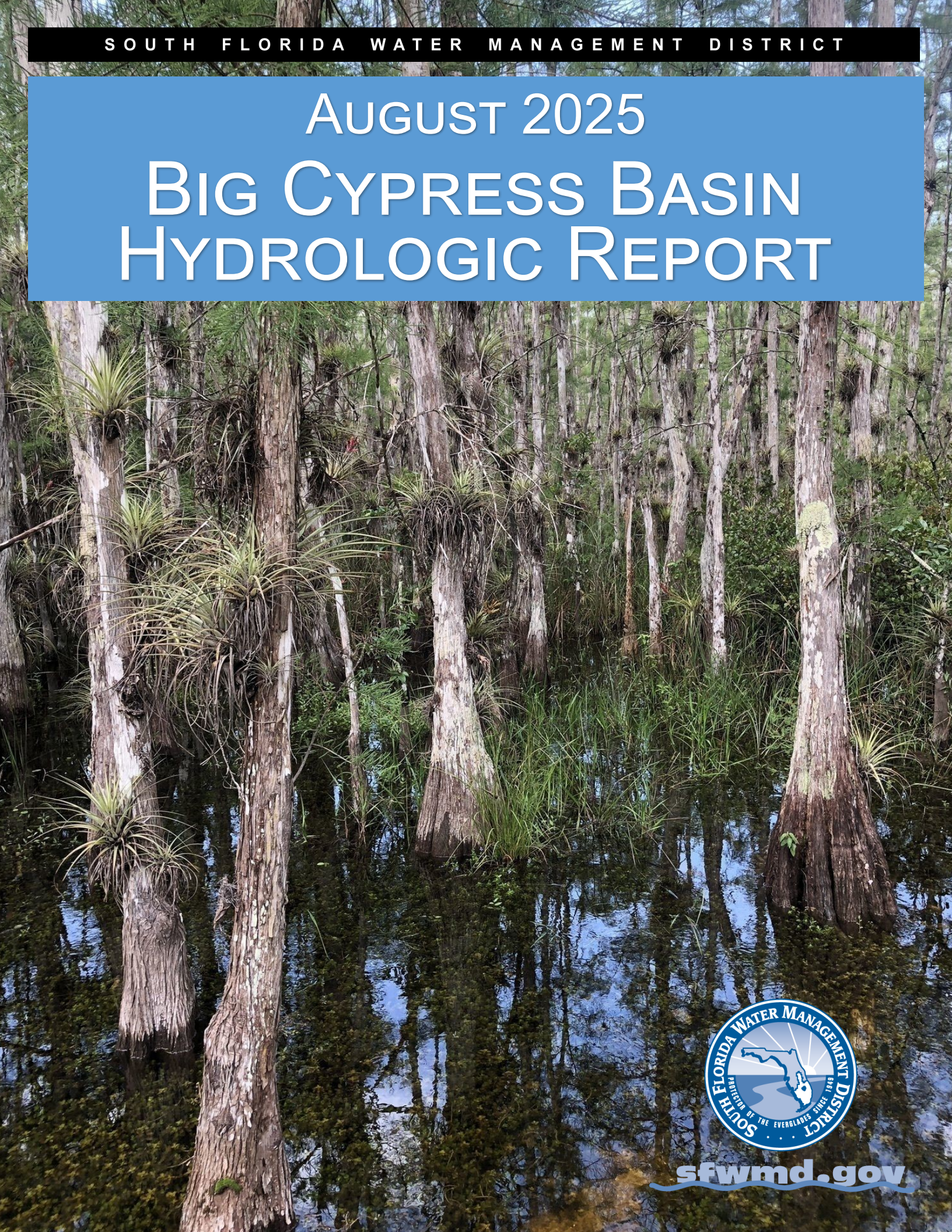
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

August 2025

Big Cypress Basin Hydrologic Report



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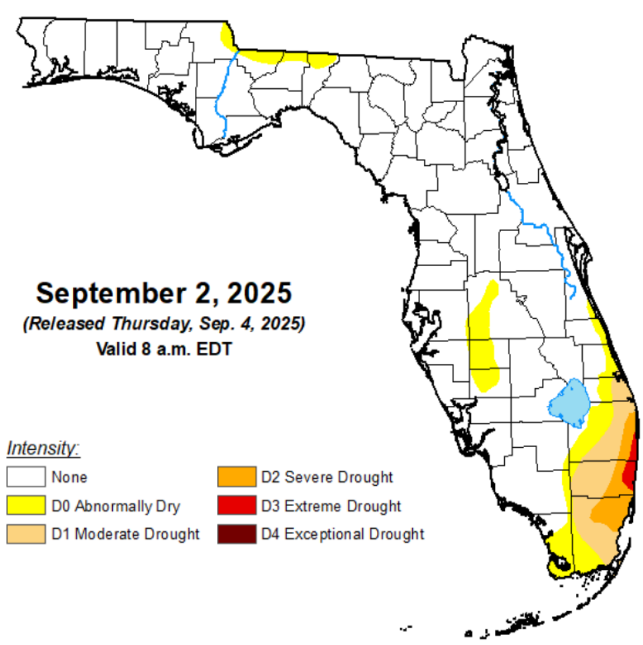
SUMMARY OF HYDROLOGIC CONDITIONS IN THE BIG CYPRESS BASIN

August 2025

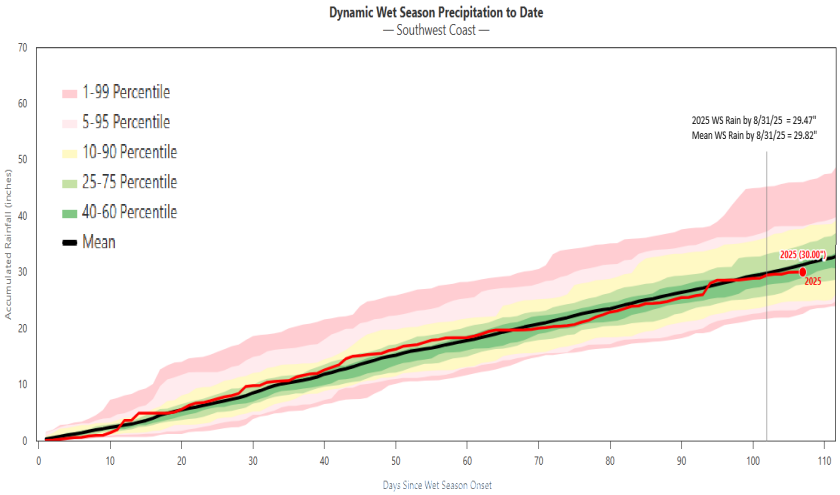
SUMMARY



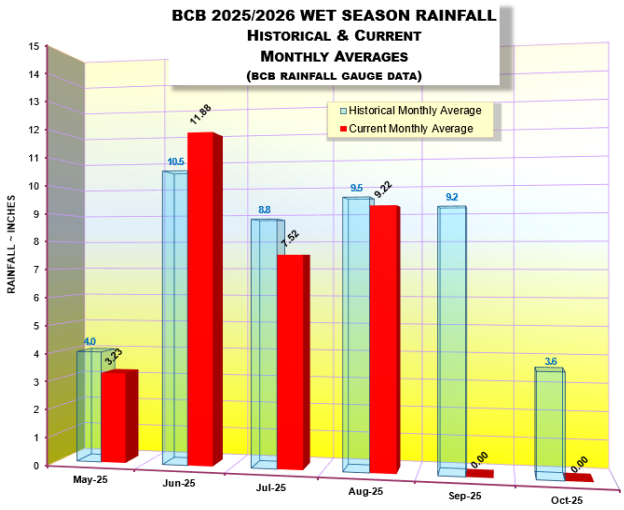
Following a slightly drier than normal July, August resulted in more typical monthly rainfall across the Big Cypress Basin (BCB). This return to normal monthly rainfalls completed BCB's recovery from drought conditions experienced earlier in the year. As of September 2, 2025 the U.S. Drought Monitor no longer showed any of Collier County under drought conditions. Only the easternmost fringe of the County remained listed as D0 Abnormally Dry.

As of August 31st, rainfall for the Southwest Coast of Florida remained slightly below the long-term average. Average BCB rainfall from May 1st through August 31st, however, is 31.9 inches, approximately 2 inches more than that for the larger Southwest Coast.

Though the Southwest Coast wet season rainfall was below normal as of the end of August, the BCB fared better, and is slightly above its long-term average. Based upon rain gauge data, August saw an average Basin rainfall of 9.22 inches (97% of normal). From May 1, 2025 through August 31, 2025, the BCB has received 32.8 inches of rainfall, 0.8 inches above the historic average.

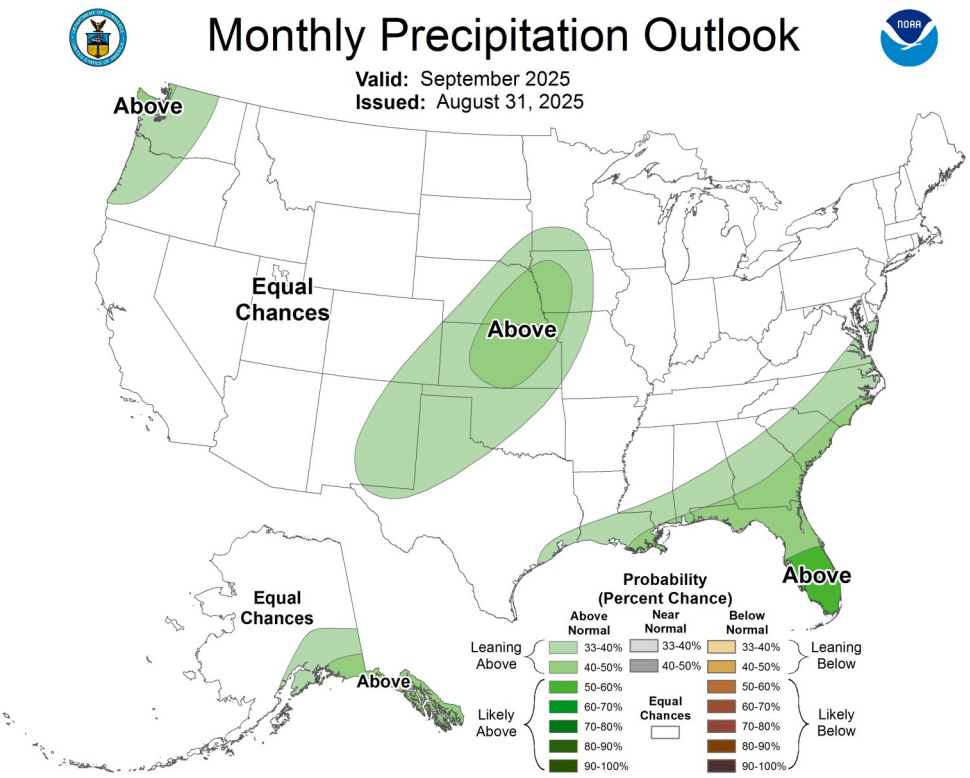


As a result of the slightly above normal BCB wet season rainfall to date, canal levels have recovered from the prior severe dry season,



and water control structures have fully transitioned into flood control operations. By the end of the month, canal levels were generally operating near the middle of their ranges to provide a balanced approach to flood control. As such, water levels can be quickly increased or decreased to accommodate changing conditions. BCB water managers continuously monitor weather forecasts and system conditions, and initiate water control structure adjustments to maximize flood control without over draining the system. This operation provides maximum flexibility to release or conserve water depending upon need.

As discussed above, the wet season to date has seen slightly above average rainfall, and water control structures have returned to flood control operations. El Niño Southern Oscillation (ENSO) neutral conditions are present in the equatorial Pacific Ocean and the Madden/Julian Oscillation (MJO) – often associated with increased tropical storm development – will be entering the western hemisphere in the second half of September. Due to these and other considerations, the Climate Prediction Center predicts a 50% - 60% chance that precipitation will be above normal in September.



Looking forward into September, BCB structures will continue to operate in flood control modes to be ready to act proactively should significant rainfall or tropical development occur.

AUGUST 2025 BCB RAINFALL

The Basin-wide averaged, gauge-measured, monthly rainfall was **9.22** inches in August. This measured rainfall was 0.30 inches below the historical monthly BCB average for the month of August **(see Figures 1, 2, 3A and Table 1)**. In August, the rain gauge with the highest measured precipitation was R-11 (COLLIER SEMINOLE STATE PARK), which recorded 12.78 inches.

Figures 3B shows August's calculated average rainfall estimates for each of the Basin's watersheds, based on gauge adjusted radar (Raindar). August's rainfall was well distributed across the watershed, with the Coastal Basins watershed seeing the highest Raindar average of 10.13 inches and the Gordon River Extension watershed seeing the lowest Raindar average of 7.09 inches. The BCB's overall calculated areal weighted average Raindar rainfall was 9.32 inches for the month, closely matching the basin-wide rain gauge average of 9.22 inches. The Raindar totals and their locality distribution across the BCB/Lower West Coast are shown on **Figure 3C**.

BIG CYPRESS BASIN CANAL SYSTEMS

During the month of August, BCB structures fully transitioned to flood control operations as the system completed its seasonal recharge due to the cumulative wet season precipitation. By the end of August, most canals were being maintained at or near the 50th percentile to maximize the ability to prepare for and respond to rainfall events. Water levels upstream of manual structures were lowered as needed during August to provide flood protection in advance of forecast rainfall events, resulting in temporary reductions in stage in some locations to near the 25th percentile. Upon passing of the rainfall event, these areas are typically brought back to the middle of their operating range. BCB canal conditions as of August 31, 2025 are shown on **Figure 4**.

GOLDEN GATE SYSTEM

Control structures in the Golden Gate Main Canal (GG Main) system fully transitioned into Flood Control Mode in August. Discharges at GG1 steadily increased as the month progressed, peaking in the second half of the month due to the notable rainfall experienced on August 23rd. Discharges have since decreased, and the canal is well positioned to accommodate September's rainfall. Water levels in main stem of GG Main from GG1 to GG4 were held in the top half of their range in the during the first half of August in an effort to conserve water due to lower than normal rainfall forecasts, As August progressed – and forecast rainfall increased – water levels were lowered to the middle of the normal operational range to position the system optimally for peak hurricane season. At month's end, GG Main remained at approximately the 50th percentile immediately upstream of GG4 **(see Figure 5)**. Water levels in Golden Gate Main tributary canals were generally between 25th and 75th percentile, with occasional temporary dips below the 25th percentile due to gate operations in anticipation of forecast rainfall events..

COCOHATCHEE SYSTEM

The Cocohatchee Canal began August near the top of its range due to the somewhat drier than normal conditions experienced in July. As a result, discharges from COCO1 low during the first half of August, until the August 23 rainfall required the system to be operated in flood control mode. Canal levels have been held in the middle of their range, thereafter, as peak hurricane season approaches. By the end of August, water levels from COCO1 through COCO3 were slightly above the 75th percentile, while water levels further upstream were between the 25th and 75th percentile (**Figures 6A, 6B, & 6C**).

FAKA UNION SYSTEM

As with the other BCB canals, the Faka Union system fully transitioned into Flood Control operations in August. Due to the drier than normal conditions in July, discharges from FU4S toward the Picayune Strand Faka Union Pump Station (S487) largely ceased in the first half of August and did not resume until rainfalls to the watershed returned mid-month. During the last week in August, discharges from FU4S decreased and become intermittent. By the end of August, the portions of the Faka Union Canal upstream of FU4S were operating at approximately the 75th percentile, while downstream levels (FU4 to S487) remained between the 25th and 75th percentile. Despite the intermittent discharges from FU4S at month's end, sufficient water within the Faki Union Canal allowed continued pumping at S487 with the low flow electric pumps. 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 than historic values due to the Army Corps of Engineers completion of the canal plugging in June. (**Figures 7A & 7B**).

HENDERSON CREEK SYSTEM

As with the other BCB canals, water control structures in the Henderson Creek are currently operating in Flood Control mode due to the increase in forecast rainfall during the second half of August. Discharges from HC1 remained low in August, peaking shortly after the August 23rd rainfall and slowly decreasing thereafter. Canal water levels upstream of HC1 remained at the 75th percentile by month's end, while water levels upstream of HC2 remained between the 25th and 75th percentile. (**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 improved from their dip in late July. All but one site (C-948R) showed an increase in groundwater levels from July 31st to August 31st (**Table 2 and Figure 9**). By the end of August, C-462, north of Lake Trafford, was at the 75th percentile, well above the level of low concern. C-1224, near Henderson Creek, saw a slight recovery from its late July drop, and hovered just below the 25th percentile at month's end. C-1004R, near the Cocohatchee Canal, also recovered from its July dip, and similar to C-1224, was just below the 25th percentile at the end of August. Though C1224 and C1004R were both below the 25th percentile at the end of the month, they remained above the level of low concern.

L-738 a Tamiami Aquifer well in Bonita Springs came up from its late-July low, but remained below normal at approximately the 10th percentile; about 6 feet above the level of low concern. L-2194, a Sandstone Aquifer well in Bonita Springs, similarly rebounded from its July dip, and also remained at approximately the 10th percentile, approximately 6 feet above the level of low concern. Finally, L-2195, a surficial aquifer well in Bonita Springs also rebounded in August and remains just above the 25th percentile, approximately 5 feet above the level of low concern.

CORKSCREW SWAMP

Figure 10 shows the historical trends for Corkscrew Swamp (CRKSWPS), Bird Rookery (BRDROOK), and the Cork 3 (CORK3) structure, and their 2025 corresponding levels. CRKSWPS and BRDROOK both experienced a drop in water level in late July due to drier than normal conditions, but returned to the 50th percentile by the end of August. CORK3 (a manually operated structure south of BRDROOK) fluctuates above and below the 50th percentile in response to gate operations. **Figure 11** shows that Lake Trafford recovered significantly in the second half of August and is now above the 25th 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. Similar to other Corkscrew Swamp sites, SOCREW1 and SOCREW2 both dipped in late August then recovered in the second half of the month. By the end of the month, SOCREW1 was between the 25th and 50th percentile, while SOCREW2 was a little lower at approximately 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

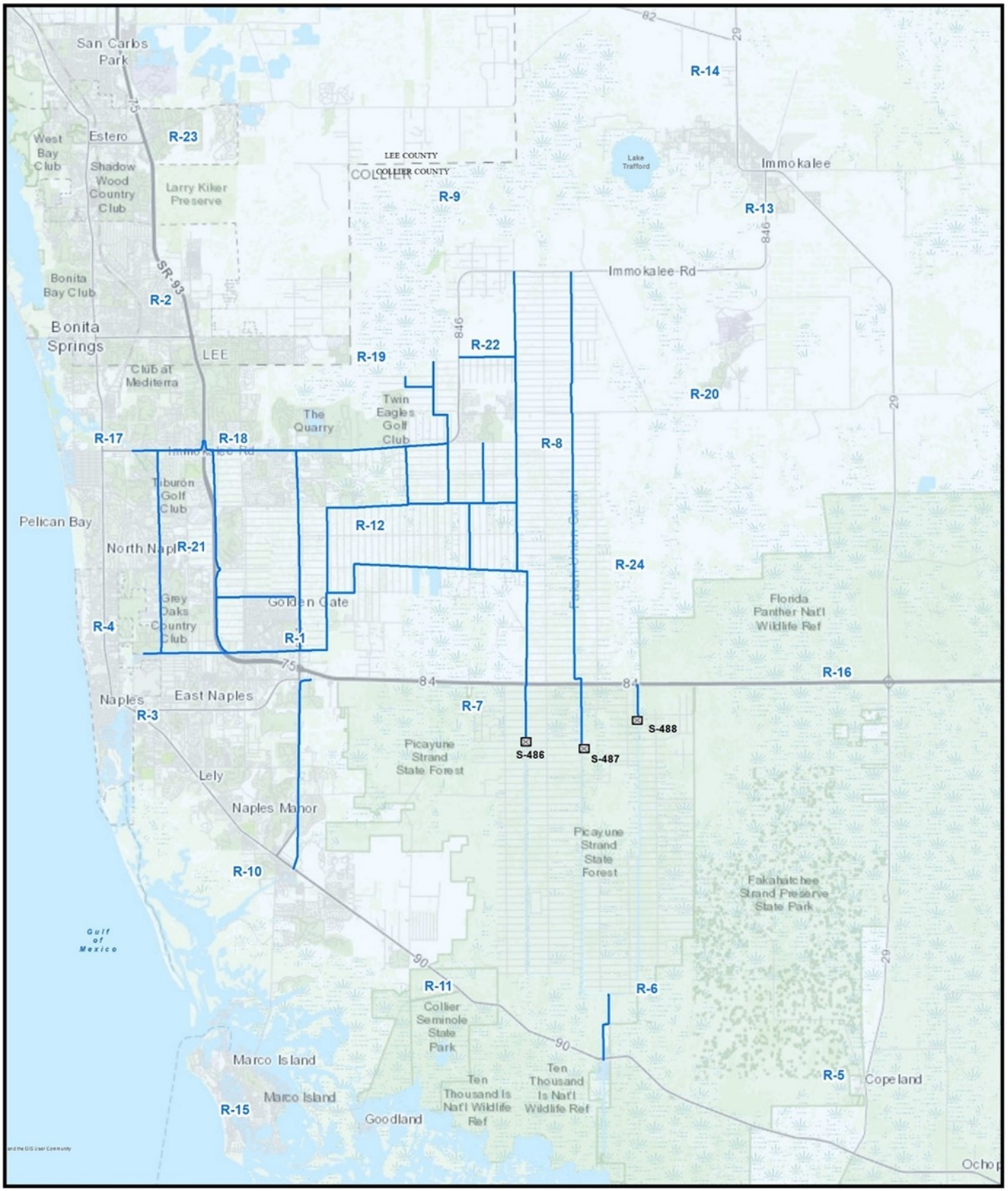
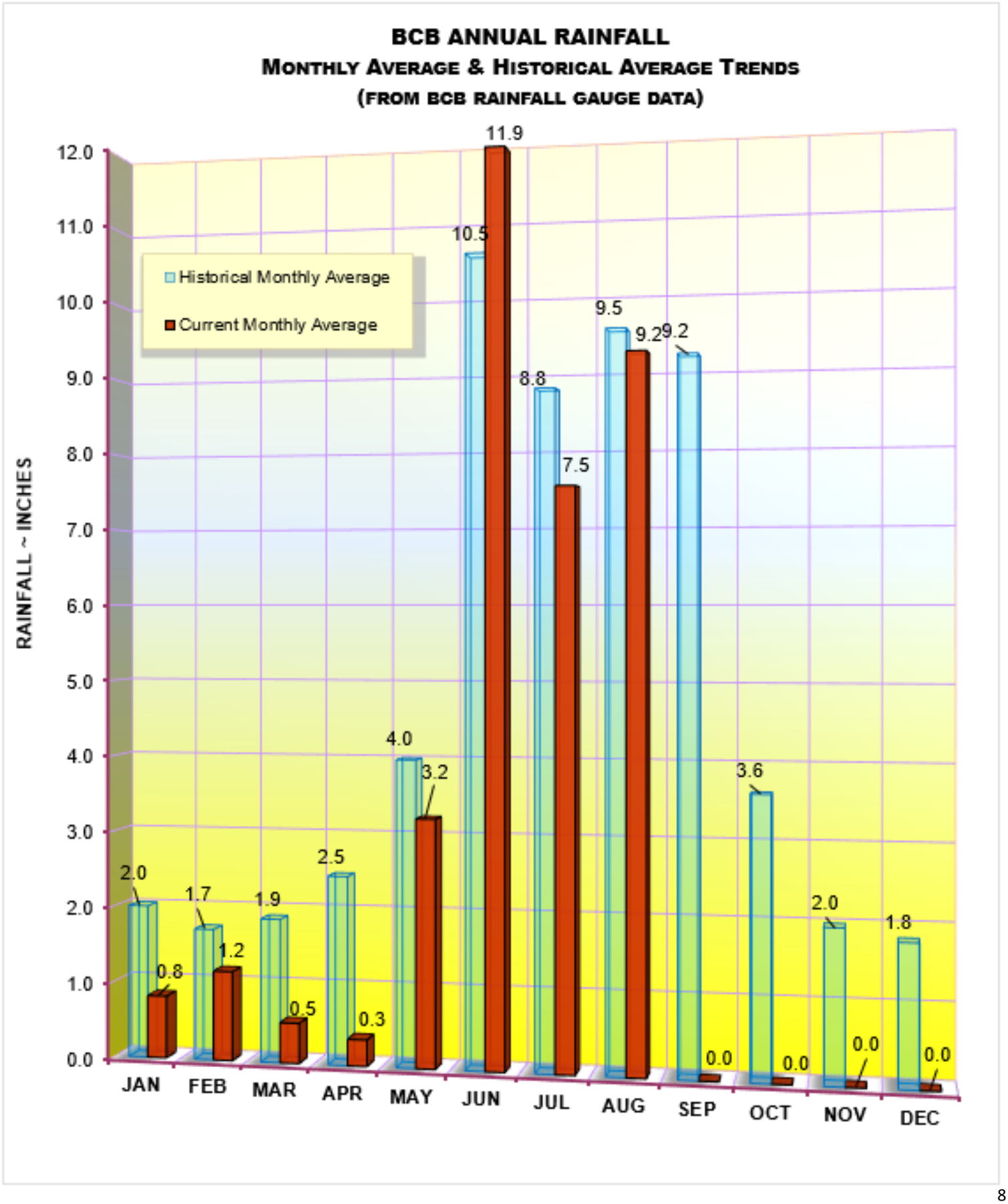

San Carlos Park
West Bay Club
Estero
R-23
Shadow Wood Country Club
Larry Kiker Preserve
LEE COUNTY
COLLIER COUNTY
COLLIER
R-9
Lake Trafford
Immokalee
R-14
R-13
846
Immokalee Rd
SR-93
Bonita Bay Club
R-2
Bonita Springs
LEE
R-19
R-22
Club at Mediterra
The Quarry
Twin Eagles Golf Club
R-20
R-17
R-18
R-8
Tiburon Golf Club
Pelican Bay
North Naples
R-21
R-12
R-24
Golden Gate
Grey Oaks Country Club
R-4
R-1
Florida Panther Nat'l Wildlife Ref
75
84
R-16
Naples
East Naples
R-3
R-7
S-488
S-486
S-487
Picayune Strand State Forest
Lely
Naples Manor
R-10
Picayune Strand State Forest
Fakahatchee Strand Preserve State Park
Gulf of Mexico
90
R-11
R-6
Collier Seminole State Park
Marco Island
Ten Thousand Is Nat'l Wildlife Ref
R-5
Copeland
R-15
Goodland
29
82

TABLE 1
RAINFALL REPORT - AUGUST 2025
DISTRICT/BASIN RAINFALL STATIONS
(ALL NUMBERS ARE IN INCHES)

STATION INDEX NO.	STATION NAME	Aug-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	9.77	12.04	-2.27	31.65	47.29	-15.64
R-2	BONITA SPRINGS WATER PLANT	10.25	9.01	1.24	32.63	37.40	-4.77
R-3	COLLIER COUNTY COURTHOUSE	6.60	8.99	-2.39	29.81	37.90	-8.09
R-4	FREEDOM PARK	7.82	9.60	-1.78	32.03	40.71	-8.68
R-5	FAKAHATCHEE STRAND HQ	10.67	10.51	0.16	34.01	43.38	-9.37
R-6	DAN HOUSE PRAIRIE	7.37	9.26	-1.89	29.24	37.50	-8.26
R-7	SGGE WEATHER STATION	10.58	10.90	-0.32	40.99	44.28	-3.29
R-8	FAKA UNION #5	11.13	9.76	1.37	39.86	45.85	-5.99
R-9	CORKSCREW SWAMP NORTH END	8.98	7.73	1.25	35.22	38.14	-2.92
R-10	ROOKERY BAY HQ	6.65	9.92	-3.27	34.63	39.43	-4.80
R-11	COLLIER SEMINOLE STATE PARK	12.78	9.98	2.80	37.37	40.46	-3.09
R-12	G.G. FIRE STATION	12.43	10.29	2.14	42.83	43.12	-0.29
R-13	IMMOKALEE LANDFILL	10.77	7.55	3.22	32.99	37.31	-4.32
R-14	IFAS	11.63	7.76	3.87	37.78	37.00	0.78
R-15	MARCO R.O. PLANT	11.18	8.92	2.26	34.96	37.47	-2.51
R-16	FAKAHATCHEE STRAND NORTH END	6.34	9.57	-3.23	31.35	44.29	-12.94
R-17	COCO#1	9.35	8.12	1.23	31.21	34.66	-3.45
R-18	COCO#3	7.77	10.80	-3.03	33.49	40.51	-7.02
R-19	BIRD ROOKERY	7.72	10.03	-2.31	37.75	44.30	-6.55
R-20	AVE MARIA	9.11	8.65	0.46	33.58	38.39	-4.81
R-21	I75W2	7.88	11.52	-3.64	33.35	43.34	-9.99
R-22	GG#7	8.43	8.85	-0.42	38.78	40.93	-2.15
R-23	FPWX	9.59	9.53	0.06	32.60	38.84	-6.24
R-24	DSOTO10	6.56	9.12	-2.56	35.62	48.19	-12.57
	AVERAGES	9.22	9.52	-0.29	34.74	40.86	-6.12

FIGURE 2
BCB GAUGE RAINFALL MONTHLY AVERAGES



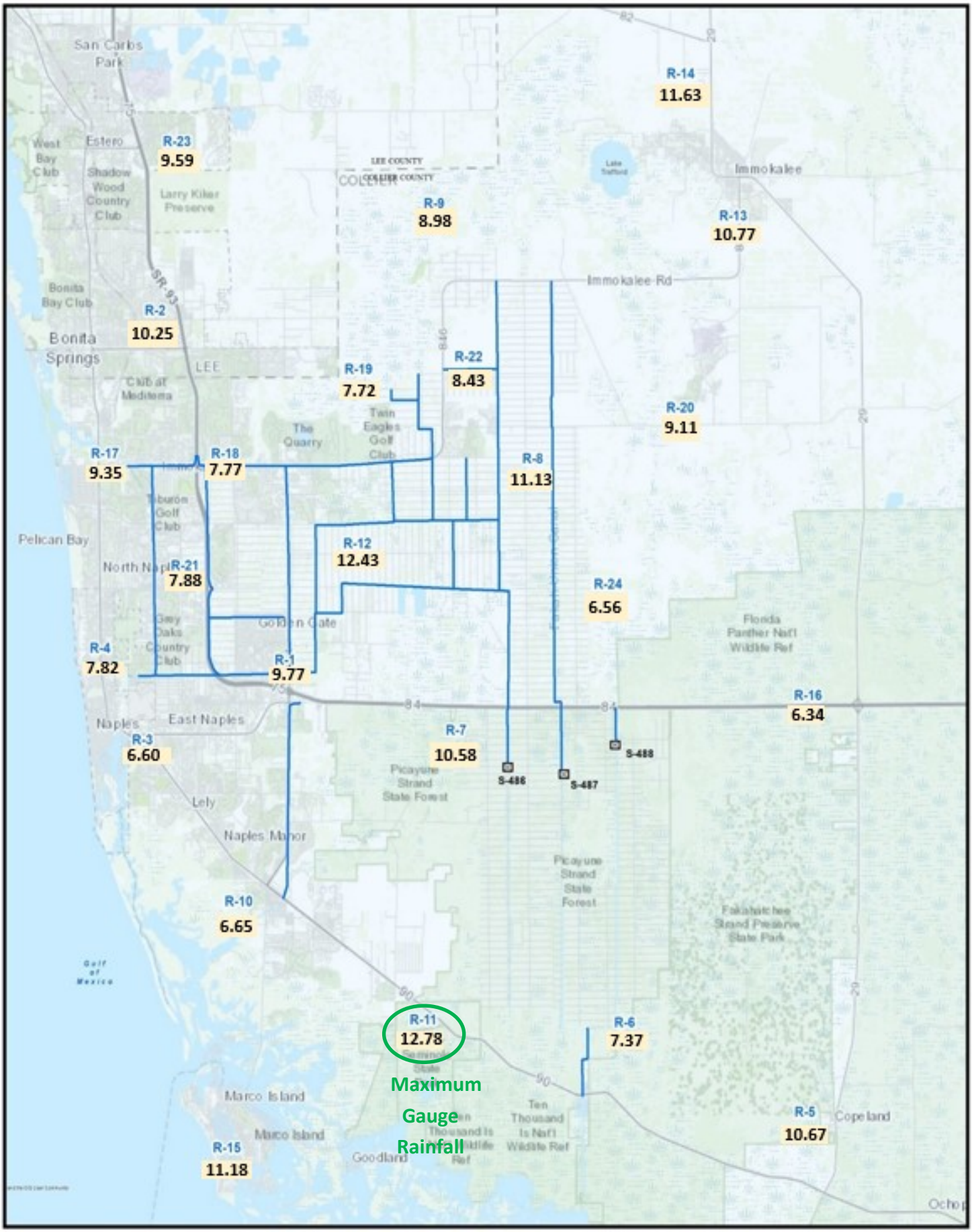
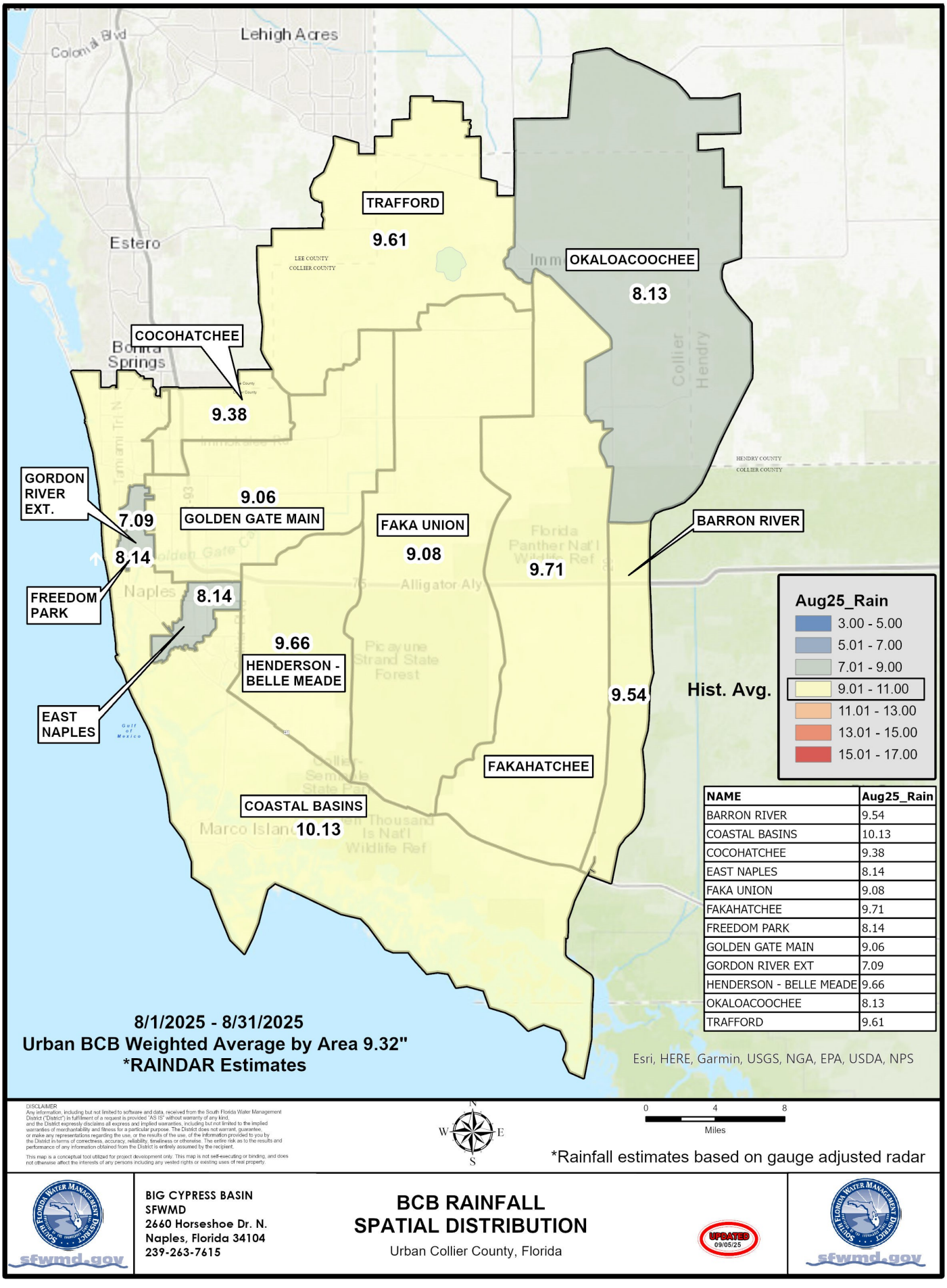


FIGURE 3A
BCB RAINFALL DISTRIBUTION
AUGUST 2025



NAME	Aug25_Rain
BARRON RIVER	9.54
COASTAL BASINS	10.13
COCOHATCHEE	9.38
EAST NAPLES	8.14
FAKA UNION	9.08
FAKAHATCHEE	9.71
FREEDOM PARK	8.14
GOLDEN GATE MAIN	9.06
GORDON RIVER EXT	7.09
HENDERSON - BELLE MEADE	9.66
OKALOACOOCHEE	8.13
TRAFFORD	9.61

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Naples, Florida 34104
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BCB RAINFALL SPATIAL DISTRIBUTION

Urban Collier County, Florida

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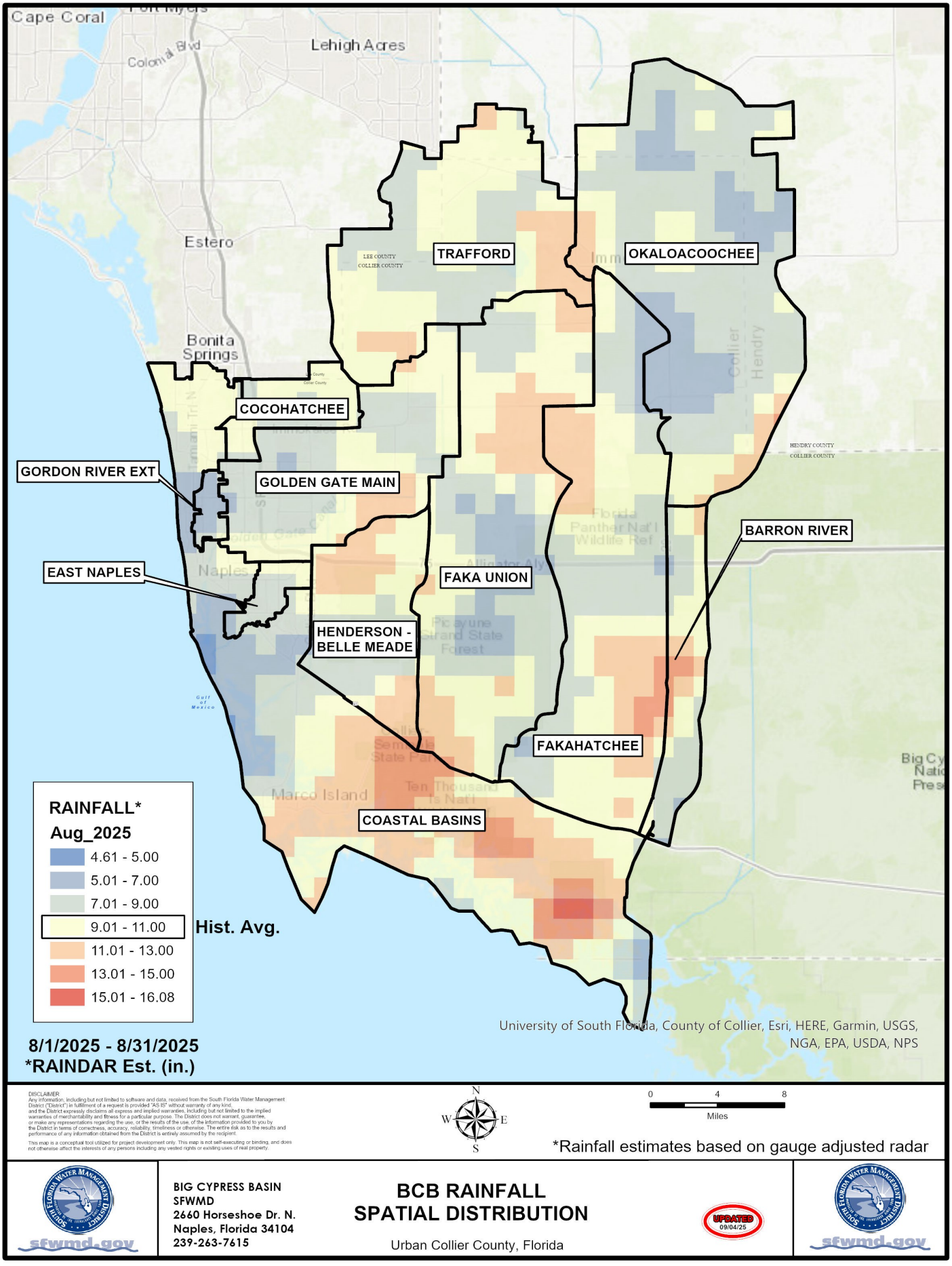
AUGUST 2025—FIGURE 3B



AUGUST 2025—FIGURE 3C

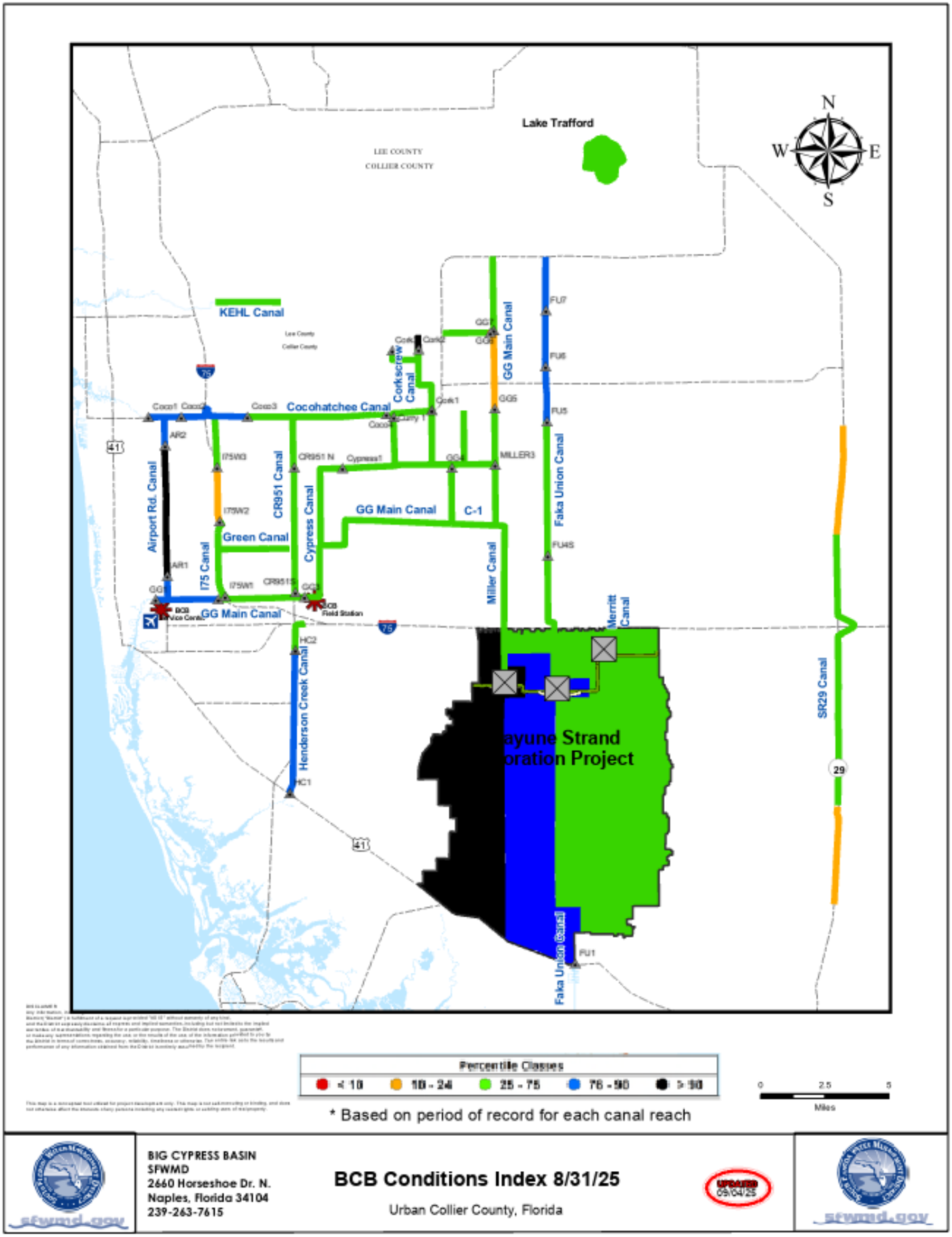

Lake Trafford
LEE COUNTY
COLLIER COUNTY
N
W
E
S
KEHL Canal
Cocohatchee Canal
Corkscrew Canal
GG Main Canal
Faka Union Canal
Airport Rd. Canal
I75 Canal
CR951 Canal
Cypress Canal
Green Canal
C-1
Miller Canal
Merritt Canal
Henderson Creek Canal
SR29 Canal
Faka Union Canal
Strand
Project
Percentile Classes
< 10
10 - 24
25 - 75
76 - 90
> 90
0
2.5
5
Miles
* Based on period of record for each canal reach
BIG CYPRESS BASIN
SFWMD
2660 Horseshoe Dr. N.
Naples, Florida 34104
239-263-7615
BCB Conditions Index 8/31/25
Urban Collier County, Florida
UPDATED
09/04/25
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FIGURE 4

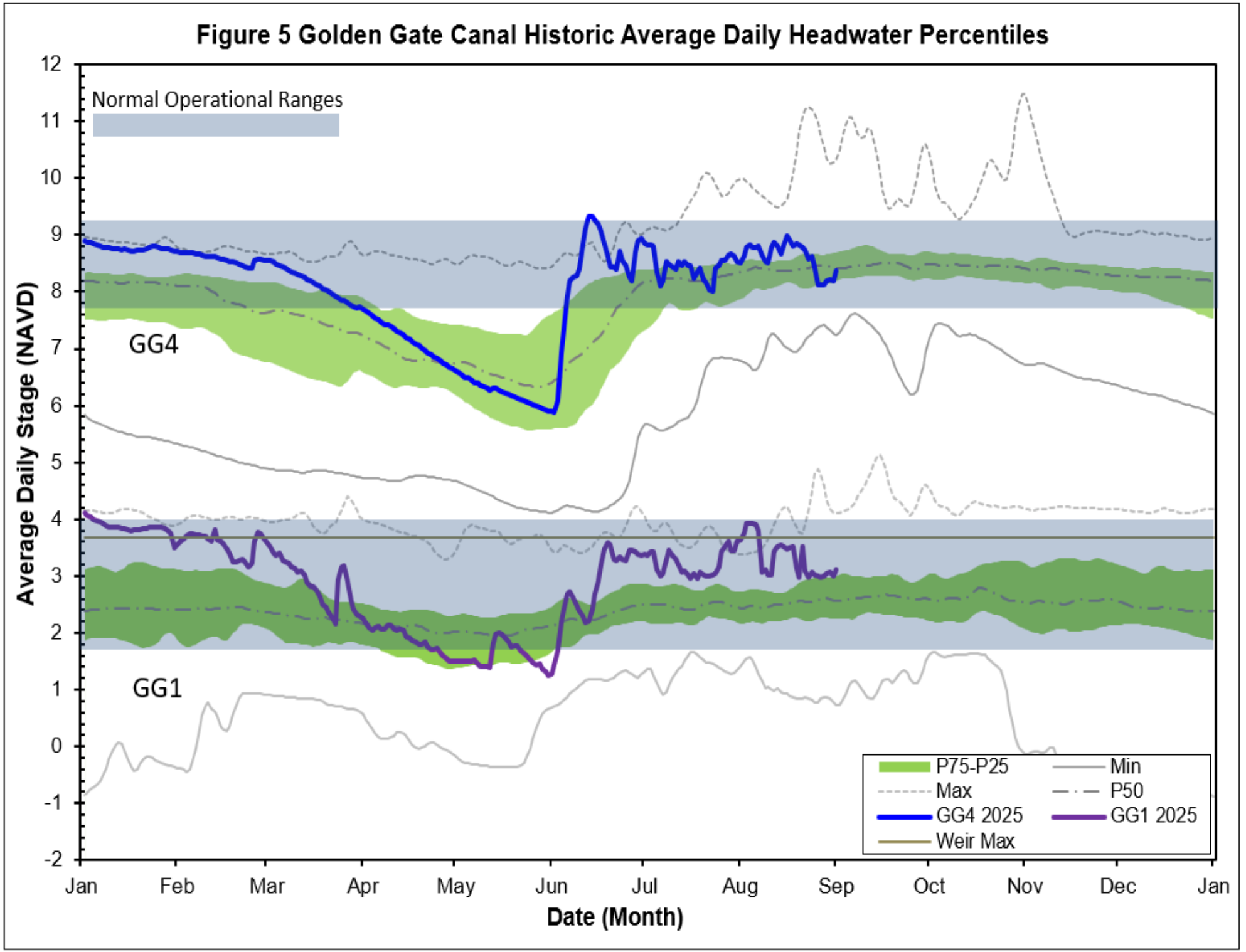


Figure 5 Golden Gate Canal Historic Average Daily Headwater Percentiles
Normal Operational Ranges
GG4
GG1
Average Daily Stage (NAVD)
12
11
10
9
8
7
6
5
4
3
2
1
0
-1
-2
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)
P75-P25
Min
Max
P50
GG4 2025
GG1 2025
Weir Max

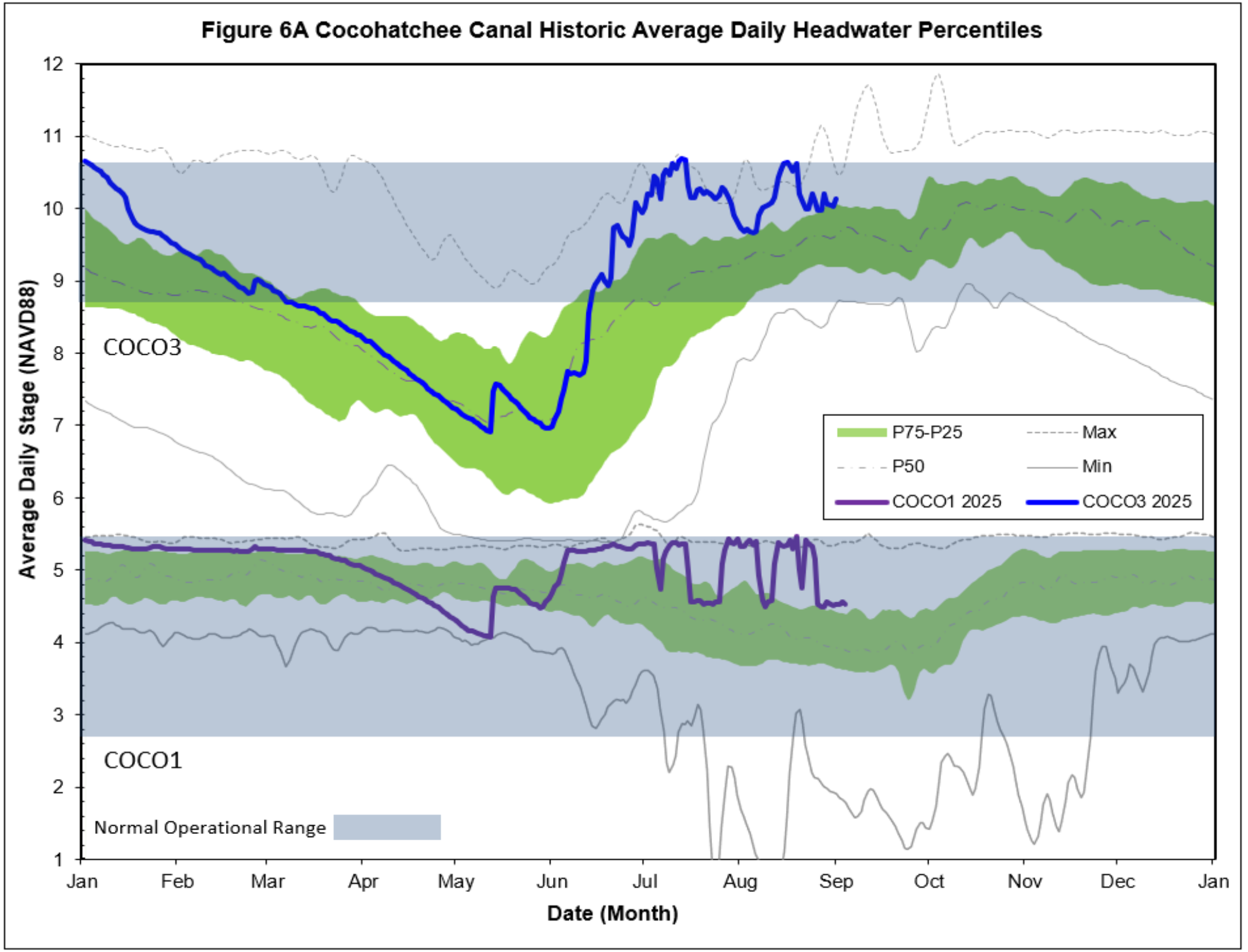


Figure 6A Cocohatchee Canal Historic Average Daily Headwater Percentiles
Average Daily Stage (NAVD88)
12
11
10
9
8
7
6
5
4
3
2
1
COCO3
COCO1
Normal Operational Range
P75-P25
Max
P50
Min
COCO1 2025
COCO3 2025
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)

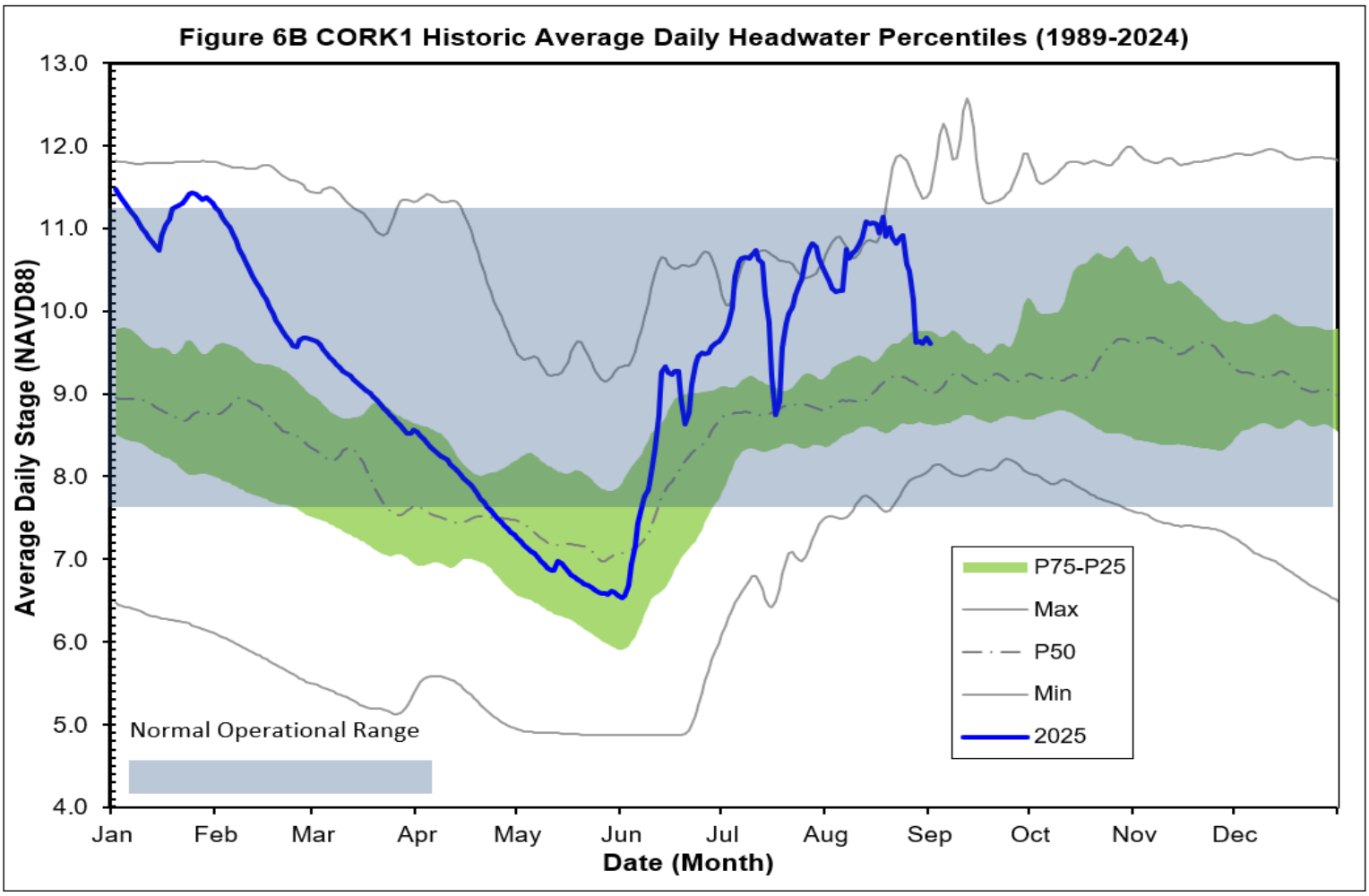


Figure 6B CORK1 Historic Average Daily Headwater Percentiles (1989-2024)
Average Daily Stage (NAVD88)
13.0
12.0
11.0
10.0
9.0
8.0
7.0
6.0
5.0
4.0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Date (Month)
Normal Operational Range
P75-P25
Max
P50
Min
2025

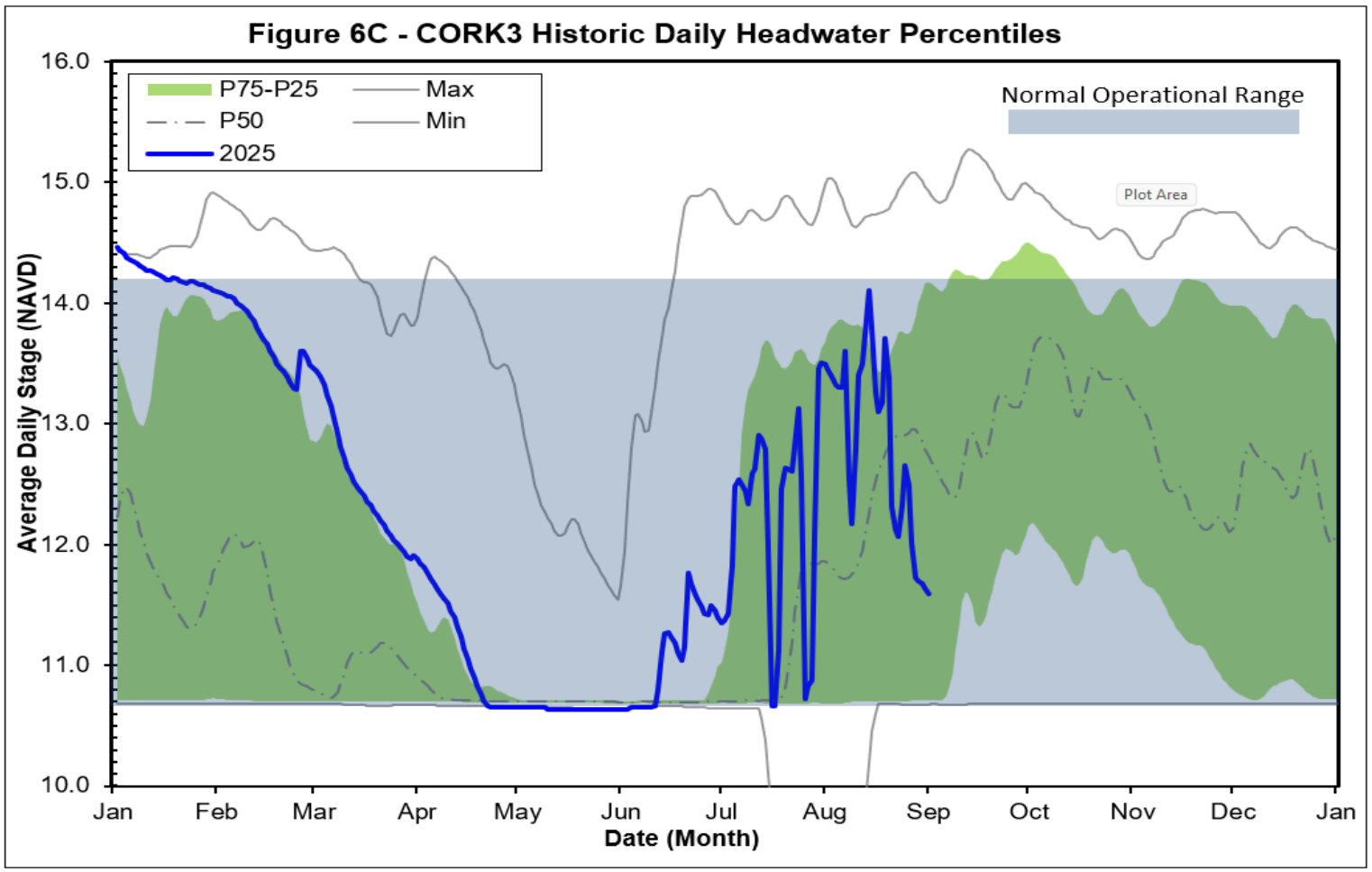


Figure 6C - CORK3 Historic Daily Headwater Percentiles
Average Daily Stage (NAVD)
16.0
15.0
14.0
13.0
12.0
11.0
10.0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)
P75-P25
Max
P50
Min
2025
Normal Operational Range
Plot Area

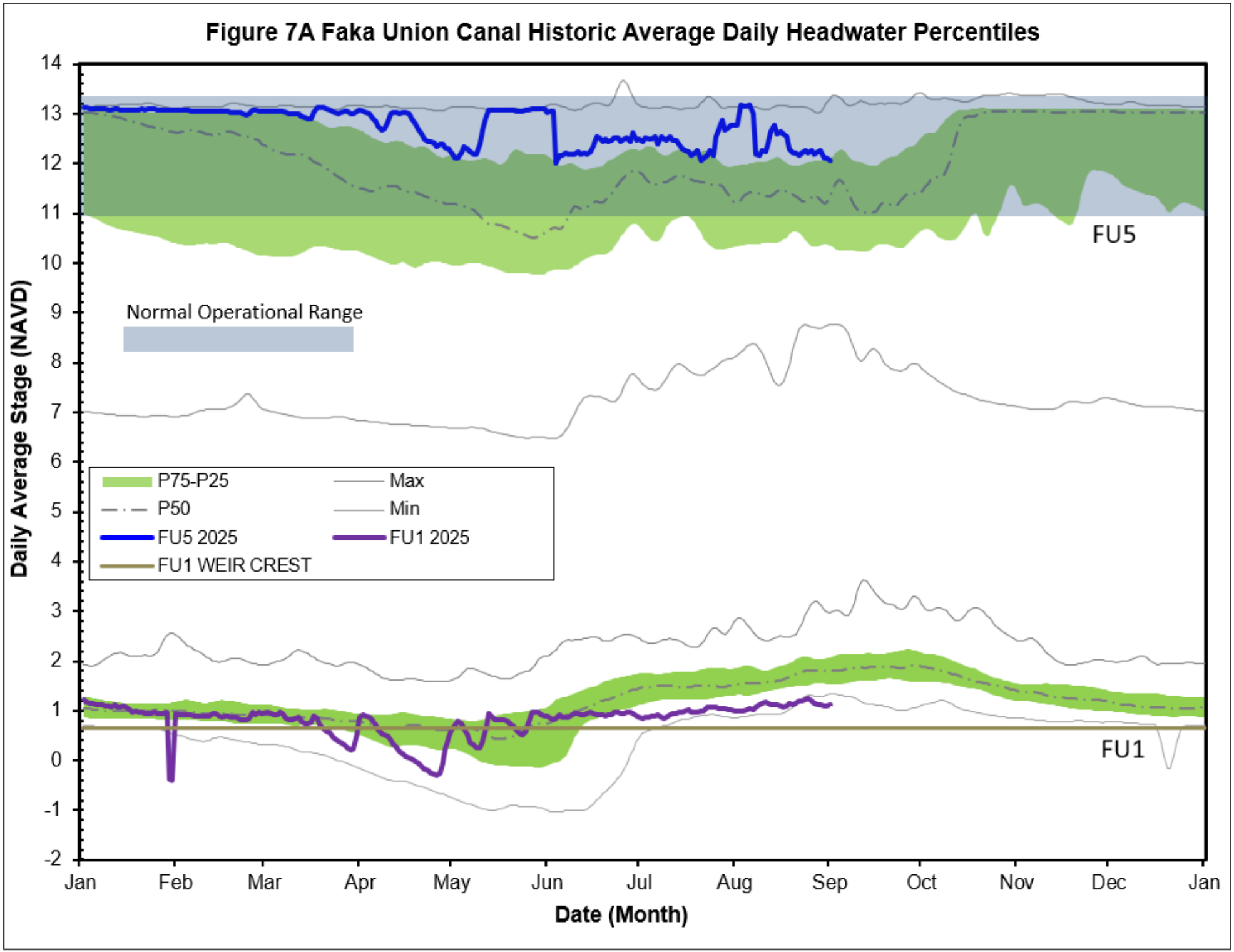


Figure 7A Faka Union Canal Historic Average Daily Headwater Percentiles
Daily Average Stage (NAVD)
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
-1
-2
Normal Operational Range
FU5
FU1
P75-P25
P50
FU5 2025
FU1 WEIR CREST
Max
Min
FU1 2025
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)

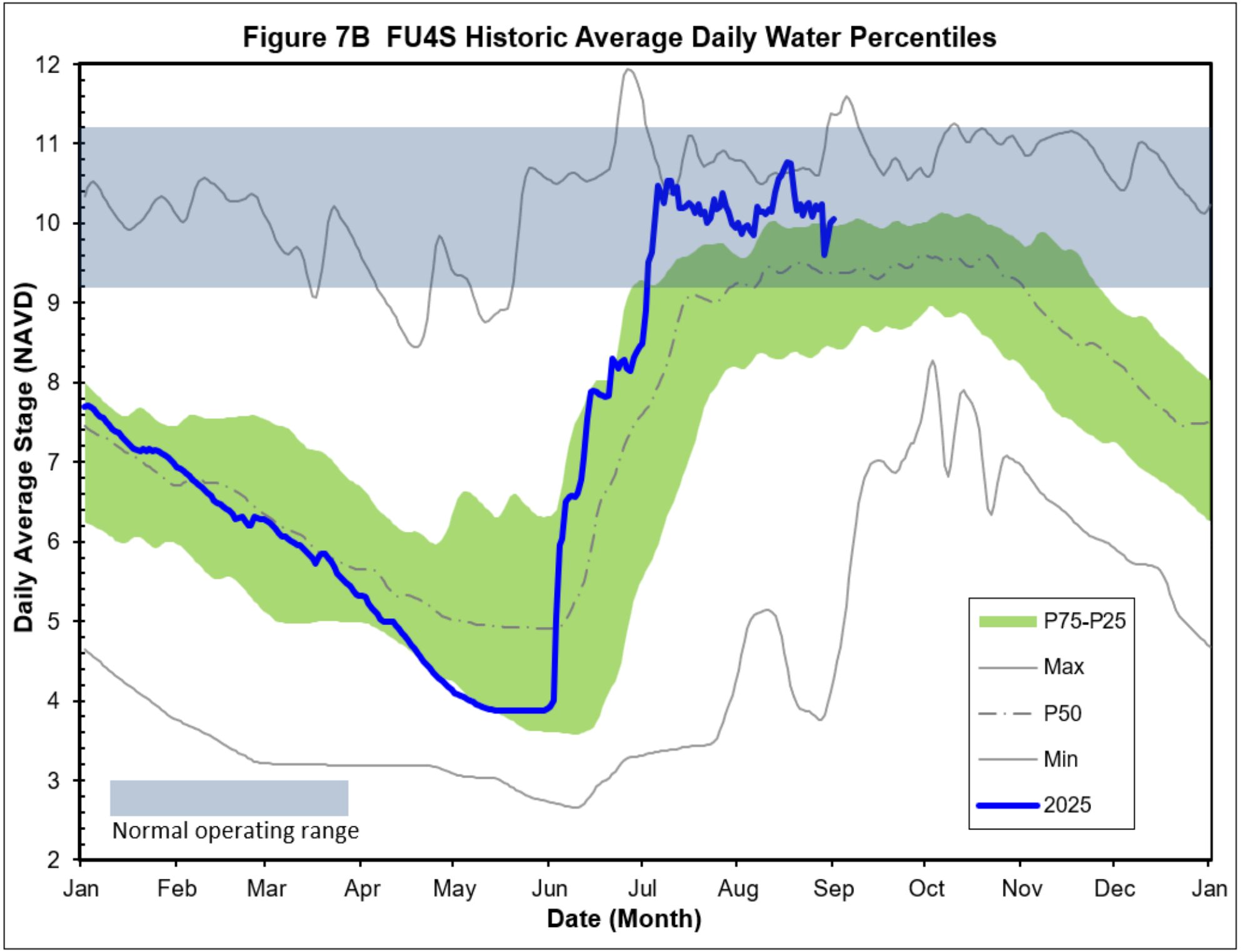


Figure 7B FU4S Historic Average Daily Water Percentiles
Daily Average Stage (NAVD)
12
11
10
9
8
7
6
5
4
3
2
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)
Normal operating range
P75-P25
Max
P50
Min
2025

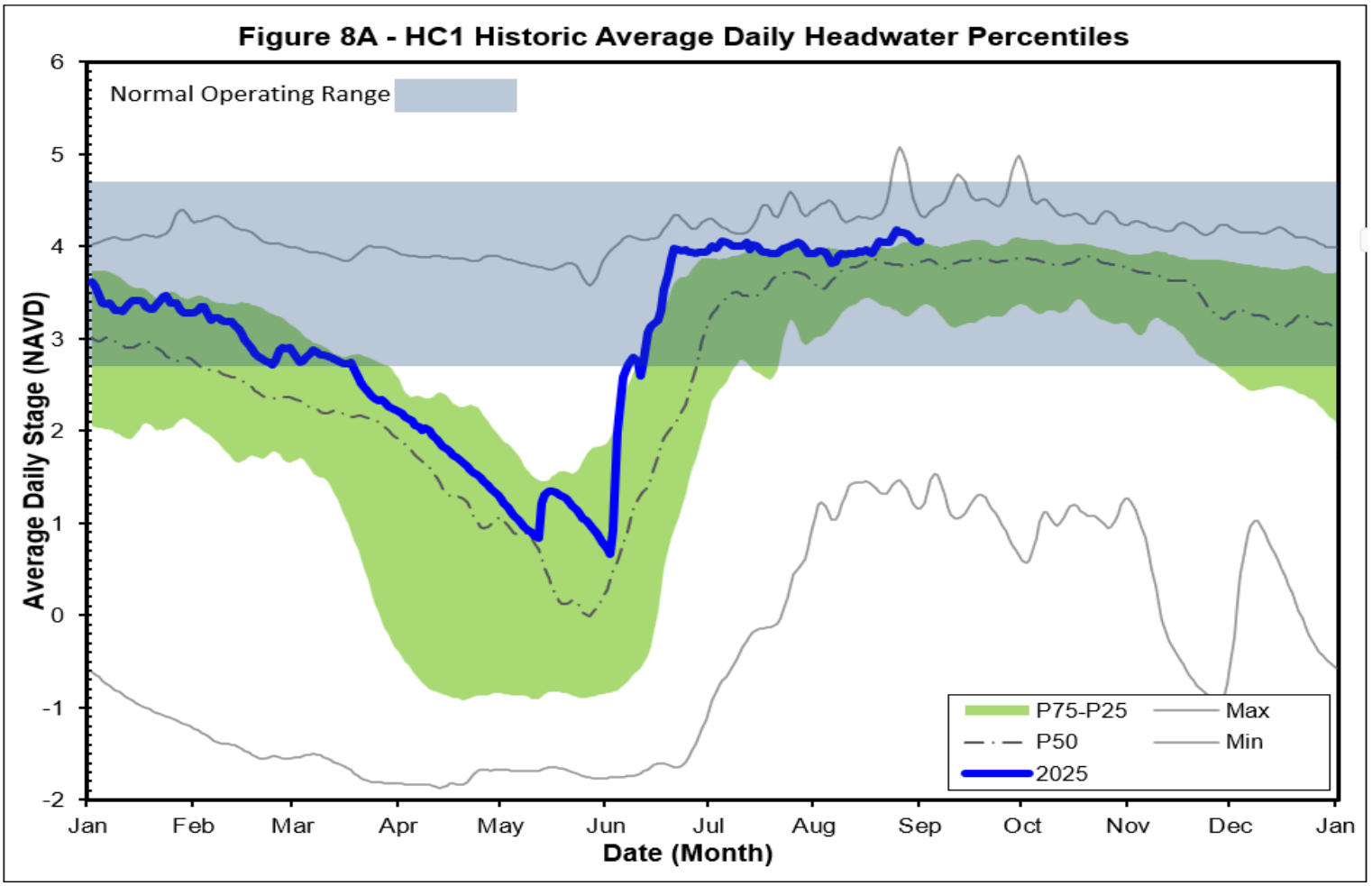


Figure 8A - HC1 Historic Average Daily Headwater Percentiles
Normal Operating Range
Average Daily Stage (NAVD)
6
5
4
3
2
1
0
-1
-2
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)
P75-P25
Max
P50
Min
2025

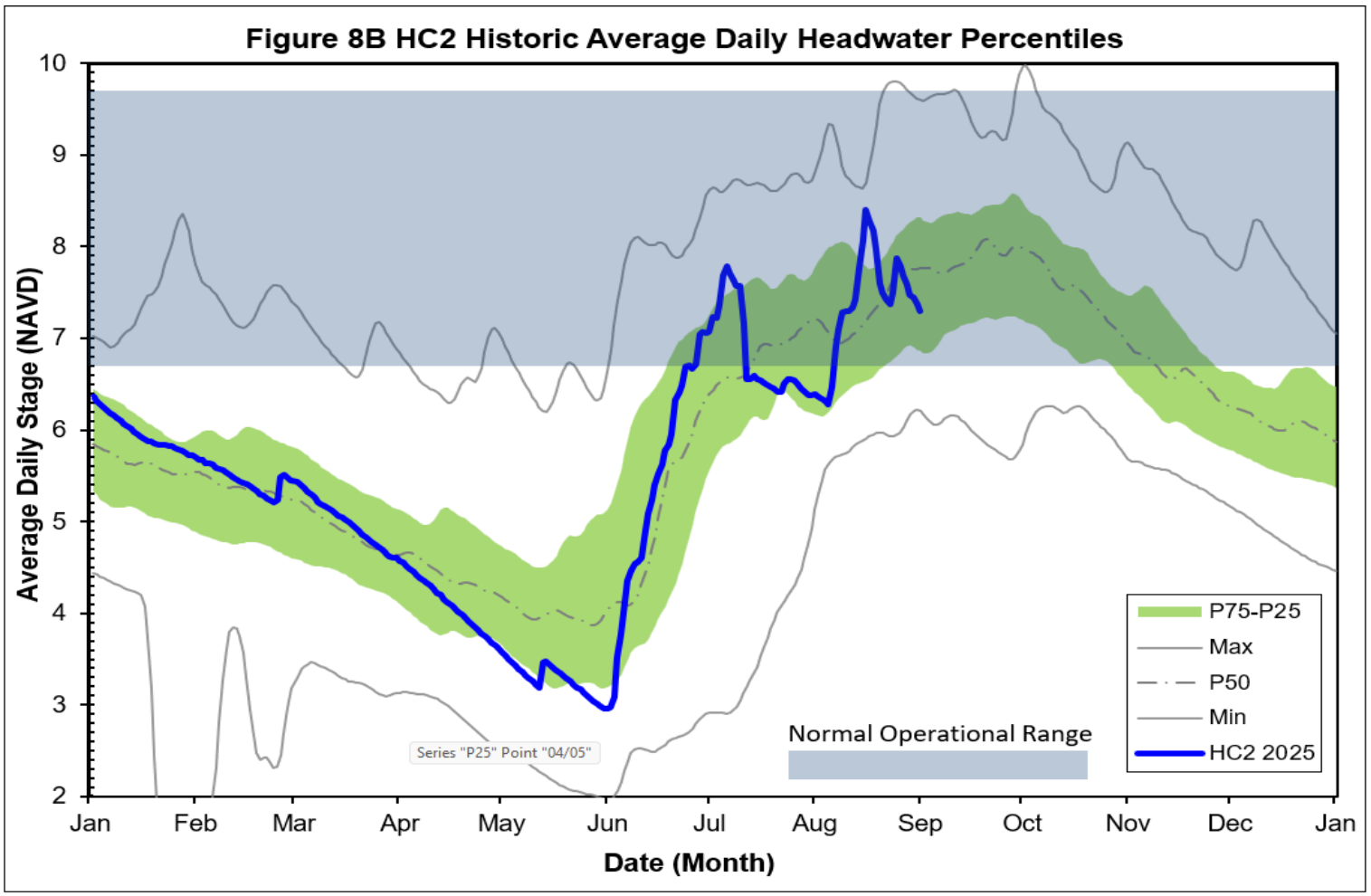


Figure 8B HC2 Historic Average Daily Headwater Percentiles
Average Daily Stage (NAVD)
10
9
8
7
6
5
4
3
2
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)
Series "P25" Point "04/05"
Normal Operational Range
P75-P25
Max
P50
Min
HC2 2025

Last Reading Date :		August 31, 2025					
Previous Period Reading Date:		July 31, 2025					
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-NGVD							
C-462	Immokalee	Lower Tamiami Aquifer	2.98	30.20	33.18	↑	GREEN
C-1004R	Naples	Lower Tamiami Aquifer	1.30	1.90	3.20	↑	GREEN
C-1224	Marco Lakes	Lower Tamiami Aquifer	0.50	2.63	3.13	↑	GREEN
C-948R	Golden Gate	Mid Hawthorn Aquifer	-0.30	28.84	28.54	↓	
C-951R	Golden Gate	Lower Tamiami Aquifer	0.69	3.58	4.27	↑	
L-2194	Bonita Springs	Sandstone Aquifer	1.54	4.66	6.20	↑	GREEN
L-2195	Bonita Springs	Surficial Aquifer System	1.42	9.16	10.58	↑	GREEN
L-738	Bonita Springs	Lower Tamiami Aquifer	0.93	0.18	1.11	↑	GREEN

TABLE 2
BCB WATER CONDITIONS SUMMARY
AUGUST 2025

BIG CYPRESS BASIN

AUGUST 31, 2025

GROUNDWATER LEVEL DAILY TRENDS COMPARED TO HISTORICAL AVERAGE

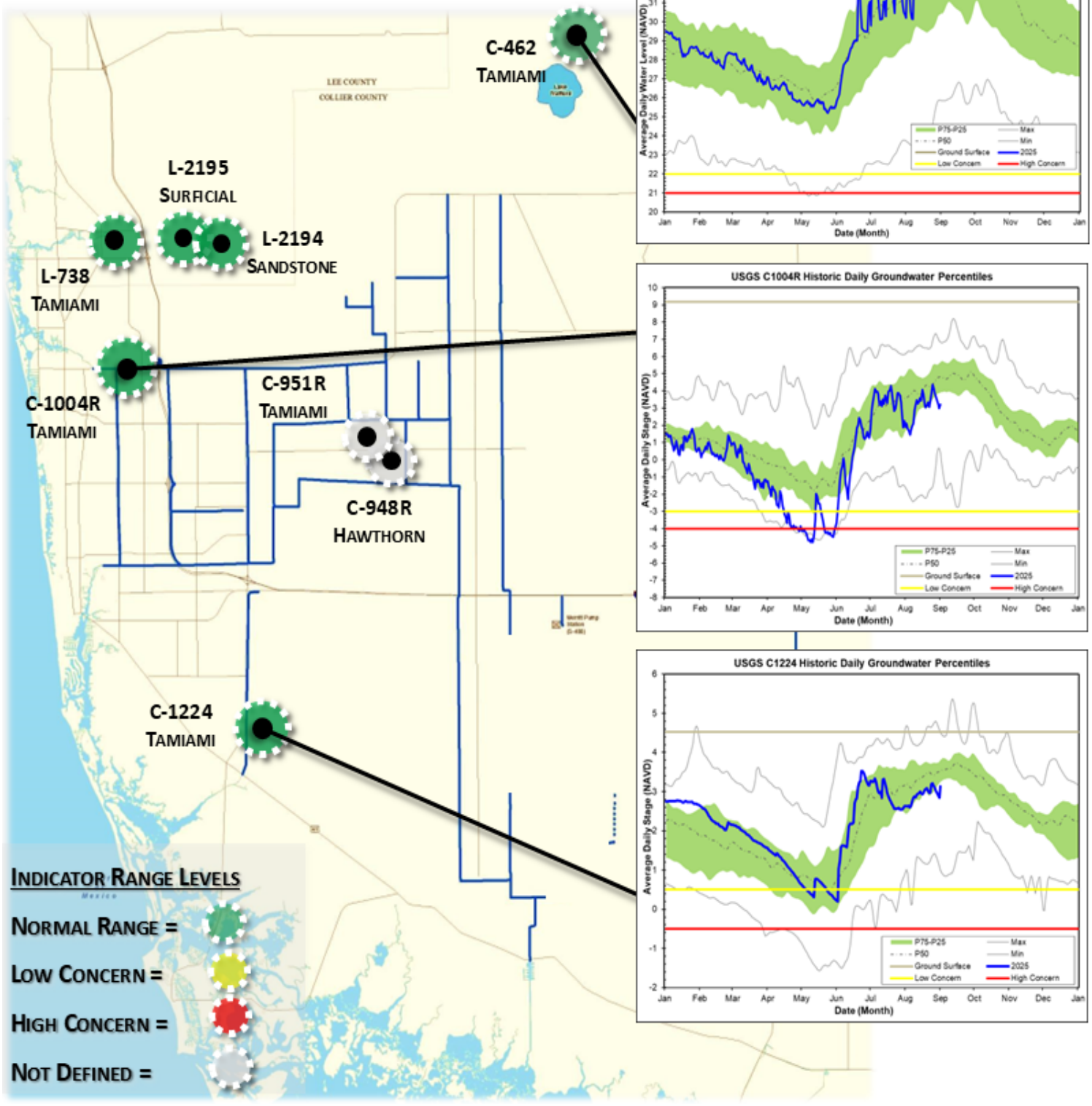


FIGURE 9

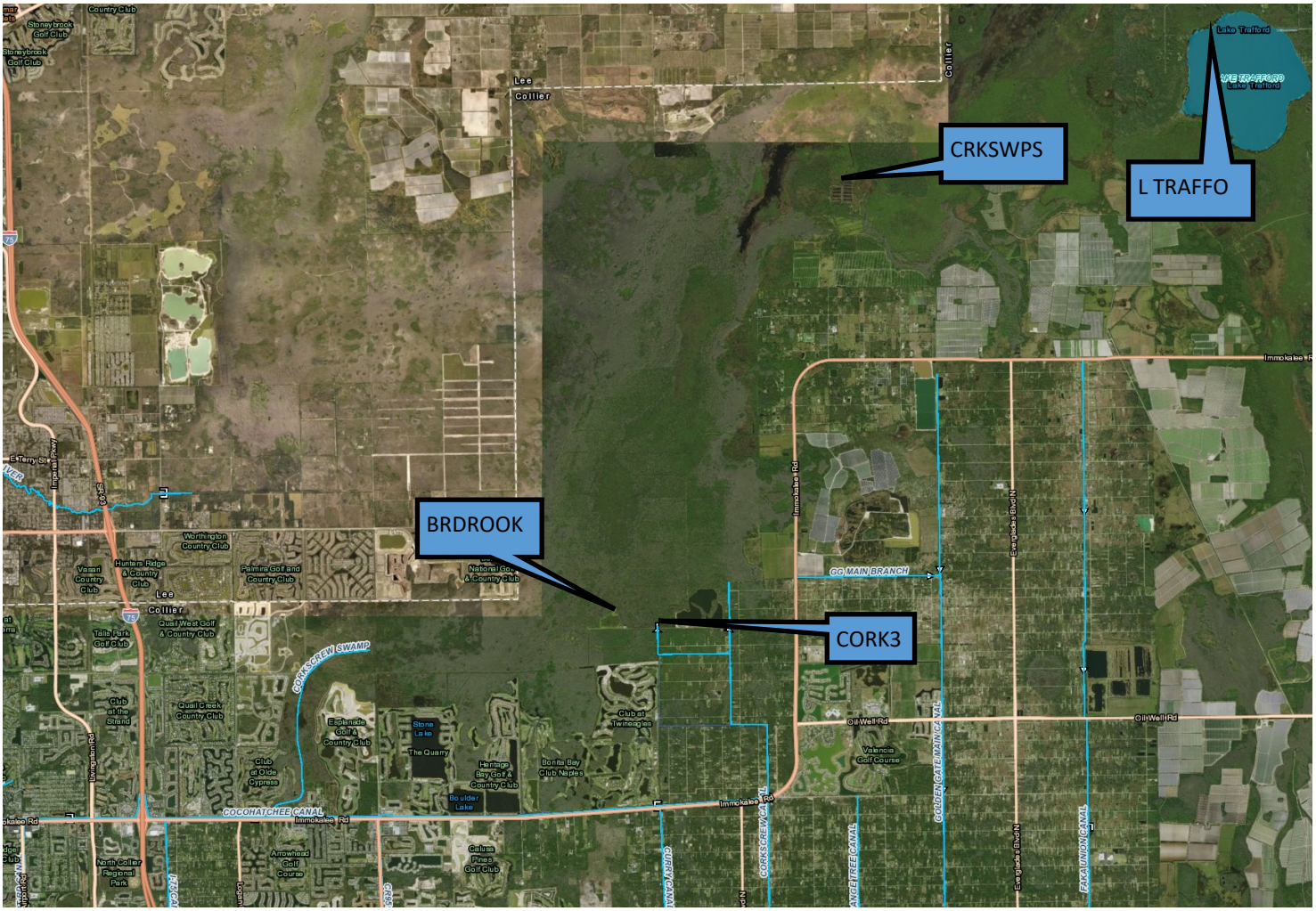


Figure 10-Corkscrew Historic Average Daily Headwater Percentiles (1984-2024)

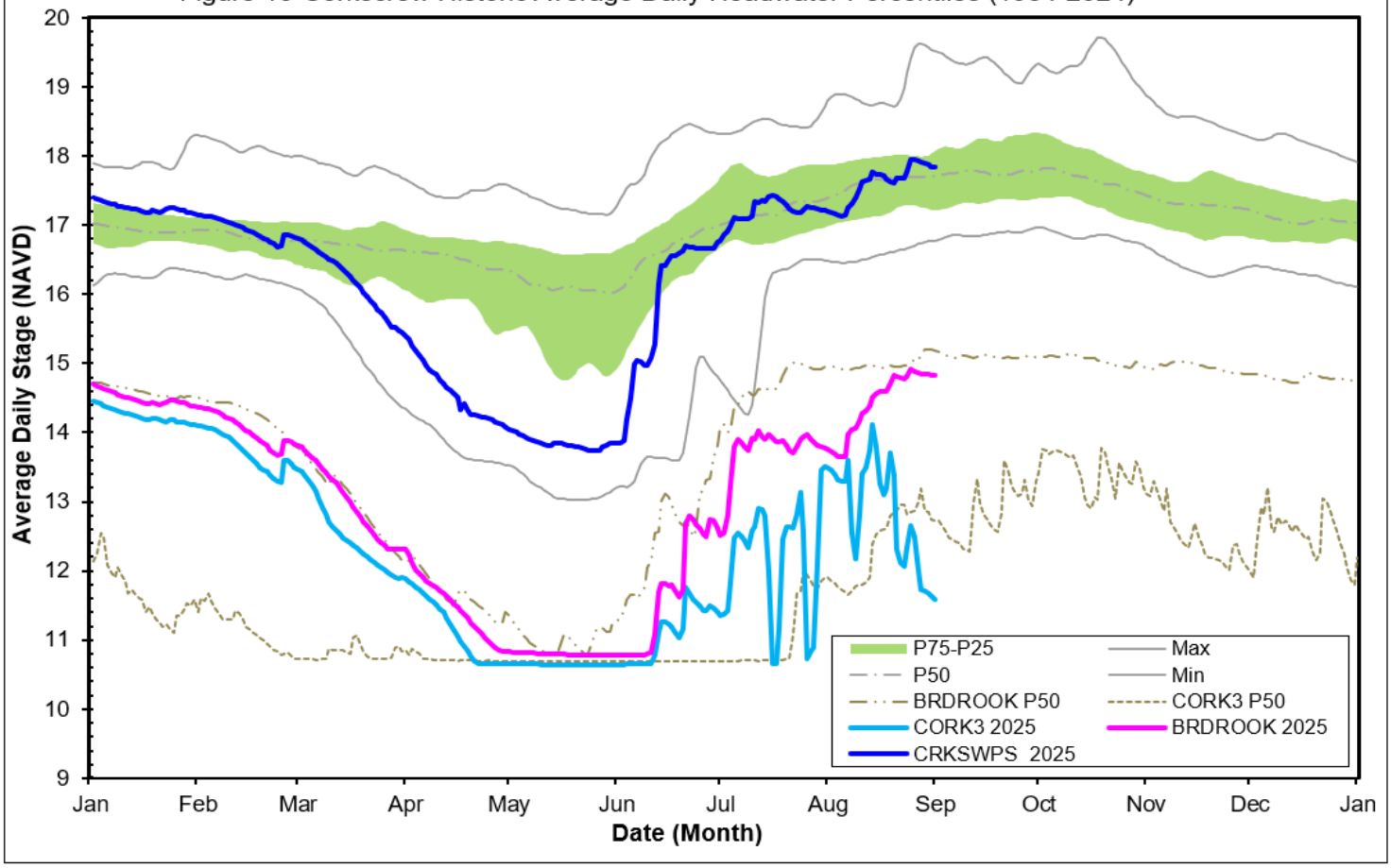
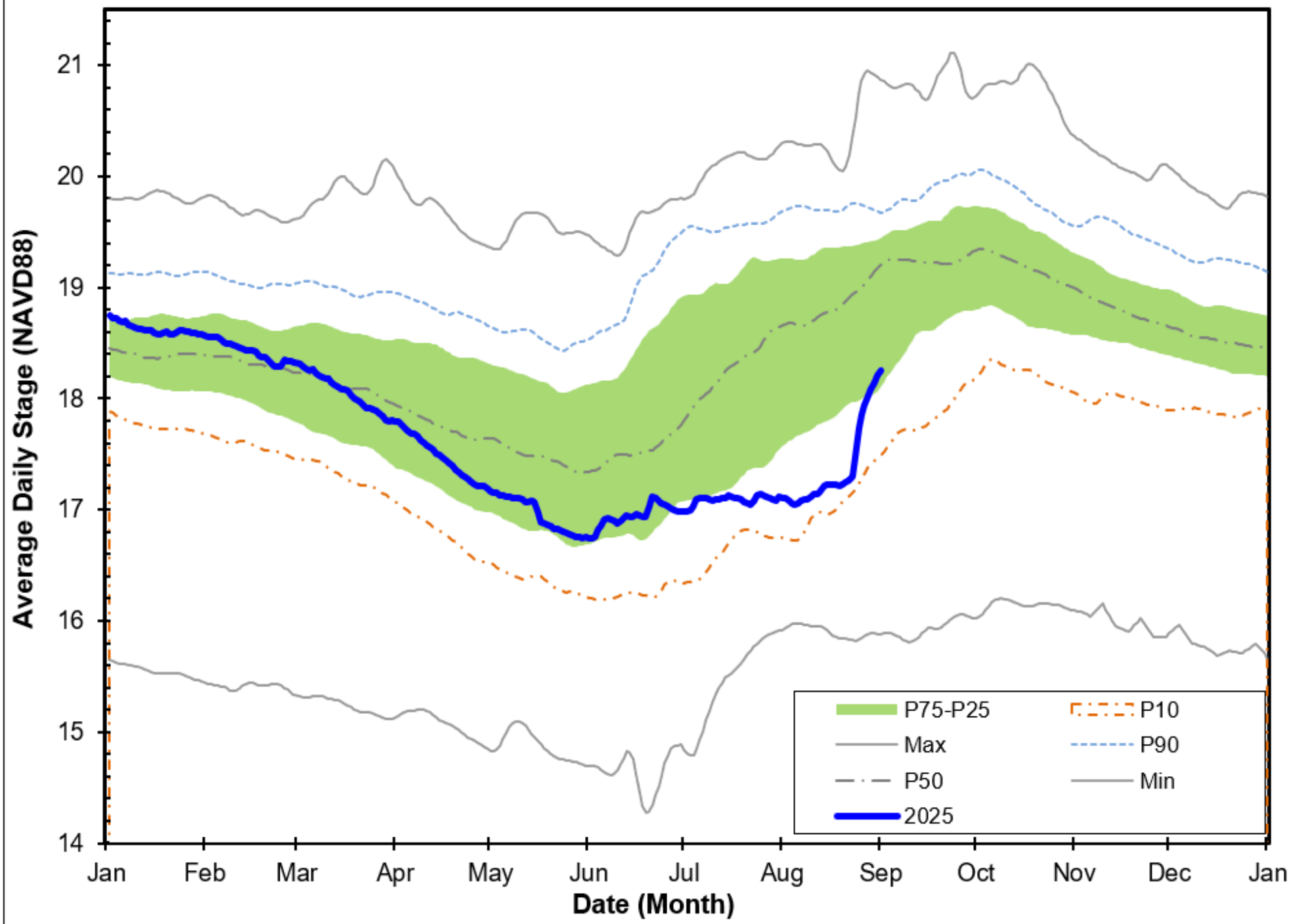
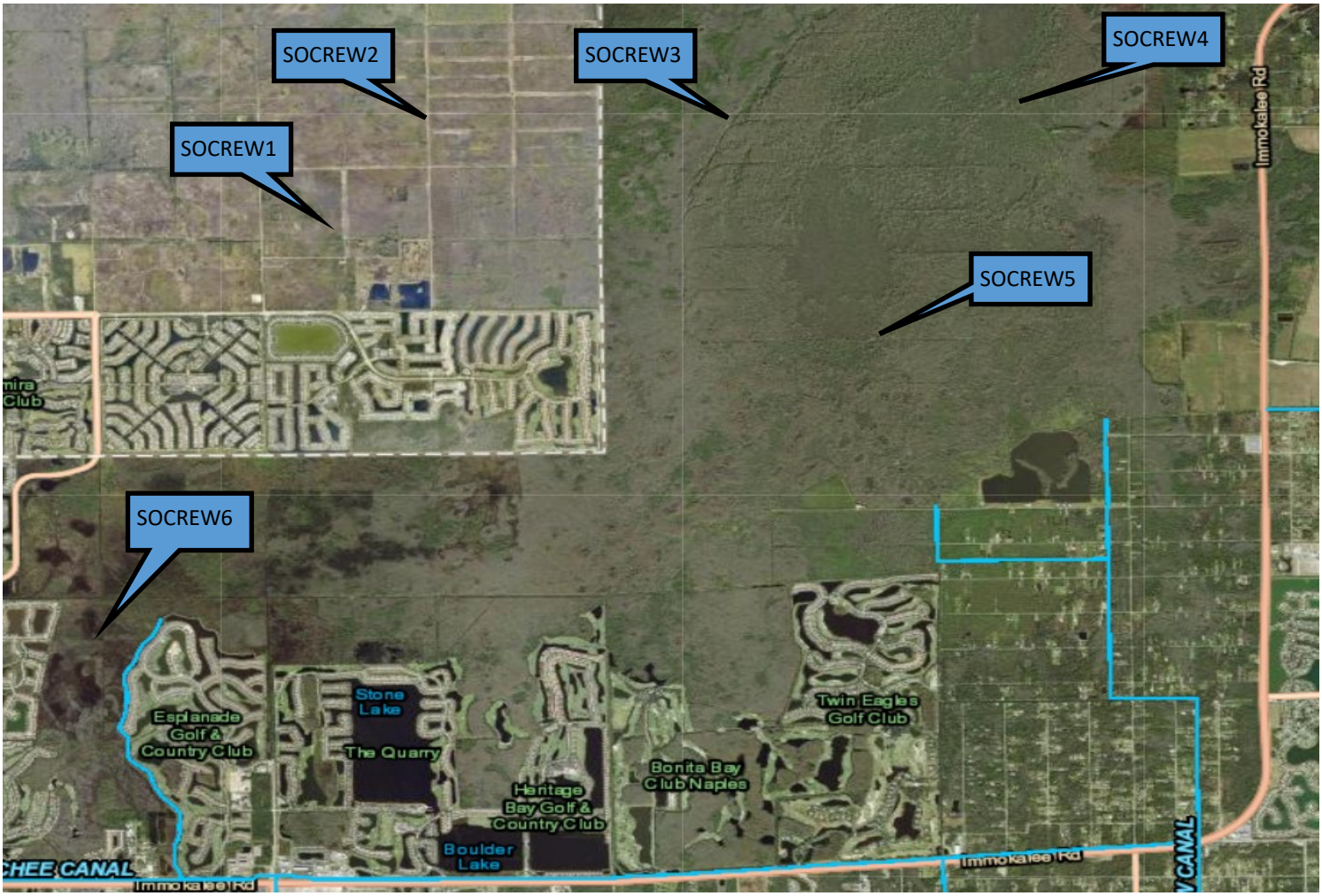


Figure 11 Lake Trafford Historic Average Daily Headwater Percentiles (1941-2024)




SOCREW1
SOCREW2
SOCREW3
SOCREW4
SOCREW5
SOCREW6
Immokalee Rd
Esplanade Golf & Country Club
Stone Lake
The Quarry
Heritage Bay Golf & Country Club
Boulder Lake
Bonita Bay Club Naples
Twin Eagles Golf Club
Immokalee Rd
Immokalee Rd

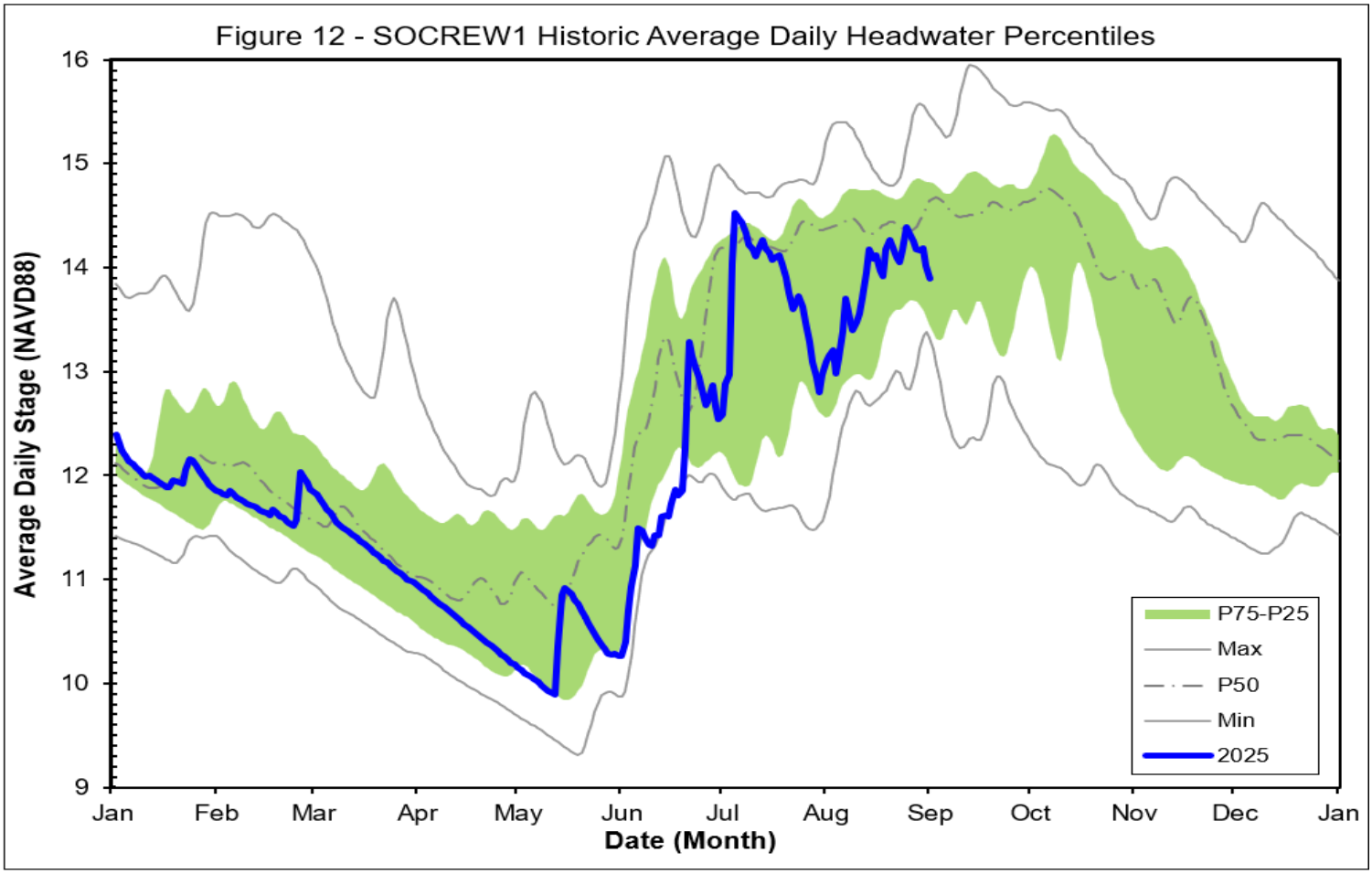


Figure 12 - SOCREW1 Historic Average Daily Headwater Percentiles
Average Daily Stage (NAVD88)
16
15
14
13
12
11
10
9
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)
P75-P25
Max
P50
Min
2025

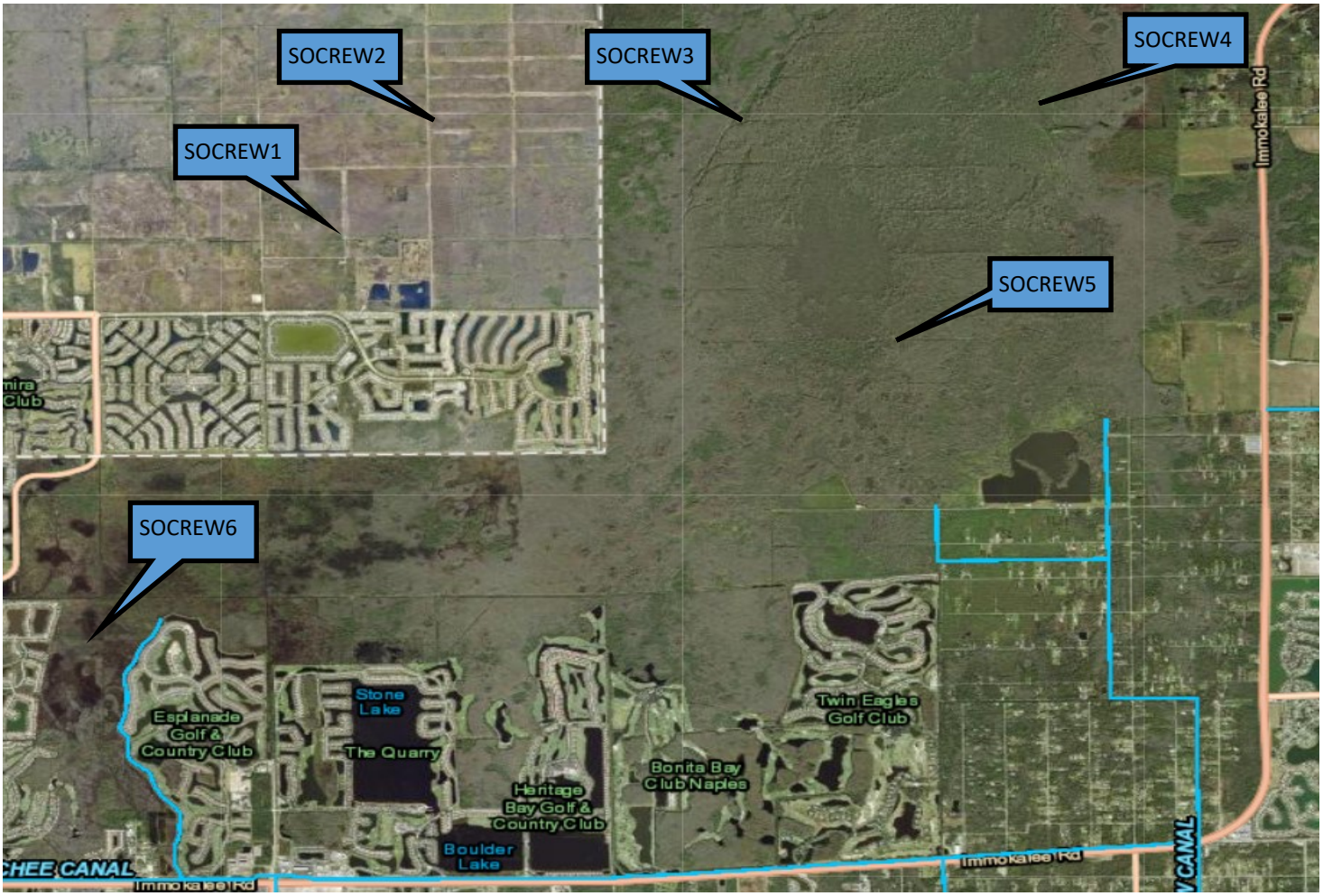


Figure 13 - SOCREW2 Historic Average Daily Headwater Percentiles (2016 - 2024)