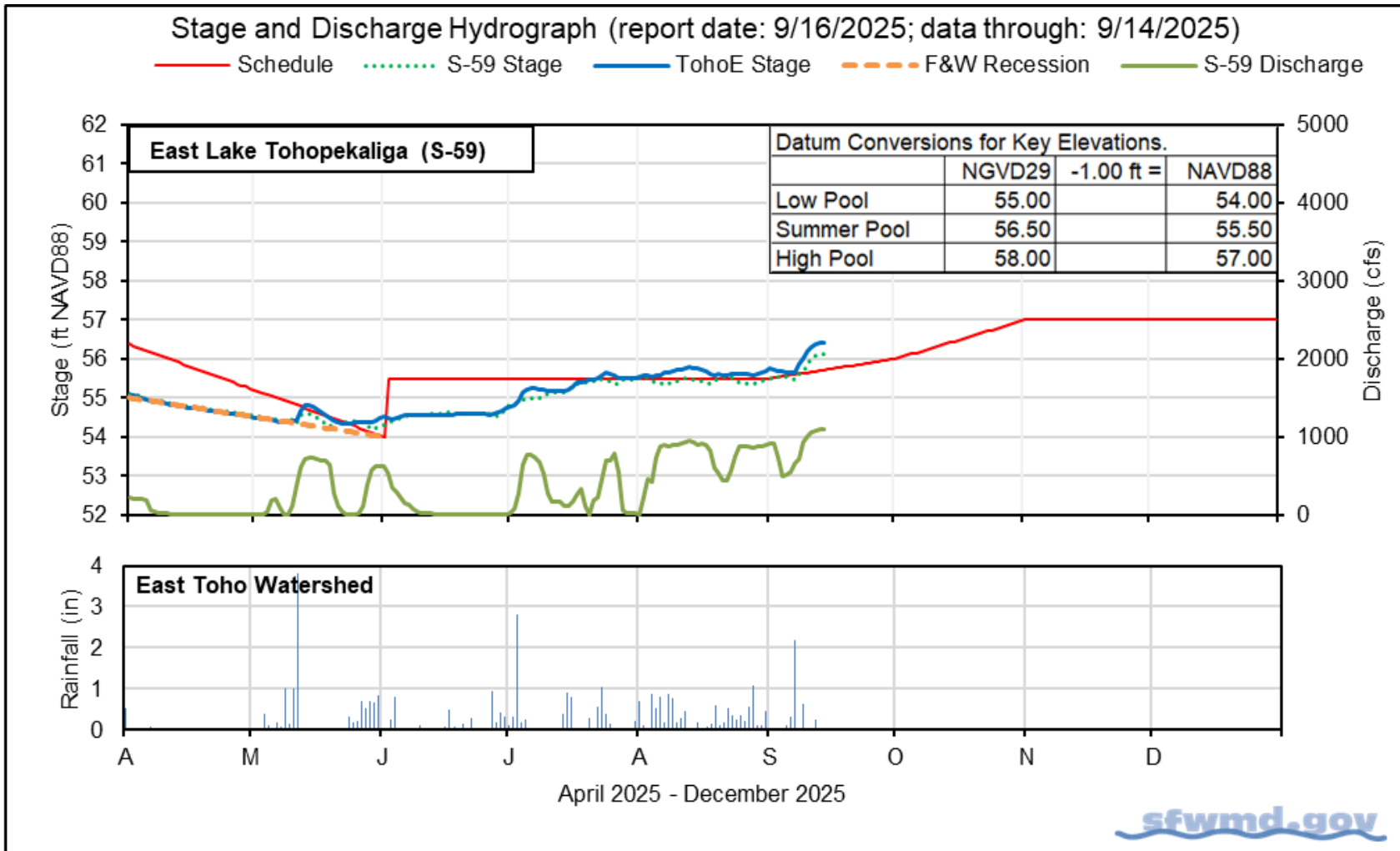


Figure KB-1. East Lake Toho regulation schedule, stage, discharge, and rainfall.

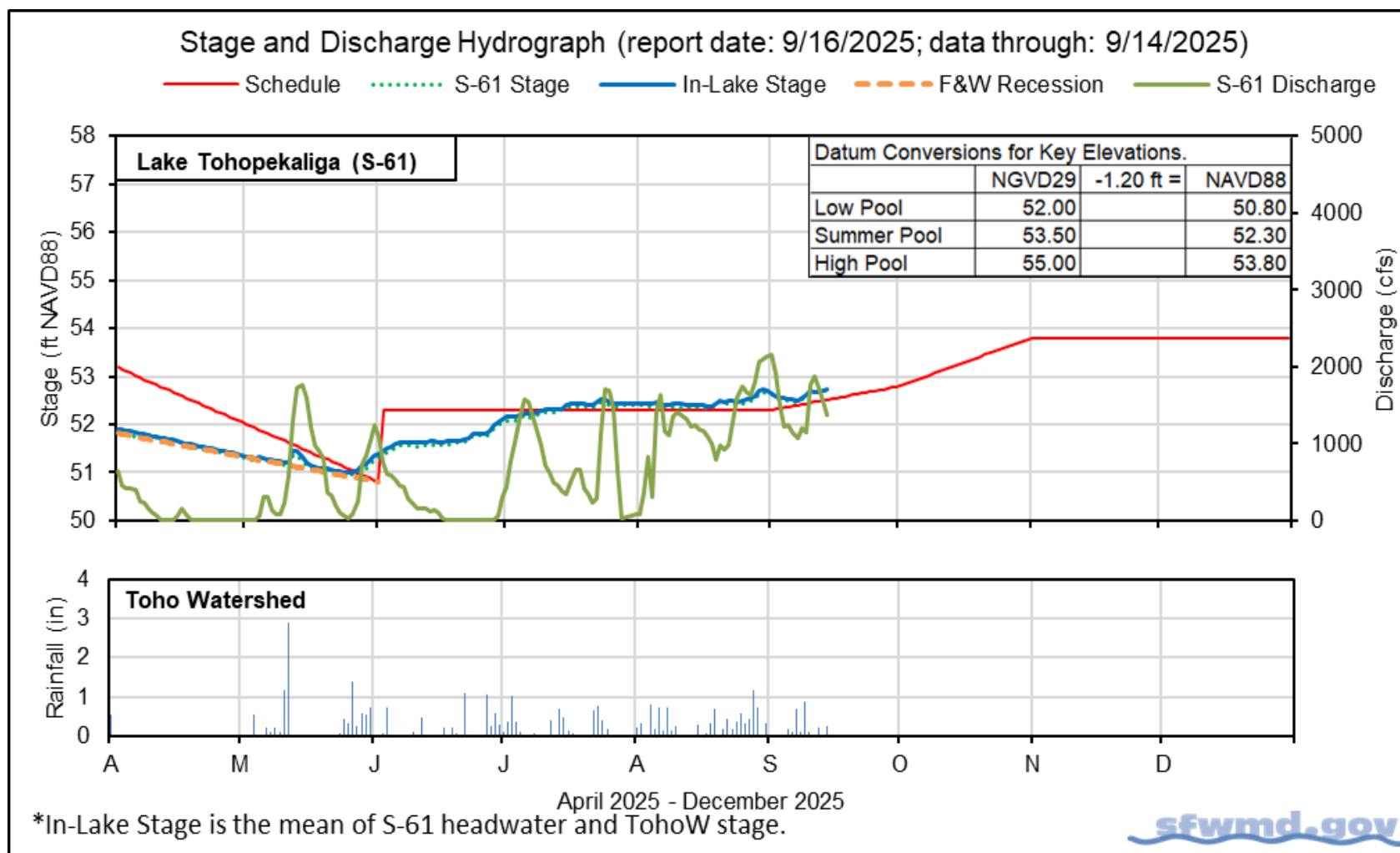


Figure KB-2. Lake Toho regulation schedule, stage, discharge, and rainfall.

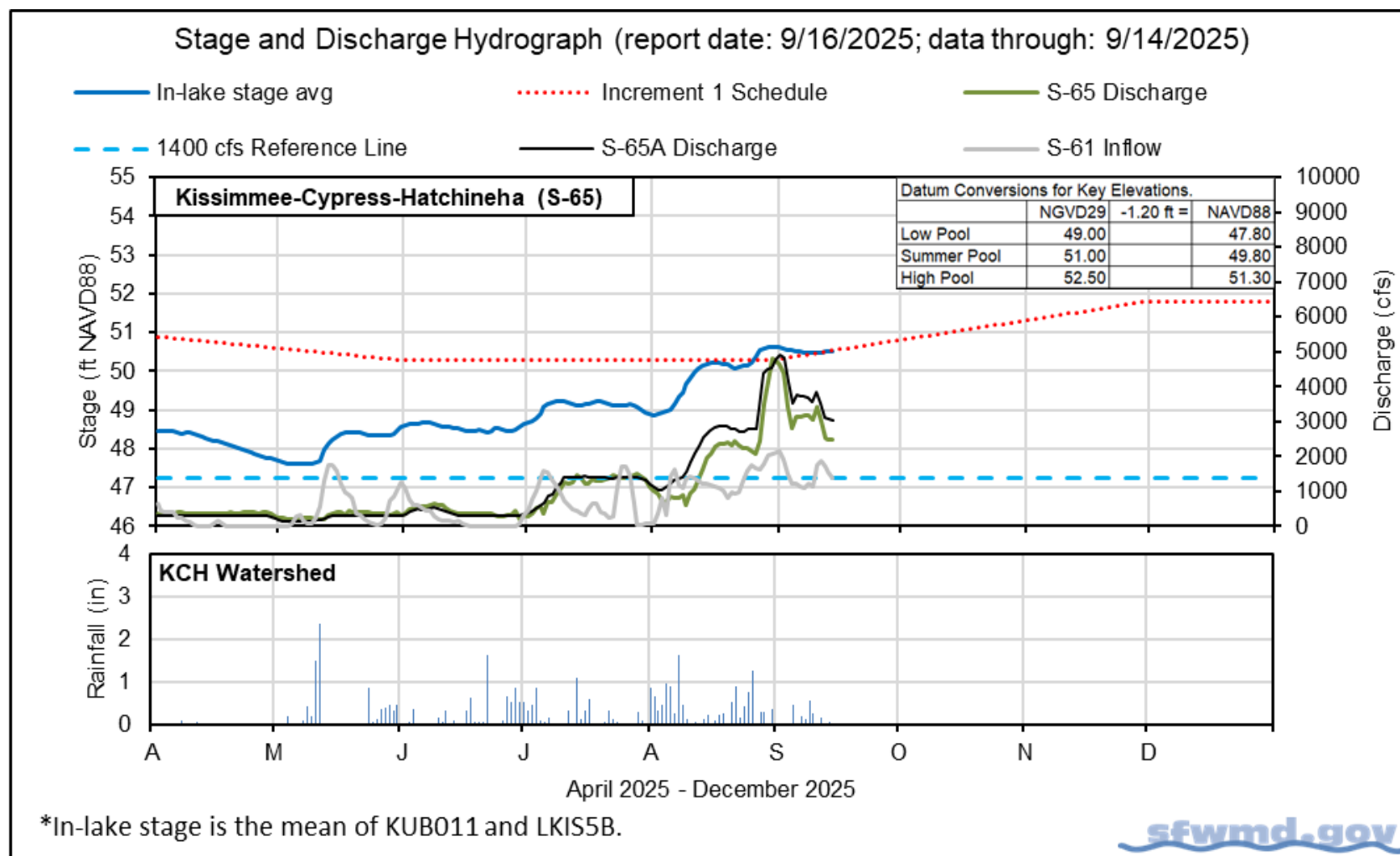


Figure KB-3. Lakes Kissimmee, Cypress and Hatchineha regulation schedule, stage, discharge, and rainfall.

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			
		9/14/25	9/14/25	9/7/25	8/31/25	8/24/25
Discharge	S-65	2,500	2,900	3,500	3,400	2,300
Discharge	S-65A ^a	3,000	3,400	4,100	3,900	2,800
Headwater Stage (feet NAVD88)	S-65A	45.1	45.3	45.9	45.7	45.1
Discharge	S-65D ^b	4,600	4,800	3,600	2,800	2,300
Headwater Stage (feet NAVD88)	S-65D ^c	26.9	27.0	27.0	26.1	25.8
Discharge (cfs)	S-65E ^d	4,500	4,600	3,400	2,600	2,100
Discharge (cfs)	S-67	0	0	0	0	0
Dissolved Oxygen (mg/L) ^e	Phase I, II/III river channel	0.3	0.3	0.1	0.2	0.0
River channel mean stage (feet NAVD88) ^f	Phase I river channel	37.7	37.9	38.0	37.1	36.9
Mean depth (feet) ^g	Phase I floodplain	1.87	1.93	1.98	1.42	1.24

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.

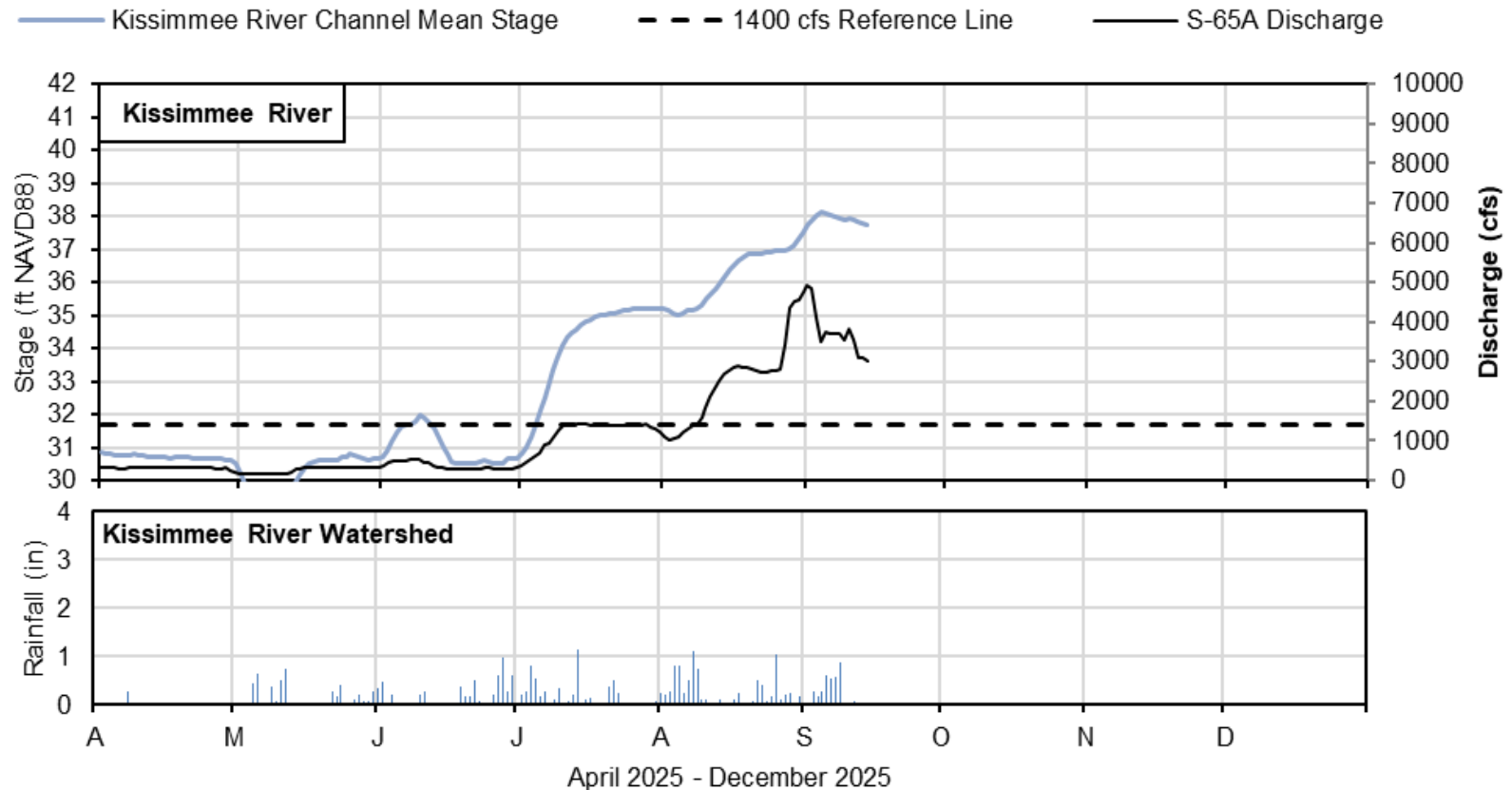
d. Combined discharge from S-65E and S-65EX1.

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: 9/16/2025; data through: 9/14/2025)



*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.

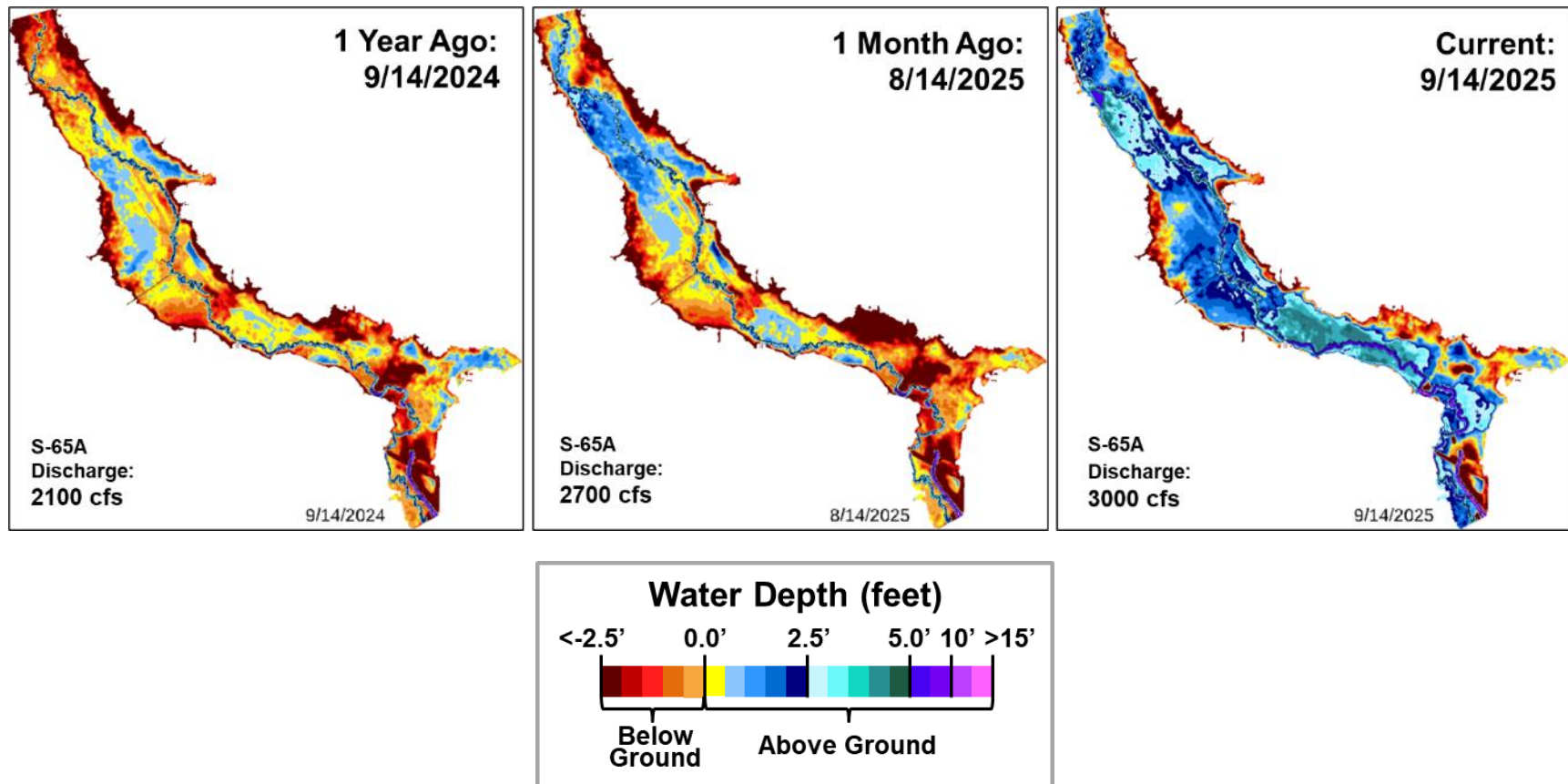
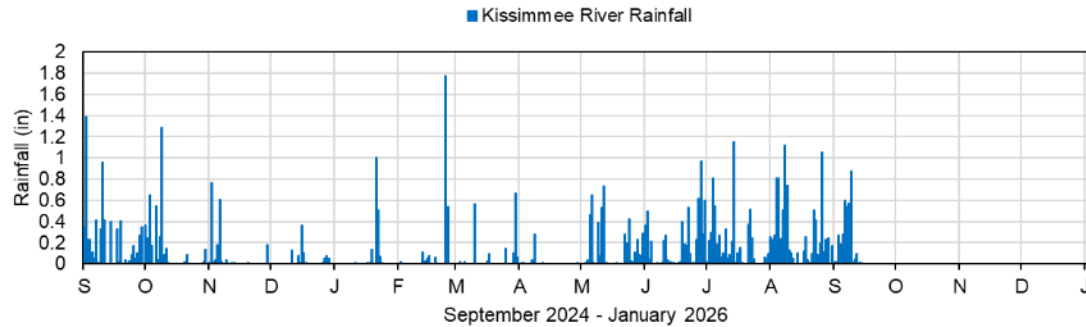
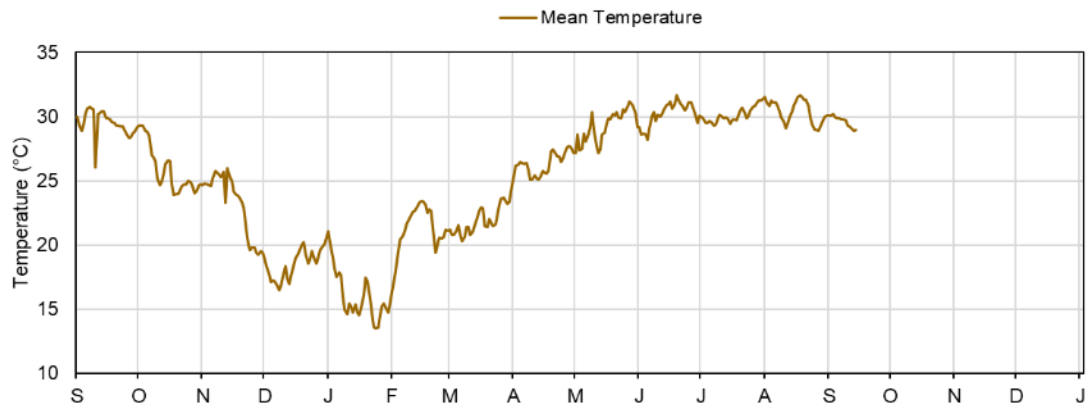
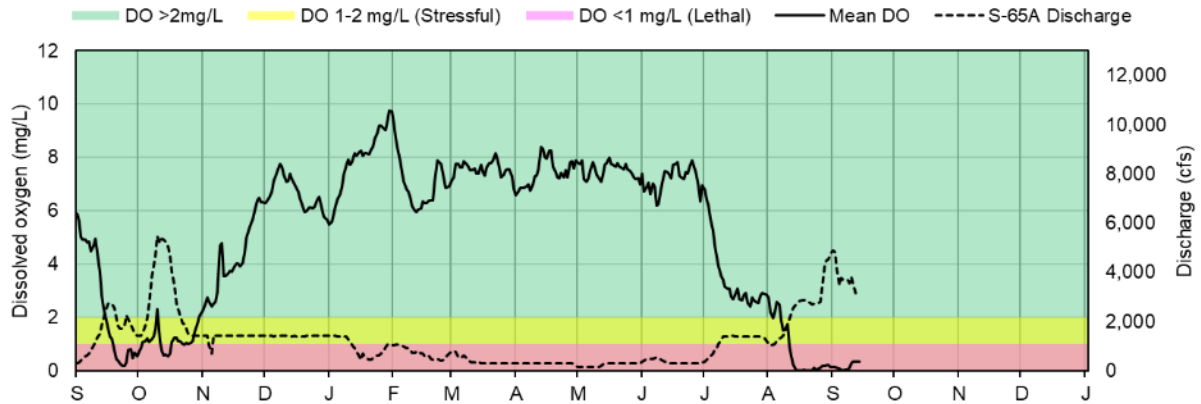


Figure KB-5. Phase I-II-III area Kissimmee River floodplain water depths (from left to right) one year ago, one month ago, and current.



Report Date: 9/16/2025; data are through: 9/14/2025

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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

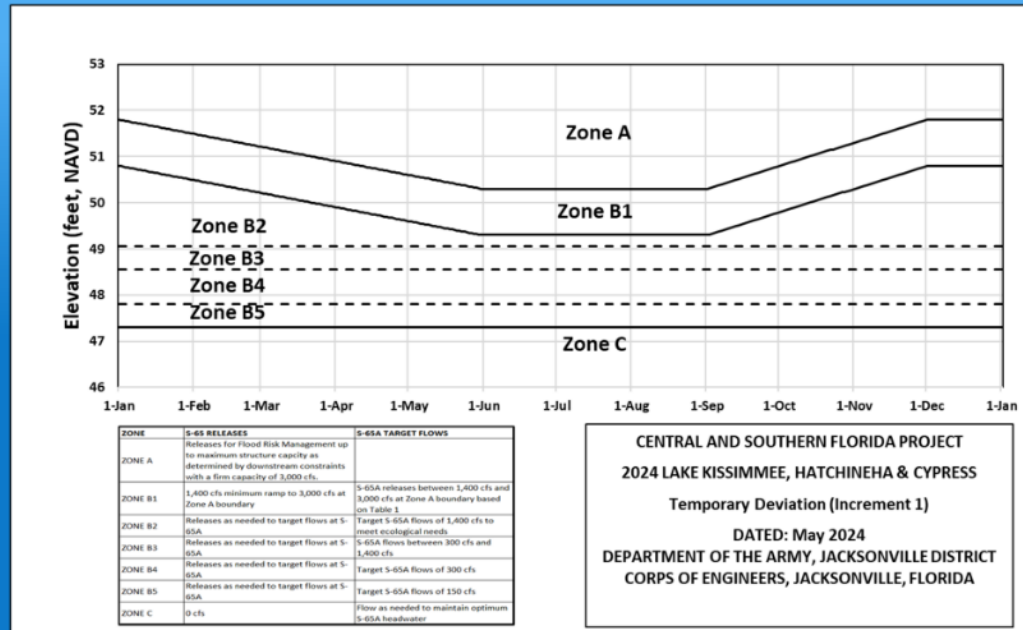
ZONE	S-65 RELEASES	S-65A TARGET FLOWS
ZONE A	Releases for Flood Risk Management up to maximum structure capacity as determined by downstream constraints with a firm capacity of 3,000 cfs.	
ZONE B1	1,400 cfs minimum ramp to 3,000 cfs at Zone A boundary	S-65A releases between 1,400 cfs and 3,000 cfs at 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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CENTRAL AND SOUTHERN FLORIDA PROJECT
2024 LAKE KISSIMMEE, HATCHINEHA & CYPRESS
Temporary Deviation (Increment 1)
DATED: May 2024
DEPARTMENT OF THE ARMY, JACKSONVILLE DISTRICT
CORPS OF ENGINEERS, JACKSONVILLE, FLORIDA

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 11.67 feet NAVD88 (12.98 ft NGVD29) on September 14, 2025, which was 0.25 feet higher than the previous week and 0.77 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 0.31 feet above the water shortage management band (**Figure LO-3**). According to NEXRAD, 1.28 inches of rain fell directly over the lake during the previous week, while 0.95 inches were lost to evapotranspiration.

Average daily inflows (excluding rainfall) increased from 4,240 cfs the previous week to 7,320 cfs. The highest inflows came from the Kissimmee River (4,640 cfs via S-65E(X1)). There were no average daily 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 14, 2025, NOAA's Harmful Algal Bloom Monitoring System shows moderate cyanobacteria potential along most of the nearshore areas of the lake (**Figure LO-6**).

The routine water quality and phytoplankton monitoring sampling trips are now on the bloom season (May-Oct) schedule and occur twice per month. Provisional phytoplankton results from the September 2-4 sampling showed 23 of 30 phytoplankton samples had detectable levels of cyanotoxin. Twenty sites had detectable levels of cylindrospermopsin ($> 0.1 \mu\text{g/L}$), eight had detectable microcystins ($> 0.2 \mu\text{g/L}$), five of which had both toxins present. None of the samples exceeded USEPA recreational standards. Site Rittae2 in the south end of the lake had a high of $2.6 \mu\text{g/L}$ of cylindrospermopsin, while S-308 (Port Mayaca) had a high of $7.4 \mu\text{g/L}$ of microcystins. Eight of the sites had chlorophyll *a* concentrations between $20\text{--}40 \mu\text{g/L}$, and 9 had concentrations $>40 \mu\text{g/L}$, 2 of which exceeded $80 \mu\text{g/L}$ (**Figure LO-7**).

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

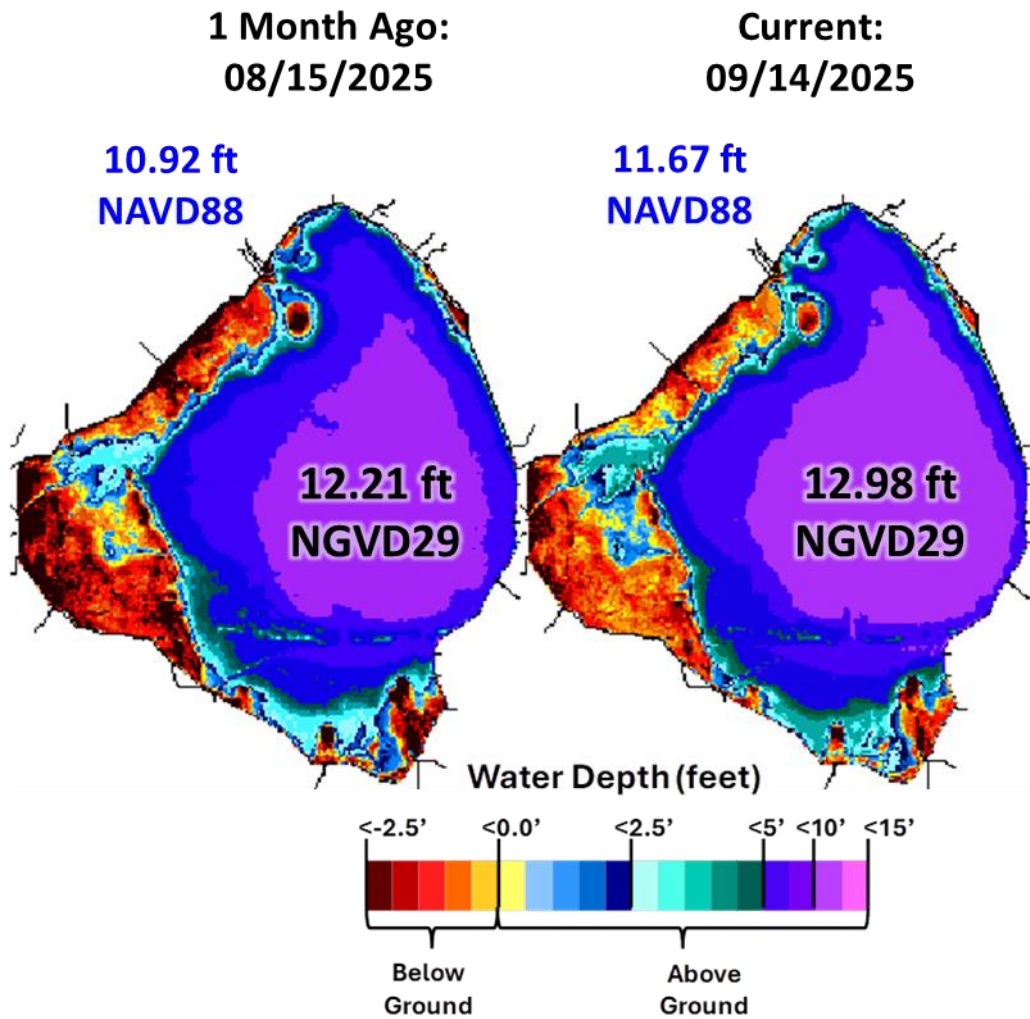


Figure LO-1. Lake Okeechobee water depth estimates based on South Florida Water Depth Assessment Tool (SFWDAT).

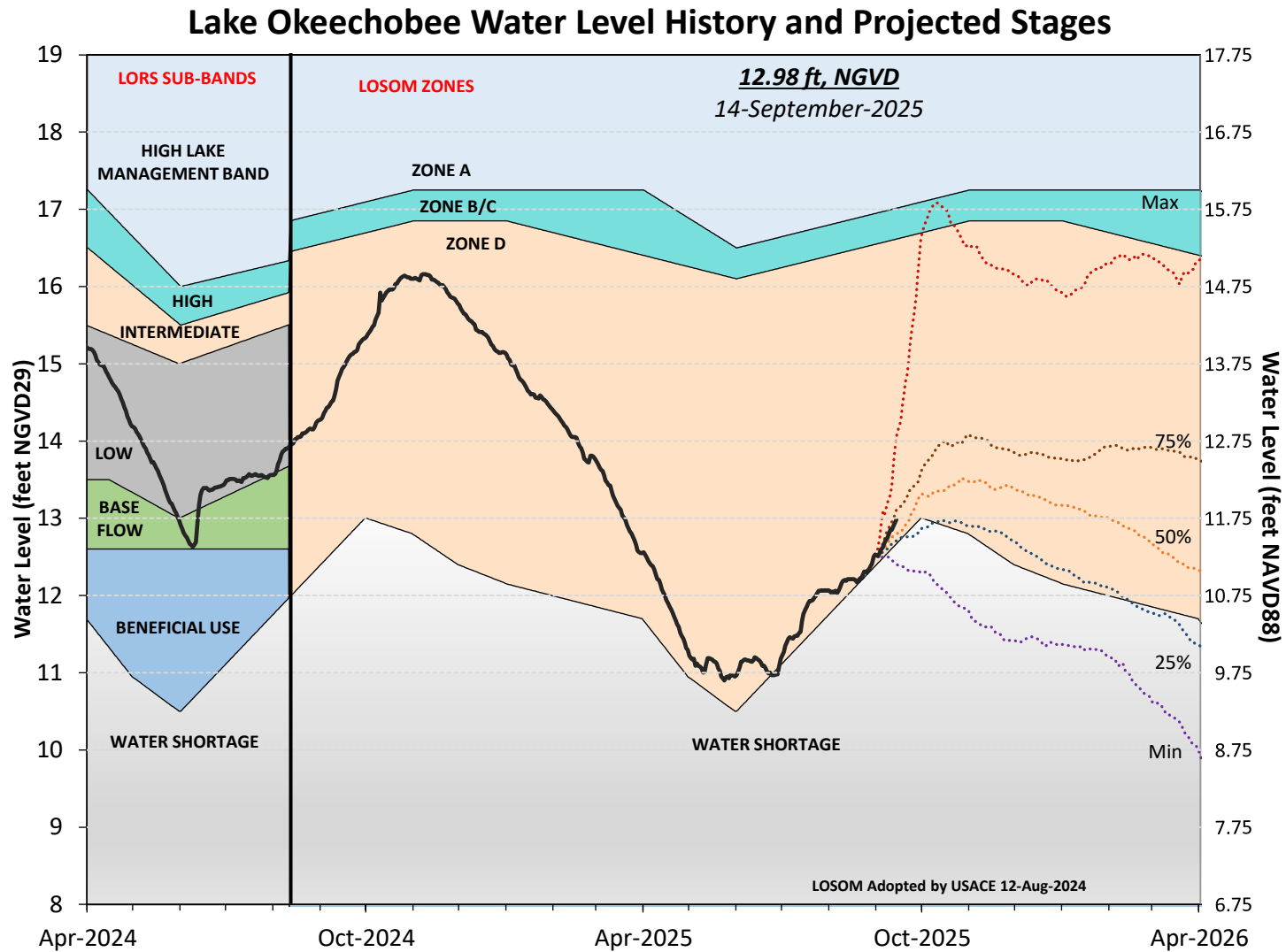


Figure LO-2. Recent Lake Okeechobee stages with projected stages based on a dynamic position analysis.
 Note: stages are in NGVD29, approximate NAVD88 values are shown for reference.

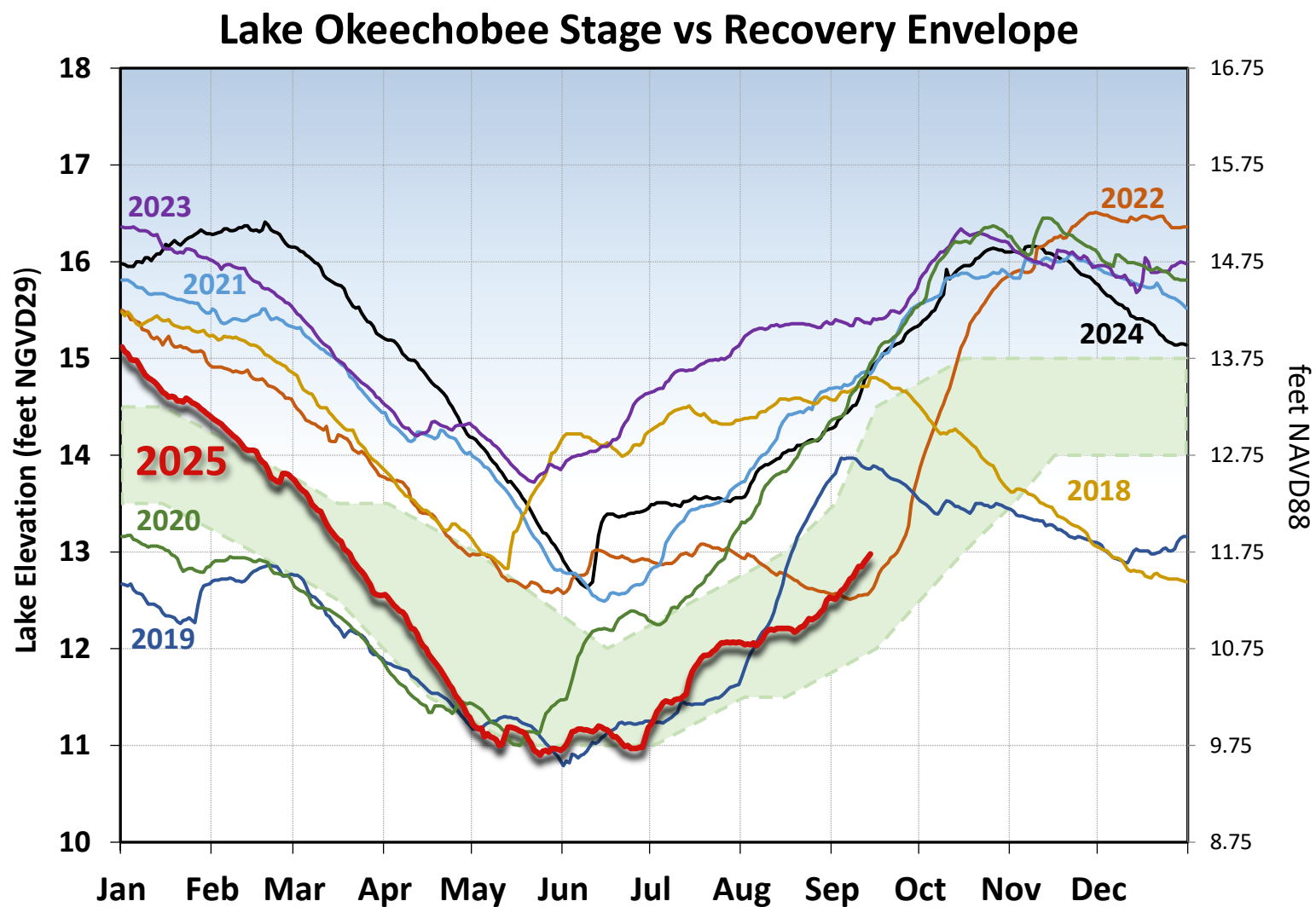


Figure LO-3. The current and seven prior year's annual stage hydrographs for Lake Okeechobee in comparison to the recovery envelope (light green). A shift from the normal ecological envelope to the recovery envelope occurred because the 30-day minimum lake stage (elevations exposed for at least 30 days,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

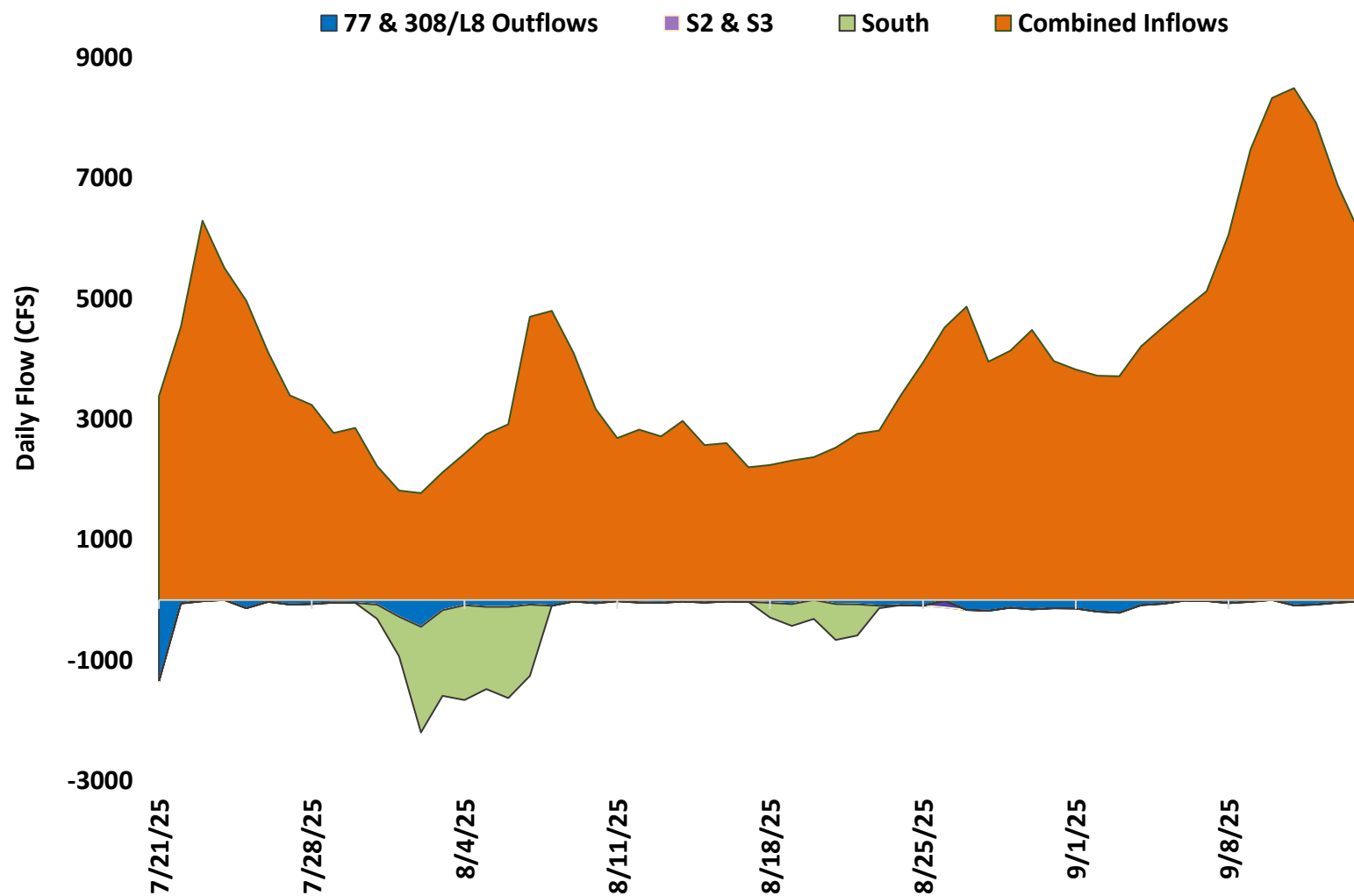


Figure LO-4. Major inflows (orange) to and outflows east and west (blue) from Lake Okeechobee. Outflows south are shown in green. Flows into Lake Okeechobee from the L-8 canal through S-271 (formerly Culvert 10A) or from the C-44 canal through the S-308 are included as inflows. Conversely, flows from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

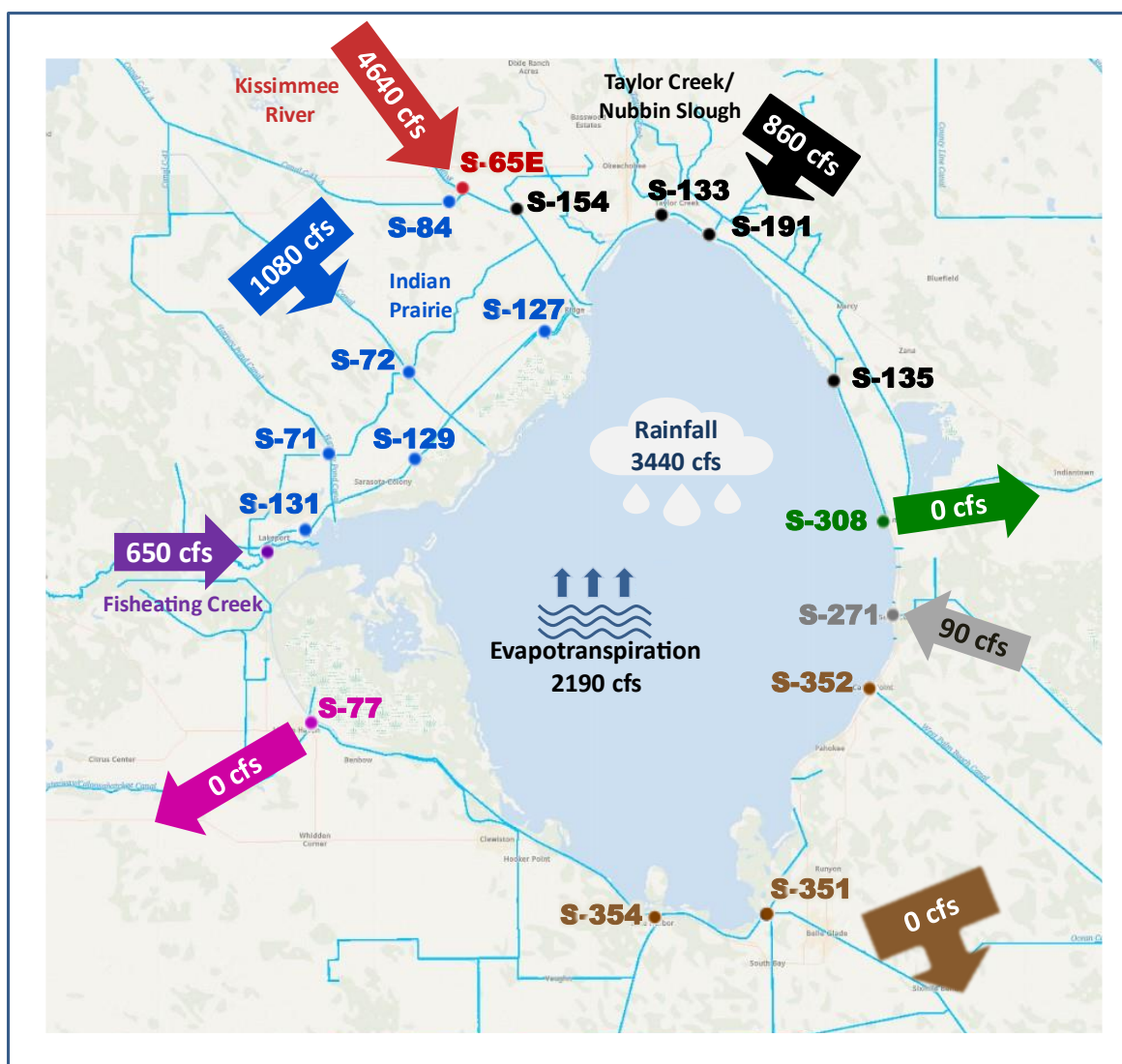


Figure LO-5. Inflows into Lake Okeechobee from Indian Prairie basins, Taylor Creek/Nubbin Slough, Kissimmee River and Fisheating Creek (currently no flow data available for FECR), and outflows to the west via S-77, to the east via S-308, to the south via S-351, S-352, S-354, and to southeast via S-271 (formerly Culvert 10A) for the week of Sep 8 – 14, 2025.

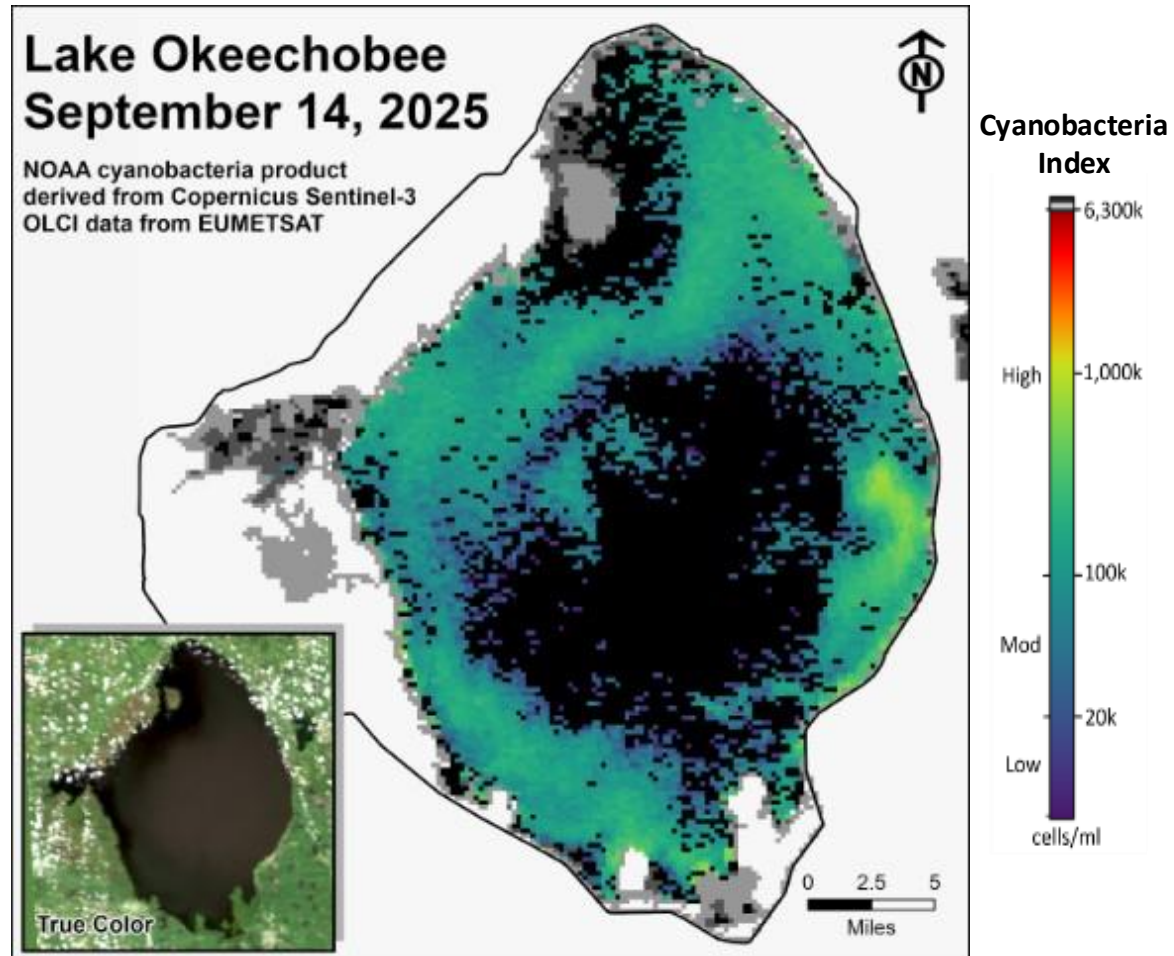


Figure LO-6. Cyanobacteria bloom index level on Lake Okeechobee, based on NOAA's harmful algal bloom monitoring system. Gray color indicates cloud cover. *Provisional NOAA image, subject to change*.

Collection Date: September 02-04, 2025

Station	CHL _a (ug/L)	TOXIN (ug/L)	TAXA	Station	CHL _a (ug/L)	TOXIN (ug/L)	TAXA
FEBIN	NS	NS	NS	L001	80.1	0.4	Micro/Raphi
FEBOUT	NS	NS	NS	L004	17.5	2.9	Microcys
KISSR0.0	15.2	BDL	mixed	L006	8.7	0.5	Microcys
L005	37.6	BDL	Micro/Plank	L007	26.6	0.1	mixed
LZ2	31.5	BDL	Microcys	L008	18.8	BDL	mixed
KBARSE	53.4	0.1	Micro/Plank	LZ30	19.4	0.1	Dolichos
RITTAE2	5.9	2.6	mixed	LZ40	15.5	2.3	Microcys
PELBAY3	32.5	0.1	Dolichos	CLV10A	45.4	6.7	Micro/Plank
POLE3S	9.1	0.7	Microcys	NCENTER	59.4	0.4	Micro/Raphi
LZ25A	61.5	0.3	mixed				
PALMOUT	11.7	0.4	Planktol	S308C	43.6	7.6	Microcys
PALMOUT1	16.0	0.1	Planktol	S77	3.6	0.2	mixed
PALMOUT2	6.8	BDL	Microcys	➤ SFWMD considers >40 µg/L Chlorophyll <i>a</i> (Chl _a) an algal bloom			
PALMOUT3	9.1	0.6	Microcys	➤ BDL – Below Detectable Limit of 0.2 µg/L (Cyl = 0.1 µg/L)			
POLESOUT	30.4	BDL	Microcys	➤ ND – No Dominant taxa			
POLESOUT1	31.2	0.4	Micro/Plank	➤ P – Pending			
POLESOUT2	36.4	0.3	Micro/Plank	➤ NS – Not Sampled			
POLESOUT3	27.0	BDL	Microcys	➤ Station bold font – crew observed possible BGA			
EASTSHORE	55.2	0.5	Micro/Raphi	➤ Chlorophyll <i>a</i> analyzed by SFWMD			
NES135	90.4	0.5	Micro/Raphi	➤ Toxin & Taxa analyzed by FDEP:			
NES191	46.5	0.2	Micro/Raphi	Microcys = Microcystis; Cylindro = Cylindrospermopsis;			
				Planktol = Planktolyngbya; Dolicho = Dolichospermum;			
				Pseud = Pseudanabaena; Raphi = Raphidiopsis			

Toxins include cylindrospermopsin and/or microcystins

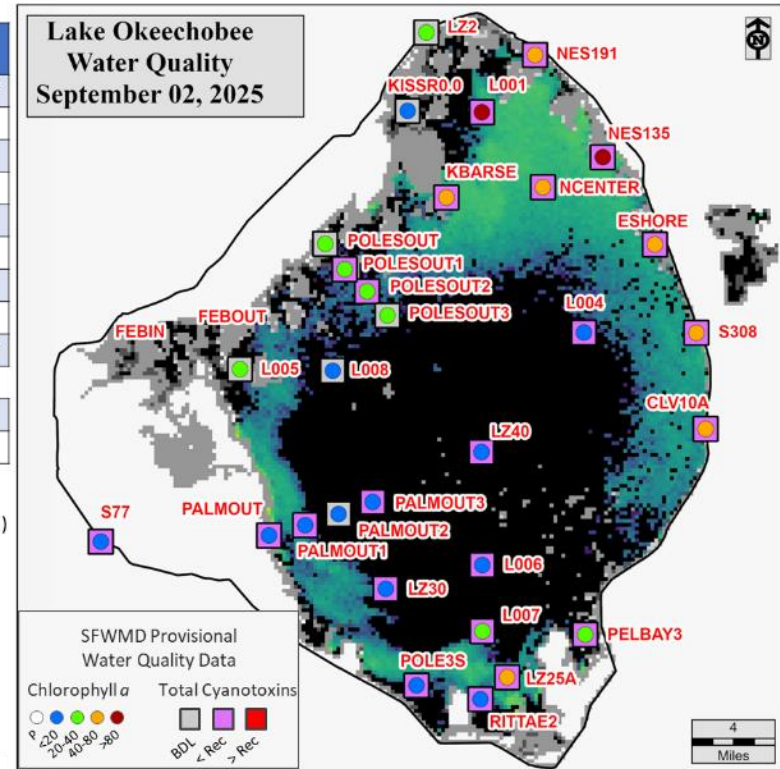


Figure LO-7. Dominant taxa, cyanotoxins (µg/L) and chlorophyll *a* (µg/L) concentration data from September 2 - 4, 2025. Sampling locations, chlorophyll *a*, and total toxin concentrations are overlaid on the September 2, 2025, image from NOAA's harmful algal bloom monitoring system. Gray color indicates cloud cover.

Estuaries

St. Lucie Estuary

Over the past week, mean total inflow to the St. Lucie Estuary was 1,770 cfs (**Figures ES-1 and ES-2**), and the previous 30-day mean inflow was 1,022 cfs. For comparison, the historical provisional mean inflows from contributing areas are shown in **Figure ES-2**.

Over the past week, surface salinities increased at the A1A Bridge site and decreased at HR1 and US1 Bridge sites (**Table ES-1 and Figure ES-3**). The seven-day moving average of the surface and bottom salinities at the US1 Bridge was 17.0. 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 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 7,381 cfs (**Figures ES-6 and ES-7**), and the previous 30-day mean inflow was 4,179 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. Salinities decreased at Cape Coral and Shell Point and increased 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 lower stressed range at Cape Coral and in the upper stressed range at Sanibel (**Figure ES-10**). The mean larval oyster recruitment rates reported by the FWRI in August were 39.1 spat/shell at Iona 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 1,277 cfs. Model results from all scenarios predict daily salinity to be 0.6 or lower and the 30-day moving average surface salinity to be 0.3 or lower at Val I-75 at the end of the two-week period (**Table ES-3 and Figure ES-13**). This

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.

keeps predicted salinities in the upper estuary within the optimal salinity range (0-10) for tape grass.

Red Tide

The FWRI reported on September 12, 2025, that *Karenia brevis*, the Florida red tide dinoflagellate, was not observed in any samples collected within the District region.

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.

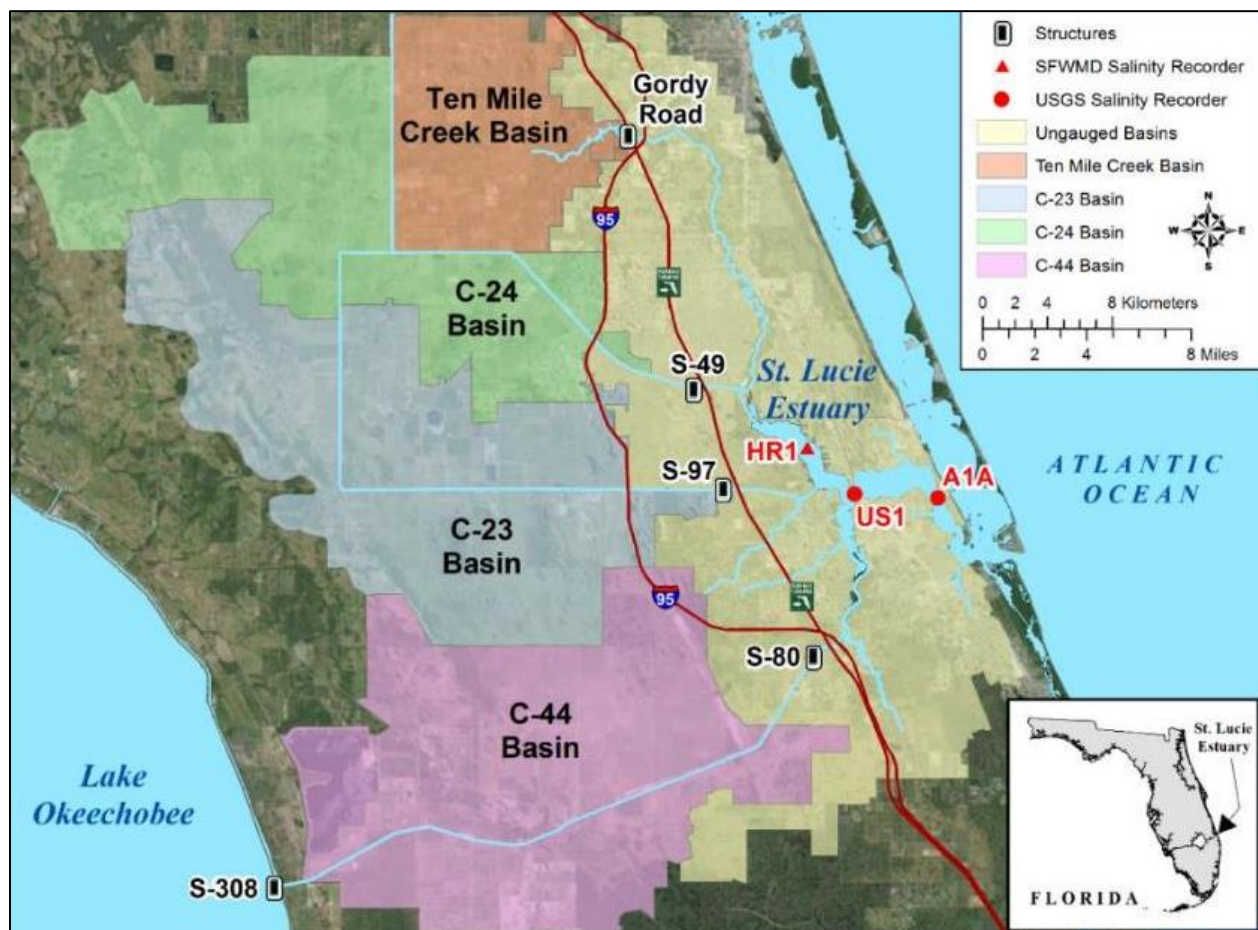


Figure ES-1. Basins, water control structures and salinity monitoring sites in the St. Lucie Estuary.

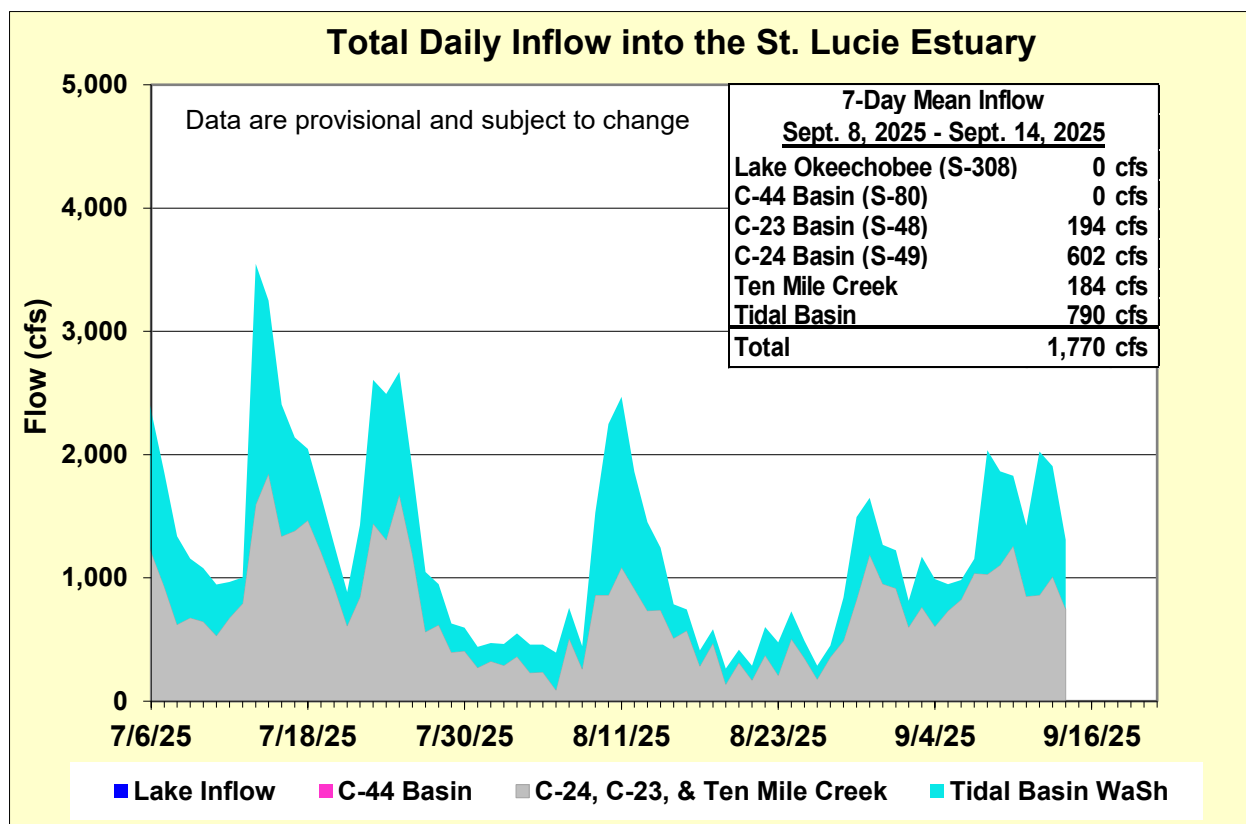


Figure ES-2. Total daily inflows from Lake Okeechobee and runoff from the C-44, C-23, C-24, Ten Mile Creek, and Tidal Basins into the St. Lucie Estuary.

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)	11.5 (12.8)	17.8 (19.7)	10.0 – 25.0
US1 Bridge	16.1 (17.4)	17.9 (20.7)	10.0 – 25.0
A1A Bridge	24.4 (24.3)	28.0 (28.3)	10.0 – 25.0

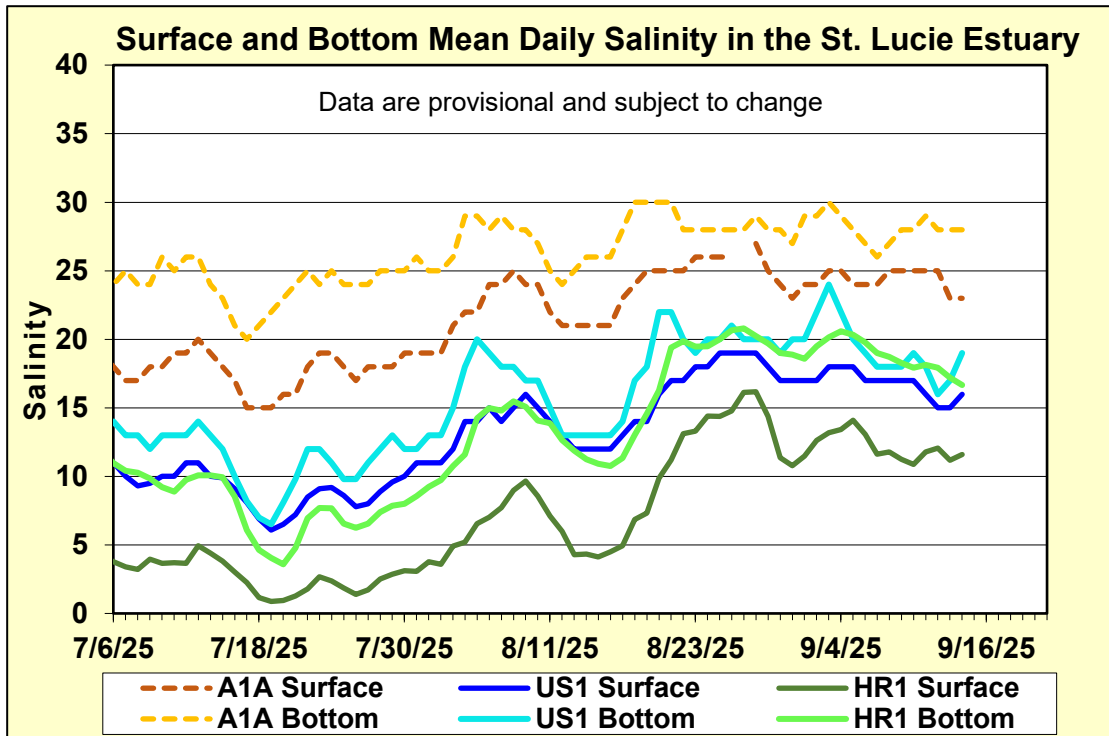


Figure ES-3. Mean daily salinity at the A1A, US1, and HR1 sites in the St. Lucie Estuary.

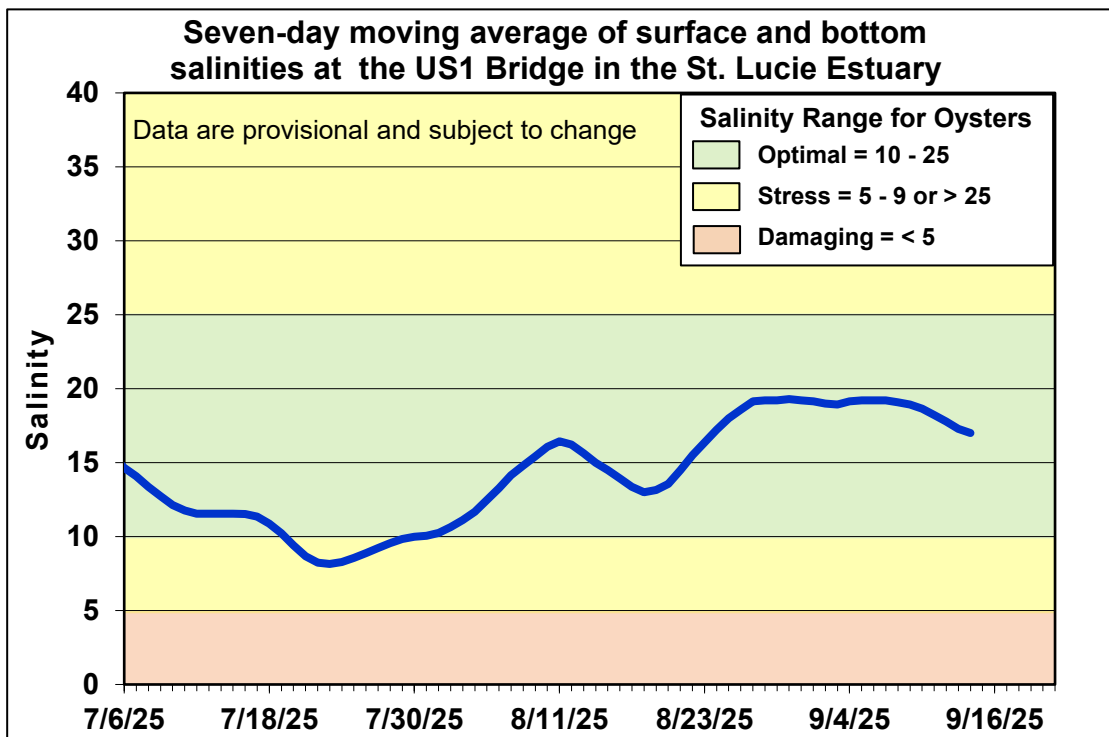


Figure ES-4. Seven-day moving average of the surface and bottom salinities at the US1 Bridge in the St. Lucie Estuary.

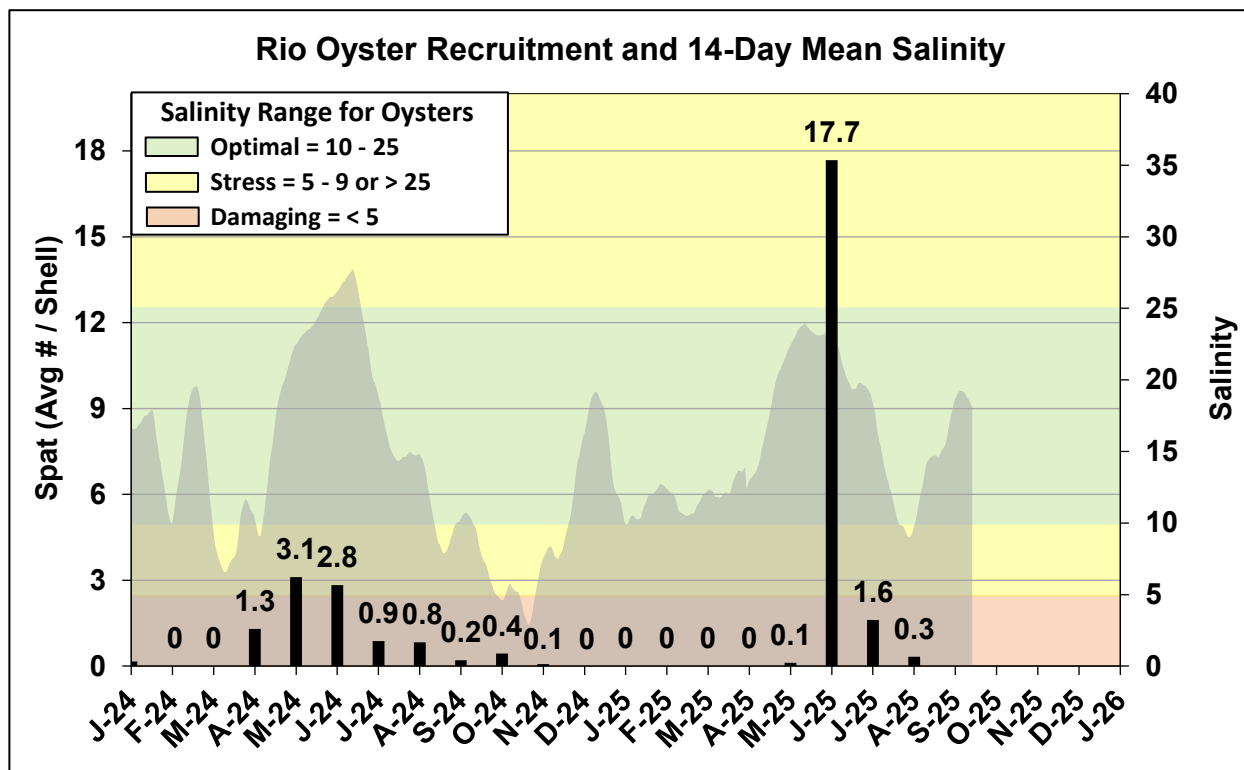


Figure ES-5. Mean oyster recruitment at the Rio oyster monitoring station and 14-day mean salinity at US1 Bridge.

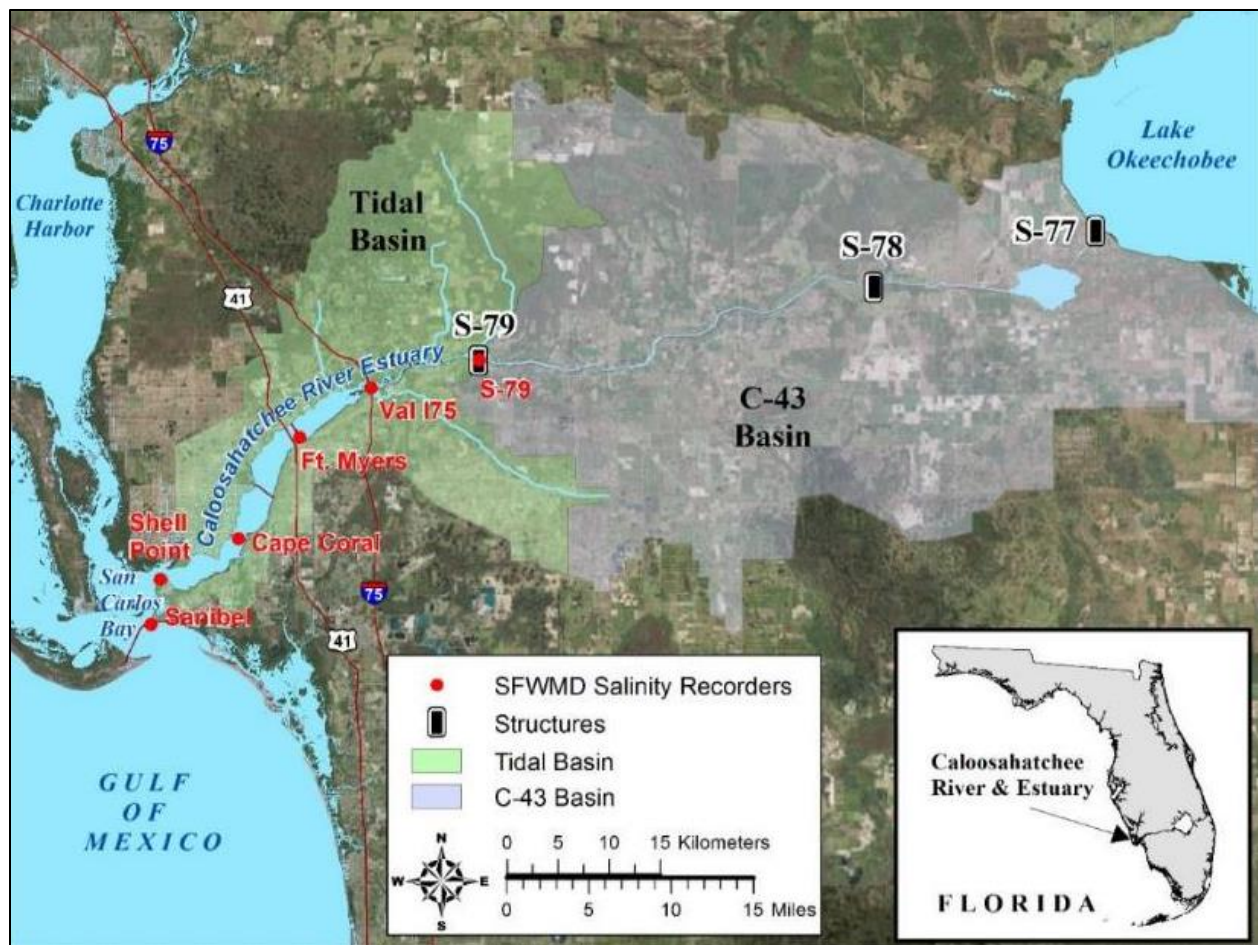


Figure ES-6. Basins, water control structures, and salinity monitoring sites in the Caloosahatchee River Estuary.

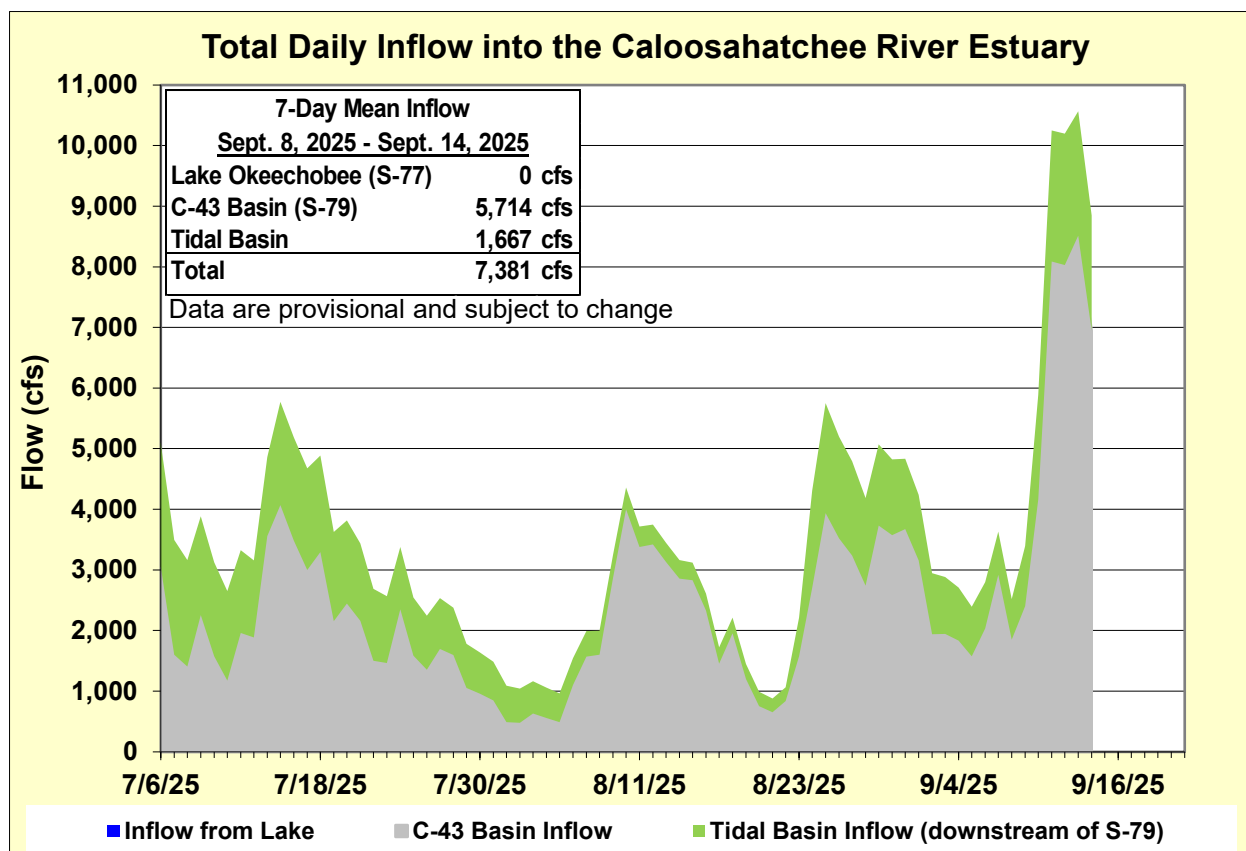


Figure ES-7. Total daily inflows from Lake Okeechobee, and runoff from the C-43 and Tidal basins into the Caloosahatchee River Estuary.

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 (0.2)	0.2 (0.2)	0.0 – 10.0
Fort Myers Yacht Basin	0.3 (0.5)	0.4 (0.5)	0.0 – 10.0
Cape Coral	4.8 (5.9)	6.0 (8.6)	10.0 – 25.0
Shell Point	18.9 (20.9)	20.6 (23.3)	10.0 – 25.0
Sanibel	25.9 (25.0)	25.4 (20.9)	10.0 – 25.0

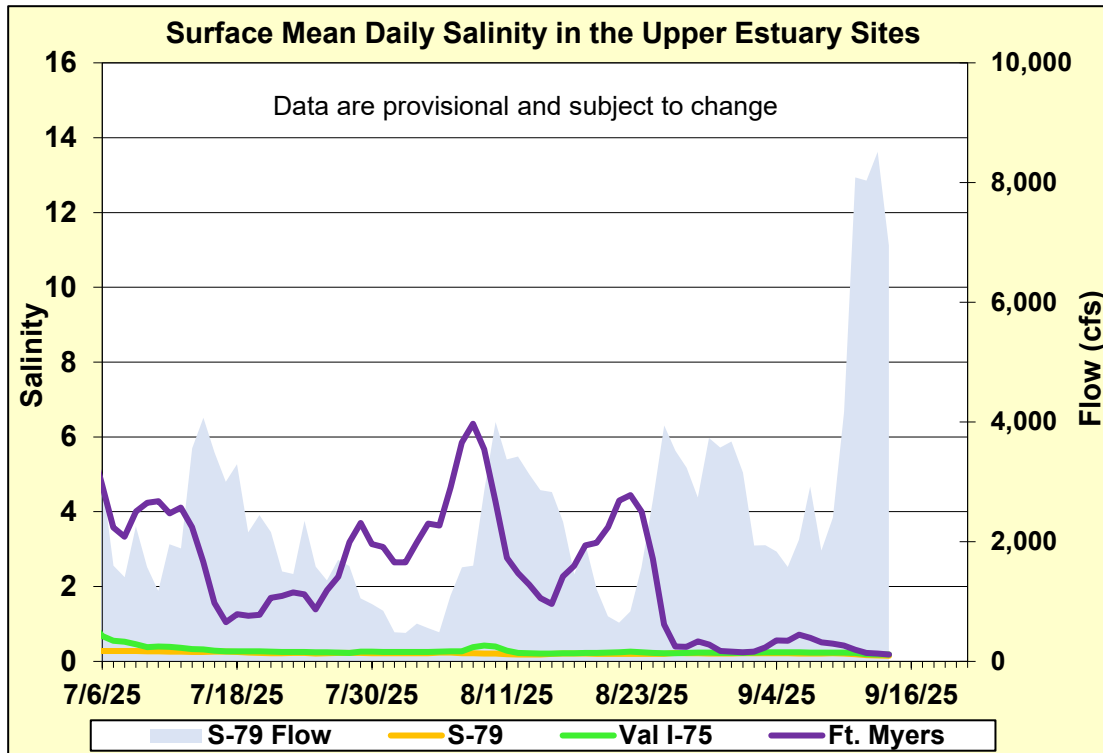


Figure ES-8. Mean daily salinity at upper Caloosahatchee River Estuary monitoring sites and mean daily flow at S-79.

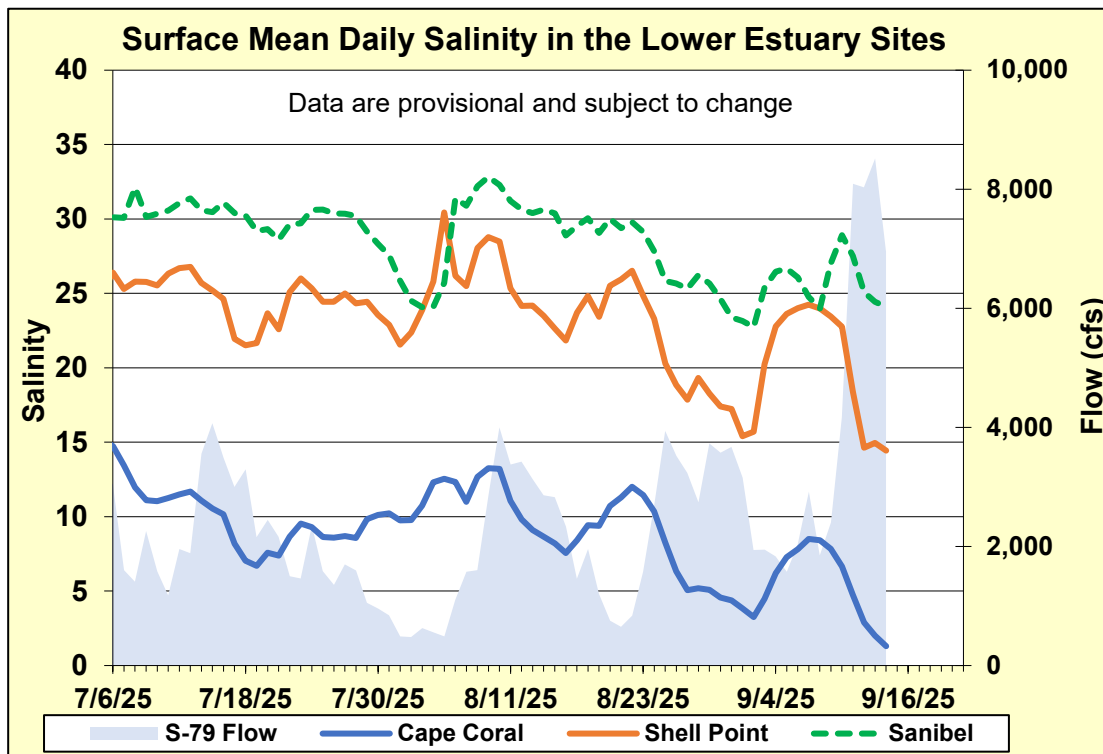


Figure ES-9. Mean daily surface salinity at lower Caloosahatchee River Estuary monitoring sites and mean daily flow at S-79.

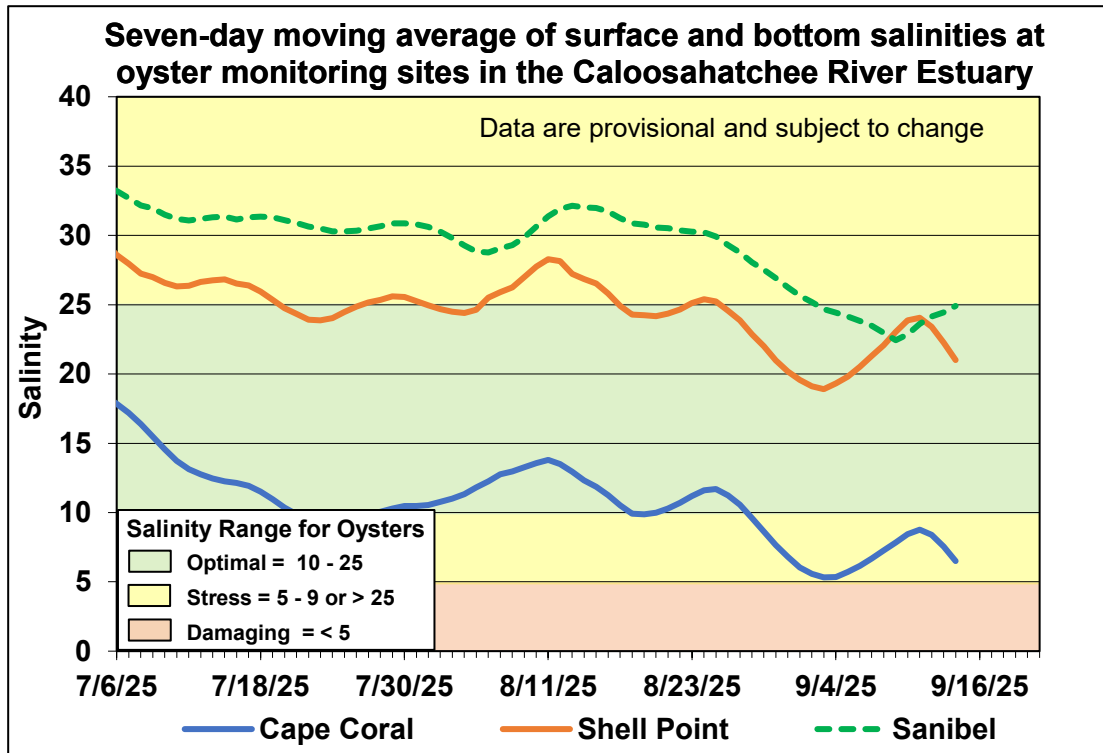


Figure ES-10. Seven-day moving average of surface and bottom salinities at Cape Coral, Shell Point, and Sanibel monitoring sites in the Caloosahatchee River Estuary.

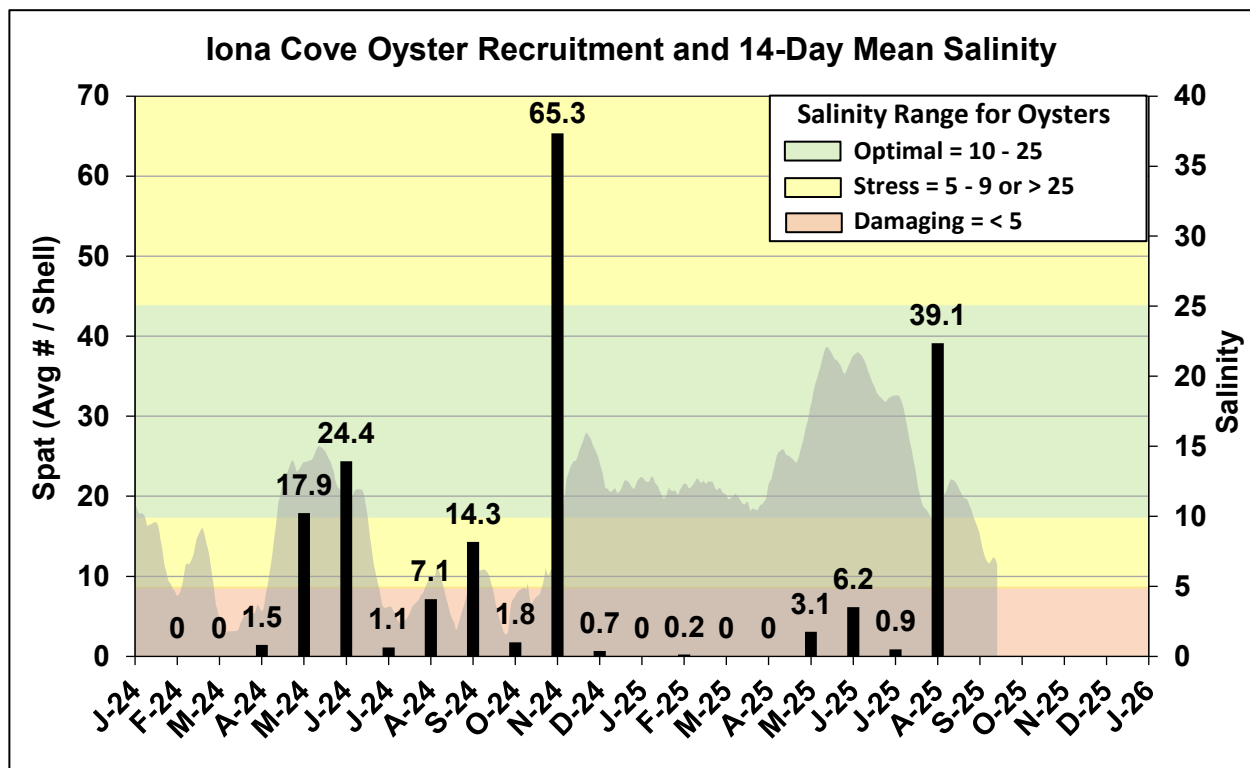


Figure ES-11. Mean oyster recruitment at the Iona Cove oyster monitoring station and 14-day mean salinity at Cape Coral.

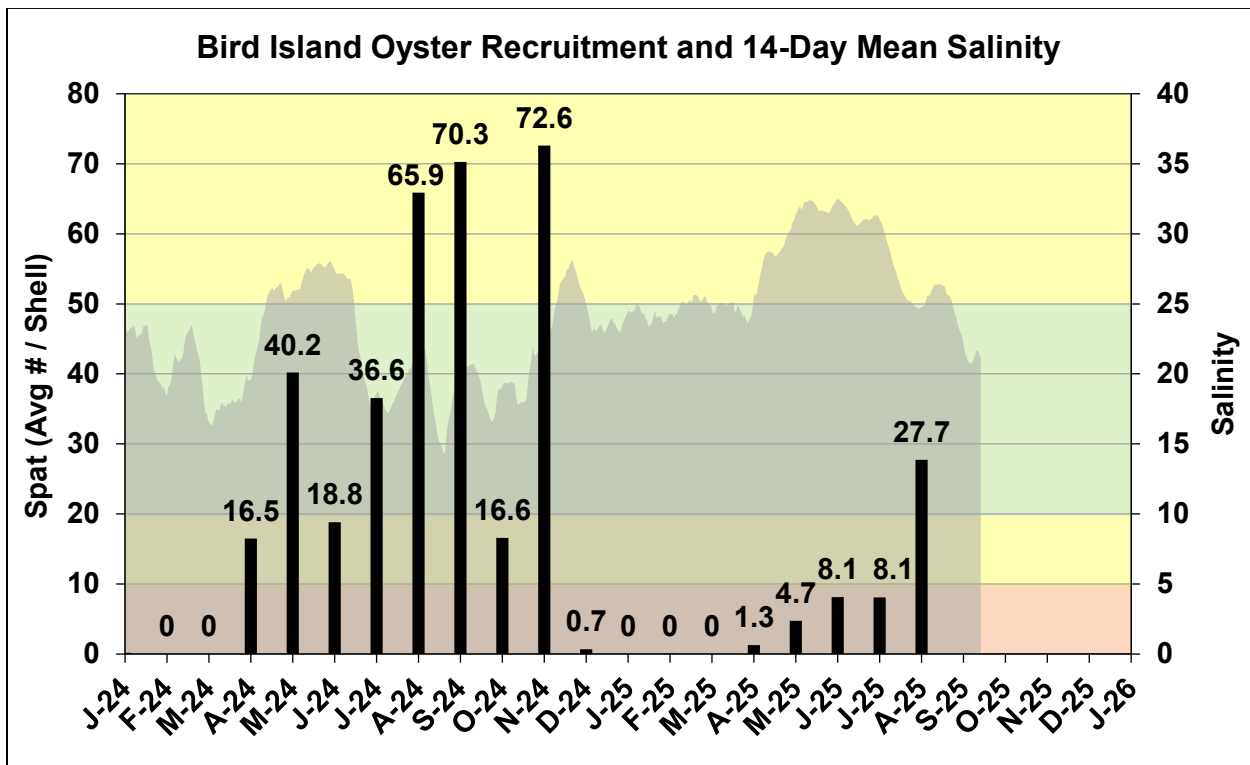


Figure ES-12. Mean oyster recruitment at the Bird Island oyster monitoring station and 14-day mean salinity at Shell Point.

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	1,277	0.6	0.3
B	750	1,277	0.3	0.3
C	1,000	1,277	0.2	0.2
D	1,500	1,277	0.1	0.2
E	2,000	1,277	0.3	0.2

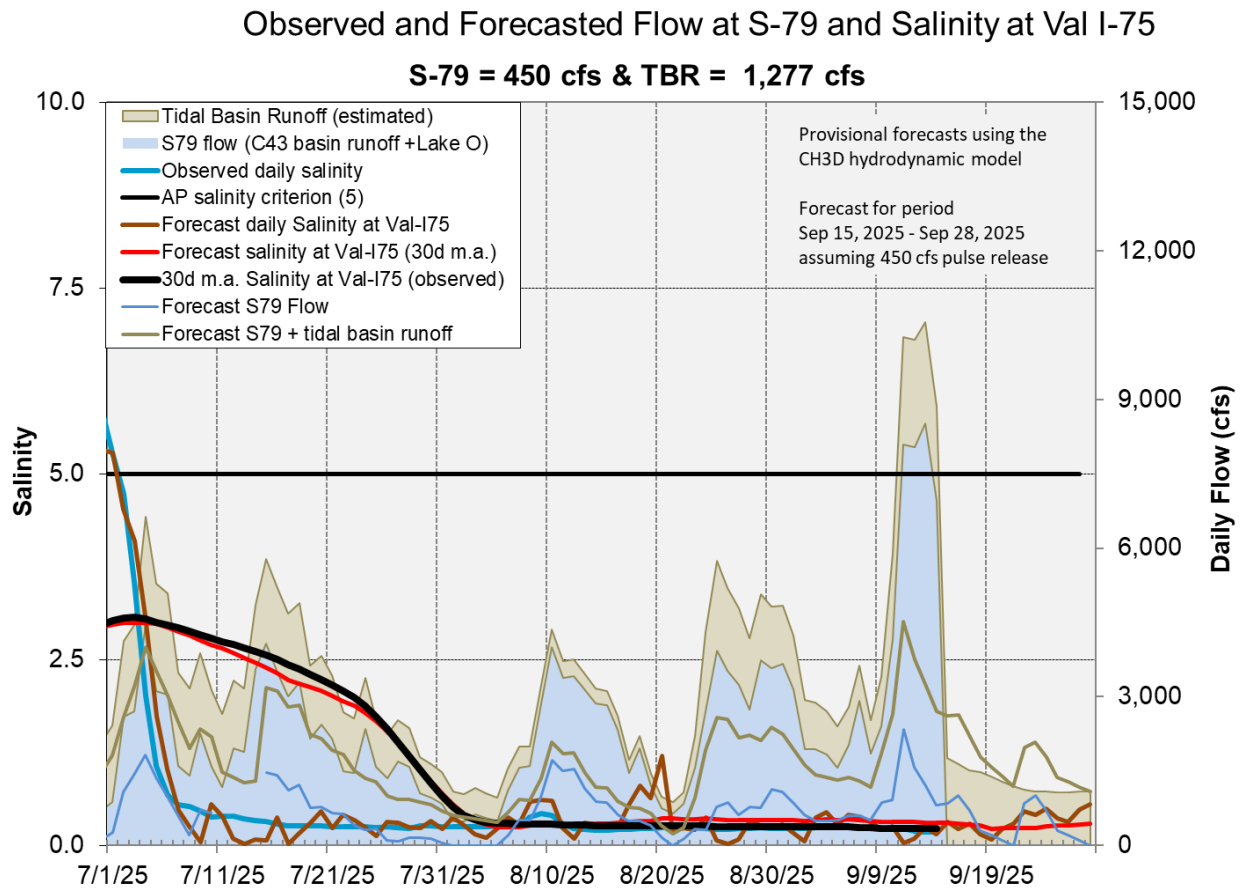


Figure ES-13. Surface salinity forecast at the Val I-75 site assuming a 450 cfs pulse release at S-79.

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 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

Everglades Stormwater Treatment Areas - STAs

- Total WY2026 inflows to STAs (5/1/2025 to 9/14/2025): ~359,300 ac-ft
- Lake Okeechobee releases to FEBs/STAs
 - 9/8/2025 to 9/14/2025: 0 ac-ft
 - WY2026: ~ 32,000 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

Estimated Inflow and Outflow Volumes

Sept. 8 – Sept. 14, 2025

Includes preliminary data

	Total Inflow (acre-feet)	Total Outflow (acre-feet)
STA-1E	500	1,600
STA-1W	1,100	2,750
STA-2	15,950	14,100
STA-3/4	20,100	14,300
STA-5/6	4,200	4,700

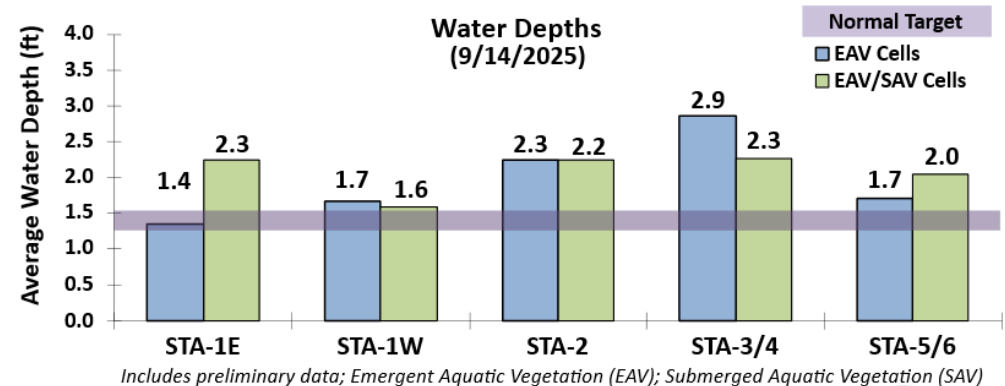


Figure S-1. STA depths and flow volumes

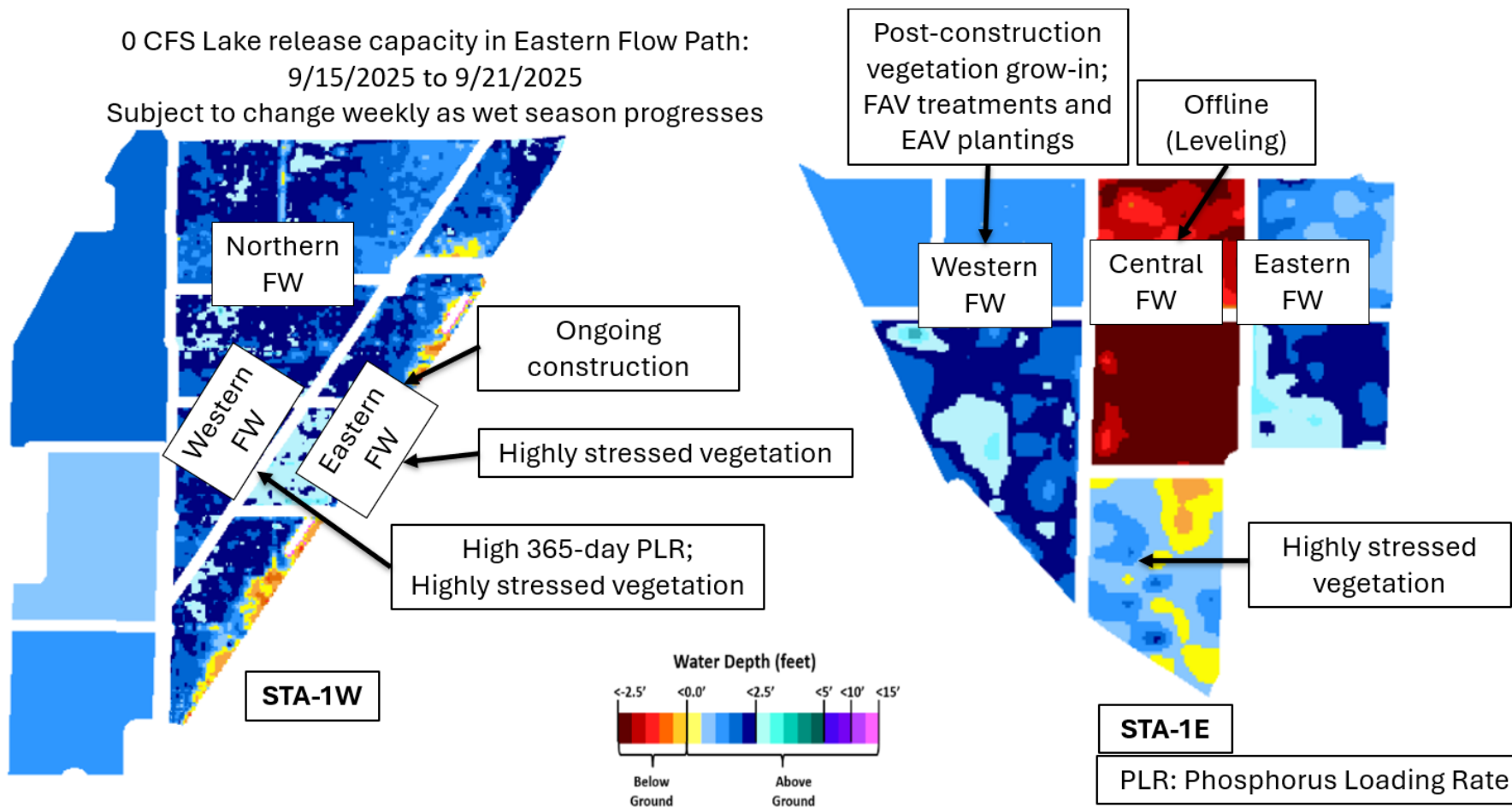


Figure S-2. Eastern Flow Path Weekly Status Report

100 CFS Lake release capacity in Central Flow Path:
9/15/2025 to 9/21/2025

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

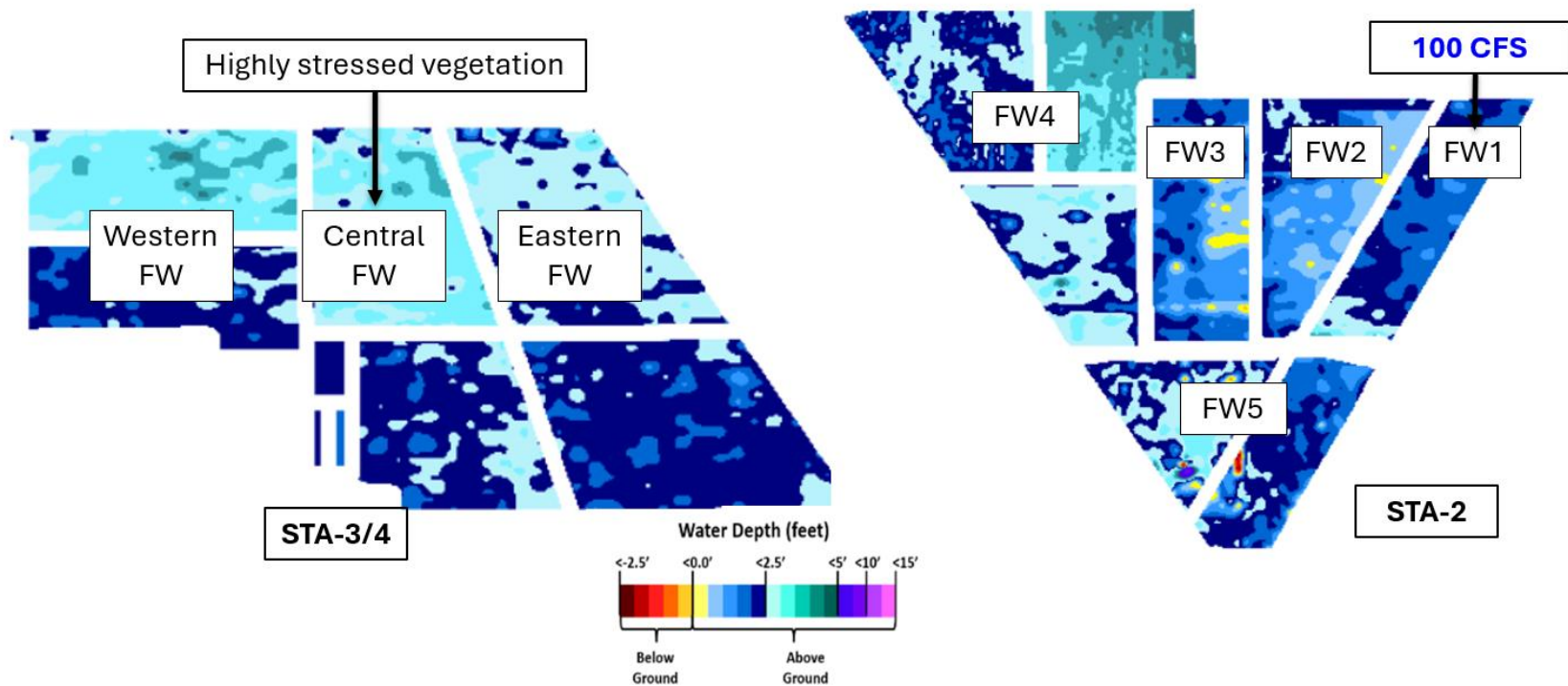


Figure S-3. Central Flow Path Weekly Status Report

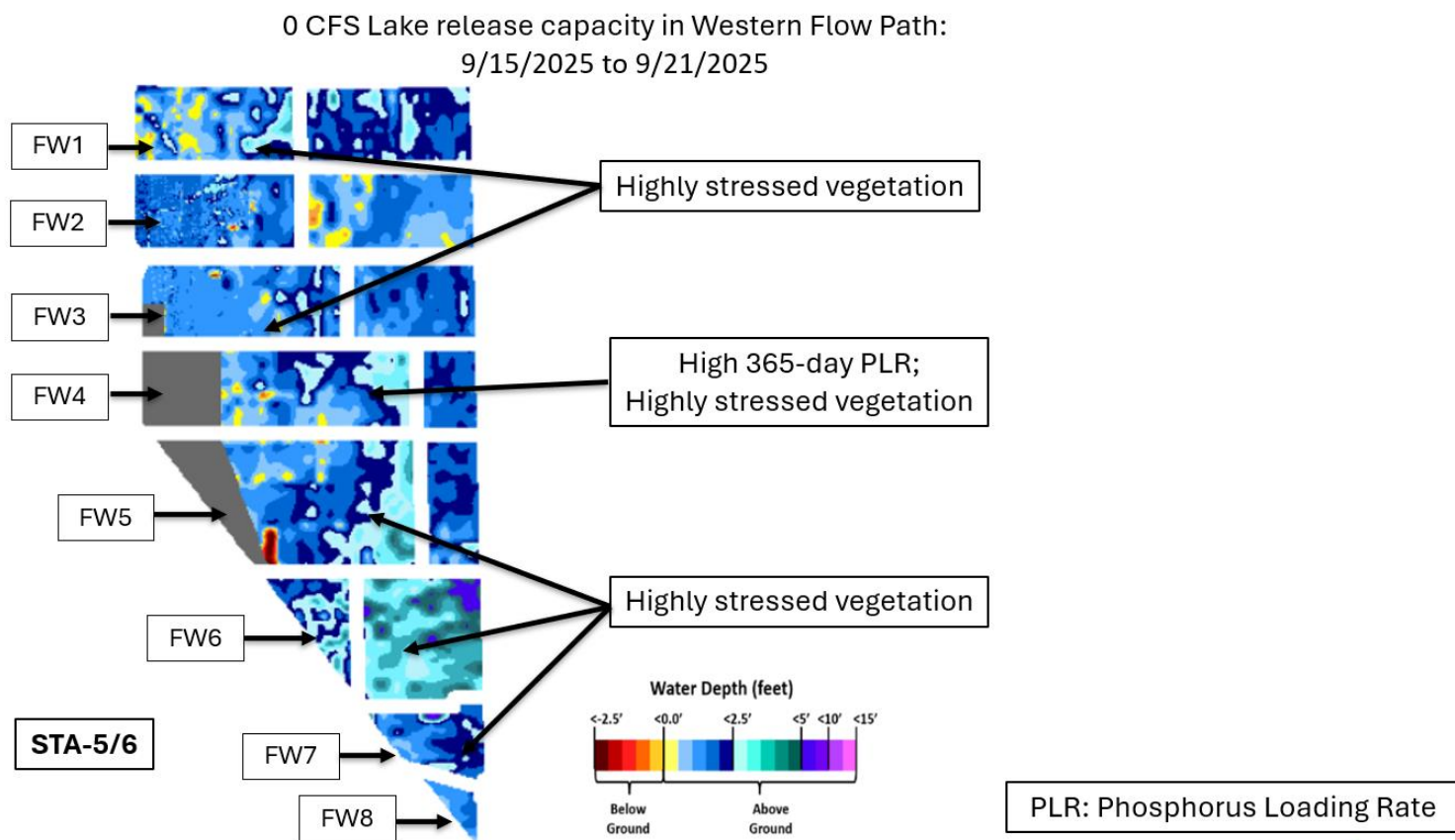


Figure S-4. Western Flow Path Weekly Status Report

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 continued to increase over the last week and was 0.57 feet below the A1 Zone regulation line on Sunday, September 14, 2025. WCA-2A: Stage rose quickly last week at the 2-17 gauge and remained above the A1 Zone regulation line by 0.95 feet on Sunday. WCA-3A: The 3-gauge average remains in Zone B but continues to ascend. On Sunday, stages were 0.79 feet below the Zone A regulation line. WCA-3A North: Stage at Gauge 62 (NW corner) continued to increase last week and remains below the Upper Schedule regulation line. On Sunday, stage was 0.63 feet below that line. See **Figures EV-1** through **EV-4**.

Water Depths

The SFWDAT model output for September 14, 2025, illustrates a continued rehydration of WCA-1, but a very small portion of the north remains just slightly above ground level. WCA-2A depths have risen quickly over the last two months toward average and above average in the south. Depths increase towards average in WCA-3A North but remain relatively low in WCA-3A South limiting aquatic prey production. Big Cypress Basin depths have risen over the last two months, but drier conditions remain near Tamiami trail. Hydrologic connectivity has improved compared to one month ago in all three of the major sloughs within Everglades National Park (ENP). Water depth conditions remain in the 10th percentile across WCA-3A South; WCA-1 and WCA-3A North remains below average; Big Cypress National Preserve and ENP exhibit both below and above average depths; and WCA-2A is at or above average across most of that basin. See **Figures EV-5** through **EV-6**.

Taylor Slough and Florida Bay

Most stages increased across Taylor Slough over the past week, and the average change was an increase of 0.17 feet. Changes ranged from –0.03 feet at EPSW in the C-111 area to +0.31 feet Taylor Slough Bridge (TSB) in the northern slough (**Figures EV-8** and **EV-9**). Taylor Slough water levels are above the recent average (WY1993-2016) for this time of year by 4.9 inches compared to before the Florida Bay Initiative (starting in 2017), an increase of 1.9 inches relative to last week's comparison. The Craighead Pond (CP) and TSB stages remain below the estimated historic average circa 1900 by 0.42 and 0.97 feet, respectively.

Average Florida Bay salinity was 30.3, a decrease of 1.5 from last week. Salinity changes ranged from –6.6 at Joe Bay (JB) in the eastern nearshore region to +2.1 at Buoy Key (BK) in the western region (**Figure EV-8**). Salinity is above the estimated historic average circa 1900 and near the WY2001-2016 Interquartile Range (IQR) 75th percentile in the eastern and western regions but is closer to the 50th percentile in the central region (**Figure EV-10**). Average Florida Bay salinity remains above its recent average (WY1993-2016) for this time of year by 3.0, a decrease of 1.1 relative to last week.

Salinity at the Taylor River (TR) station in the mangrove zone (tracked for the Florida Bay MFL) was 25.0, an increase of 0.6 from last week (**Figure EV-11**). The 365-day moving sum of flow from the five major creeks (McCormick Creek, Taylor River, Mud Creek, Trout Creek, West Highway Creek) was 204,989 acre-feet, an increase of 13,293 acre-feet from last week (**Figure EV-11**).

Average rainfall across Taylor Slough and Florida Bay was approximately 2.82 inches over the past week, based on the 18 gauges used for this report. Rainfall ranged from 0.76 inches at Whipray Basin (WB) in the central region to 5.20 inches at BK in the western region (**Figure EV-12**). Wind directions and speeds in Florida Bay ranged from 0.2 mph W on September 10th to 20.2 mph E on September 12th (**Figure EV-12**).

Average daily flow from the five major creeks totaled 1,728 acre-feet, with net positive flows for the week. Total daily creek flow ranged from 560 acre-feet on September 8th to 3,294 acre-feet on September 12th (**Figure EV-13**). Average daily flow was 3,407 acre-feet below estimated historical levels (circa 1900). Average daily flow from Alligator creek was 43 acre-feet, with net positive flows for the week (**Figure EV-13**).

Implications for water management.

Despite above average rainfall, WCA-3A South continues to experience unseasonably dry conditions. Rainfall over the past two weeks has increased water depths throughout EPA, but continued increases in depth are required this wet season to support aquatic fauna recovery in the central Everglades, protect peat soils and plants from future drought stress, and recover from wildfires. 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. This has the potential to further extend the recent run of poor wading bird nesting into the 2026 and 2027 nesting seasons. With the potential for another La Niña dry season, conserving water within the WCAs may prove ecologically prudent. Taylor Slough depths remain above the recent average as do average salinities in Florida Bay, but all regions of the Bay have trended down away from the hypersalinity threshold over the last two weeks. Salinities in the central region of the Bay approach the 50th percentile. Florida Bay will benefit from freshwater input to the system down Taylor Slough 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	3.72	+0.34
WCA-2A	4.39	+0.51
WCA-2B	3.78	+0.37
WCA-3A	2.90	+0.28
WCA-3B	3.69	+0.16
ENP	3.21	+0.24

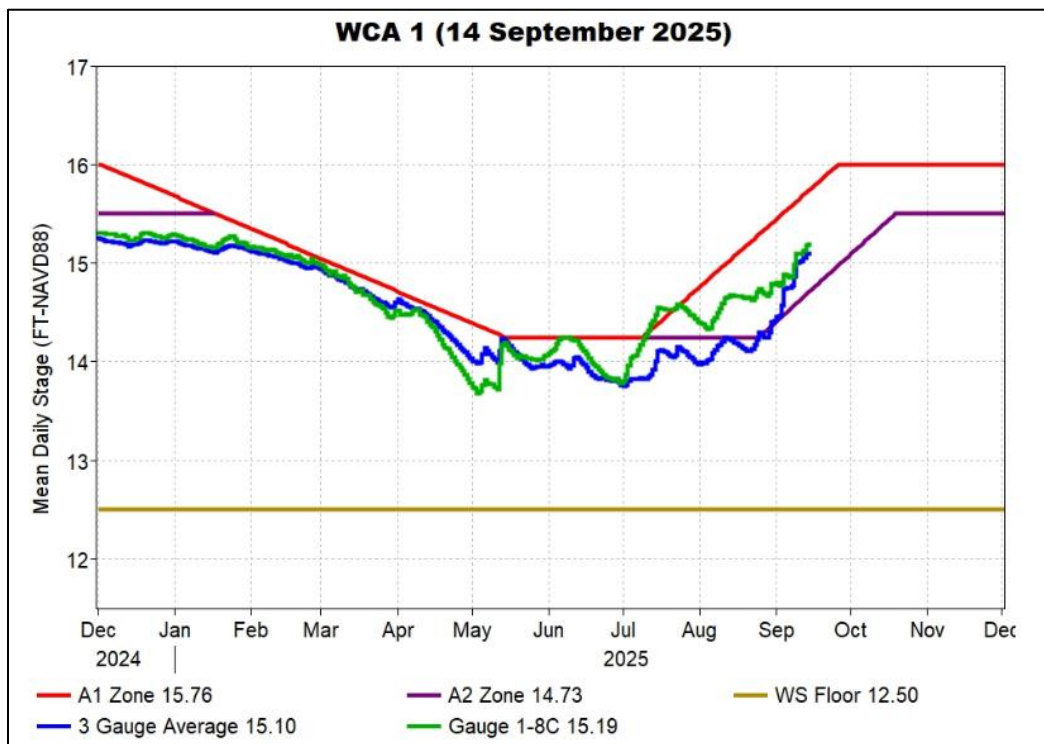


Figure EV-1. WCA-1 stage hydrographs and regulation schedule.

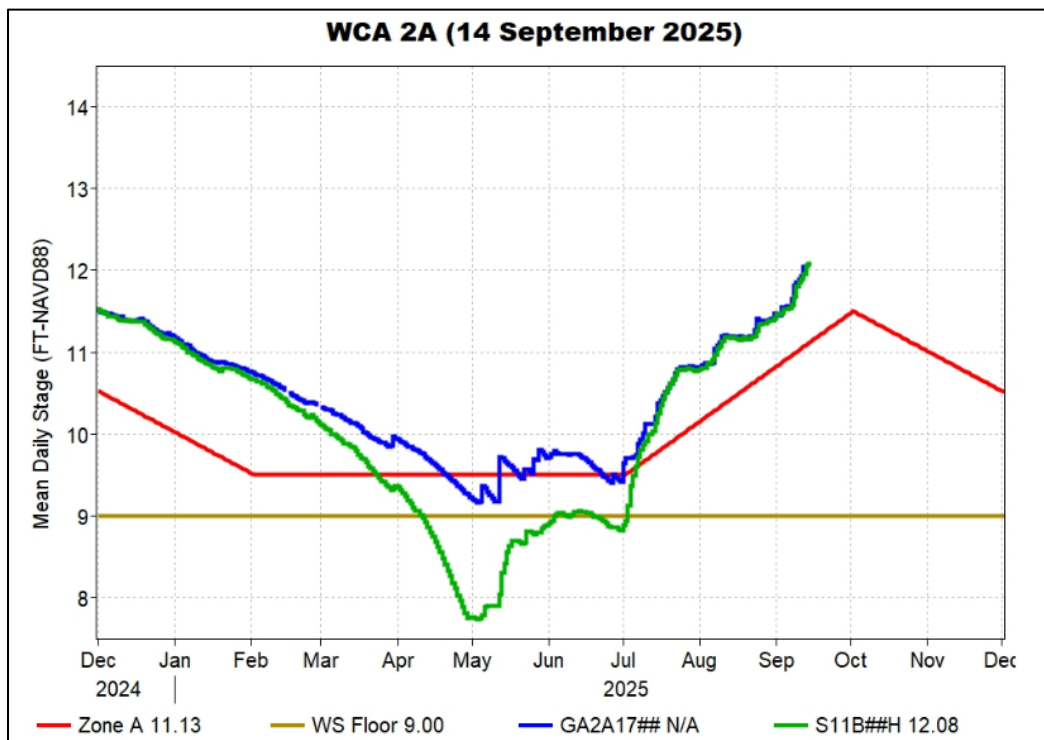


Figure EV-2. WCA-2A stage hydrographs and regulation schedule.

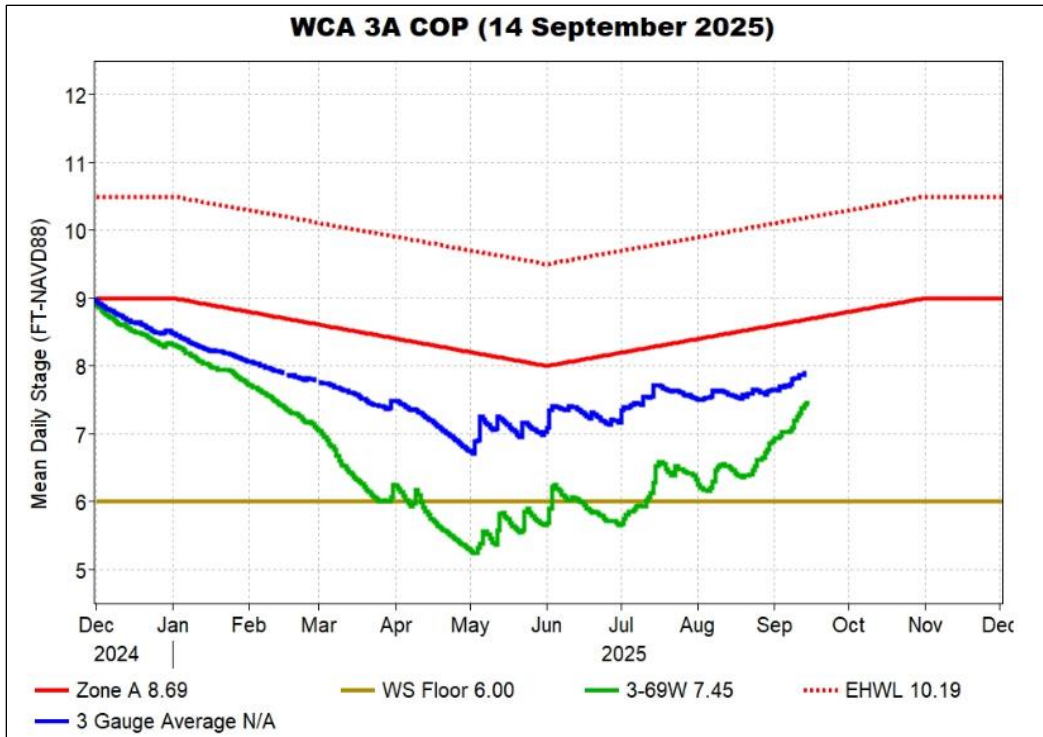


Figure EV-3. WCA-3A stage hydrographs (three-gauge average, 3-69W) and regulation schedule.

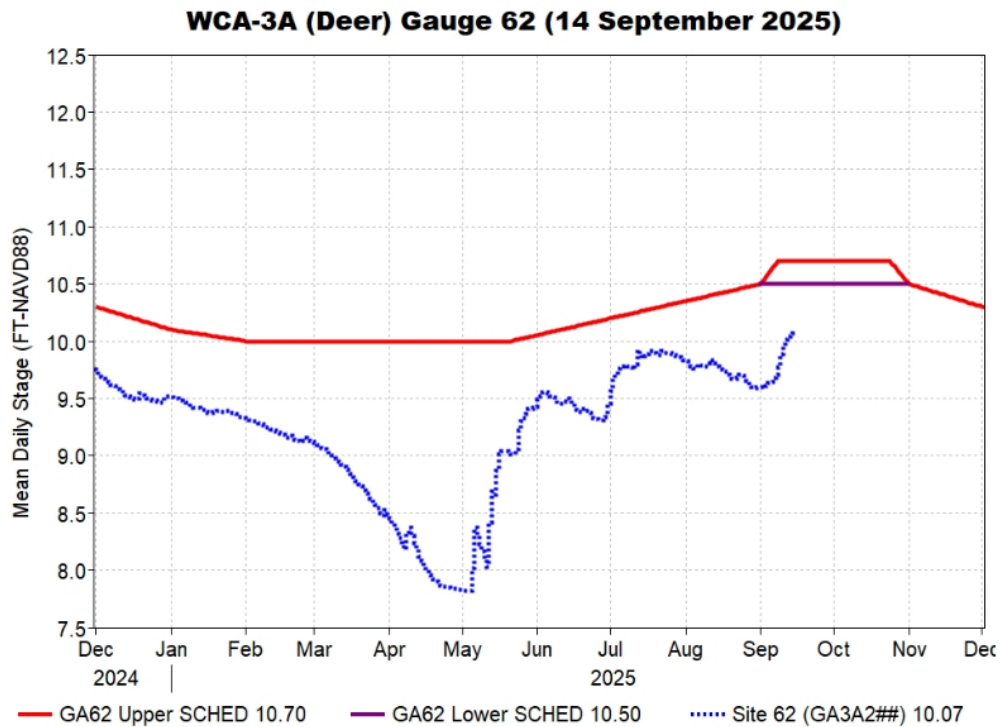


Figure EV-4. WCA-3A stage hydrograph (Deer gauge; Site 62) and GA62 regulation schedule.

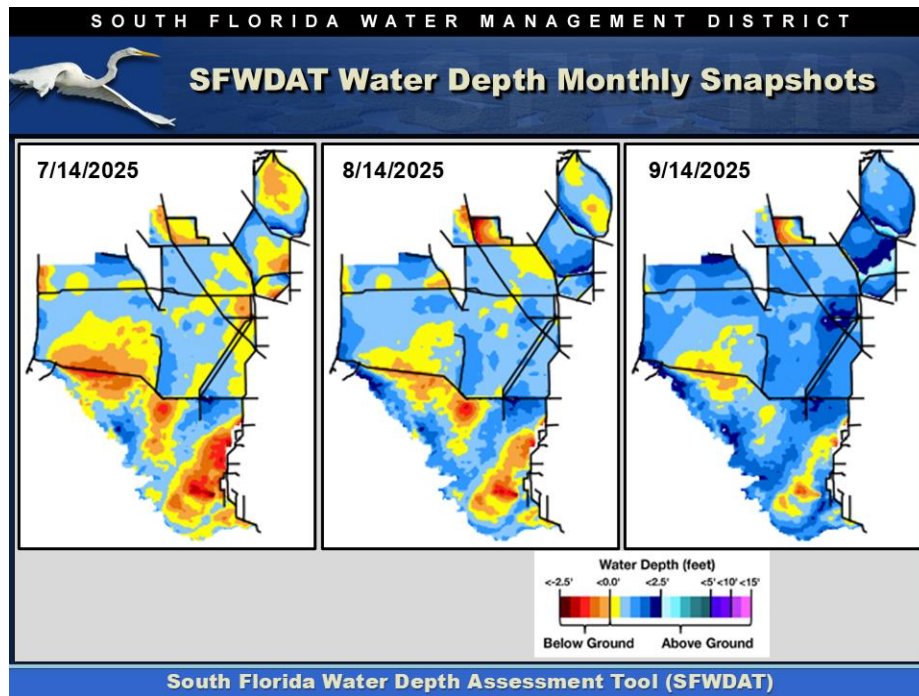


Figure EV-5. Everglades water depths from two months ago (left), one month ago (center) and present (right), based on SFWDAT.

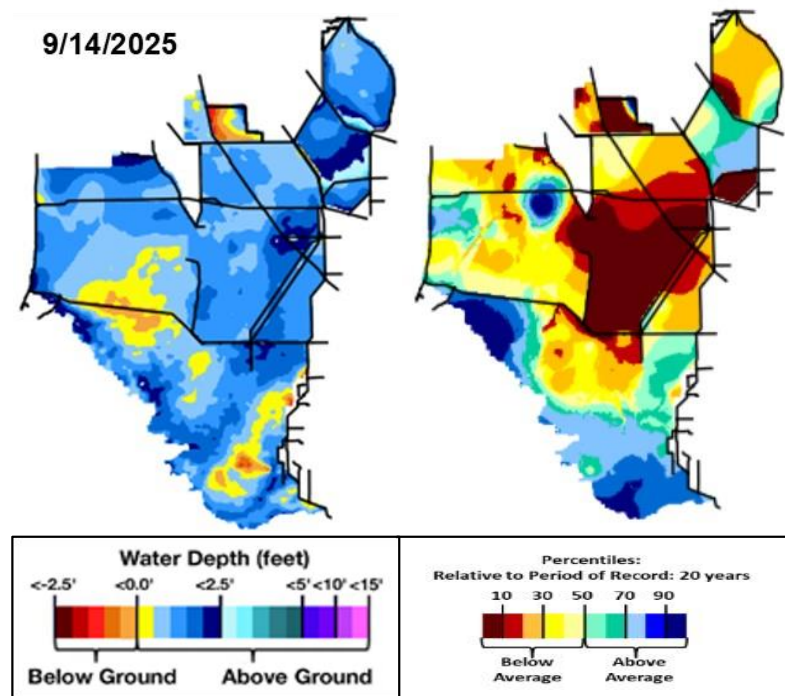


Figure EV-6. Present water depths (September 14, 2025) compared to the day of year relative to average (percentile) over the previous 20 years.

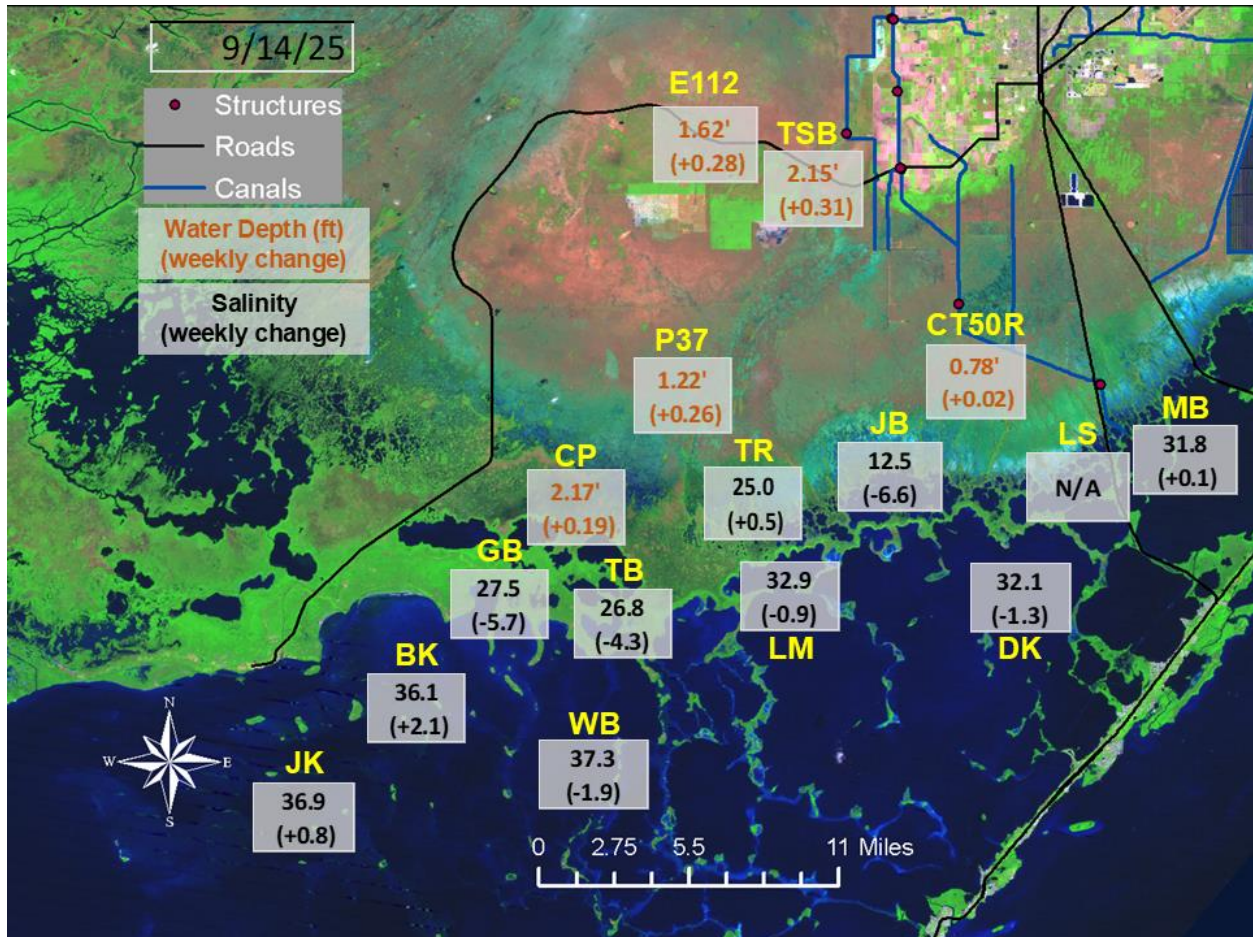


Figure EV-7. Taylor Slough water depths and Florida Bay salinities with changes since August 24th.

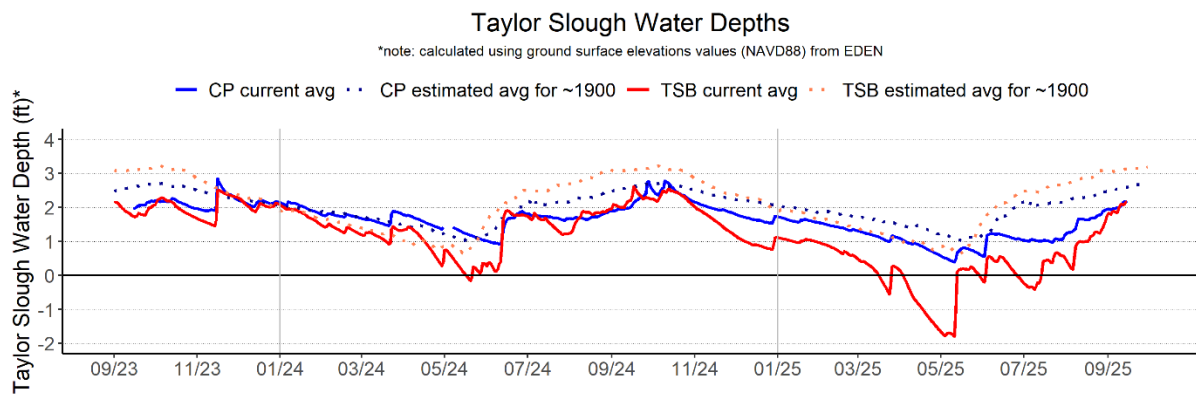


Figure EV-8. Taylor Slough water depth time series for Taylor Slough Bridge (TSB; northern slough) and Craighead Pond (CP; southern slough).

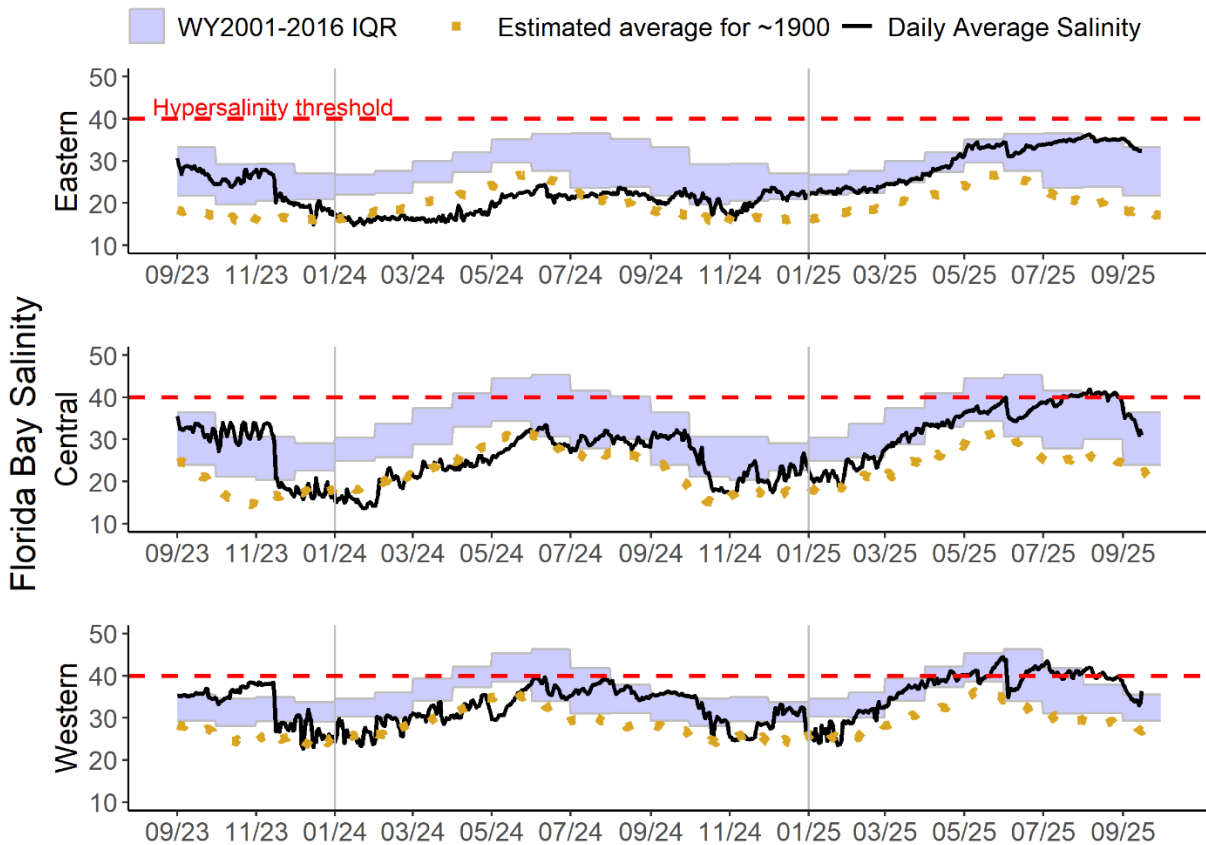


Figure EV-9. Eastern (top panel), Central (middle panel) and Western (bottom panel) Florida Bay daily average salinities with WY2001-2016 interquartile (25-75 percentile) ranges (IQR) and estimated historical daily average salinities. The hypersalinity threshold indicates the level at which salinities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

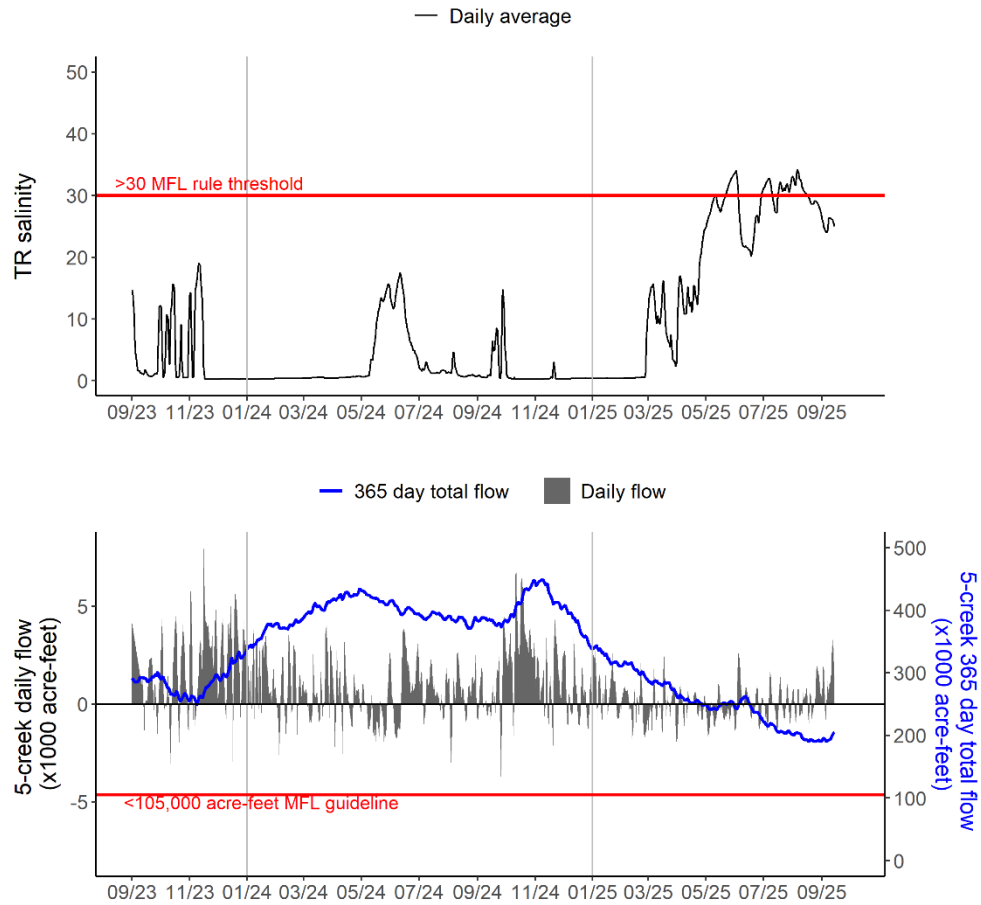


Figure EV-10. Salinity at Taylor River (TR; top) and creek inflow to Florida Bay (bottom) from the five major creeks (McCormick Creek, Taylor River, Mud Creek, Trout Creek, and West Highway Creek). The 30-day moving average salinity and 365-day total creek flow are tracked for the Florida Bay MFL criteria.

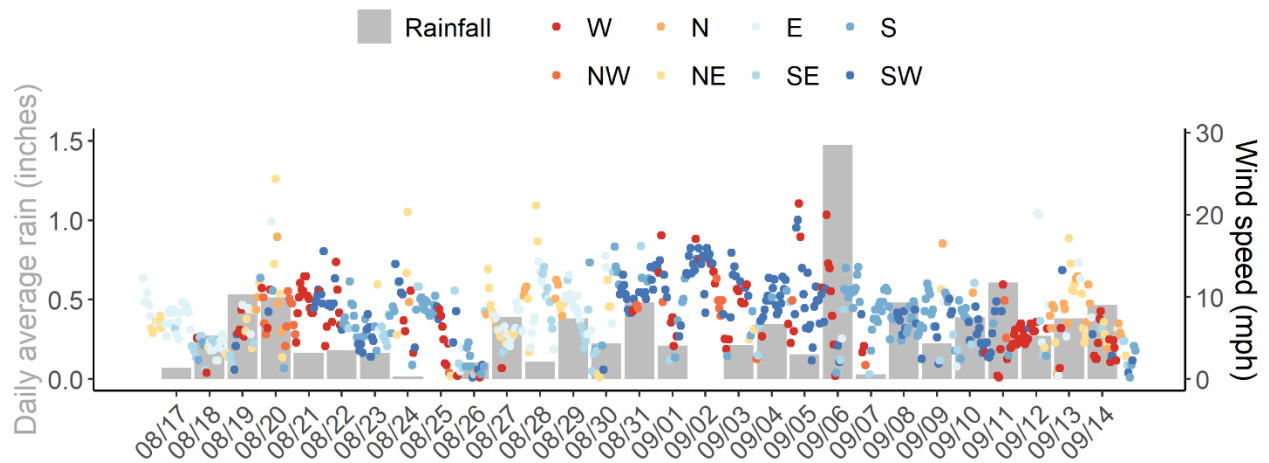


Figure EV-11. Daily average rain across Taylor Slough and Florida Bay, along with hourly average wind speed and direction (measured at Long Key) in Florida Bay over the past four weeks.

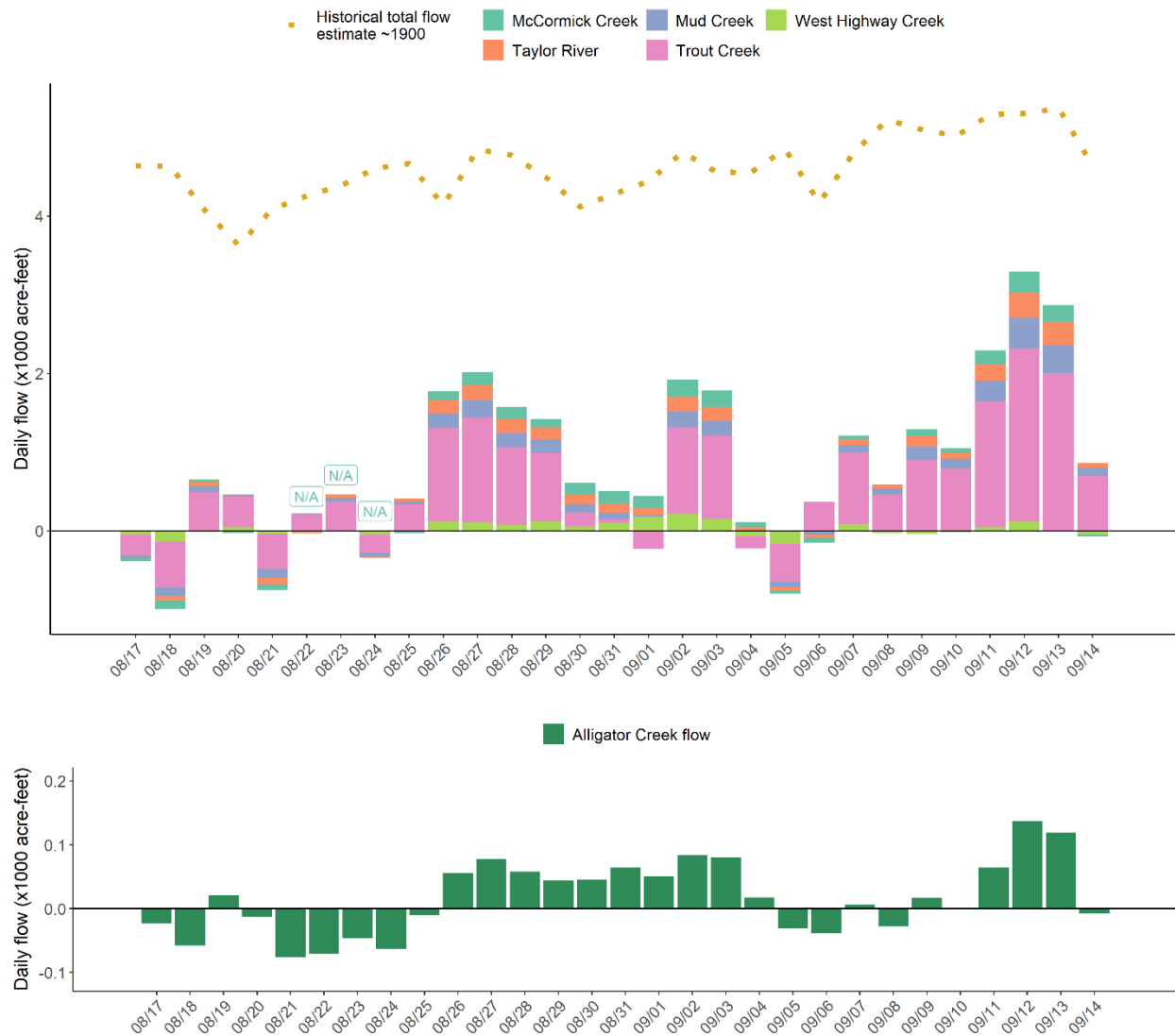


Figure EV-12. Top: daily average creek flow summed between the five major creeks with estimated historical daily flow over the past four weeks. Bottom: daily average creek flow from Alligator Creek over the past four weeks.

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

SFWMD Everglades Ecological Recommendations, September 14, 2025 (red is new)			
	Weekly change	Recommendation	Reasons
WCA-1	Stage increased by 0.34 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 0.51 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 0.37 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 0.17 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 0.45 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 0.24 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.
Southern WCA-3A S	Stage decreased by 0.24 feet		
WCA-3B	Stage increased by 0.16 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 changes ranged from - 0.03 feet to +0.31 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	Salinity changes ranged from -6.6 to +2.1	Move water southward as possible.	When available, provide freshwater to promote water movement.
FB- Salinity	Salinity changes ranged from -9.4 to -0.6	Move water southward as possible.	When available, provide freshwater to promote water movement.