

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

SEPTEMBER 2026

BIG CYPRESS BASIN

HYDROLOGIC REPORT



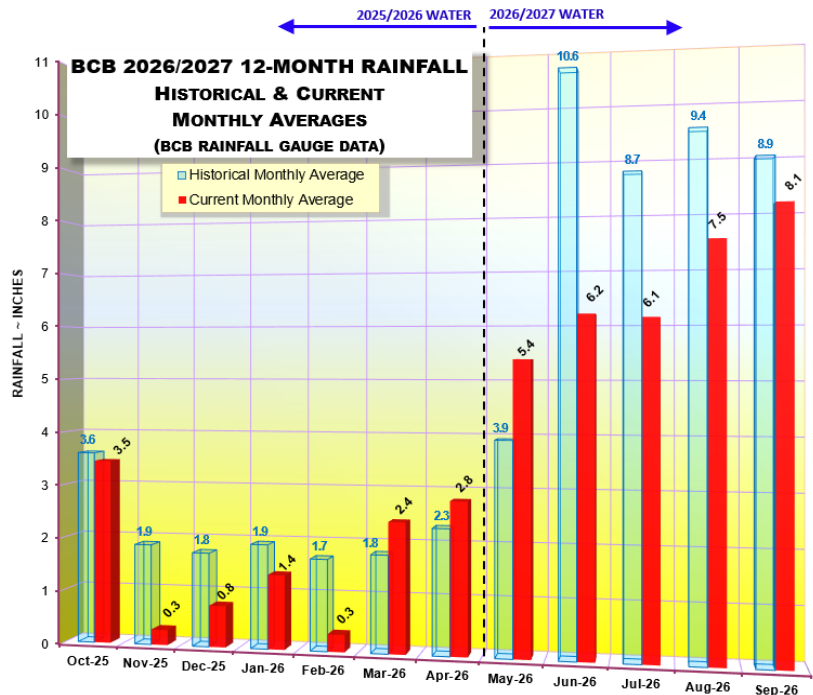
sfwmd.gov

SUMMARY OF HYDROLOGIC CONDITIONS IN THE BIG CYPRESS BASIN

September 2026

SUMMARY

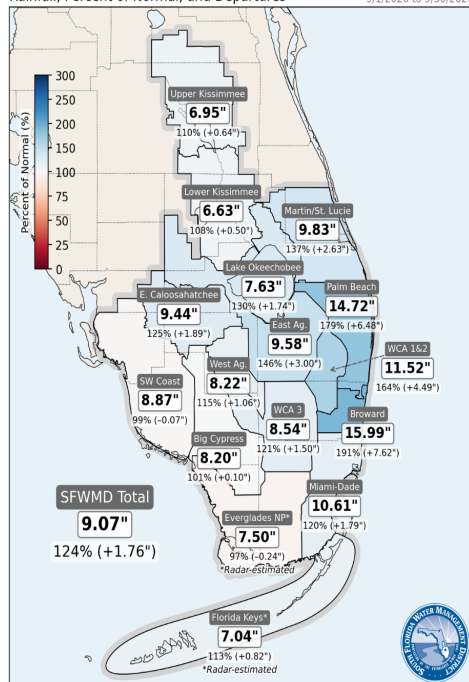
September 2026 marked the fourth consecutive month of below-normal precipitation in the Big Cypress Basin (BCB). Basin-wide rain gauges recorded an average of just **8.12** inches, which is 91% of the normal rainfall for this period. This continues the trend of sub-normal rainfall, adding to the substantial deficit for the current wet season that began on May 15th. As Septembers' rainfall was closer to normal than the prior month, water control operations generally remained in flood control to accommodate rainfall associated with the peak of wet season.



September 2026

Rainfall, Percent of Normal, and Departures

SFWMD/Daily Rainfall Report
9/1/2026 to 9/30/2026

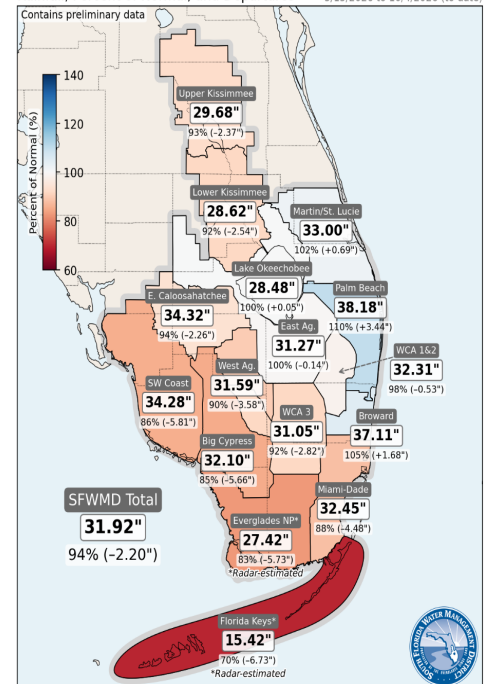


In September, the Southwest Coast Forecast Area (SWCFA), which includes portions of Lee and Hendry Counties, recorded an average rainfall of 8.87 inches, which exceeds the BCB gauge-based average of 8.12 inches and falls within the normal rainfall range for the region. As of October 4, 2026, the SWCFA has noted a cumulative rainfall deficit of 5.81 inches for the 2026–2027 wet season, a result of the below-normal precipitation recorded since June.

Dynamic Wet Season 2026

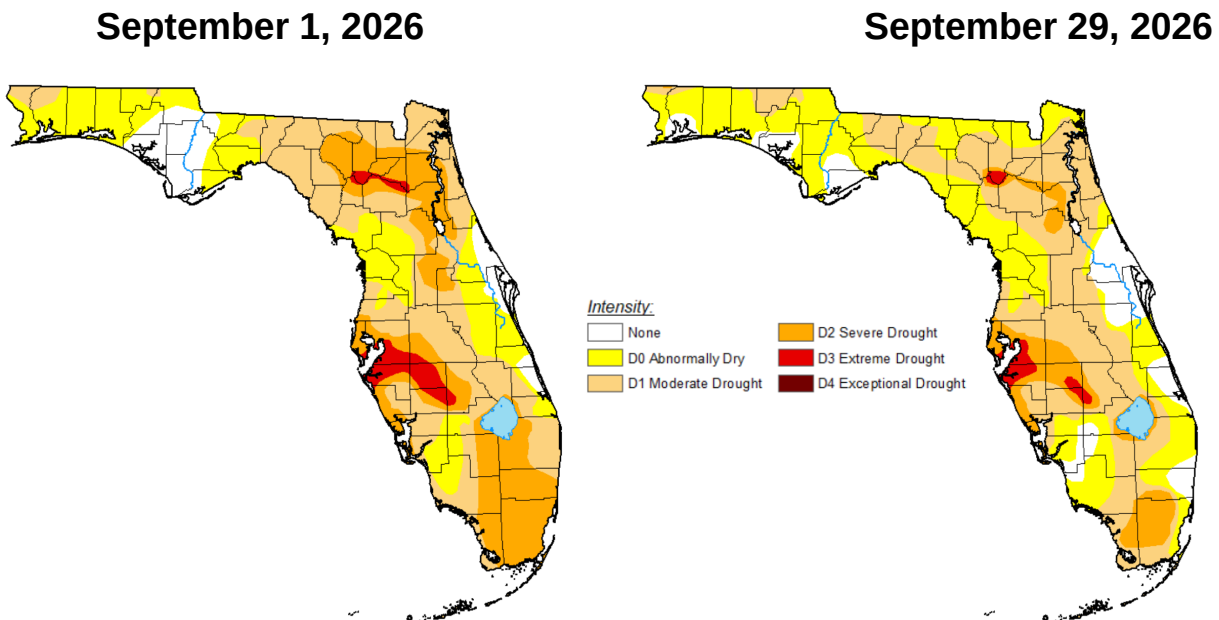
Rainfall, Percent of Normal, and Departures

SFWMD/Daily Rainfall Report
5/15/2026 to 10/4/2026 (to date)

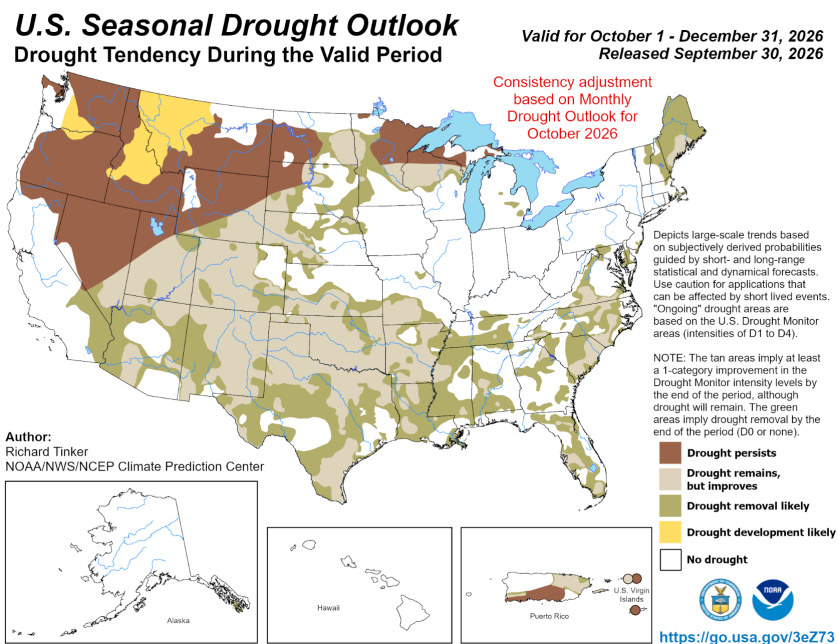


DROUGHT CONDITIONS

As of September 29, 2026, the U.S. Drought Monitor reports an improvement in drought conditions across the BCB area, attributable to nearly average rainfall throughout the month. Notably, a small section of northwest Collier County has transitioned to “None” in drought classification. Furthermore, a significant part of the western region has improved from “D1 Moderate Drought” to “D0 Abnormally Dry.” Additionally, the eastern segments of Collier County have seen improvement from “D2 Severe Drought” to “D1 Moderate Drought.”



The U.S. Monthly Drought Outlook indicates that the regions in the BCB currently classified as “D0 Abnormally Dry” are not expected to experience a return to drought conditions by December 31, 2026. Furthermore, areas in Collier County that are presently facing drought conditions are likely to see a reduction or complete alleviation of these conditions in the forthcoming months.



EL NIÑO SOUTHERN OSCILLATION (ENSO)

El Niño strengthened further in September, with sea surface temperature anomalies exceeding +4.0°C in portions of the eastern equatorial Pacific. A strong-to-very strong El Niño is likely through January-March 2027 (remaining greater than an 83% chance). This strong and persistent El Niño is expected to enhance dry season precipitation in the coming months, leading to a wetter than normal winter, though still less than seen during wet season.

Relative Sea Surface Temperature (SST) Anomalies (°C)
September 2026

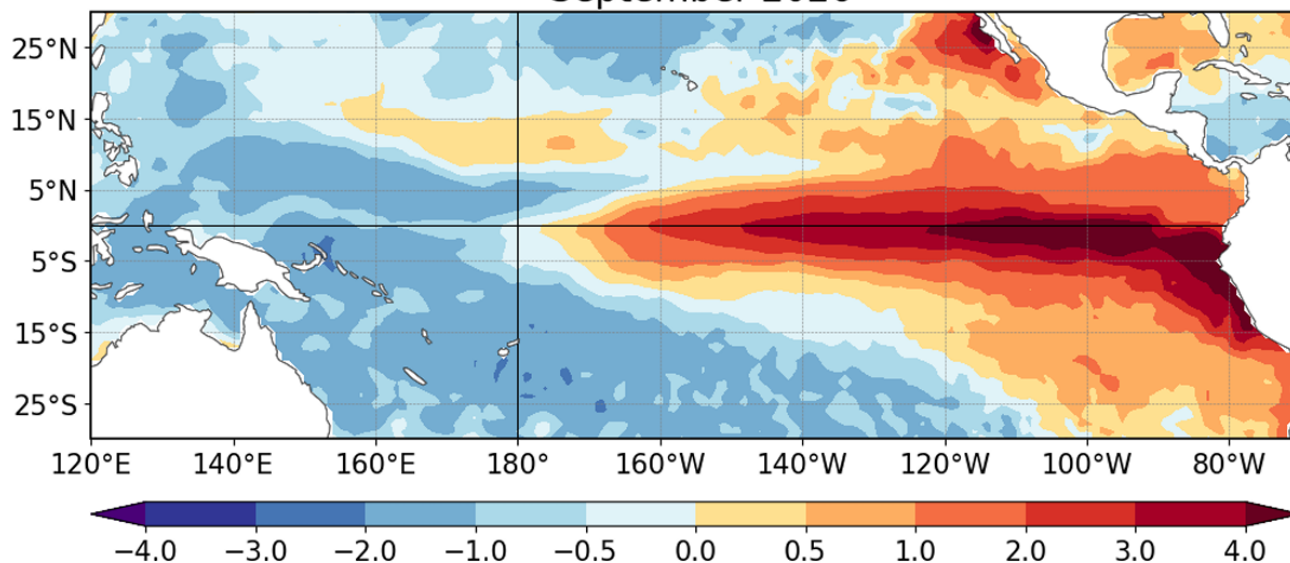


Figure 1. Average relative sea surface temperature (SST) anomalies (°C) for September 2026. Anomalies are computed with respect to the 1991-2020 base period monthly means. Data: OISSTv2.1.

Due to the climatological conditions associated with the current El Niño, the SFWMD QPF Matrix for the Southwest Coast indicates a high probability of above normal rainfall for coming months, with December through March potentially seeing rainfall totals more than double historic averages.

SFWMD QPF Matrix

Consensus, uncertainty, timing, and model detail across Florida.

October 2026 Oct 1 to Oct 31, 2026 5.85" Median 5.57" P10-P90 2.71"-9.13" + 166% normal (+2.33") 14 contributing models	November 2026 Nov 1 to Nov 30, 2026 3.06" Median 2.68" P10-P90 1.12"-5.63" + 174% normal (+1.30") 14 contributing models	December 2026 Dec 1 to Dec 31, 2026 4.62" Median 4.36" P10-P90 1.86"-7.75" + 265% normal (+2.88") 14 contributing models	January 2027 Jan 1 to Jan 31, 2027 5.58" Median 5.28" P10-P90 2.42"-9.00" + 246% normal (+3.31") 14 contributing models	February 2027 Feb 1 to Feb 28, 2027 4.92" Median 4.50" P10-P90 2.07"-8.65" + 272% normal (+3.31") 13 contributing models	March 2027 Mar 1 to Mar 31, 2027 4.57" Median 4.49" P10-P90 2.15"-6.66" + 224% normal (+2.53") 6 contributing models	April 2027 Apr 1 to Apr 30, 2027 3.17" Median 2.62" P10-P90 1.07"-5.97" + 126% normal (+0.66") 5 contributing models	May 2027 May 1 to May 31, 2027 3.45" Median 3.35" P10-P90 0.90"-6.04" + 91% normal (-0.35") 5 contributing models
June 2027 Jun 1 to Jun 30, 2027 4.78" Median 3.98" P10-P90 2.14"-8.74" + 48% normal (-5.26") 5 contributing models	July 2027 Jul 1 to Jul 31, 2027 4.21" Median 3.30" P10-P90 1.91"-8.04" + 47% normal (-4.77") 4 contributing models	August 2027 Aug 1 to Aug 31, 2027 5.26" Median 4.54" P10-P90 2.70"-9.13" + 54% normal (-4.50") 4 contributing models	September 2027 Sep 1 to Sep 30, 2027 6.24" Median 5.60" P10-P90 3.52"-9.41" + 71% normal (-2.53") 4 contributing models				

BCB RAINFALL

The Basin-wide averaged, gauge-measured, monthly rainfall was 8.12 inches in September 2026. This measured rainfall amounted to 91% of the historic BCB September average of 8.93 inches. September rainfall was highly variable by location. The rain gauge with the highest measured precipitation was R-21 I-75W2 which recorded 14.66 inches. R-13 IMMOKOLEE LANDFILL received the lowest rain gauge monthly total with just 4.22 inches. **(Figures 1, 2, 3A and Table 1)**

Figure 3B shows September's calculated average rainfall estimates for each of the Basin's watersheds, based on gauge adjusted radar (Raindar). The Cocohatchee watershed saw the highest Raindar average of 11.46 inches and the Okaloacooche watershed saw the lowest Raindar average of 6.05 inches. The BCB's overall calculated area weighted average Raindar rainfall (by watershed) was 7.14 inches for the month, approximately 1 inch lower than the basin-wide rain gauge average of 8.12 inches. This discrepancy may be attributed to the localized nature of the rainfall, with precipitation primarily occurring in areas where rain gauges are situated. The Raindar totals and their locality distribution across the BCB/Lower West Coast are shown on **Figure 3C**.

BCB OPERATIONS AND WATER LEVELS

In September, the operations of BCB structures were dictated by a combination of flood control and water conservation measures, tailored to specific locations, current water levels, and precipitation forecasts. Following a recent transition from significantly below-average rainfall to just slightly below average, a few gradual adjustments were made to upstream water control structures from water conservation to flood control operations to prepare for localized rainfall events associated with the wet season. These modifications to the system were carefully managed with the approaching dry season in mind. Meanwhile, downstream structures maintained flood control measures, deliberately lowering levels to enhance conveyance capacity. BCB canal conditions as of September 30, 2026 are shown on **Figure 4**.

GOLDEN GATE SYSTEM

Water management operations within the Golden Gate Main Canal varied by specific location, reflected by the uneven rainfall distribution across the watershed. Structures situated nearer to the coast, such as GG1, GG2, and GG3, typically underwent intermediate flood control operations in September to ensure that water levels were adequately maintained in anticipation of intense rainfall events. The GG4 structure operated under a combination of flood control and water conservation modes as circumstances dictated. Meanwhile, structures located further upstream, including GOLDW5, GG6, and GG7, were gradually transitioned from water conservation to flood control operations as conditions warranted. Discharge to tide at GG1 was variable in September, with flow rates ranging from 200 cubic feet per second (CFS) during drier portions of the month to as much as 1,200 CFS as a result of localized heavy rainfall occurrences within the system. Throughout the Golden Gate Main system, canal levels were sustained within normal parameters, typically between the 25th and 75th percentiles. **(Figure 5)**

COCOCHATCHEE SYSTEM

As with the Golden Gate Main system, water management operations within the Cocohatchee Canal varied based on location. Given the relatively small size of the Cocohatchee watershed, coupled with the canal's efficient conveyance and rapid response capabilities, the COCO1 and COCO2 structures, located closer to the coast, were predominantly managed within higher operational ranges—exceeding the 75th percentile. Discharges at COCO1 routinely fluctuated between 30 and 60 CFS, peaking at approximately 250 CFS mid-month due to localized heavy rainfall events within the watershed. Correspondingly, water levels at upstream structures, including COCO3, COCO4, CORK1, CORK2, and CORK3, began to rise closer to typical wet season levels. Discharges from these upstream structures were intentionally restricted in September to conserve water resources, compensating for the preceding dry conditions. This conservation-minded approach served to maintain upstream water levels near the 75th percentile. **(Figures 6A, 6B, & 6C).**

FAKA UNION SYSTEM

During September, the FU4S and FU5 structures engaged in intermediate flood control operations similar to those implemented in the Golden Gate Main Canals. Throughout the month, discharges at these structures generally ranged from 30 to 70 CFS, except for some occasional deliberate rainfall-based adjustments to operational levels resulting in discharges reaching approximately 300 CFS. The water levels upstream of FU4S and FU5 concluded the month positioned just above and just below the 75th percentiles, respectively. **(Figures 7A & 7B)**

The Miller Pump Station (S486) operated with heightened pumping capacity, utilizing two high-flow diesel pumps throughout most of the month in conjunction with its electric low-flow pumps. The Faka Pump Station (S487) commenced operations with high-flow diesel pumps for the first time this wet season at the month's onset, adding additional capacity to supplement its electric low-flow pumps. The Merritt Pump Station (S488) maintained similar operations as the previous month, restricted to low-flow electric pumps only. Additionally, monitoring wells within the Picayune Strand Restoration Project (PSRP) concluded the month generally above the 75th percentile in the western portion, while remaining below the 50th percentile in the eastern area.

HENDERSON CREEK SYSTEM

During the beginning of the month, HC1 and HC2 were engaged in flood control operations, responding to the substantial rainfall received at the end of the previous month. As the month progressed, however, the operations transitioned to water conservation due to a notable decrease in rainfall in the watershed. By the end of the month, HC1 was operating near the 50th percentile, while HC2 finished below the 50th percentile. **(Figure 8A & 8B).**

BIG CYPRESS BASIN & LOWER WEST COAST GROUNDWATER LEVELS

For the Lower West Coast (LWC), the groundwater monitoring stations revealed increasing water level trends during September. **(Table 2 and Figures 9A and 9B).**

C-462 (north of Lake Trafford) maintained a positive trend but concluded the month significantly below the 25th percentile. **C-1224** (near Henderson Creek), experienced a sharp rise in water levels during the early to mid-month period, reaching nearly the 75th percentile before declining to finish just below the 50th percentile. **C-1004R** (a Tidally influenced well near Cocohatchee Canal) exhibited irregular increases during the early to mid-month timeframe, initially surpassing the 25th percentile. This was followed by a pronounced decrease toward the end of the month, resulting in levels well below the 25th percentile.

L-738 (a Tamiami Aquifer well in Bonita Springs) recorded a sharp increase at the beginning of the month, then tapered off and saw significant drop in the final days of September, ultimately finishing just inches above record low territory. **L-2194** (a Sandstone Aquifer well in Bonita Springs) saw a strong increase from record lows, experiencing a slight downturn at the end of the month while remaining above the record low threshold. **L-2195** (a surficial aquifer well in Bonita Springs) saw a significant increase from record lows over the course of the month, concluding close to the 25th percentile.

CORKSCREW SWAMP

Figure 10 shows the historical trends for Corkscrew Swamp (CRKSWPS), Bird Rookery (BRDROOK), and the Cork 3 (CORK3) structure, and their 2026 corresponding levels. CRKSWPS experienced a significant rise from approximately one foot below record lows, eventually stabilizing near the 25th percentile by the end of the month. For the first time this water year, CORK3 exceeded the lower detection limit of its water level sensor before reaching operational levels late in the month. Meanwhile, BRDROOK maintained a strong upward trend, concluding the month about 0.8 feet below the 50th percentile.

Figure 11 reveals a reversal in the downward trend for Lake Trafford, which saw a steady increase this month, but still closed below the 10th percentile.

Figures 12 and Figure 13 show the locations for Southern Corkscrew (SOCREW) Sites 1 through 6, all of which are combination surface and groundwater monitoring wells. Also shown are the historical trends for SOCREW1 and SOCREW2, which have been monitored since 2016. Both SOCREW1 and SOCREW2 sites recorded sharp increases in water levels during the month, followed by a slight tapering off and subsequent decrease. Ultimately, SOCREW1 and SOCREW2 finished slightly below the 25th percentile. SOCREW sites 3, 4, 5, and 6, being newer with less than four years of recorded data, currently lack sufficient information for meaningful statistical cyclic analysis.

FIGURE 1
RAIN GAUGE LOCATIONS

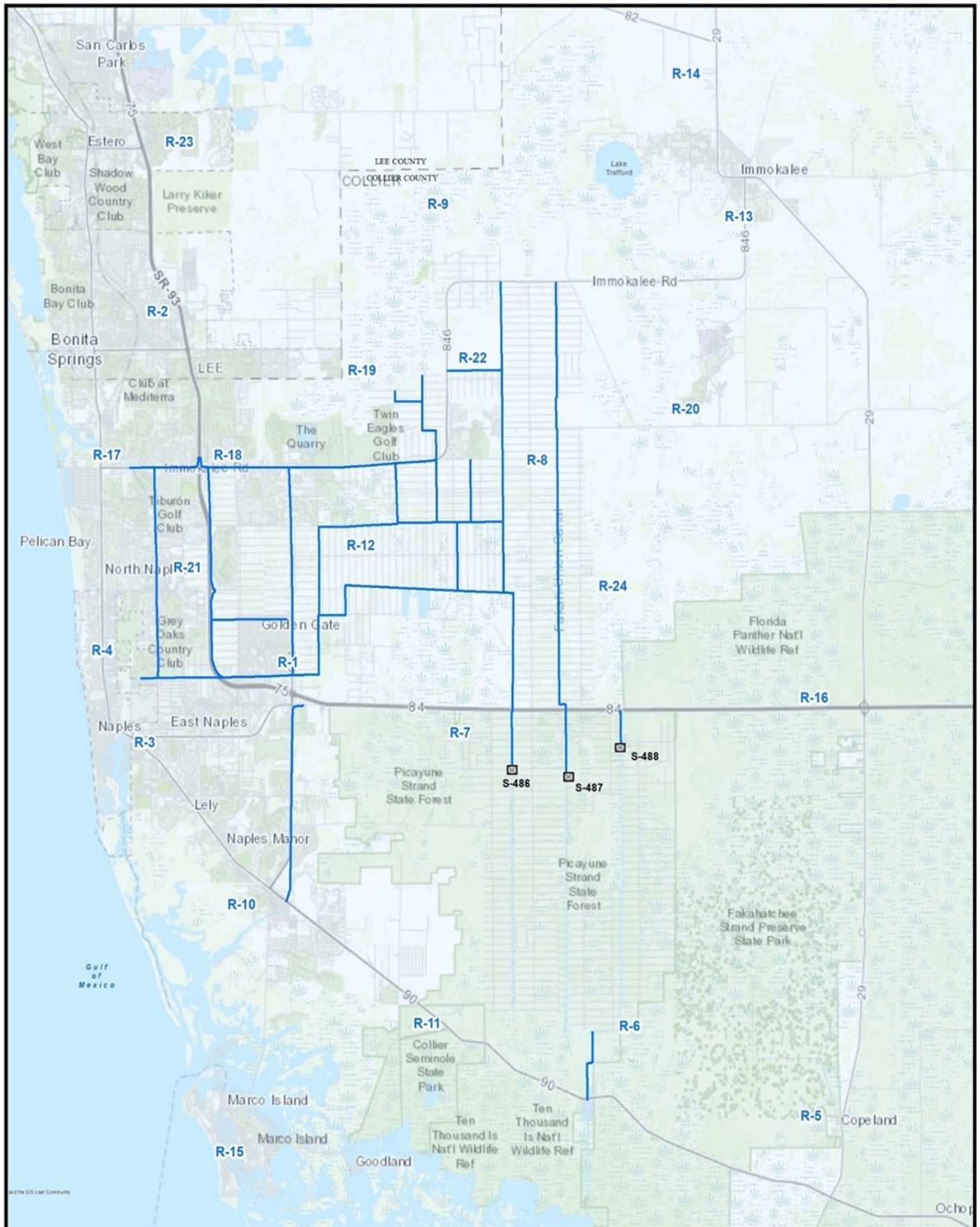


FIGURE 2
BCB GAUGE MEASURED RAINFALL MONTHLY AVERAGES
CALENDAR YEAR 2026

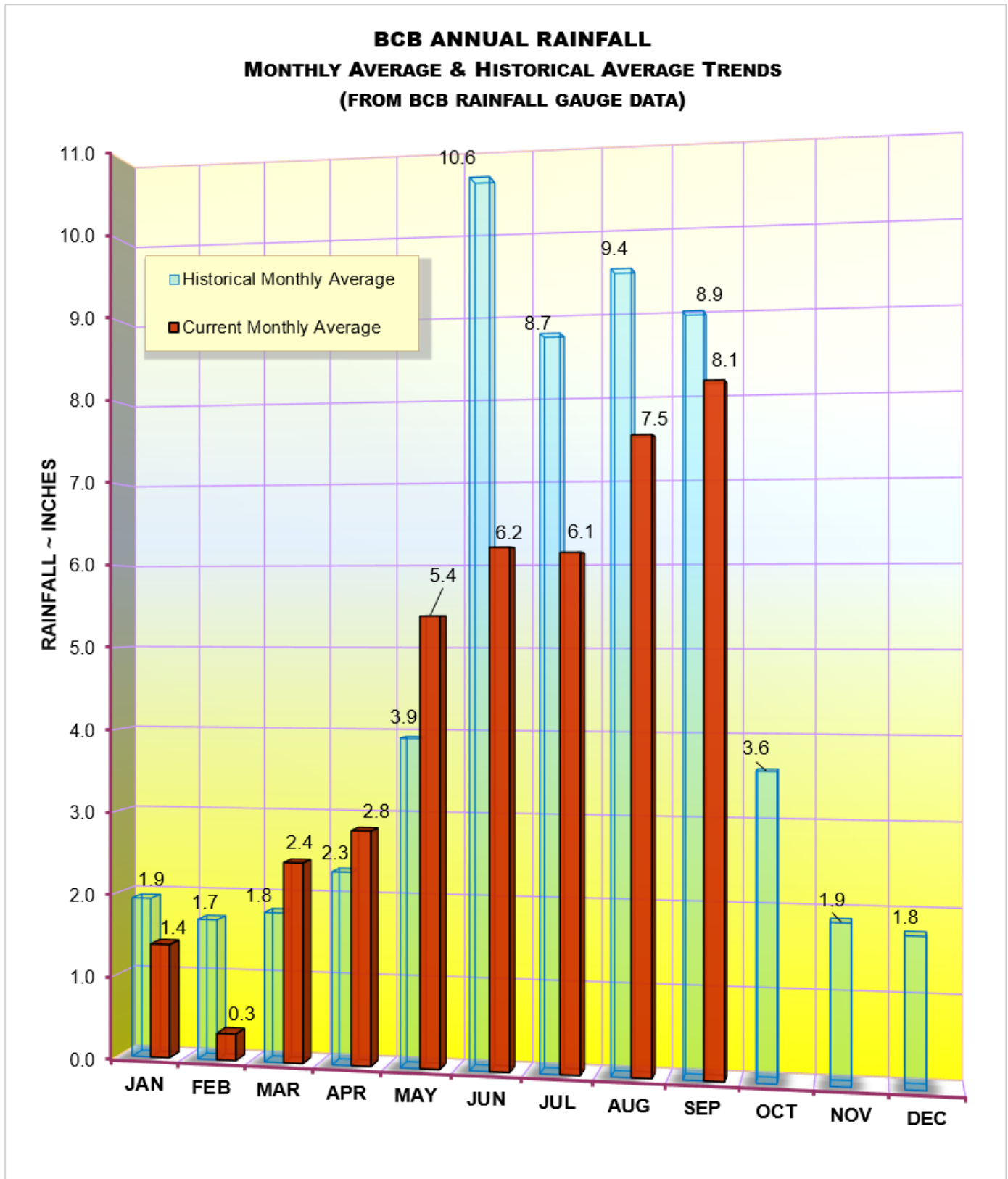


TABLE 1
RAINFALL REPORT - SEPTEMBER 2026
DISTRICT/BASIN RAINFALL STATIONS
 (ALL NUMBERS ARE IN INCHES)

STATION INDEX NO.	STATION NAME	Sep-26	LONG TERM MONTHLY AVERAGE	MONTHLY DIFFERENCE	CALENDAR YEAR 2026 CUMULATIVE TOTAL	AVERAGE CALENDAR YEAR TO DATE	YEAR TO DATE DIFFERENCE
R-1	GG#3	8.40	10.13	-1.73	52.93	55.86	-2.93
R-2	BONITA SPRINGS WATER PLANT	11.27	8.20	3.07	41.97	45.50	-3.53
R-3	COLLIER COUNTY COURTHOUSE	5.31	8.38	-3.07	36.67	46.09	-9.42
R-4	FREEDOM PARK	7.80	8.58	-0.78	32.59	48.50	-15.91
R-5	FAKAHATCHEE STRAND HQ	6.36	9.05	-2.69	36.25	52.26	-16.01
R-6	DAN HOUSE PRAIRIE	6.95	8.45	-1.50	41.11	45.66	-4.55
R-7	SGGE WEATHER STATION	6.77	10.83	-4.06	43.25	54.97	-11.72
R-8	FAKA UNION #5	7.28	8.37	-1.09	48.87	53.62	-4.75
R-9	CORKSCREW SWAMP NORTH END	9.24	7.78	1.46	40.62	45.82	-5.20
R-10	ROOKERY BAY HQ	9.02	9.70	-0.68	41.19	48.92	-7.73
R-11	COLLIER SEMINOLE STATE PARK	5.25	9.39	-4.14	37.26	49.78	-12.52
R-12	G.G. FIRE STATION	6.13	9.18	-3.05	47.05	52.29	-5.24
R-13	IMMOKALEE LANDFILL	4.22	8.00	-3.78	30.29	45.21	-14.92
R-14	IFAS	5.60	7.11	-1.51	28.32	44.12	-15.80
R-15	MARCO R.O. PLANT	4.65	8.39	-3.74	26.70	45.80	-19.10
R-16	FAKAHATCHEE STRAND NORTH END	7.69	8.62	-0.93	40.98	52.68	-11.70
R-17	COCO#1	9.25	8.03	1.22	38.61	42.61	-4.00
R-18	COCO#3	11.50	8.94	2.56	41.91	49.12	-7.21
R-19	BIRD ROOKERY	10.17	10.49	-0.32	43.83	54.05	-10.22
R-20	AVE MARIA	7.06	8.17	-1.11	40.68	46.44	-5.76
R-21	I75W2	14.66	9.96	4.70	51.11	52.18	-1.07
R-22	GG#7	10.53	9.68	0.85	40.86	50.37	-9.51
R-23	FPWX	13.61	8.90	4.71	43.79	47.48	-3.69
R-24	DSOTO10	6.24	9.98	-3.74	39.80	55.29	-15.49

AVERAGES	8.12	8.93	-0.81	40.28	49.36	-9.08
----------	------	------	-------	-------	-------	-------

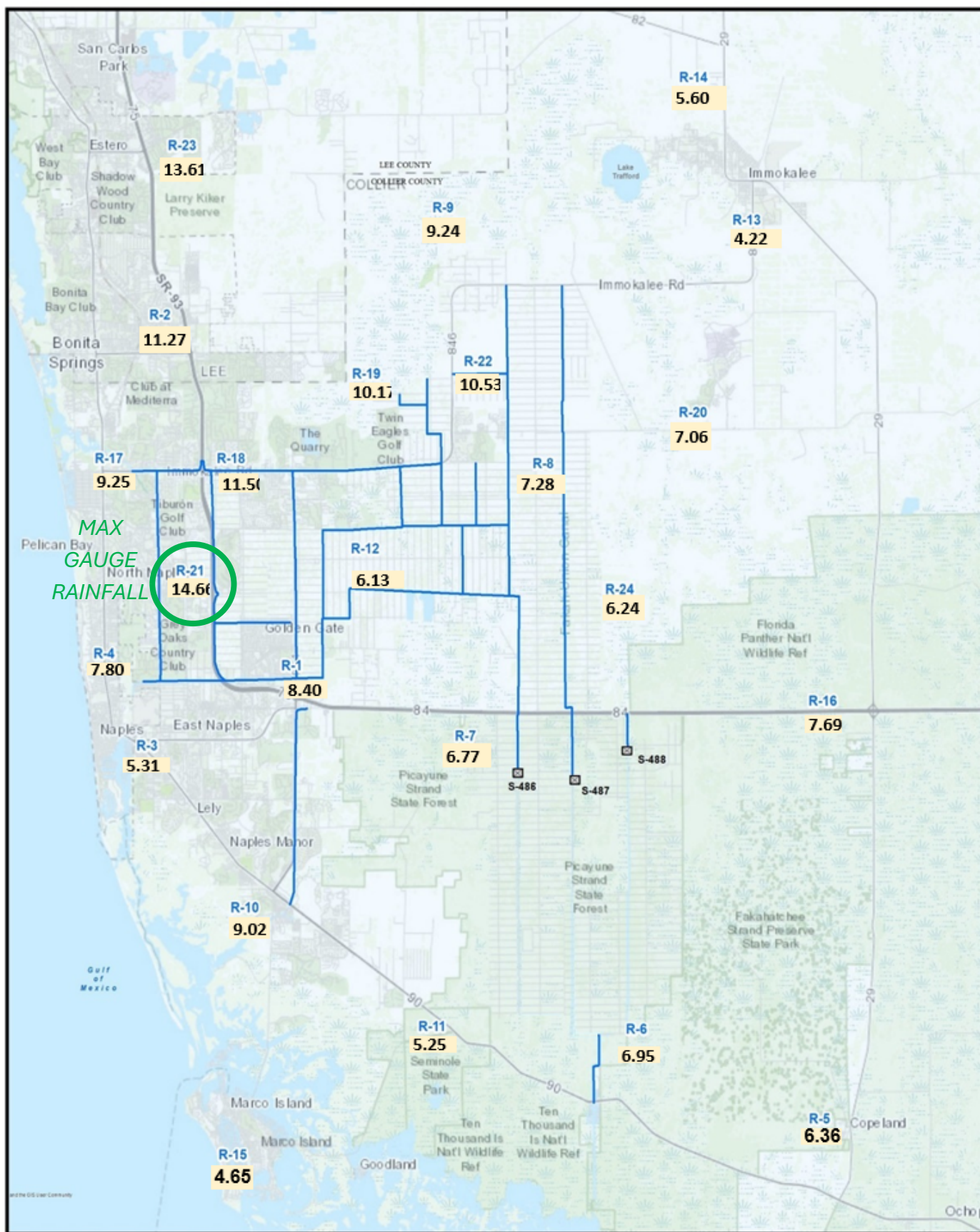
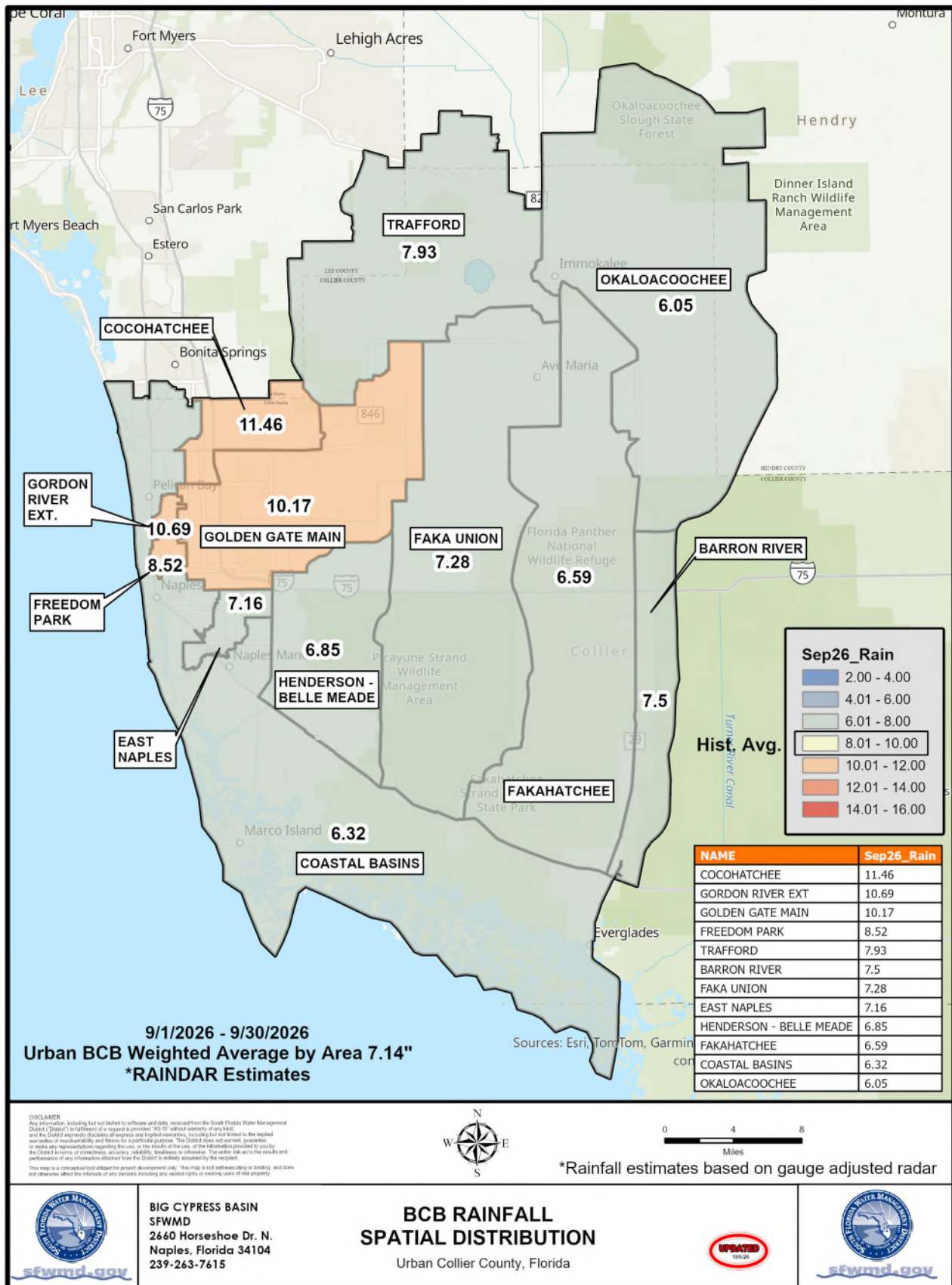
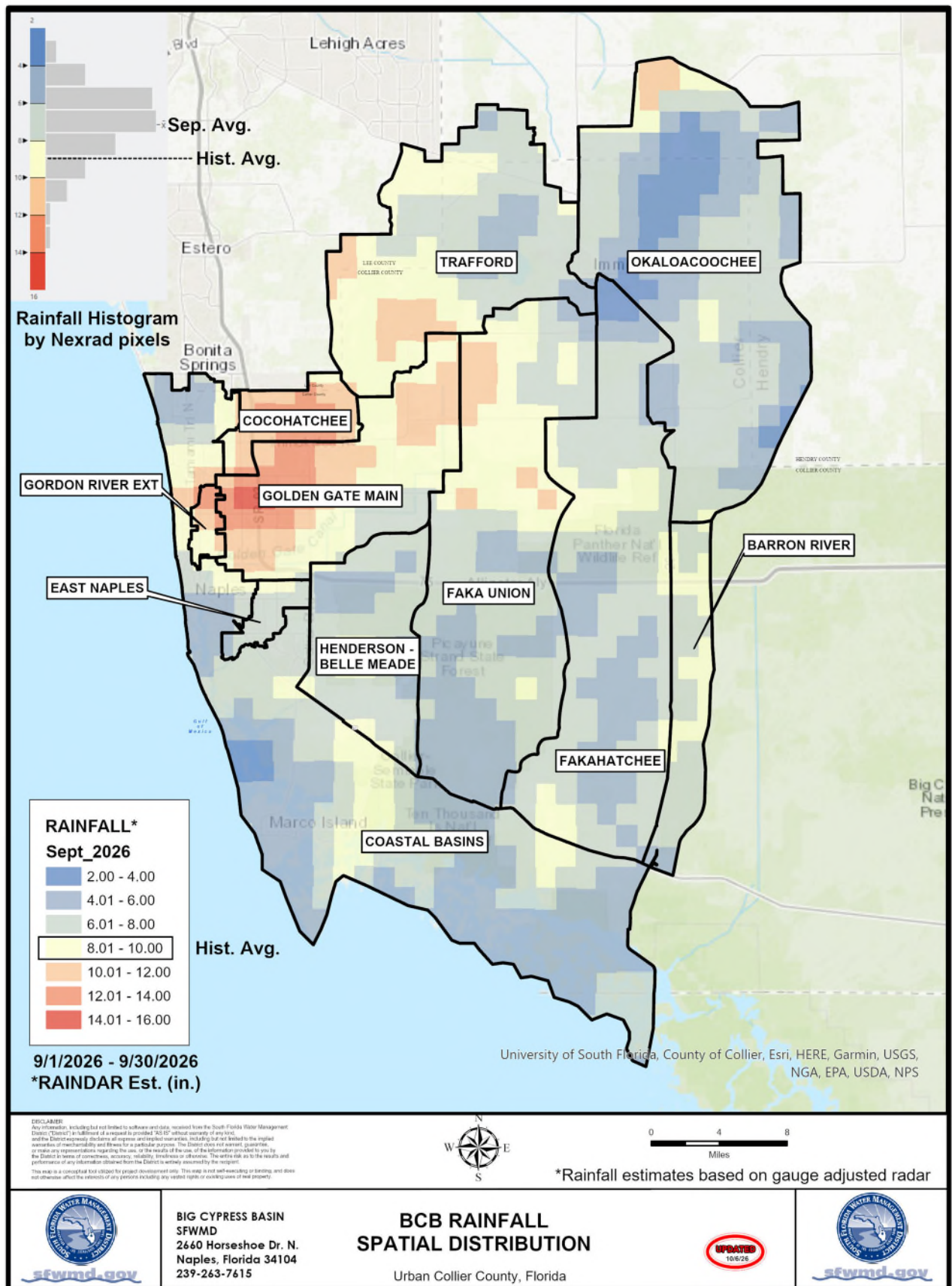


FIGURE 3A
BCB RAINFALL DISTRIBUTION
SEPTEMBER 2026



September 2026 — FIGURE 3B



September 2026 — FIGURE 3C

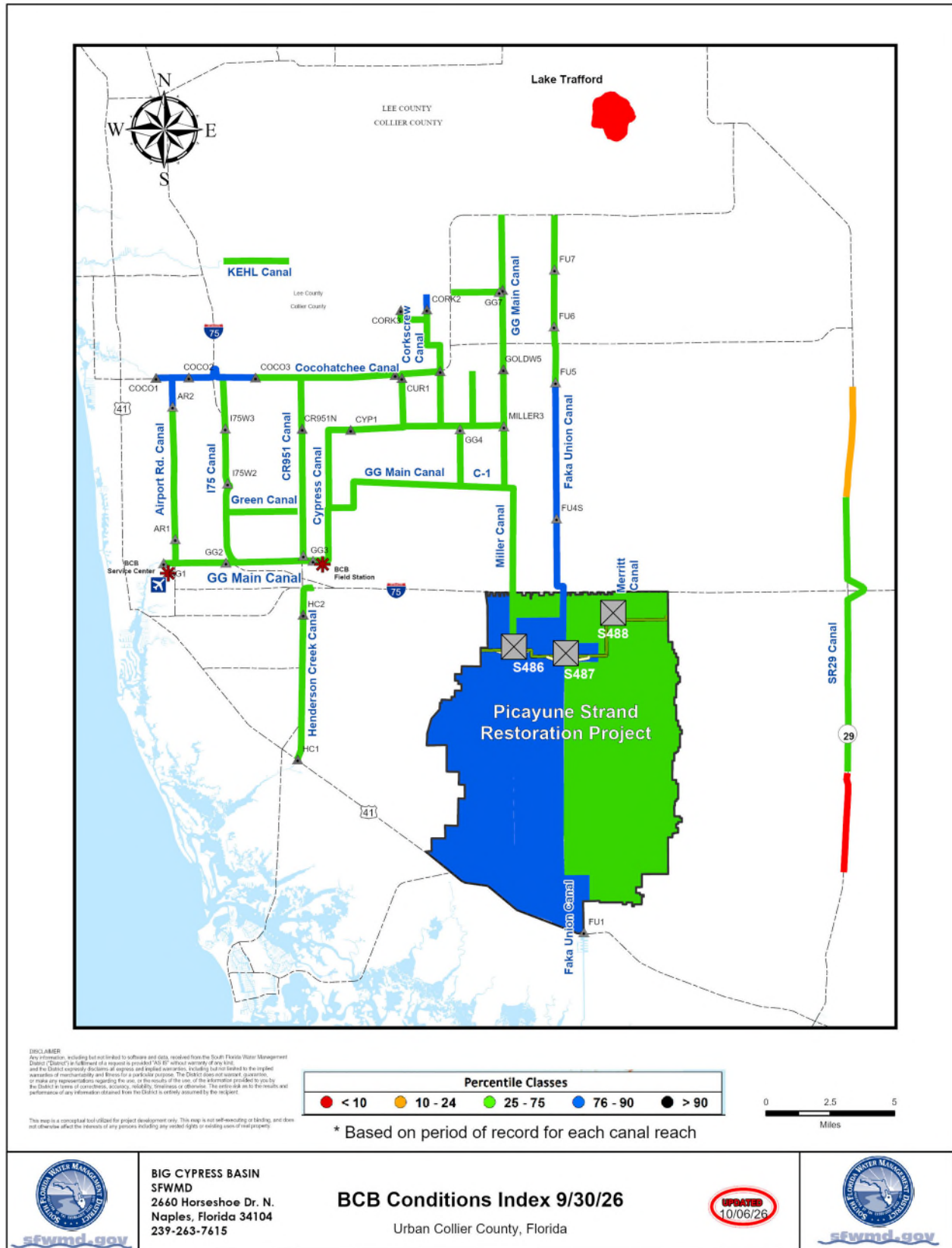


FIGURE 4
BCB WATER CONDITIONS

Figure 5 Golden Gate Canal Historic Average Daily Headwater Percentiles

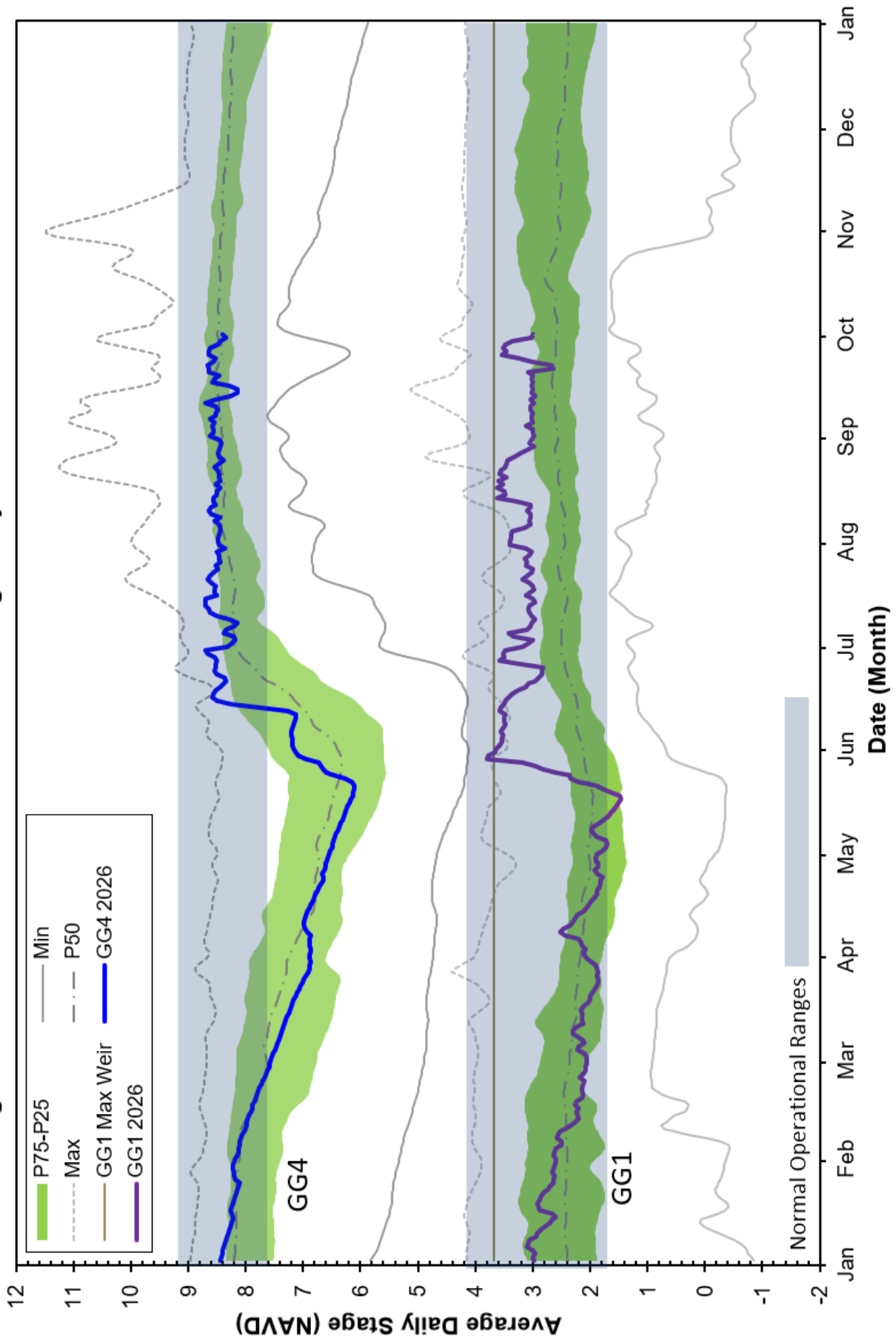


Figure 6A Cocohatchee Canal Historic Average Daily Headwater Percentiles

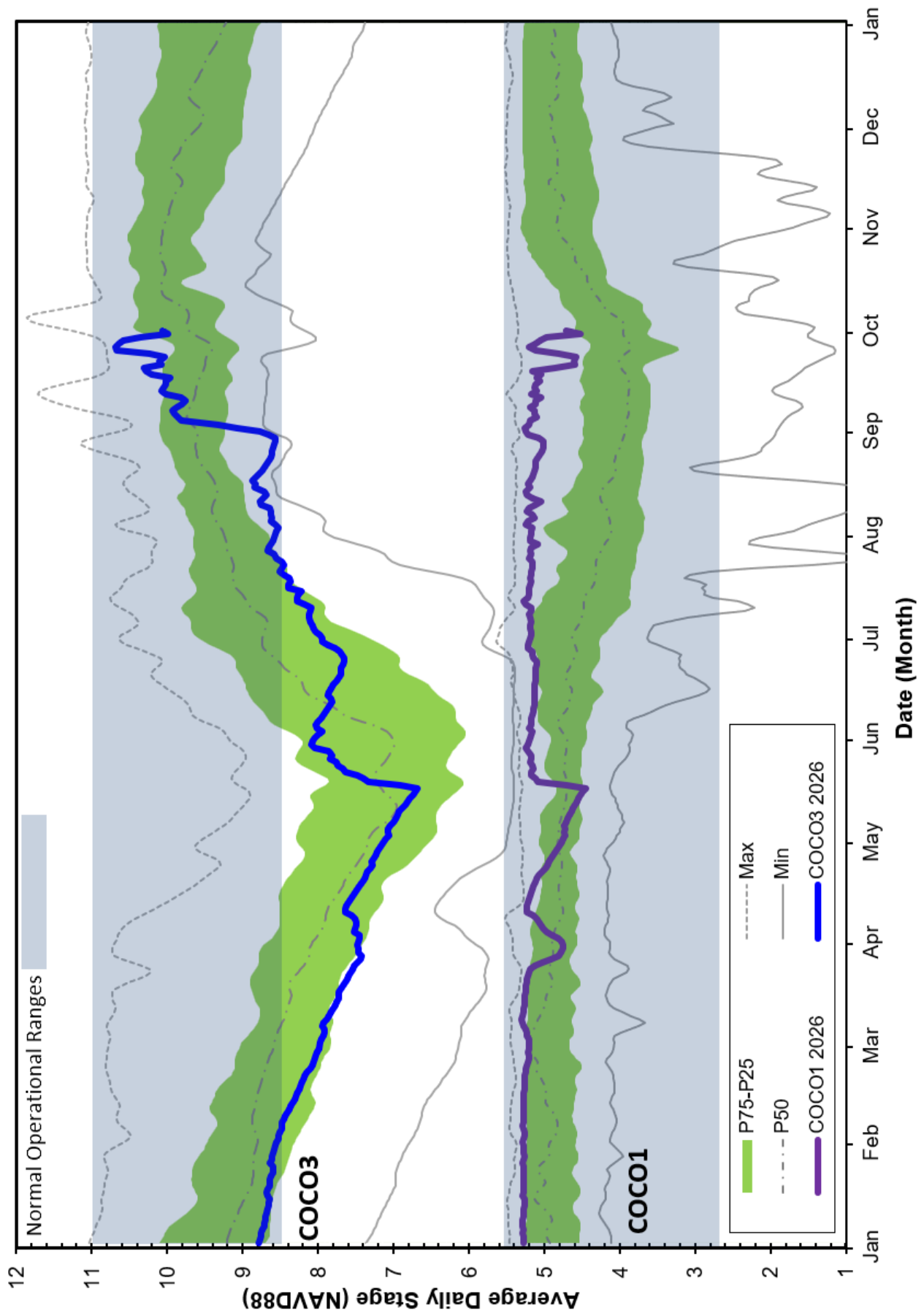


Figure 6B CORK1 Historic Average Daily Headwater Percentiles

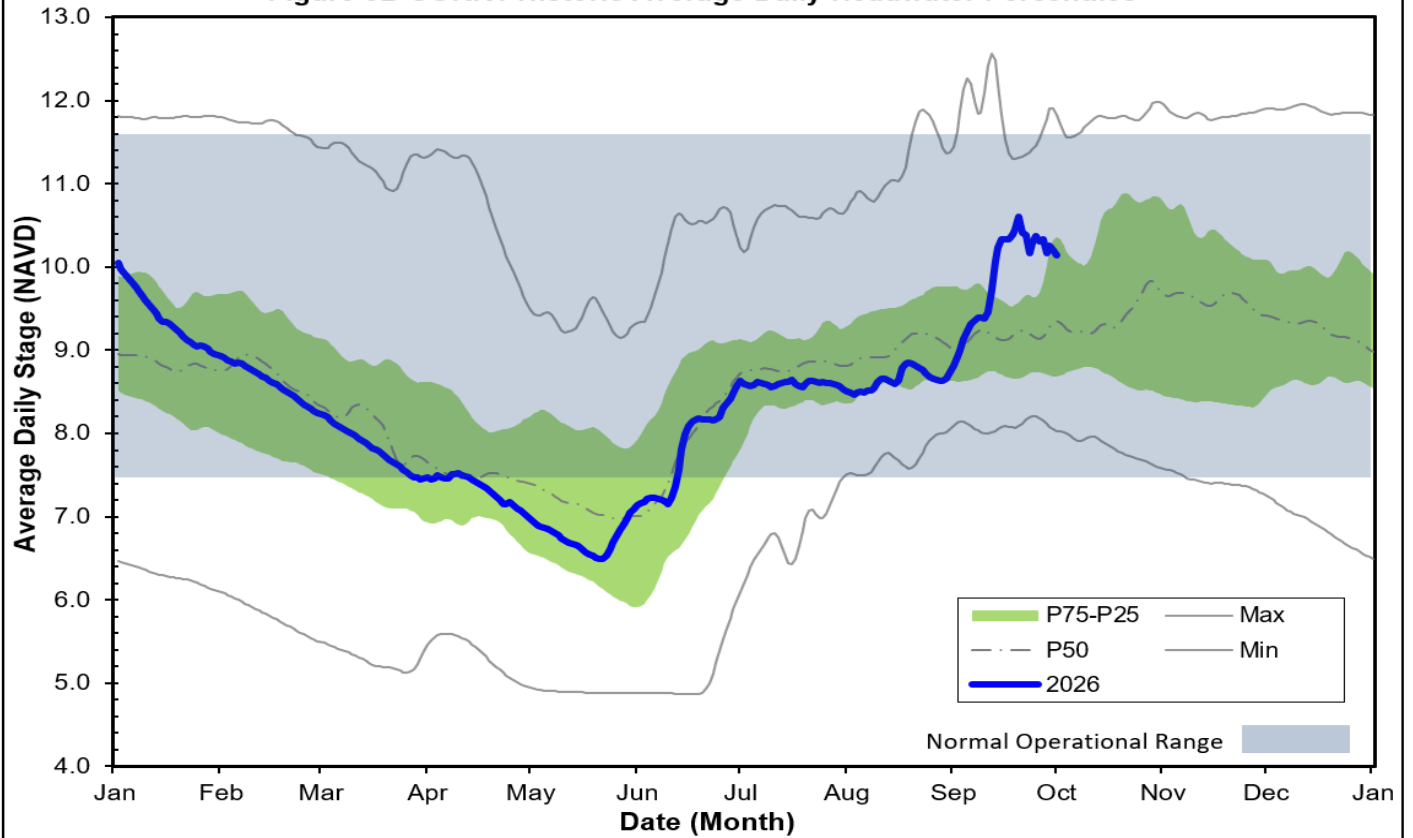


Figure 6C - CORK2 Historic Average Daily Headwater Percentiles

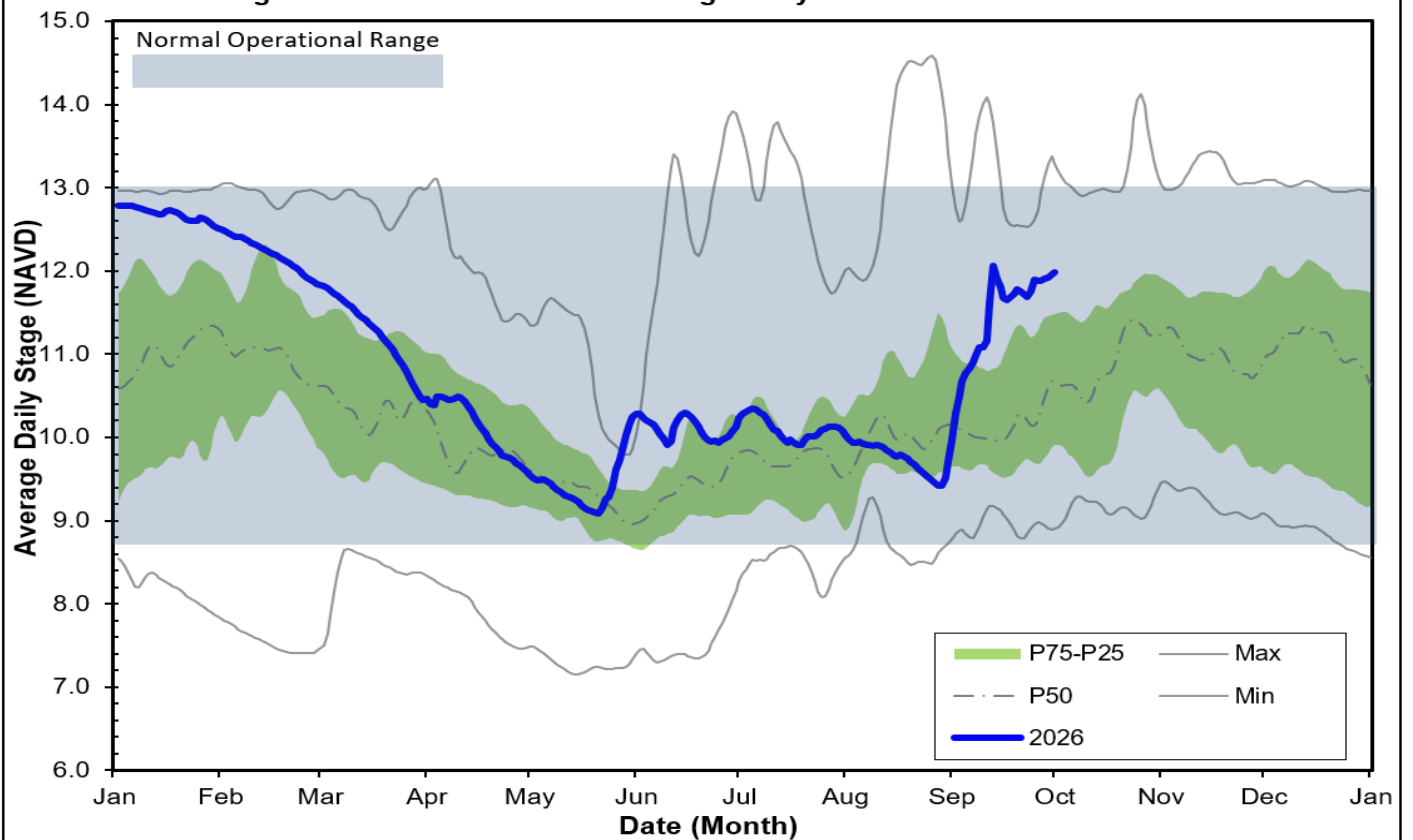


Figure 7A Faka Union Canal Historic Average Daily Headwater Percentiles

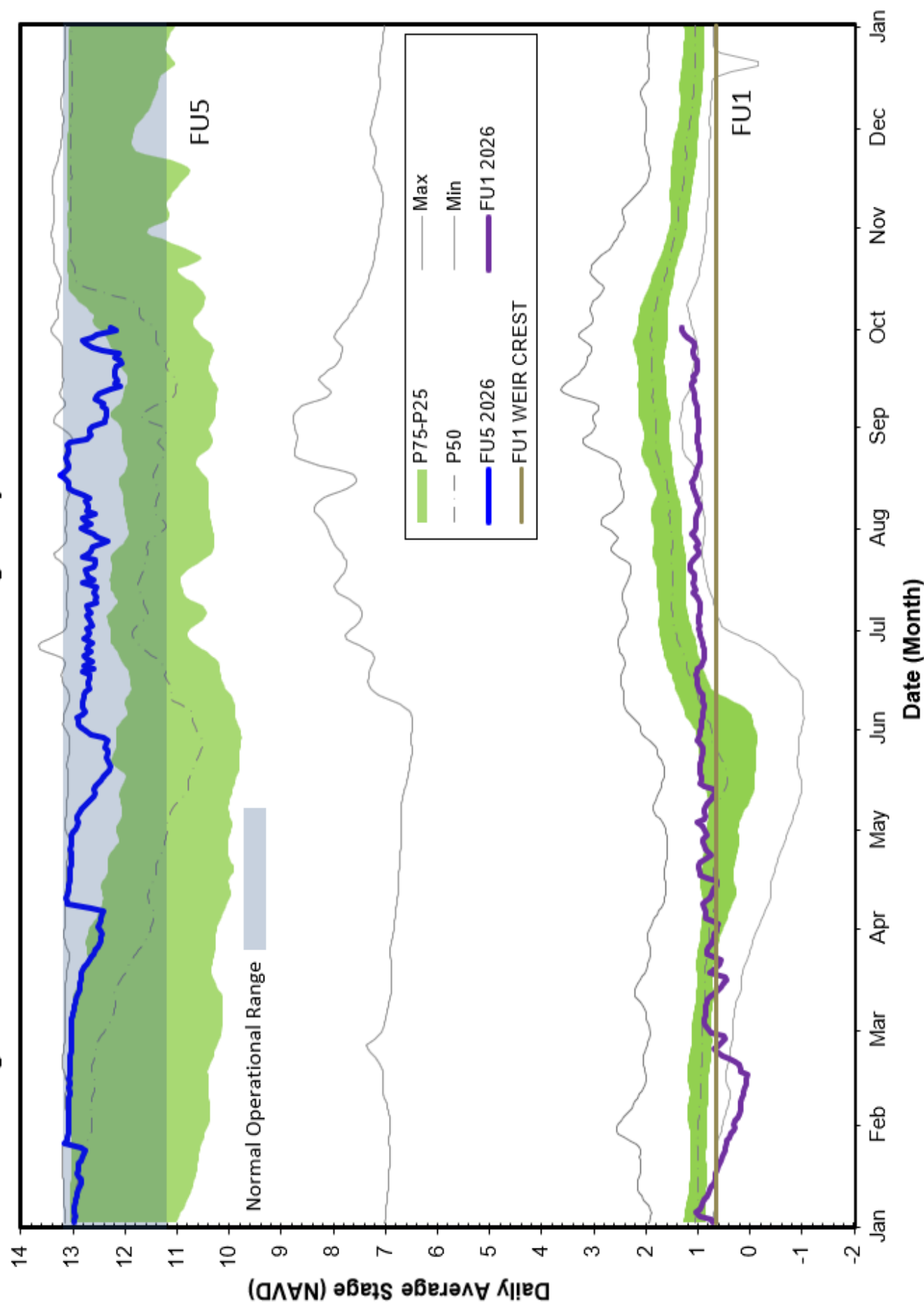


Figure 7B FU4S Historic Average Daily Water Percentiles

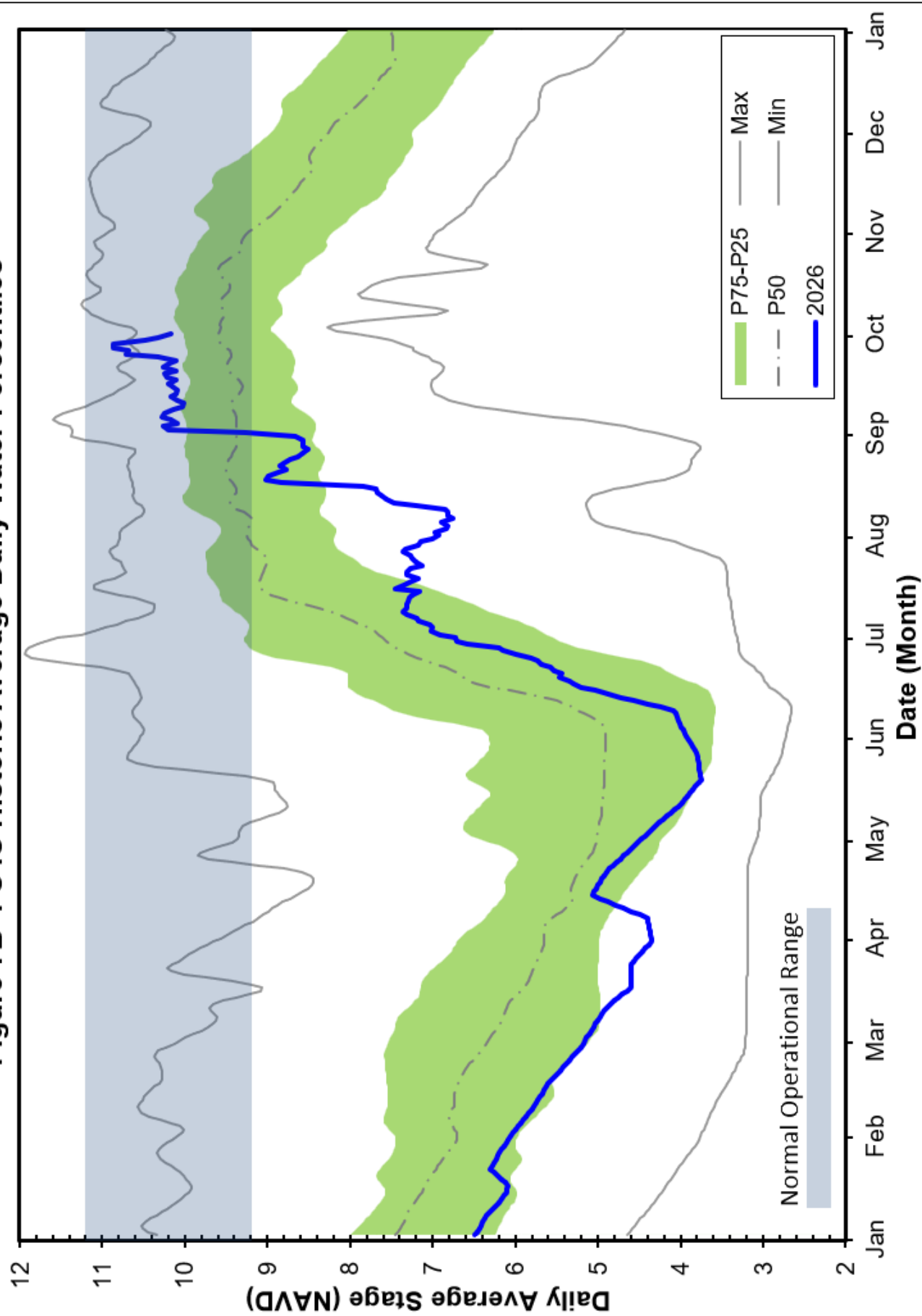


Figure 8A - HC1 Historic Average Daily Headwater Percentiles

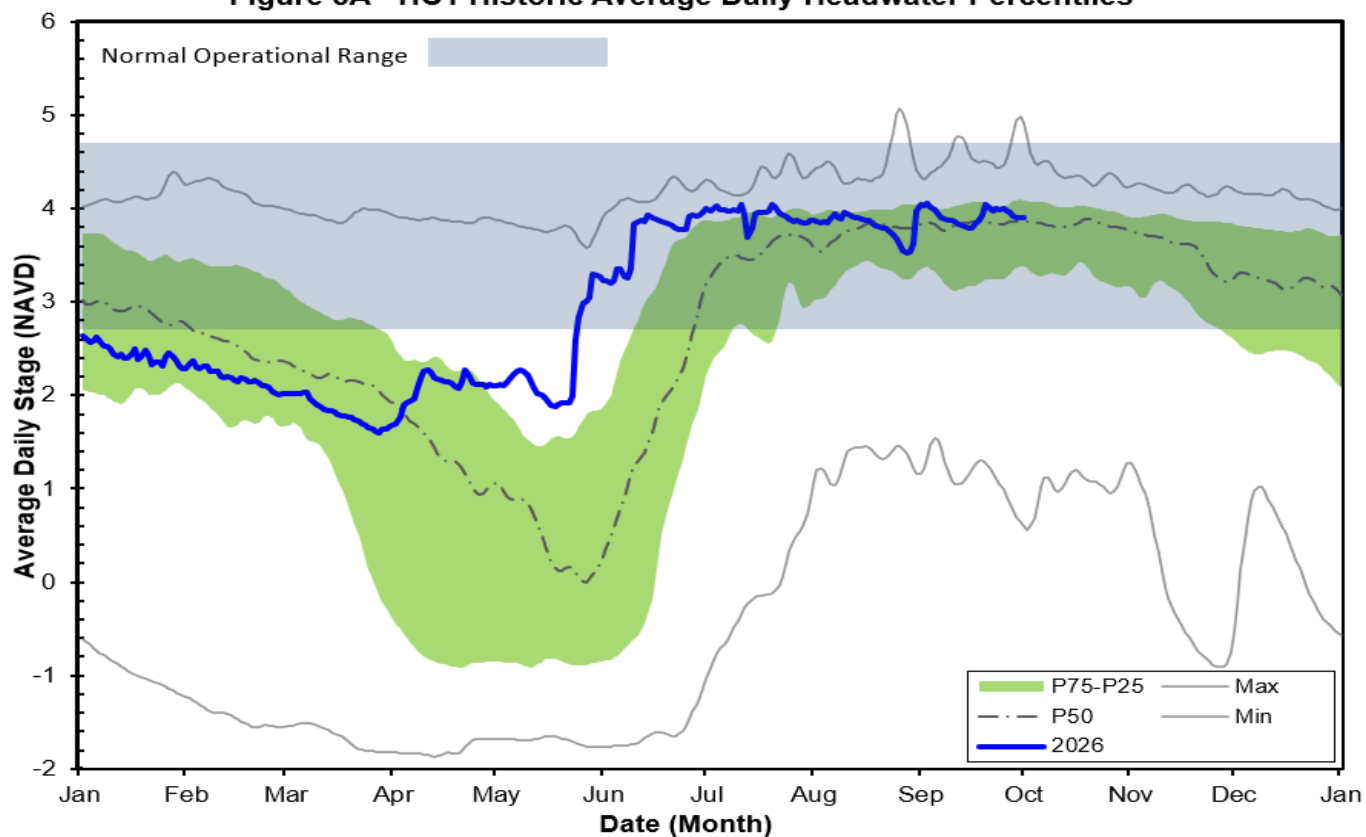


Figure 8B HC2 Historic Average Daily Headwater Percentiles

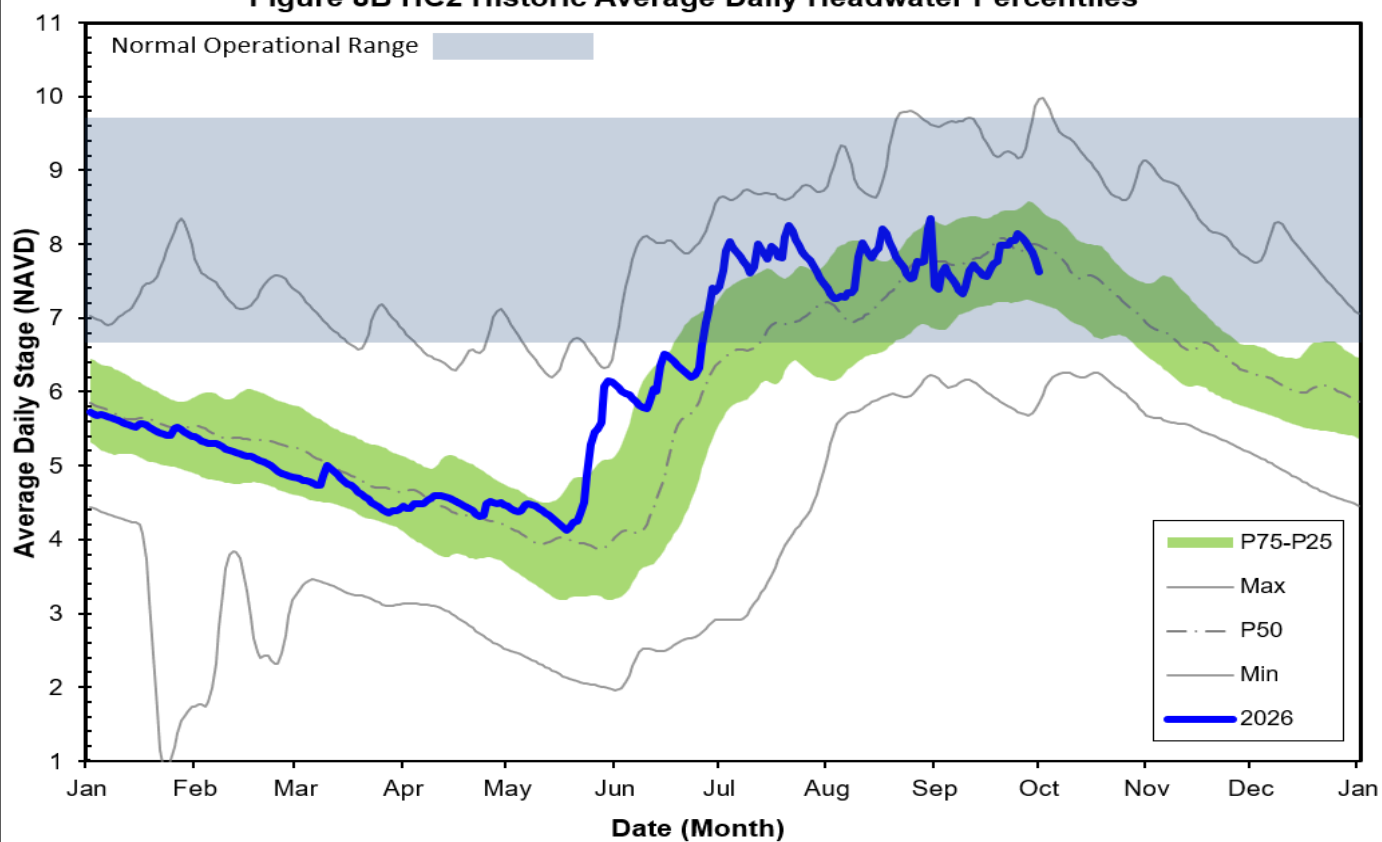


TABLE 2
WATER CONDITIONS SUMMARY - SEPTEMBER 2026
SELECTED STATIONS for BCB AREA / SW FLORIDA

Last Reading Date :		September 30, 2026					
Previous Period Reading Date:		August 31, 2026					
STATION INDEX NO.	WELL LOCATION	WELL / AQUIFER - TYPE	CHANGE (from previous date)	PREVIOUS LEVEL	CURRENT LEVEL (ft)	DIRECTION OF CHANGE	CONCERN INDICATOR
ALL INDICATOR LEVELS SHOWN IN FT-NAVD88							
C-462	Immokalee	Lower Tamiami Aquifer	1.28	27.72	29.00	↑	GREEN
C-1004R	Naples	Lower Tamiami Aquifer	0.50	1.86	2.36	↑	GREEN
C-1224	Marco Lakes	Lower Tamiami Aquifer	0.47	2.90	3.37	↑	GREEN
C-948R	Golden Gate	Mid Hawthorn Aquifer	0.78	27.53	28.31	↑	
C-951R	Golden Gate	Lower Tamiami Aquifer	0.93	2.97	3.90	↑	
L-2194	Bonita Springs	Sandstone Aquifer	2.31	2.13	4.44	↑	GREEN
L-2195	Bonita Springs	Surficial Aquifer System	2.23	8.19	10.42	↑	GREEN
L-738	Bonita Springs	Lower Tamiami Aquifer	1.59	-1.56	0.03	↑	GREEN

BIG CYPRESS BASIN

SEPTEMBER 30, 2026

GROUNDWATER LEVEL DAILY TRENDS
COMPARED TO HISTORICAL AVERAGE

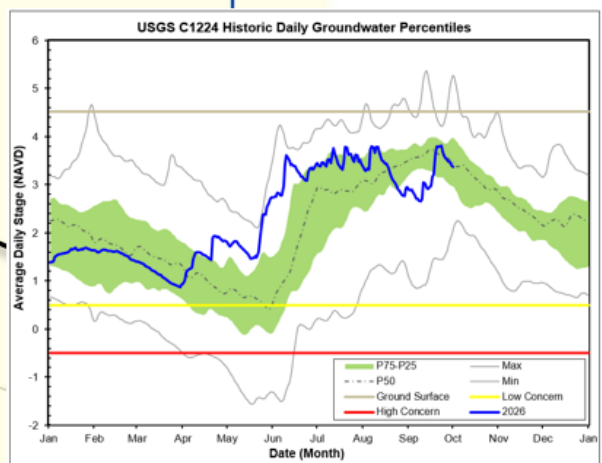
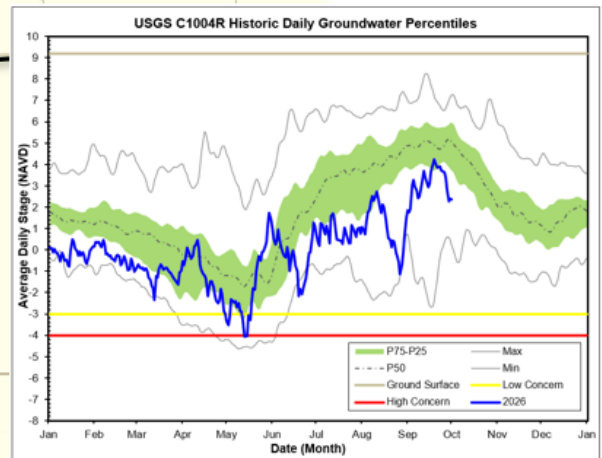
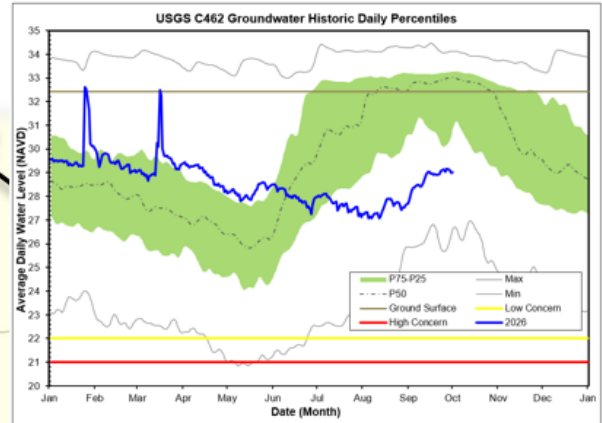
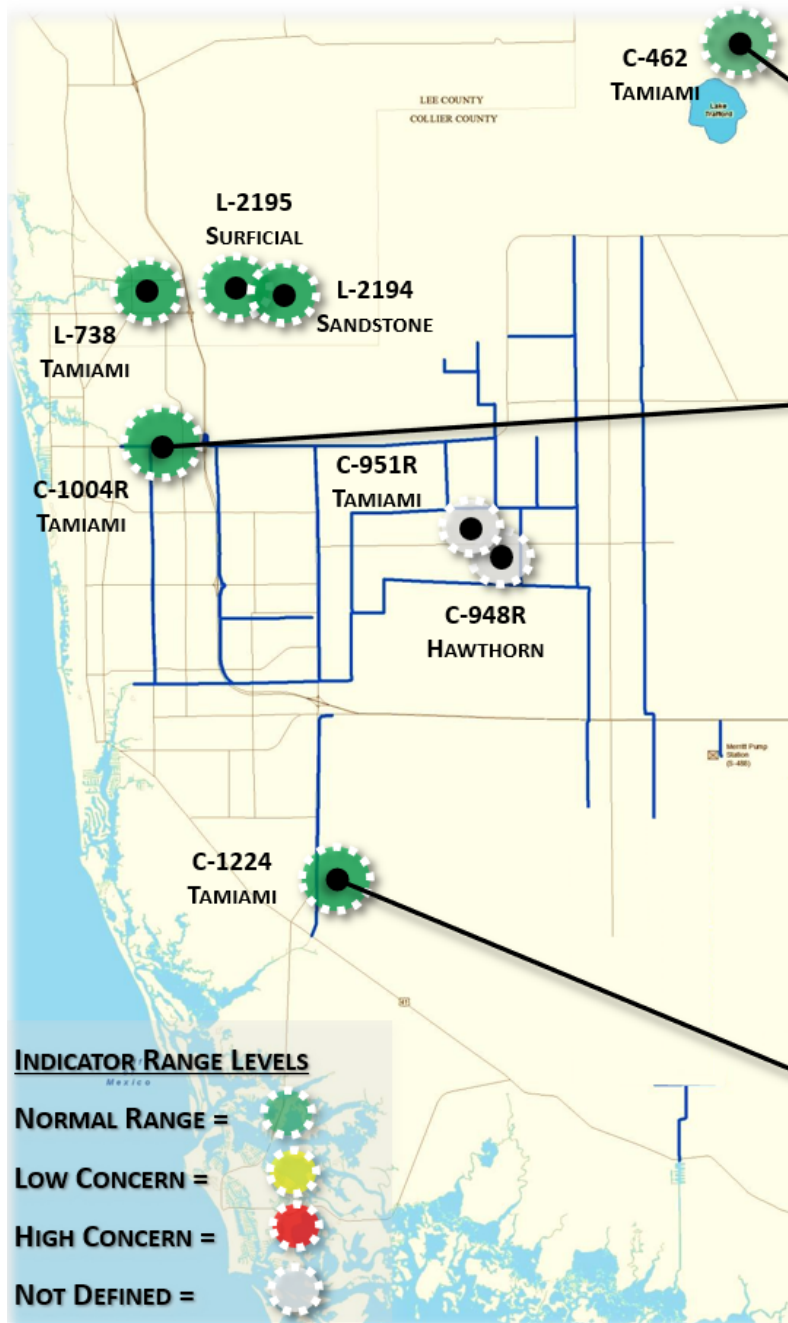


FIGURE 9A

BIG CYPRESS BASIN

SEPTEMBER 30, 2026

GROUNDWATER LEVEL DAILY TRENDS
COMPARED TO HISTORICAL AVERAGE

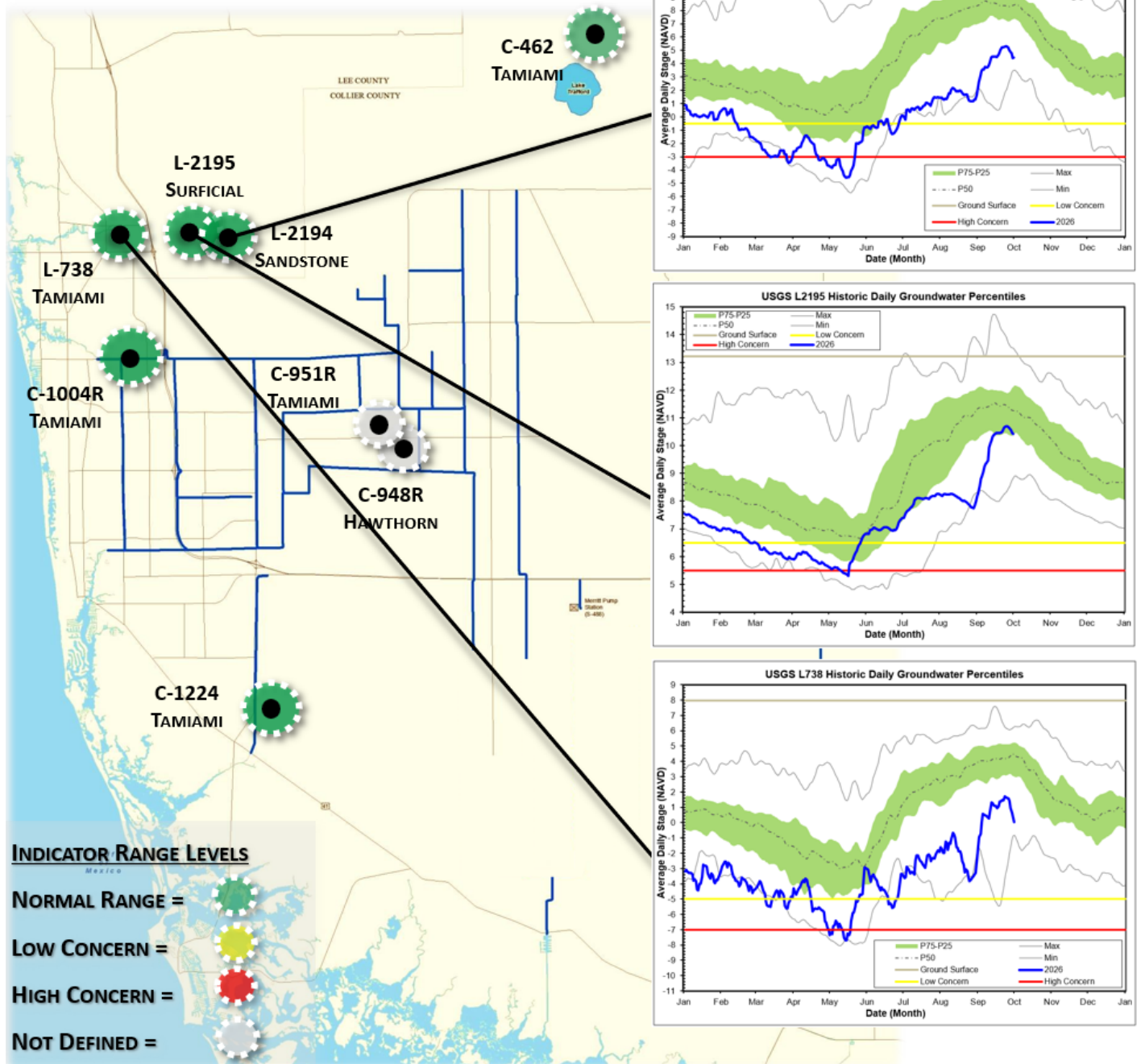


FIGURE 9B

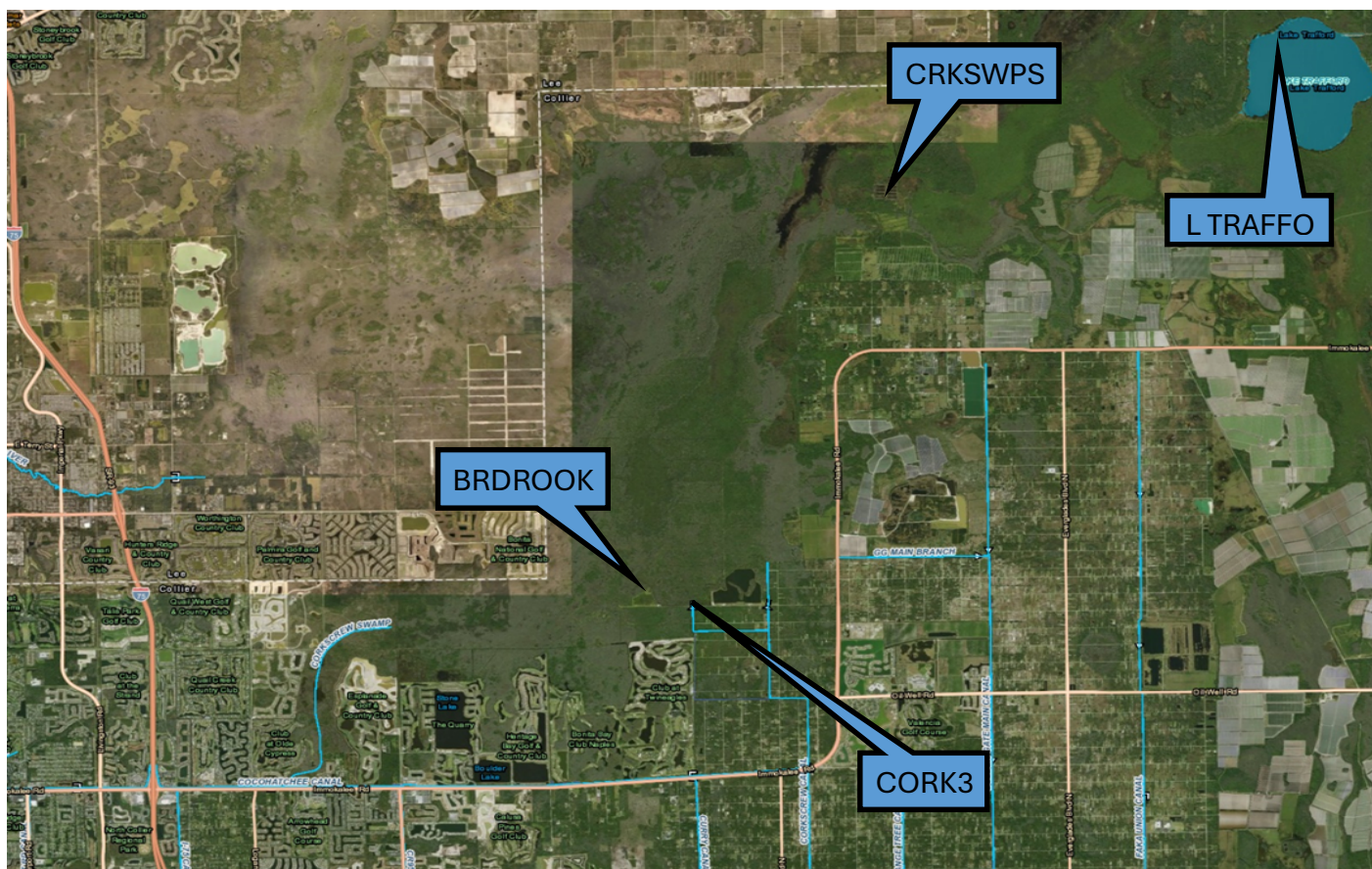


Figure 10-Corkscrew Historic Average Daily Headwater Percentiles (1984-2025)

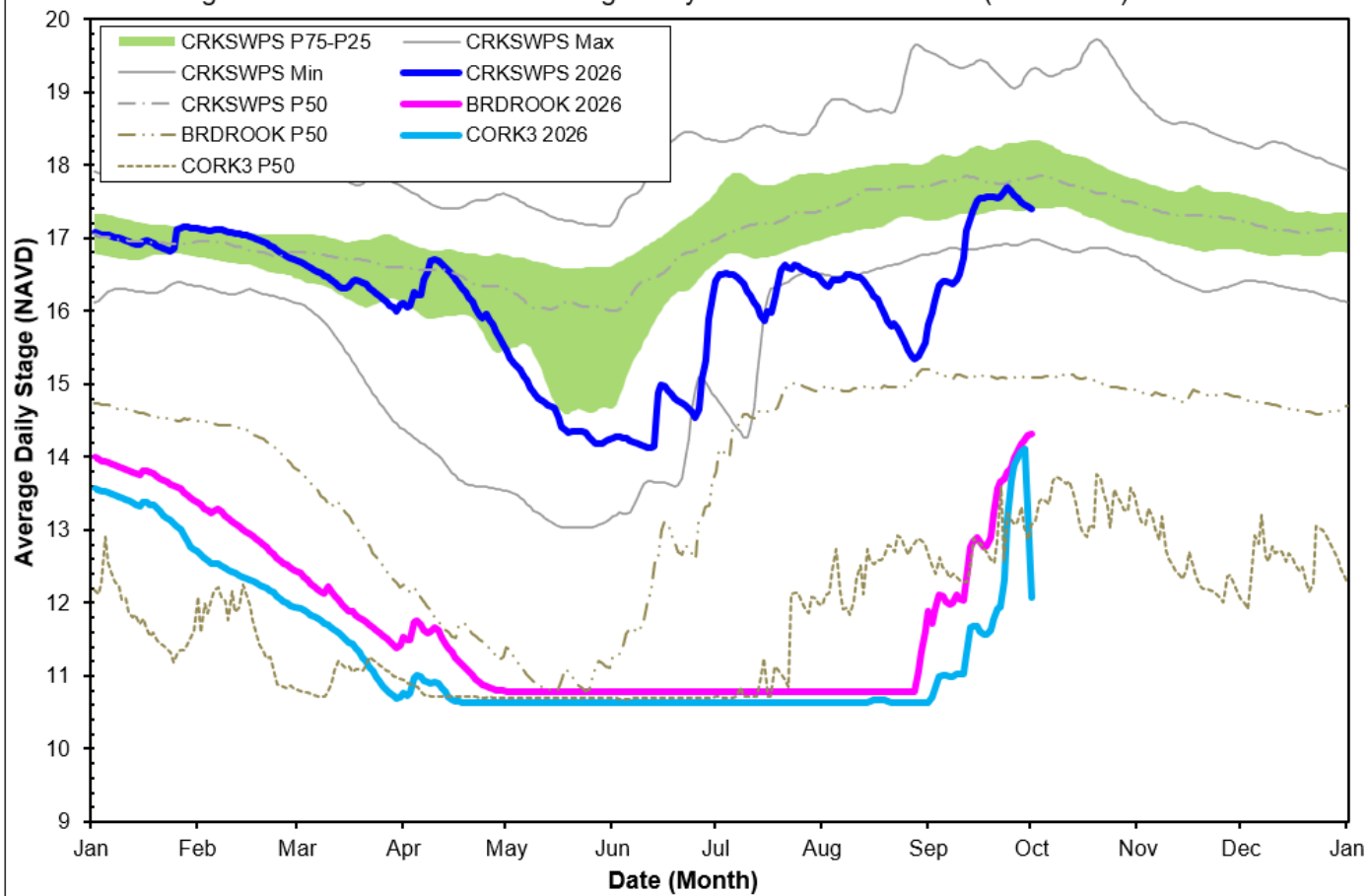
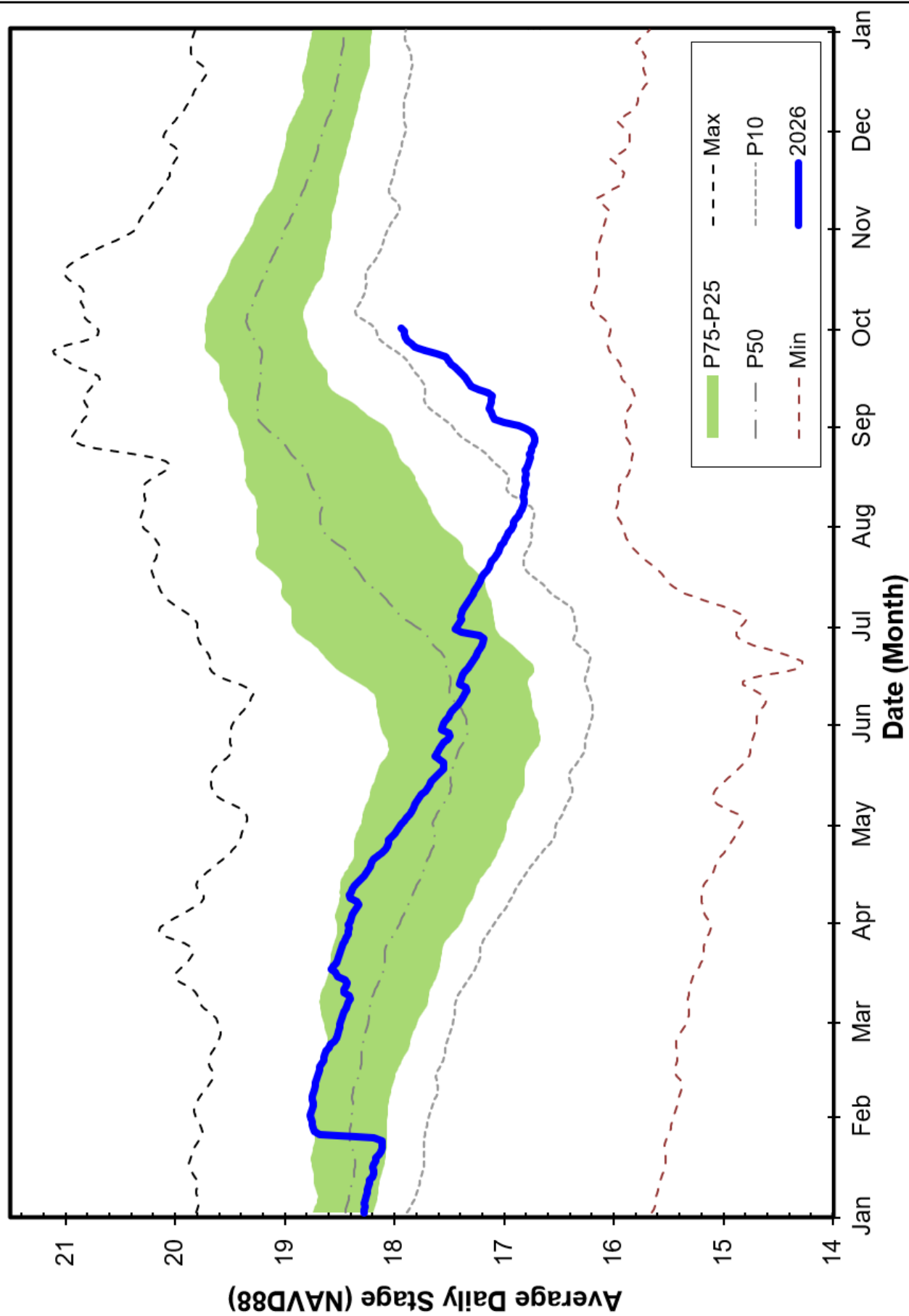


Figure 11 Lake Trafford Historic Average Daily Headwater Percentiles (1941-2024)



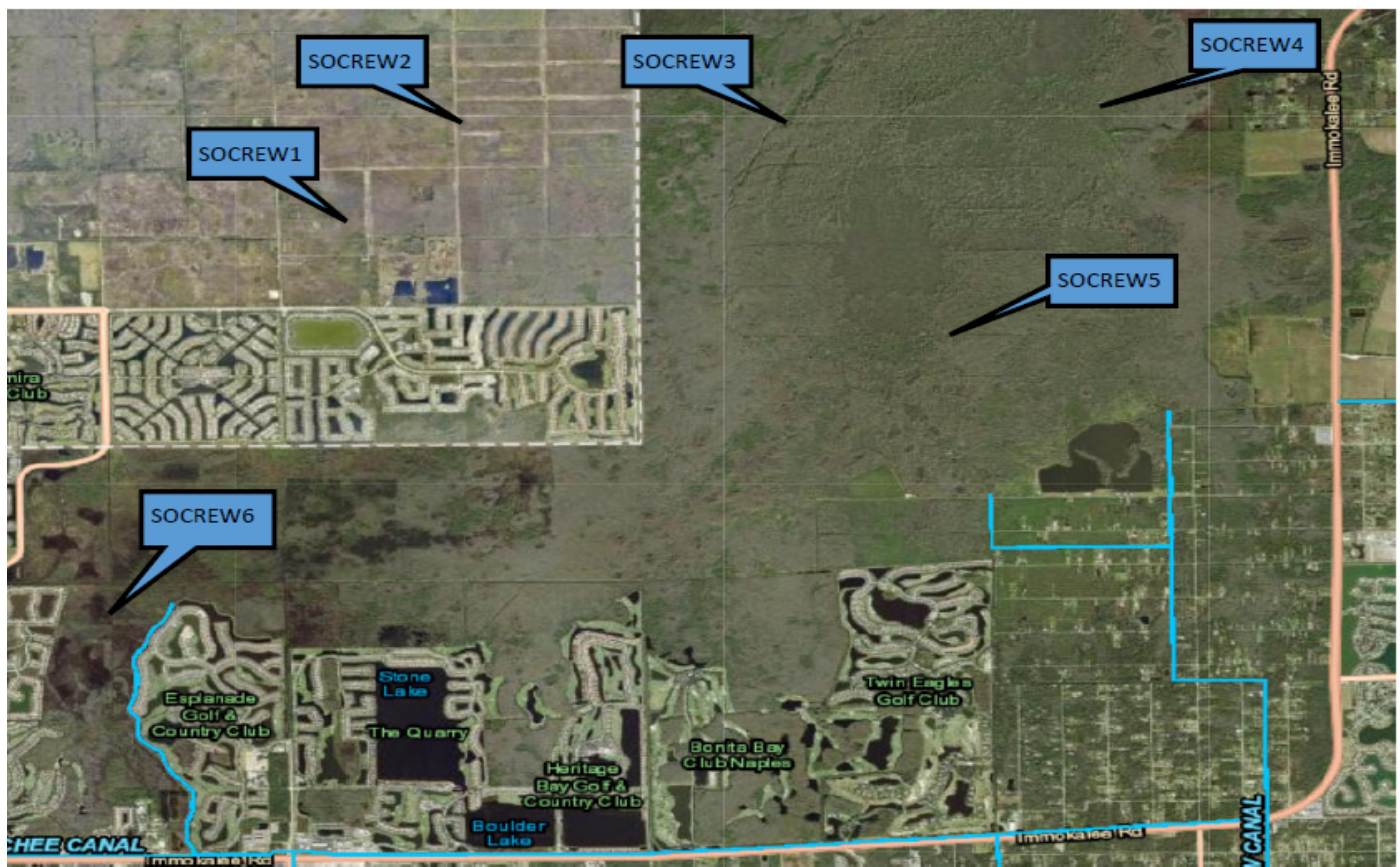
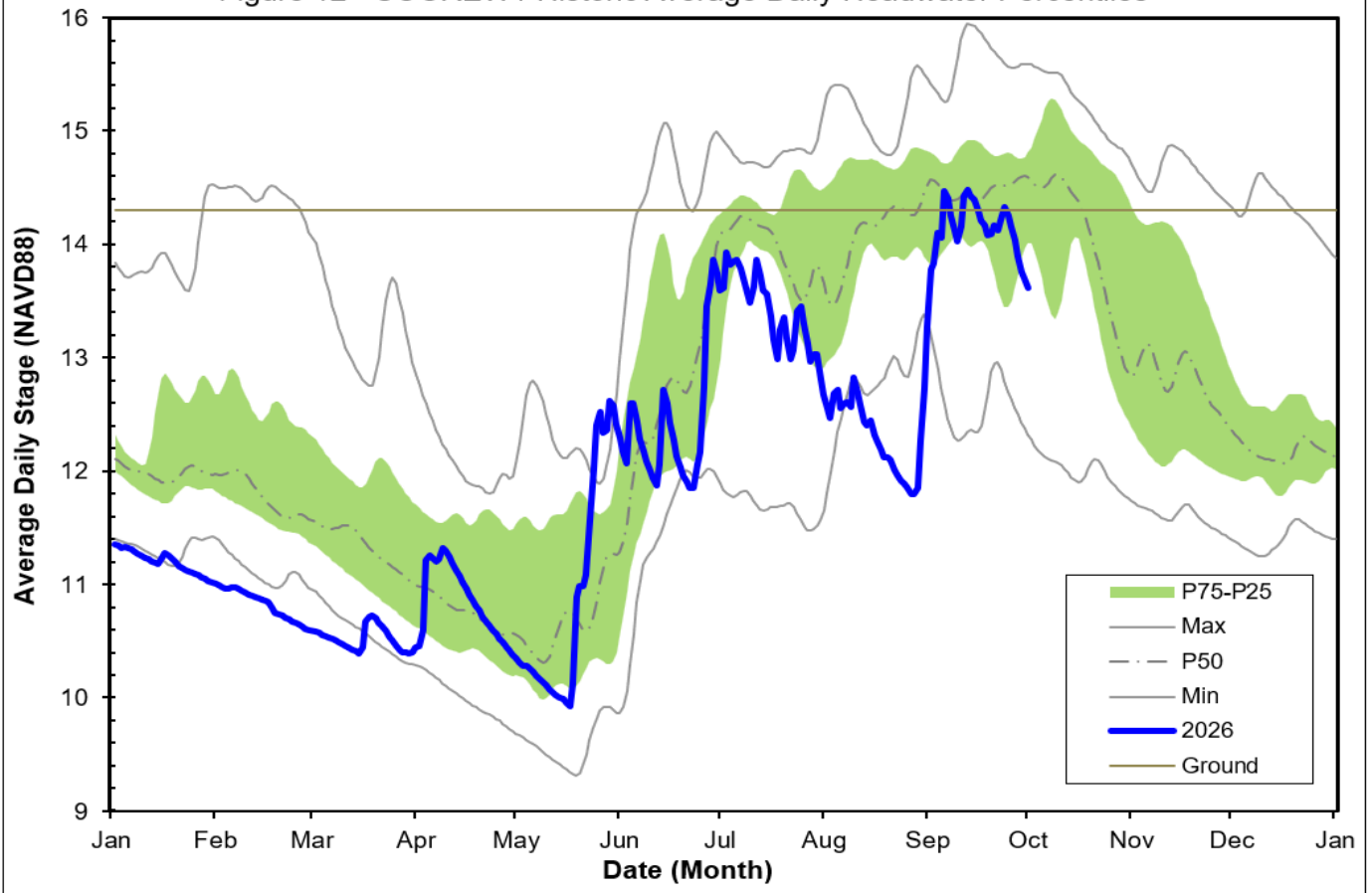


Figure 12 - SOCREW1 Historic Average Daily Headwater Percentiles



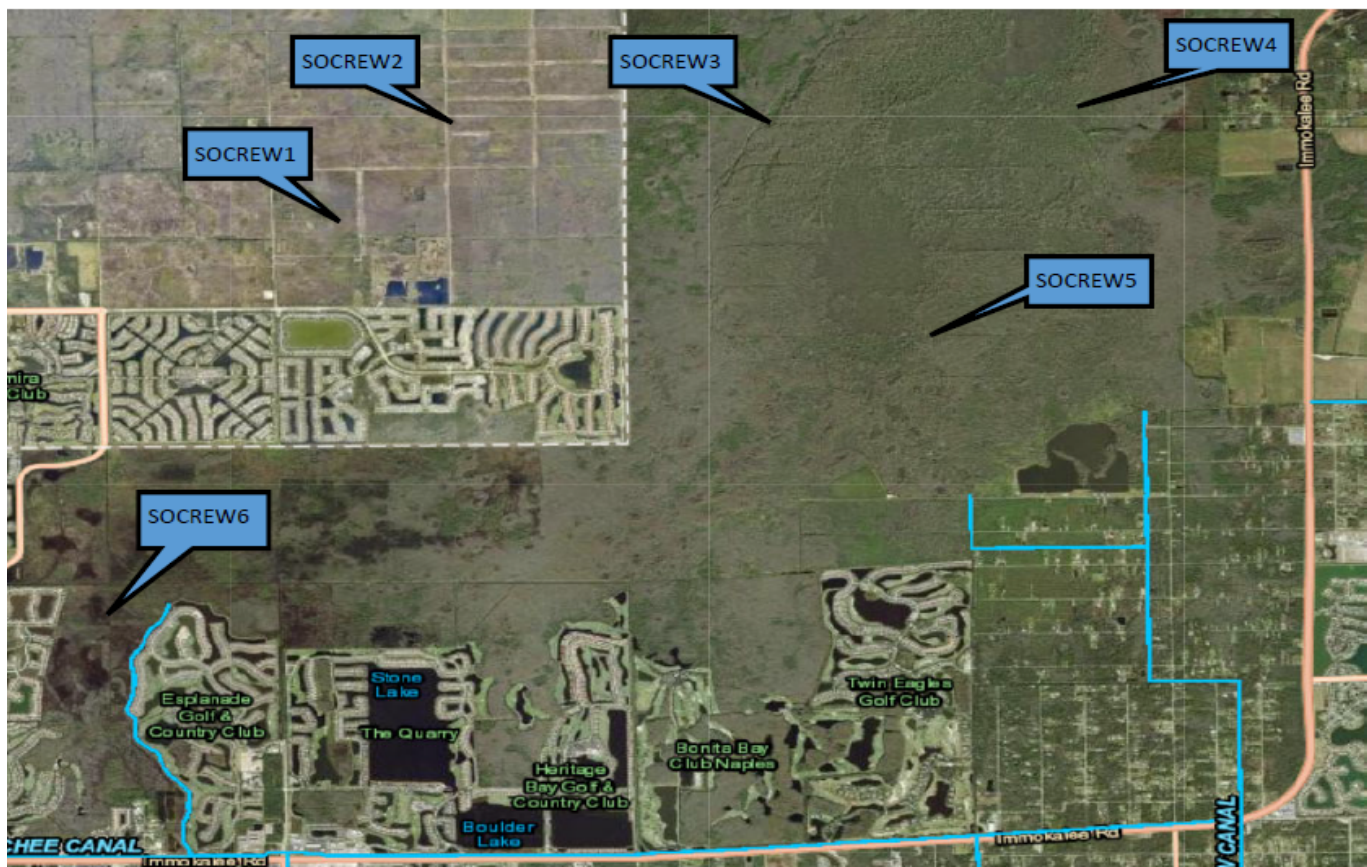


Figure 13 - SOCREW2 Historic Average Daily Headwater Percentiles

