

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 12, 2025

**SUBJECT:** Weekly Environmental Conditions for Systems Operations

### **Summary**

#### **Weather Conditions and Forecast**

A vigorous upper-air disturbance will dive from the Ohio Valley into the Tennessee River Valley today, carving out an unusually strong upper-level trough of low pressure that will gradually shift eastward across the eastern United States. A strong cold front associated with this system extends roughly from a Melbourne-Port Charlotte line around sunrise this morning and will rapidly plunge southeastward through the southeastern half of the SFWMD during the morning hours. By early afternoon, the front should reach a northwestern Bahamas–central Cuba line and push well southeast of the area overnight as the trough continues shifts eastward and intensifies further.

Ahead of the cold front, shallow moisture and frontal lift could produce a few very light showers over the southeastern part of the SFWMD and the Florida Keys this morning. Following frontal passage, an exceptionally dry and stable air mass will sweep across the region on brisk northwesterly winds, ending any rainfall and ushering in markedly colder temperatures. In fact, by Tuesday morning, the coldest air the SFWMD has experienced since the middle of last winter will arrive, with notably low wind chills.

On Tuesday, the upper-level trough will gradually lift out of the eastern United States, allowing the area of strong surface high pressure trailing behind it to weaken slightly but linger over the northeastern Gulf of Mexico and north Florida through Wednesday. The extreme dryness and strong atmospheric stability will ensure dry weather throughout this period. Chilly daytime temperatures on Tuesday will give way to a gradual warming trend on Wednesday as an onshore flow develops along the east coast, carrying modified air from the warm Gulf Stream waters inland across the SFWMD.

From Wednesday into Thursday, a weak upper-air disturbance trekking from the Great Lakes to the northeastern United States will help to maintain a broad but weaker trough of low pressure over the eastern U.S. A weak cold front accompanying this system will remain north of 30°N latitude, limiting its influence to areas well north of the SFWMD. Its passage will nonetheless reinforce surface high pressure along the north-central and northeastern Gulf Coast, with another dose of dry air slowing the recovery of even shallow moisture over the SFWMD despite continued onshore winds along the east coast.

Following this, another upper-air disturbance – stronger than its predecessor -- will sweep southeastward from just north of the Great Lakes from Friday to Atlantic Canada and surrounding areas on Saturday, resulting in a stronger upper-level trough over the western Atlantic. This latest disturbance will drive a “backdoor” cold front southward over the Atlantic, strengthening surface high pressure to the northwest of Florida. As a result, additional dry and stable air will filter southward across the SFWMD on northeasterly winds. The air mass will be somewhat modified after passing over the Atlantic waters, but regardless, help to maintain dry weather across the region through at least the first half of the weekend. A minor exception is possible if a narrow band of moisture along the leading edge of the “backdoor” cold front results in a slight increase in shower activity along and near the east coast of the SFWMD as is depicted in the weekend QPFs.

Attention then turns to the southern jet stream, where a disturbance will emerge from the southern Rockies on Saturday and move into the Plains in tandem with a northern jet stream disturbance by Sunday as mid-level high pressure forms over the northwestern Caribbean Sea. Most model guidance indicates that the southern stream disturbance will lift northeastward when it later moves through the east-central U.S., leaving the mid-level high in control across the region. Under this scenario, dry conditions would likely continue across the SFWMD through Sunday with a gradual warming trend as the Polar Front lifts north of the area. However, roughly 15–20% of model solutions suggest either a weaker mid-level high and/or a stronger southern stream system making greater eastward progress before lifting out. If either or both of those scenarios occur, there is a chance that fast-moving shower activity associated with the southern system’s cold front could affect parts of the SFWMD late Sunday or early Monday, mainly across northern and western areas. However, based on the latest guidance, any such rainfall appears more likely to occur on Monday than Sunday, though it cannot be ruled out that some could arrive sooner. Consequently, the Sunday rainfall forecast is rated of low confidence despite the overall dry signal in most guidance.

For the week ending next Monday morning, total area-averaged rainfall across the SFWMD is very likely to be much below the long-term average. This will still be true, even if the 15-20% of the guidance favoring a wetter scenario late in the weekend were to materialize.

### **Kissimmee**

In the past week, releases were made from East Lake Toho and Lake Toho to keep stages at the regulation schedule. Releases from lakes Kissimmee, Cypress, and Hatchineha (KCH) followed the Headwaters Revitalization Schedule (HRS) Increment 1 Temporary Deviation Discharge Plan. Weekly average discharge on November 9, 2025, was 1,500 cfs at S-65 and 1,400 cfs at S-65A, respectively. Mean weekly water depth on the Kissimmee River floodplain decreased by 0.17 feet to 0.68 feet. The weekly average concentration of dissolved oxygen in the Kissimmee River increased from the previous week’s value of 2.8 mg/L to 4.7 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 12.59 feet NAVD88 (13.90 ft NGVD29) on November 9, 2025, which was 0.02 feet lower than the previous week and 0.19 feet higher than a month ago. Average daily inflows (excluding rainfall) decreased compared to the previous week, dropping from 2,300 cfs to 1,610 cfs. Average daily outflows (excluding evapotranspiration) increased to 1,310 cfs. The most recent non-obscured satellite image from November 09, 2025, NOAA's Harmful Algal Bloom Monitoring System suggests elevated bloom activity in the southern region of the lake.

## **Estuaries**

Total inflow to the St. Lucie Estuary averaged 320 cfs over the past week with no flow coming from Lake Okeechobee. Mean surface 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 590 cfs over the past week with 190 cfs coming from Lake Okeechobee. Over the past week, surface salinities increased at all sites in the estuary. 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 Cape Coral and in the upper stressed range (>25) at Shell Point and Sanibel.

## **Stormwater Treatment Areas**

For the week ending Sunday, November 9th, 2025 no water was delivered to the FEBs/STAs from Lake Okeechobee. The total amount of Lake releases sent to the FEBs/STAs in WY2026 thus far is approximately 32,000 ac-feet. The total amount of inflows to the STAs in WY2026 is approximately 521,279 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**

There was well below average rainfall across the EPA last week and recession rates remained slightly elevated. Stage change fell mainly in the fair category across the EPA, except for northwestern WCA-3A where recession rate increased to the poor category. Southern WCA-2A remains unseasonably deep, while a majority of WCA-3A remains in the driest 10<sup>th</sup> percentile of the last 25 years, 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 may occur by the end of the dry season. 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; however, all three regions remain within the Interquartile Range (IQR) near the 50<sup>th</sup> percentile.

## Supporting Information

### Kissimmee Basin

#### *Upper Kissimmee*

On November 9, 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 49.6 feet NAVD88 (1.9 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 9, 2025, mean weekly discharge was 1,500 cfs at S-65 and 1,400 cfs at S-65A. Mean weekly discharge from the Kissimmee River was 1,600 cfs at S-65D and 1,500 at S-65E, respectively (**Table KB-2**). Mean weekly headwater stages were 45.2 feet NAVD88 at S-65A and 32.8 feet NAVD88 at S-65D. Mean weekly river channel stage decreased by 0.3 feet from the previous week's value of 35.9 feet to 35.6 feet NAVD88 (**Figure KB-4**). Mean weekly water depth on the Kissimmee River floodplain decreased by 0.17 feet to 0.68 feet (**Table KB-2, Figure KB-5**). The weekly average concentration of dissolved oxygen in the Kissimmee River increased from 2.8 mg/L the previous week to 4.7 mg/L (**Table KB-2, Figure KB-6**).

#### **Water Management Recommendations**

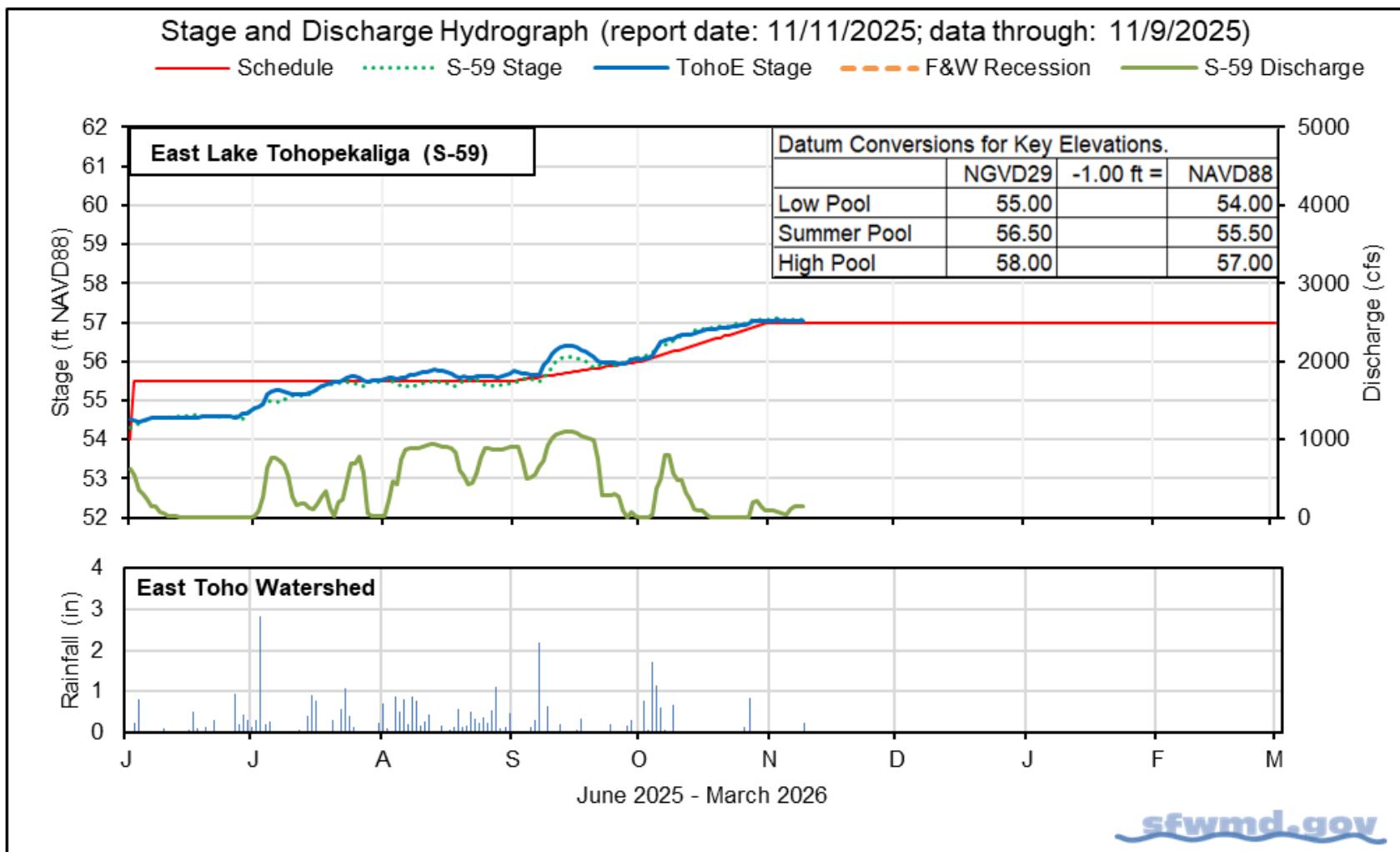
In KCH, follow the Headwaters Revitalization Schedule (HRS) Increment 1 Temporary Deviation Discharge Plan for S-65/S-65A (**Figure KB-7**). With KCH stage in Zone B2, target flows of 1,400 cfs at S-65A. When stage decreases into Zone B3, use the Increment 1 Interpolation Tool to determine discharge 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.

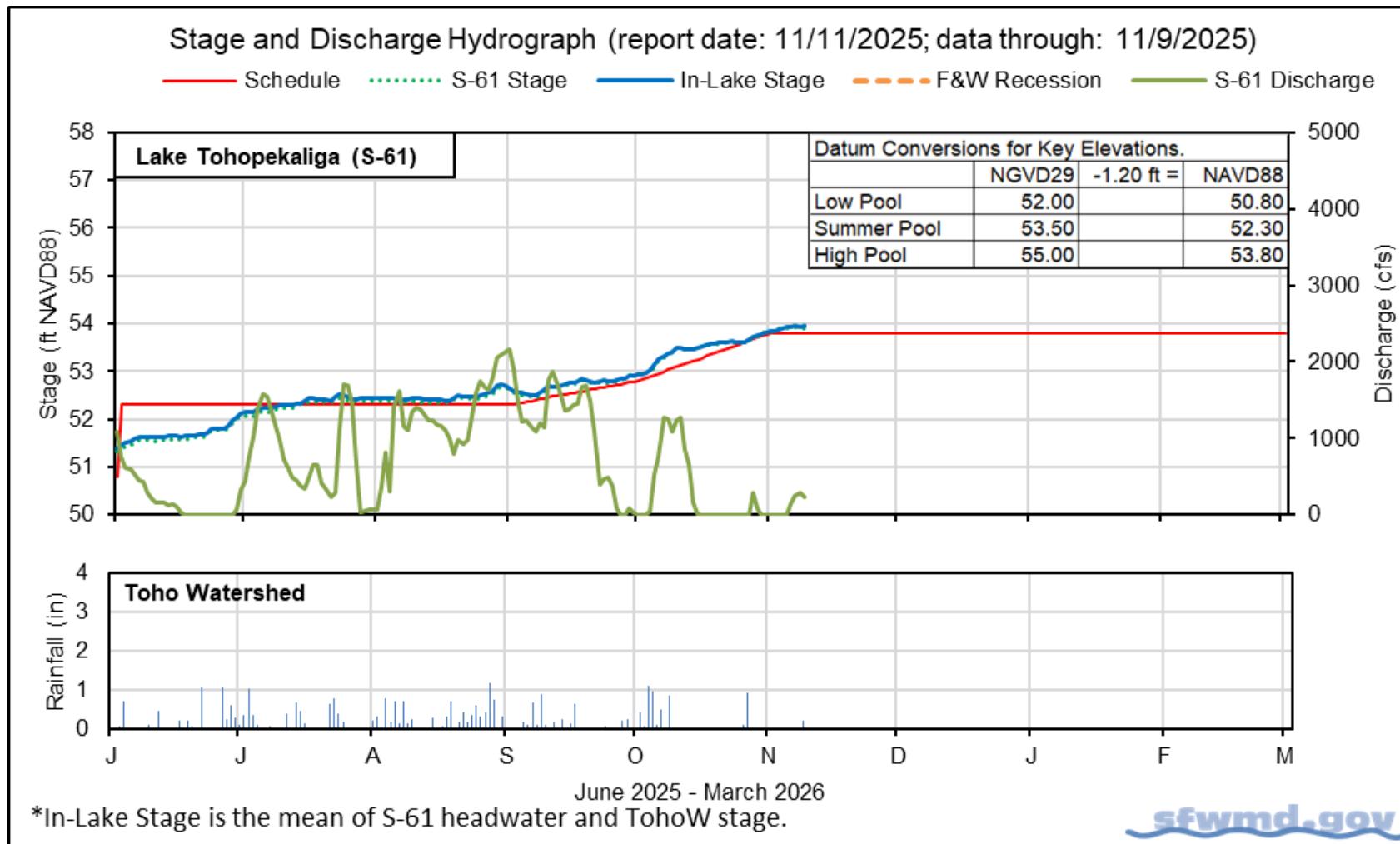
Water Body	Structure	Stage Monitoring Site	Weekly (7-Day) Average Discharge (cfs)	Sunday Lake Stage (feet NAVD88) <sup>a</sup>	Schedule Type <sup>b</sup>	Sunday Schedule Stage (feet NAVD88)	Sunday Departure from Regulation (feet)	
							11/9/25	11/2/25
Lakes Hart and Mary Jane	S-62	LKMJ	62	59.9	R	59.9	0.0	0.0
Lakes Myrtle, Preston and Joel	S-57	S-57	53	61.0	R	61.0	0.0	0.0
Alligator Chain	S-60	ALLI	25	63.0	R	63.0	0.0	0.0
Lake Gentry	S-63	LKGT	57	60.5	R	60.4	0.1	0.0
East Lake Toho	S-59	TOHOE	100	57.0	R	57.0	0.0	0.1
Lake Toho	S-61	TOHOW	130	53.9	R	53.8	0.1	0.1
Lakes Kissimmee, Cypress and Hatchineha	S-65	KUB011 LKIS5B	1500	49.6	T	51.5	-1.9	-1.5

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

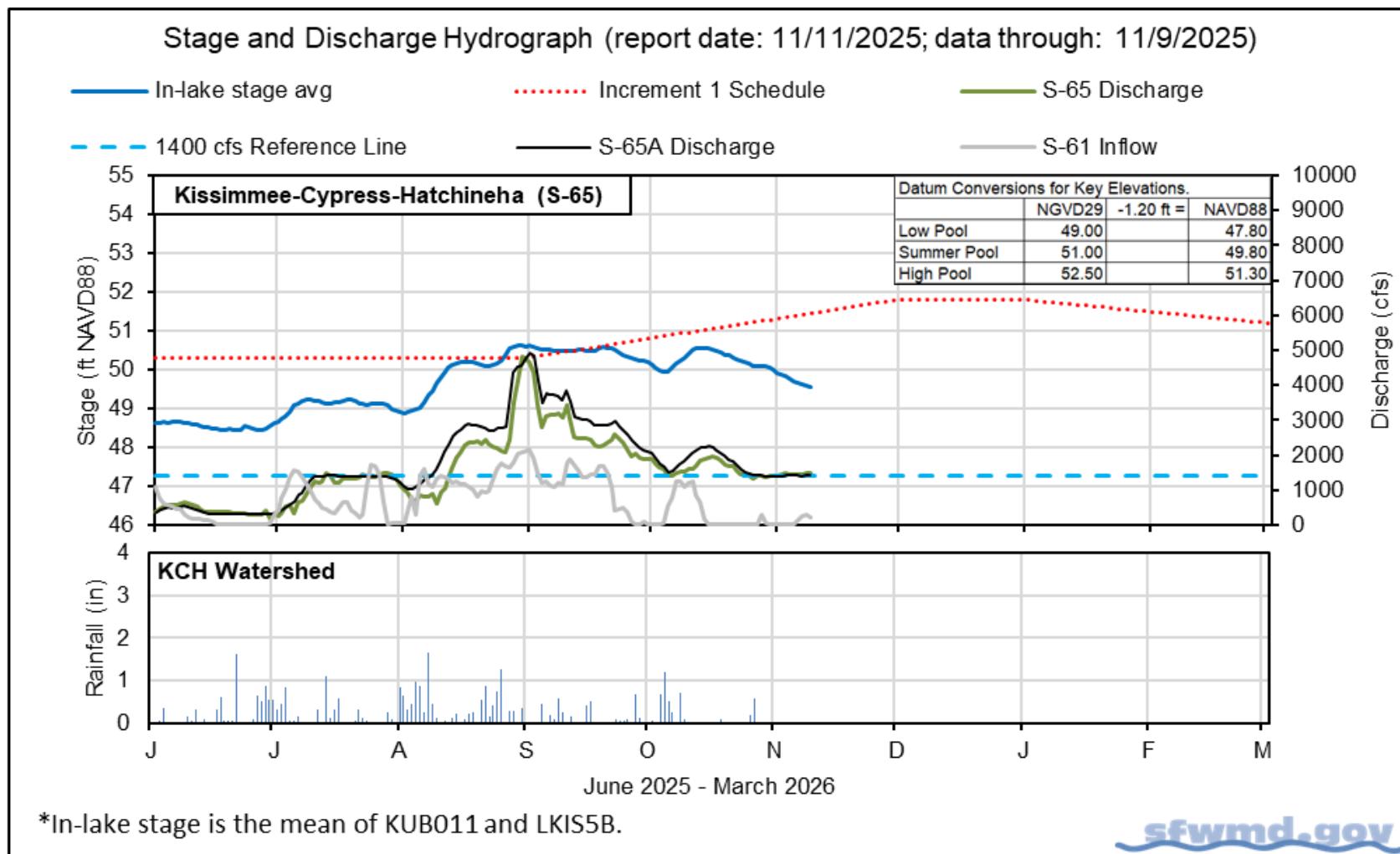
b. A: projected recession line; R: USACE regulation schedule; S: temporary recession target line; T: temporary schedule; NA: not applicable or not available.



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



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



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

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

Metric	Location	Sunday Daily Average	Weekly Average for Previous Seven Day Periods			
		11/9/25	11/9/25	11/2/25	10/26/25	10/19/25
Discharge	S-65	1,500	1,500	1,400	1,500	1,900
Discharge	S-65A <sup>a</sup>	1,400	1,400	1,400	1,600	2,200
Headwater Stage (feet NAVD88)	S-65A	45.2	45.2	45.2	45.1	45.2
Discharge	S-65D <sup>b</sup>	1,500	1,600	2,100	2,400	2,700
Headwater Stage (feet NAVD88)	S-65D <sup>c</sup>	25.6	32.8	33.1	33.5	33.4
Discharge (cfs)	S-65E <sup>d</sup>	1,400	1,500	2,000	2,300	2,600
Discharge (cfs)	S-67	0	0	0	0	0
Dissolved Oxygen (mg/L) <sup>e</sup>	Phase I, II/III river channel	4.8	4.7	2.8	1.9	1.8
River channel mean stage (feet NAVD88) <sup>f</sup>	Phase I river channel	35.5	35.6	35.9	36.4	36.4
Mean depth (feet) <sup>g</sup>	Phase I & II/III floodplain	0.65	0.68	0.85	1.06	1.14

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.

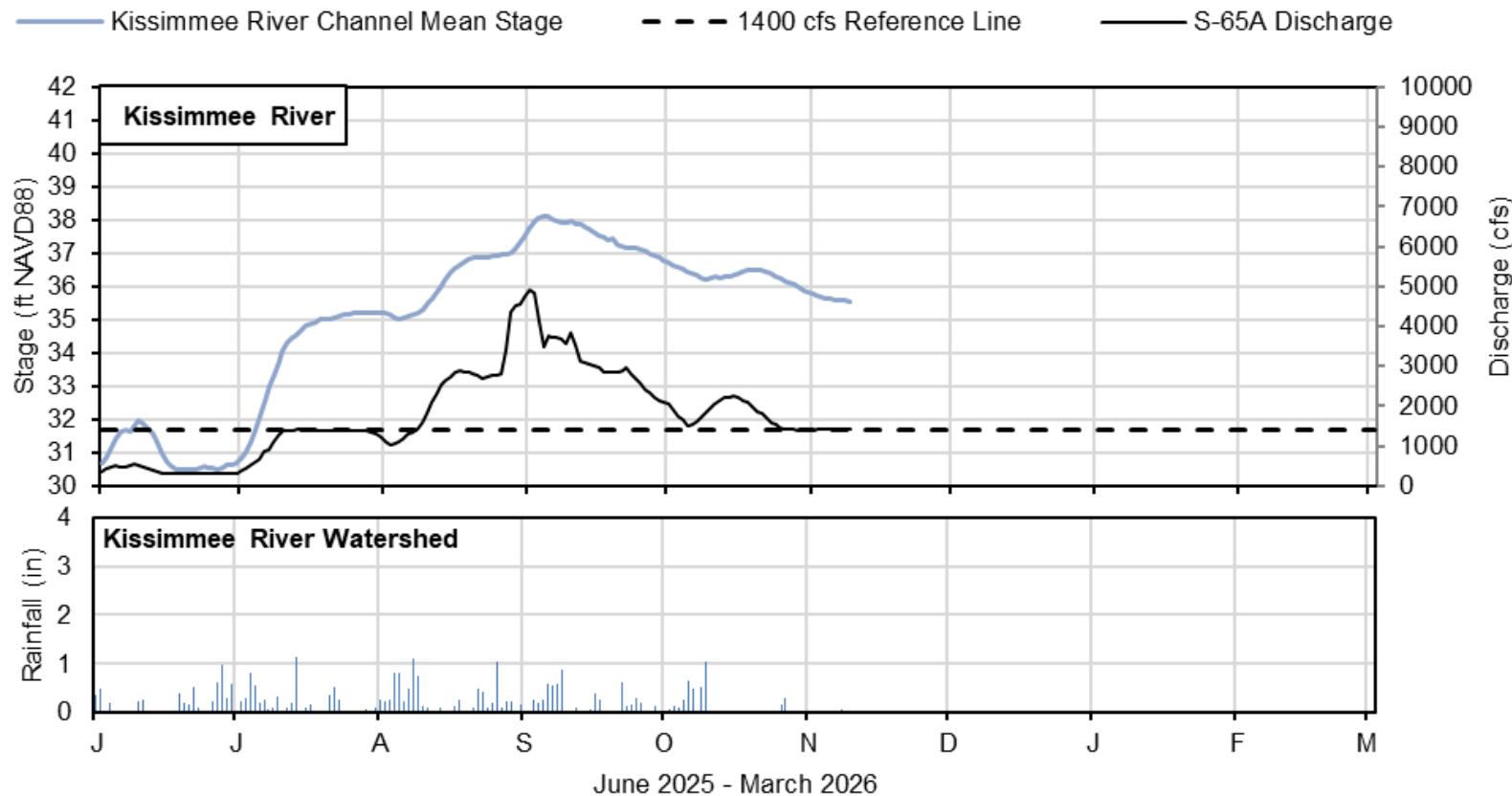
d. Combined discharge from S-65E and S-65EX1.

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).

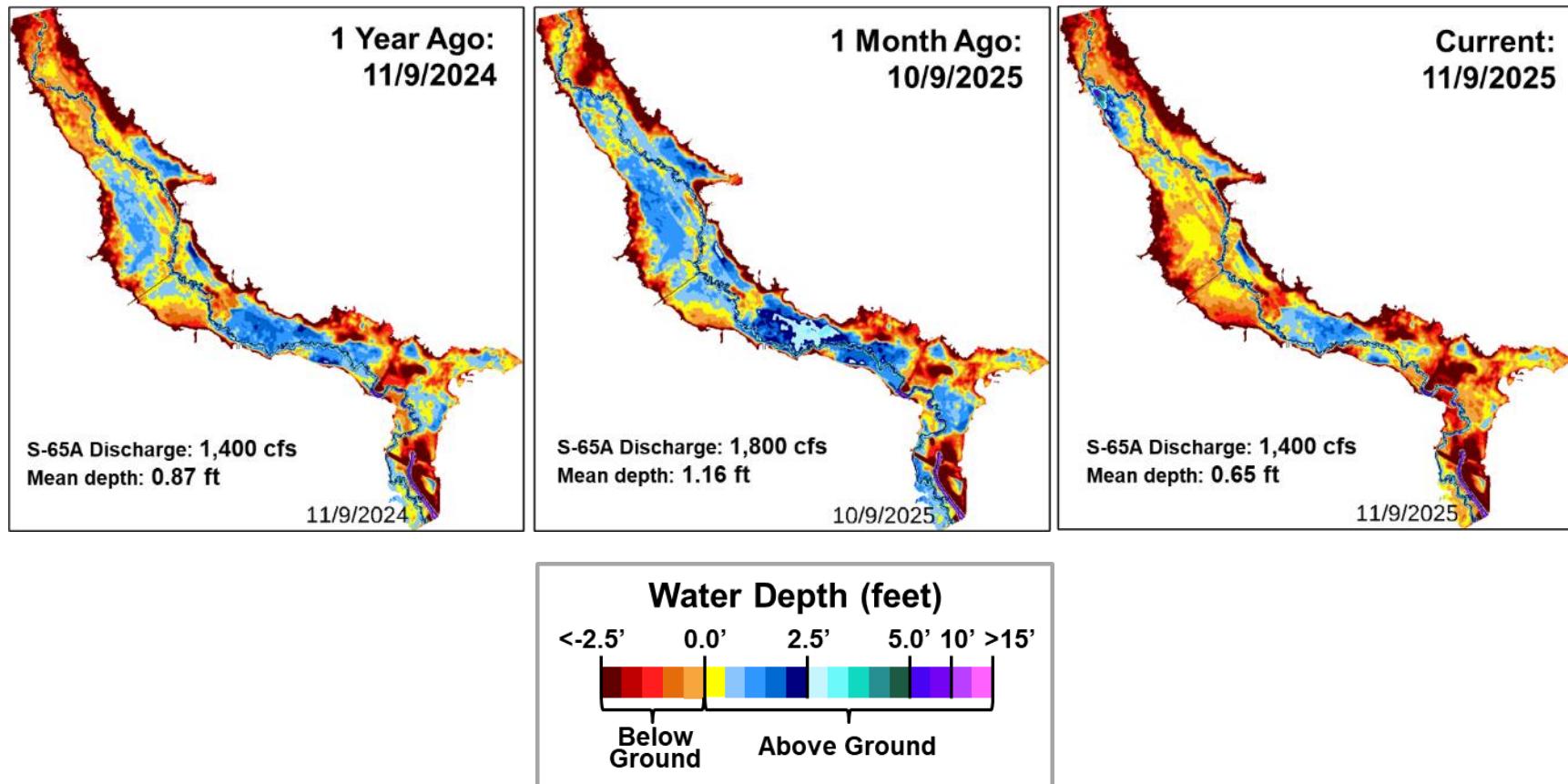
### Stage and Discharge Hydrograph (report date: 11/11/2025; data through: 11/9/2025)



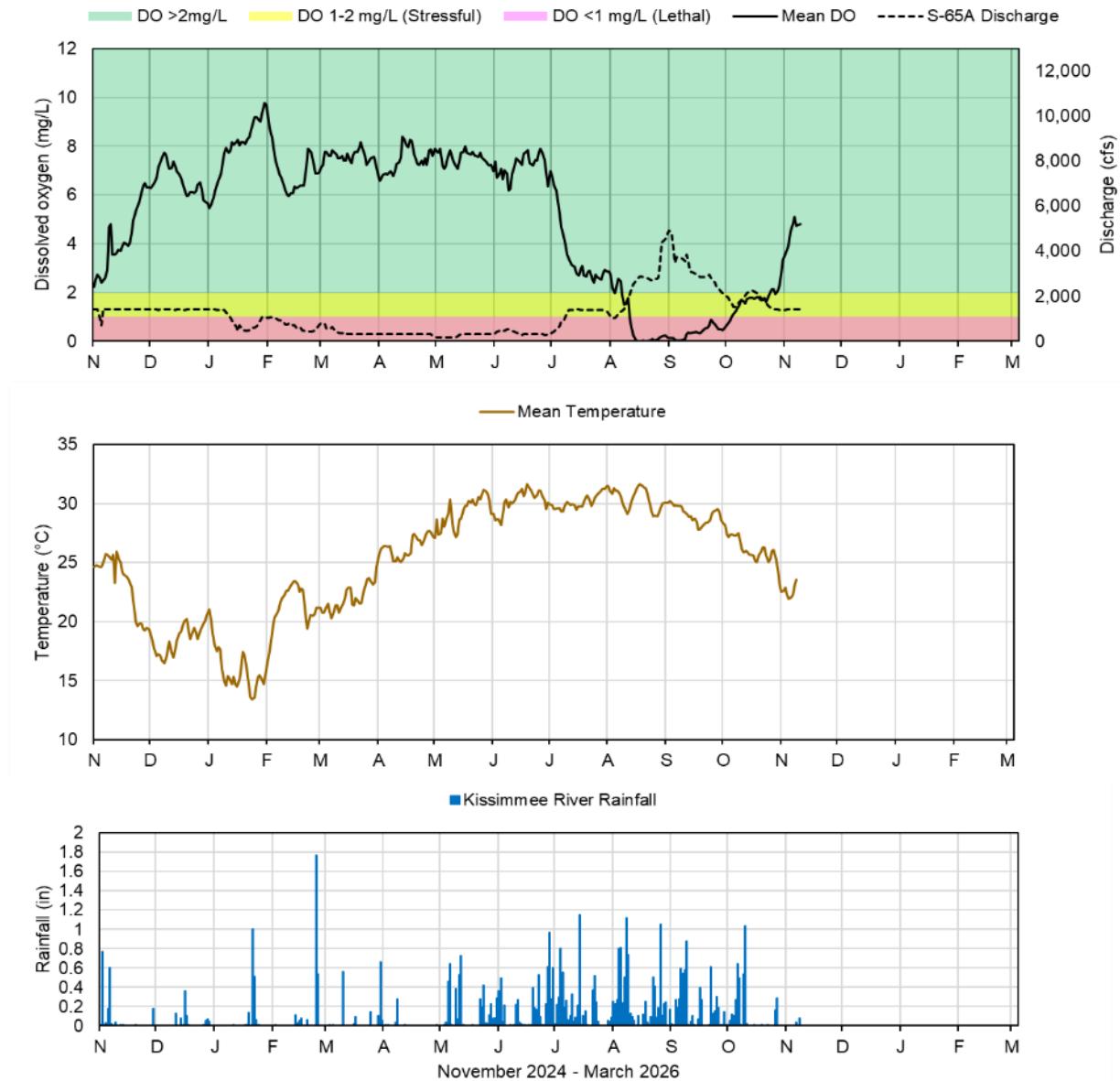
\*River Channel Stage is the average for PC62, KRDR02, KRBN, PC33, and PC11.

[sfwm.gov](http://sfwm.gov)

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



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



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

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

## Discharge Guidance for Increment I Temporary Deviation Discharge Plan

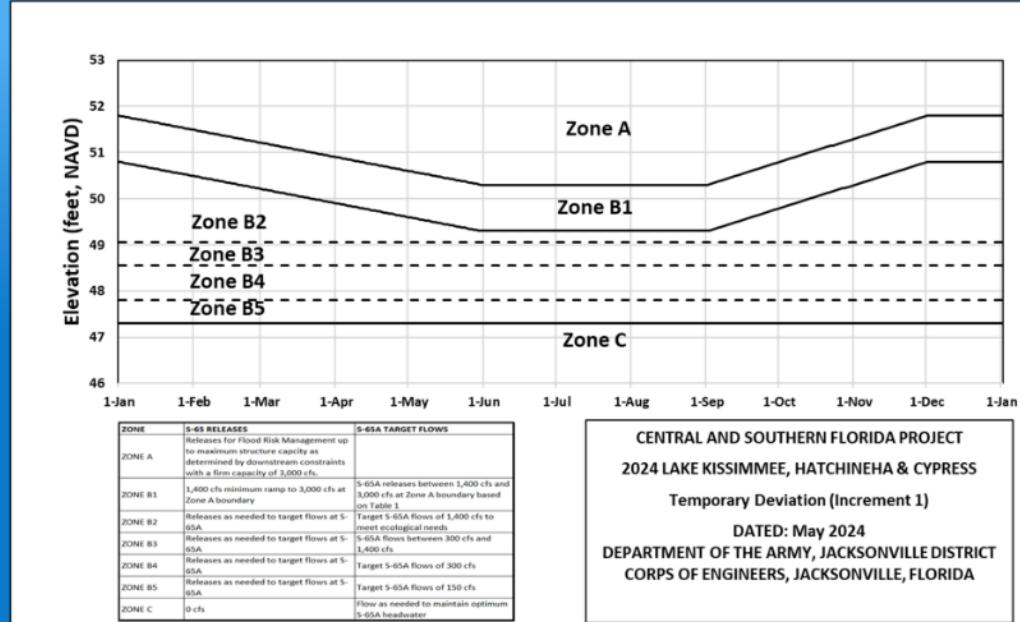
ZONE	S-65 RELEASES	S-65A TARGET FLOWS
ZONE A	Releases for Flood Risk Management up to maximum structure capacity as determined by downstream constraints with a firm capacity of 3,000 cfs.	
ZONE B1	1,400 cfs minimum ramp to 3,000 cfs at Zone A boundary	S-65A releases between 1,400 cfs and 3,000 cfs at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

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

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

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

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## Other Considerations

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

Slide Revised 7/29/2024

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

## Lake Okeechobee

Lake Okeechobee stage was 12.59 feet NAVD88 (13.90 ft NGVD29) on November 9, 2025, which was 0.02 feet lower than the previous week and 0.19 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 more than 1 foot above the water shortage management band (**Figure LO-3**). According to NEXRAD, no rain fell directly over the lake during the previous week, while 0.86 inches were lost to evapotranspiration.

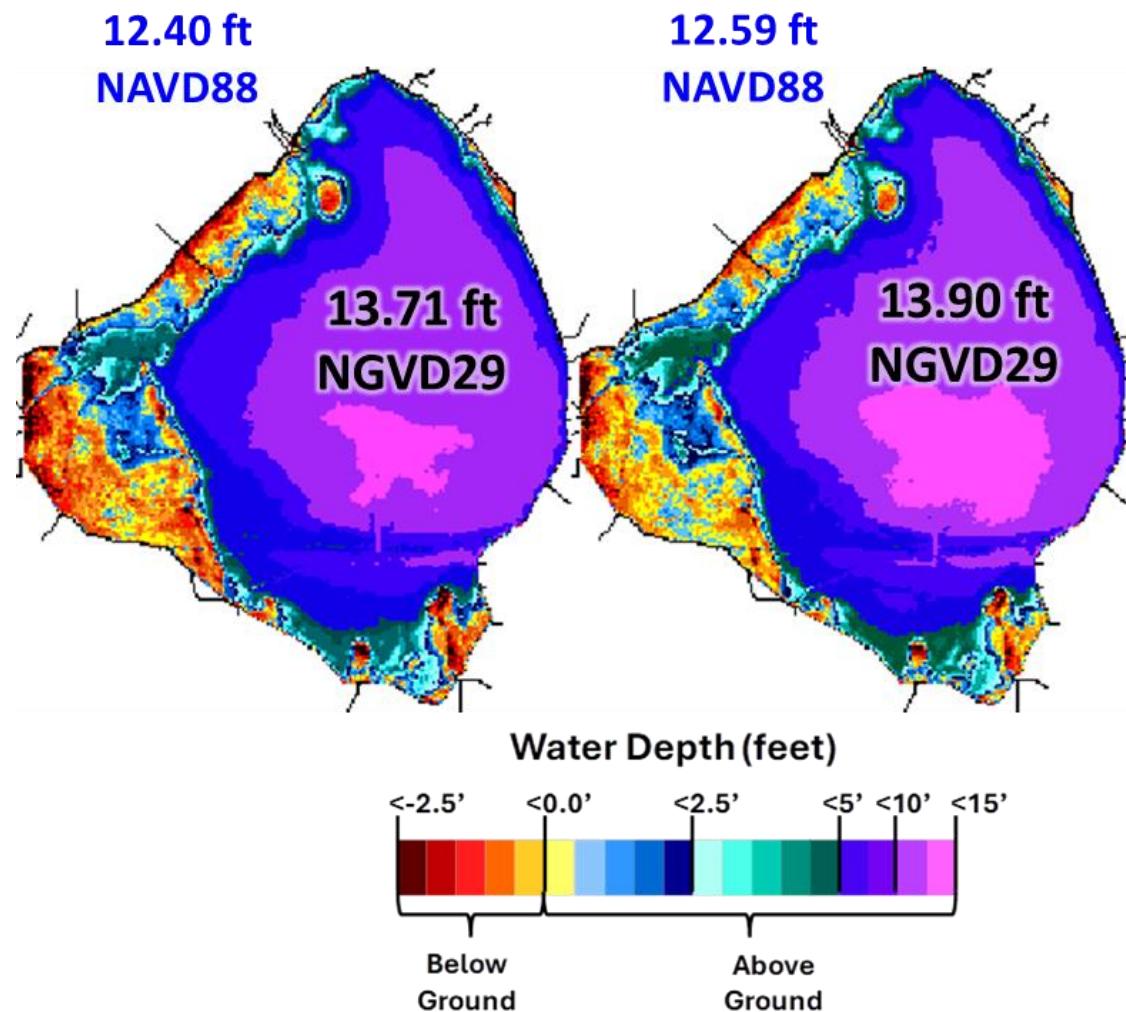
Average daily inflows (excluding rainfall) decreased compared to the previous week, dropping from 2,300 cfs to 1,610 cfs. The highest inflows came from the Kissimmee River (1,510 cfs via S-65E(X1)). Average daily outflows (excluding evapotranspiration) increased compared to the previous week, going from 60 cfs to 1,310 cfs, most of which went south through the S-350 structures (950 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-obsured satellite image from November 9, 2025, NOAA's Harmful Algal Bloom Monitoring System suggests a continued cyanobacteria bloom in the southern region of the lake, which should dissipate with cooler weather and winds expected over the coming week (**Figure LO-6**).

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

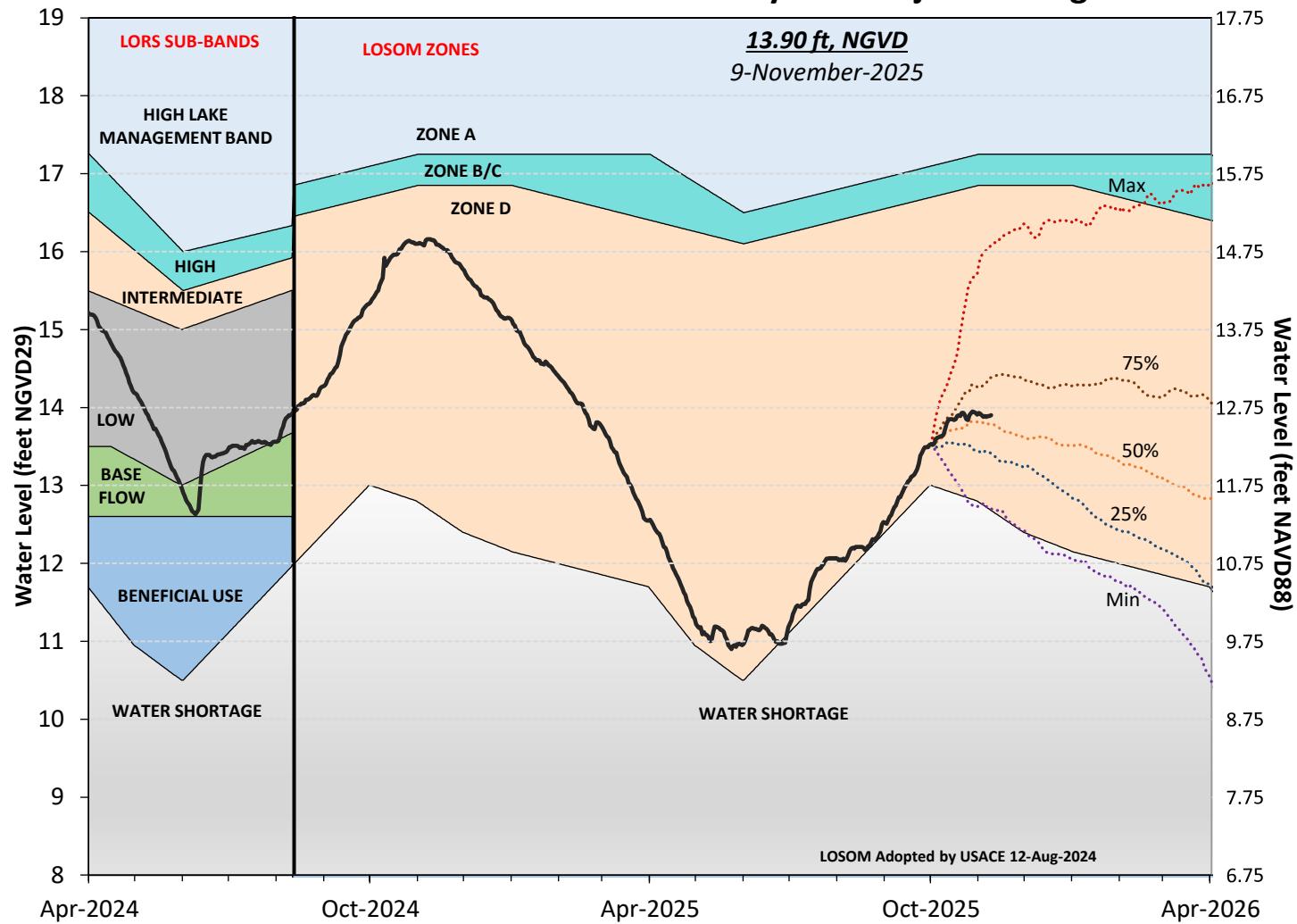
**1 Month Ago:**  
**10/10/2025**

**Current:**  
**11/09/2025**



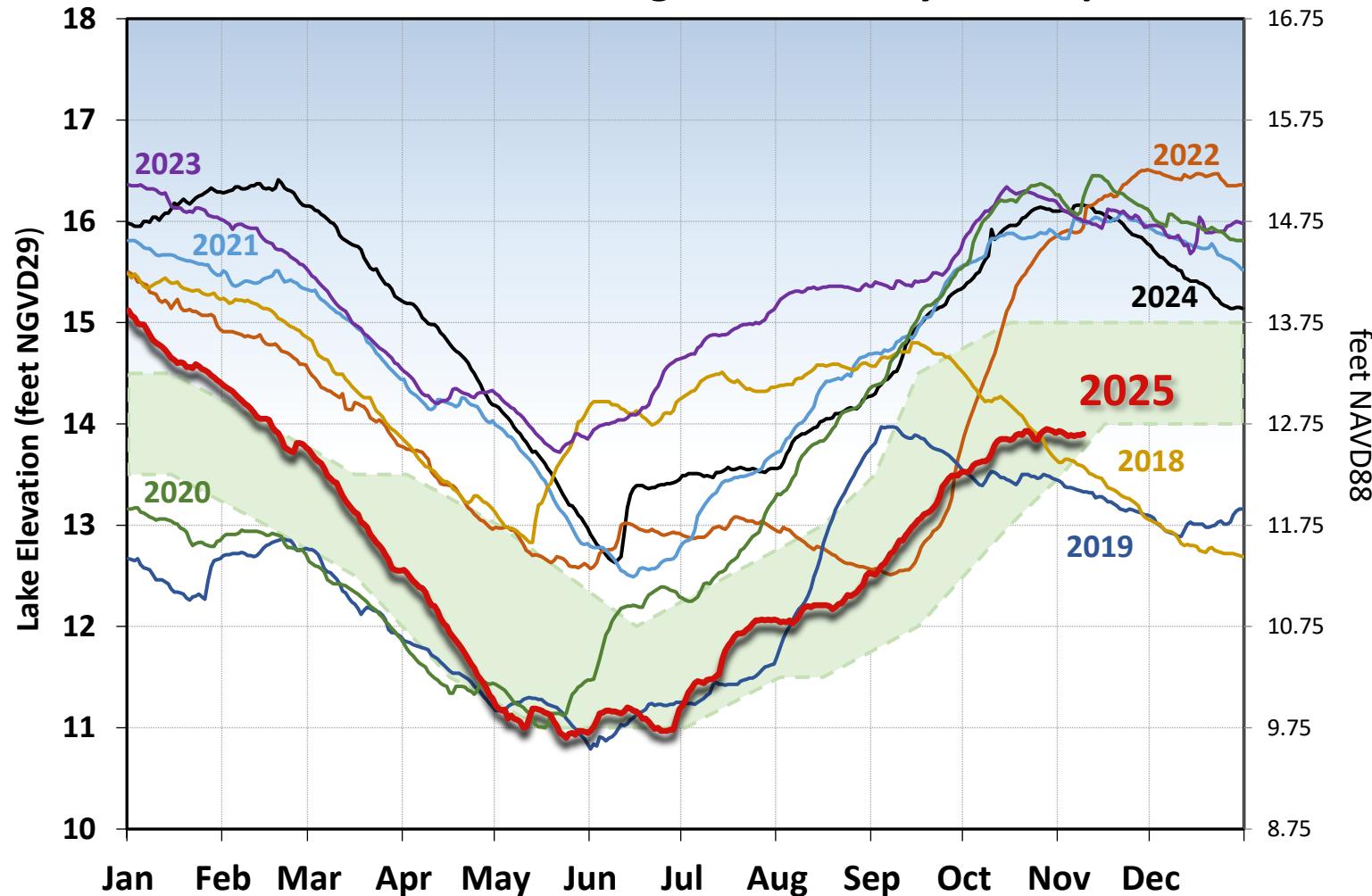
**Figure LO-1.** Lake Okeechobee water depth estimates based on South Florida Water Depth Assessment Tool (SFWDAT).

## Lake Okeechobee Water Level History and Projected Stages

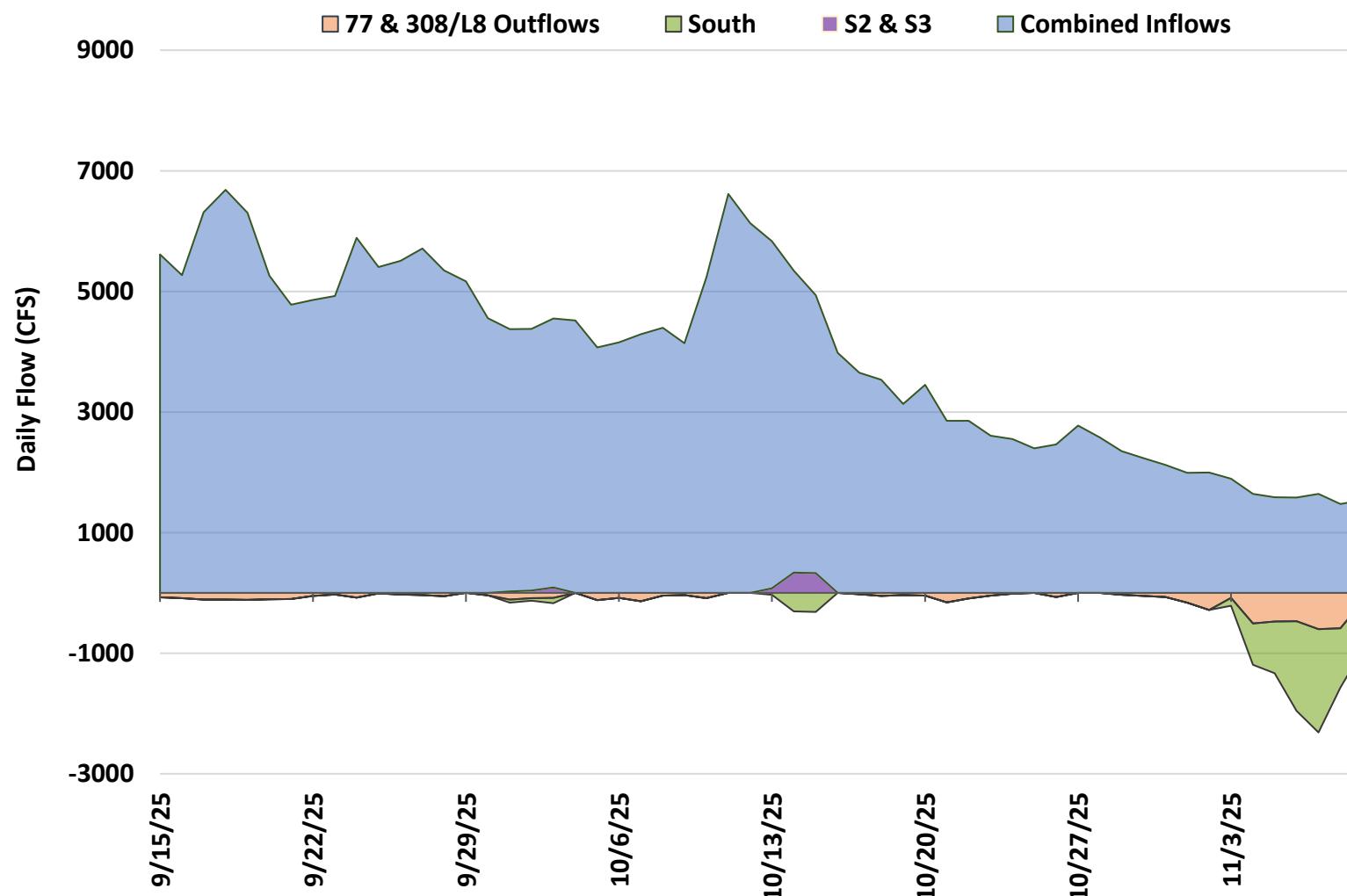


**Figure LO-2.** Recent Lake Okeechobee stages with projected stages based on a dynamic position analysis.  
Note: stages are in NGVD29, approximate NAVD88 values are shown for reference.

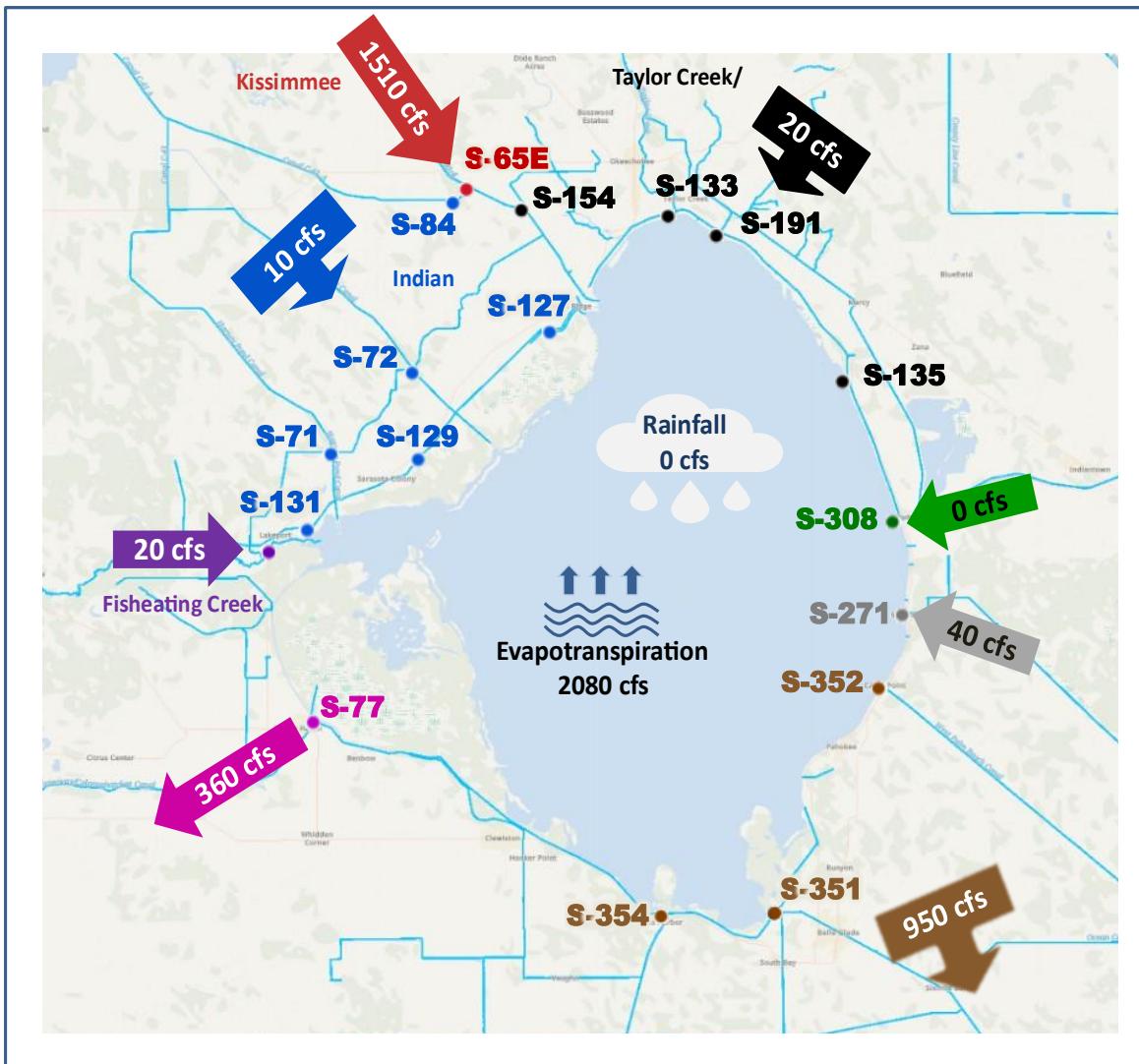
## Lake Okeechobee Stage vs Recovery Envelope



**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 3-Nov 9, 2025.

# Lake Okeechobee

## November 09, 2025

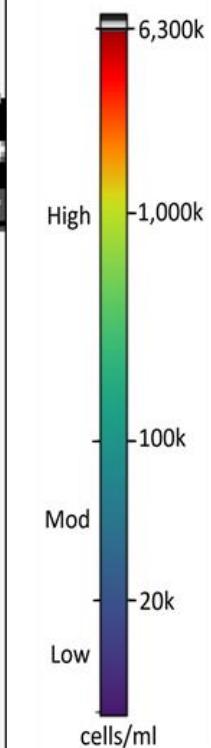
NOAA cyanobacteria product  
derived from Copernicus Sentinel-3  
OLCI data from EUMETSAT



True Color



Cyanobacteria  
Index



0 2.5 5  
Miles

**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 320 cfs (**Figures ES-1 and ES-2**), and the previous 30-day mean inflow was 1,150 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 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 15.3. 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 slight decrease from the previous month (**Figure ES-5**).

### ***Caloosahatchee River Estuary***

Over the past week, mean total inflow to the Caloosahatchee River Estuary was 590 cfs (**Figures ES-6 and ES-7**), and the previous 30-day mean inflow was 950 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 all sites in the estuary (**Table ES-2** and **Figures ES-8 and ES-9**). The seven-day mean salinities (**Table ES-2**) were in the optimal range (0-10) for tape grass in the upper estuary. The seven-day mean salinity values were within the optimal range for adult eastern oysters at Cape Coral and in the upper stressed range at Sanibel and Shell Point (**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<sup>1</sup>) 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 130 cfs. Model results from all scenarios predict daily salinity to be 5.1 or lower and the 30-day moving average surface salinity to be 3.9 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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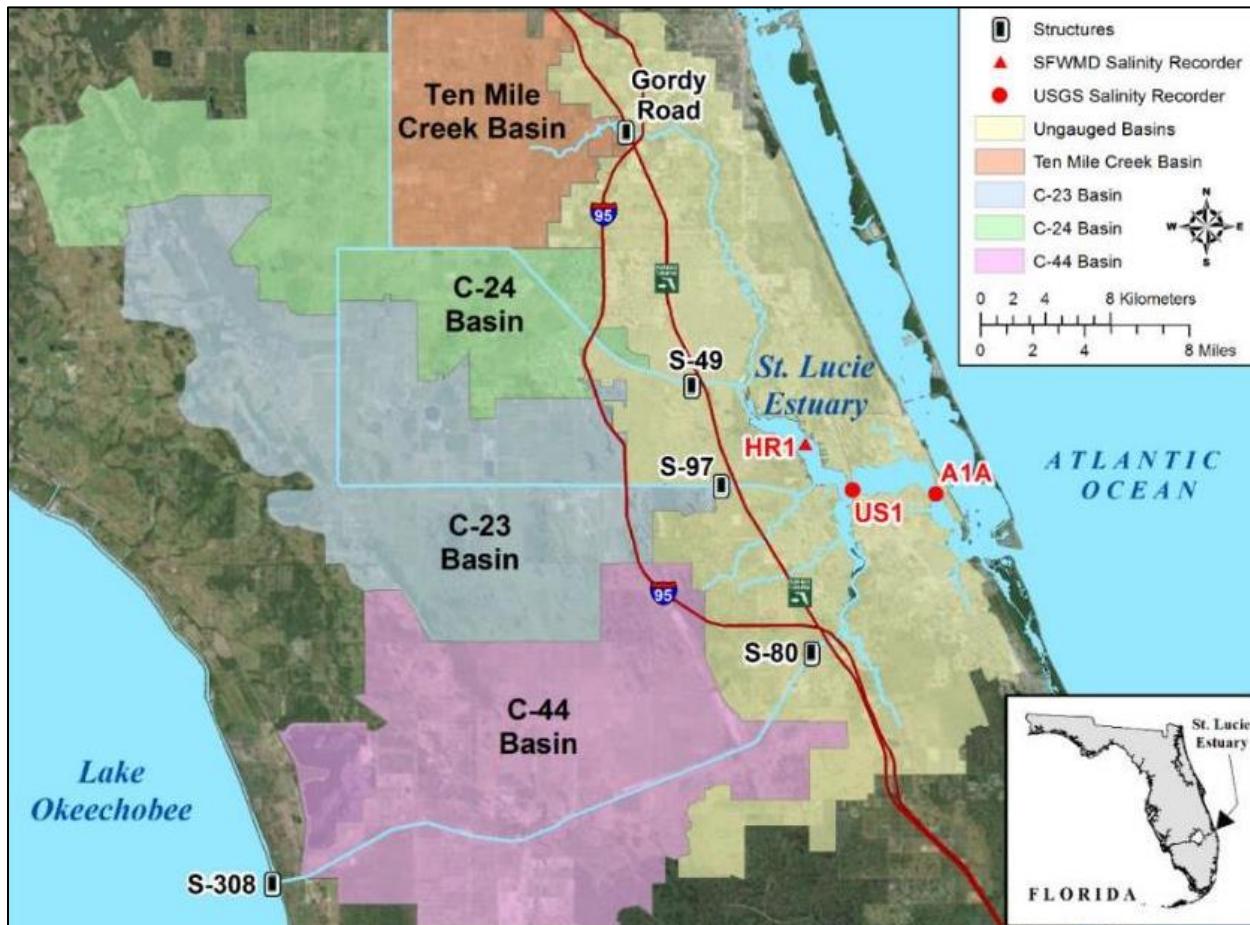
<sup>1</sup> Qui, C., and Y. Wan. 2013. Time series modeling and prediction of salinity in the Caloosahatchee River Estuary. *Water Resources Research* 49:5804-5816.

## **Red Tide**

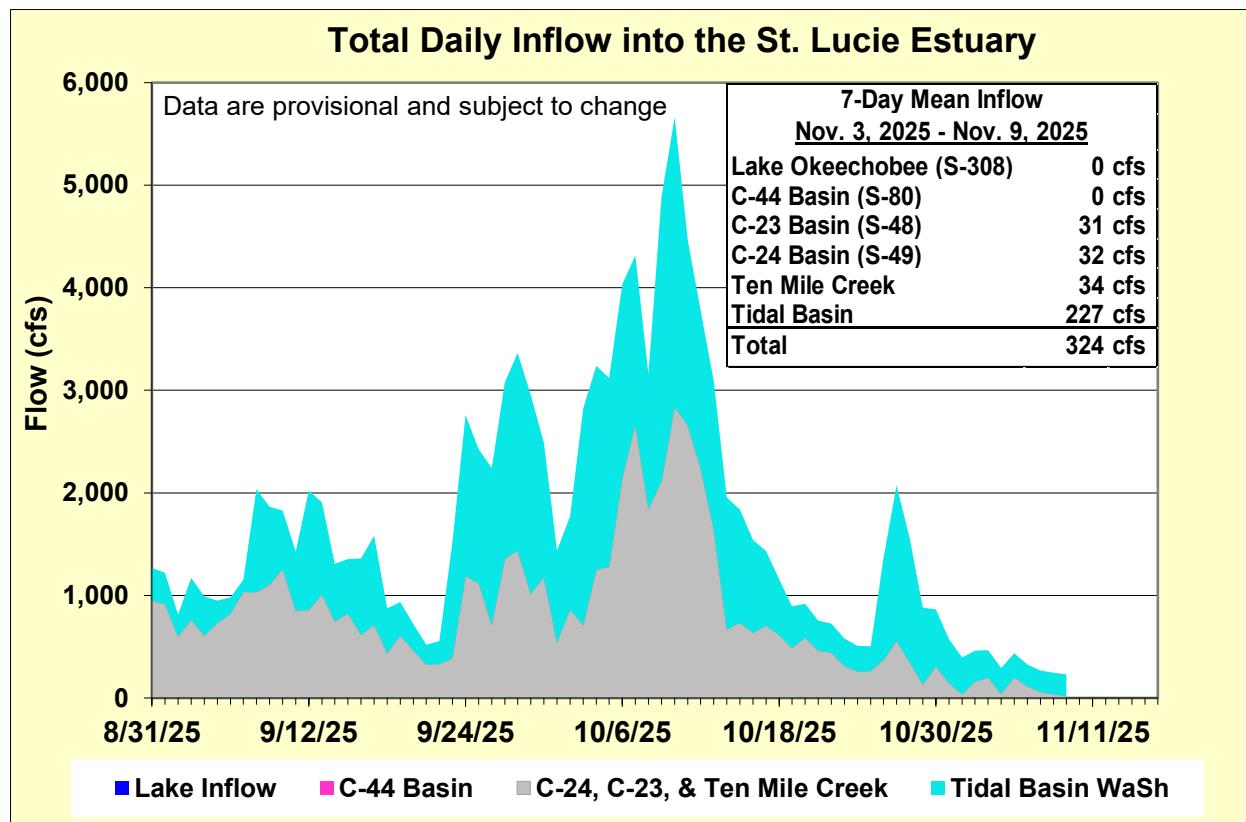
The FWRI reported on November 7, 2025, that *Karenia brevis*, the Florida red tide dinoflagellate, was not observed at bloom concentrations in samples collected within the District region.

## **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.



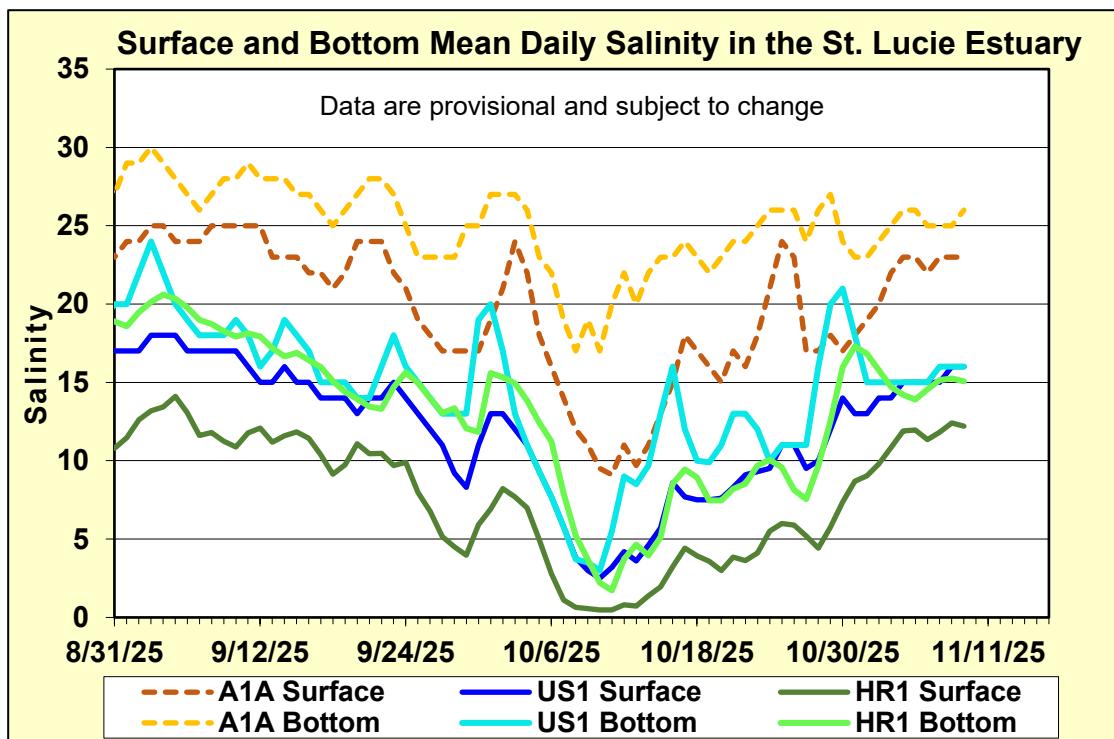
**Figure ES-1.** Basins, water control structures and salinity monitoring sites in the St. Lucie Estuary.



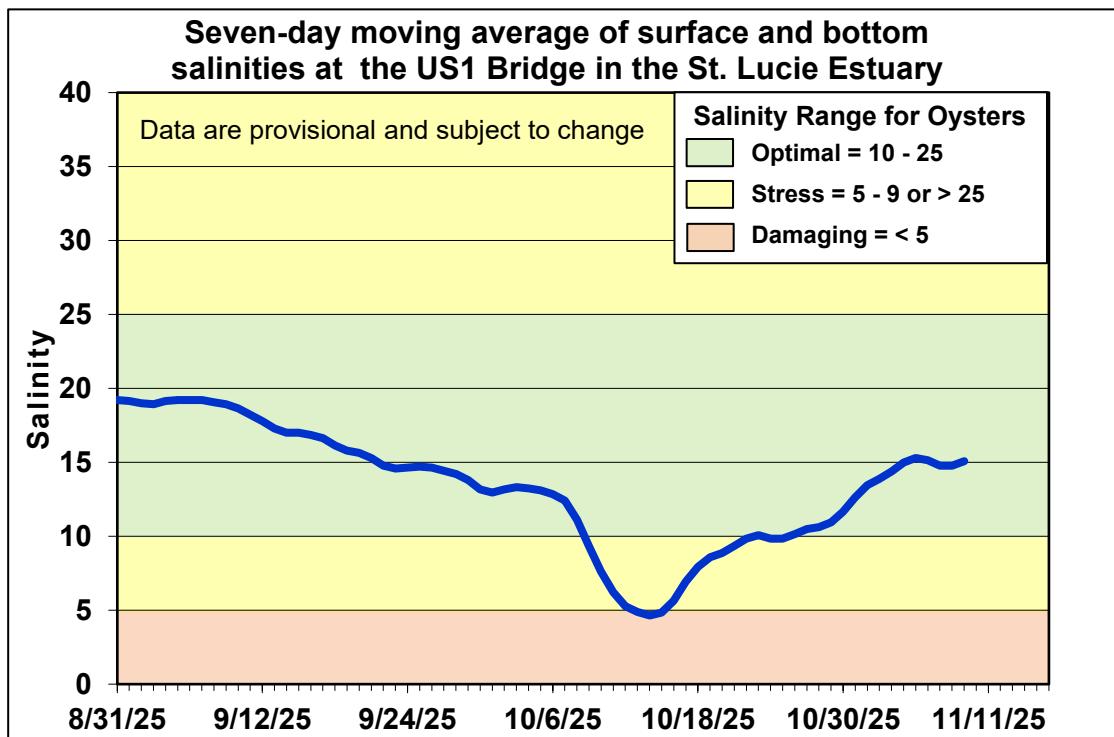
**Figure ES-2.** Total daily inflows from Lake Okeechobee and runoff from the C-44, C-23, C-24, Ten Mile Creek, and Tidal Basins into the St. Lucie Estuary.

**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.

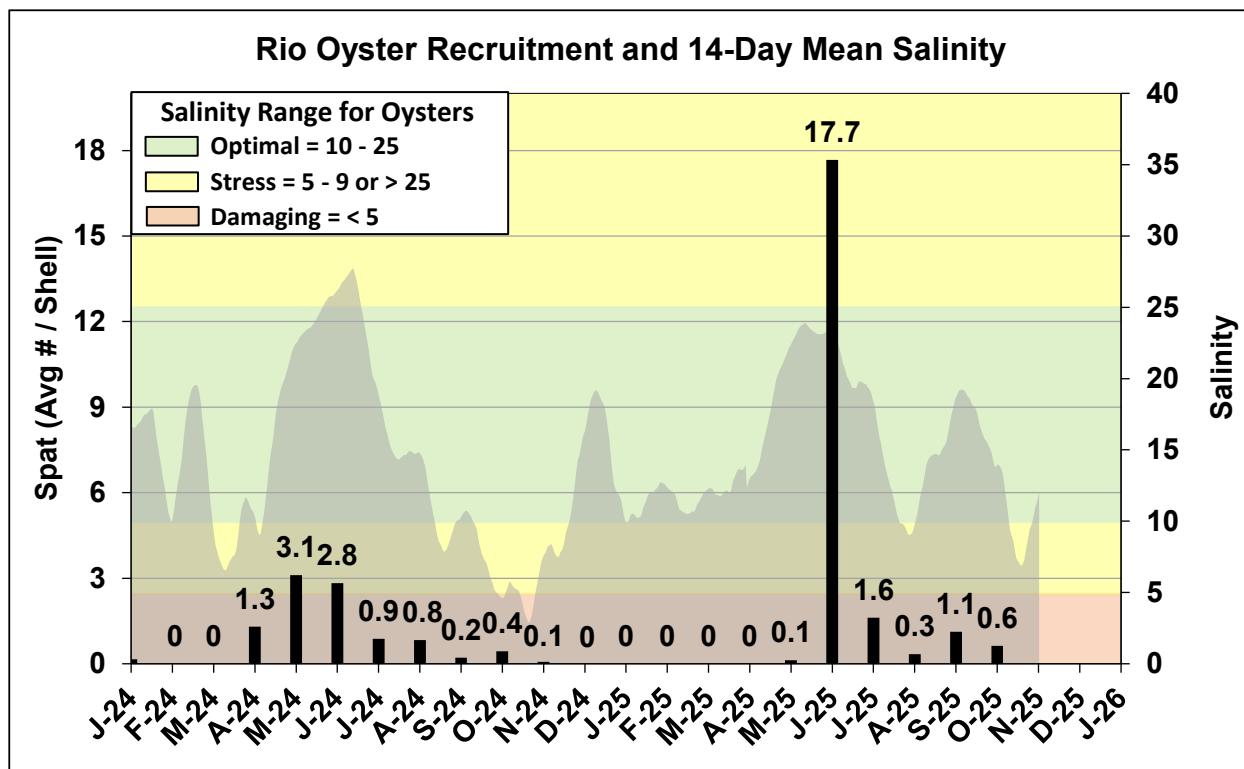
Sampling Site	Surface	Bottom	Optimum Envelope
HR1 (North Fork)	<b>11.8</b> (7.2)	<b>14.7</b> (13.7)	10.0 – 25.0
US1 Bridge	<b>15.1</b> (12.2)	<b>15.4</b> (16.6)	10.0 – 25.0
A1A Bridge	<b>22.7</b> (18.0)	<b>25.4</b> (24.4)	10.0 – 25.0



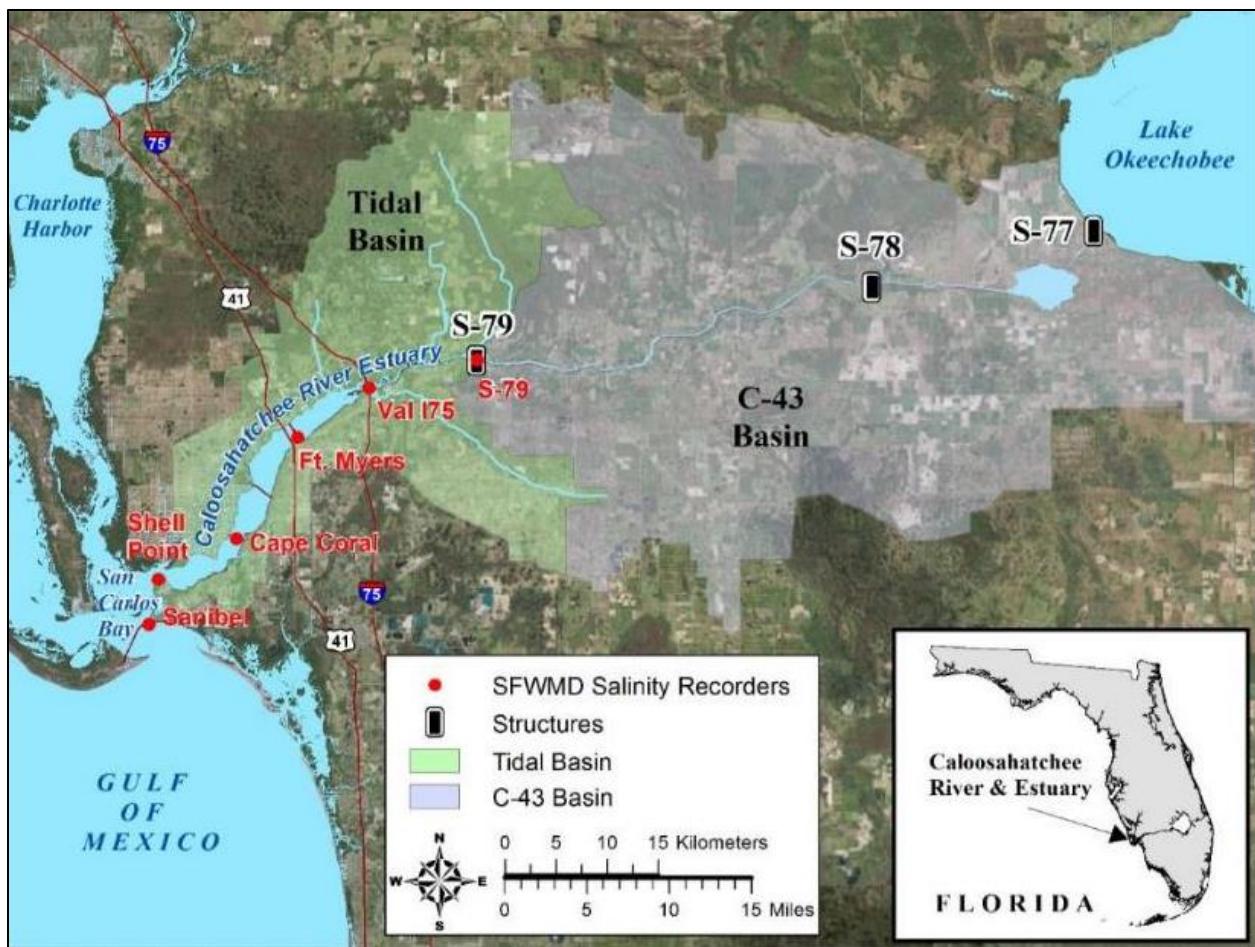
**Figure ES-3.** Mean daily salinity at the A1A, US1, and HR1 sites in the St. Lucie Estuary.



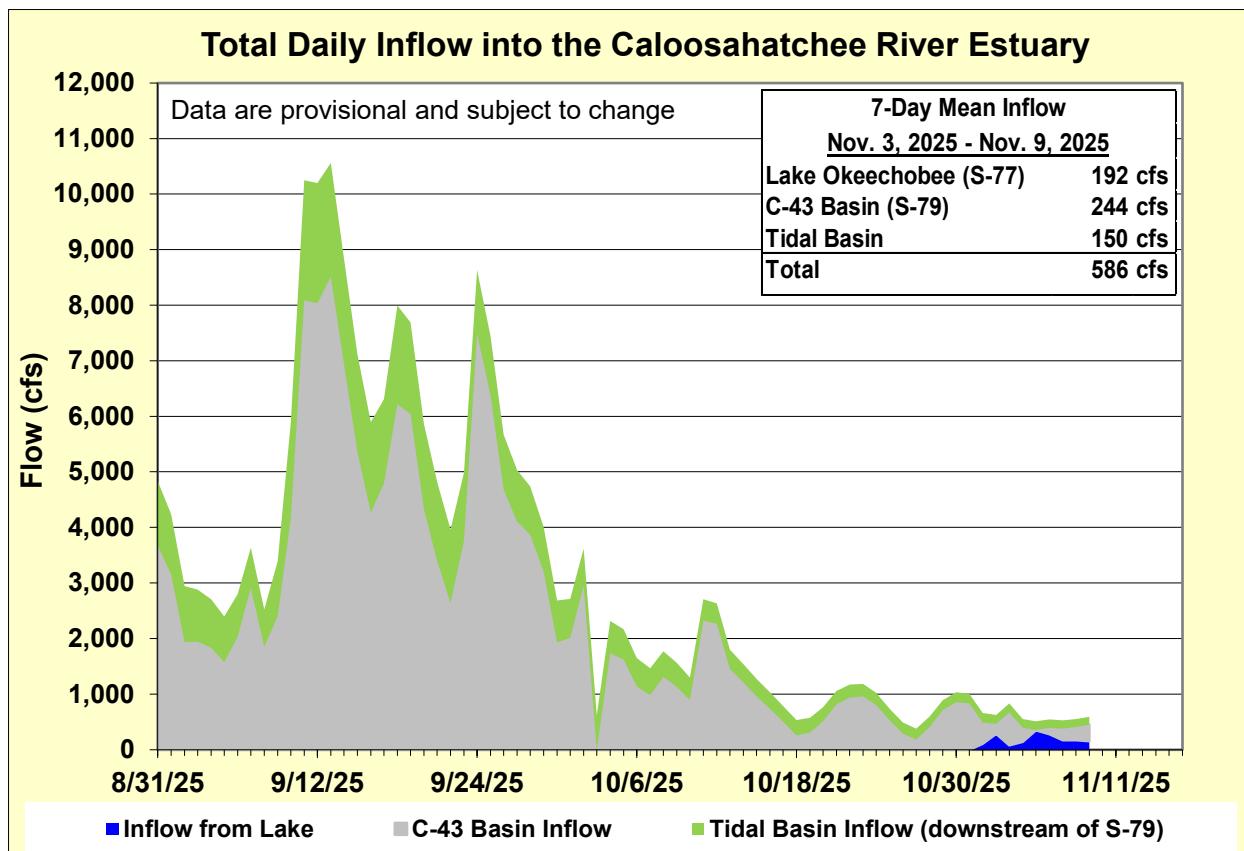
**Figure ES-4.** Seven-day moving average of the surface and bottom salinities at the US1 Bridge in the St. Lucie Estuary.



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



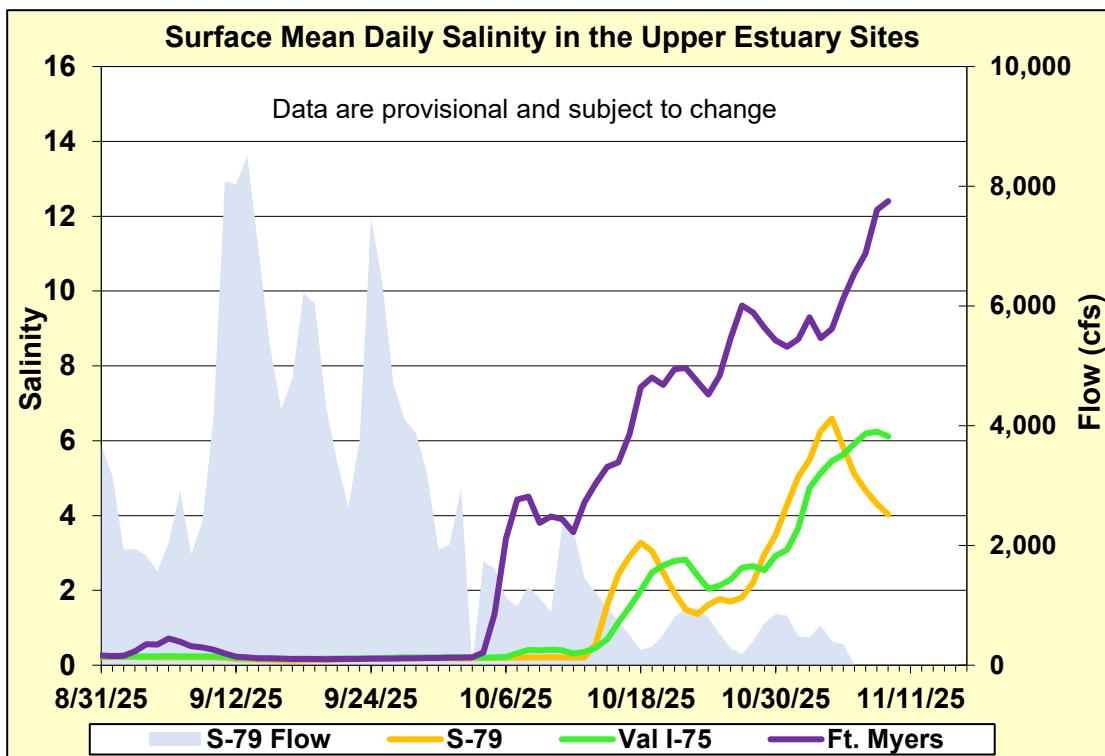
**Figure ES-6.** Basins, water control structures, and salinity monitoring sites in the Caloosahatchee River Estuary.



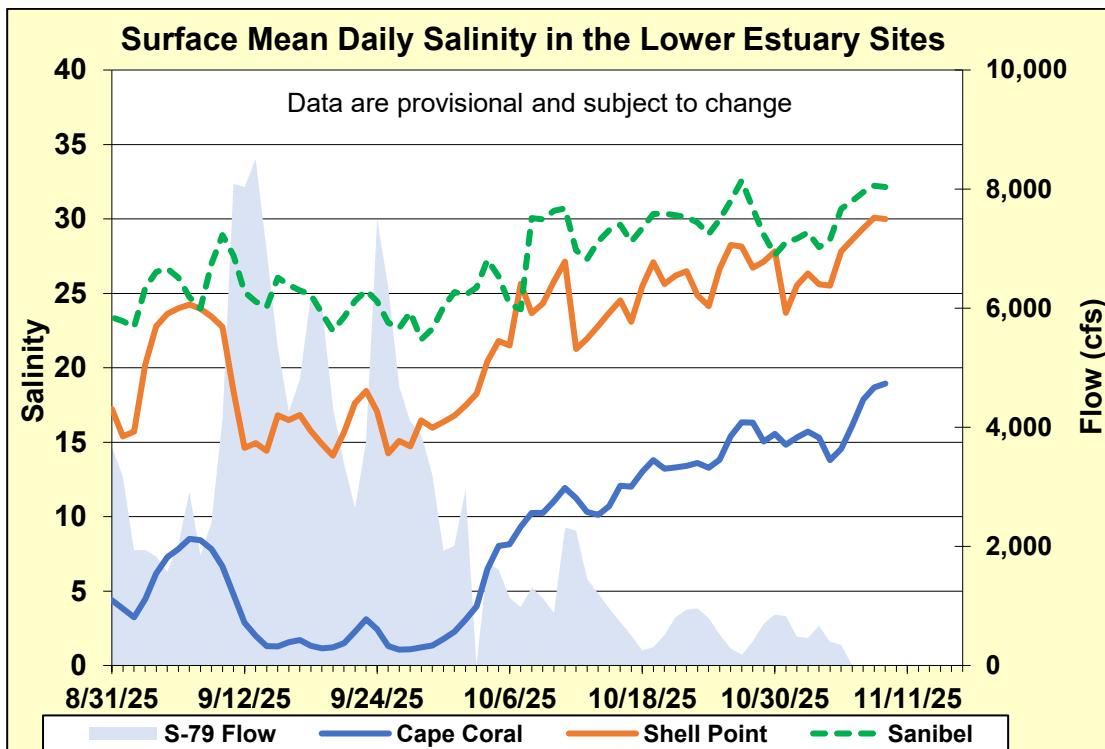
**Figure ES-7.** Total daily inflows from Lake Okeechobee, and runoff from the C-43 and Tidal basins into the Caloosahatchee River Estuary.

**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.

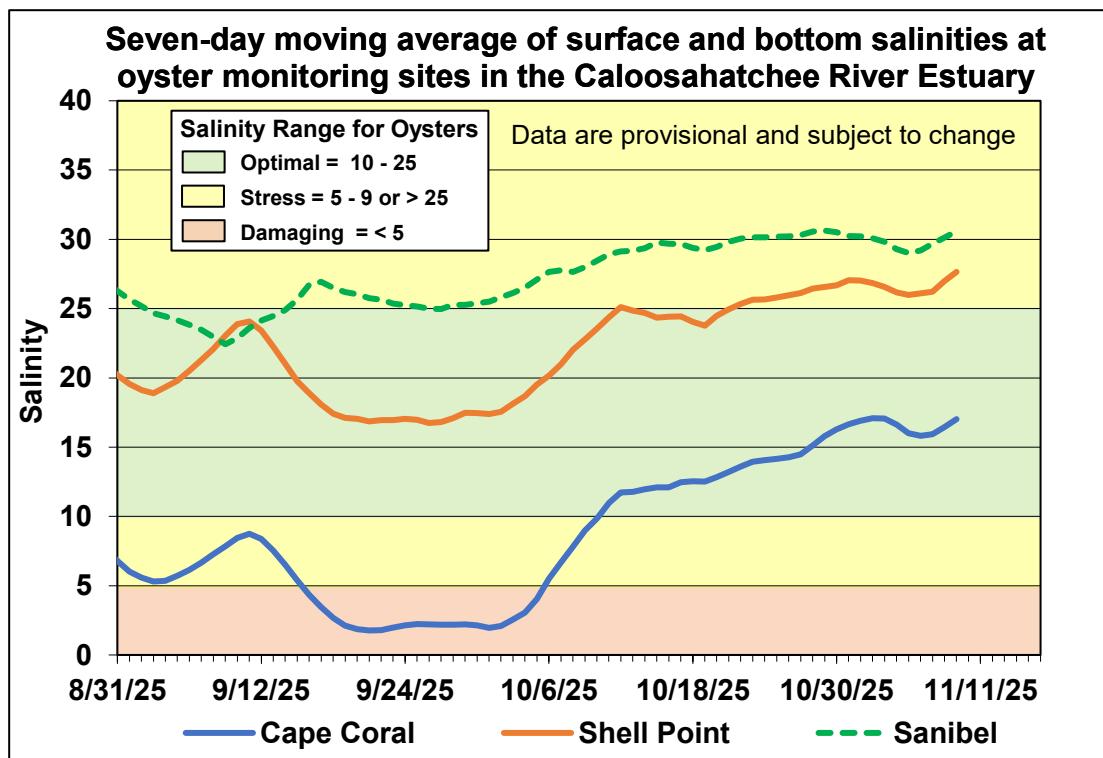
Sampling Site	Surface	Bottom	Optimum Envelope
S-79 (Franklin Lock)	<b>5.3</b> (3.6)	<b>5.5</b> (3.9)	0.0 – 10.0
Val I-75	<b>5.8</b> (3.2)	<b>7.0</b> (7.4)	0.0 – 10.0
Fort Myers Yacht Basin	<b>10.5</b> (9.0)	<b>11.6</b> (15.6)	0.0 – 10.0
Cape Coral	<b>16.5</b> (15.6)	<b>18.6</b> (18.6)	10.0 – 25.0
Shell Point	<b>28.1</b> (26.5)	<b>28.3</b> (26.6)	10.0 – 25.0
Sanibel	<b>30.7</b> (29.4)	<b>31.3</b> (30.2)	10.0 – 25.0



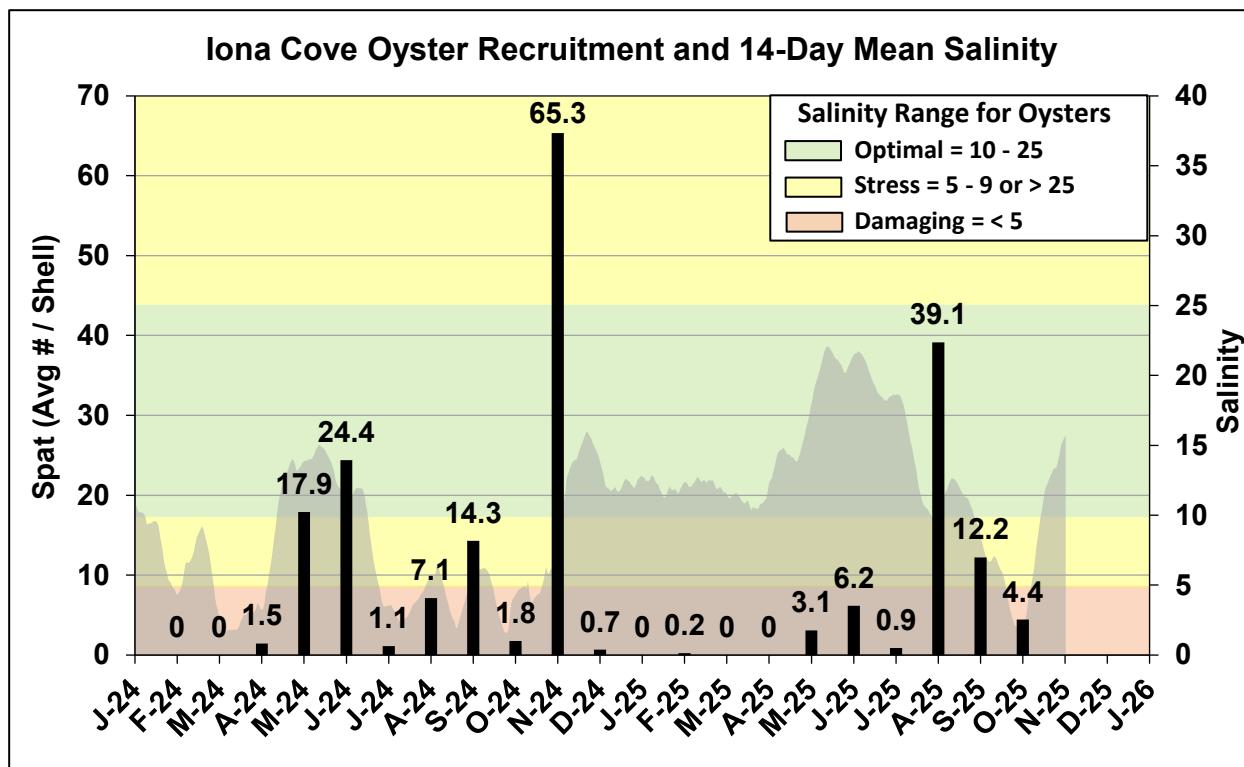
**Figure ES-8.** Mean daily salinity at upper Caloosahatchee River Estuary monitoring sites and mean daily flow at S-79.



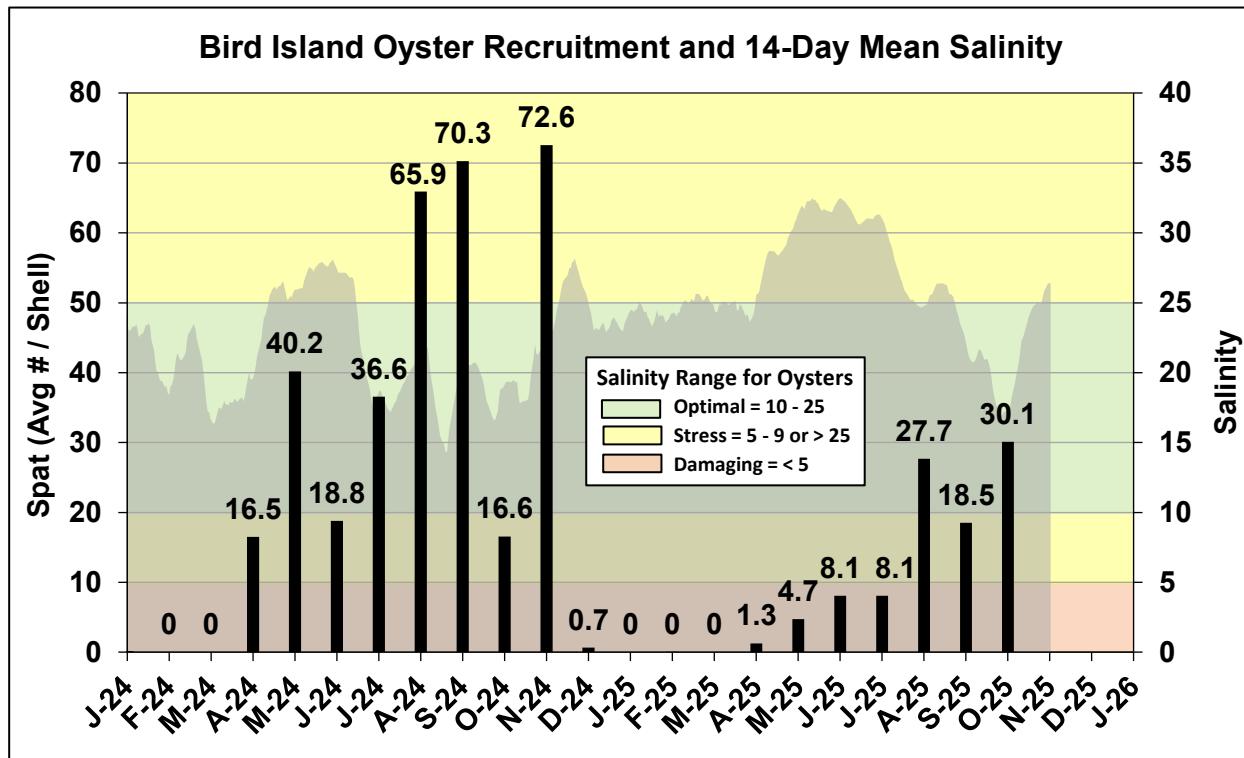
**Figure ES-9.** Mean daily surface salinity at lower Caloosahatchee River Estuary monitoring sites and mean daily flow at S-79.



**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.



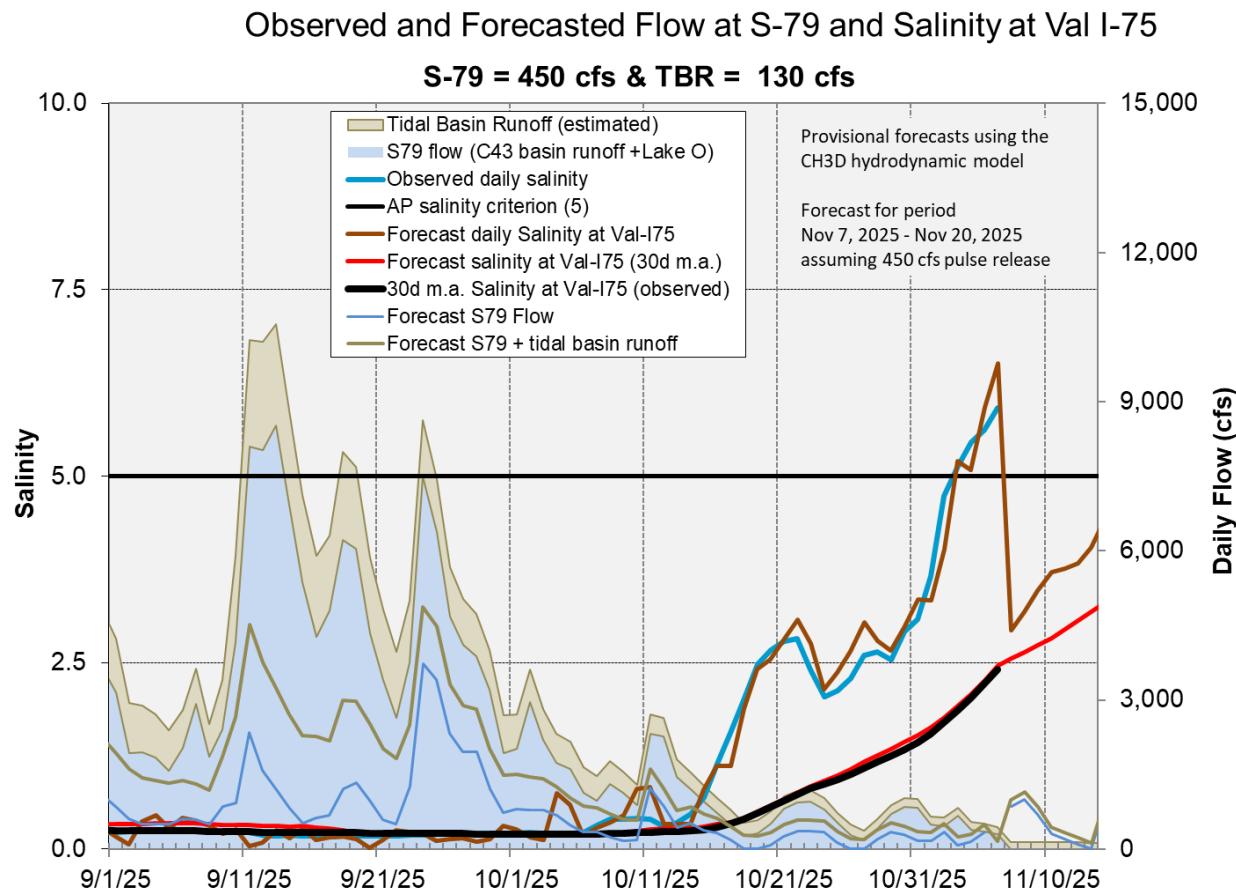
**Figure ES-11.** Mean oyster recruitment at the Iona Cove oyster monitoring station and 14-day mean salinity at Cape Coral.



**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	130	5.1	3.9
B	750	130	3.9	3.7
C	1,000	130	3.2	3.4
D	1,500	130	1.9	3.1
E	2,000	130	1.1	2.8



**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 above target stage. The 365-day PLR for the Western and Eastern Flow-way is below 1.0 g/m<sup>2</sup>/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 Northern Flow-ways are below 1.0 g/m<sup>2</sup>/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 at or above target stage. The 365-day PLRs for all Flow-ways are below 1.0 g/m<sup>2</sup>/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<sup>2</sup>/year (**Figure S-3**).

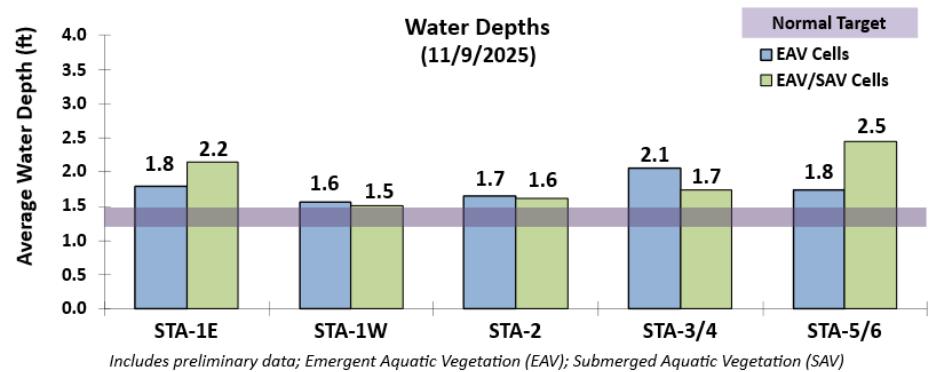
**STA-5/6:** Treatment cells are above target stage. All treatment cells have highly stressed or stressed vegetation conditions. The 365-day PLRs for all Flow-ways are below 1.0 g/m<sup>2</sup>/year. (**Figure S-4**).

For definitions on STA operational language see glossary following figures

- Total WY2026 inflows to STAs (5/1/2025 to 11/09/2025): ~521,279 ac-ft
- Lake Okeechobee releases to FEBs/STAs
  - 11/03/2025 to 11/09/2025: 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

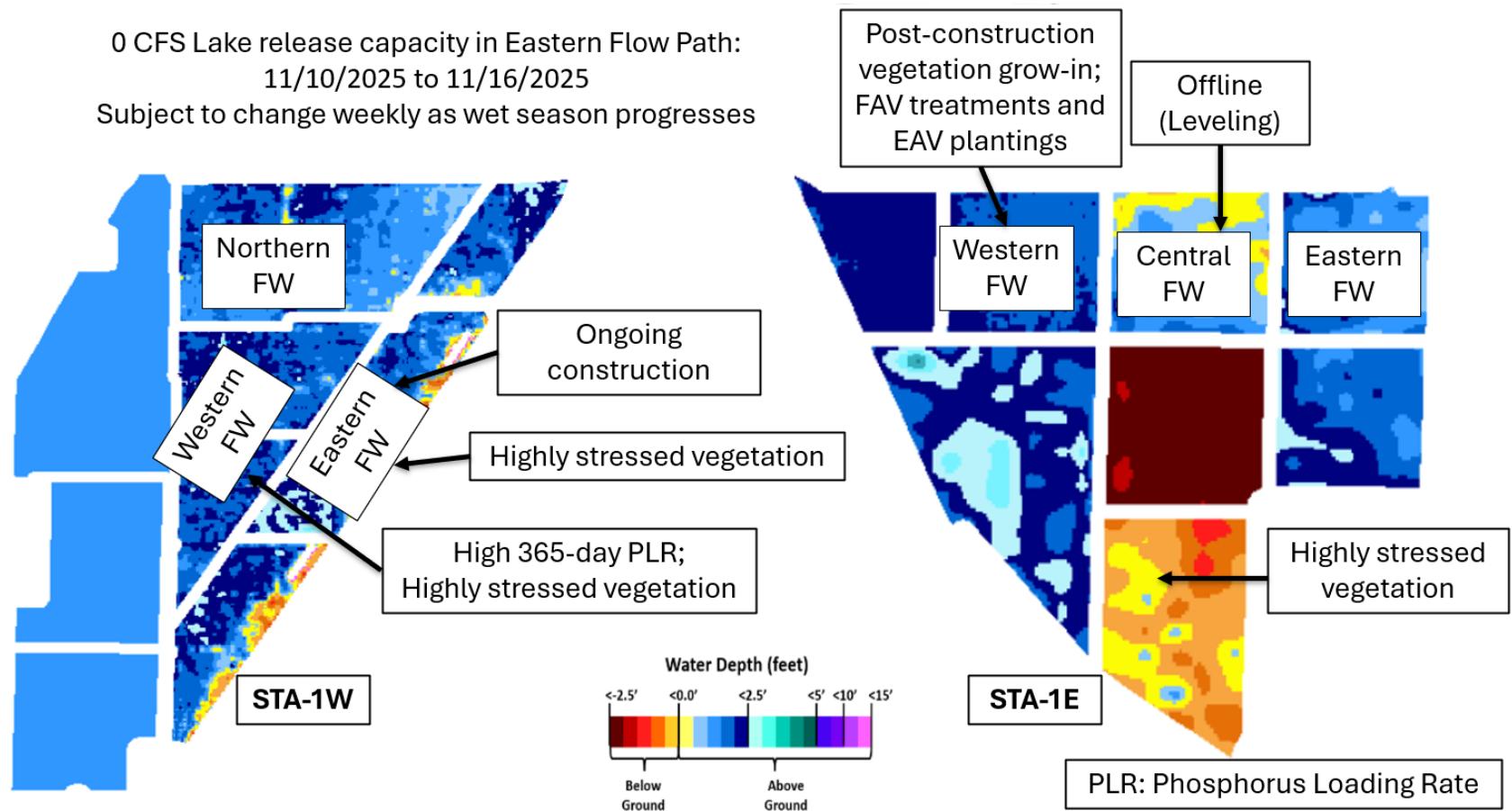
Estimated Inflow and Outflow Volumes  
Nov. 3<sup>rd</sup> – Nov. 9<sup>th</sup>, 2025      *Includes preliminary data*

	Total Inflow (acre-feet)	Total Outflow (acre-feet)
STA-1E	0	200
STA-1W	200	50
STA-2	0	780
STA-3/4	400	325
STA-5/6	470	760



**Figure S-1.** STA depths and flow volumes

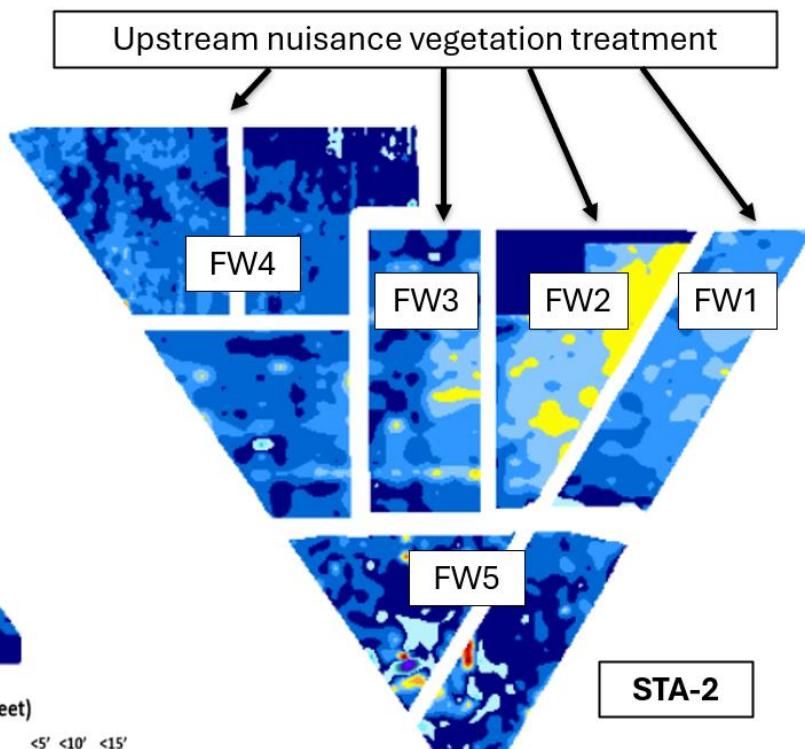
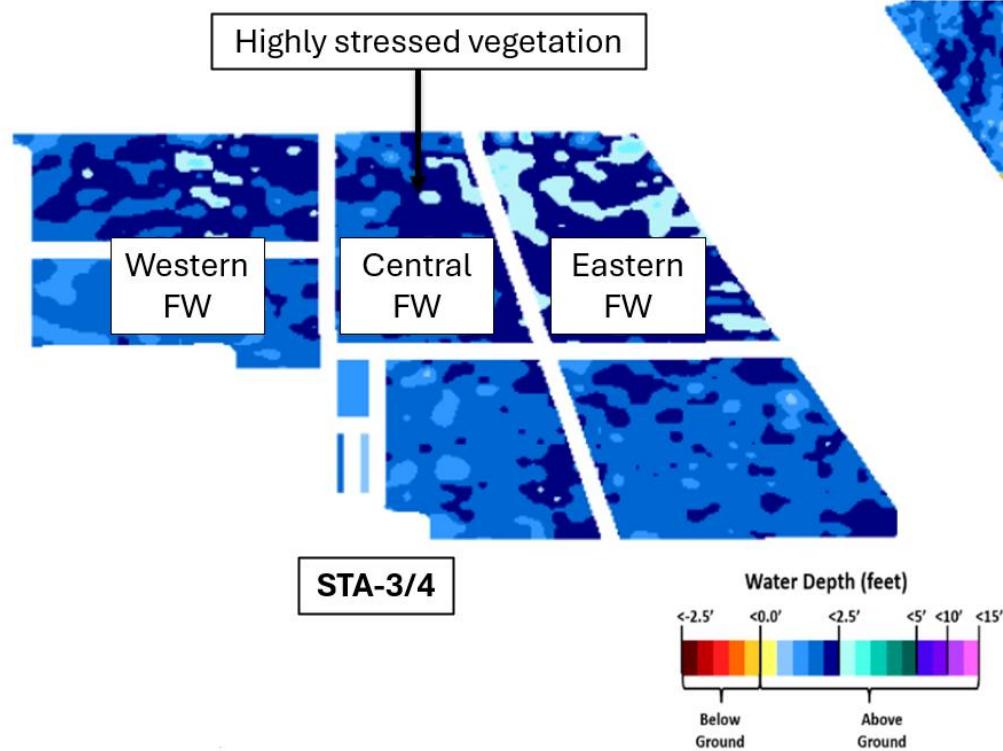
0 CFS Lake release capacity in Eastern Flow Path:  
11/10/2025 to 11/16/2025  
Subject to change weekly as wet season progresses



**Figure S-2.** Eastern Flow Path Weekly Status Report

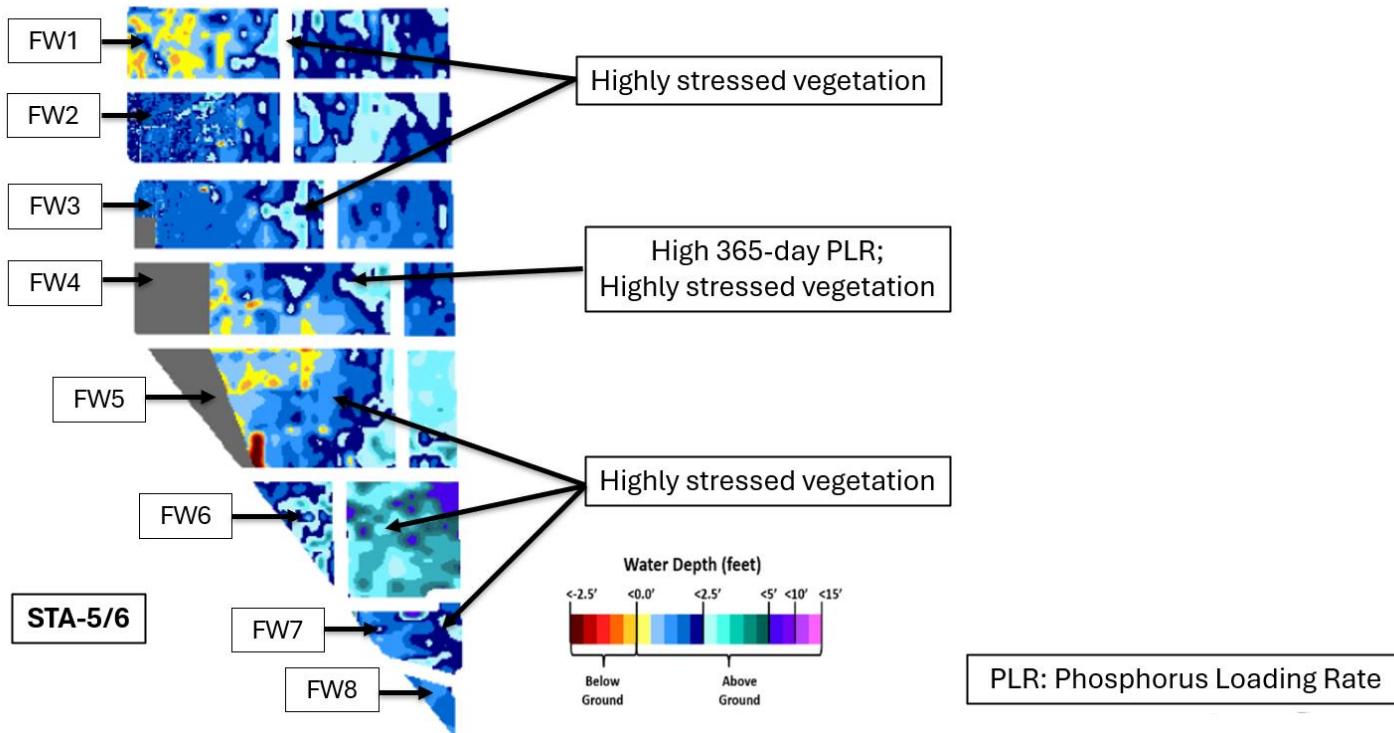
0 CFS Lake release capacity in Central Flow Path:  
11/10/2025 to 11/16/2025

- Subject to change weekly as wet season progresses



**Figure S-3.** Central Flow Path Weekly Status Report

0 CFS Lake release capacity in Western Flow Path:  
11/10/2025 to 11/16/2025



**Figure S-4.** Western Flow Path Weekly Status Report

## Basic Concepts and Definitions for STA Weekly Status Report

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

## **Everglades**

### **Water Conservation Area**

#### **Regulation Schedules**

WCA-1: Stage change at the 1-8C gauge declined last week, stages were 0.6 feet below the flat A1 zone regulation line on Sunday, November 9, 2025. WCA-2A: Stage at the 2-17 gauge fell last week but remains well above the A1 zone regulation line, 1.51 feet above on Sunday. WCA-3A: The 3 gauge average remains well into zone B and stage change decreased over the week, on Sunday stages were 0.99 feet below the zone A regulation line. WCA-3A North: Stage at Gauge 62 (NW corner) decreased last week and remains below the Upper Schedule regulation line; on Sunday stage was 0.61 feet below that line. See figures **EV-1** through **EV-4**.

#### **Water Depths**

The SFWDAT model output for November 9, 2025, illustrates a slow recession in WCA-1. The southern half of WCA-2A remains very deep for this time of year. Drier conditions expanded in Northeastern WCA-3A along the L38-W canal. Depths are decreasing in WCA-3A and remain relatively low in northeastern and southern WCA-3A limiting aquatic prey production in this region. Hydrologic connectivity has declined in all three major sloughs of Everglades National Park over the last month, especially in the west, but remains relatively robust. Conditions remain in the 10<sup>th</sup> percentile across a majority of WCA-3A South. In WCA-2A depths remain above the 90th percentile compared to the past 20 years. 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 0.11 feet for the week. Changes ranged from -0.14 feet at Taylor Slough Bridge (TSB) to -0.05 feet at E112, both in the northern slough (**Figure EV-8** and **Figure EV-9**). Taylor Slough water levels remain above the recent average (WY1993-2016) for this time of year by 2.4 inches compared to before the Florida Bay initiative (starting in 2017), a decrease of 0.5 inches relative to last week's comparison. The Craighead Pond (CP) and TSB stages remain below the estimated average for 1900 by 0.52 and 1.25 feet, respectively.

Average Florida Bay salinity was 25.9, an increase of 1.0 from last week. Salinity changes ranged from -1.3 at Long Sound (LS) in the eastern nearshore region to +5.6 at Terrapin Bay (TB) in the central nearshore region (**Figure EV-8**). Salinity is above the estimated average for 1900 and near the WY2001-2016 Interquartile Range (IQR) 50<sup>th</sup> percentile for all three regions (**Figure EV-9**). Average Florida Bay salinity is above its recent average (WY1993-2016) for this time of year by 2.4, an increase of 0.5 relative to last week's comparison.

Salinity at the Taylor River (TR) station in the mangrove zone (tracked for the Florida Bay MFL) was 3.6, a decrease of 1.9 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 208,077 acre-feet, an increase of 1,570 acre-feet from last week (**Figure EV-10**).

Average rainfall across Taylor Slough and Florida Bay was approximately 0.07 inches over the past week, based on the 17 gauges used for this report. Rainfall ranged from 0.0 inches at nine stations to 0.68 inches at TSB in the northern slough (**Figure EV-11**). Wind directions and speeds in Florida Bay ranged from 0.4 mph NW on November 3<sup>rd</sup> to 19.6 mph NE on November 4<sup>th</sup> (**Figure EV-11**).

Average daily flow from the five major creeks totaled 1,583 acre-feet, with net positive flows for the week. Total daily creek flow ranged from -305 acre-feet on November 9<sup>th</sup> to 3,772 acre-feet on November 4<sup>th</sup> (**Figure EV-12**). Average daily flow was 3,162 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**).

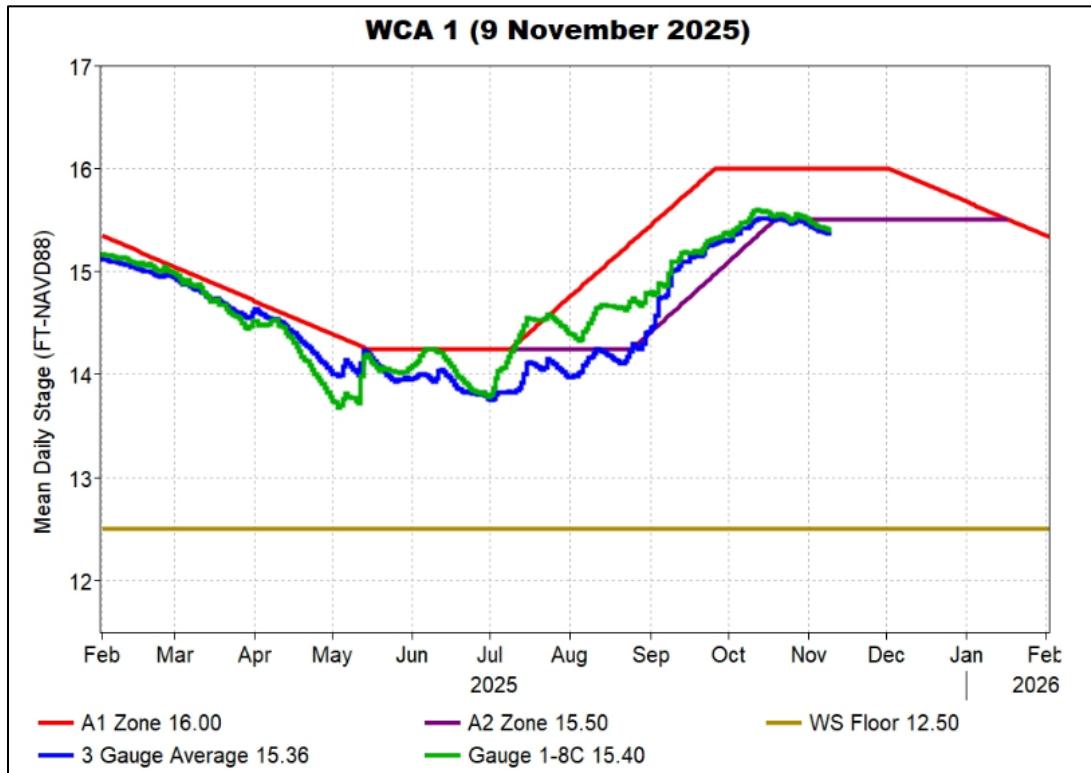
***Implications/considerations for water management.***

- Stage has decreased within the EPA over the last month; and slow recessions 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 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, east of 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 season.
  - 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 are needed to recover ridge and slough habitat.
- Taylor Slough depths have begun to steadily recede, and salinities are above their recent average in Florida Bay, however:
  - All regions of the Bay are within the interquartile range, near the 50<sup>th</sup> percentile.
- 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

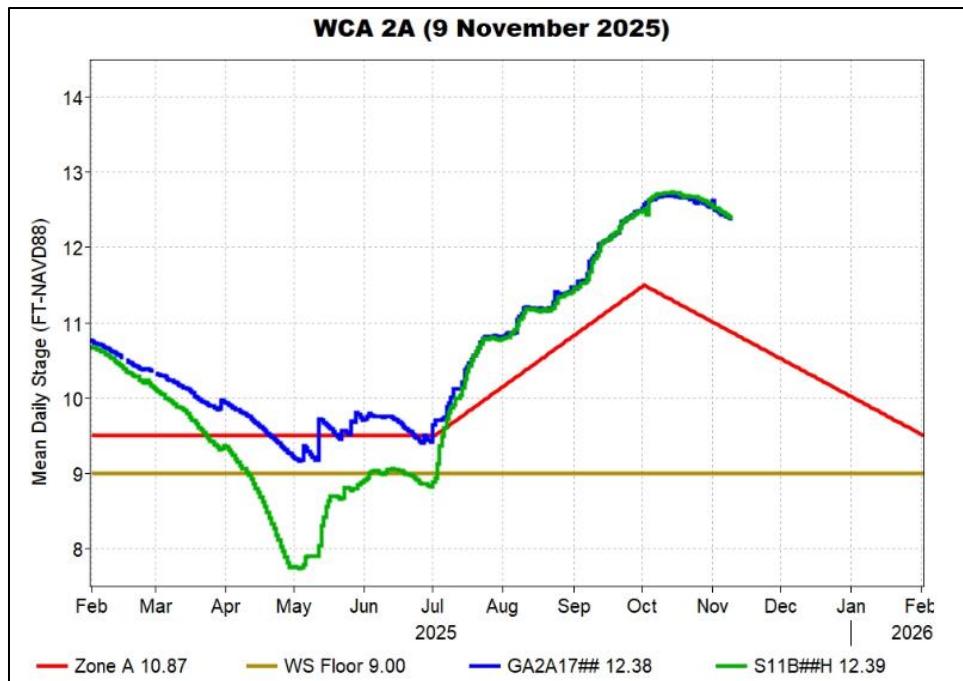
downstream ecological needs of the system. Individual regional recommendations can be found in **Table EV-2**.

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

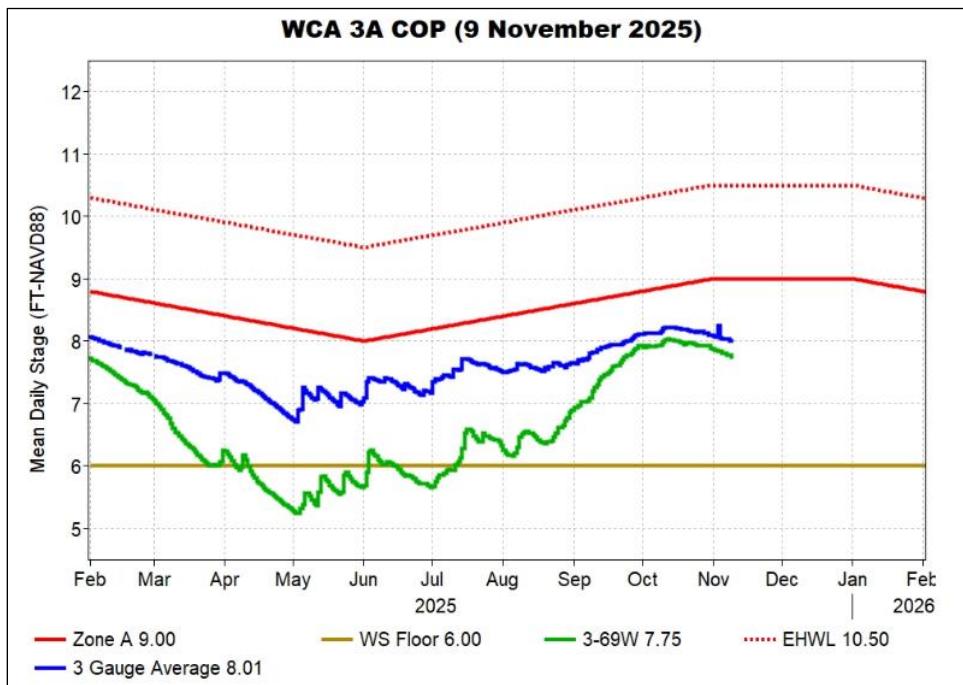
Everglades Region	Rainfall (inches)	Stage change (feet)
WCA-1	0.05	-0.07
WCA-2A	<0.01	-0.12
WCA-2B	0.04	+0.10
WCA-3A	0.04	-0.09
WCA-3B	0.08	-0.04
ENP	0.14	-0.10



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

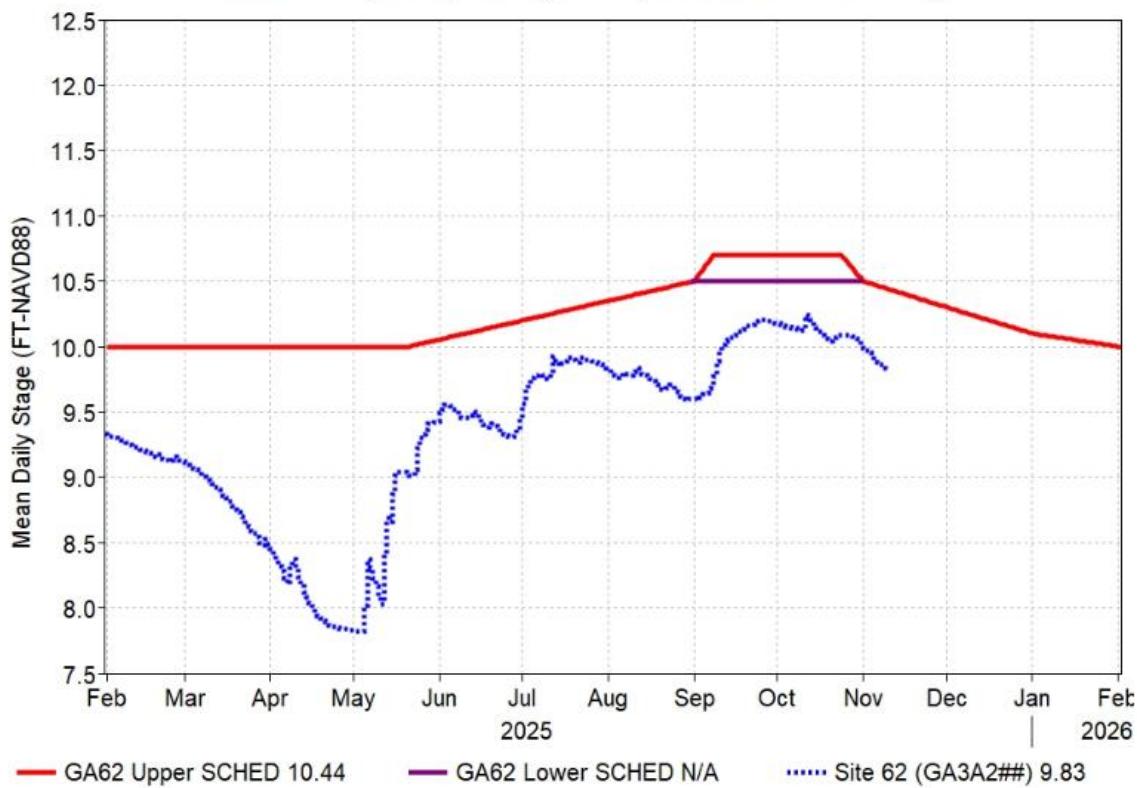


**Figure EV-2.** WCA-2A stage hydrographs and regulation schedule.

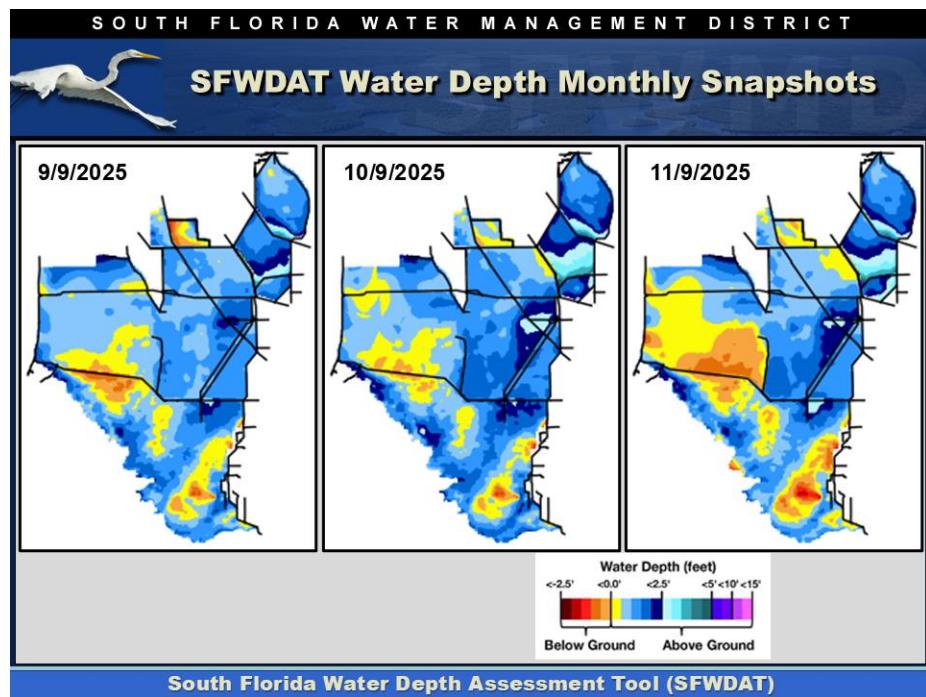


**Figure EV-3.** WCA-3A stage hydrographs (three-gauge average, 3-69W) and regulation schedule.

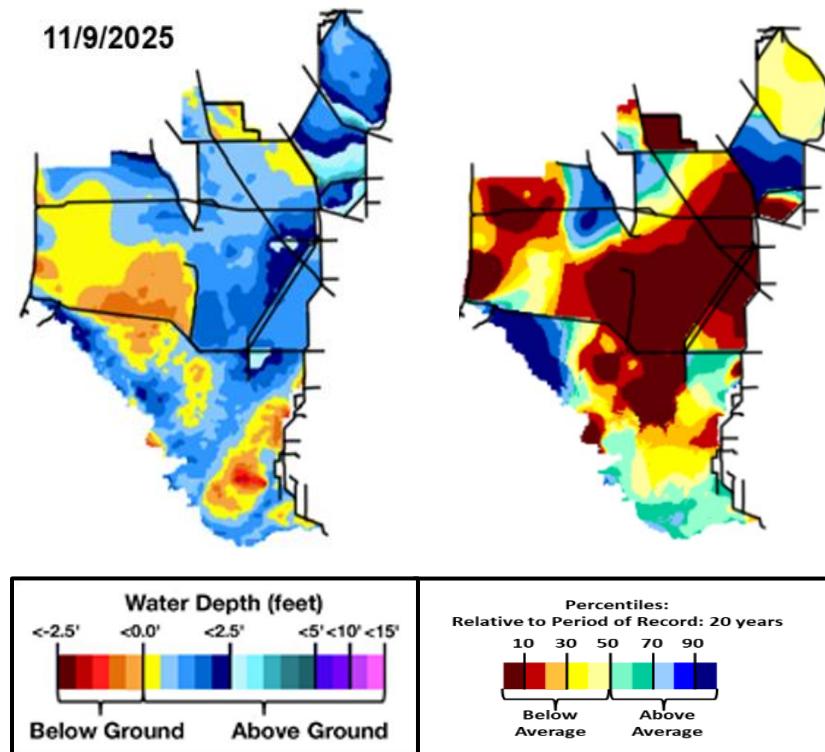
### WCA-3A (Deer) Gauge 62 (9 November 2025)



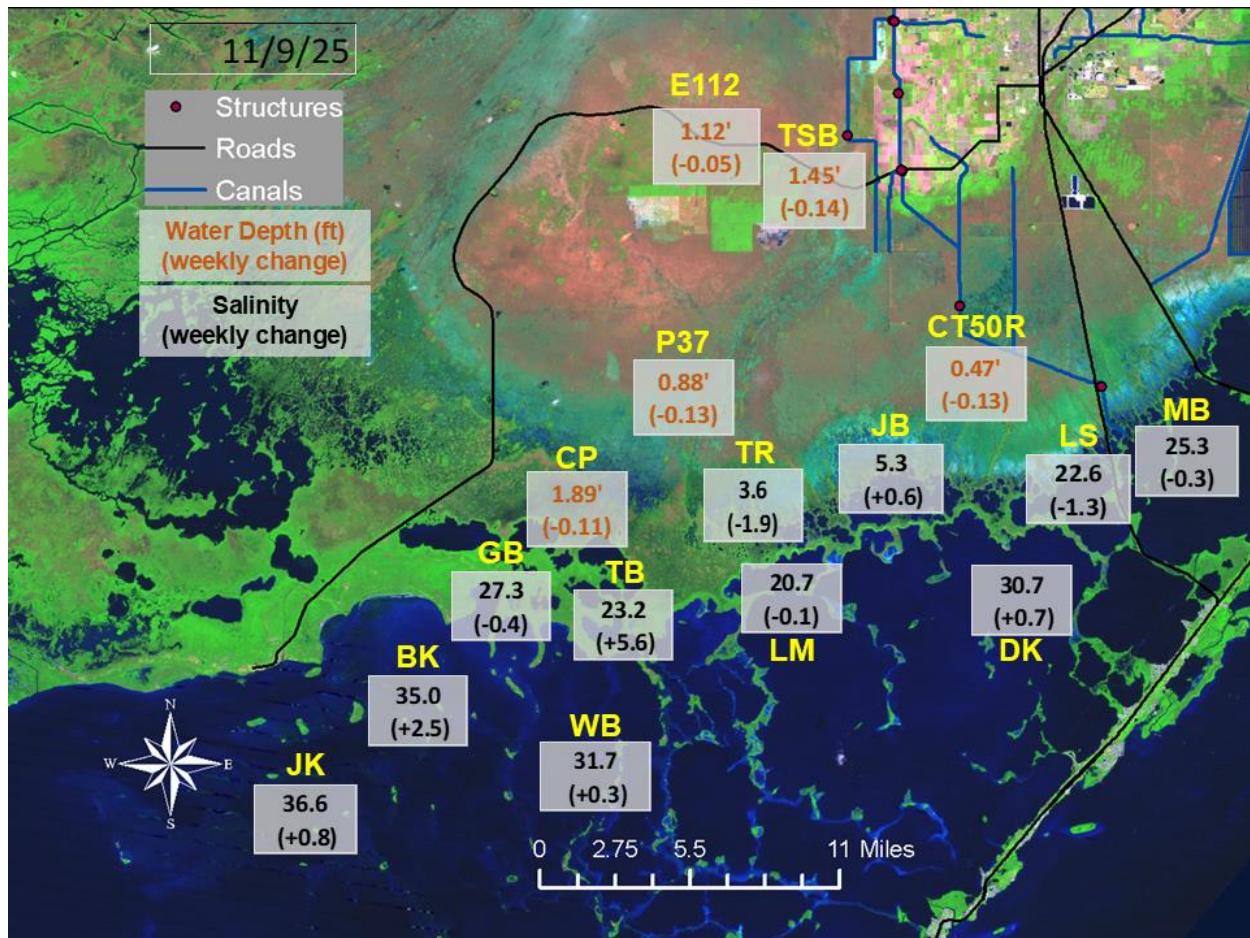
**Figure EV-4.** WCA-3A stage hydrograph (Deer gauge; Site 62) and regulation schedule.



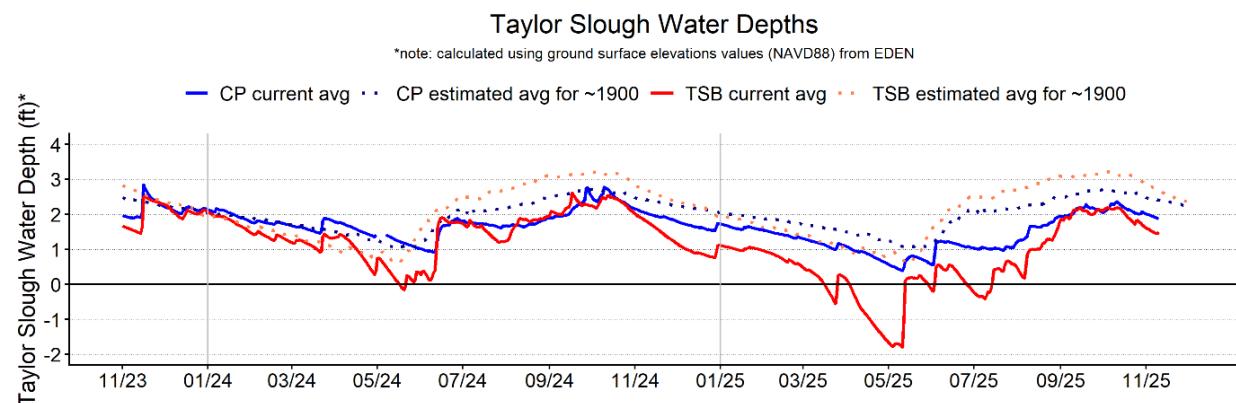
**Figure EV-5.** Everglades water depths from two months ago (left), one month ago (center) and present (right), based on SFWDAT.



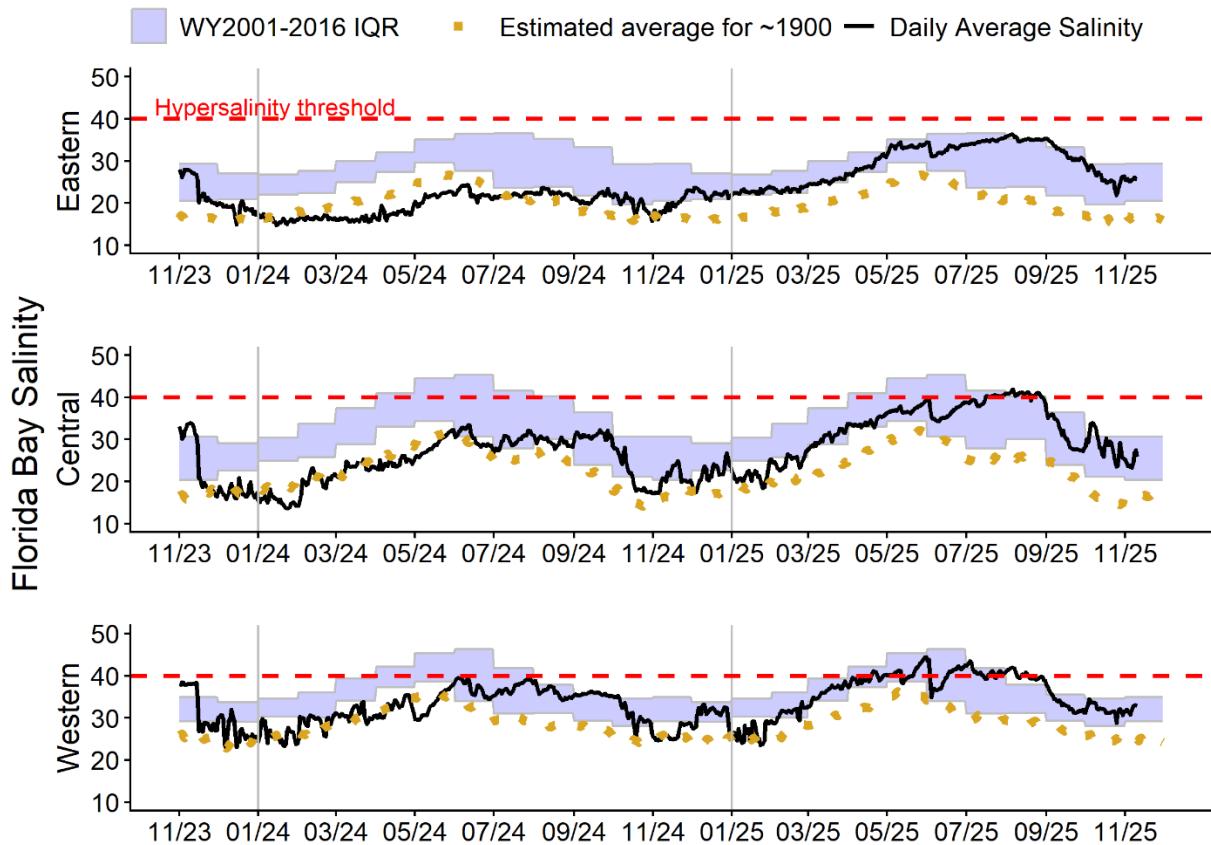
**Figure EV-6.** Present water depths (November 9, 2025) compared to the day of year relative to average (percentile) over the previous 20 years.



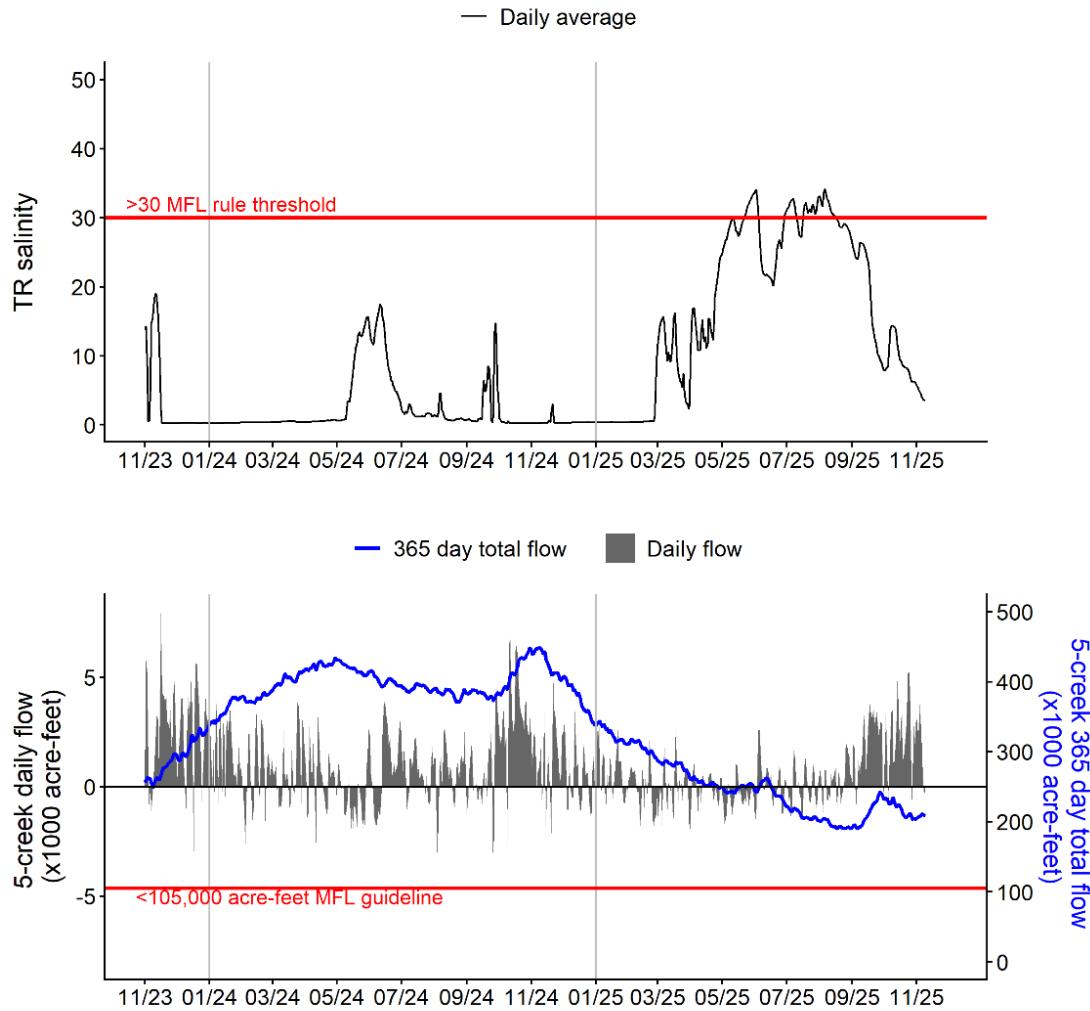
**Figure EV-7.** Taylor Slough water depths and Florida Bay salinities with changes since one week ago.



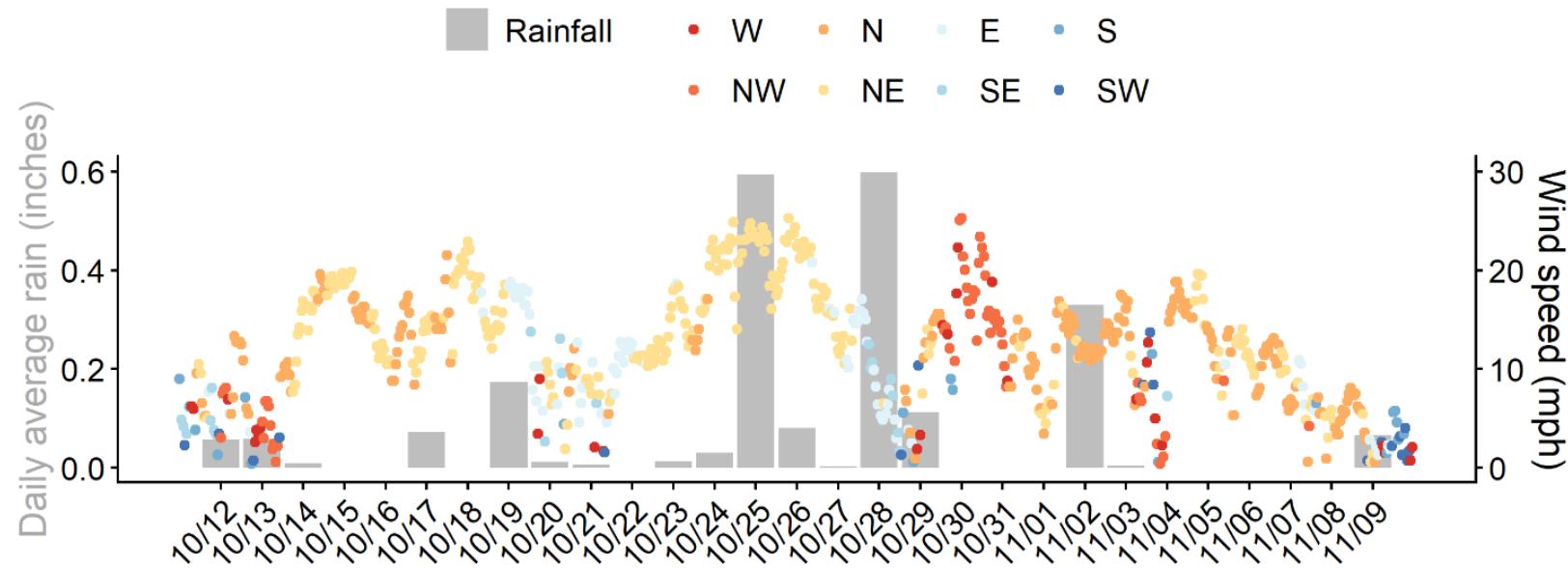
**Figure EV-8.** Taylor Slough water depth time series for Taylor Slough Bridge (TSB; northern slough) and Craighead Pond (CP; southern slough).



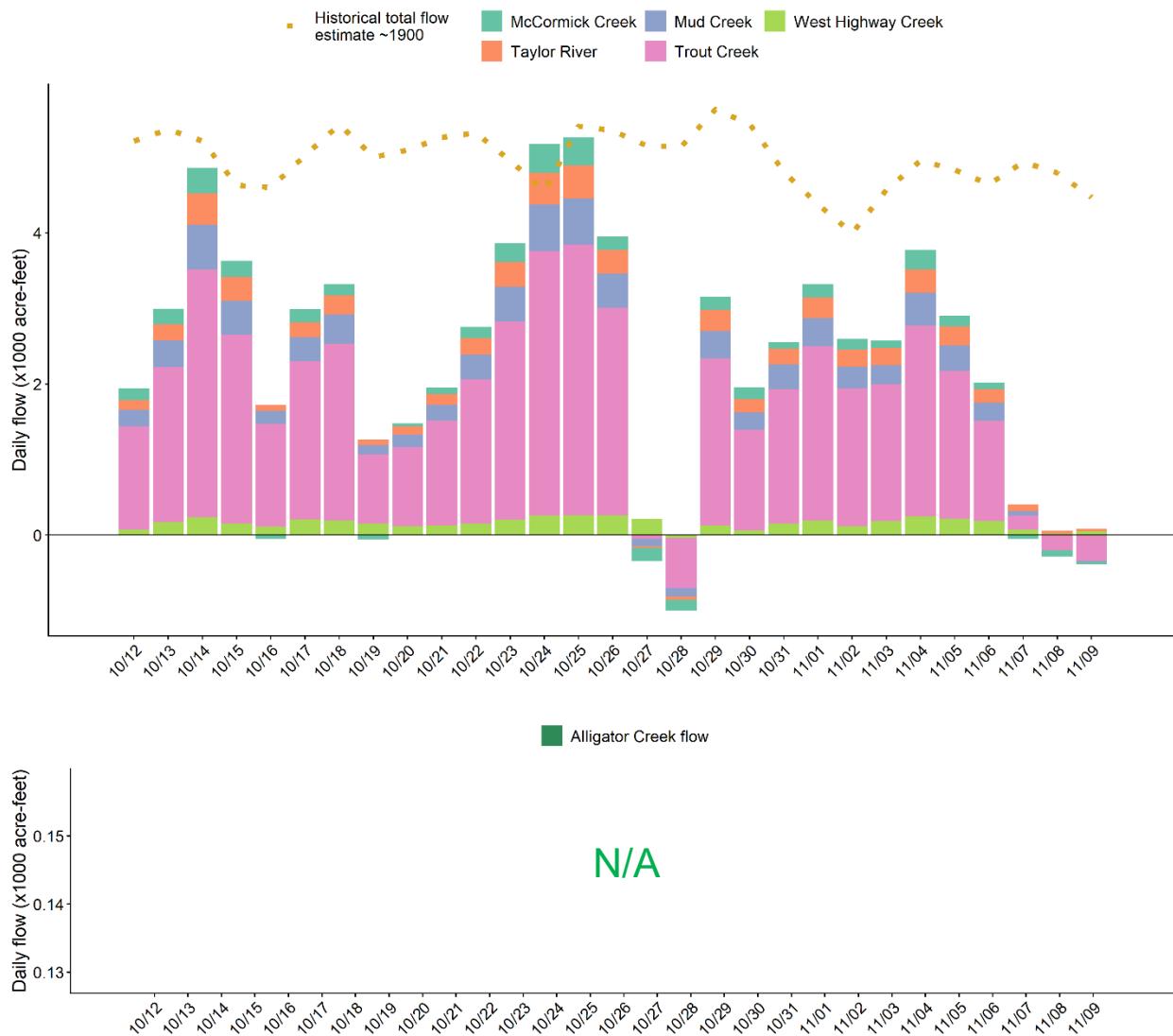
**Figure EV-9.** Eastern (top panel), Central (middle panel) and Western (bottom panel) Florida Bay daily average salinities with WY2001-2016 interquartile (25-75 percentile) ranges (IQR) and estimated historical daily average salinities. The hypersalinity threshold indicates the level at which salinities 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 11 <sup>th</sup> , 2025 (red is new)			
	Weekly change	Recommendation	Reasons
<b>WCA-1</b>	<b>Stage decreased by 0.07 feet.</b>	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.
<b>WCA-2A</b>	<b>Stage decreased by 0.12 feet</b>	A recession of no faster than 0.12 feet per week.	Maintain within basin (north versus south) and downstream habitat and wildlife.
<b>WCA-2B</b>	<b>Stage increased by 0.10 feet</b>	A recession of no faster than 0.12 feet per week.	Protect within basin and downstream habitat and wildlife.
<b>WCA-3A NE</b>	<b>Stage decreased by 0.06 feet</b>	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.
<b>WCA-3A NW</b>	<b>Stage decreased by 0.14 feet</b>	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.
<b>Central WCA-3A S</b>	<b>Stage decreased by 0.09 feet</b>	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.
<b>Southern WCA-3A S</b>	<b>Stage decreased by 0.06 feet</b>	A recession of no faster than 0.12 feet per week.	Protect within basin and downstream habitat and wildlife.
<b>WCA-3B</b>	<b>Stage decreased by 0.05 feet.</b>	A recession of no faster than 0.12 feet per week.	Protect within basin and downstream habitat and wildlife.
<b>ENP-SRS</b>	<b>Stage decreased by 0.10 feet.</b>	Make discharges to ENP according to COP protocol, considering up/down stream ecological conditions.	Protect within basin and upstream habitat and wildlife.
<b>Taylor Slough</b>	<b>Stage changes ranged from -0.24 feet to -0.02 feet</b>	Move water southward as possible.	When available, provide freshwater to promote water movement.
<b>FB- Salinity</b>	<b>Salinity changes ranged from -0.6 to +5.9</b>	Move water southward as possible.	When available, provide freshwater to promote water movement.