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

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: November 19, 2025

SUBJECT: Weekly Environmental Conditions for Systems Operations

Summary

Weather Conditions and Forecast

Insufficient moisture and a strongly stable atmosphere will preclude most rainfall this week as high pressure builds into the region. The only chance of rainfall will occur along parts of the east coast and Florida Keys where onshore flow could drive light isolated showers towards the coast.

Afterwards, the next chance of rainfall will occur late in the weekend and early next week as an upper-air disturbance over the Carolinas enters the western Atlantic, sending a cold front southward into Florida. However, only fast-moving light showers are likely ahead of the front, especially over Kissimmee Valley and parts of the east coast. The front could push further southward and dissipate over south Florida by mid next week.

For the 7-day period ending next Tuesday morning, total SFWMD rainfall is forecast to remain much below average.

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 KCH followed the Headwaters Revitalization Schedule (HRS) Increment 1 Temporary Deviation Discharge Plan. Weekly average discharge on November 16, 2025, was 1,400 cfs at S-65 and 1,400 cfs at S-65A, respectively. Mean weekly water depth on the Kissimmee River floodplain decreased by 0.06 feet to 0.63 feet. The weekly average concentration of dissolved oxygen in the Kissimmee River increased from the previous week's value of 4.7 mg/L to 5.8 mg/L, which is above both the potentially lethal level of 1.0 mg/L and the stressful level of 2.0 mg/L for Florida bass and other species (**Figure KB-6**).

Lake Okeechobee

Lake Okeechobee stage was 12.49 feet NAVD88 (13.79 ft NGVD29) on November 16, 2025, which was 0.11 feet lower than the previous week and 0.06 feet lower than a month ago. Average daily inflows (excluding rainfall) decreased compared to the previous week, dropping from 1,610 cfs to 1,380 cfs. Average daily outflows (excluding

evapotranspiration) increased compared to the previous week, going from 1,390 cfs to 1,930. The most recent non-obscured satellite image from November 16, 2025, NOAA's Harmful Algal Bloom Monitoring System suggests moderate bloom activity in the southern region of the lake.

Estuaries

Total inflow to the St. Lucie Estuary averaged 271 cfs over the past week with no flow coming from Lake Okeechobee. Mean salinities increased 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 545 cfs over the past week with 234 cfs coming from Lake Okeechobee. Over the past week, surface salinities increased at Fort Myers and Cape Coral and decreased at the other sites across the estuary. Salinities exceeded the optimal range (0-10) for tape grass at the Ft. Myers site in the upper estuary. Salinities were in the optimal range (10-25) for adult oysters at Cape Coral and in the upper stress range (>25) at Shell Point and Sanibel.

Stormwater Treatment Areas

For the week ending Sunday, October 19th, 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 523,250 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, there is no capacity for Lake releases in the STAs.

Everglades

Near zero rainfall fell last week across the EPA and upstream and recession rates responded, remaining characterized as fair but elevated near the poor range (greater than 0.012 feet per week). Southern WCA-2A remains unseasonably deep, while a majority of WCA-3A remains dry, in the 10th percentile, as it has for most of the water year. Below average depths in the central Everglades limit aquatic prey production and the predators that rely upon them (wading birds and herpetofauna). Starting off the dry season with very low water depths in WCA-3A will likely mean that wading bird nesting will be below average for the fifth consecutive year and damaging dry conditions can be expected by the end of the dry season especially if dry conditions persist as predicted by La Nina forecast. Taylor Slough stages on average decreased again last week but remain above the recent average for this time of year. Average Florida Bay salinities increased again last week and remained above the recent average; the western region salinities are approaching the 75th percentile for this time of year, while the eastern and central regions remain near the 50th percentile.

Supporting Information

Kissimmee Basin

Upper Kissimmee

On November 16, 2025, mean daily lake stages were 57.0 feet NAVD88 (at schedule) in East Lake Toho, 53.9 feet NAVD88 (0.1 feet above schedule) in Lake Toho, and 49.2 feet NAVD88 (2.4 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 November 16, 2025, mean weekly discharge was 1,400 cfs at S-65 and 1,400 cfs at S-65A. Mean weekly discharge from the Kissimmee River was 1,500 cfs at S-65D and 1,400 at S-65E, respectively (**Table KB-2**). Mean weekly headwater stages were 45.2 feet NAVD88 at S-65A and 32.6 feet NAVD88 at S-65D. Mean weekly river channel stage decreased by 0.1 feet from the previous week's value of 35.6 feet to 35.5 feet NAVD88 (**Figure KB-4**). Mean weekly water depth on the Kissimmee River floodplain decreased by 0.06 feet to 0.63 feet (**Table KB-2**, **Figure KB-5**). The weekly average concentration of dissolved oxygen in the Kissimmee River increased from 4.7 mg/L the previous week to 5.8 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 B2, target flows of 1,400 cfs at S-65A. When stage decreases into Zone B3, 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)	
							11/16/25	*11/9/25*
Lakes Hart and Mary Jane	S-62	LKMJ	37	59.9	R	59.9	0.0	0.0
Lakes Myrtle, Preston and Joel	S-57	S-57	30	61.1	R	61.0	0.1	0.0
Alligator Chain	S-60	ALLI	7	63.0	R	63.0	0.0	0.0
Lake Gentry	S-63	LKGT	28	60.4	R	60.4	0.0	0.1
East Lake Toho	S-59	TOHOE	56	57.0	R	57.0	0.0	0.0
Lake Toho	S-61	TOHOW	110	53.9	R	53.8	0.1	0.1
Lakes Kissimmee, Cypress and Hatchineha	S-65	KUB011 LKIS5B	1400	49.2	T	51.6	-2.4	-1.9

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.

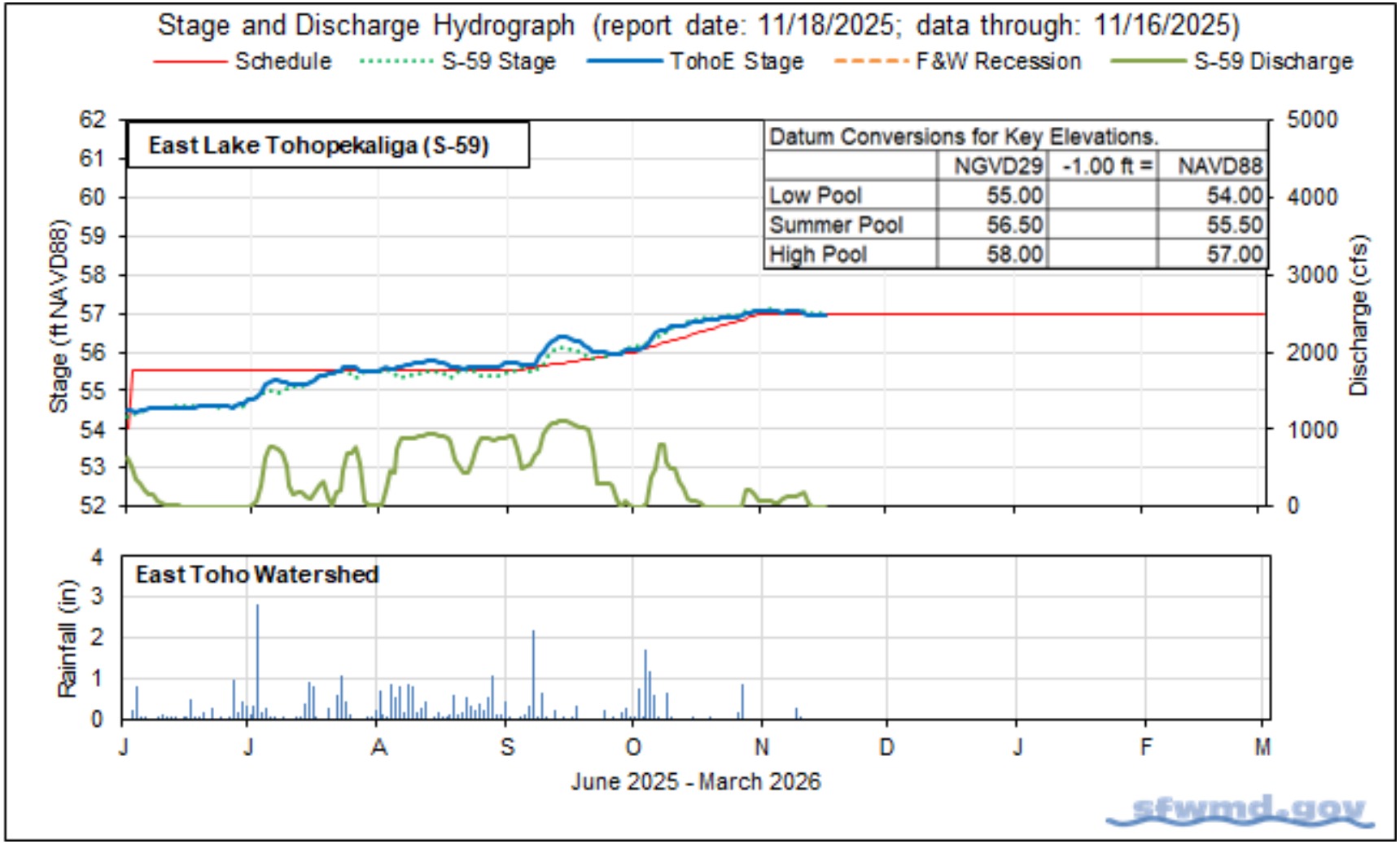


Figure KB-1. East Lake Toho regulation schedule, stage, discharge, and rainfall.

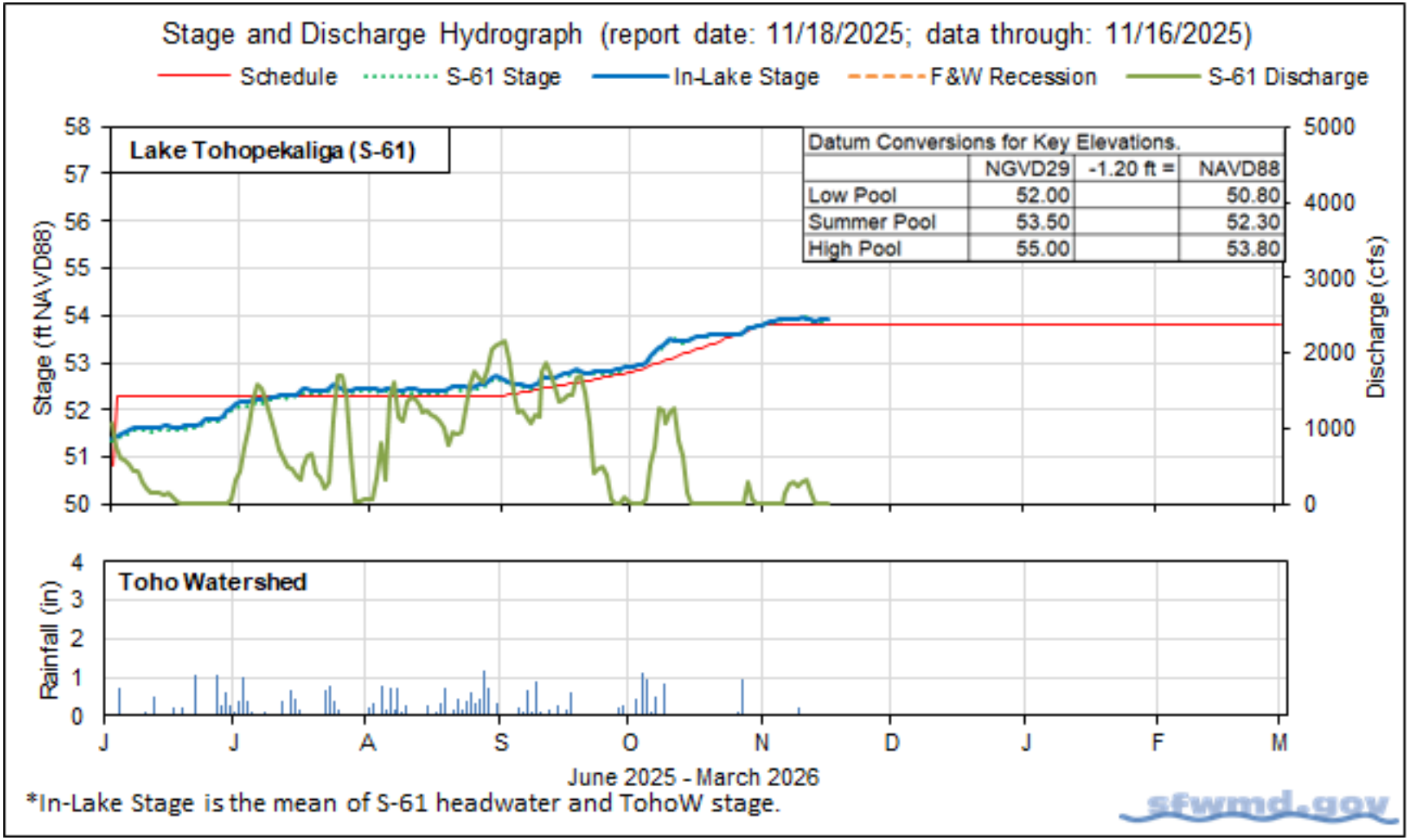


Figure KB-2. Lake Toho regulation schedule, stage, discharge, and rainfall.

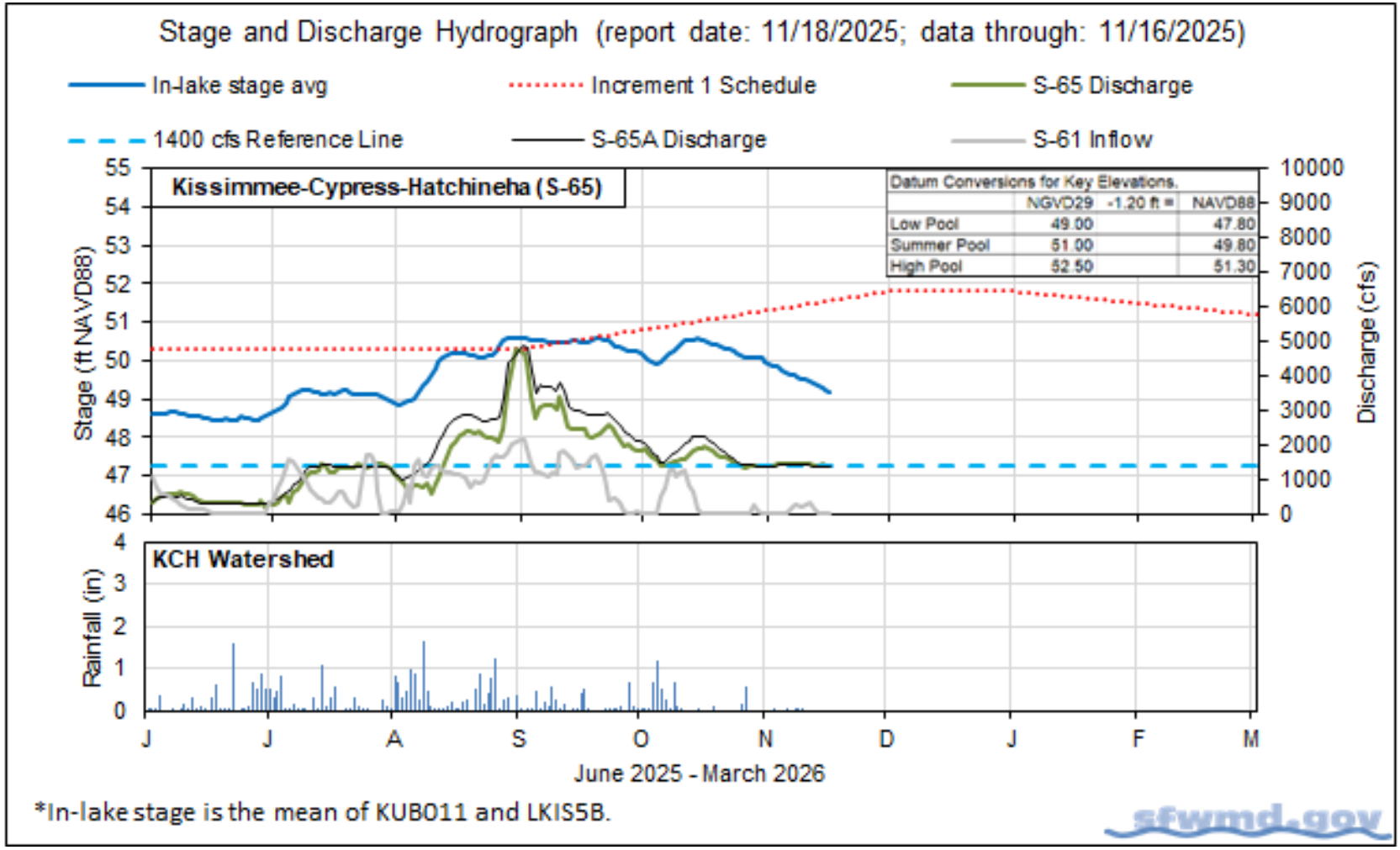


Figure KB-3. Lakes Kissimmee, Cypress and Hatchineha regulation schedule, stage, discharge, and rainfall.

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			
		11/16/25	11/16/25	11/9/25	11/2/25	10/26/25
Discharge	S-65	1,400	1,400	1,500	1,400	1,500
Discharge	S-65A[a]	1,400	1,400	1,400	1,400	1,600
Headwater Stage (feet NAVD88)	S-65A	45.1	45.2	45.2	45.2	45.1
Discharge	S-65D[b]	1,400	1,500	1,600	2,100	2,400
Headwater Stage (feet NAVD88)	S-65D[c]	25.5	32.6	32.8	33.1	33.5
Discharge (cfs)	S-65E[d]	1,300	1,400	1,500	2,000	2,300
Discharge (cfs)	S-67	0	0	0	0	0
Dissolved Oxygen (mg/L) [e]	Phase I, II/III river channel	6.6	5.8	4.7	2.8	1.9
River channel mean stage (feet NAVD88) [f]	Phase I river channel	35.5	35.5	35.6	35.9	36.4
Mean depth (feet) [g]	Phase I & II/III floodplain	0.61	0.63	0.69	0.86	1.06

a. Combined discharge from main and auxiliary structures.

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

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

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

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

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

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

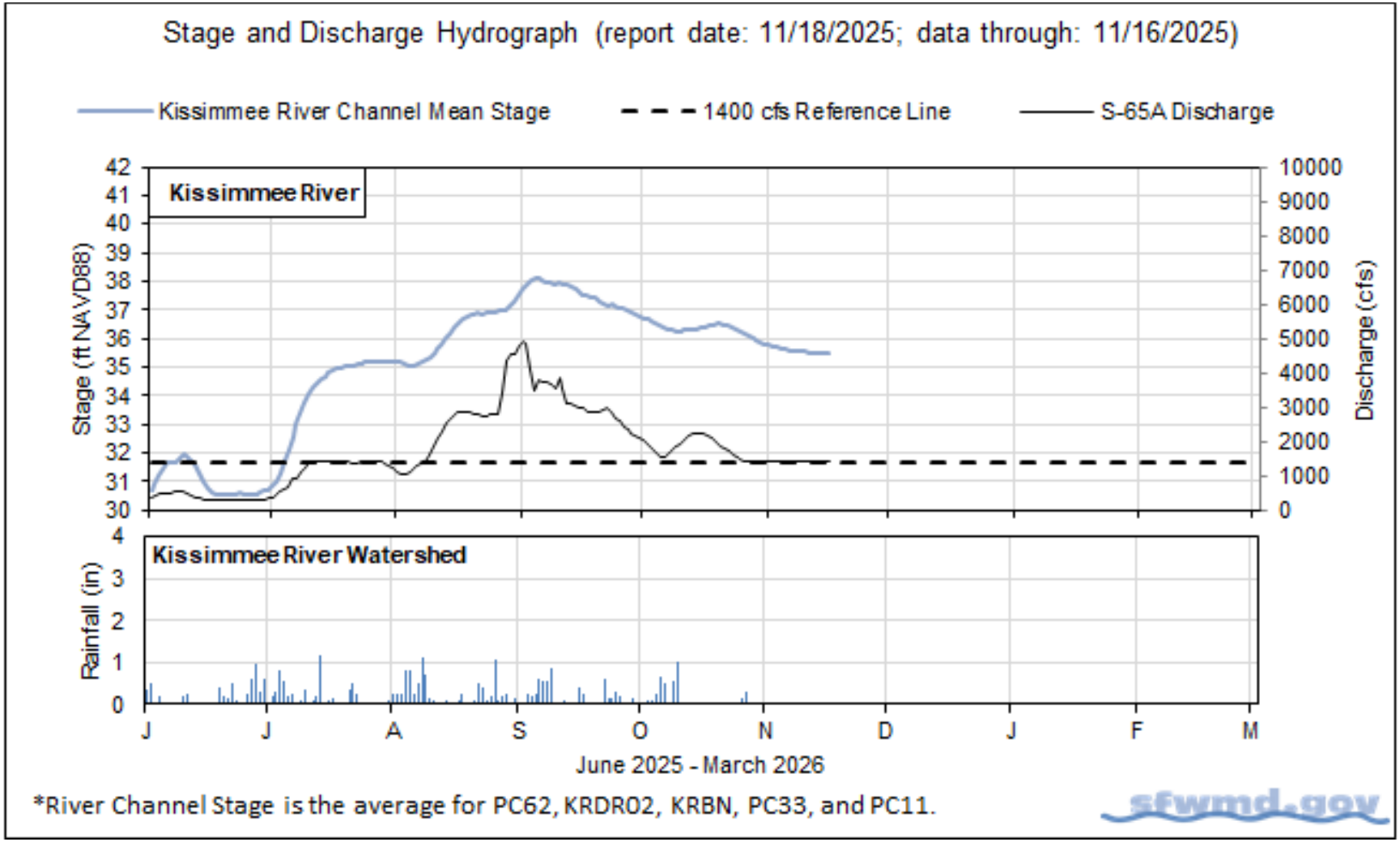


Figure KB-4. Kissimmee River stage, discharge, and rainfall.

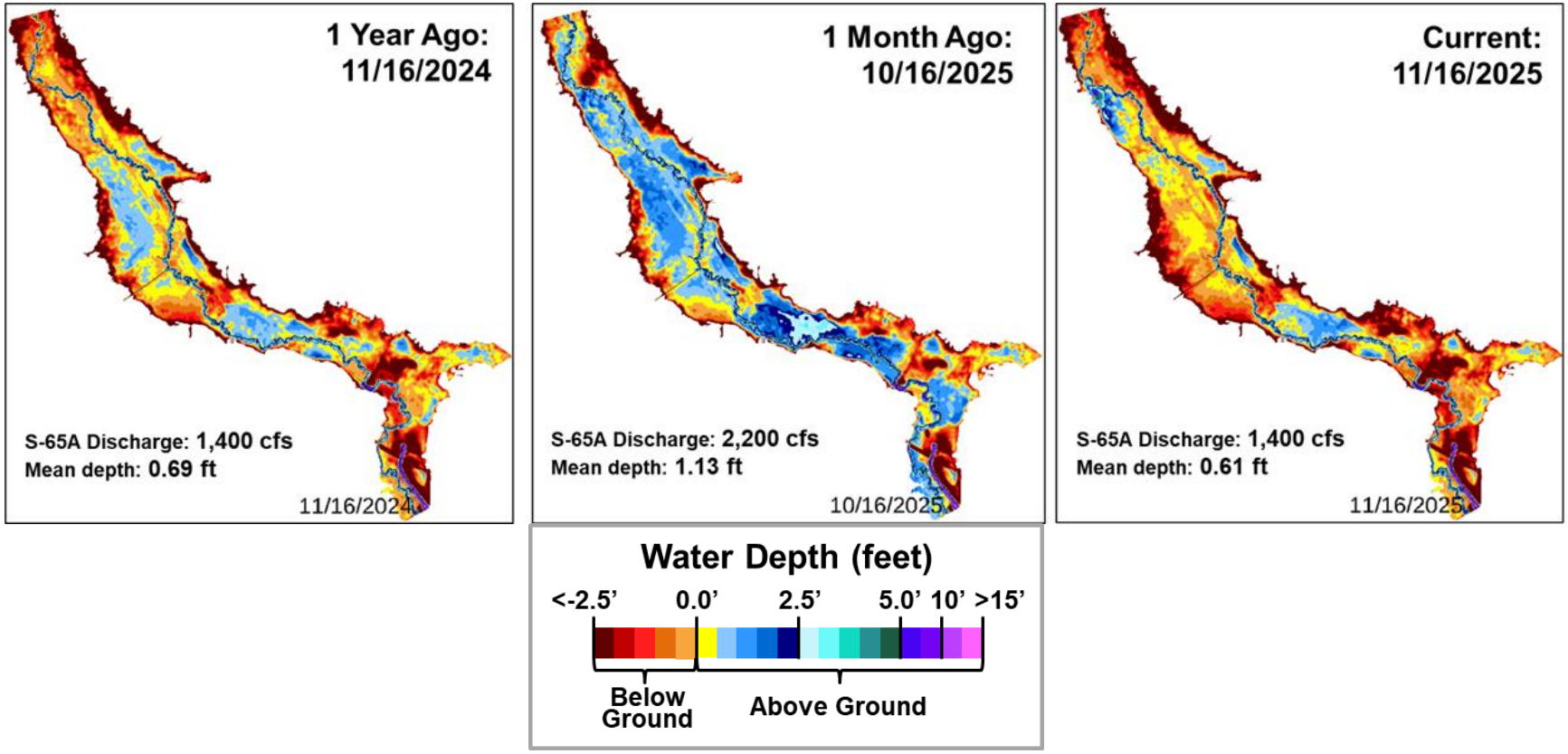
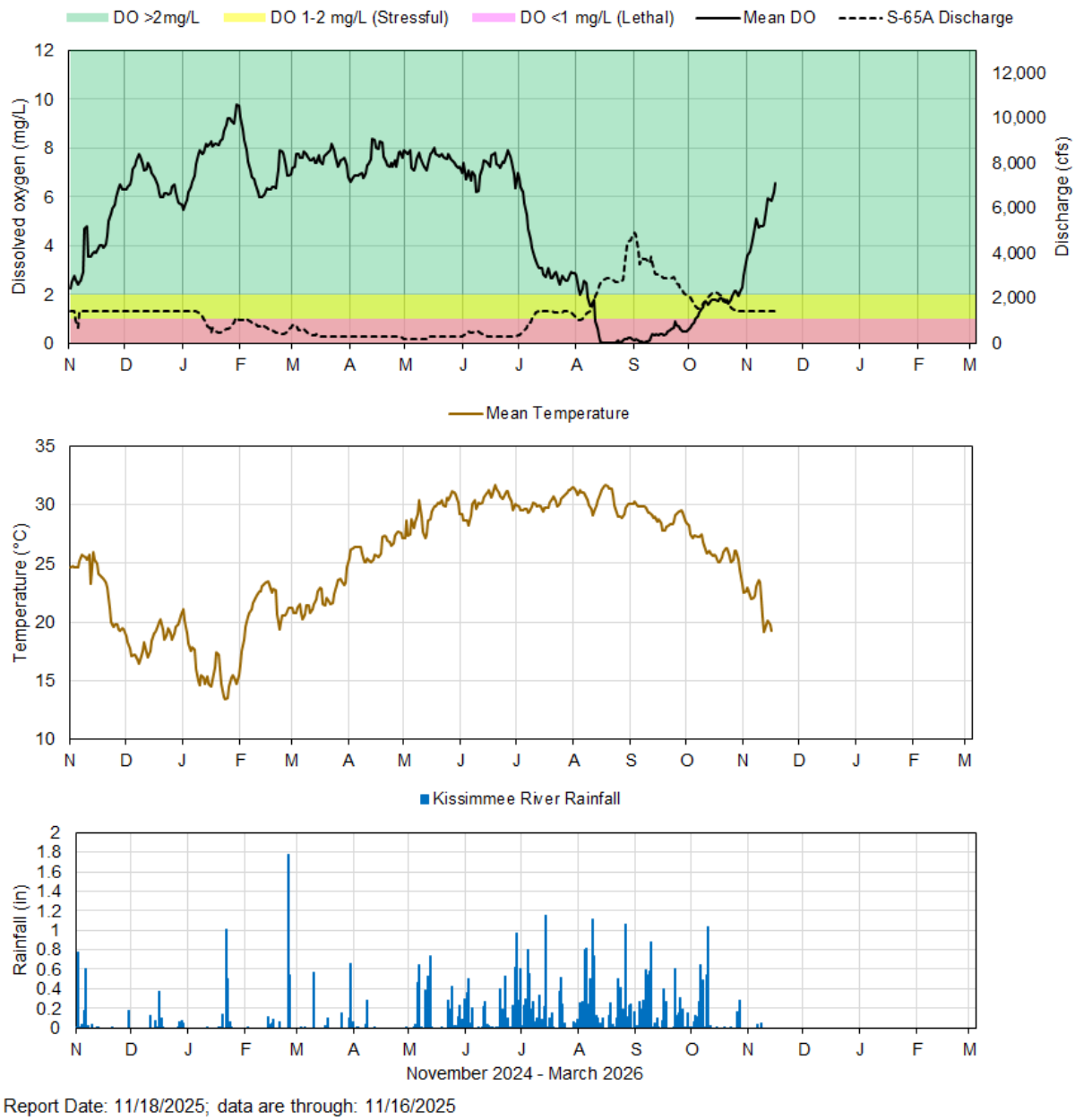


Figure KB-5. Phase I-II-III area Kissimmee River floodplain water depths (from left to right) one year ago, one month ago, and current.



Report Date: 11/18/2025; data are through: 11/16/2025

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

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

HRS Increment 1 Temporary Deviation Discharge Plan for S-65/S-65A

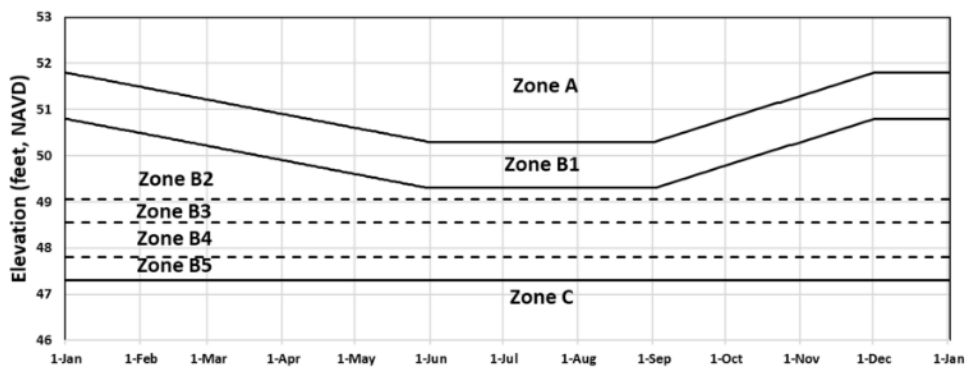
Discharge Guidance for Increment I Temporary Deviation Discharge Plan

ZONE	S-65 RELEASES	S-65A TARGET FLOWS
ZONE A	Releases for Flood Risk Management up to maximum structure capcity 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 Chane 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



ZONE	S-65 RELEASES	S-65A TARGET FLOWS
ZONE A	Releases for Flood Risk Management up to maximum structure capcity 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

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

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.

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

Lake Okeechobee

Lake Okeechobee stage was 12.49 feet NAVD88 (13.79 ft NGVD29) on November 16, 2025, which was 0.11 feet lower than the previous week and 0.06 feet lower than a month ago (**Figure LO-1**). Lake stage is in Zone D of the regulation schedule (**Figure LO-2**) and is 0.2 feet below the lower limit of the recovery ecological envelope (**Figure LO-3**). According to NEXRAD, no rain has fallen directly over the lake for almost 3 weeks. During the previous week, 0.96 inches were lost to evapotranspiration.

Average daily inflows (excluding rainfall) decreased compared to the previous week, dropping from 1,610 cfs to 1,380 cfs. The highest inflows came from the Kissimmee River (1,350 cfs via S-65E(X1)). Average daily outflows (excluding evapotranspiration) increased compared to the previous week, going from 1,390 cfs to 1,930, most of which went south through the S-350 structures (1,310 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 November 16, 2025, NOAA's Harmful Algal Bloom Monitoring System suggests a reformation of the cyanobacteria bloom in the southern region of the lake, which briefly dissipated with the cooler weather and winds experienced at the start of week (**Figure LO-6**).

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

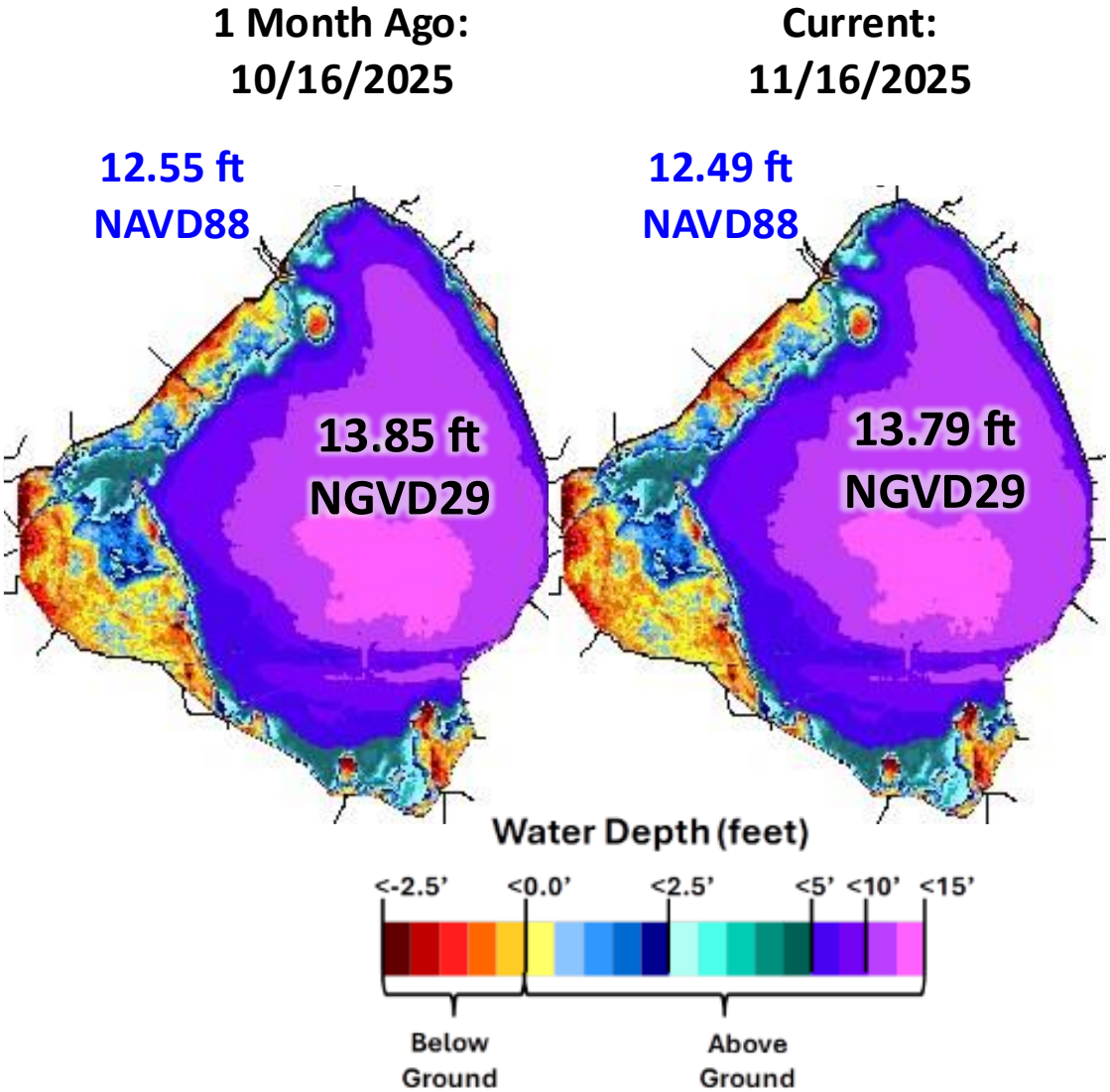

Figure LO-1. Lake Okeechobee water depth estimates based on South Florida Water Depth Assessment Tool (SFWDAT).

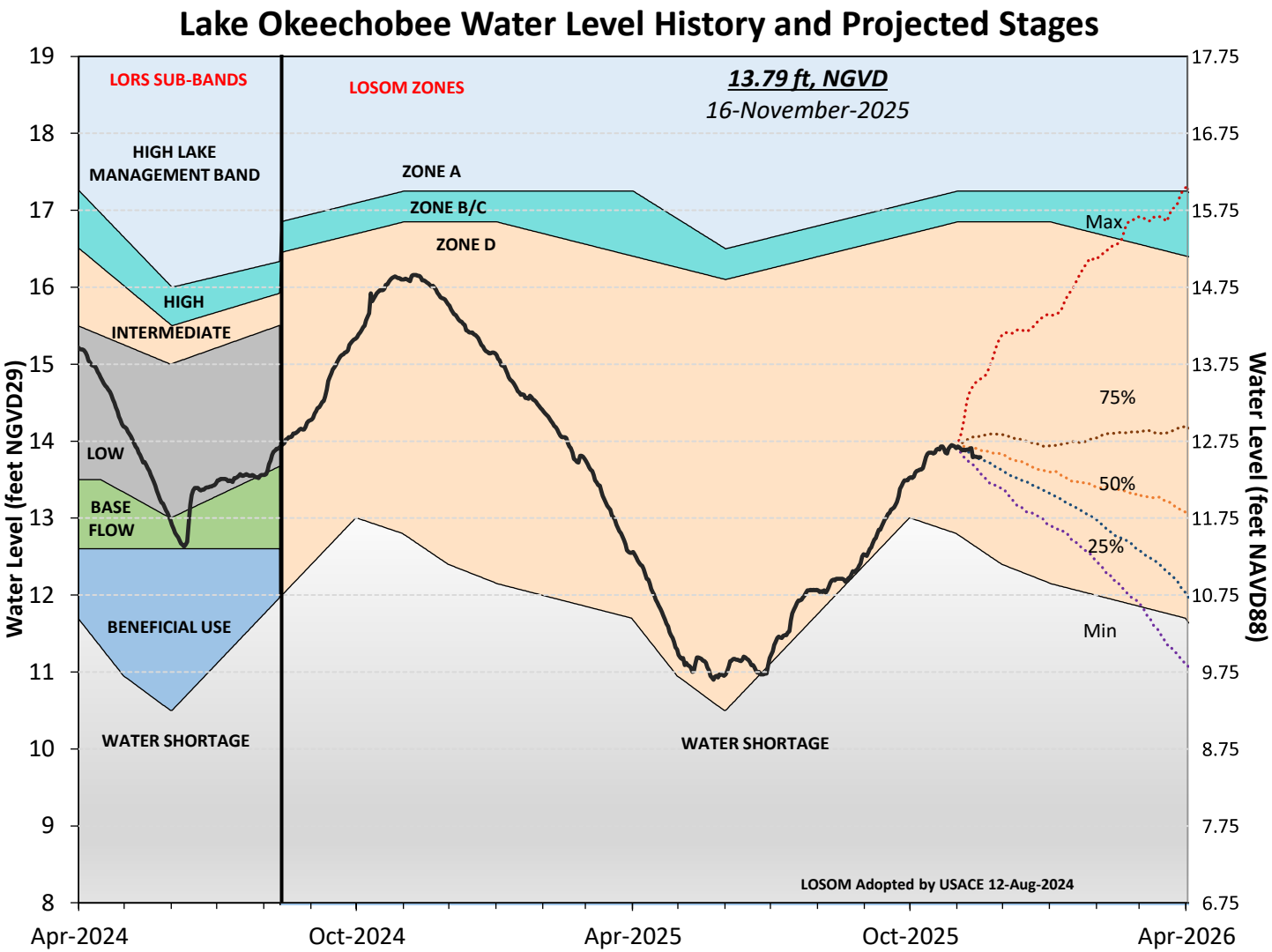

Figure LO-2. Recent Lake Okeechobee stages with projected stages based on a dynamic position analysis. Note: stages are in NGVD29, approximate NAVD88 values are shown for reference.

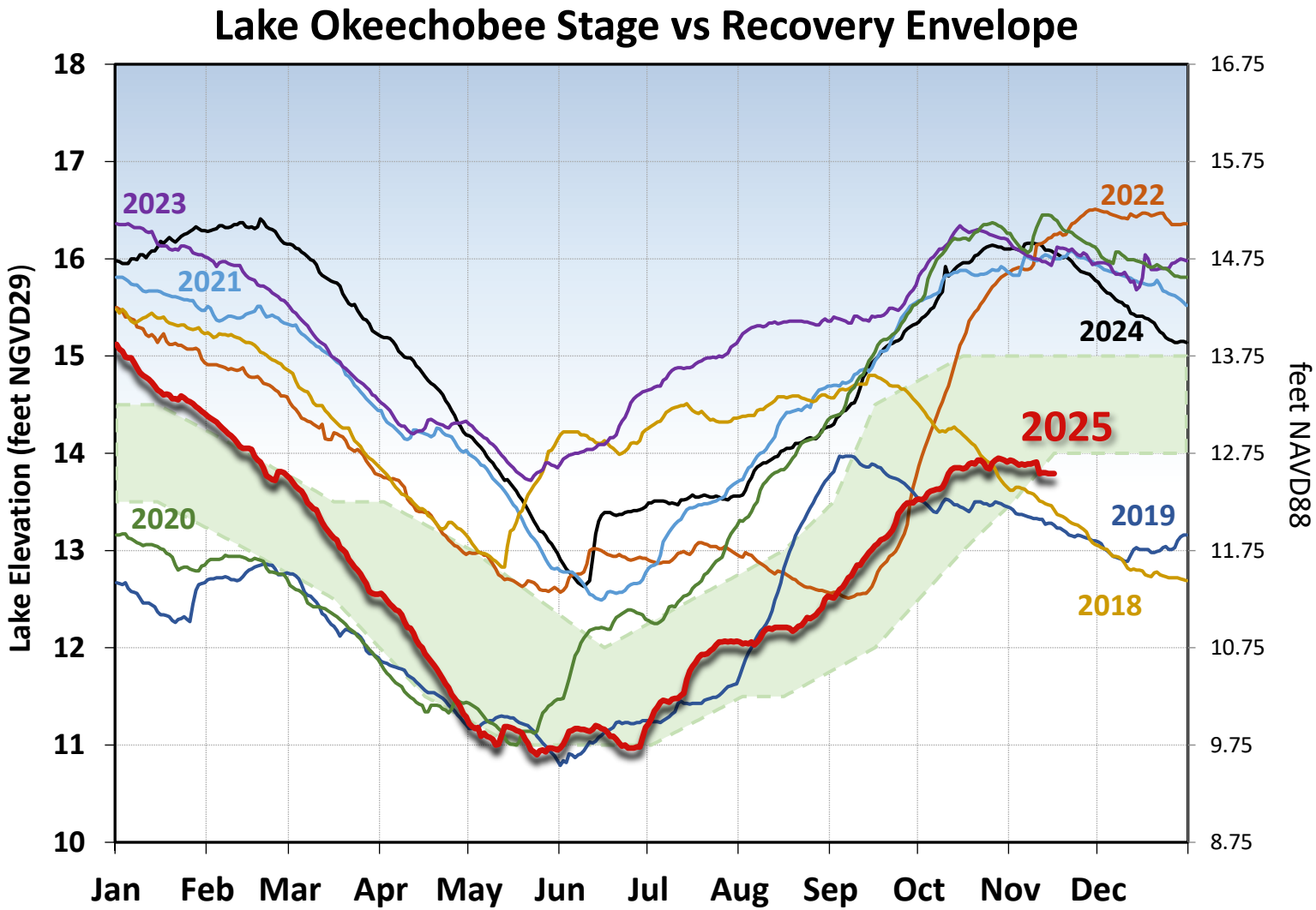

Figure LO-3. The current and seven prior year's annual stage hydrographs for Lake Okeechobee in comparison to the recovery envelope (light green). A shift from the normal to the recovery envelope occurred because the 30-day minimum lake stage (elevations exposed for at least 30 days, nonconsecutively)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

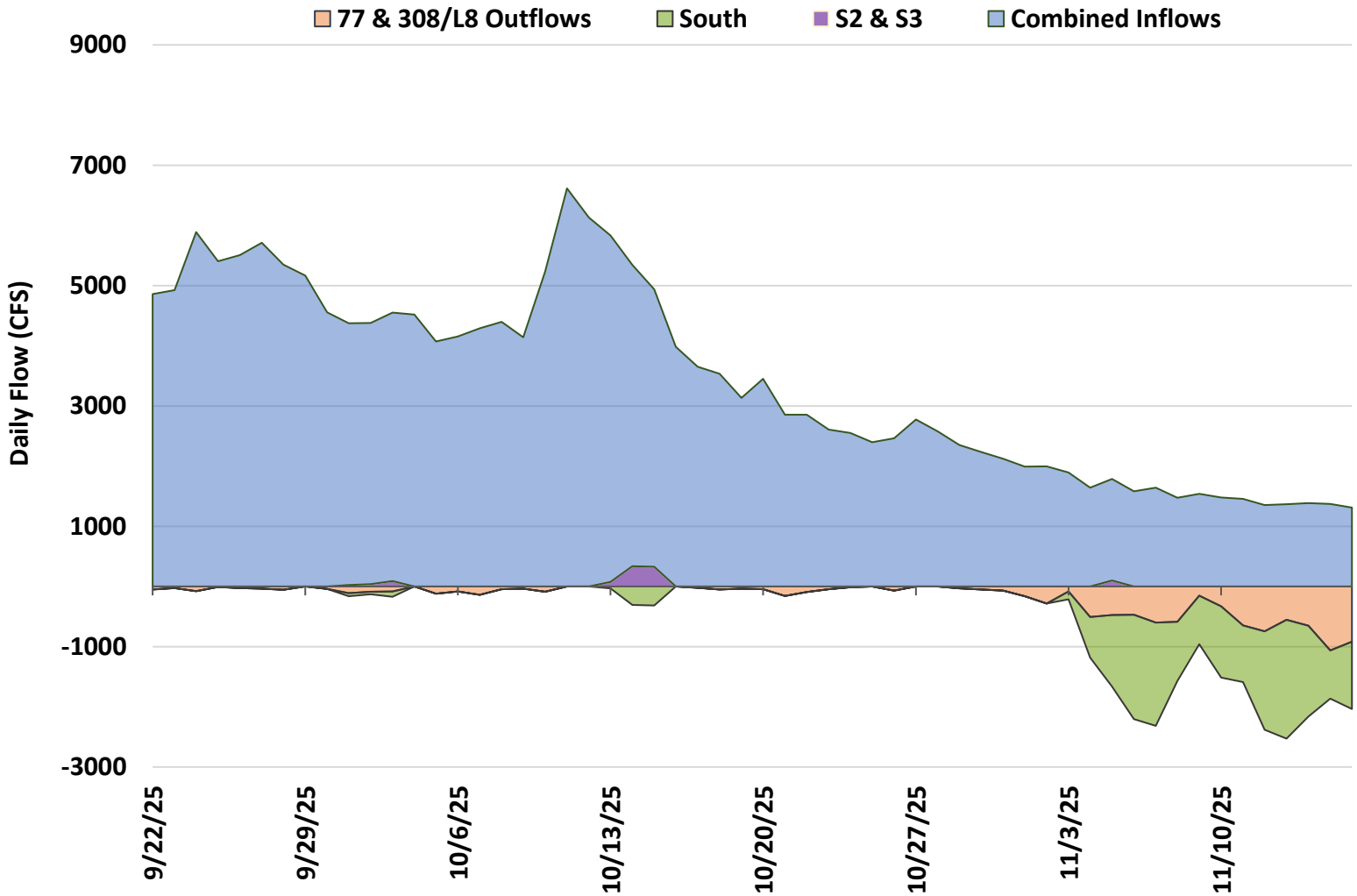

Figure LO-4. Major inflows (orange) to and outflows east and west (blue) from Lake Okeechobee. Outflows south are shown in green. Flows into Lake Okeechobee from the L-8 canal through S-271 (formerly Culvert 10A) or from the C-44 canal through the S-308 are included as inflows. Conversely, flows from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

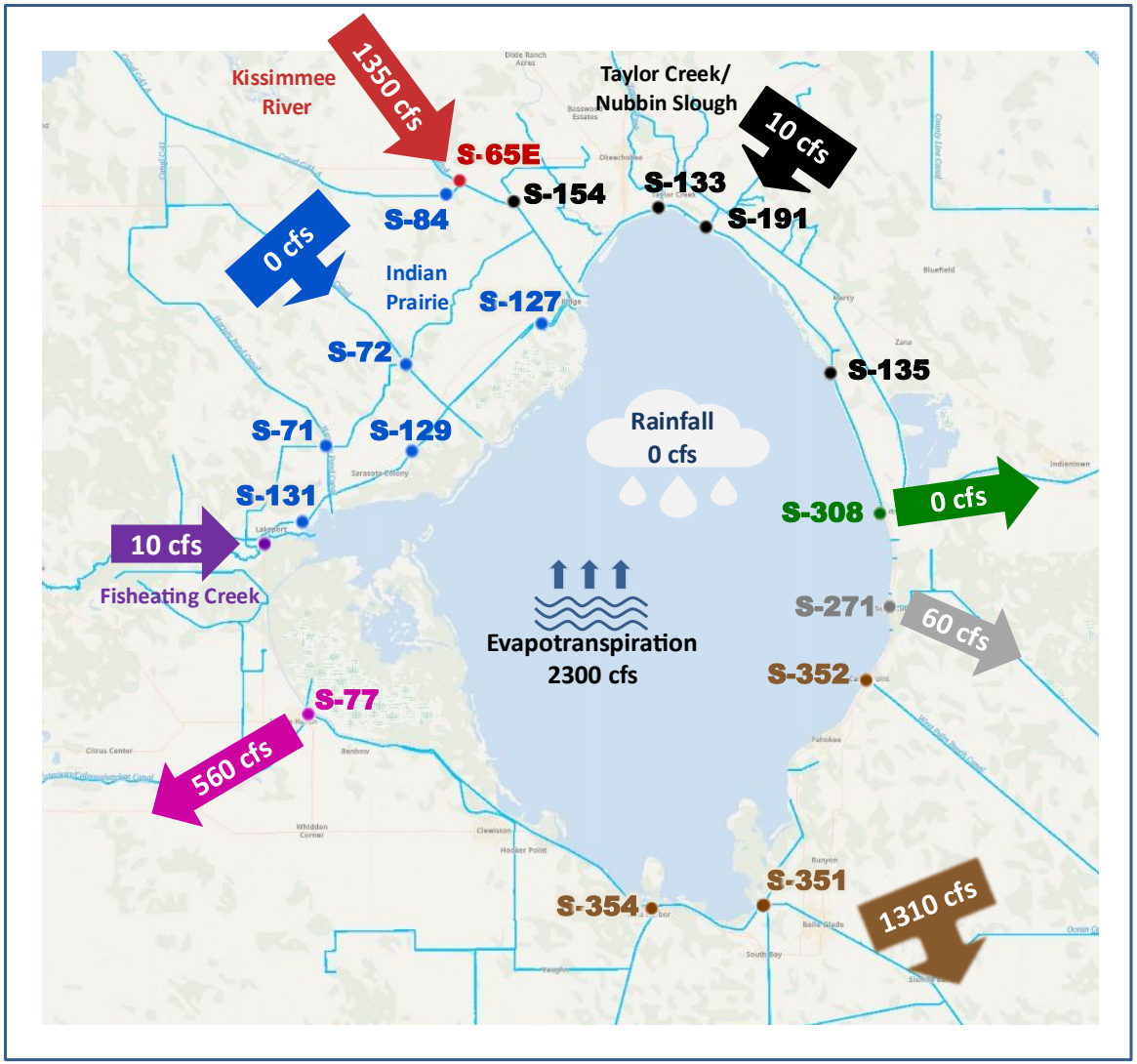

Figure LO-5. Inflows into Lake Okeechobee from Indian Prairie basins, Taylor Creek/Nubbin Slough, Kissimmee River and Fisheating Creek (currently no flow data available for FECR), and outflows to the west via S-77, to the east via S-308, to the south via S-351, S-352, S-354, and to southeast via S-271 (formerly Culvert 10A) for the week of Nov 10-16, 2025.

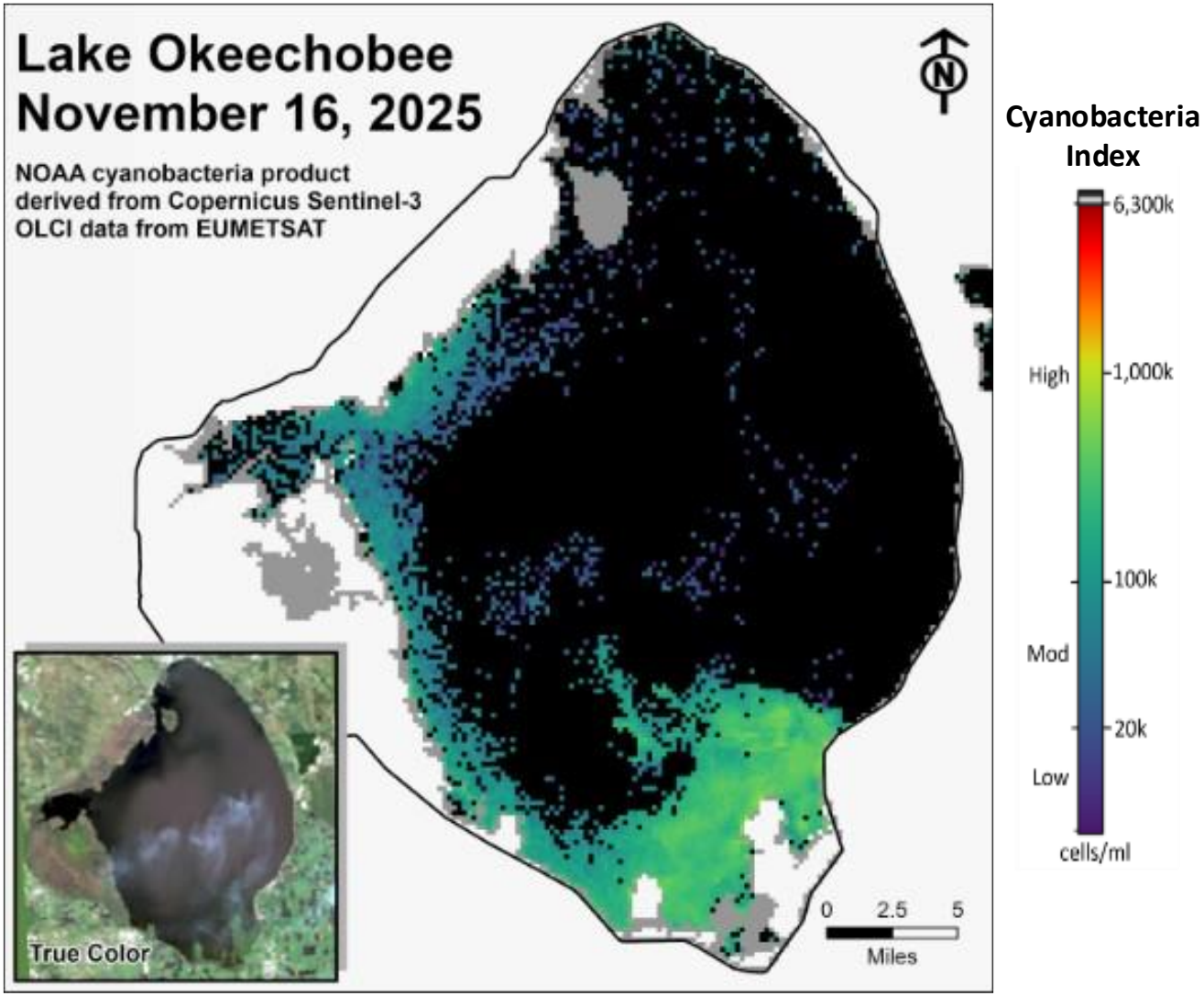

Figure LO-6. Cyanobacteria bloom index level on Lake Okeechobee, based on NOAA's harmful algal bloom monitoring system. Gray color indicates cloud cover. *Provisional NOAA image, subject to change*.

Estuaries

St. Lucie Estuary

Over the past week, mean total inflow to the St. Lucie Estuary was 271 cfs (**Figures ES-1** and **ES-2**), and the previous 30-day mean inflow was 612 cfs. For comparison, the historical provisional mean inflows from contributing areas are shown in **Figure ES-2**.

Over the past week, salinities increased 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 18.8. Salinity conditions in the middle estuary were estimated to be within the optimal range for adult eastern oysters (**Figure ES-4**). The mean larval oyster recruitment rate reported by the Fish and Wildlife Research Institute (FWRI) for October was 0.6 spat/shell at Rio, which is a decrease from the previous month (**Figure ES-5**).

Caloosahatchee River Estuary

Over the past week, mean total inflow to the Caloosahatchee River Estuary was 545 cfs (**Figures ES-6** and **ES-7**), and the previous 30-day mean inflow was 687 cfs. For comparison, the historical provisional mean inflows from the contributing areas are shown in **Figure ES-7**.

Over the past week, surface salinities increased at Fort Myers and Cape Coral and decreased at the other sites across the estuary (**Table ES-2** and **Figures ES-8** and **ES-9**). The seven-day mean salinities (**Table ES-2**) exceeded the optimal range (0-10) for tape grass at the Ft. Myers site in the upper estuary. The seven-day mean salinity values were within the optimal range for adult eastern oysters at Cape Coral and in the upper stressed range at Shell Point and Sanibel (**Figure ES-10**). The mean larval oyster recruitment rates reported by the FWRI in October decreased at Iona Cove to 4.4 spat/shell and increased at Bird Island to 30.1 spat/shell compared to 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, 2013[1]) 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 112 cfs. Model results from all scenarios predict daily salinity to be 4.5 or lower and the 30-day moving average surface salinity to be 4.9 or lower 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.

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

Red Tide

The FWRI reported on November 14, 2025, that *Karenia brevis*, the Florida red tide dinoflagellate, was not observed at bloom concentrations in any samples collected within the District region.

Water Management Recommendations

Lake stage is in Zone D. Current climatological 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.

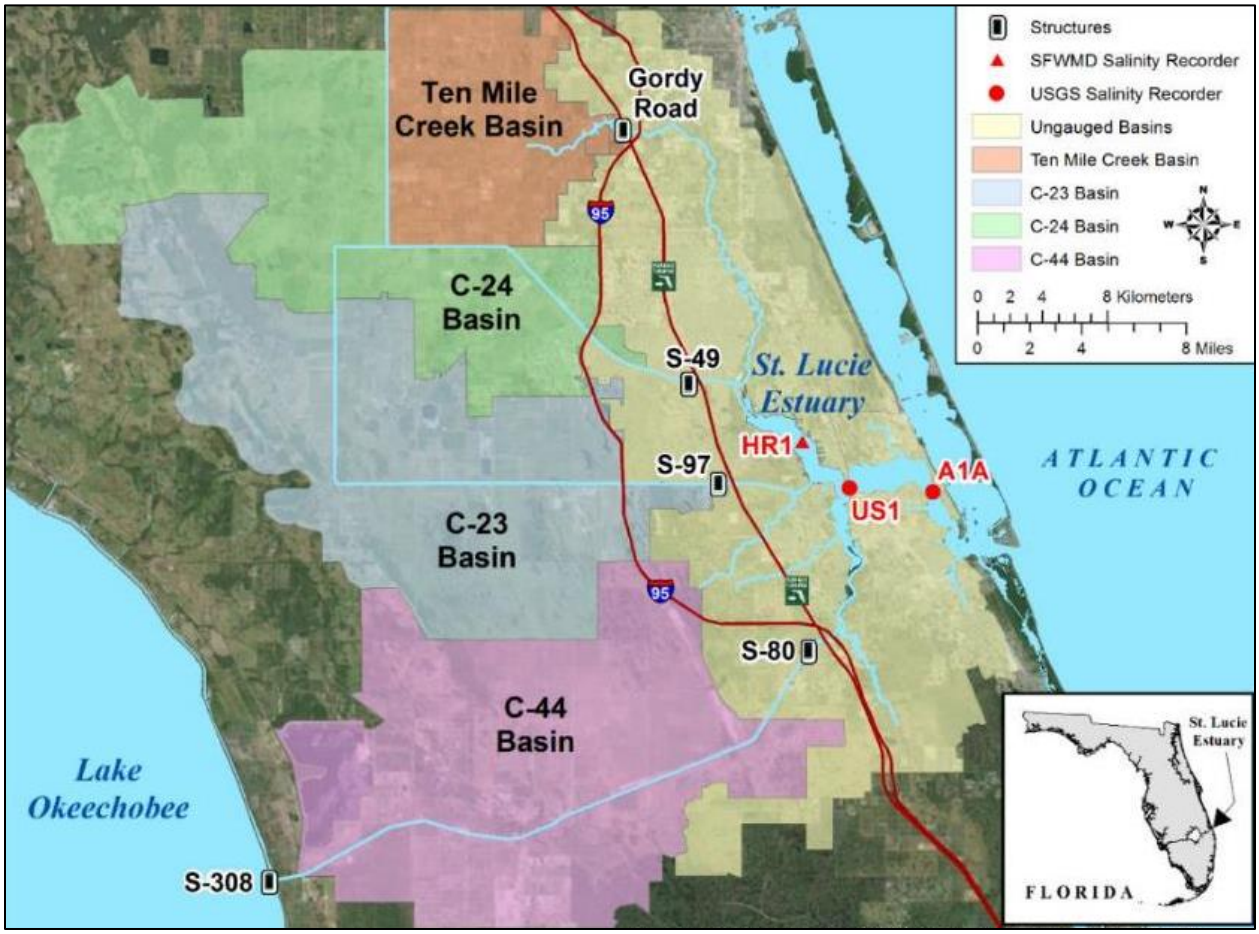

Figure ES-1. Basins, water control structures and salinity monitoring sites in the St. Lucie Estuary.

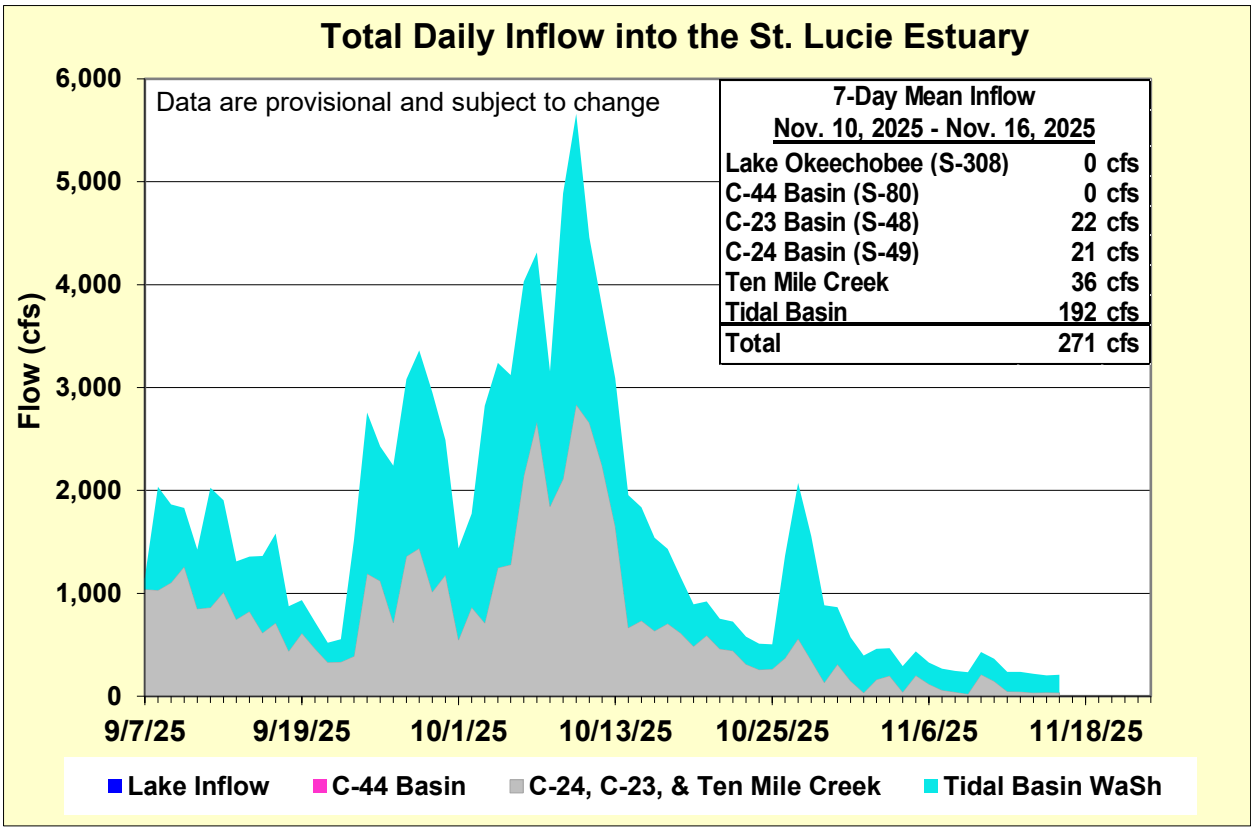

Figure ES-2. Total daily inflows from Lake Okeechobee and runoff from the C-44, C-23, C-24, Ten Mile Creek, and Tidal Basins into the St. Lucie Estuary.

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)	**13.9** (11.8)	**17.7** (14.7)	10.0 – 25.0
US1 Bridge	**18.3** (15.1)	**19.3** (15.4)	10.0 – 25.0
A1A Bridge	**24.6** (22.7)	**26.6** (25.4)	10.0 – 25.0

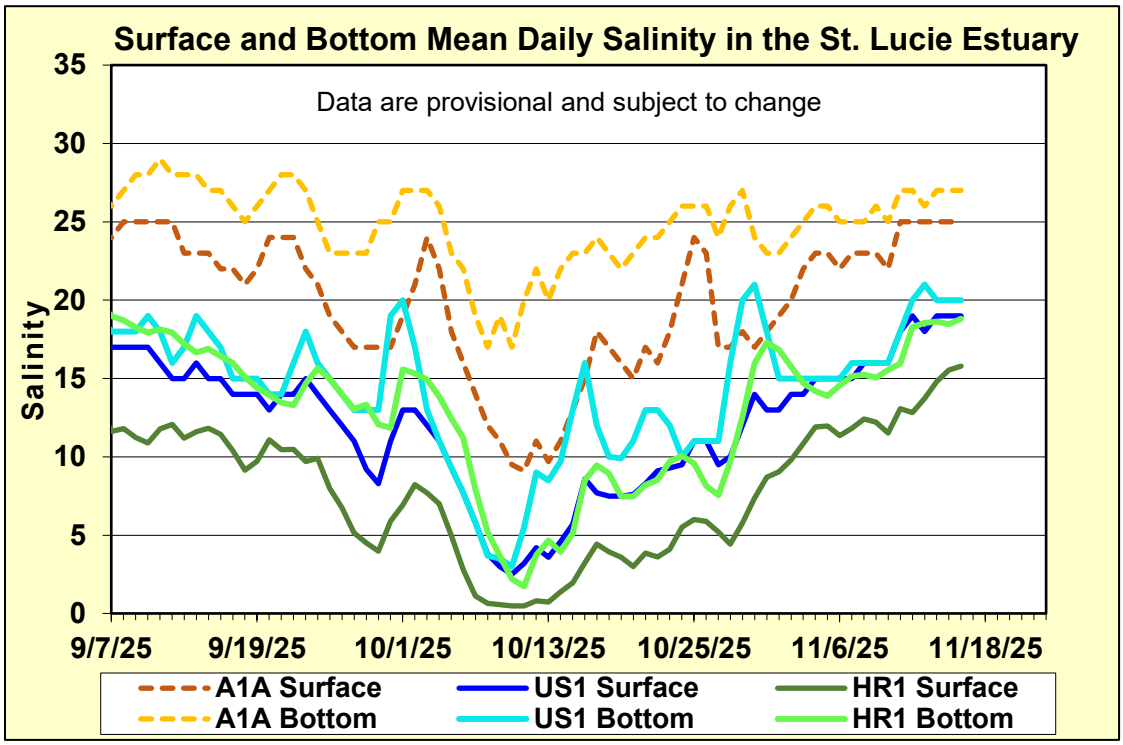

Figure ES-3. Mean daily salinity at the A1A, US1, and HR1 sites in the St. Lucie Estuary.

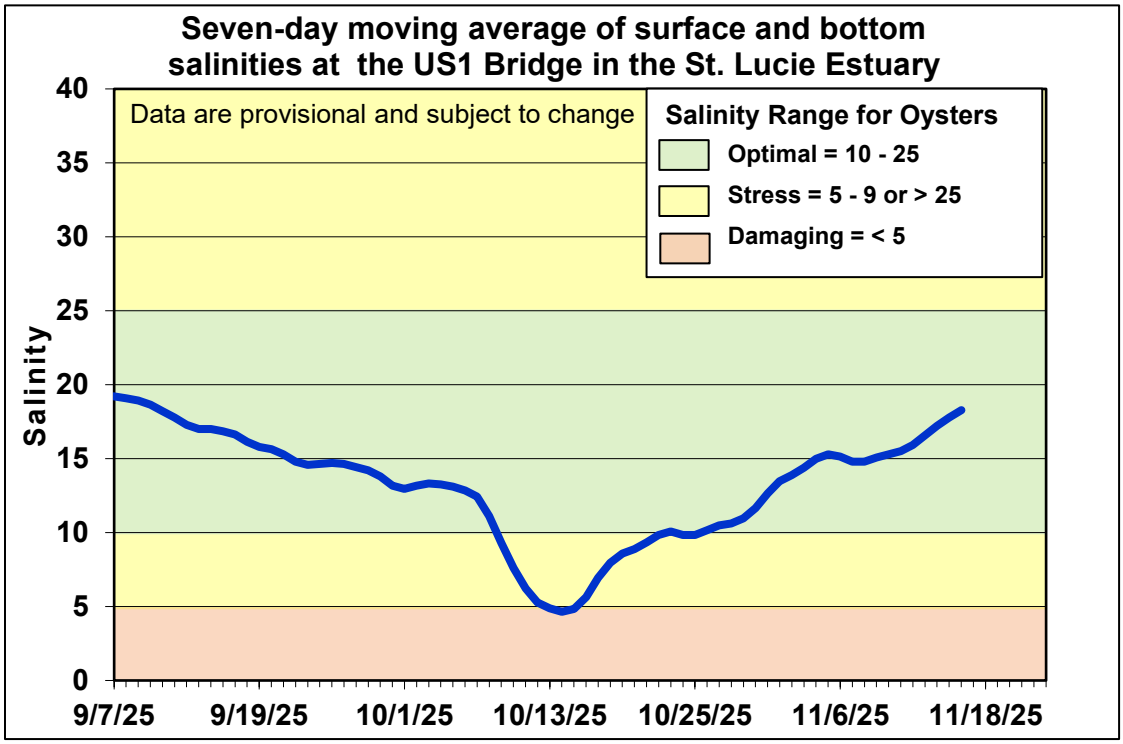

Figure ES-4. Seven-day moving average of the surface and bottom salinities at the US1 Bridge in the St. Lucie Estuary.

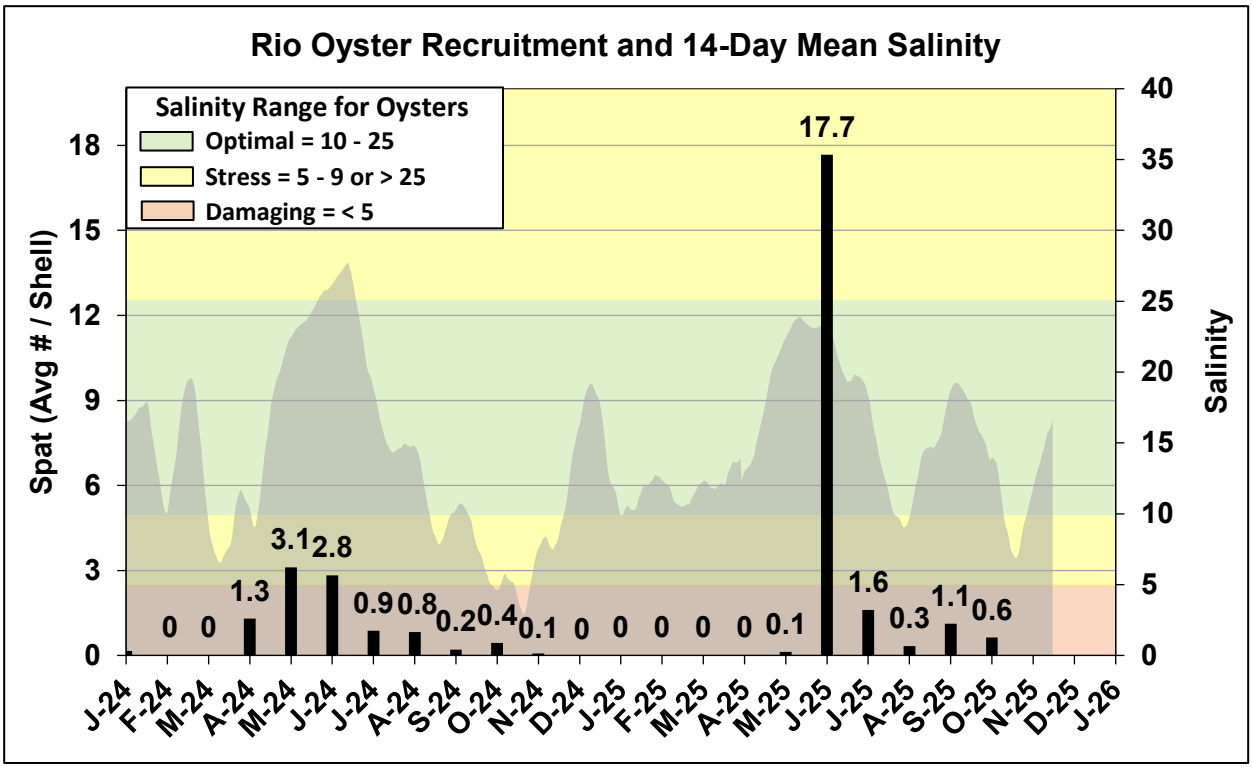

Figure ES-5. Mean oyster recruitment at the Rio oyster monitoring station and 14-day mean salinity at US1 Bridge.

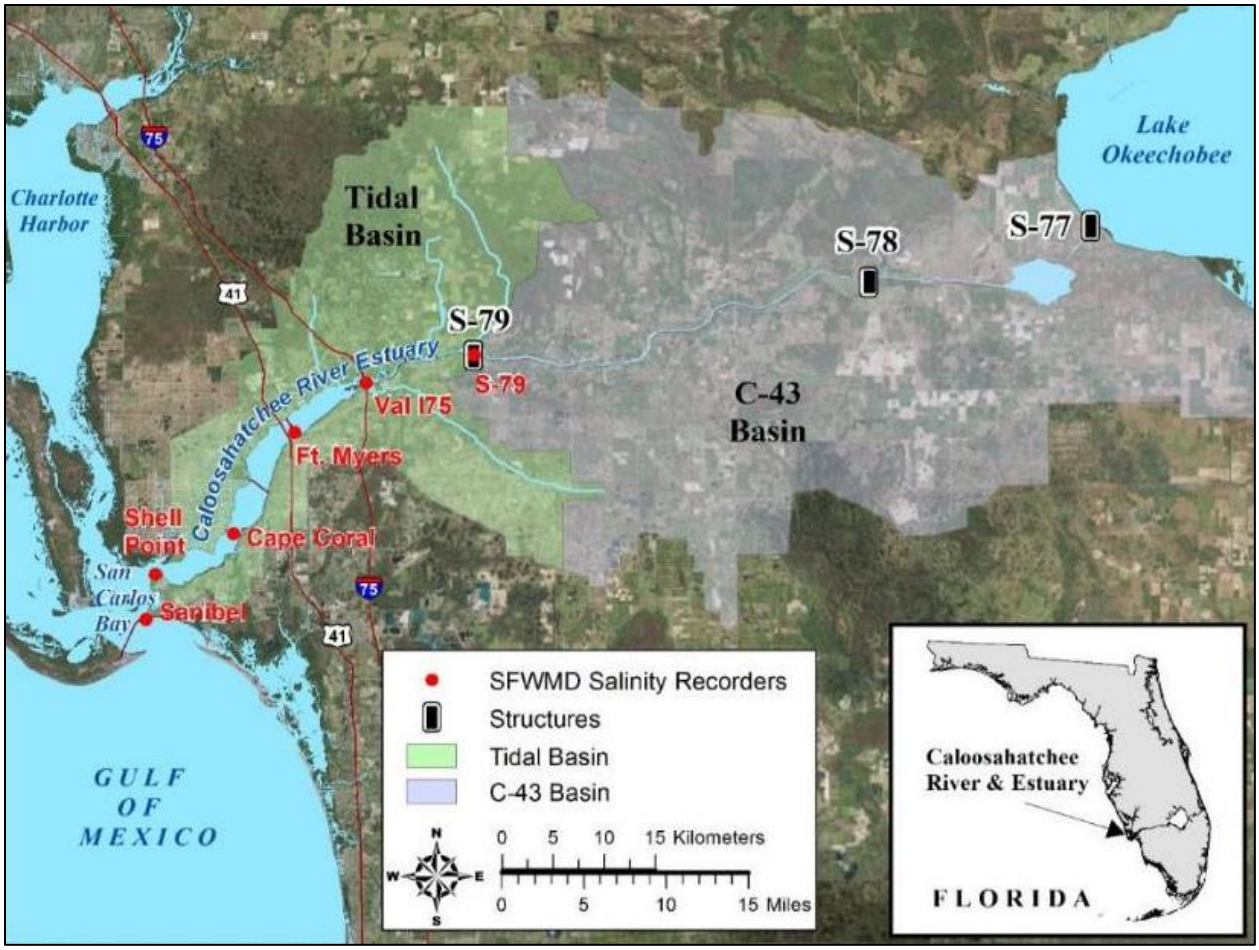

Figure ES-6. Basins, water control structures, and salinity monitoring sites in the Caloosahatchee River Estuary.

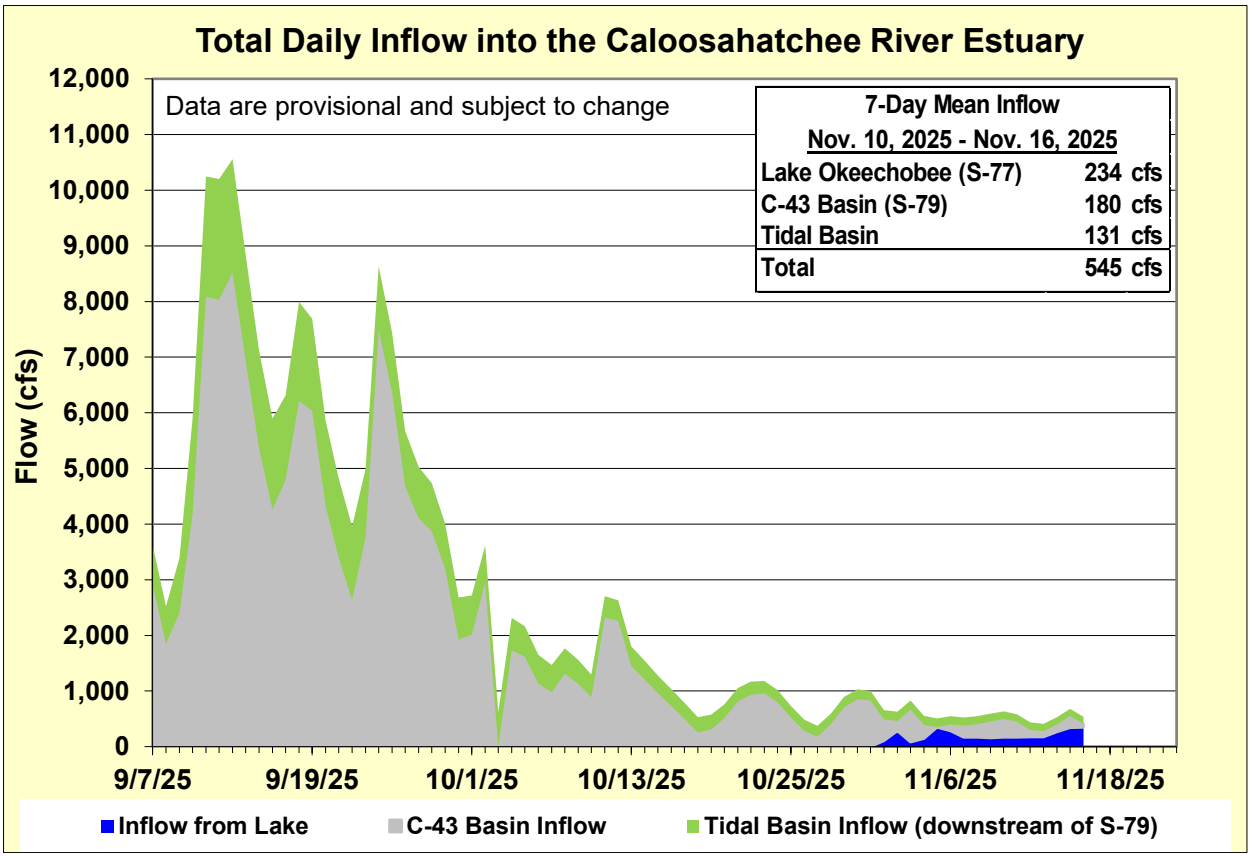

Figure ES-7. Total daily inflows from Lake Okeechobee, and runoff from the C-43 and Tidal basins into the Caloosahatchee River Estuary.

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)	**4.1** (5.3)	**4.2** (5.5)	0.0 – 10.0
Val I-75	**4.9** (5.8)	**7.1** (7.0)	0.0 – 10.0
Fort Myers Yacht Basin	**10.8** (10.5)	**14.2** (11.6)	0.0 – 10.0
Cape Coral	**17.8** (16.5)	**19.6** (18.6)	10.0 – 25.0
Shell Point	**27.4** (28.0)	**27.7** (28.0)	10.0 – 25.0
Sanibel	**30.3** (30.4)	**31.0** (31.1)	10.0 – 25.0

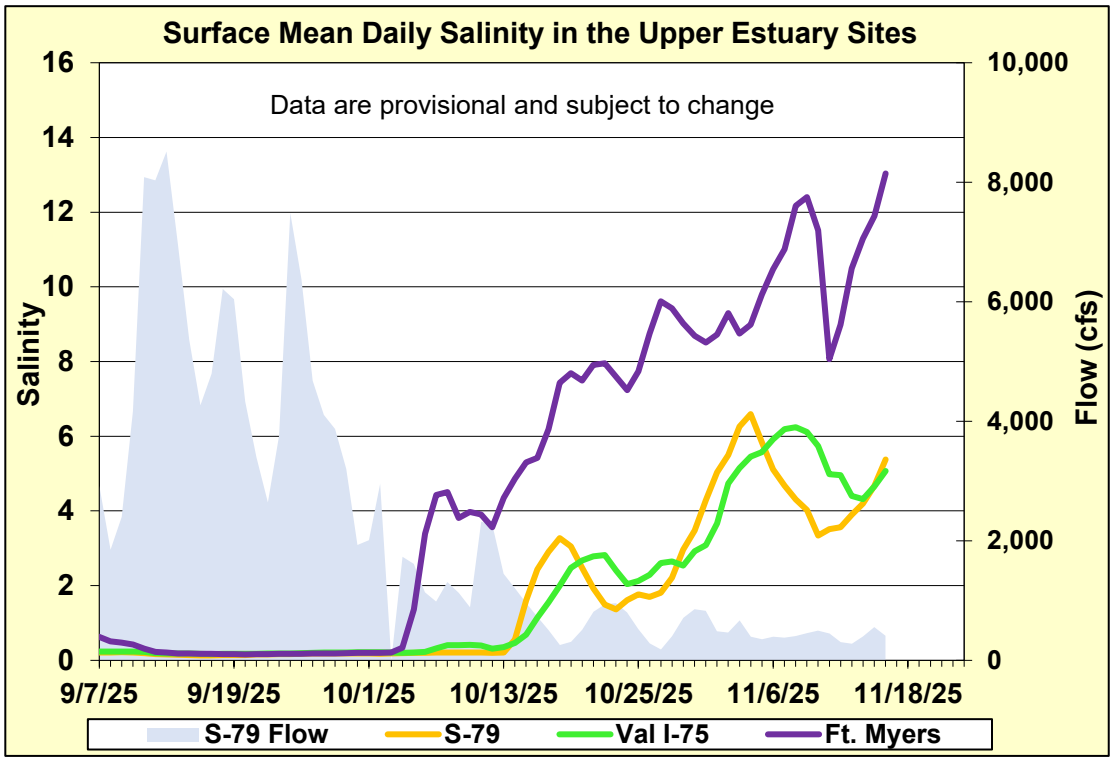

Figure ES-8. Mean daily salinity at upper Caloosahatchee River Estuary monitoring sites and mean daily flow at S-79.

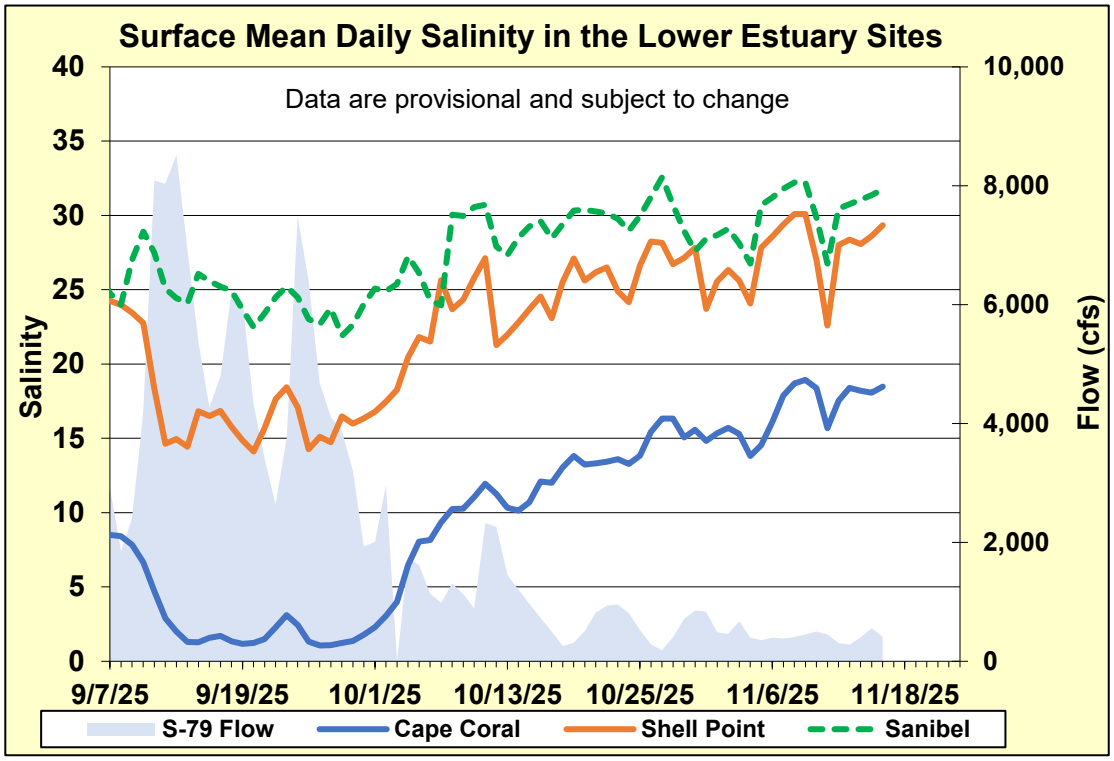

Figure ES-9. Mean daily surface salinity at lower Caloosahatchee River Estuary monitoring sites and mean daily flow at S-79.

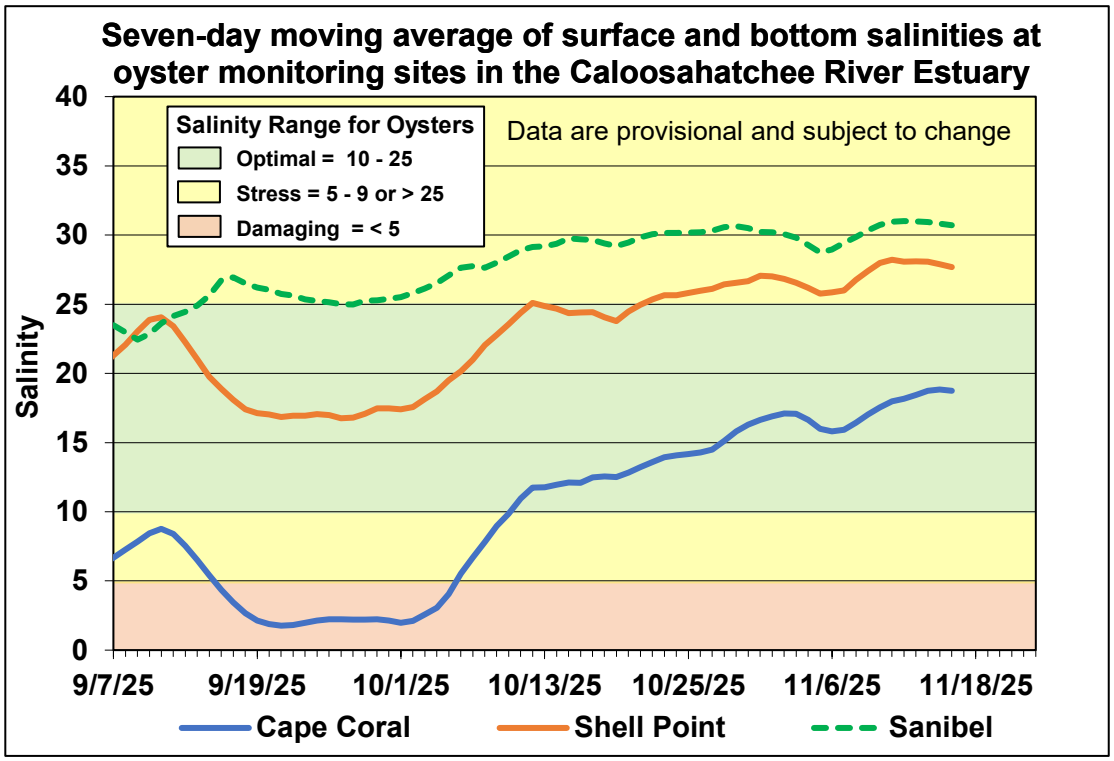

Figure ES-10. Seven-day moving average of surface and bottom salinities at Cape Coral, Shell Point, and Sanibel monitoring sites in the Caloosahatchee River Estuary.

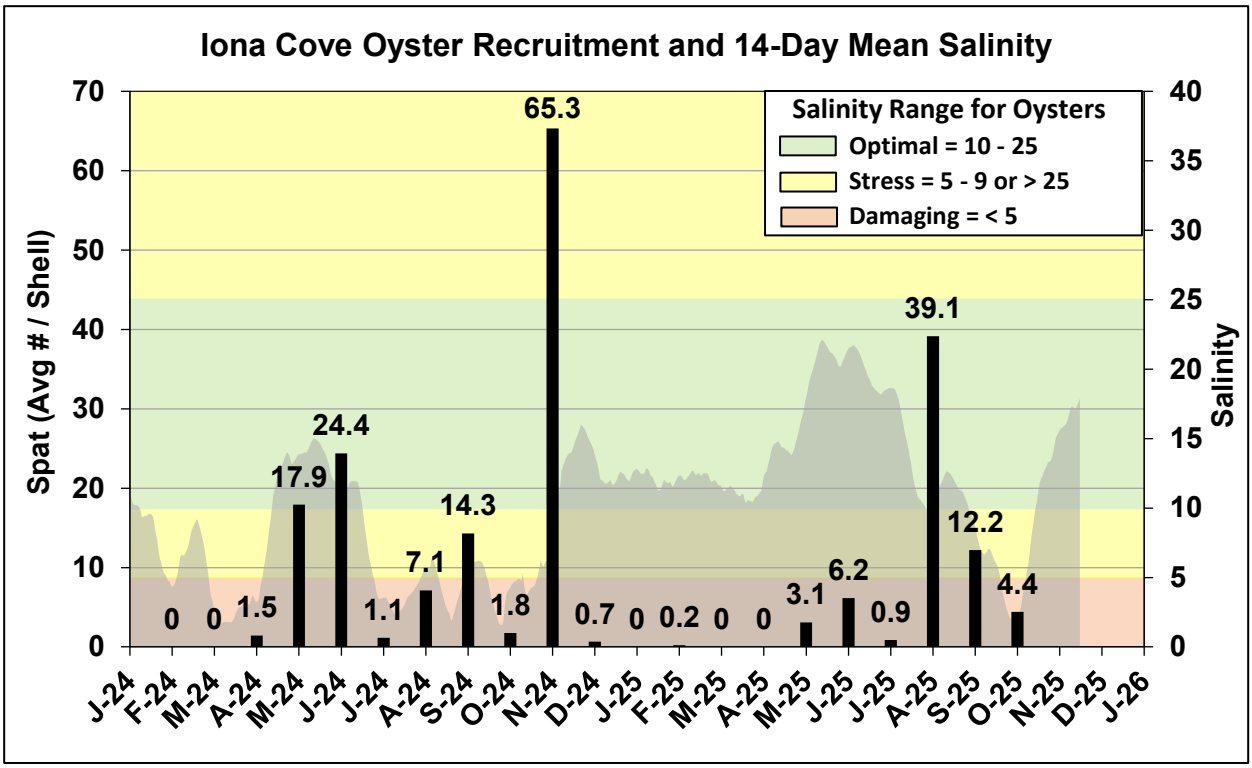

Figure ES-11. Mean oyster recruitment at the Iona Cove oyster monitoring station and 14-day mean salinity at Cape Coral.

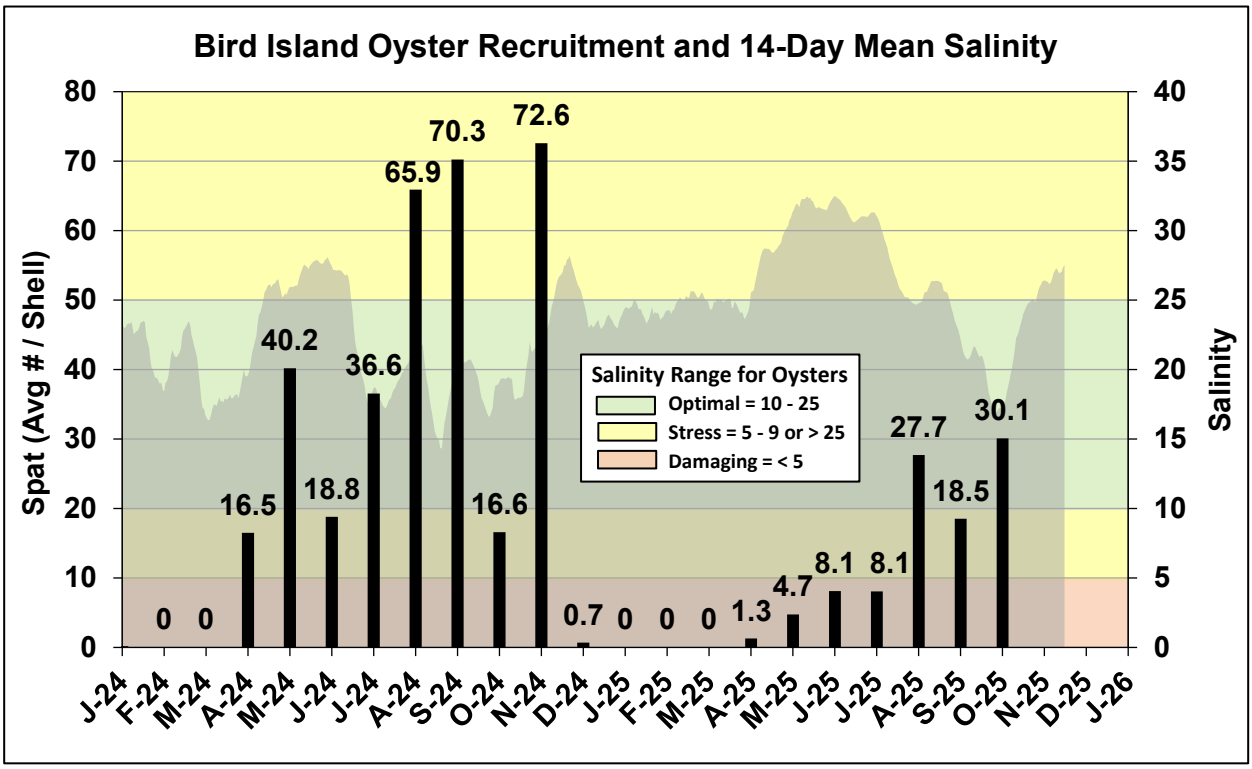

Figure ES-12. Mean oyster recruitment at the Bird Island oyster monitoring station and 14-day mean salinity at Shell Point.

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	112	4.5	4.9
B	750	112	3.1	4.5
C	1,000	112	2.5	4.2
D	1,500	112	1.2	3.8
E	2,000	112	0.5	3.5

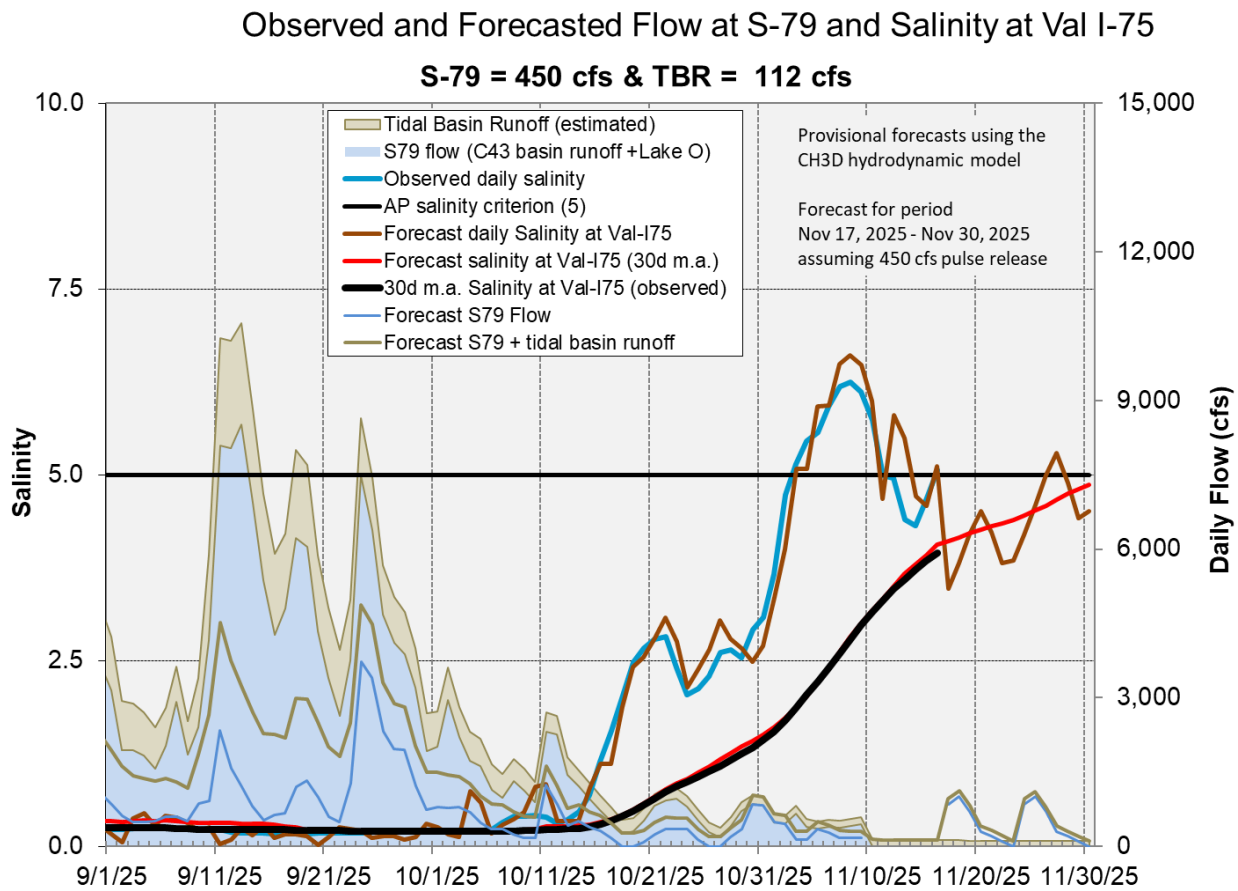

Figure ES-13. Surface salinity forecast at the Val I-75 site assuming a 450 cfs pulse release at S-79.

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 slightly above target stage. The 365-day PLR for the Western and Eastern Flow-way is below 1.0 g/m^2/year (**Figure S-2**).

STA-1W: STA-1W Eastern Flow-way is online with restrictions for G-253 structure replacements. Most treatment cells are at target stage. Vegetation in the Western and Eastern Flow-ways is highly stressed. The 365-day PLRs for the Eastern and Western Flow-ways are below 1.0 g/m^2/year. The 365-day PLR for the Northern 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. Most treatment cells are at target stage. The 365-day PLRs for all Flow-ways are below 1.0 g/m^2/year (**Figure S-3).**

STA-3/4: An operational restriction is in place in the Eastern Flow-way for vegetation management activities. Treatment cells are slightly 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/m^2/year (**Figure S-3**).

STA-5/6: Treatment cells are above target stage. All treatment cells have highly stressed or stressed vegetation conditions. The 365-day PLRs for all Flow-ways are below 1.0 g/m^2/year. (**Figure S-4**).

For definitions on STA operational language see glossary following figures

- Total WY2026 inflows to STAs (5/1/2025 to 11/16/2025): ~523,250 ac-ft
- Lake Okeechobee releases to FEBs/STAs
  - 11/10/2025 to 11/16/2025: 0 ac-ft
  - WY2026: ~ 32,000 ac-ft
- Extensive vegetation management activities underway to address stressed and highly stressed vegetation in EAV cells
- All treatment cells are at or above target water depth

Estimated Inflow and Outflow Volumes
Nov. 10th – Nov. 16th, 2025 *Includes preliminary data*

	Total Inflow (acre-feet)	Total Outflow (acre-feet)
STA-1E	90	160
STA-1W	1,500	50
STA-2	60	325
STA-3/4	1,400	0
STA-5/6	0	25

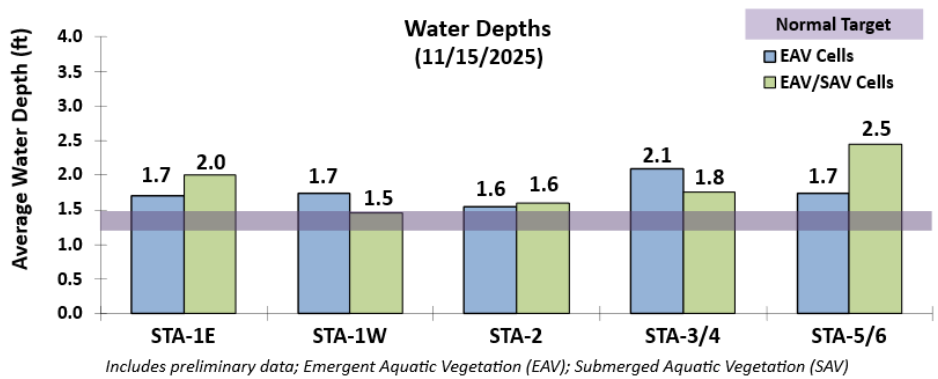

Figure S-1. STA depths and flow volumes

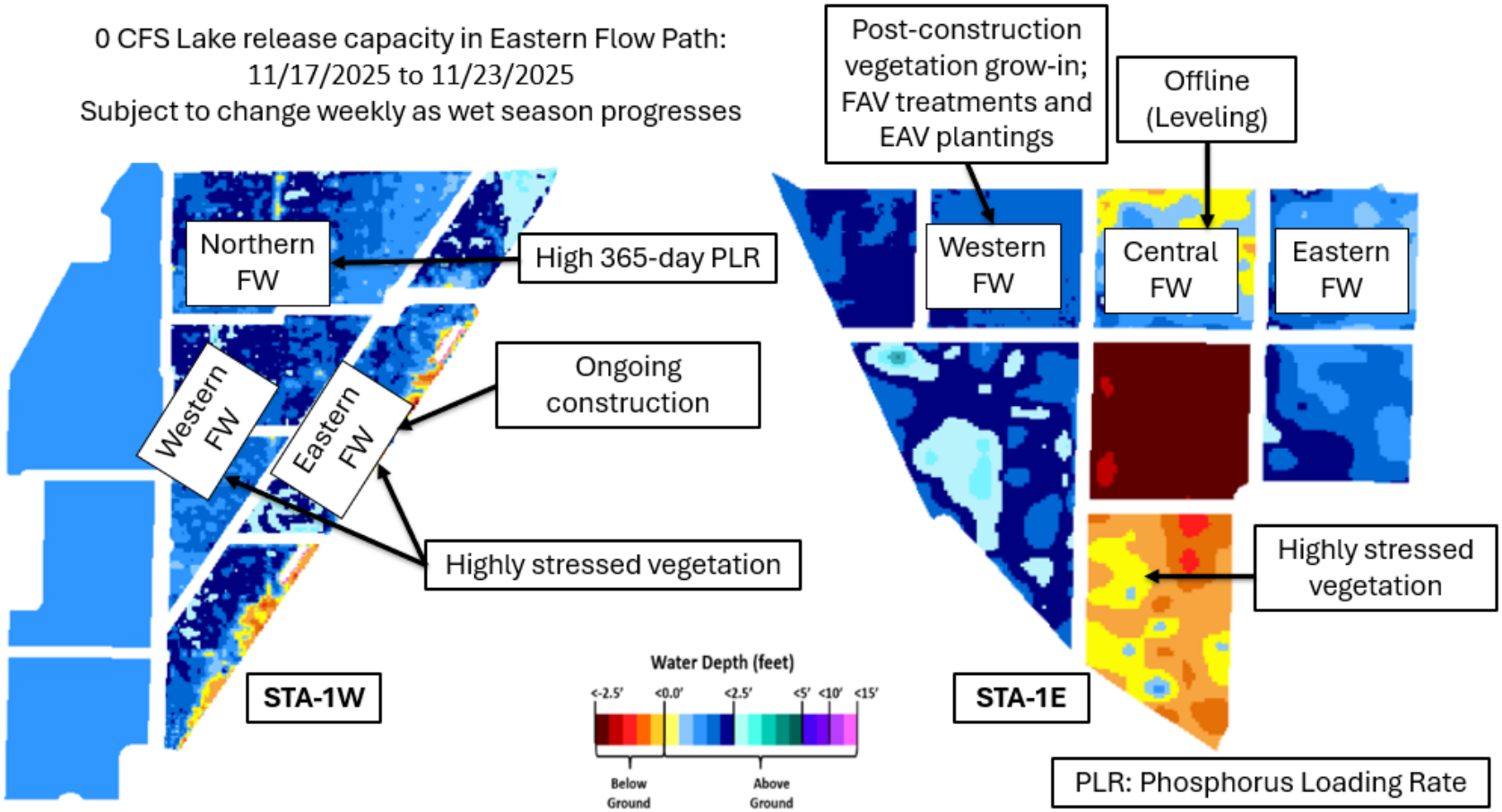

Figure S-2. Eastern Flow Path Weekly Status Report

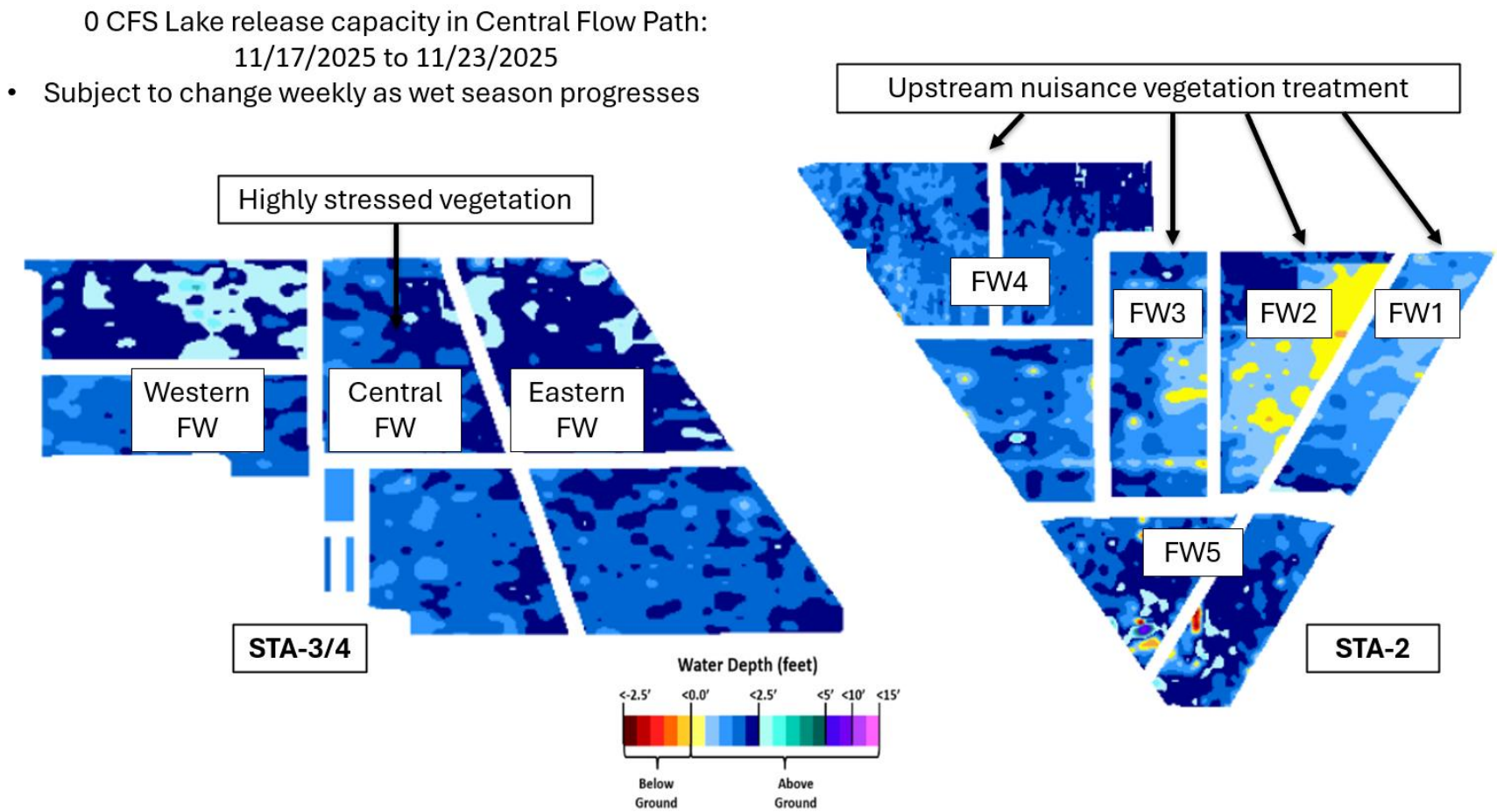

Figure S-3. Central Flow Path Weekly Status Report

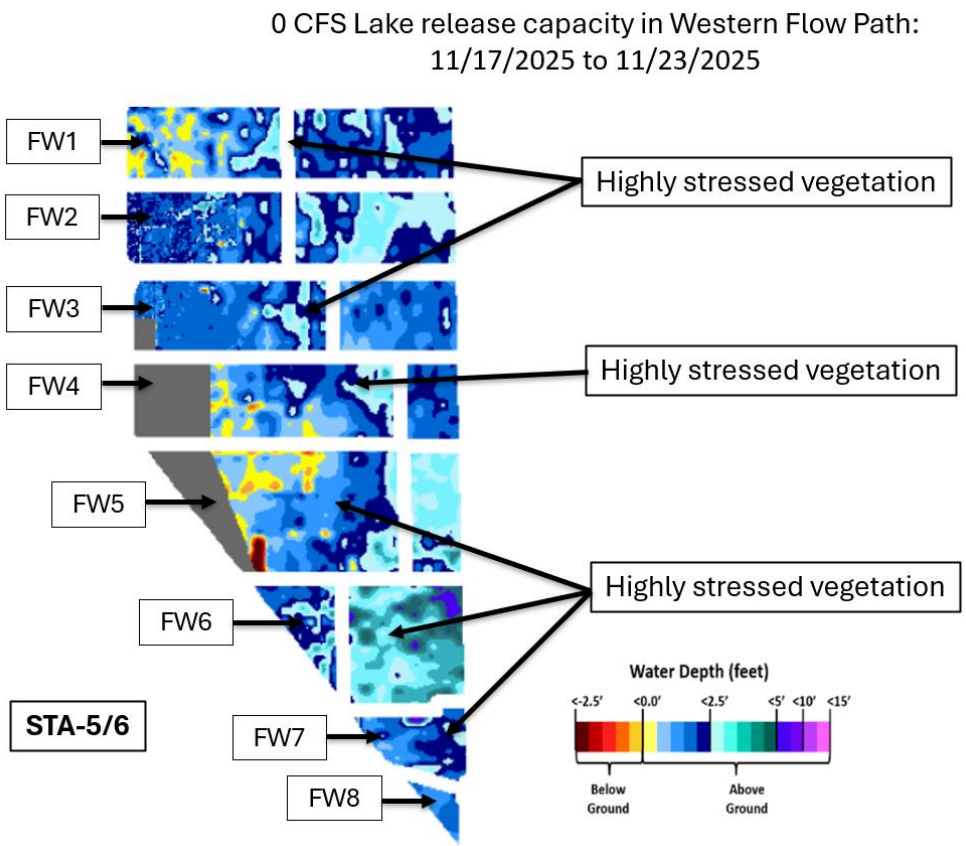

Figure S-4. Western Flow Path Weekly Status Report

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

Everglades

Water Conservation Area Regulation Schedules

WCA-1: Stage change at the 1-8C gauge continued a gradual decline last week, stages were 0.69 feet below the flat A1 zone regulation line on Sunday, November 16, 2025. WCA-2A: Last week stage at the 2-17 gauge continued to recede relatively quickly but remains well above the A1 zone regulation line, 1.53 feet above on Sunday. WCA-3A: The 3-gauge average remains well into zone B and stage change increased over the previous week; on Sunday stages were 1.09 feet below the zone A regulation line. WCA-3A North: Stage at Gauge 62 (NW corner) continued to steadily decrease last week and remains below the Upper Schedule regulation line, 0.71 feet below on Sunday. See figures **EV-1** through **EV-4**.

Water Depths

The SFWDAT model output for November 16, 2025, illustrates lower depths from north to south within WCA-1 compared to a month ago. The southern half of WCA-2A remains very deep for this time of year. Drier conditions expand westward in northeastern WCA-3A along the L38-W canal. Depths are decreasing across WCA-3A and remain relatively low in northeastern WCA-3A and WCA-3A South limiting aquatic prey production in this region. Hydrologic connectivity remains but has declined in all three major sloughs of Everglades National Park over the last month, especially in the west. Comparing conditions on Sunday to depths over the last twenty years; the majority of WCA-3A South and northeastern WCA-3A remain in the 10th percentile, while in WCA-2A depths remain above the 90th percentile in the south but fall closer to average in the north. See figures **EV-5** through **EV-6**.

Taylor Slough and Florida Bay

All stages across Taylor Slough decreased over the past week, with an average decrease of 0.08 feet for the week. Changes ranged from −0.15 feet at P37 around the mid-point of Taylor Slough to −0.02 feet at E112 in the northern slough (**Figure EV-7 and Figure EV-8**). Taylor Slough water levels remain above the recent average (WY1993-2016) for this time of year by 2.3 inches compared to before the Florida Bay initiative (starting in 2017), a decrease of 0.1 inches relative to last week's comparison. The Craighead Pond (CP) and TSB stages remain below the estimated average for 1900 by 0.61 and 1.18 feet, respectively.

Average Florida Bay salinity was 25.4, an increase of 0.5 from last week. Salinity changes ranged from −6.7 at Terrapin Bay (TB) in the western nearshore region to +2.5 at Garfield Bight (GB) also in the western nearshore region (**Figure EV-7**). Salinity is above the estimated average for 1900 and near the WY2001-2016 Interquartile Range (IQR) 50th percentile in the eastern and central region of the bay while approaching the 75th percentile in the western region (**Figure EV-9**). Average Florida Bay salinity is above its recent average (WY1993-2016) for this time of year by 1.7.

Salinity at the Taylor River (TR) station in the mangrove zone (tracked for the Florida Bay MFL) was 1.85, a decrease of 1.75 from last week (**Figure EV-10**). The 365-day moving sum of flow from the five major creeks (McCormick Creek, Taylor River, Mud Creek, Trout Creek, West Highway Creek) was 216,192 acre-feet, an increase of 8,115 acre-feet from last week (**Figure EV-10**).

Average rainfall across Taylor Slough and Florida Bay was approximately 0.001 inches over the past week, based on the 17 gauges used for this report. Rainfall ranged from 0.0 inches at nine stations to 0.01 inches at Peterson Key in Florida Bay (**Figure EV-11**). Wind directions and speeds in Florida Bay ranged from 0.8 mph W on November 16th to 29 mph NE on November 11th (**Figure EV-11**).

Average daily flow from the five major creeks totaled 1,844 acre-feet, with net positive flows for the week. Total daily creek flow ranged from −691 acre-feet on November 16th to 4911 acre-feet on November 11th (**Figure EV-12**). Average daily flow was 2,308 acre-feet below estimated historical levels (circa 1900). Average daily flow from Alligator creek was unable to be assessed due to missing data (**Figure EV-12**).

Implications/considerations for water management.

- Stage has decreased within the EPA over the last month; and slow recessions (around 0.05 feet per week) are needed to protect the wetland ecology from damaging dry downs expected by the end of the dry season in some regions, the depths within WCA-3A this wet season were not high enough (need ~2.5 to 3.0 feet peak depths) to recover aquatic prey populations from antecedent dry conditions or protect peat soils throughout the current dry season especially given a La Nina climate prediction this winter.
    - WCA-3A South and WCA-3A North, along the Miami canal, continue to experience unseasonably dry conditions.
    - Populations of prey, already depleted by the extended dry down in the last dry season, are unlikely to recover for another year or even longer if water levels do not return to more average conditions.
    - This has the potential to further extend the recent run of 4 consecutive poor wading bird nesting years into the 2026 nesting seasons.
    - With the potential for La Nina conditions this dry season, conserving water within the WCAs in the early dry season may prove ecologically beneficial especially in regions prone to dry out (e.g. WCA-3A North).

- Depths are too deep (~3.0 feet) in south-central WCA-2A where shallower conditions (read suitable depth) are needed to recover ridge and slough habitat.

- Taylor Slough depths have steadily receded, and salinities are above their recent average in Florida Bay:
    - The eastern and central regions of Florida Bay remain near the 50th percentile, while the western region approaches the 75th percentile for this time of year.

- Continued freshwater input through Taylor Slough and increased local rainfall would help moderate salinities and support recovery of estuarine conditions.

- Conserving water in the WCAs while providing freshwater input to the sloughs of ENP will require careful consideration of a balance between the upstream and downstream ecological needs of the system. Individual regional recommendations can be found in **Table EV-2**.

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

Everglades Region	Rainfall (inches)	Stage change (feet)
WCA-1	0.00	−0.09
WCA-2A	0.00	−0.10
WCA-2B	0.00	+0.02
WCA-3A	0.01	−0.11
WCA-3B	0.02	−0.04
ENP	<0.01	−0.09

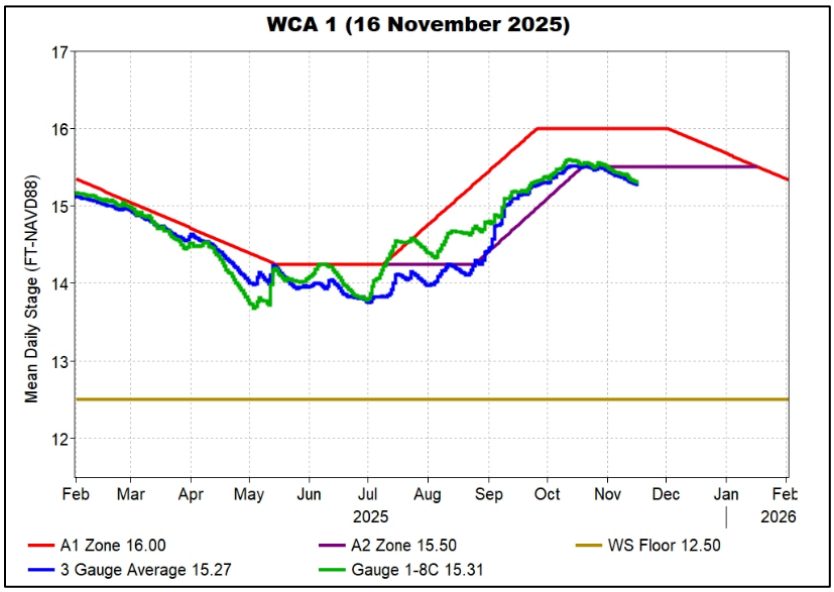

Figure EV-1. WCA-1 stage hydrographs and regulation schedule.

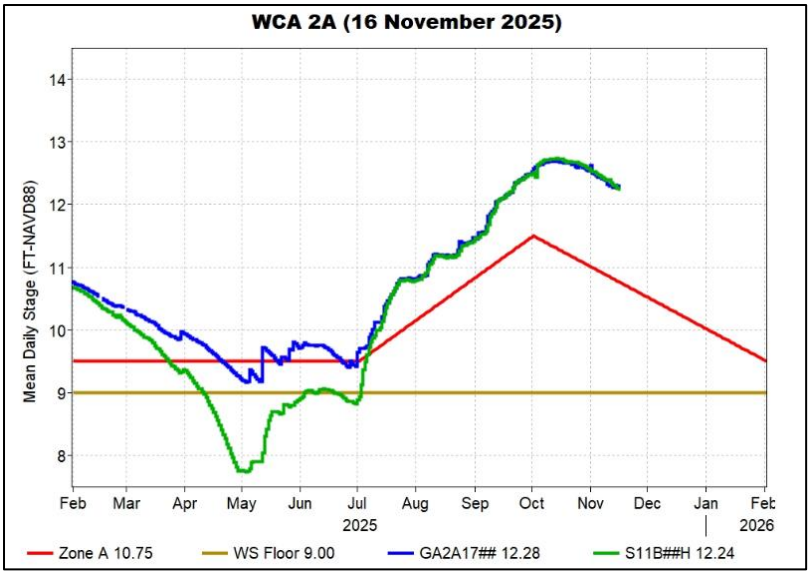

Figure EV-2. WCA-2A stage hydrographs and regulation schedule.

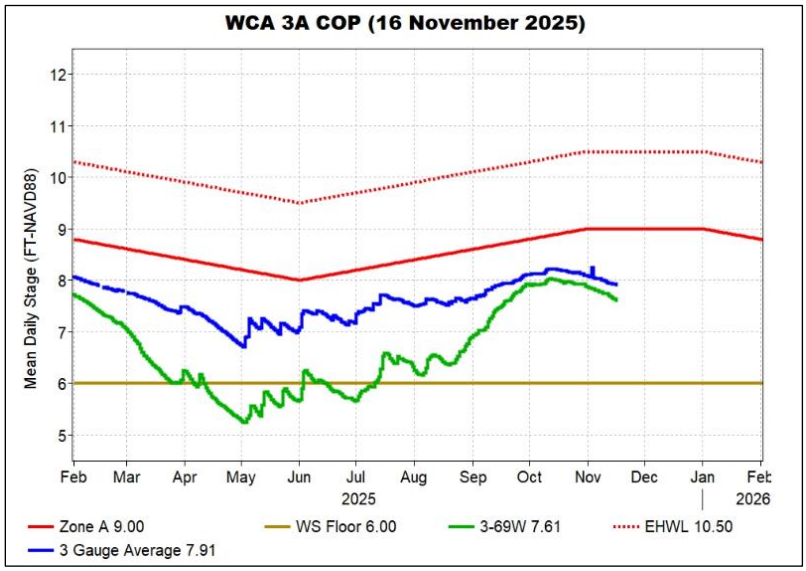

Figure EV-3. WCA-3A stage hydrographs (three-gauge average, 3-69W) and regulation schedule.

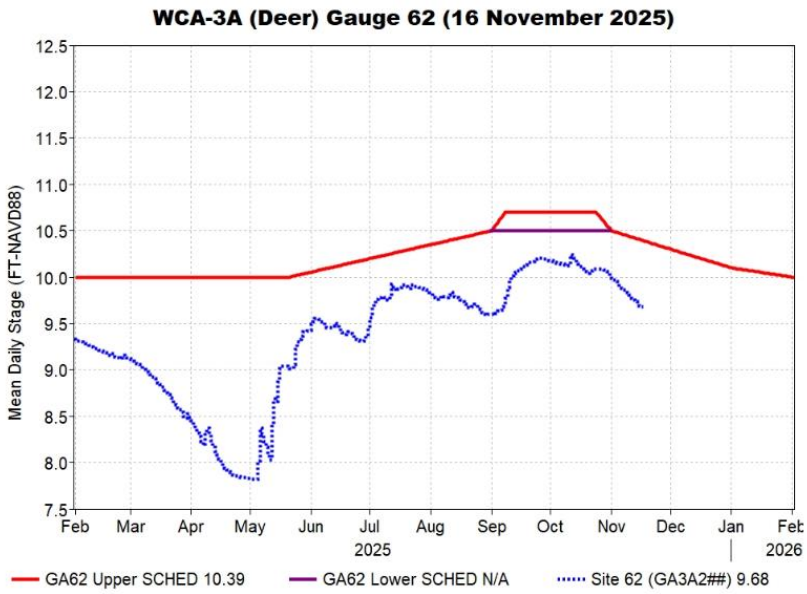

Figure EV-4. WCA-3A stage hydrograph (Deer gauge; Site 62) and regulation schedule.

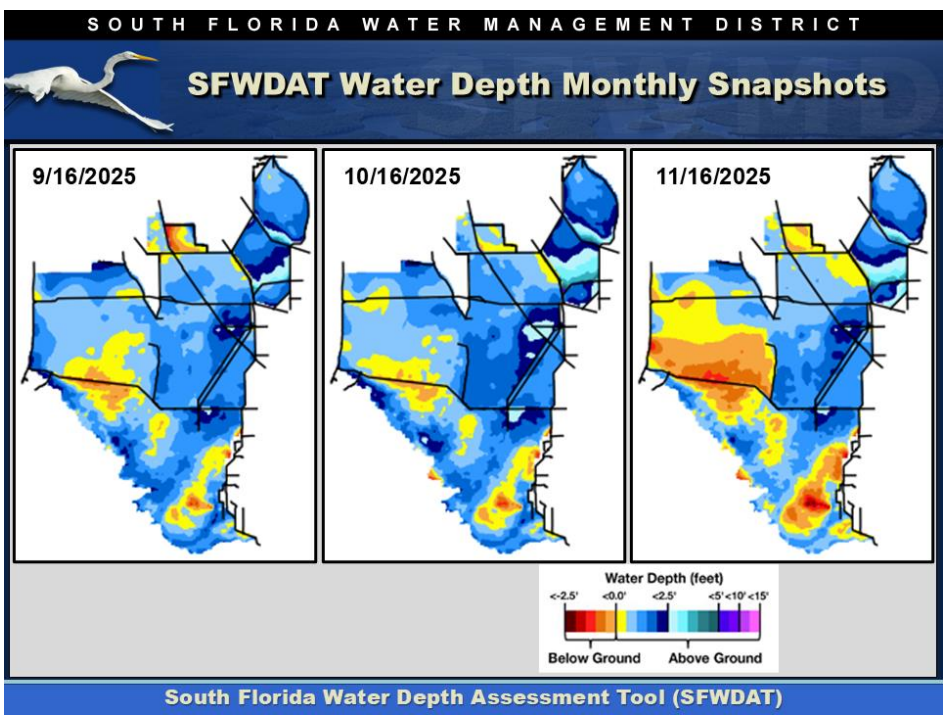

Figure EV-5. Everglades water depths from two months ago (left), one month ago (center) and present (right), based on SFWDAT.

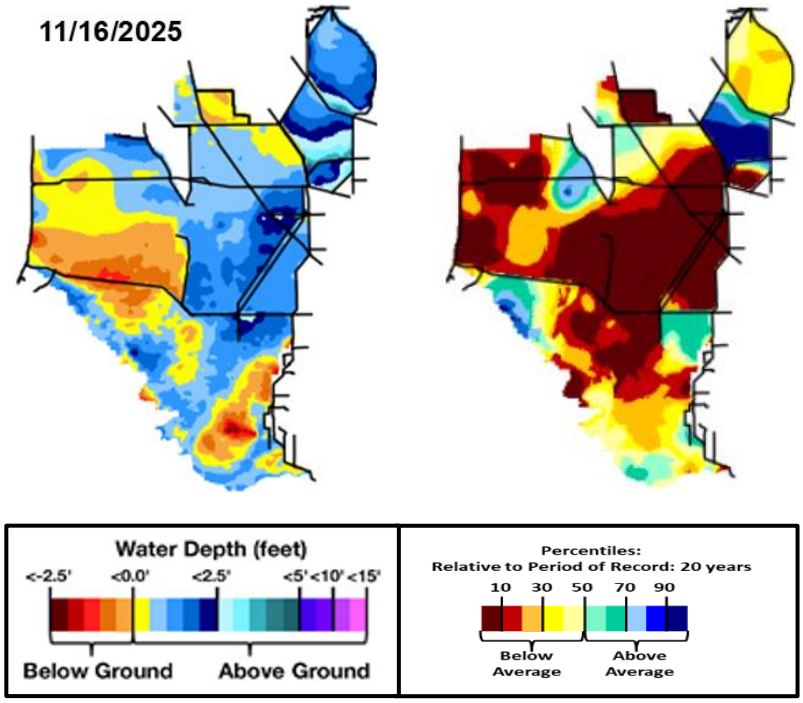

Figure EV-6. Present water depths (November 16, 2025) compared to the day of year relative to average (percentile) over the previous 20 years.

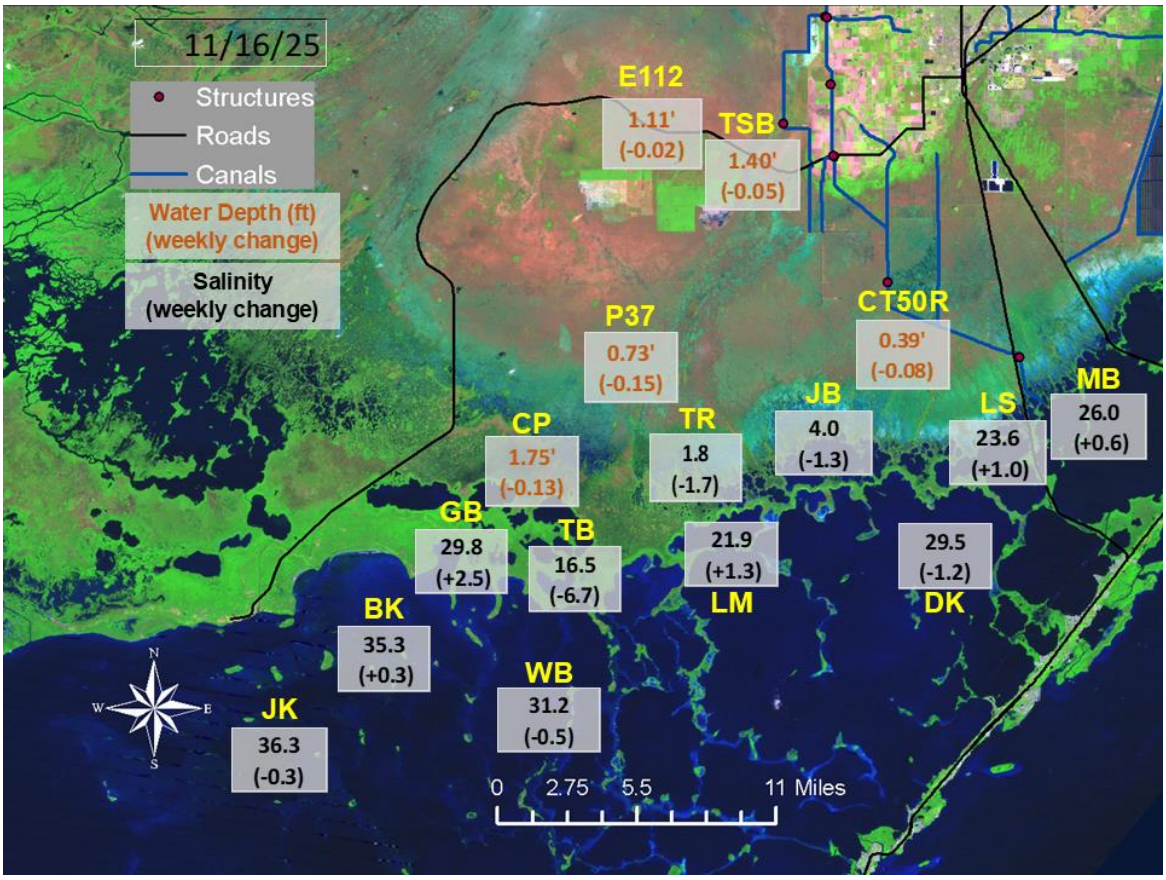

Figure EV-7. Taylor Slough water depths and Florida Bay salinities with changes since one week ago.

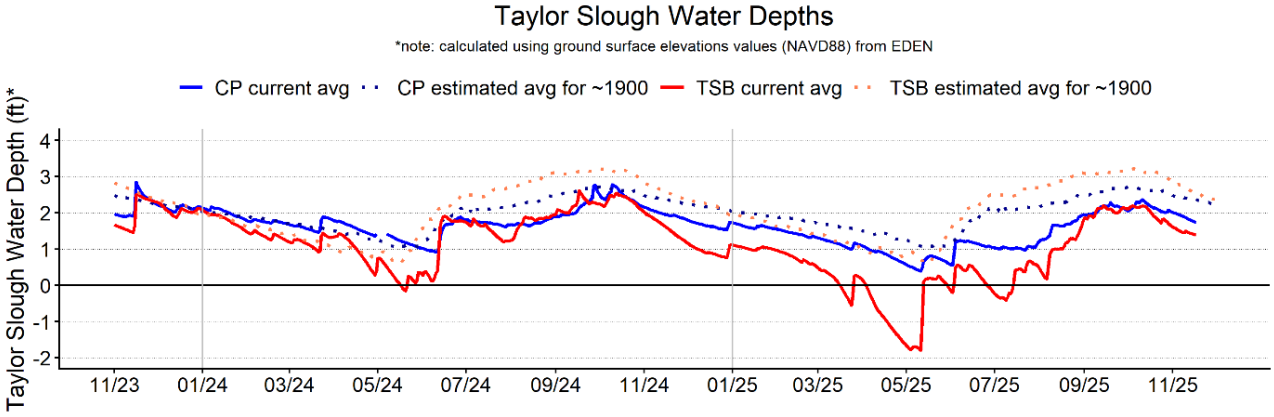

Figure EV-8. Taylor Slough water depth time series for Taylor Slough Bridge (TSB; northern slough) and Craighead Pond (CP; southern slough).

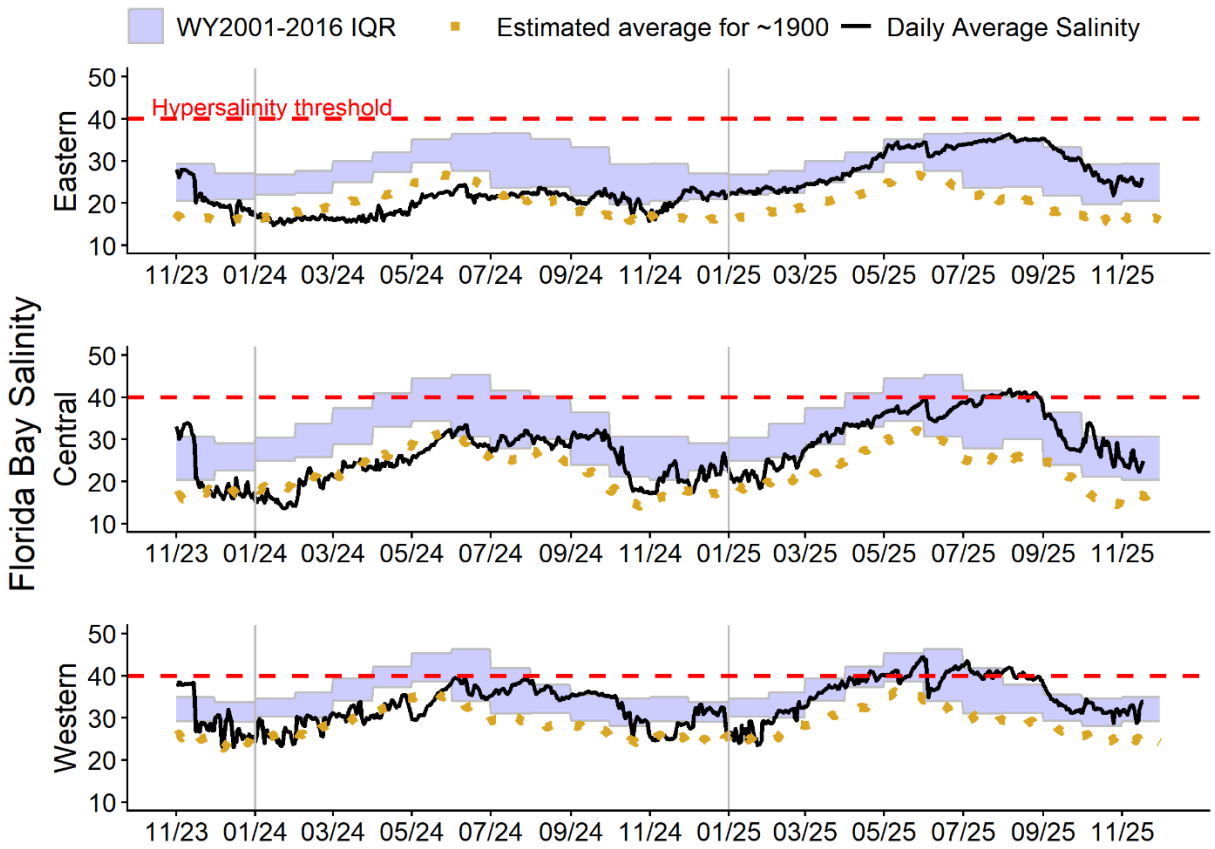

Figure EV-9. Eastern (top panel), Central (middle panel) and Western (bottom panel) Florida Bay daily average salinities with WY2001-2016 interquartile (25-75 percentile) ranges (IQR) and estimated historical daily average salinities. The hypersalinity threshold indicates the level at which salinities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

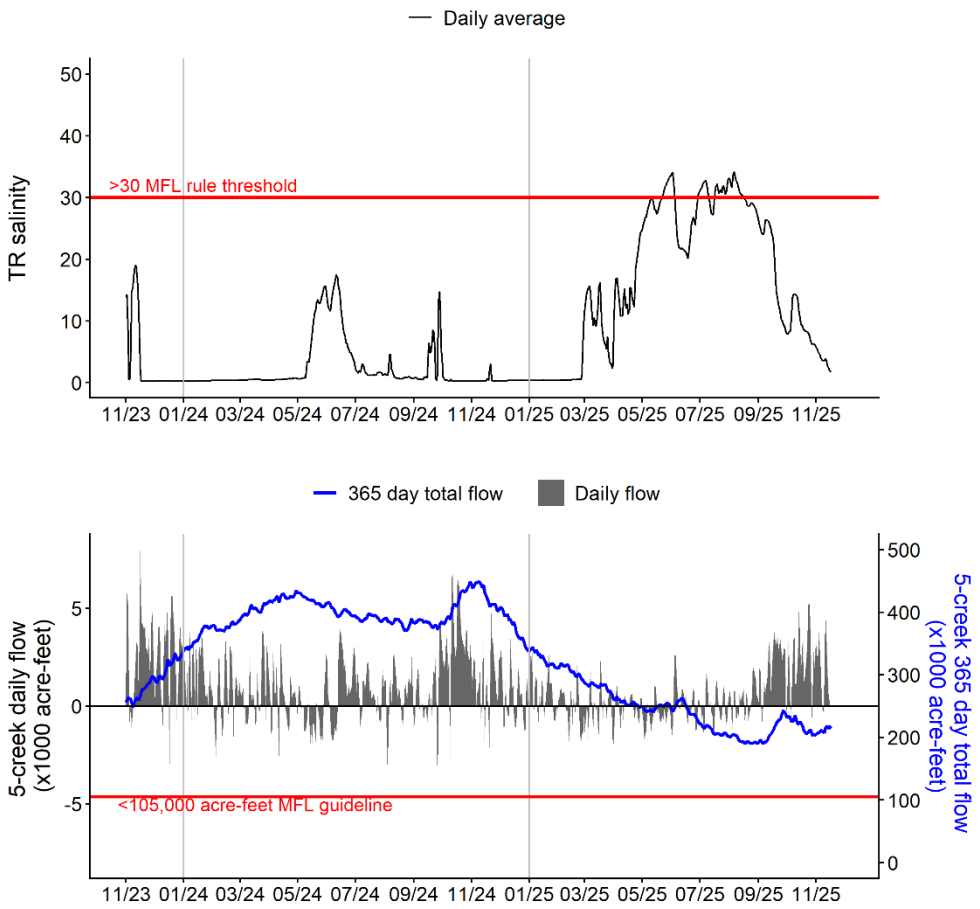

Figure EV-10. Salinity at Taylor River (TR; top) and creek inflow to Florida Bay (bottom) from the five major creeks (McCormick Creek, Taylor River, Mud Creek, Trout Creek, and West Highway Creek). The daily average salinity and 365-day total creek flow are tracked for the Florida Bay MFL criteria.

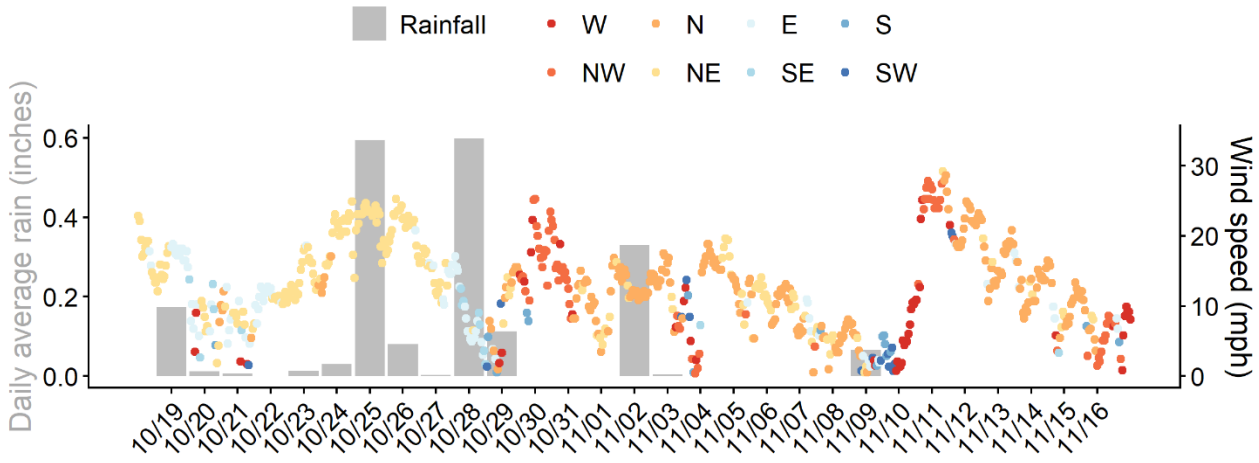

Figure EV-11. Daily average rain across Taylor Slough and Florida Bay, along with hourly average wind speed and direction (measured at Long Key) in Florida Bay over the past four weeks.

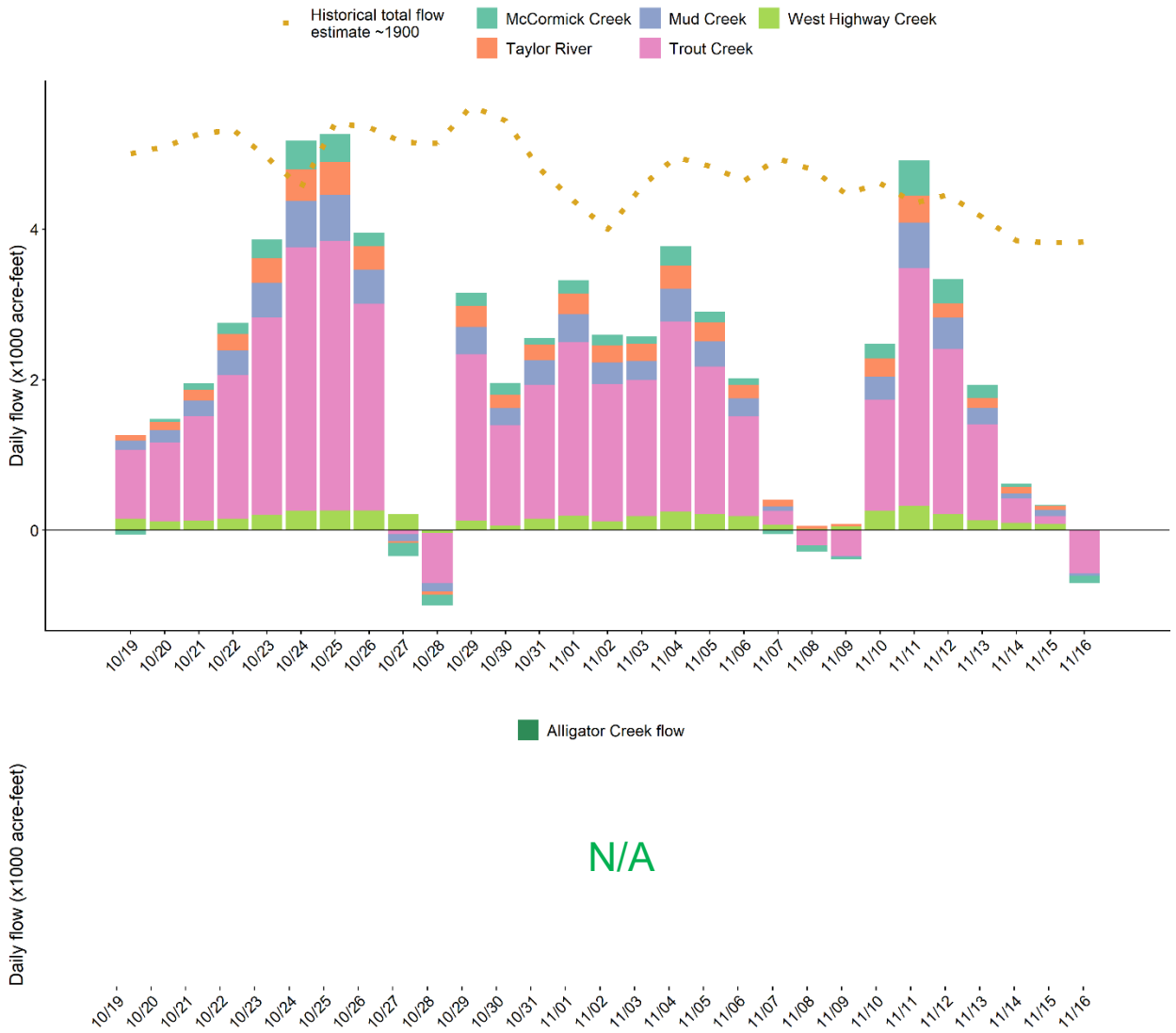

Figure EV-12. Top: daily average creek flow summed between the five major creeks with estimated historical daily flow over the past four weeks. Bottom: daily average creek flow from Alligator Creek over the past four weeks (not currently available).

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

SFWMD Everglades Ecological Recommendations, November 18, 2025 (red is new)			
	Weekly change	Recommendation	Reasons
WCA-1	Stage decreased by 0.09 feet.	A recession of no faster than 0.05 feet per week.	Conserve water, maintain within basin and downstream habitat and wildlife. Maintain maintenance access for vegetation management.
WCA-2A	Stage decreased by 0.10 feet	A recession of no faster than 0.12 feet per week.	Maintain within basin (north versus south) and downstream habitat and wildlife.
WCA-2B	Stage increased by 0.02 feet	A recession of no faster than 0.12 feet per week.	Protect within basin and downstream habitat and wildlife.
WCA-3A NE	Stage decreased by 0.06 feet	A recession of no faster than 0.05 feet per week.	Conserve water, maintain within basin and downstream habitat and wildlife. Provide suitable depths for aquatic prey and protect against peat soil loss during the dry season.
WCA-3A NW	Stage decreased by 0.15 feet	A recession of no faster than 0.05 feet per week.	
Central WCA-3A S	Stage decreased by 0.11 feet	A recession of no faster than 0.05 feet per week.	Conserve water, maintain within basin and downstream habitat and wildlife. Provide suitable depths for aquatic prey.
Southern WCA-3A S	Stage decreased by 0.11 feet		
WCA-3B	Stage decreased by 0.05 feet.	A recession of no faster than 0.12 feet per week.	Protect within basin and downstream habitat and wildlife.
ENP-SRS	Stage decreased by 0.09 feet.	Make discharges to ENP according to COP protocol, considering up/down stream ecological conditions.	Protect within basin and upstream habitat and wildlife.
Taylor Slough	Stage changes ranged from -0.15 feet to -0.02 feet	Move water southward as possible.	When available, provide freshwater to promote water movement.
FB- Salinity	Salinity changes ranged from -6.7 to +2.5	Move water southward as possible.	When available, provide freshwater to promote water movement.