SOUTH FLORIDA WATER MANAGEMENT DISTRICT

SEPTEMBER 2025

BIG CYPRESS BASIN HYDROLOGIC REPORT

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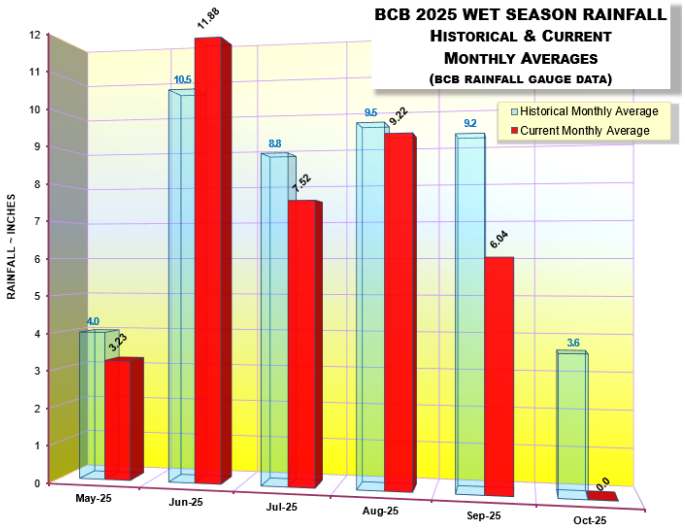
SUMMARY OF HYDROLOGIC CONDITIONS IN THE BIG CYPRESS BASIN

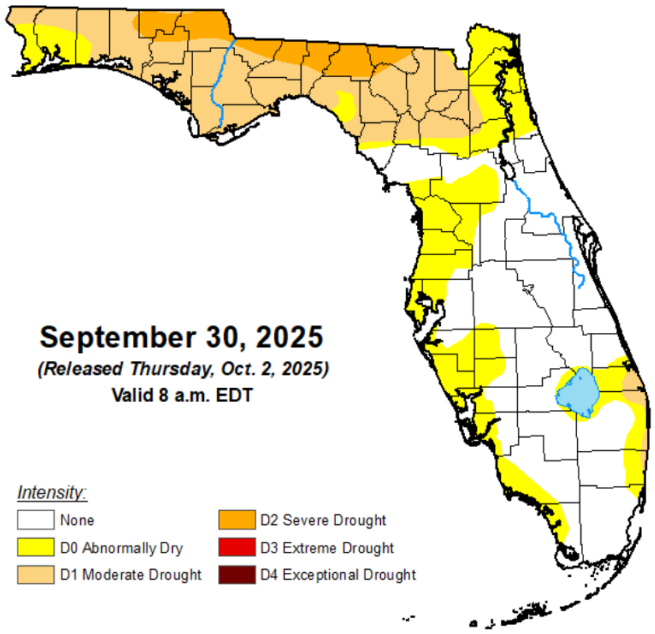
September 2025

SUMMARY



September 2025 rainfall was noticeably below normal for the Big Cypress Basin (BCB). Based upon rain gauge data, BCB saw an average rainfall of just 6.04 inches, amounting to just 65% of normal BCB precipitation for the month of September.

September's drier than normal conditions moved the BCB to below normal rainfall for the 2025 wet season to date. The average gauge measured rainfall from May 1st through September 30th is 42.0 inches. During this same 5-month period in 2025, the BCB received 37.9 inches (90% of normal).



As a result of the drier than normal conditions, the U.S. Drought Monitor elevated the drought condition along Coastal Collier County from "None" to "D0 Abnormally Dry."

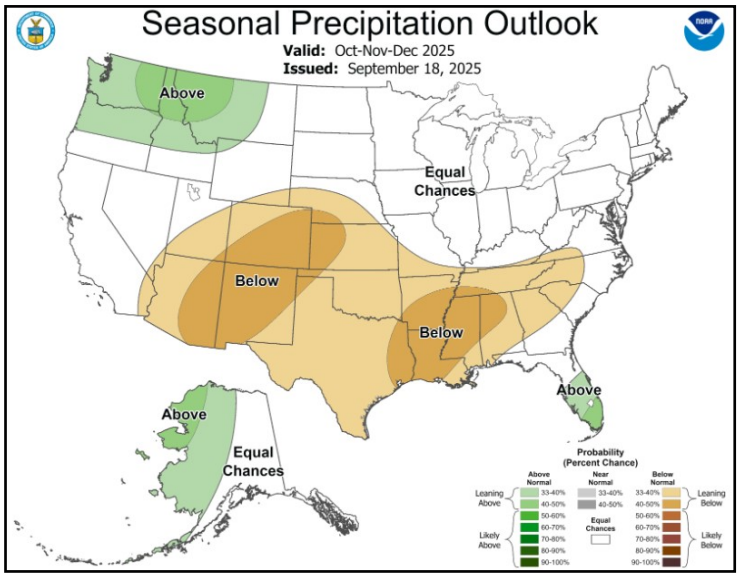
Though rainfall ultimately ended the month below normal, the potential for tropical weather development remained high during September due seasonal warm ocean temperatures combined with the Madden/Julian Oscillation (MJO) entering the western hemisphere. MJO transit into the western hemisphere is often associated with the potential for increased tropical system development, and September 2025 was no exception. The impact of September's tropical systems on Florida, however, was mitigated by a persistent and somewhat unusual early season cold front which stretched across the State. Winds associated with this frontal boundary helped steer the storms north then northeast, keeping them off the east coast of Florida. Though beneficial from a tropical weather threat perspective, this pattern contributed to conditions less favorable for precipitation in the BCB.

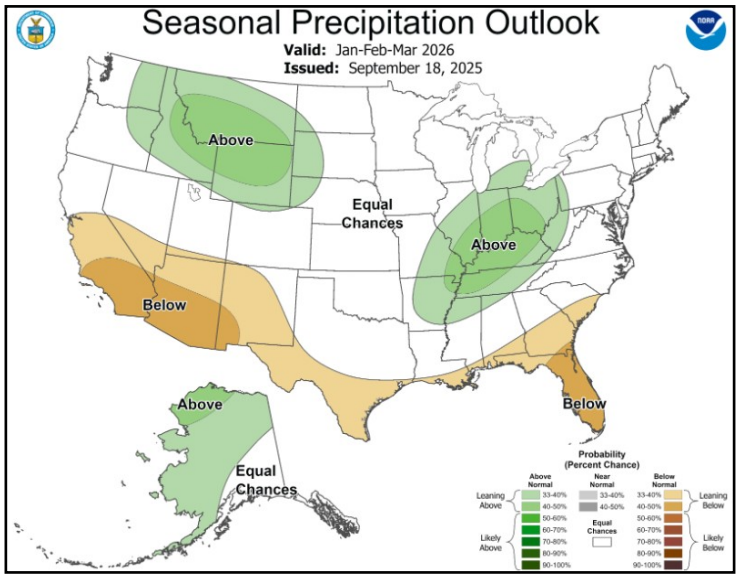
As a result of the traditionally high likelihood of tropical impacts in September, the BCB's water control structures remained in Flood Control operations for the majority of the month. As September drew to a close, and with no imminent tropical threats materializing, the system began a gradual transition to water conservation operations to be optimally prepared for the upcoming dry season.

The National Weather Service Climate Prediction Center anticipates a transition from El Niño Southern Oscillation neutral conditions (ENSO-neutral) to La Niña, with a 71% chance of La Niña from October through December 2025, and a 54% chance of La Niña persisting through February 2026. La Niña

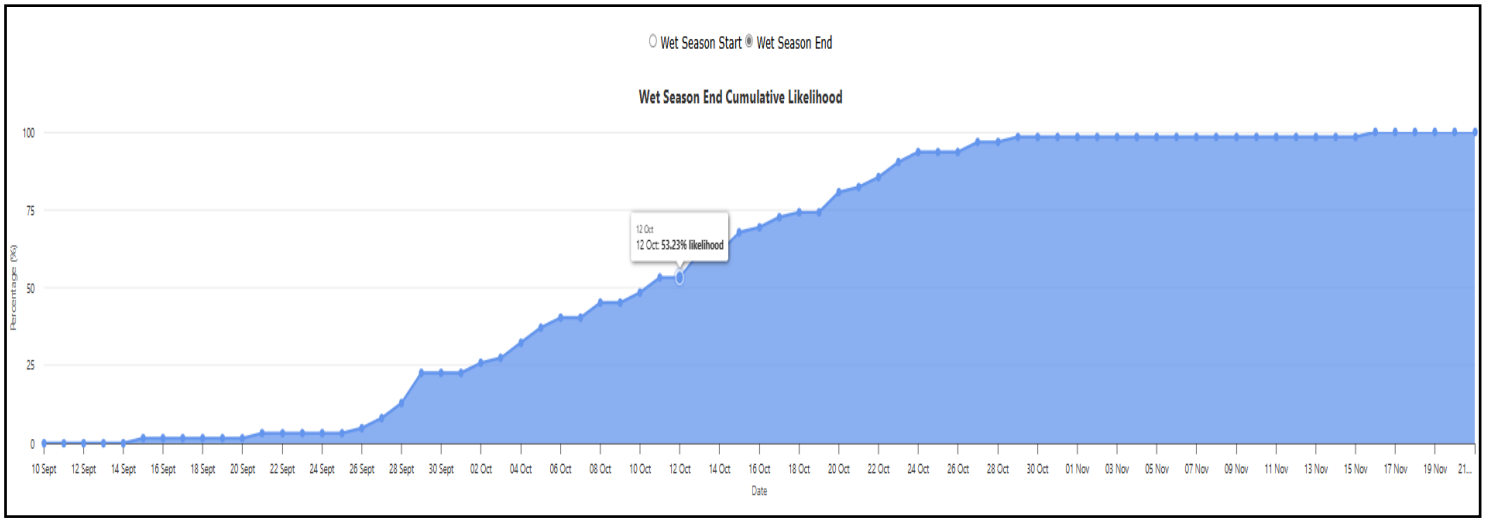
conditions are often associated with drier than normal conditions in Florida, as was seen in the 2024/2025 dry season.

Despite the anticipated onset of La Niña conditions, the National Weather Service predicts a slightly elevated probability of above normal precipitation in the months of October through December. The January through March outlook, however, switches to a drier forecast, with slightly increased probability of drier than normal conditions in early 2026.





Though the exact date of the end of the wet season is not officially declared until after it occurs, the highest likelihood is that it will end in mid-October, with a 53% probability of it ending by October 12th in any given year.



With the reduced rainfall in September – and the likelihood of drier than normal conditions in the upcoming spring – it is imperative that the BCB take advantage of water storage opportunities in the remaining days of the 2025 Wet Season. To this end, BCB water managers will operate the canal system to capture and retain rainfall in the coming weeks to maximally prepare for the upcoming dry season. Though the wet season will almost certainly end in October, the potential for tropical precipitation exists well into November. BCB water managers will stand ready to transition to flood control operations should the need arise.

SEPTEMBER 2025 BCB RAINFALL

The Basin-wide averaged, gauge-measured, monthly rainfall was **6.04** inches in September. This measured rainfall was 3.14 inches below the historical monthly BCB average for the month of September **(see Figures 1, 2, 3A and Table 1)**. In September, the rain gauge with the highest measured precipitation was R-7 (SGGE Weather Station), which recorded 10.31 inches. R-4 (Freedom Park) received the lowest rain gauge monthly total with only 2.29 inches.

Figures 3B shows September's calculated average rainfall estimates for each of the Basin's watersheds, based on gauge adjusted radar (Raindar). The Henderson - Belle Meade watershed saw the highest Raindar average of 8.71 inches and the Freedom Park watershed saw the lowest Raindar average of 3.65 inches. The BCB's overall calculated areal weighted average Raindar rainfall was 6.54 inches for the month, slightly exceeding, but consistent with, the basin-wide rain gauge average of 6.04 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 September, BCB structures remained in flood control operations, until the end of the month when the seasonal transition to water conservation operations began. By the end of September – as the system began its transition to water conservation operations – most canals were at or above the 50th percentile. Areas that respond more quickly to operational changes rose to the 75th percentile, while a few locations rose to the 90th percentile. BCB water managers will complete the transition to water conservation operations in October, barring a forecast of significant rainfall which necessitates a temporary resumption of flood control protocols. BCB canal conditions as of September 30, 2025 are shown on **Figure 4**.

GOLDEN GATE SYSTEM

Control structures in the Golden Gate Main Canal (GG Main) system maintained flood control operations for most of September, with discharges generally between 400 and 600 cubic feet per second (cfs) during the first half of the month and slightly lower in the second half of the month. When the system began its transition to water conservation operations at the end of the month, discharges temporarily dropped as the canal system responded to higher operating regimens. At month's end, GG Main immediately upstream of GG1 rose to the 90th percentile, while the middle regions (GG2 through GG4) rose to the 75the percentile **(see Figure 5)**. The upper reaches of the system (upstream of GG5) finished the month between the 25th and 75th percentile. Water levels in Golden Gate Main tributary canals generally remained between the 25th and 75th percentile, with occasional short term dips associated with the operation of manual flood control structures in advance of forecast rainfall events.

COCOHATCHEE SYSTEM

The Cocohatchee Canal was kept in flood control operations in September, until the end of the month when it began its transition to water conservation operation. By the end of September, water levels in the Lower Cocohatchee Canal responded nicely to the return to water conservation operations. Upstream of COCO1 the water level rose to the 75the percentile, while between COCO2 and COCO3 levels rose to the 90th percentile. The middle of the system (COCO3to COCO4) responded more slowly to the operational changes, and remained between the 25th and 50th percentile at the end of the month. Upstream of COCO4, including the Corkscrew Canal, rose to the 90th percentile. (**Figures 6A, 6B, & 6C**).

FAKA UNION SYSTEM

As with the other BCB canals, the Faka Union system began its transition to water conservation operations at the end of September. Due to the lower than normal rainfall, discharges from FU4S toward the Picayune

Strand Restoration Project were intermittent during the first half of September; began to taper off mid month; and ceased entirely by the last week of the month. By the end of September, the portion of the Faka Union Canal immediately upstream of FU4S was operating slightly below the 75th percentile, while upstream of FU5 levels had risen above the 75th percentile. Downstream levels (FU4 to S487) also remained at the 75th percentile. Due to the minimal flows coming from the north, pumping at S487 was accomplished primarily through the use of the low-flow electric pumps, with occasional use of the larger diesel pumps as needed to maintain target headwater levels. 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 completion of the Miller Canal plugging in June. (**Figures 7A & 7B**).

HENDERSON CREEK SYSTEM

As with the other BCB canals, water control structures in the Henderson Creek system began their transition to water conservation operations at the end of September. Discharges from HC1 peaked in mid-September; quickly tapered off after; and ceased by the last week of the month. Canal water levels in the Henderson Creek system remained between the 25th and 75th percentile by month's end. (**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 generally declined in September due to the sub-normal rainfall. Only two sites C462 and C948R showed modest increases in stage, while all others showed varying levels of recession (**Table 2 and Figure 9**). By the end of September, C-462, north of Lake Trafford, was holding at the 75th percentile, well above the level of low concern. C-1224, near Henderson Creek, saw a notable recession from its mid-month peak and dropped to just below the 25th percentile. C-1004R, near the Cocohatchee Canal, saw a similar decline from its mid-month peak and dropped to below the 10th percentile by month's end. Though C1224 and C1004R both saw significant drops in the second half of September, they remained above the level of low concern.

L-738 a Tamiami Aquifer well in Bonita Springs also saw a sharp decline in the second half of September and dropped to the 10th percentile by month's end, though it remained above the level of low concern. L-2194, a Sandstone Aquifer well in Bonita Springs, similarly declined from its mid-September peak, and dropped to under the 10th percentile by months end, approximately 5 feet above the level of low concern. Finally, L-2195, a surficial aquifer well in Bonita Springs also declined in the second half of September and fell to between the 10th and 25th percentile, approximately 3.5 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. Water levels in CRKSWPS and BRDROOK remained stable in September. CRKSWPS rose to between the 50th and 75th percentile and BRDROOK was just below the 50th percentile by the end of the month. CORK3 (a manually operated structure south of BRDROOK) remained below the 50th percentile in September due to required gate operations to accommodate forecast rainfall. This gate will be gradually closed as wet season ends. **Figure 11** shows that Lake Trafford continued its recovery in the first half of September and leveled off just below the 50th percentile by the end of September.

FIGURE 1

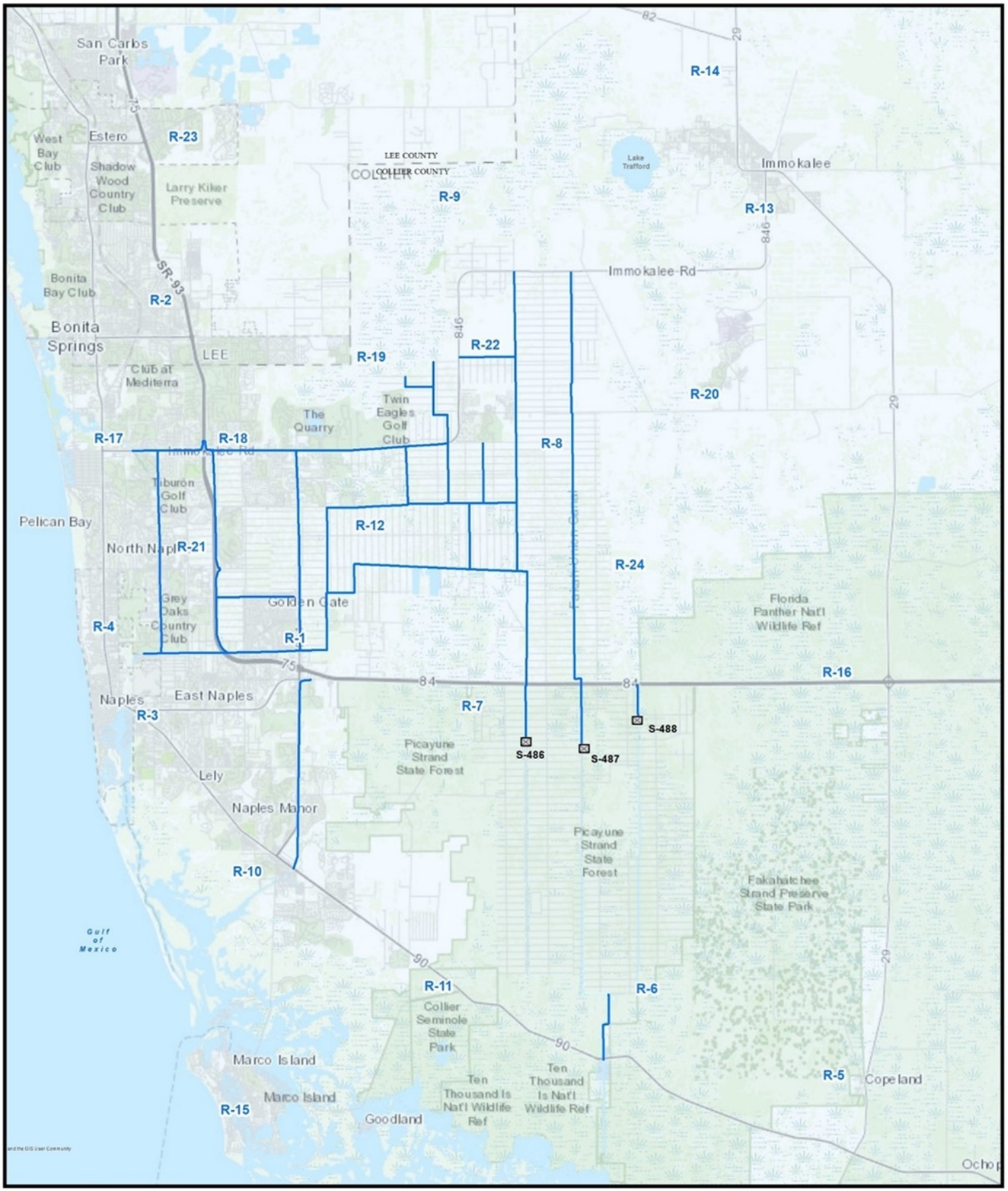
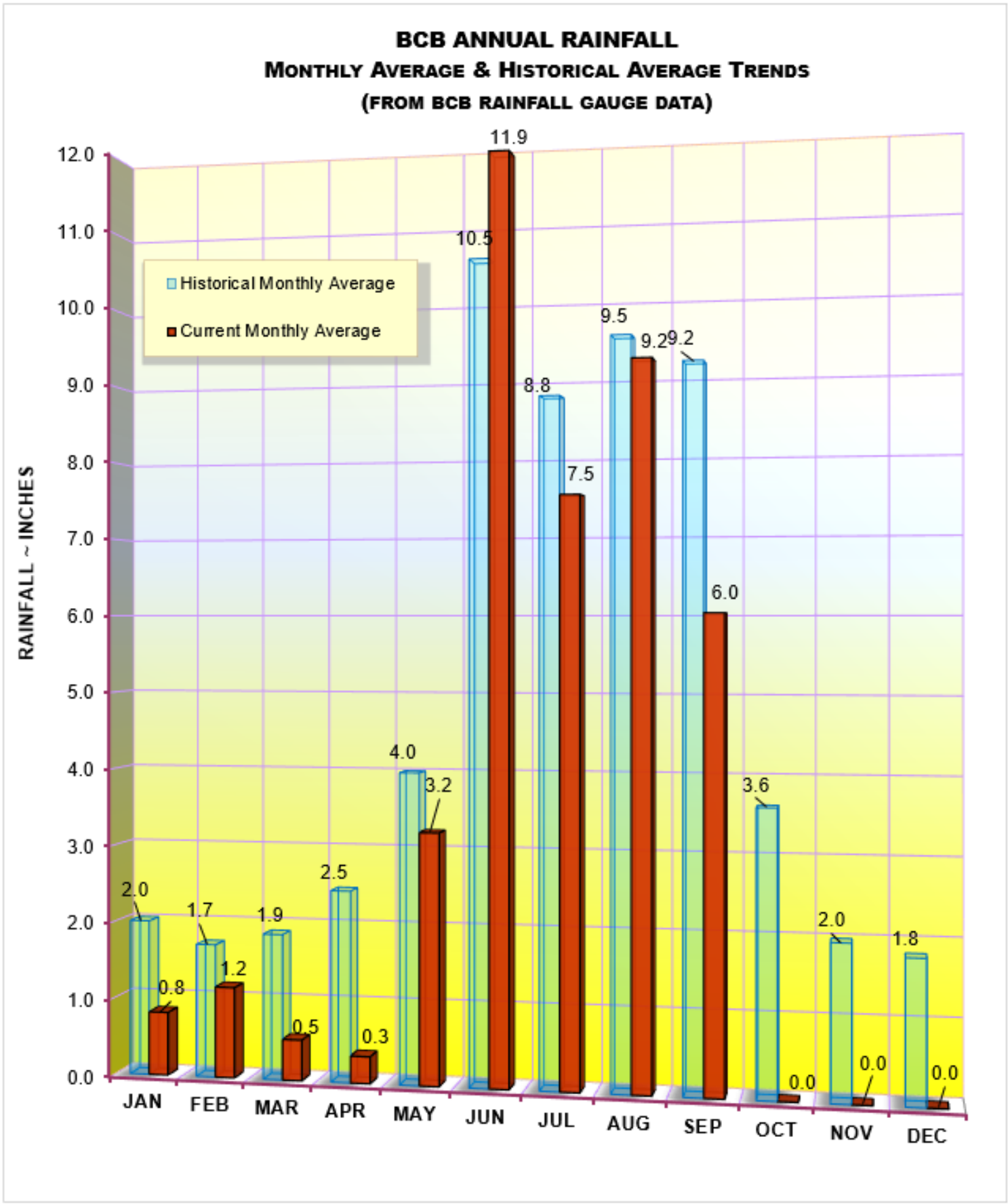

San Carlos Park
West Bay Club
Estero
R-23
Shadow Wood Country Club
Larry Kiker Preserve
LEE COUNTY
COLLIER COUNTY
COLLIER
R-9
Lake Trafford
Immokalee
R-14
R-13
846
Immokalee Rd
Bonita Bay Club
SR-93
R-2
Bonita Springs
LEE
R-19
R-22
Club at Mediterra
The Quarry
Twin Eagles Golf Club
R-20
R-17
R-18
R-8
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
Ochop

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

STATION INDEX NO.	STATION NAME	Sep-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	5.41	10.65	-5.24	33.49	57.95	-24.46
R-2	BONITA SPRINGS WATER PLANT	5.49	8.26	-2.77	33.08	45.66	-12.58
R-3	COLLIER COUNTY COURTHOUSE	5.28	8.45	-3.17	32.28	46.35	-14.07
R-4	FREEDOM PARK	2.29	9.21	-6.92	32.78	49.92	-17.14
R-5	FAKAHATCHEE STRAND HQ	7.38	9.08	-1.70	38.74	52.46	-13.72
R-6	DAN HOUSE PRAIRIE	4.40	8.59	-4.19	30.49	46.09	-15.60
R-7	SGGE WEATHER STATION	10.31	10.86	-0.55	47.19	55.14	-7.95
R-8	FAKA UNION #5	5.09	8.73	-3.64	40.34	54.58	-14.24
R-9	CORKSCREW SWAMP NORTH END	4.58	7.91	-3.33	35.64	46.05	-10.41
R-10	ROOKERY BAY HQ	9.05	9.73	-0.68	40.33	49.17	-8.84
R-11	COLLIER SEMINOLE STATE PARK	7.24	9.45	-2.21	39.89	49.91	-10.02
R-12	G.G. FIRE STATION	5.38	9.27	-3.89	42.02	52.39	-10.37
R-13	IMMOKALEE LANDFILL	5.64	8.06	-2.42	33.68	45.37	-11.69
R-14	IFAS	10.03	7.06	2.97	42.06	44.06	-2.00
R-15	MARCO R.O. PLANT	10.21	8.35	1.86	41.52	45.82	-4.30
R-16	FAKAHATCHEE STRAND NORTH END	5.62	8.68	-3.06	33.80	52.97	-19.17
R-17	COCO#1	4.73	8.11	-3.38	31.84	42.77	-10.93
R-18	COCO#3	4.76	9.13	-4.37	34.15	49.64	-15.49
R-19	BIRD ROOKERY	8.42	10.74	-2.32	42.99	55.04	-12.05
R-20	AVE MARIA	4.34	8.27	-3.93	32.69	46.66	-13.97
R-21	I75W2	3.84	10.72	-6.88	34.49	54.06	-19.57
R-22	GG#7	4.60	10.32	-5.72	40.62	51.25	-10.63
R-23	FPWX	5.35	9.07	-3.72	31.86	47.91	-16.05
R-24	DSOTO10	5.41	11.50	-6.09	38.09	59.69	-21.60
	AVERAGES	6.04	9.18	-3.14	36.84	50.04	-13.20

FIGURE 2
BCB GAUGE RAINFALL MONTHLY AVERAGES



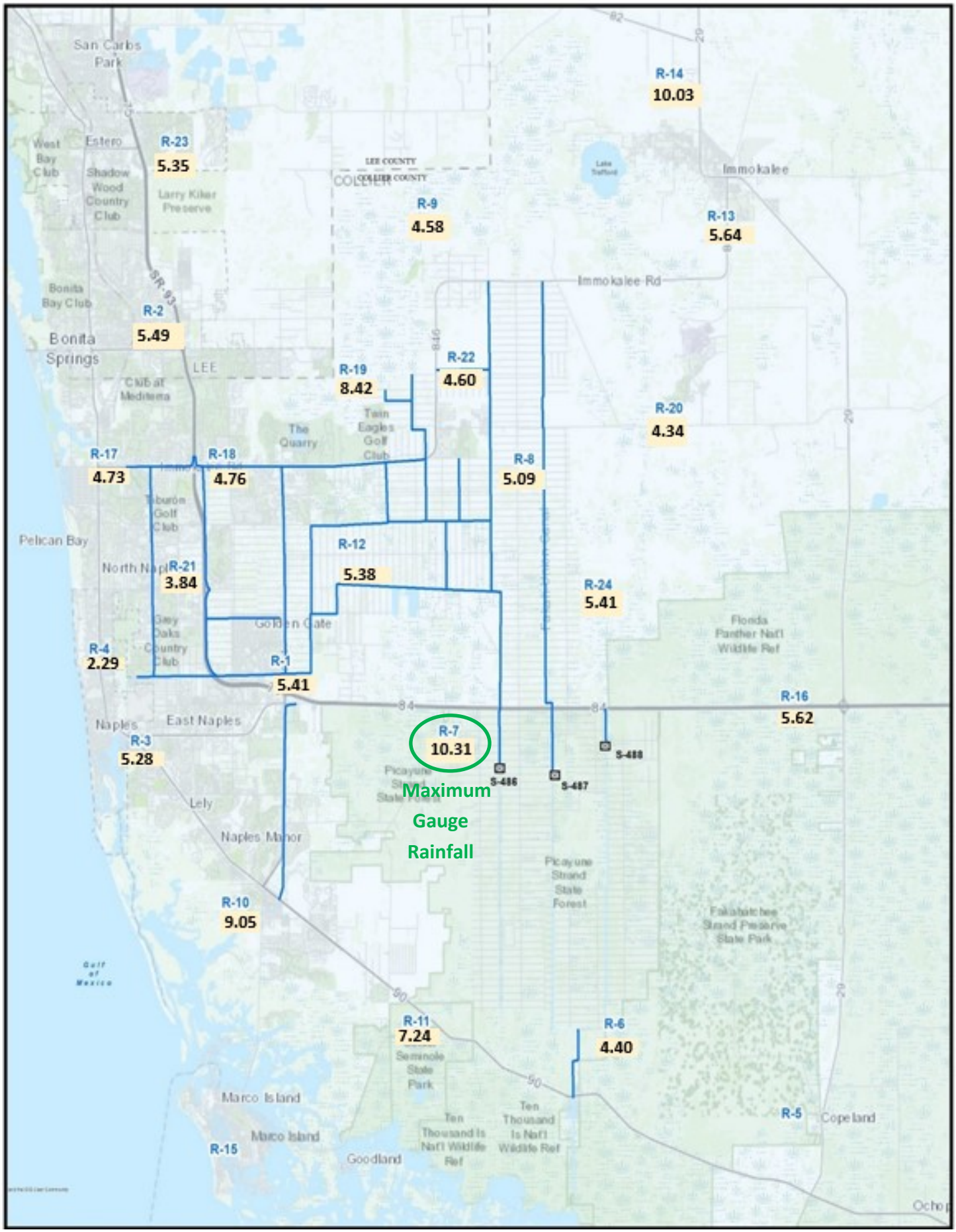
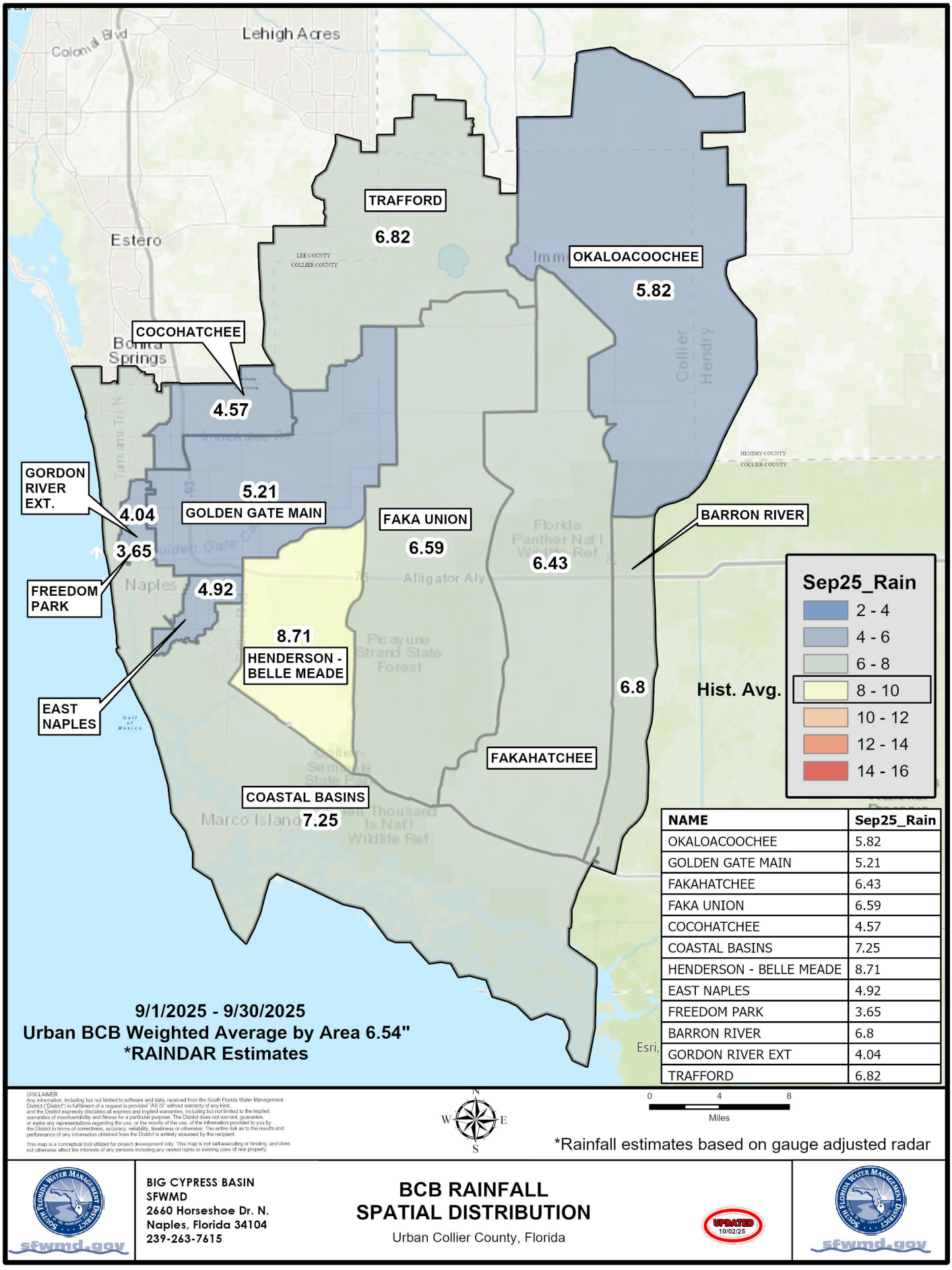


FIGURE 3A
BCB RAINFALL DISTRIBUTION



NAME	Sep25_Rain
OKALOACOOCHEE	5.82
GOLDEN GATE MAIN	5.21
FAKAHATCHEE	6.43
FAKA UNION	6.59
COCOHATCHEE	4.57
COASTAL BASINS	7.25
HENDERSON - BELLE MEADE	8.71
EAST NAPLES	4.92
FREEDOM PARK	3.65
BARRON RIVER	6.8
GORDON RIVER EXT	4.04
TRAFFORD	6.82

BIG CYPRESS BASIN
SFWMD
2660 Horseshoe Dr. N.
Naples, Florida 34104
239-263-7615

BCB RAINFALL SPATIAL DISTRIBUTION

Urban Collier County, Florida

UPDATED 10/02/25

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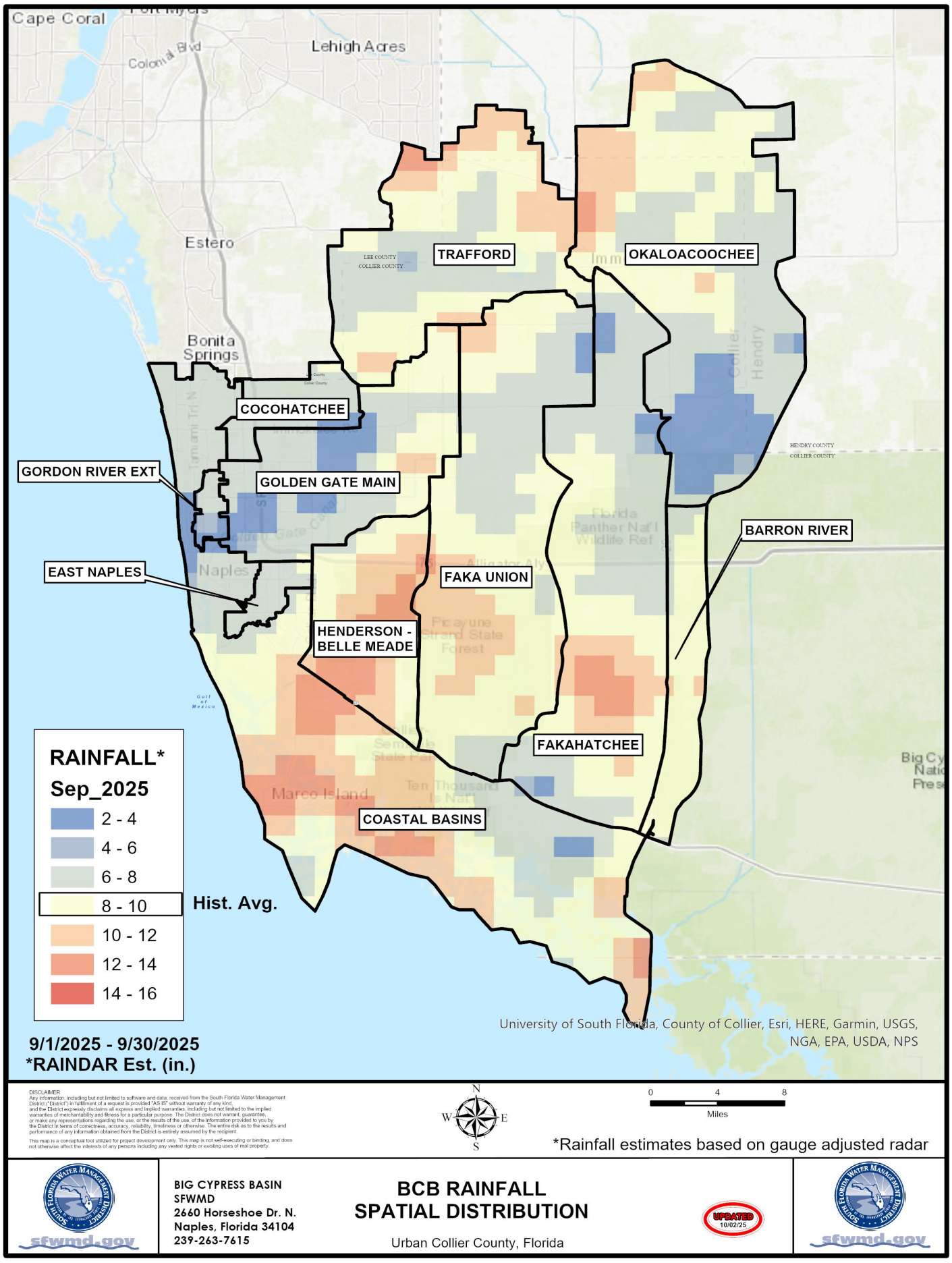
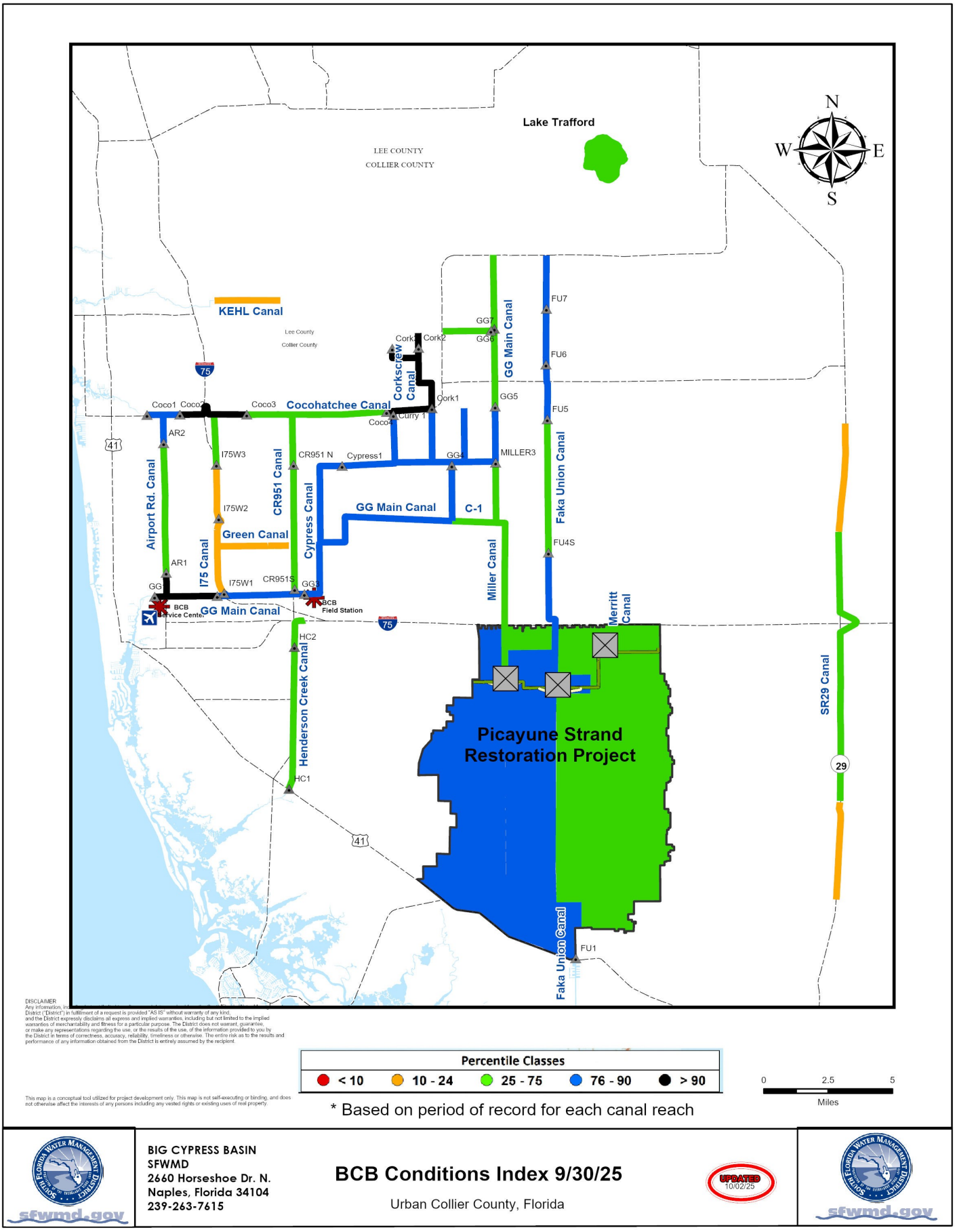
SEPTEMBER 2025—FIGURE 3B



SEPTEMBER 2025—FIGURE 3C


Lake Trafford
LEE COUNTY
COLLIER COUNTY
N
W
E
S
KEHL Canal
Lee County
Collier County
Corkscrew Canal
Cork3
Cork2
Cork1
GG7
GG6
GG5
GG4
GG3
GG2
GG1
GG Main Canal
FU7
FU6
FU5
FU4S
FU1
Faka Union Canal
Cocohatchee Canal
Coco1
Coco2
Coco3
Coco4
Curry 1
AR2
AR1
Airport Rd. Canal
I75W3
I75W2
I75W1
I75 Canal
Green Canal
CR951 N
CR951S
CR951 Canal
Cypress1
Cypress Canal
C-1
MILLER3
Miller Canal
BCB Service Center
BCB Field Station
HC2
HC1
Henderson Creek Canal
Merritt Canal
SR29 Canal
Picayune Strand Restoration Project
75
41
29
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This map is a conceptual tool utilized for project development only. This map is not self-executing or binding, and does
not otherwise affect the interests of any persons including any vested rights or existing uses of real property.
Percentile Classes
< 10
10 - 24
25 - 75
76 - 90
> 90
* Based on period of record for each canal reach
0
2.5
5
Miles
BIG CYPRESS BASIN
SFWMD
2660 Horseshoe Dr. N.
Naples, Florida 34104
239-263-7615
sfwmd.gov
BCB Conditions Index 9/30/25
Urban Collier County, Florida
UPDATED
10/02/25
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FIGURE 4

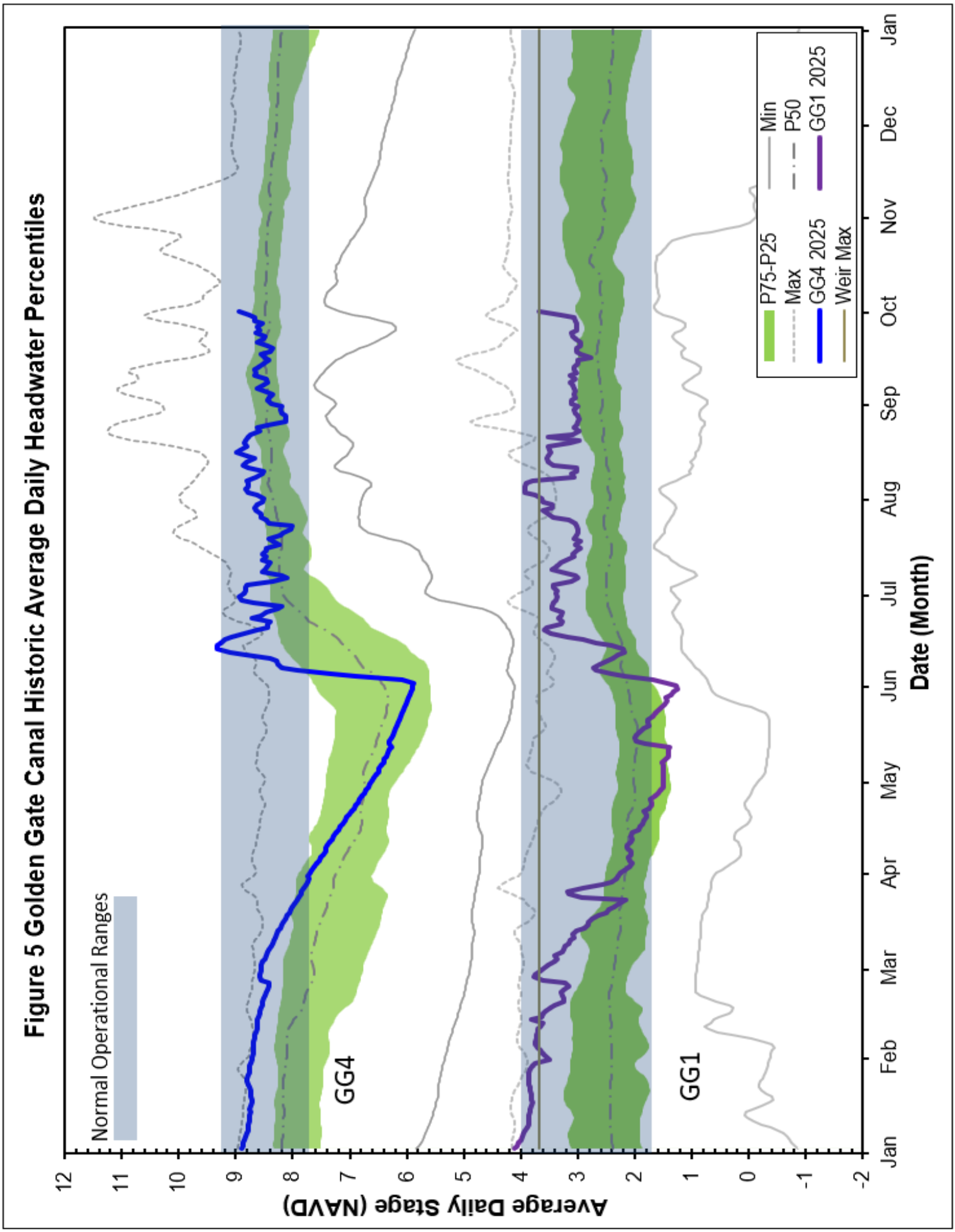


Figure 5 Golden Gate Canal Historic Average Daily Headwater Percentiles
Normal Operational Ranges
GG4
GG1
P75-P25
Max
GG4 2025
Min
P50
GG1 2025
Weir Max
Average Daily Stage (NAVD)
12
11
10
9
8
7
6
5
4
3
2
1
0
-1
-2
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)

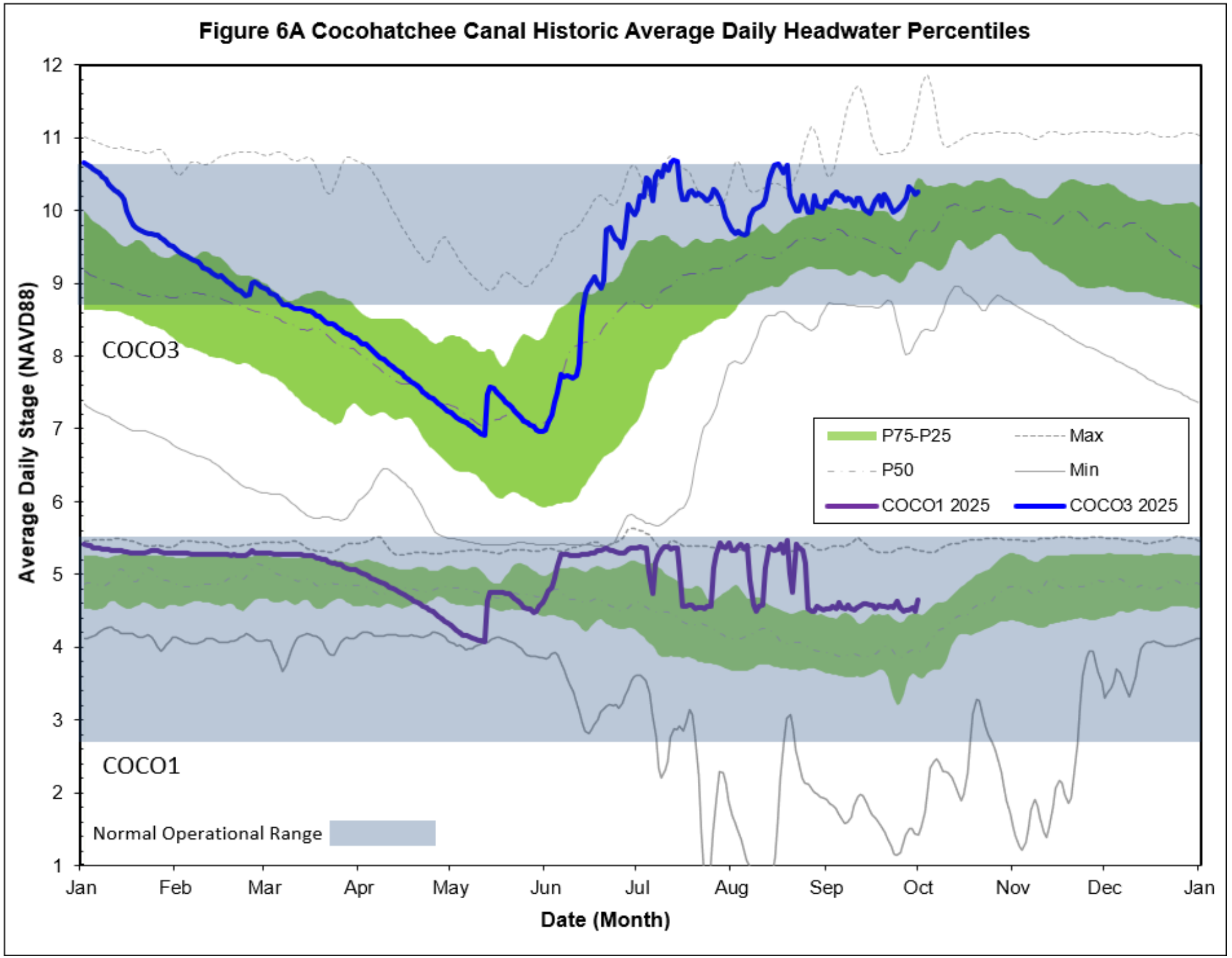


Figure 6A Cocohatchee Canal Historic Average Daily Headwater Percentiles
Average Daily Stage (NAVD88)
12
11
10
9
8
7
6
5
4
3
2
1
COCO3
COCO1
Normal Operational Range
P75-P25
Max
P50
Min
COCO1 2025
COCO3 2025
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)

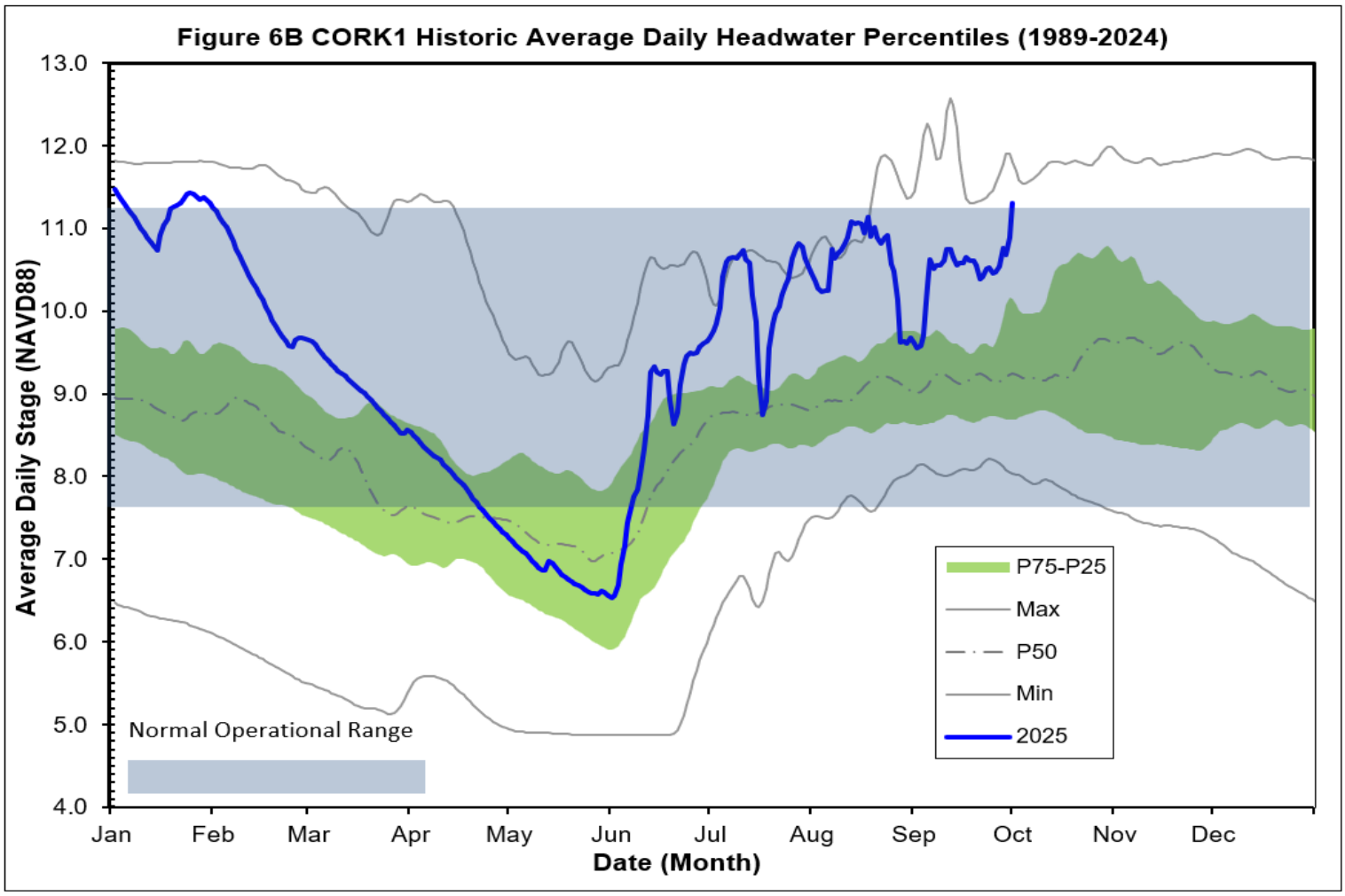


Figure 6B CORK1 Historic Average Daily Headwater Percentiles (1989-2024)
Average Daily Stage (NAVD88)
13.0
12.0
11.0
10.0
9.0
8.0
7.0
6.0
5.0
4.0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Date (Month)
Normal Operational Range
P75-P25
Max
P50
Min
2025

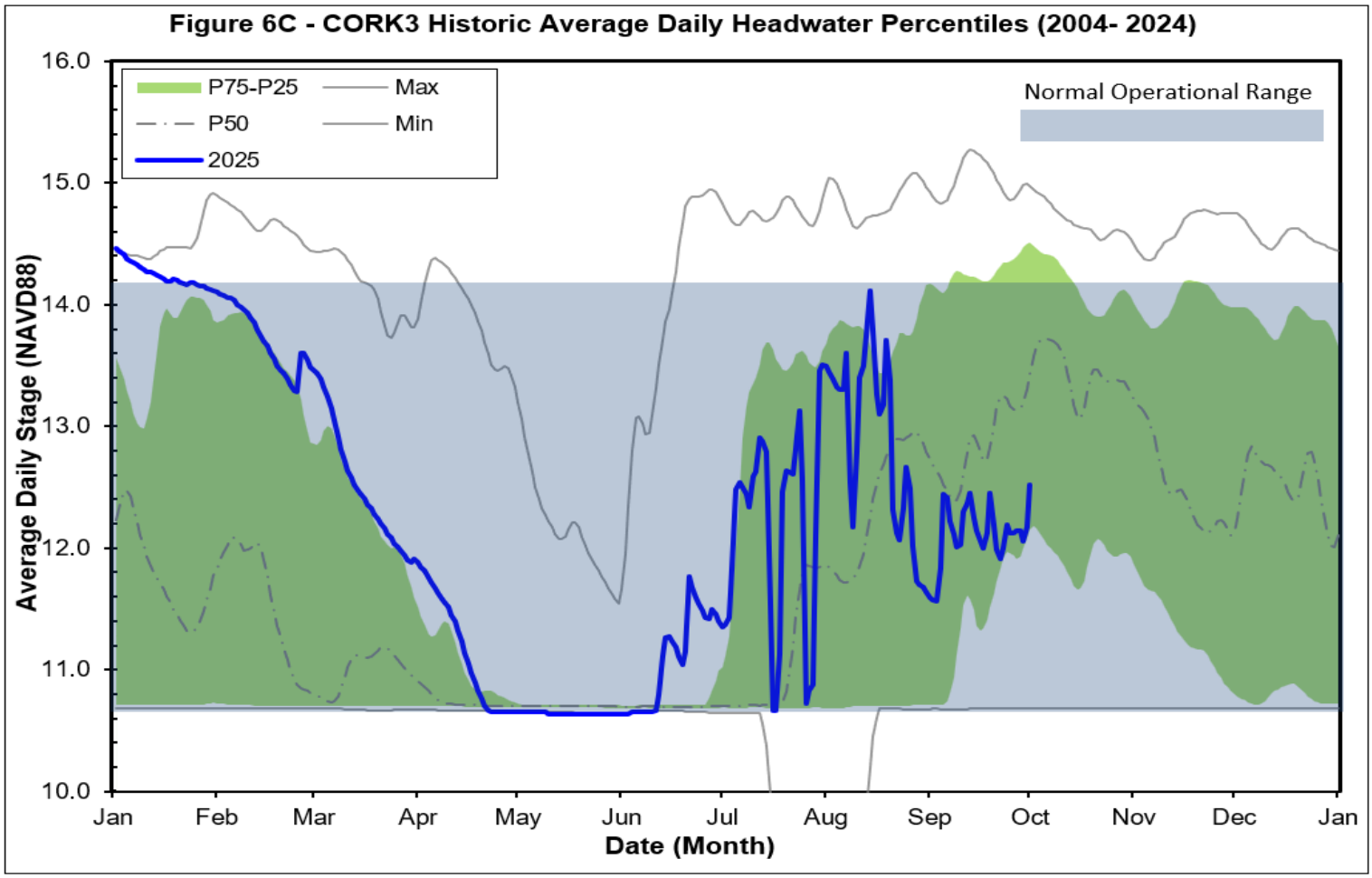


Figure 6C - CORK3 Historic Average Daily Headwater Percentiles (2004- 2024)
Average Daily Stage (NAVD88)
16.0
15.0
14.0
13.0
12.0
11.0
10.0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)
P75-P25
Max
P50
Min
2025
Normal Operational Range

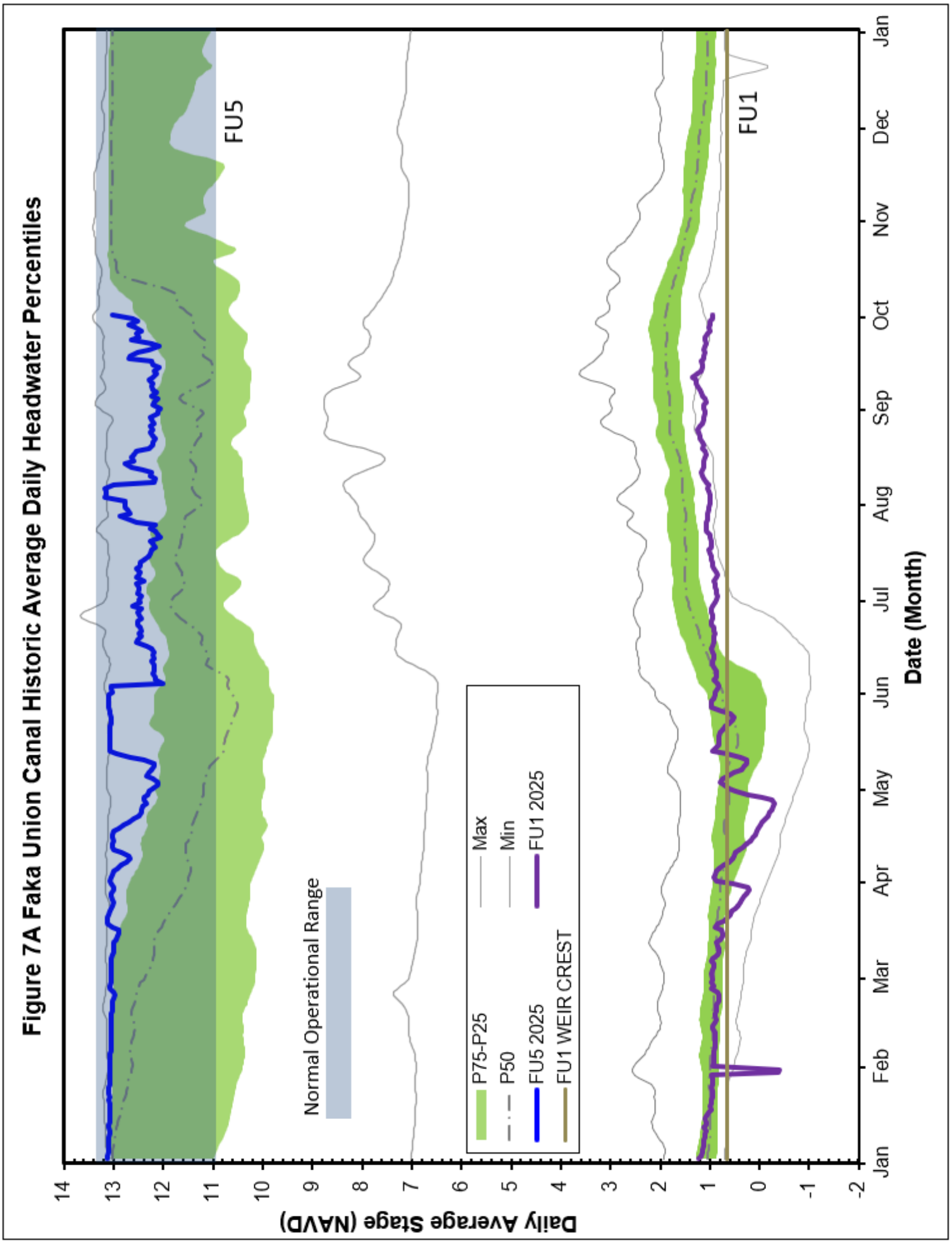


Figure 7A Faka Union Canal Historic Average Daily Headwater Percentiles
FU5
FU1
Normal Operational Range
P75-P25
P50
FU5 2025
FU1 WEIR CREST
Max
Min
FU1 2025
Daily Average Stage (NAVD)
Date (Month)
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
-1
-2
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan

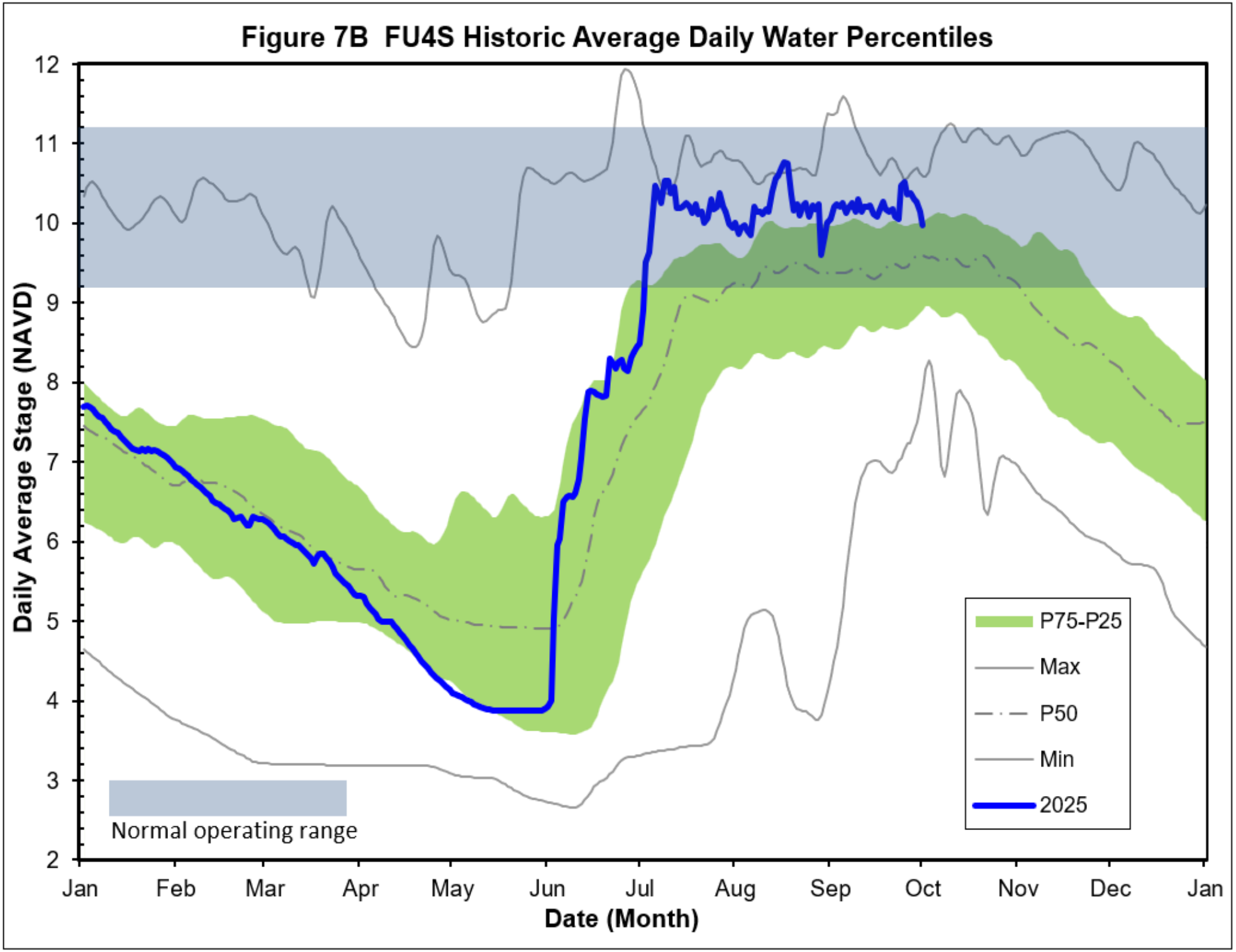


Figure 7B FU4S Historic Average Daily Water Percentiles
Daily Average Stage (NAVD)
12
11
10
9
8
7
6
5
4
3
2
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)
Normal operating range
P75-P25
Max
P50
Min
2025

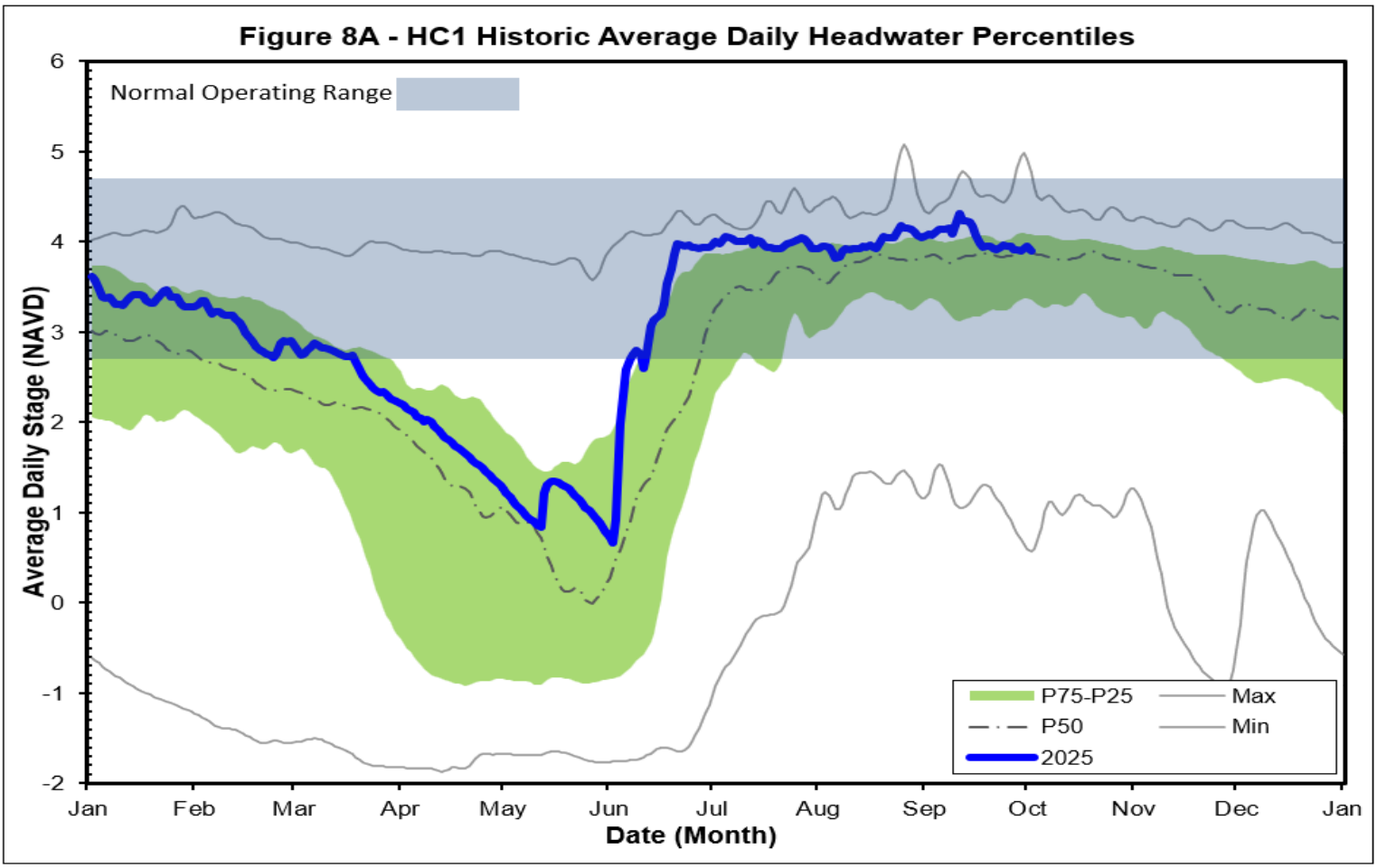


Figure 8A - HC1 Historic Average Daily Headwater Percentiles
Normal Operating Range
Average Daily Stage (NAVD)
6
5
4
3
2
1
0
-1
-2
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)
P75-P25
Max
P50
Min
2025

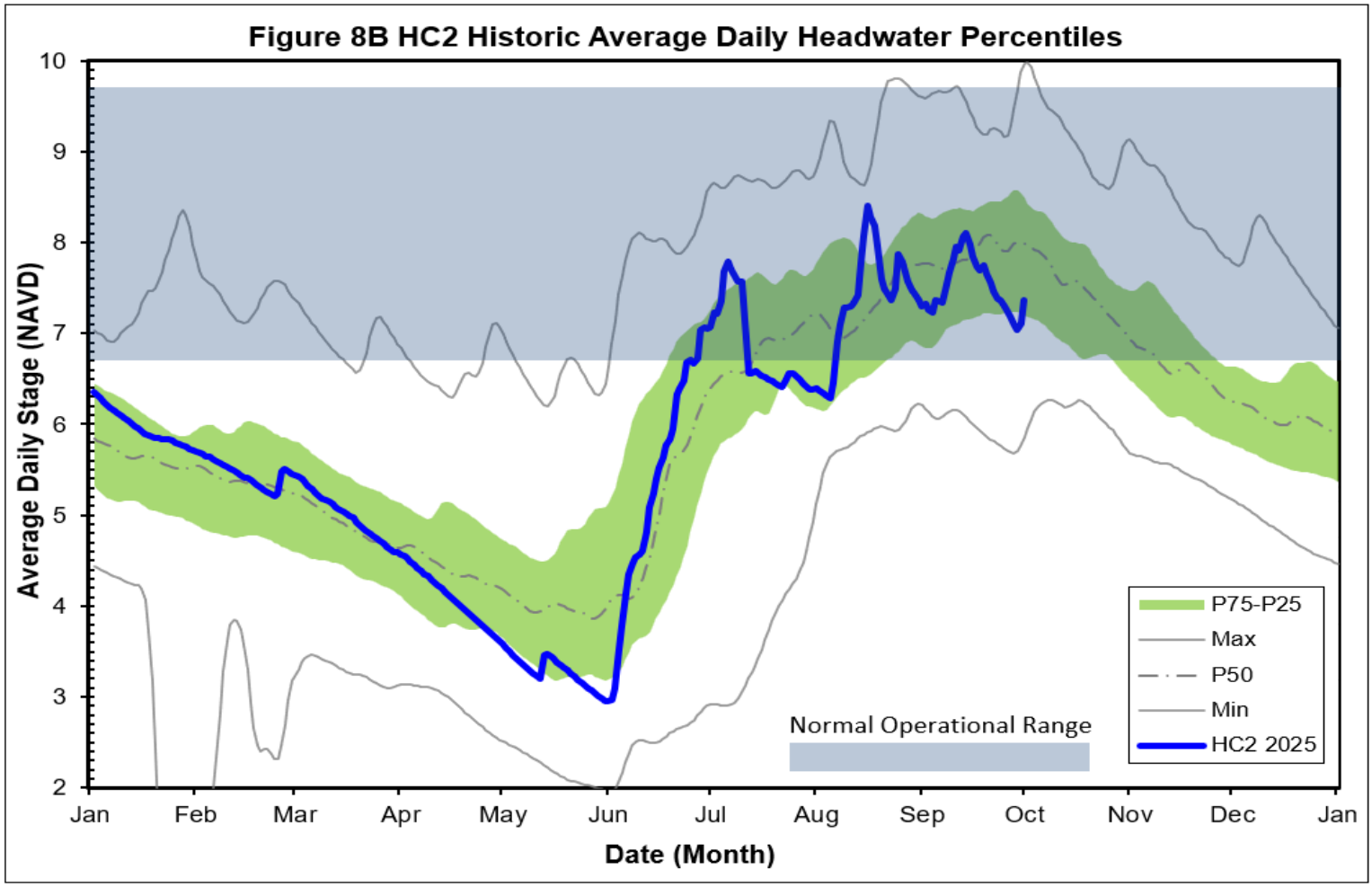


Figure 8B HC2 Historic Average Daily Headwater Percentiles
Average Daily Stage (NAVD)
10
9
8
7
6
5
4
3
2
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)
Normal Operational Range
P75-P25
Max
P50
Min
HC2 2025

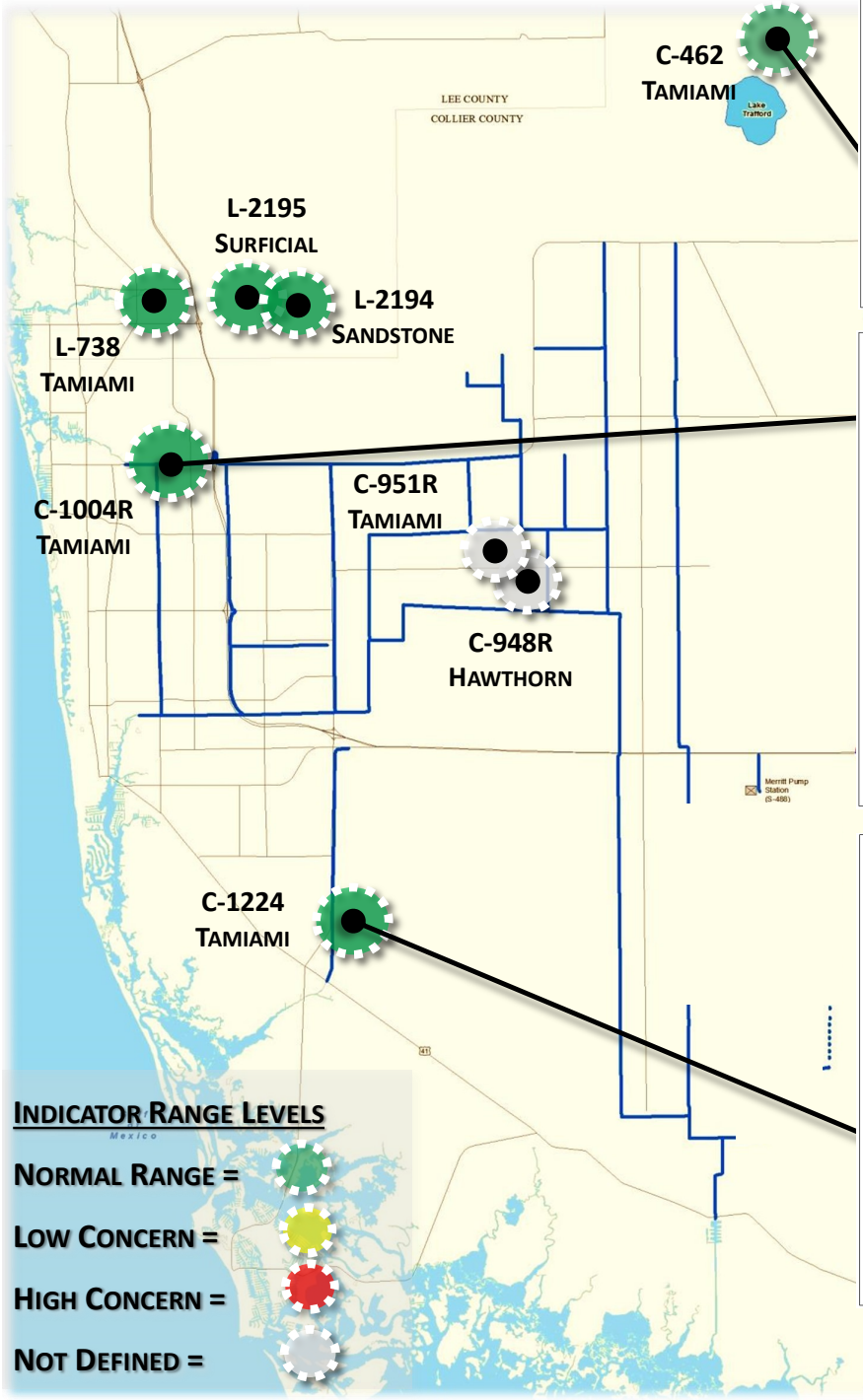
Last Reading Date :		September 30, 2025					
Previous Period Reading Date:		August 31, 2025					
STATION INDEX NO.	WELL LOCATION	WELL / AQUIFER - TYPE	CHANGE (from previous date)	PREVIOUS LEVEL	CURRENT LEVEL (ft)	DIRECTION OF CHANGE	CONCERN INDICATOR
ALL INDICATOR LEVELS SHOWN IN FT-NGVD							
C-462	Immokalee	Lower Tamiami Aquifer	0.03	33.18	33.21	↑	GREEN
C-1004R	Naples	Lower Tamiami Aquifer	-1.80	3.20	1.40	↓	GREEN
C-1224	Marco Lakes	Lower Tamiami Aquifer	-0.48	3.13	2.65	↓	GREEN
C-948R	Golden Gate	Mid Hawthorn Aquifer	1.11	28.54	29.65	↑	
C-951R	Golden Gate	Lower Tamiami Aquifer	-0.67	4.27	3.60	↓	
L-2194	Bonita Springs	Sandstone Aquifer	-0.75	6.20	5.45	↓	GREEN
L-2195	Bonita Springs	Surficial Aquifer System	-0.44	10.58	10.14	↓	GREEN
L-738	Bonita Springs	Lower Tamiami Aquifer	-1.03	1.11	0.08	↓	GREEN

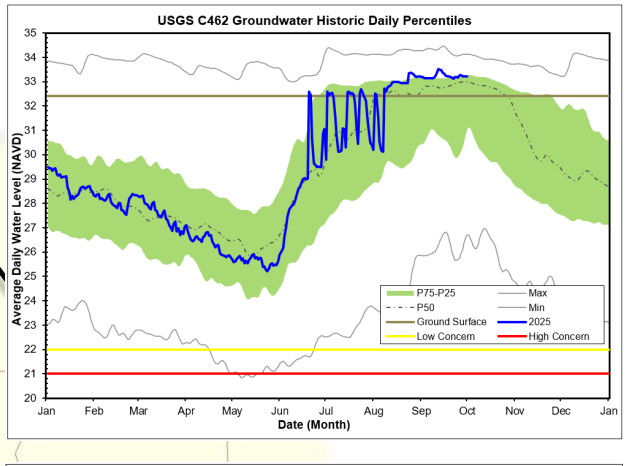
TABLE 2
BCB WATER CONDITIONS SUMMARY
SEPTEMBER 2025

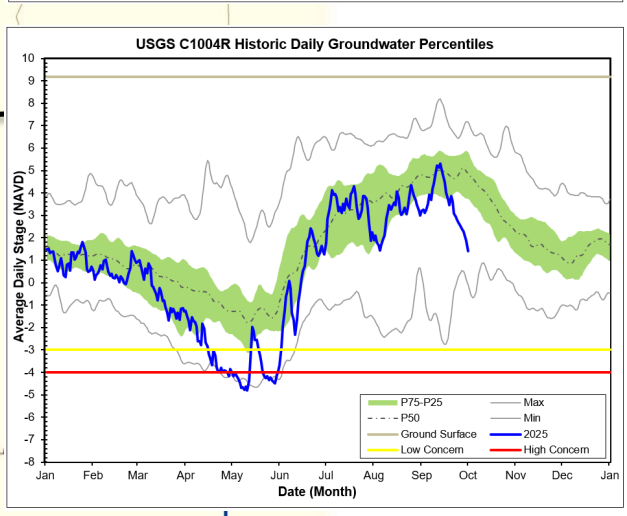
BIG CYPRESS BASIN

SEPTEMBER 30, 2025

GROUNDWATER LEVEL DAILY TRENDS COMPARED TO HISTORICAL AVERAGE







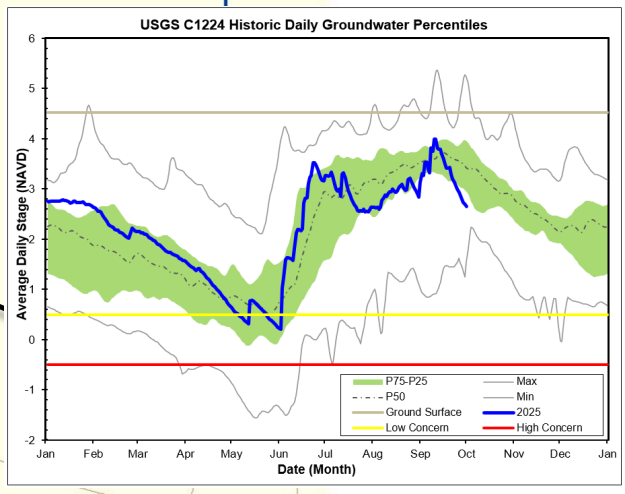


FIGURE 9

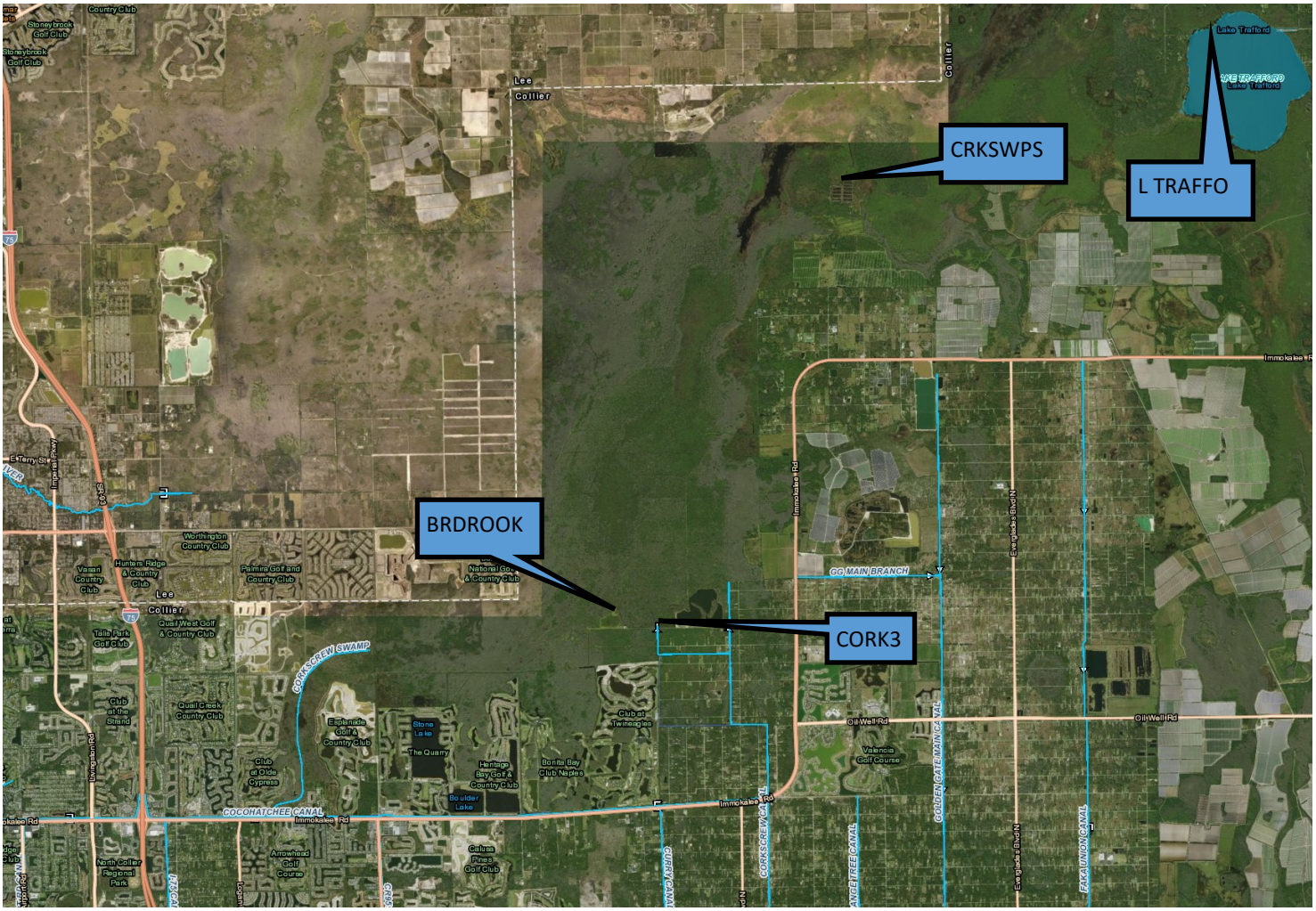


Figure 10-Corkscrew Historic Average Daily Headwater Percentiles (1984-2024)

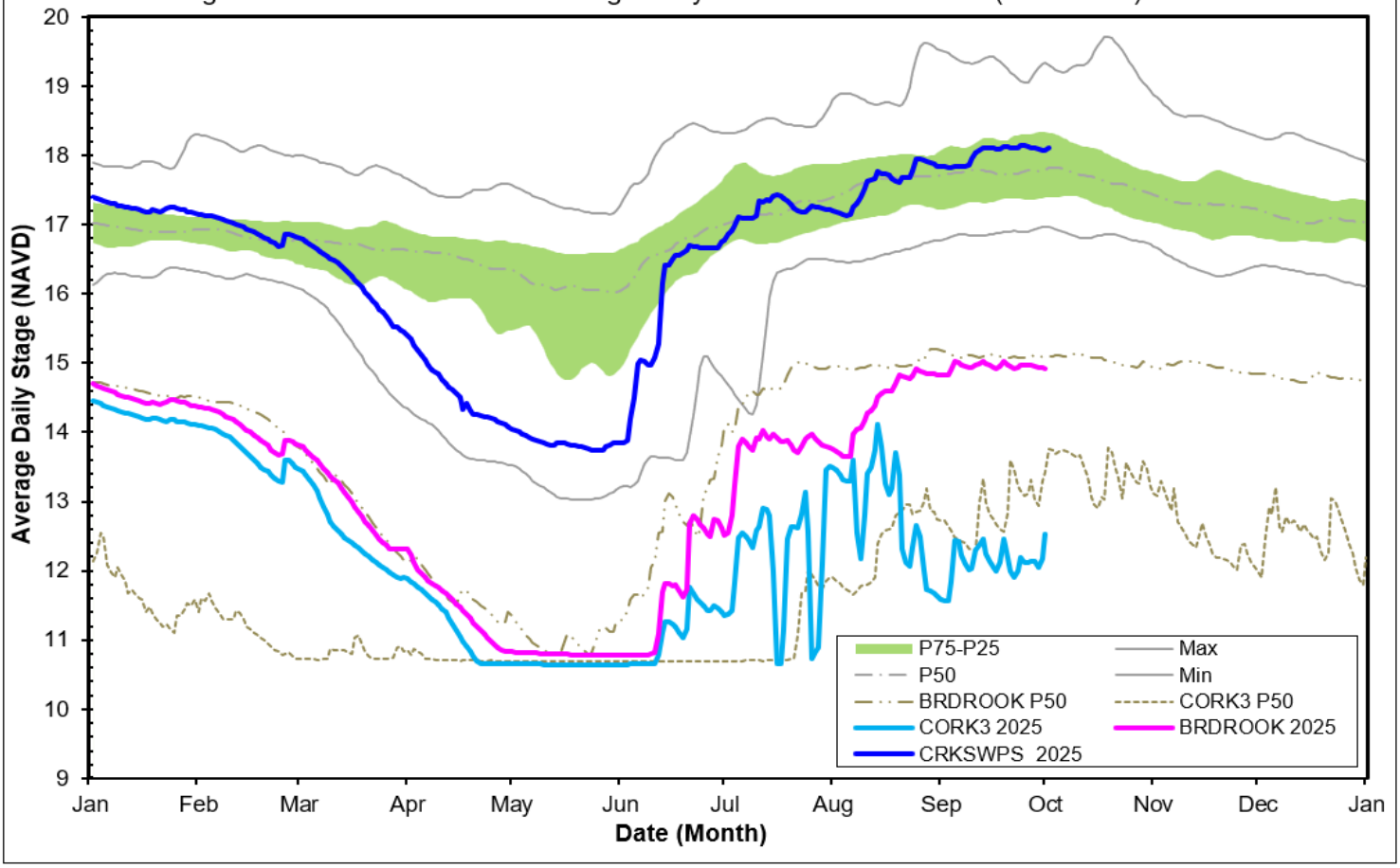
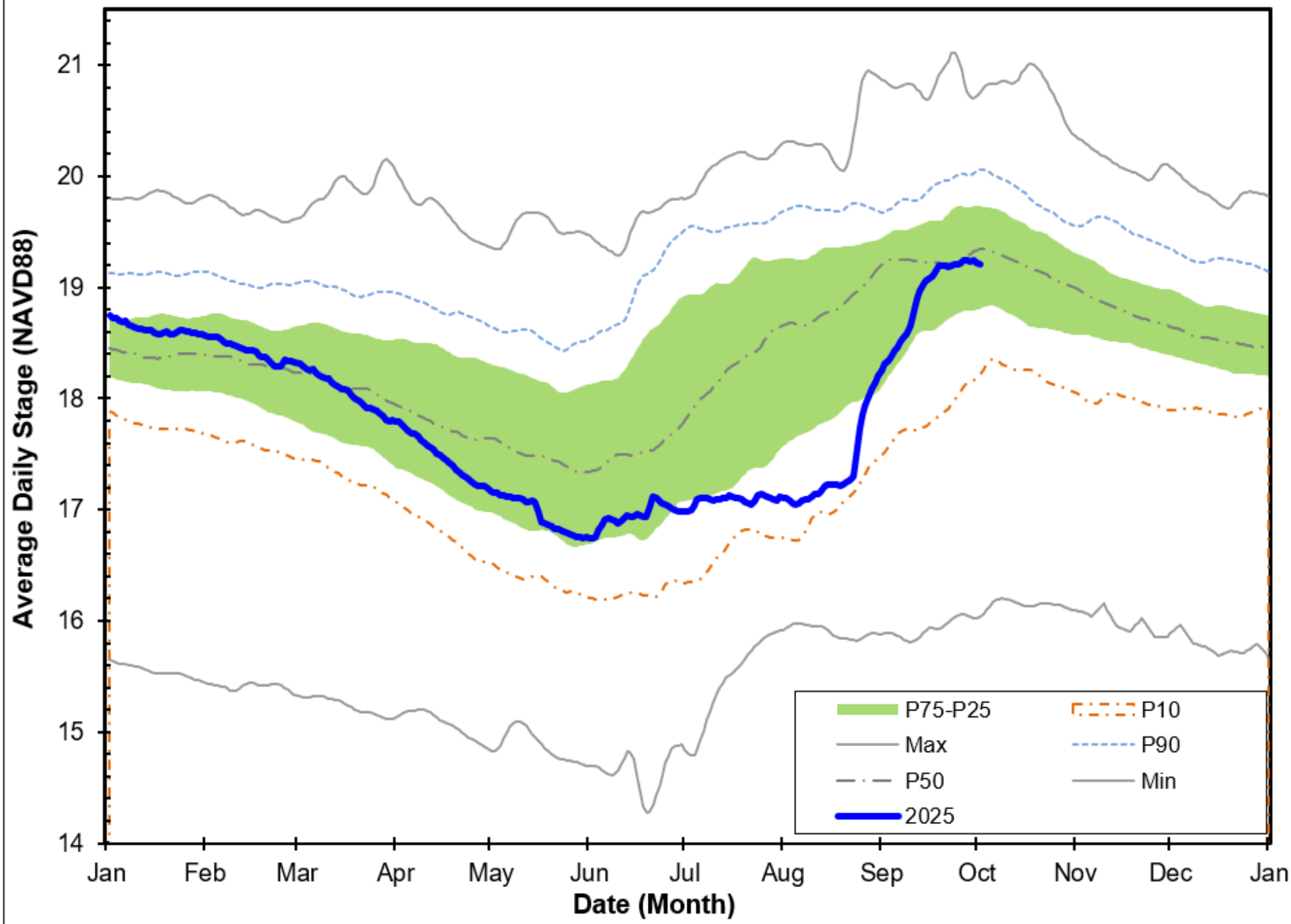
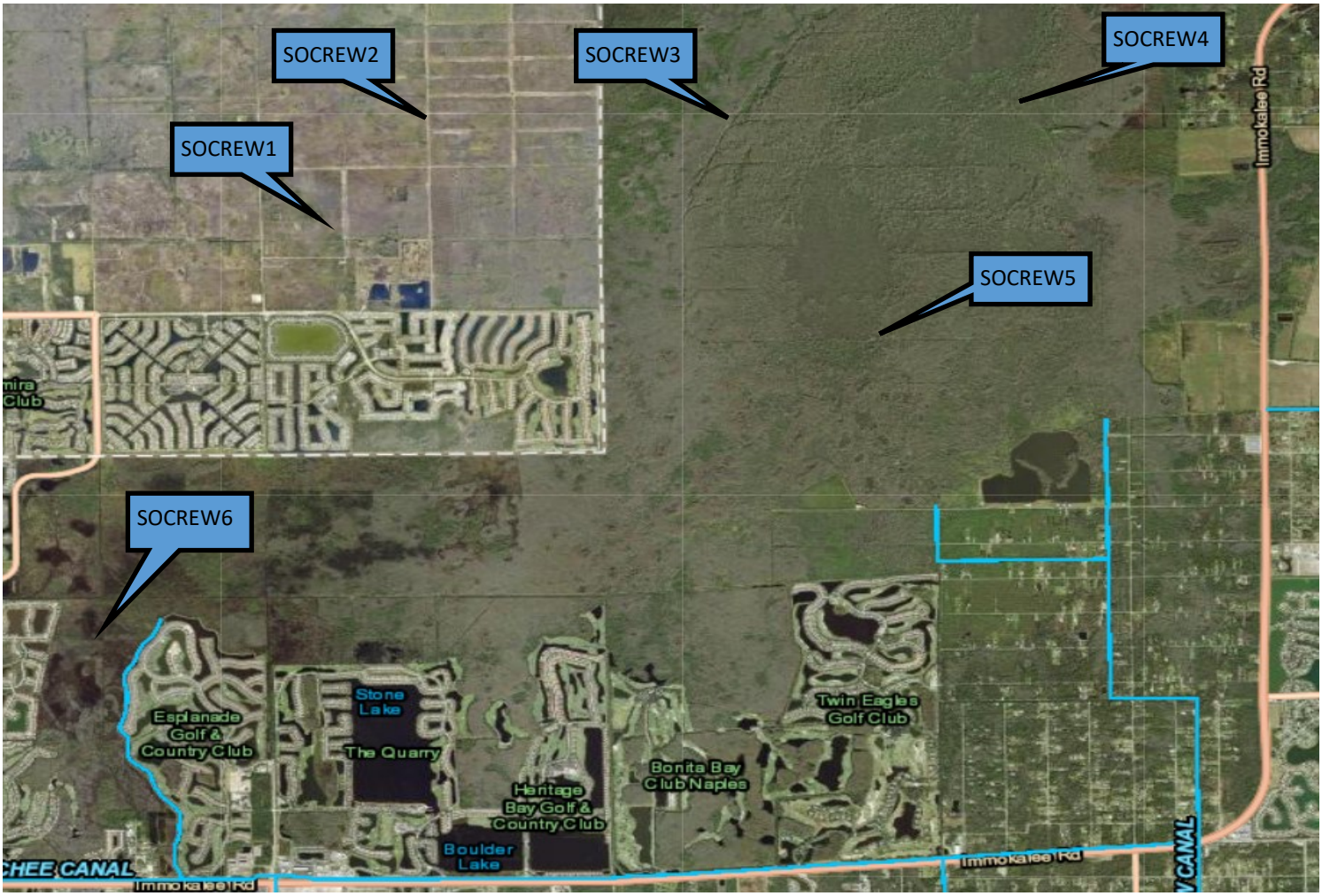


Figure 11 Lake Trafford Historic Average Daily Headwater Percentiles (1941-2024)




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

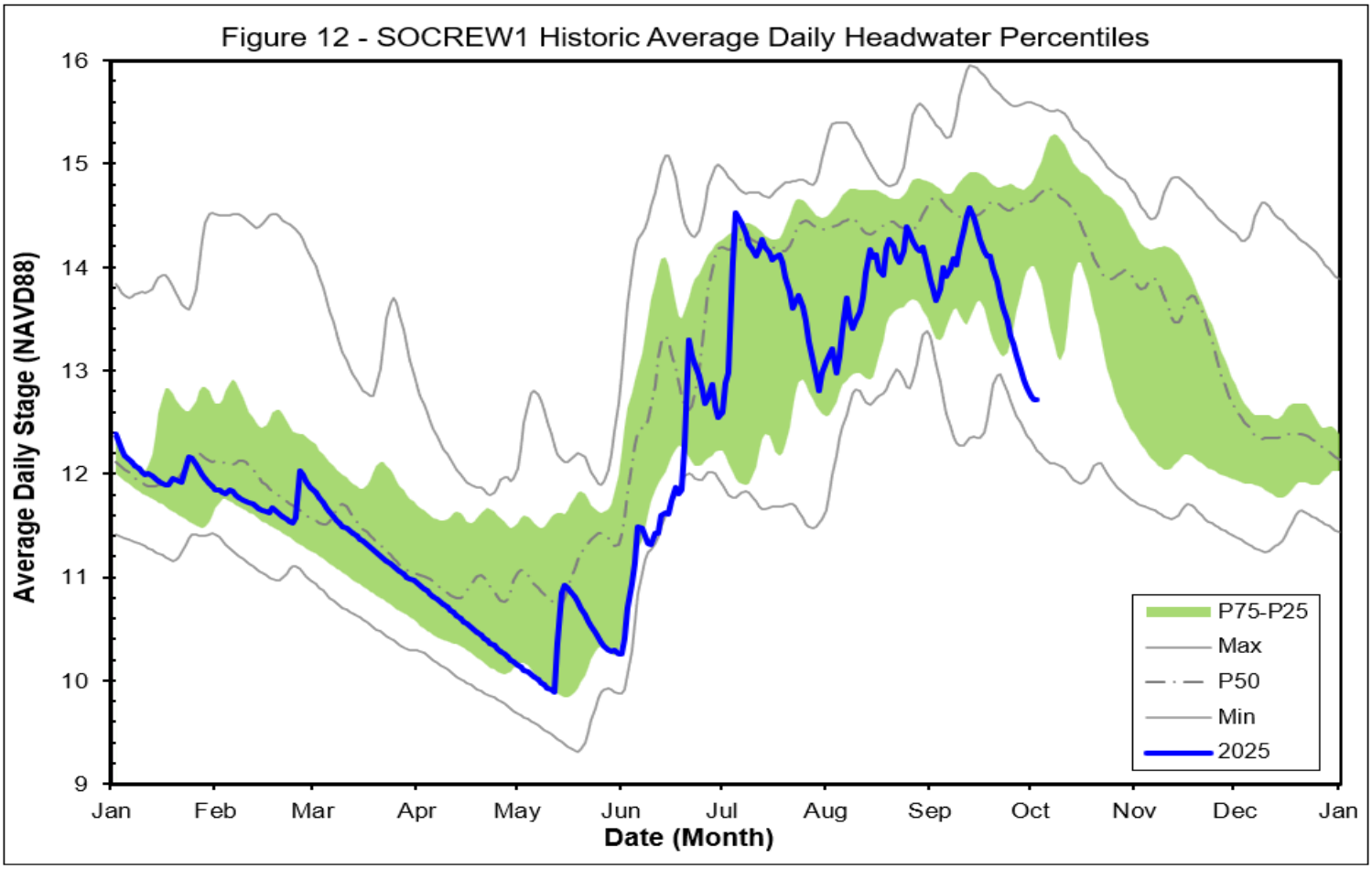
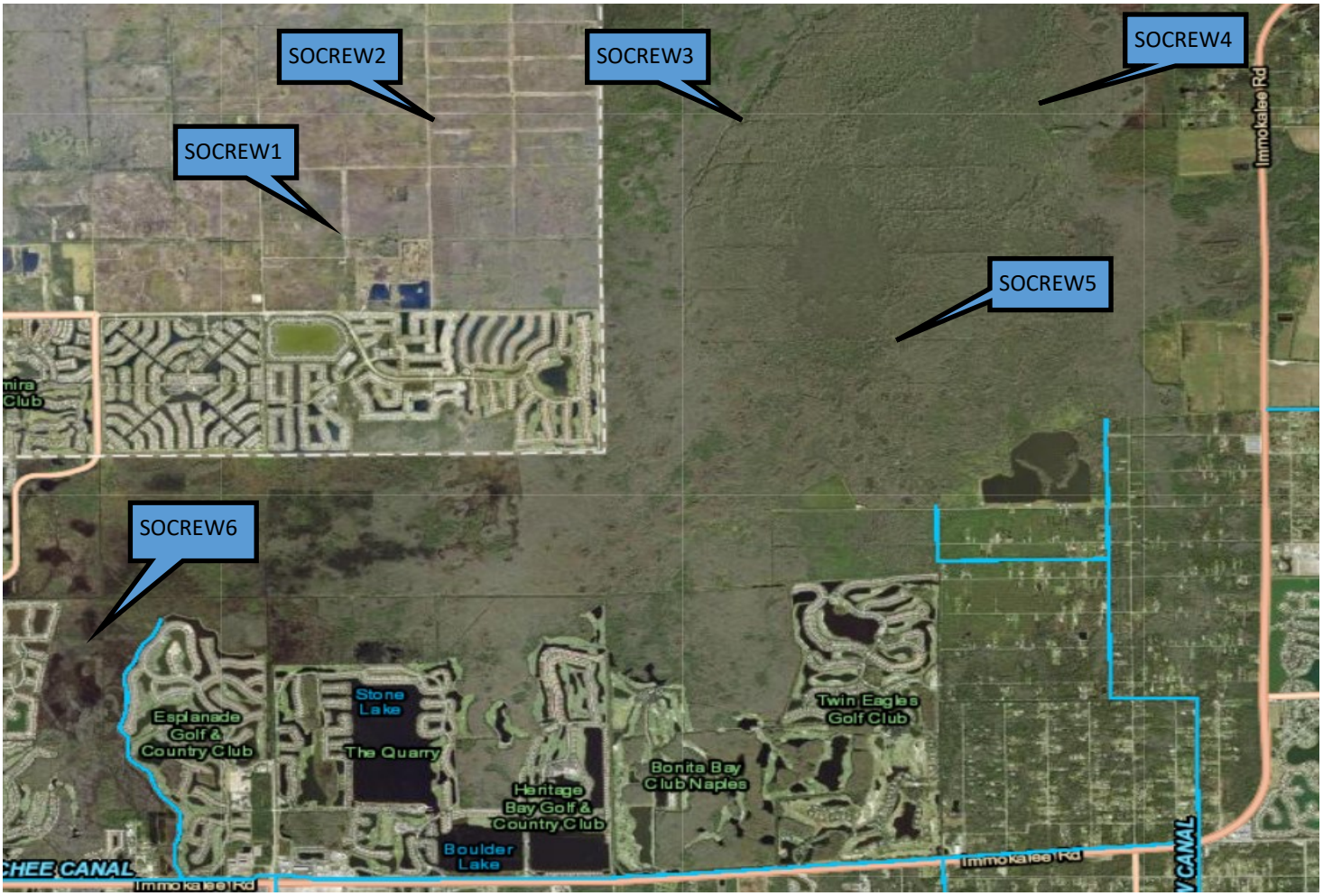


Figure 12 - SOCREW1 Historic Average Daily Headwater Percentiles
Average Daily Stage (NAVD88)
16
15
14
13
12
11
10
9
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)
P75-P25
Max
P50
Min
2025


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

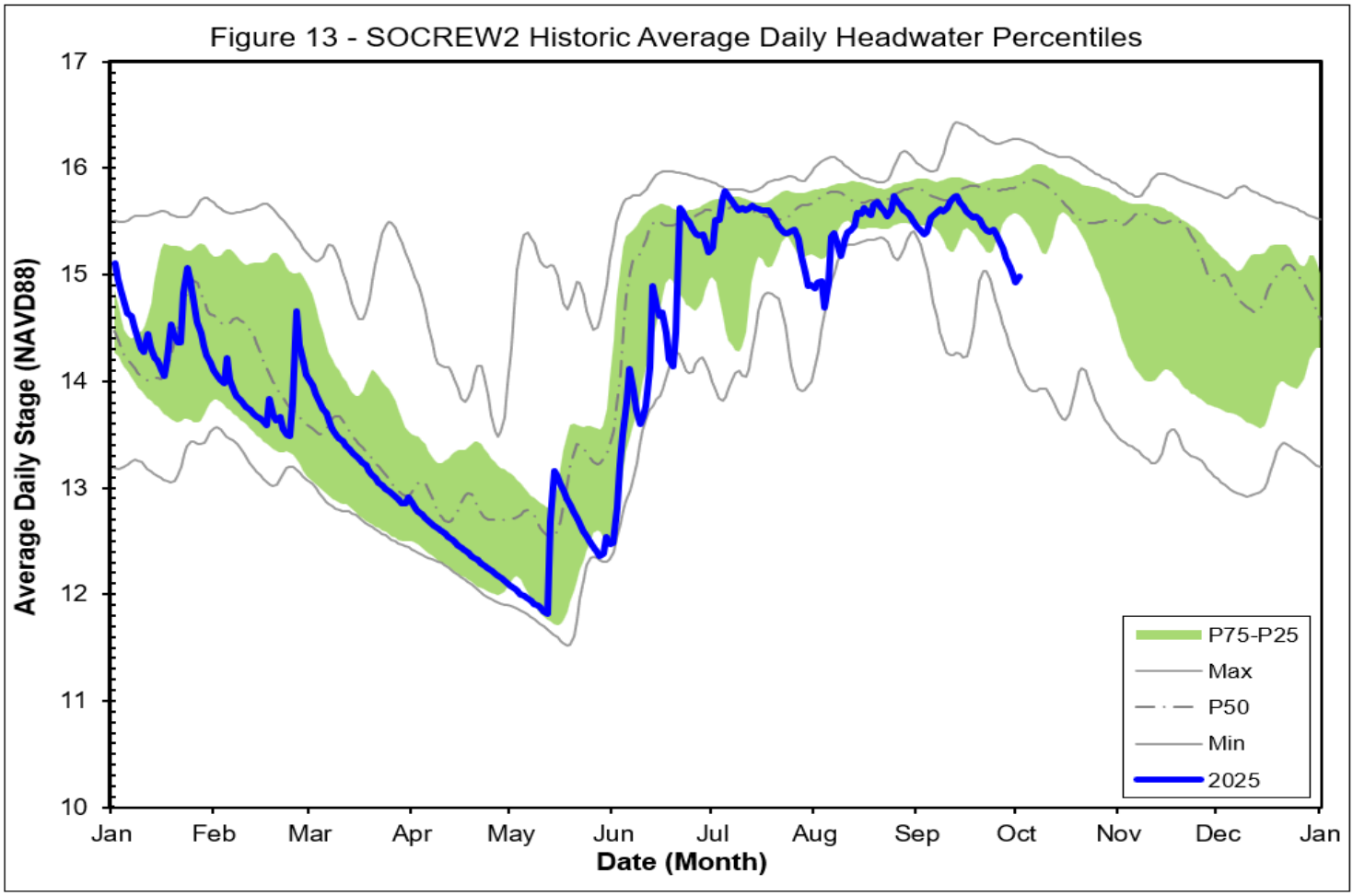


Figure 13 - SOCREW2 Historic Average Daily Headwater Percentiles
Average Daily Stage (NAVD88)
17
16
15
14
13
12
11
10
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Date (Month)
P75-P25
Max
P50
Min
2025