SOUTH FLORIDA WATER MANAGEMENT DISTRICT

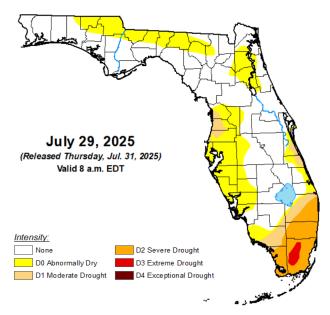
# JUNE / JULY 2025 BIG CYPRESS BASIN HYDROLOGIC REPORT



#### SUMMARY OF HYDROLOGIC CONDITIONS IN THE BIG CYPRESS BASIN

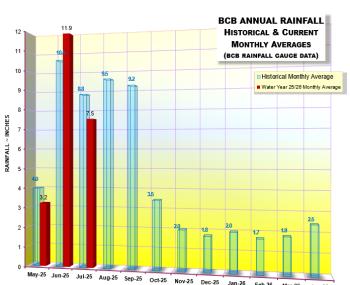
#### June / July 2025

#### **SUMMARY**



Following the return of more normal rainfalls in the second half of May, June continued the wetter trend and produced above average rainfalls for the Big Cypress Basin (BCB). July initially continued this return to wetter conditions, then transitioned to below normal rainfall as the month progressed. The above average rainfall experienced in June helped mitigate the drier July conditions, and as of July 29, 2025 the U.S. Drought Monitor had reduced the severity of the drought conditions in Collier County. Much of the north of the County, abutting Lee and Hendry Counties was no longer considered in drought conditions. Only the southeast portions of Collier County remained listed as experiencing Drought Conditions.

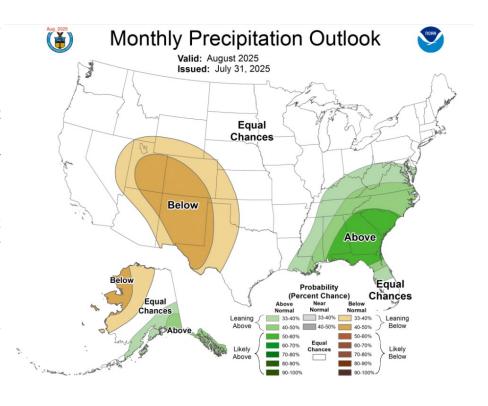
Based upon rain gauge data, June saw an average Basin rainfall of 11.9 inches (113% of normal). July brought another 7.5 inches (85% of normal). The drier July caused the 2025 wet season total precipitation to dip below the long-term (1993-2025) average for the Southwest Coast of Florida. In line with the Southwest Coast, the BCB typically receives 23.3 inches of rainfall from May 1st through July 31st. For this same period in 2025, the Basin received 22.6 inches, 0.7 inches below the historic average.



Dynamic Wet Season Precipitation to Date - Southwest Coast -50 1-99 Percentile 5-95 Percentile 2025 WS Rain by 7/31/25 = 20.1 inches - 10-90 Percentile Mean WS Rain by 7/31/25 = 21.0 inches = 25-75 Percentile = 40-60 Percentile Mean 60 30 50 80 Days Since Wet Season Onset

As a result of the near normal rainfalls experienced in the Basin so far this wet season, canal levels have rebounded to normal operating ranges. June saw canal levels largely recover from the significant rainfall deficit experienced in the prior dry season. To preserve water during the drier month of July, control structures were generally operated to maintain water levels at or above the middle of their operating ranges. This strategy resulted in the canals remaining in their normal operating ranges despite the reduction in precipitation, and provided maximum flexibility to conserve water should dry conditions persist in the coming months.

As discussed above, the wet season to date has seen slightly below average rainfalls and canal levels have returned to their normal operating ranges. The U.S. Monthly Drought Outlook does not predict a return to drought conditions for the Basin in August. Additionally the Climate Prediction Center predicts equal chances of wetter and drier than normal conditions, thus lending support that August conditions may see near normal precipitation. Looking forward August, BCB structures into primarily in flood operate control regimes, but will adjust to water conservation regimens if warranted due to the return of dry conditions.



#### **JUNE & JULY 2025 BCB RAINFALL**

The Basin-wide averaged, gauge-measured, monthly rainfall was **11.88** inches in June and **7.52** inches in July. These measured rainfall amounts were 1.36 inches above and 1.25 inches below historical monthly averages for June and July, respectively (see Figures 1, 2, 3A, 3B Tables 1A and 1B). In June, the rain gauge with the highest measured precipitation was R-10 (ROOKERY BAY HQ), which recorded 17.32 inches. In July, the highest gauge measured rainfall occurred at location R-12 (GG FIRE STATION), which recorded 12.13 inches.

**Figures 3C and 3D** respectively show the June and July calculated average rainfall estimates for each of the Basin's watersheds, based on gauge adjusted radar (Raindar). In June the Henderson - Belle Meade basin saw the highest Raindar rainfall estimate, with a calculated areal average of 16.61 inches across its watershed. In July, the area with the highest calculated areal average was the Cocohatchee Basin, with 9.46 inches of rainfall across its watershed. The BCB's overall calculated areal weighted average Raindar rainfall was 12.26 inches for June and 7.24 inches for July, closely matching the basin-wide rain gauge averages. The Raindar totals and their locality distribution across the BCB/Lower West Coast are shown on **Figures 4A and 4B**.

#### **BIG CYPRESS BASIN CANAL SYSTEMS**

During the month of June, BCB structures gradually transitioned from water conservation operations to flood control regimens as the system filled due to the increase in precipitation. By the end of June, most canals were at or above the 50th percentile, with some even exceeding the 90% percentile. As July progressed, precipitation rates dropped below normal, and conditions became drier. Forecasts predicted below normal precipitation for the second half of the month, therefore, water control structures were operated slightly above typical July settings to conserve as much water as possible should dry conditions persist. Due to this water conservation strategy, by the end of July, most Basin canals remained above the 50th percentile, providing maximum operational flexibility for either wetter than normal or drier than normal conditions in August. BCB canal conditions as of July 31, 2025 are shown on **Figure 4C**.

#### **GOLDEN GATE SYSTEM**

Control structures in the Golden Gate Main Canal system transitioned into Flood Control Mode in June as wet season rains returned and canal levels rose. Discharges at GG1 resumed by mid-June and continued at varying levels through the end of July. By the end of July, the discharge rate at GG1 had decreased due to drier than normal conditions. Water levels in main stem of Golden Gate Main Canal from GG1 to GG4 were held near the 90th percentile to conserve water and mitigate the reduced July rainfall. Upstream of GG4 the canal remained at approximately the 75th percentile by the end of July (see Figure 5). By the end of July, water levels in Golden Gate Main tributary canals varied by location. The CR951 Canal and the Golden Gate Main Branch Canal (upstream of GG7) were both operating above the 90th percentile. Airport Road Canal, I75 Canal, and Cyress Canal (upstream of CYP1) were all operating between the 25th and 75th percentile.

#### COCOHATCHEE SYSTEM

The Cocohatchee Canal system transitioned into Flood Control Mode in June due to the increase in rainfall associated with the onset of the wet season. Due to the significant rainfall deficit from the prior dry season, canal water levels took some time to rebound, and discharge at COCO1 did not commence in earnest until the end of June. Discharge at COCO1 has continued to varying degrees since, with a reduction in volume in late July due to the onset of drier than normal conditions. As July concluded, water levels in the majority of the canal were above the 90th percentile, with only the middle of the system (between COCO3 and COCO4) slightly lower at approximately the 75th percentile (**Figures 6A, 6B, & 6C**).

#### **FAKA UNION SYSTEM**

As with the other BCB canals, the Faka Union system gradually transitioned into Flood Control operations in June. Water conservation operations during the prior severe dry season succeeded in mitigating the lack of rainfall and resulted in maintenance of the headwater pool upstream of FU5, helping to protect upstream wetlands such as Winchester Head.. Once rains returned, flood control operations at FU5 gradually filled the downstream canal (between FU5 and FU4S) to normal operational levels and releases from FU4S toward the Picayune Strand Faka Union Pump Station (S487) resumed by mid-July. The onset of drier than normal conditions in the second half of July resulted in a reduction of upstream water levels at FU4S, and a return to water conservation operations. This resulted in the suspension of downstream releases from FU4S in late July. .

By the end of July, the headwaters of the Faka Union System (upstream of FU5) were operating above the 90th percentile, while downstream levels (FU5 to S487) remained at approximately the 75th percentile. Despite the lack of discharge from FU4S in June, pumping resumed at S487 early in the month due to runoff from portions of the watershed immediately upstream of the pump station. Downstream of the Picayune Strand Restoration Project, water levels immediately upstream of FU1 (the fixed crest weir just north of U.S. Highway 41) continued to trend lower due to the reduction of channelized flows associated with the completion of the Miller Canal Plugging in June. Variation of stages upstream of FU1 are now attributed to a combination of sheet flow from the pump stations, localized rainfall and tidal overtopping of the fixed crest weir. (Figures 7A & 7B).

#### **HENDERSON CREEK SYSTEM**

As with the other BCB canals, water control structures in the Henderson Creek system gradually transitioned into Flood Control operations due to the return of more normal rainfalls. Due the significant rainfall deficit —and associated low canal levels — from the prior dry season, recovery of the Henderson

Creek system occurred slowly and discharges from HC1 did not resume until mid-July. Discharge volumes gradually declined in the second half of the month as dry conditions returned. At the end of July, canal levels upstream of HC1 remained just below the 75th percentile. Water levels upstream of HC2 were temporarily maintained between the 25th and 75th percentile in July to help facilitate FDOT work in the area. (**Figure 8A & 8B**).

#### **BIG CYPRESS BASIN & LOWER WEST COAST GROUNDWATER LEVELS**

For the Lower West Coast [LWC], the water levels in the groundwater monitoring stations rebounded in June and early July due to the return of near normal rainfalls. As drier conditions took hold in the second half of July, groundwater responded by dropping accordingly. Despite this decline in the second half of July, from June 30th to July 31st, all but one site (C-1224) showed an increase in groundwater levels. (**Table 2 and Figure 9**). By the end of July, C-462, north of Lake Trafford, remained between the 25th and 75th percentile, well above the level of low concern. C-1224, near Henderson Creek, saw a decline from its peak in mid-June to the 25th percentile by the end of July, but also remained well above the area of low concern. C1004R, near the Cocohatchee Canal, also reacted to the reduction of rainfall in the second half of July and dropped to approximately the 25th percentile by the end of the month, though also still well above the area of low concern.

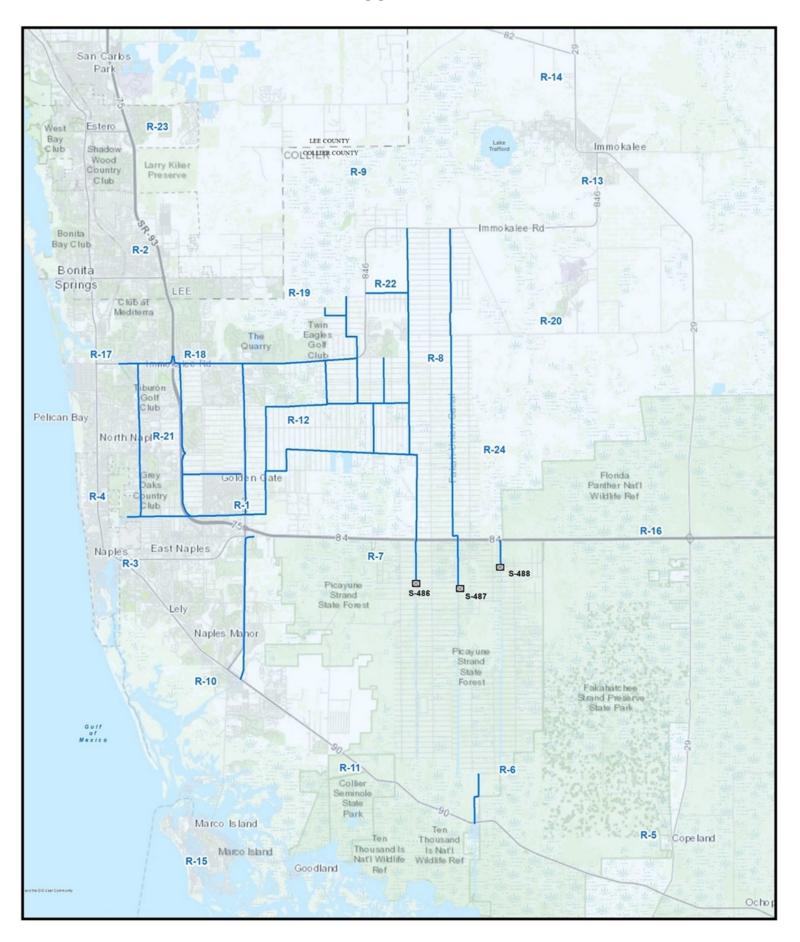
L-738 a Tamiami Aquifer well in Bonita Springs rebounded nicely from its dry season low, which in April and May had dipped into the level of high concern. As of the end of July L-738 was just below the 25th percentile and was several feet above the area of low concern. L-2194, a Sandstone Aquifer well in Bonita Springs, similarly rebounded from its dry season low where it crossed below the level of high concern, and has risen to near the 25th percentile, also several feet above the area of low concern. Finally, L-2195, a surficial aquifer well in Bonita Springs also rebounded and is now above the 25th percentile, well above the area of low concern.

#### **CORKSCREW SWAMP**

Figure 10 shows the historical trends for Corkscrew, Bird Rookery, and the Cork 3 structure and the 2025 corresponding levels. All three sites experienced significant rebound of water levels in June due to the seasonal increase in rainfall. July saw flatter trends in water levels as dry conditions returned to the area. By the end of July, the water level in the Corkscrew Swamp (CRKSWPS) had recovered to between the 25th and 50th percentile. Similarly, water levels at Bird Rookery (BRDROOK) recovered in June, leveled off in July, and are currently between the 25th and 50th percentile. As Figure 11 shows, though Lake Trafford is slowly trending upward, its rise is below that typically experienced. As a result of this slower than average rise, it has dropped from above the 25th percentile in June to midway between the 10th and 25th percentile by the end of July.

**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. The charts on these figures , as well as the historical trends for SOCREW1 and SOCREW2. Both SOCREW1 and SOCREW2 ended the showed a decrease in water level in the month of July. While SOCREW1 remained near the 25th percentile, SOCREW2 had dropped lower and finished the month below the 25th percentile. The SOCREW sites 3, 4, 5 and 6 are newer sites and only have a period of record for approximately 2.5 years, so there is not adequate data to complete a statistical analysis.

#### FIGURE 1



#### TABLE 1A RAINFALL REPORT - JUNE 2025 DISTRICT/BASIN RAINFALL STATIONS

(ALL NUMBERS ARE IN INCHES)

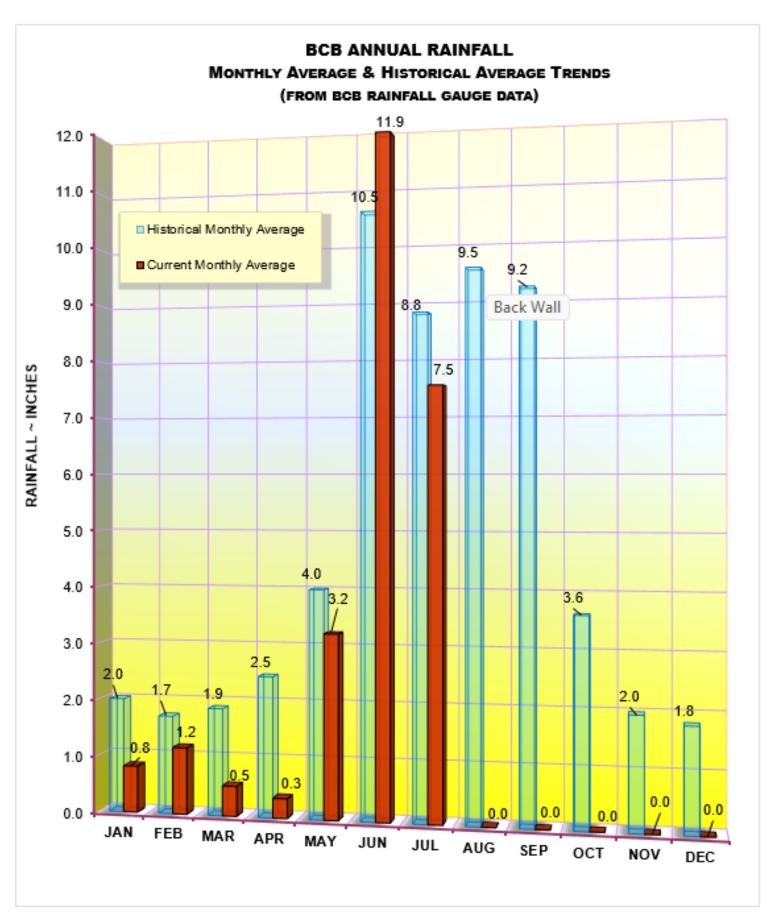
STATION INDEX NO.	STATION NAME	Jun-25	LONG TERM MONTHLY AVERAGE	MONTHLY DIFFERENCE	CALENDAR YEAR 2025 CUMULATIVE TOTAL	AVERAGE CALENDAR YEAR TO DATE	YEAR TO DATE DIFFERENCE
R-1	GG#3	10.89	12.80	-1.91	15.42	25.70	-10.28
R-2	BONITA SPRINGS WATER PLANT	8.68	8.71	-0.03	15.82	20.25	-4.43
R-3	COLLIER COUNTY COURTHOUSE	14.36	8.67	5.69	18.57	20.38	-1.81
R-4	FREEDOM PARK	14.08	10.40	3.68	18.90	21.75	-2.85
R-5	FAKAHATCHEE STRANDHQ	11.08	11.08	0.00	16.76	23.86	-7.10
R-6	DAN HOUSE PRAIRIE	9.53	9.56	-0.03	16.76	20.05	-3.29
R-7	SGGE WEATHER STATION	16.44	11.90	4.54	20.92	24.31	-3.39
R-8	FAKA UNION #5	11.61	12.88	-1.27	20.52	26.41	-5.89
R-9	CORKSCREW SWAMP NORTH END	10.61	11.81	-1.20	17.63	22.58	-4.95
R-10	ROOKERY BAY HQ	17.32	9.81	7.51	21.85	20.74	1.11
R-11	COLLIER SEMINOLE STATE PARK	12.84	10.23	2.61	18.33	21.68	-3.35
R-12	G.G. FIRE STATION	13.10	10.23	2.87	18.27	22.78	-4.51
R-13	IMMOKALEE LANDFILL	7.35	9.06	-1.71	15.53	21.96	-6.43
R-14	IFAS	11.99	9.02	2.97	18.76	22.04	-3.28
R-15	MARCO R.O. PLANT	13.09	9.31	3.78	18.66	21.06	-2.40
R-16	FAKAHATCHEE STRAND NORTH END	11.90	10.56	1.34	18.53	25.46	-6.93
R-17	COCO#1	7.32	8.33	-1.01	13.50	18.83	-5.33
R-18	COCO#3	12.74	9.14	3.60	18.53	19.92	-1.39
R-19	BIRD ROOKERY	14.21	13.57	0.65	20.00	24.46	-4.46
R-20	AVE MARIA	9.98	8.66	1.32	16.66	21.76	-5.10
R-21	175W2	10.08	12.21	-2.13	16.51	22.68	-6.17
R-22	GG#7	12.82	11.01	1.81	19.88	21.96	-2.08
R-23	FPWX	8.52	10.18	-1.66	14.88	20.91	-6.03
R-24	DSOTO10	14.67	13.52	1.15	20.58	30.18	-9.60
	AVERAGES	11.88	10.53	1.36	17.99	22.57	-4.58

#### TABLE 1B RAINFALL REPORT - JULY 2025 DISTRICT/BASIN RAINFALL STATIONS

(ALL NUMBERS ARE IN INCHES)

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STATION INDEX NO.	STATION NAME	Jul-25	LONG TERM MONTHLY AVERAGE	MONTHLY DIFFERENCE	CALENDAR YEAR 2025 CUMULATIVE TOTAL	AVERAGE CALENDAR YEAR TO DATE	YEAR TO DATE DIFFERENCE
R-1	GG#3	6.46	9.54	-3.08	21.88	35.25	-13.37
R-2	BONITA SPRINGS WATER PLANT	6.54	8.14	-1.60	22.38	28.39	-6.01
R-3	COLLIER COUNTY COURTHOUSE	4.64	8.53	-3.89	23.21	28.91	-5.70
R-4	FREEDOM PARK	5.31	9.37	-4.06	24.21	31.12	-6.91
R-5	FAKAHATCHEE STRANDHQ	6.58	9.01	-2.43	23.34	32.87	-9.53
R-6	DAN HOUSE PRAIRIE	5.11	8.19	-3.08	21.87	28.24	-6.37
R-7	SGGE WEATHER STATION	9.49	9.07	0.42	30.41	33.38	-2.97
R-8	FAKA UNION #5	8.21	9.68	-1.47	28.73	36.09	-7.36
R-9	CORKSCREW SWAMP NORTH END	8.61	7.83	0.78	26.24	30.41	-4.17
R-10	ROOKERY BAY HQ	6.13	8.78	-2.65	27.98	29.51	-1.53
R-11	COLLIER SEMINOLE STATE PARK	6.26	8.80	-2.54	24.59	30.48	-5.89
R-12	G.G. FIRE STATION	12.13	10.05	2.08	30.40	32.82	-2.42
R-13	IMMOKALEE LANDFILL	6.69	7.80	-1.11	22.22	29.76	-7.54
R-14	IFAS	7.39	7.20	0.19	26.15	29.24	-3.09
R-15	MARCO R.O. PLANT	5.12	7.48	-2.36	23.78	28.54	-4.76
R-16	FAKAHATCHEE STRAND NORTH END	6.48	9.26	-2.78	25.01	34.72	-9.71
R-17	COCO#1	8.36	7.71	0.65	21.86	26.54	-4.68
R-18	COCO#3	7.19	9.79	-2.60	25.72	29.71	-3.99
R-19	BIRD ROOKERY	10.03	9.81	0.22	30.03	34.26	-4.23
R-20	AVE MARIA	7.81	7.98	-0.17	24.47	29.74	-5.27
R-21	175W2	8.96	9.14	-0.18	25.47	31.82	-6.35
R-22	GG#7	10.47	10.12	0.35	30.35	32.08	-1.73
R-23	FPWX	8.13	8.40	-0.27	23.01	29.31	-6.30
R-24	DSOTO10	8.48	8.90	-0.42	29.06	39.07	-10.01
	AVERAGES	7.52	8.77	-1.25	25.52	31.34	-5.83

### FIGURE 2 BCB GAUGE RAINFALL MONTHLY AVERAGES



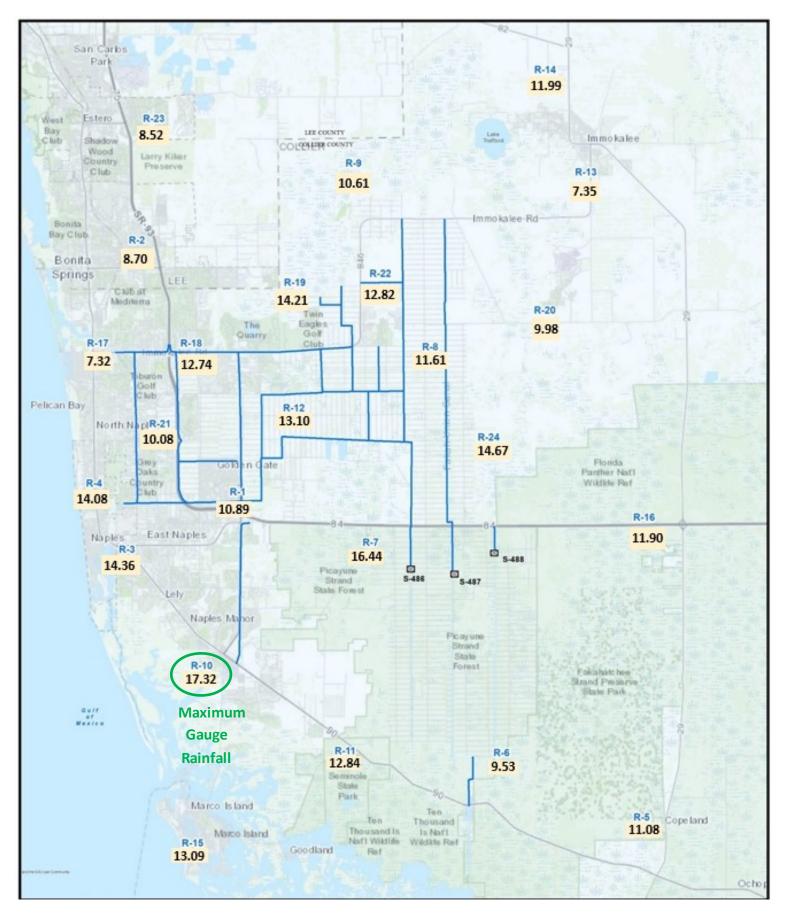


FIGURE 3A BCB RAINFALL DISTRIBUTION JUNE 2025

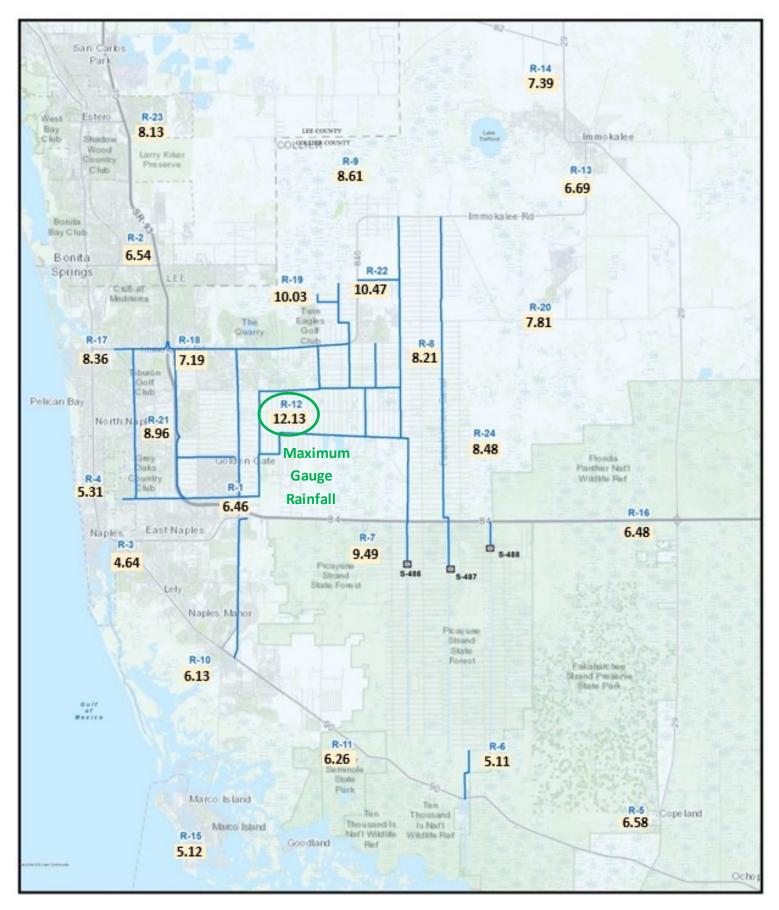
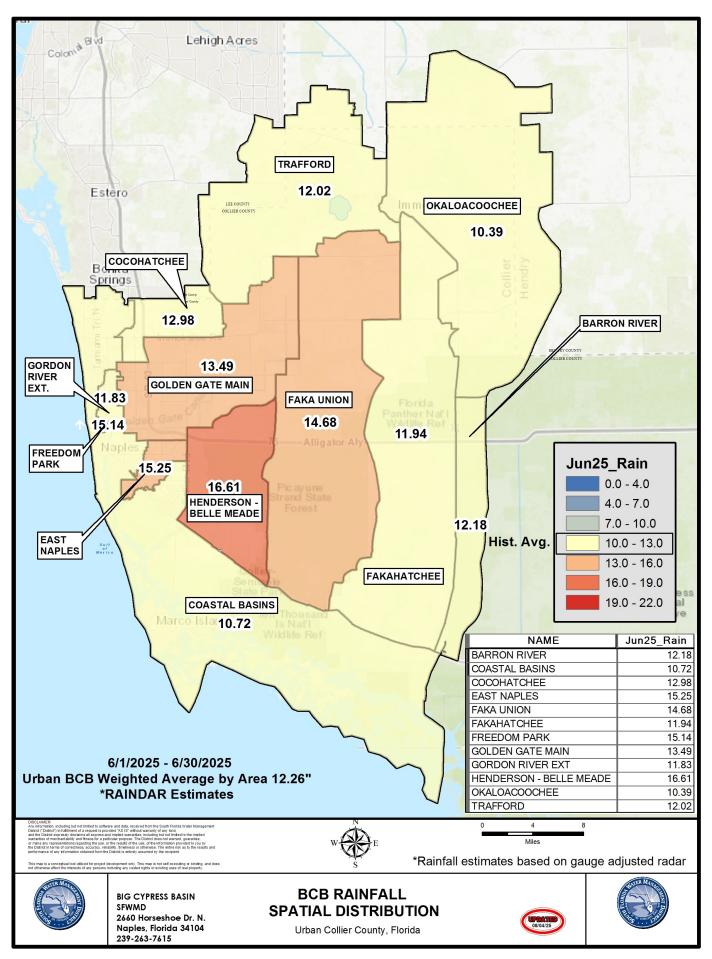
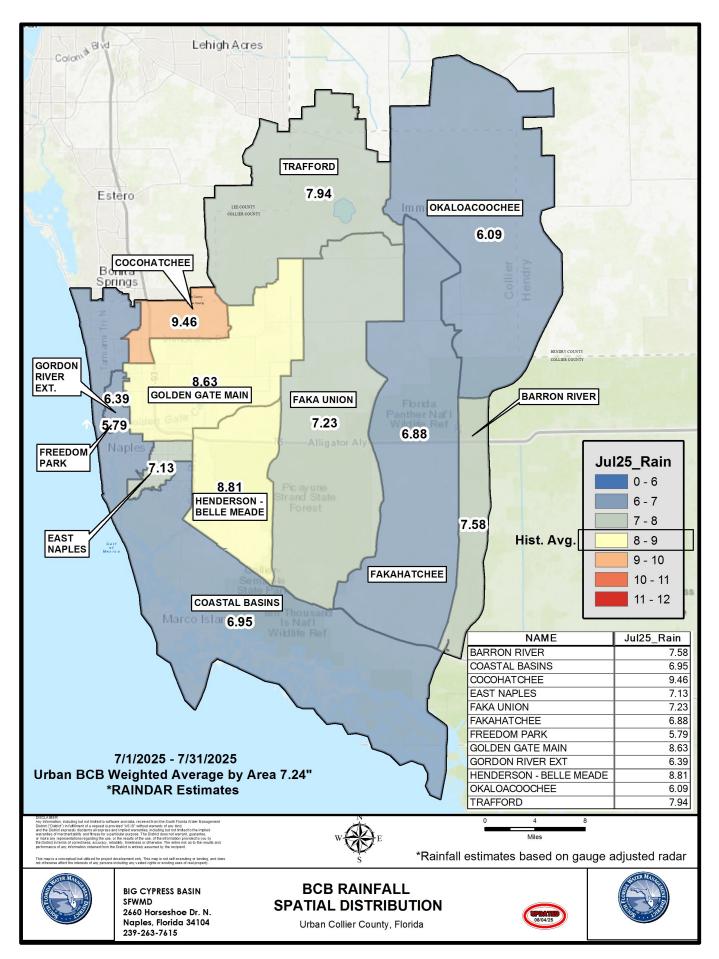
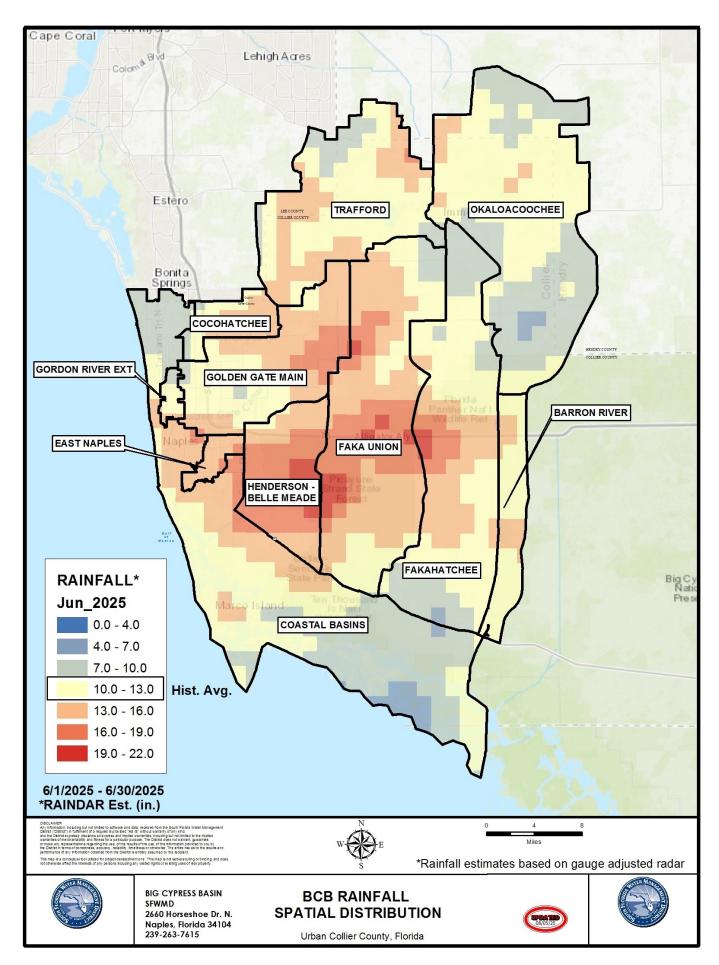
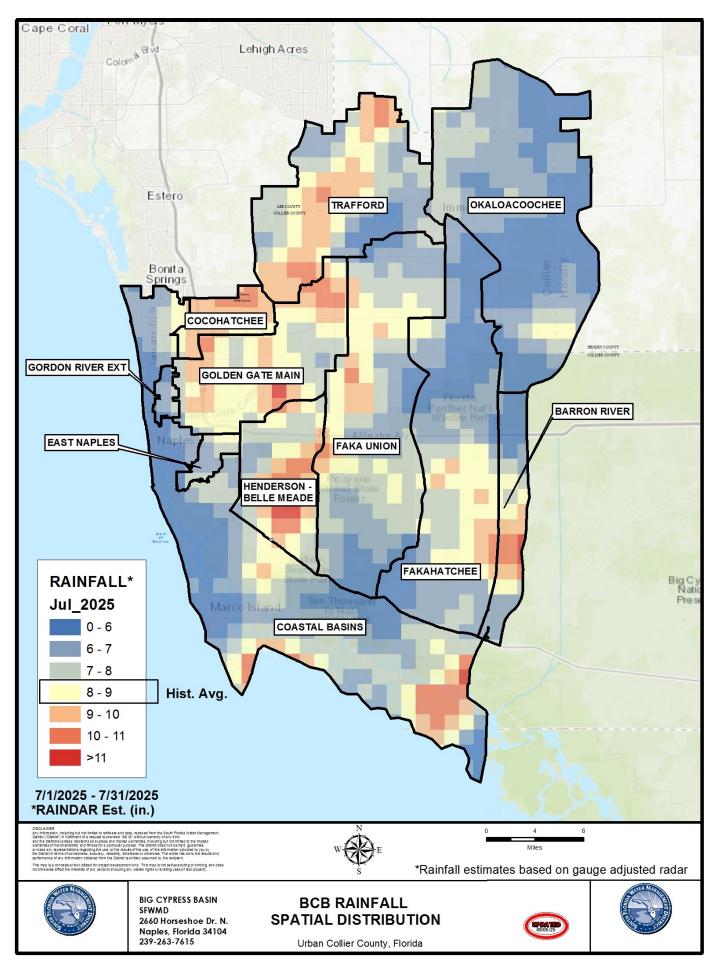


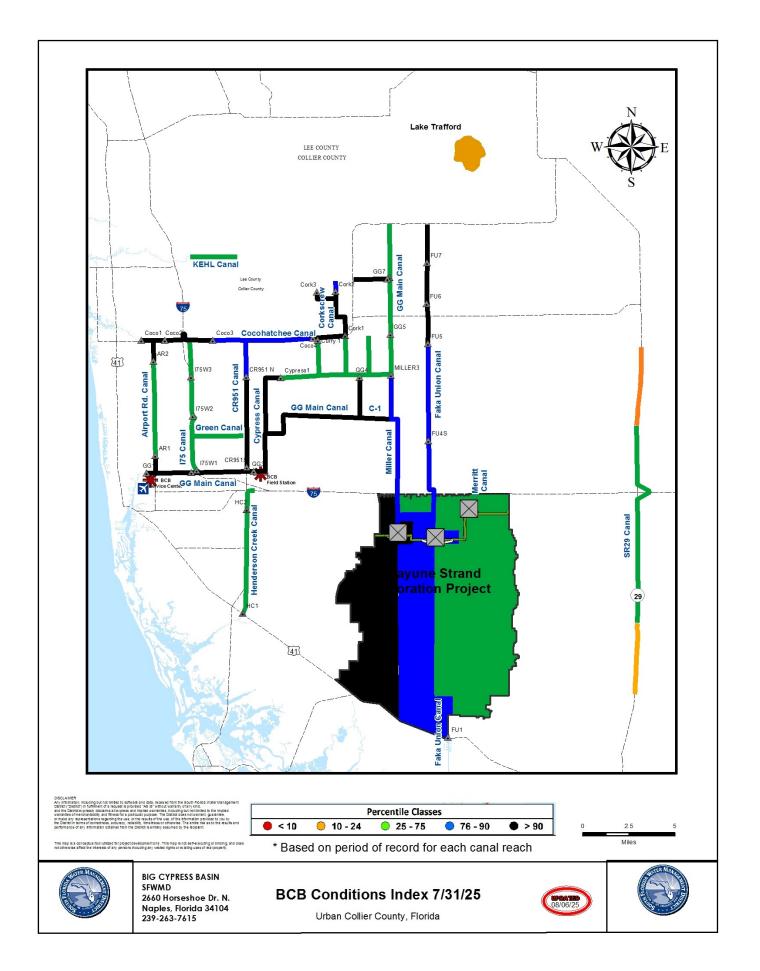
FIGURE 3B BCB RAINFALL DISTRIBUTION JULY 2025

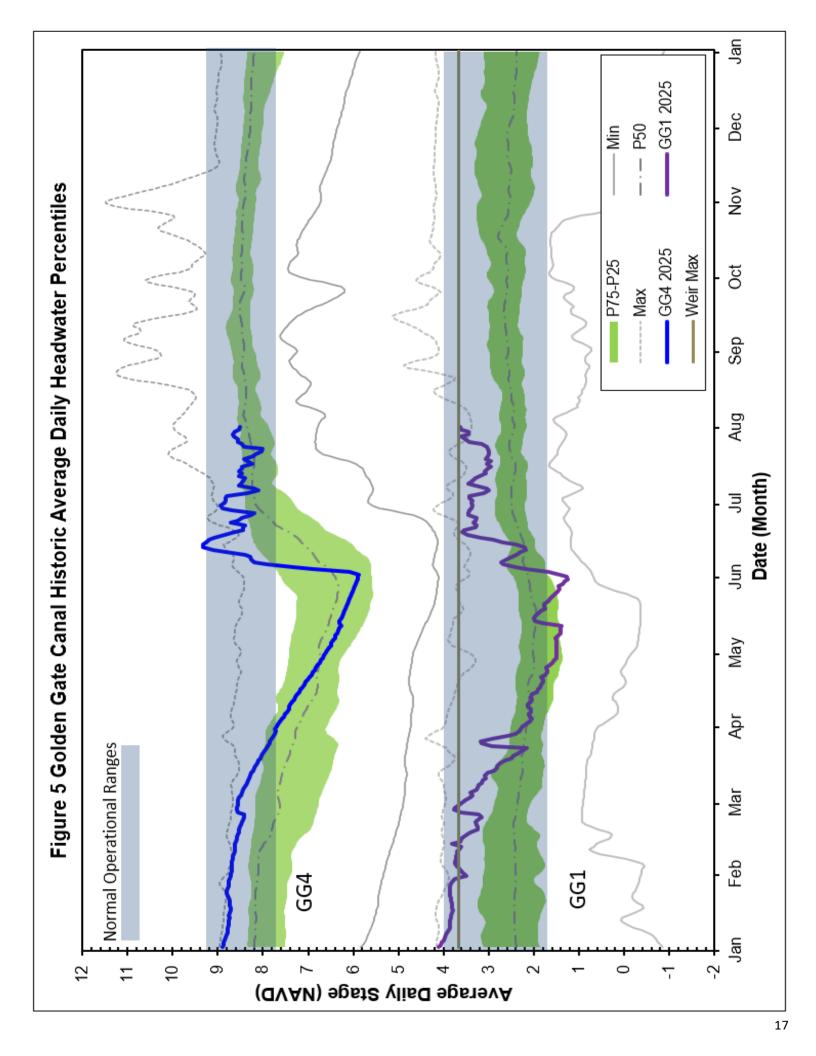


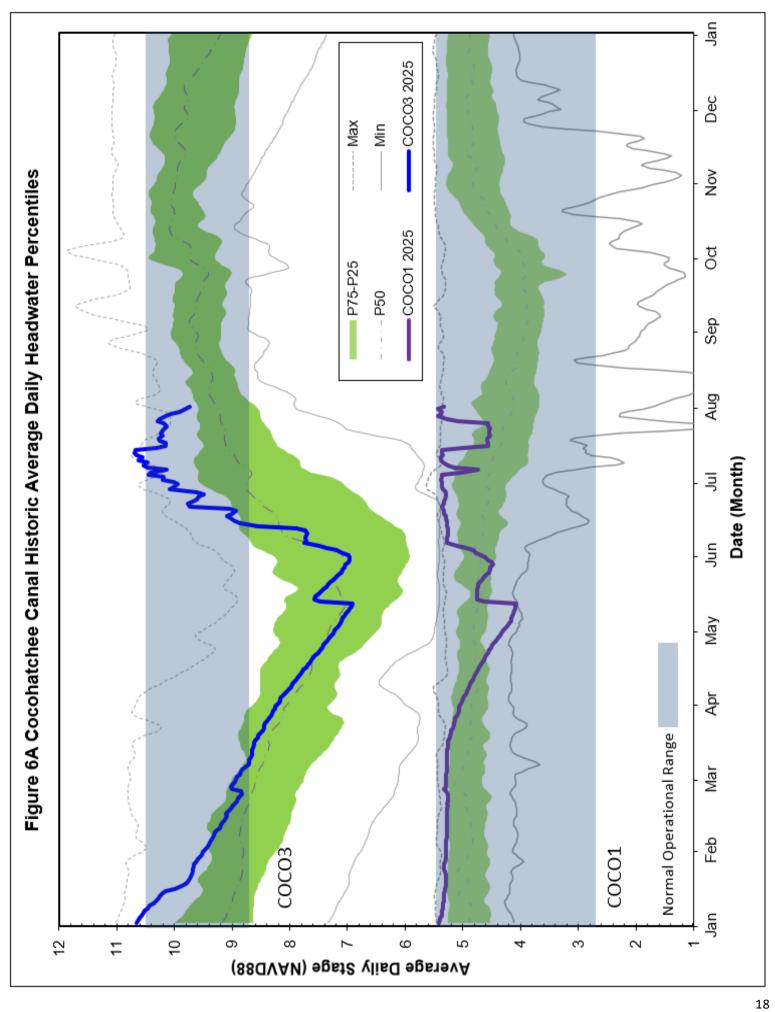


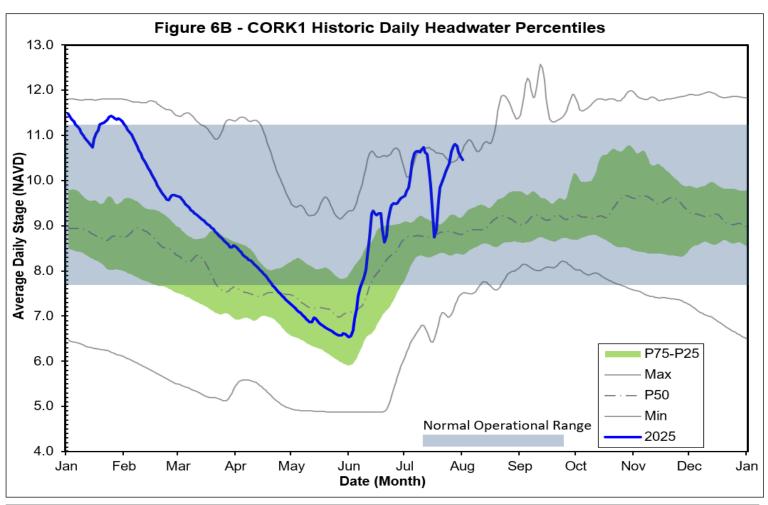


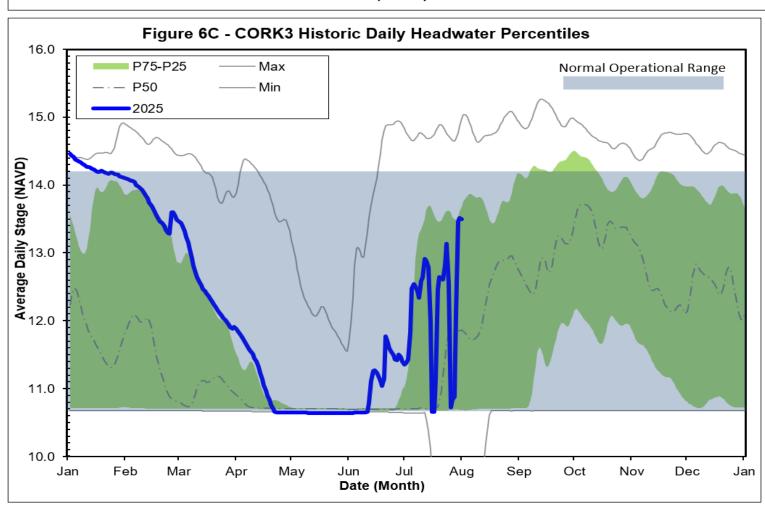


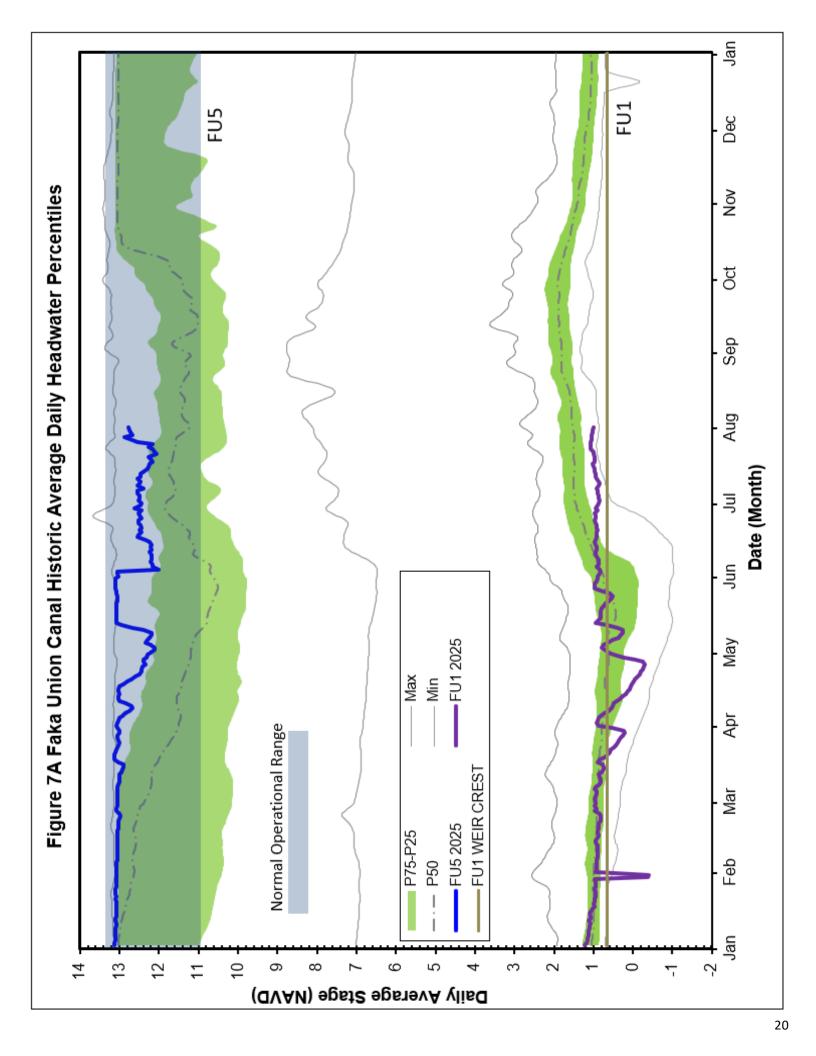


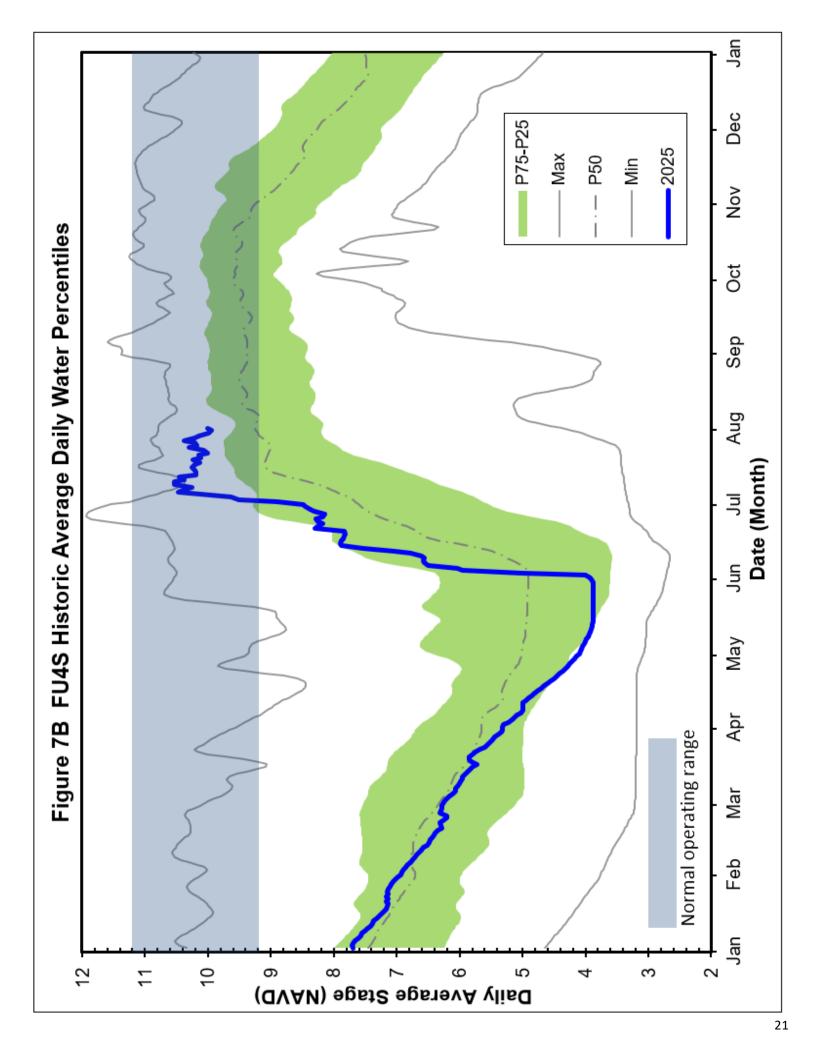


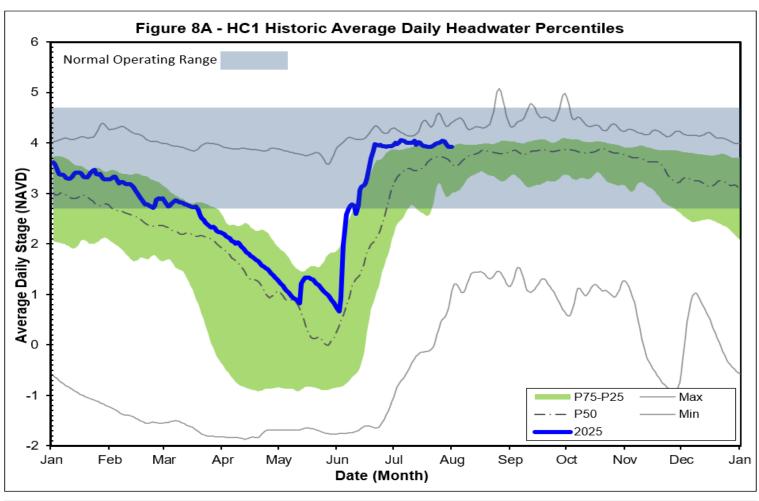


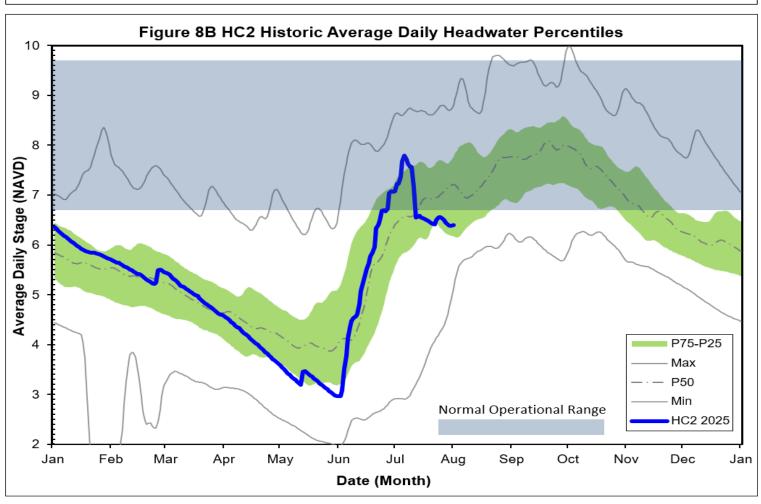












Last Reading Date :		July 31, 2025								
Previous Period Reading Date:		June 30, 2025								
STATION INDEX NO.	WELL LOCATION	WELL / AQUIFER - TYPE	CHANGE (from previous date)	PREVIOUS LEVEL	CURRENT LEVEL (ft)	DIRECTION OF CHANGE	CONCERN INDICATOR			
ALL INDICA	ALL INDICATOR LEVELS SHOWN IN FT-NGVD									
C-462	Immokalee	Lower Tamiami Aquifer	0.41	29.79	30.20	<b>↑</b>	GREEN			
C-1004R	Naples	Lower Tamiami Aquifer	0.11	1.79	1.90	<b>↑</b>	GREEN			
C-1224	Marco Lakes	Lower Tamiami Aquifer	-0.64	3.27	2.63	<b>\</b>	GREEN			
C-948R	Golden Gate	Mid Hawthorn Aquifer	0.65	28.19	28.84	<b>↑</b>				
C-951R	Golden Gate	Lower Tamiami Aquifer	0.21	3.37	3.58	<b>↑</b>				
L-2194	Bonita Springs	Sandstone Aquifer	1.83	2.83	4.66	<b>↑</b>	GREEN			
L-2195	Bonita Springs	Surficial Aquifer System	1.36	7.80	9.16	<b>↑</b>	GREEN			
L-738	Bonita Springs	Lower Tamiami Aquifer	1.64	-1.46	0.18	<b>↑</b>	GREEN			

## TABLE 2 BCB WATER CONDITIONS SUMMARY JULY 2025

#### BIG CYPRESS BASIN

**JULY 31, 2025** 

