



# **Hydrologic Conditions Report**

#### November 2025

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## **Summary**

November 2025 was characterized by much-below-normal precipitation and near-normal temperatures (averaging around 60.6 degrees Fahrenheit) that contributed to generally belownormal hydrologic conditions across the Panhandle. Drought conditions slowly worsened throughout most of the District due to continued low rainfall amounts.

### **Rainfall**

In November 2025, an average of 0.43 inches of rain was recorded across the Panhandle. This amount was 3.46 inches (160%) below the District normal rainfall for the month of November, which is 3.89 inches (Table 1; Figures 1 – 7). Normal rainfall is defined as average monthly rainfall for the 1991-2020 reference period.

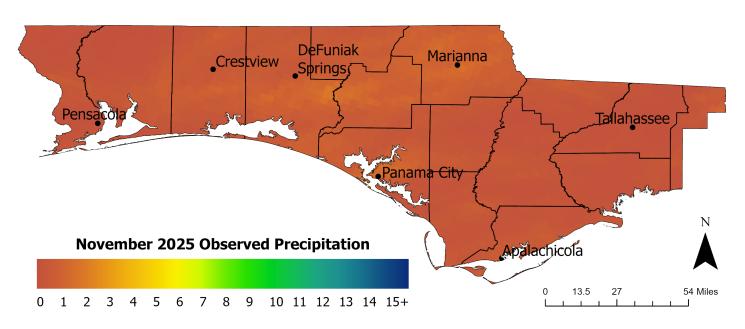
Rain events in November 2025 were few in number and did not produce much rainfall. All of the rainfall received in the Panhandle was as a result of frontal systems, each producing less than 1.00 inches of rain per occurrence (Table 1; Figures 4 – 7). The most significant rain event occurred November 8-10, 2025, as a result of a cold front. This system produced between 0.01 and 1.00 inch of rain throughout the Panhandle with the most rainfall occurring in Jackson County. This system produced 0.71 inches (81%) of the total 0.88 inches collected by the Marianna rain gauge.

Table 1: November 2025 rainfall compared to 30-year normal monthly rainfall for Tallahassee, Marianna, Niceville, and Pensacola

Station	November Normal Rainfall (1991 to 2020)	November 2025 Observed Rainfall	Percent Difference
Tallahassee Regional Airport	3.10	0.10	-188%
Marianna Regional Airport	3.67	0.88	-123%
Niceville, FL	4.97	0.72	-149%
Pensacola Regional Airport	4.42	0.08	-193%

Source: <a href="https://www.weather.gov/wrh/Climate?wfo=tae">https://www.weather.gov/wrh/Climate?wfo=tae</a>
<a href="https://www.weather.gov/wrh/Climate?wfo=mob">https://www.weather.gov/wrh/Climate?wfo=tae</a>

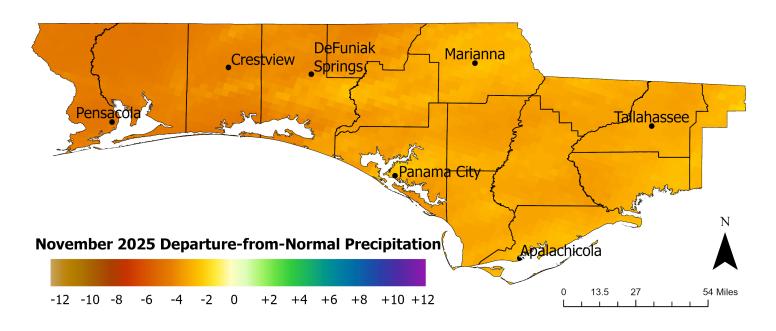
Figure 1: District-wide November 2025 observed rainfall



Source: <a href="https://water.noaa.gov/resources/downloads/precip/stagelV/">https://water.noaa.gov/resources/downloads/precip/stagelV/</a>

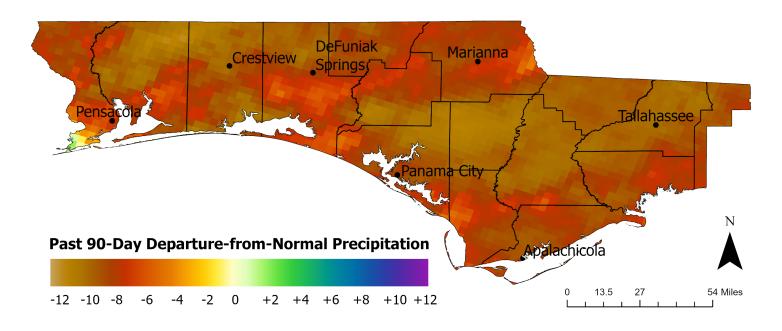


Figure 2: District-wide November 2025 precipitation departure from normal



Source: <a href="https://water.noaa.gov/resources/downloads/precip/stageIV/">https://water.noaa.gov/resources/downloads/precip/stageIV/</a>

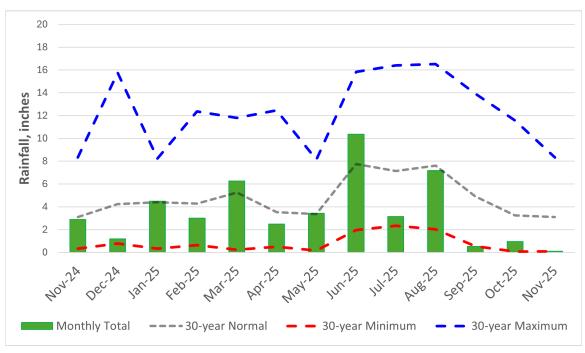
Figure 3: District-wide precipitation departure from normal for the previous 90 days



Source: https://water.noaa.gov/resources/downloads/precip/stageIV/

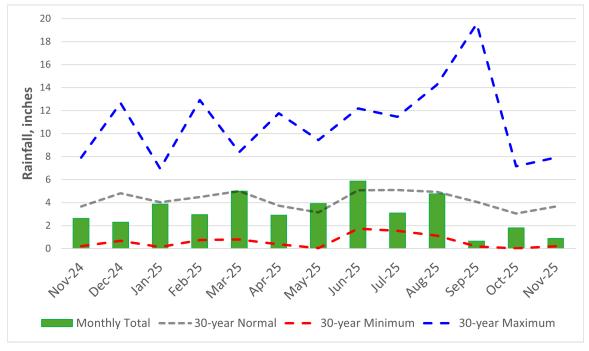


Figure 4: Observed rainfall at Tallahassee Regional Airport for the past 13 months compared to the 30-year normal, minimum, and maximum precipitation for each month



Source: <a href="https://www.weather.gov/wrh/Climate?wfo=tae">https://www.weather.gov/wrh/Climate?wfo=tae</a>

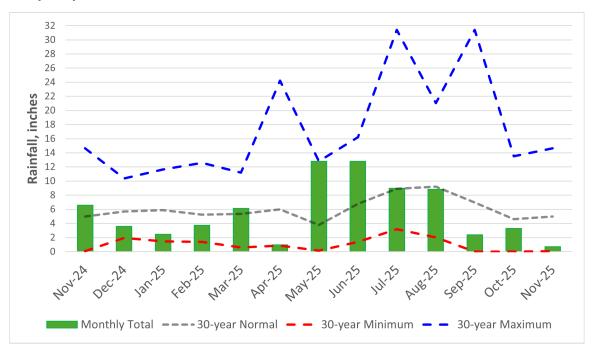
Figure 5: Observed rainfall at Marianna Regional Airport for the past 13 months compared to the 30-year normal, minimum, and maximum precipitation for each month



Source: <a href="https://www.weather.gov/wrh/Climate?wfo=tae">https://www.weather.gov/wrh/Climate?wfo=tae</a>

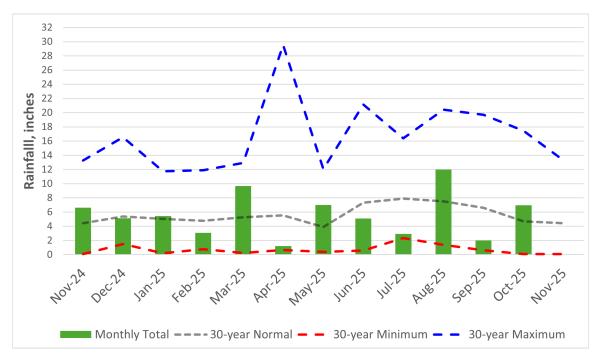


Figure 6: Observed rainfall in Niceville for the past 13 months compared to the 30-year normal, minimum, and maximum precipitation for each month



Source: https://www.weather.gov/wrh/Climate?wfo=mob

Figure 7: Observed rainfall at Pensacola Regional Airport for the past 13 months compared to the 30-year normal, minimum, and maximum precipitation for each month



Source: https://www.weather.gov/wrh/Climate?wfo=mob



#### **Climate Outlook**

According to NOAA's Climate Prediction Center, the forecast issued November 30, 2025, for December 2025 showed a likely chance for above-normal temperatures in the District. There were also equal chances of above-, below-, or near-normal precipitation across the Panhandle (Figure 8).

As of December 8, 2025, La Niña conditions were present and favored to persist through the Northern Hemisphere winter. La Niña conditions typically lead to warmer temperatures and below-normal precipitation during winter in Northern Florida. A transition to ENSO-neutral conditions was forecast to occur sometime between January and March 2026.

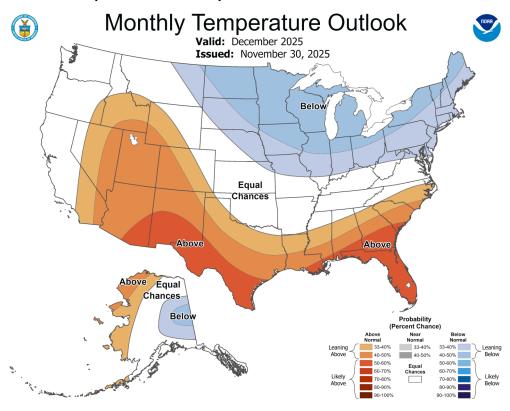
The 2025 Atlantic Hurricane Season has ended as of November 30, 2025, with a total of thirteen named storms forming throughout the season. Overall, the season performed within the ranges that NOAA forecasted and was considered a near-normal season. Zero named storms affected the Florida Panhandle during the 2025 Atlantic Hurricane Season. Zero named storms formed during November 2025 in the Atlantic basin.

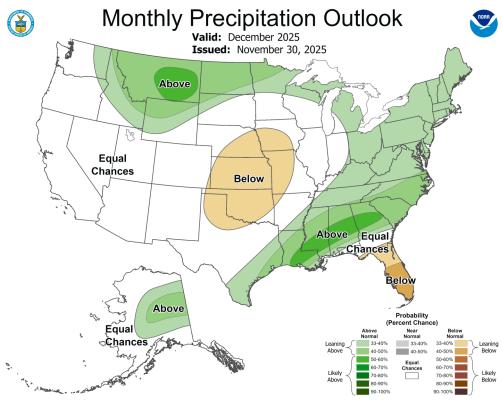
Source: https://www.cpc.ncep.noaa.gov/products/predictions/30day/

https://www.cpc.ncep.noaa.gov/products/analysis\_monitoring/lanina/enso\_evolution-status-fcsts-web.pdf https://www.noaa.gov/news-release/2025-atlantic-hurricane-season-marked-by-striking-contrasts



Figure 8: December 2025 Temperature and Precipitation Outlooks for the United States





Source: https://www.cpc.ncep.noaa.gov/products/predictions/30day/



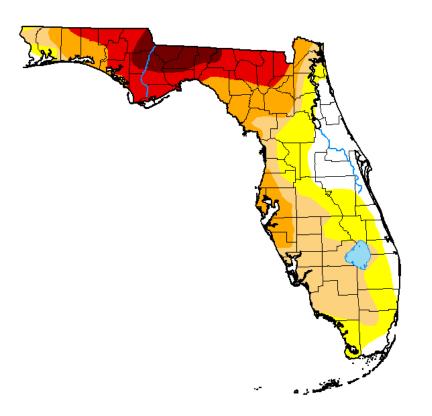
#### **Drought Conditions**

The U.S. Drought Monitor report released for December 2, 2025, showed most of the District under at least abnormally dry conditions with the majority of the Panhandle under severe, extreme, or exceptional drought conditions (Figure 9). This was due to a severe rainfall deficit throughout most of the District between September and November 2025 (Figure 3).

According to the U.S. Monthly Drought Outlook for December 2025, existing drought conditions were expected to remain but improve in the eastern portion of the District and be removed completely in the western portion of the Panhandle (Figure 8).

Figure 9: Florida Drought Conditions on December 2, 2025

# U.S. Drought Monitor Florida



#### December 2, 2025

(Released Thursday, Dec. 4, 2025) Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	14.36	85.64	62.93	37.61	20.54	5.61
Last Week 11-25-2025	20.33	79.67	63.03	29.25	20.31	5.61
3 Month's Ago 09-02-2025	84.57	15.43	7.21	2.49	0.47	0.00
Start of Calendar Year 01-07-2025	10.12	89.88	29.22	0.00	0.00	0.00
Start of Water Year 09-30-2025	42.27	57.73	30.65	6.18	0.00	0.00
One Year Ago 12-03-2024	42.70	57.30	18.70	0.00	0.00	0.00

ln	te.	ns	it	y

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

#### Author:

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Western Regional Climate Center









droughtmonitor.unl.edu

Source: https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?FL

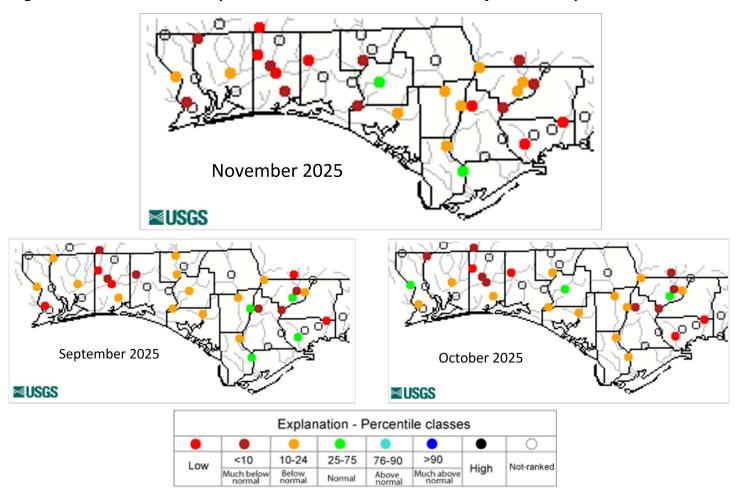


#### **Surface Water**

Streamflows. During November 2025, one streamflow station in the District recorded flows on average within normal ranges, six streamflow stations recorded below normal flows, eight stations recorded much below normal flows, and seven stations recorded low flows (Figures 10 – 16). The classification of "low" indicates that the estimated streamflow is the lowest value ever measured for that day of the year. Stations along the Apalachicola River were not included in analysis because its flows are more indicative of conditions in Georgia and Alabama more than the Florida Panhandle due to it being dam-controlled at its headwaters.

This distribution of percentile classes was a direct result of the dry conditions observed since September 2025 (Figures 1 – 3 & Figure 9). The St. Marks River near Newport continued to log record low flows that continued to decline throughout the duration of the month (Figures 10 & 11). Similarly, Blackwater River near Milton also recorded record low flows starting in September 2025 and remained low through November 2025 (Figure 15).

Figure 10: Northwest Florida September 2025 to November 2025 monthly streamflow percentiles



Source: http://waterwatch.usgs.gov/index.php



Figure 11: Daily streamflows and percentile ranges for USGS station 02326900 St. Marks River Near Newport, Florida

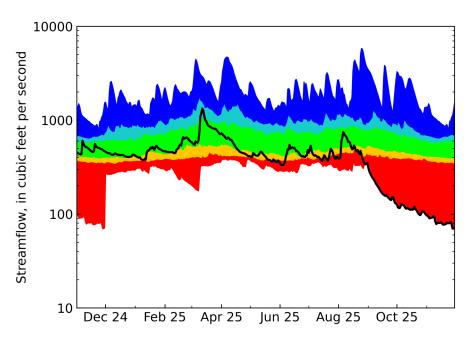


Figure 12: Daily streamflows and percentile ranges for USGS Station 02329000 Ochlockonee River Near Havana, Florida

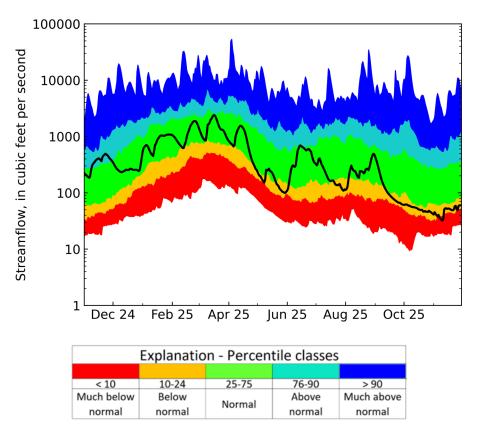




Figure 13: Daily streamflows and percentile ranges for USGS Station 02358700 Apalachicola River Near Blountstown, Florida

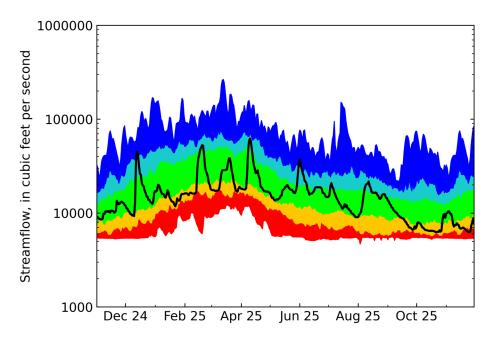
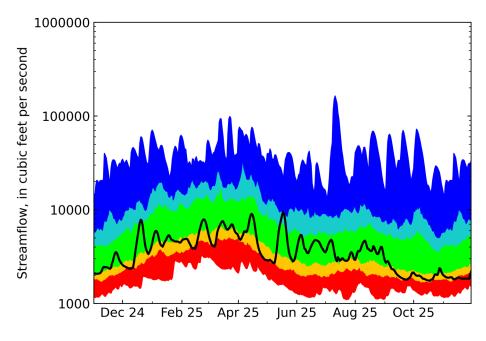


Figure 14: Daily streamflows and percentile ranges for USGS Station 02366500 Choctawhatchee River Near Bruce, Florida



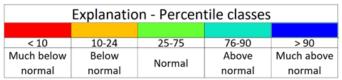




Figure 15: Daily streamflows and percentile ranges for USGS Station 02370000 Blackwater River Near Baker, Florida

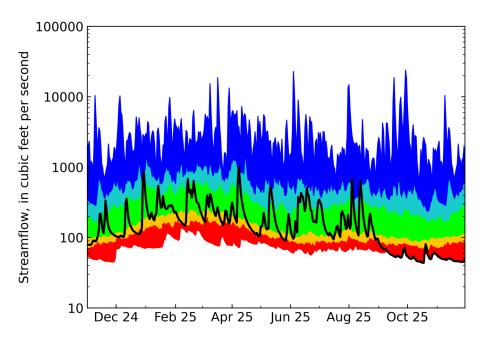
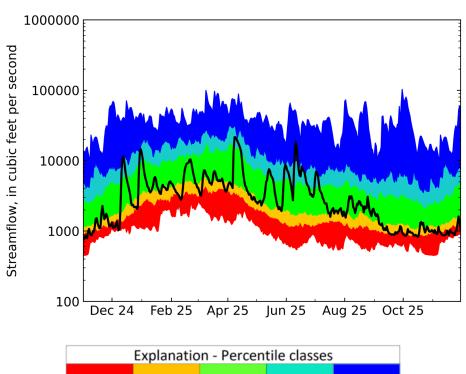


Figure 16: Daily streamflows and percentile ranges for USGS Station 02375500 Escambia River Near Century, Florida



25-75

Normal

76-90

Above

normal

> 90

Much above

normal

10-24

Below

normal

< 10

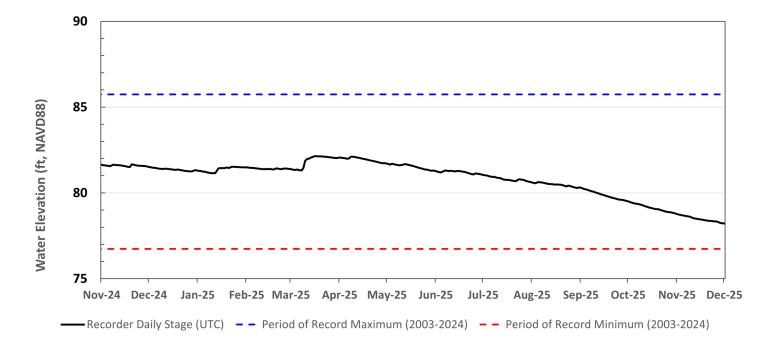
Much below

normal



Lake Levels. Water levels at Lake Jackson in Leon County decreased by 0.54 feet during November 2025, ending the month with a stage level of 78.23 feet, NAVD 1988. Late in the month, much of Lake Jackson drained into Porter Sink for the first time since 2021 (Figure 17). Porter Sink stops draining and will be covered in water again when there is enough rainfall to fill the aquifer below the lake. The long-term (January 29, 2003, to November 30, 2025) average stage level for Lake Jackson is 80.88 feet, NAVD 1988, and the full pool level is 85.74 feet, NAVD 1988.

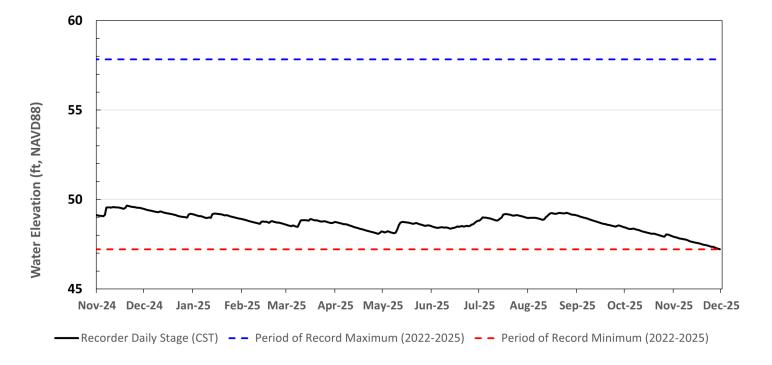
Figure 17: Daily water levels at Lake Jackson at Miller Landing, Leon County





At Piney Lake in southern Washington County, water levels decreased 0.70 feet during November 2025. Piney Lake ended the month with a stage level of 47.22 feet, NAVD 1988, which was the lowest level recorded since monitoring began after the 2022 flooding event (Figure 18). When the water levels at Piney Lake drop below 51.42 feet, NAVD 1988, the lake separates into two distinct "lobes". Based on the lake level data being collected at Piney Lake since 2022, the lake may have been continuously separated since December 15, 2023.

Figure 18: Daily water levels at Piney Lake, Washington County





#### **Spring Flows**

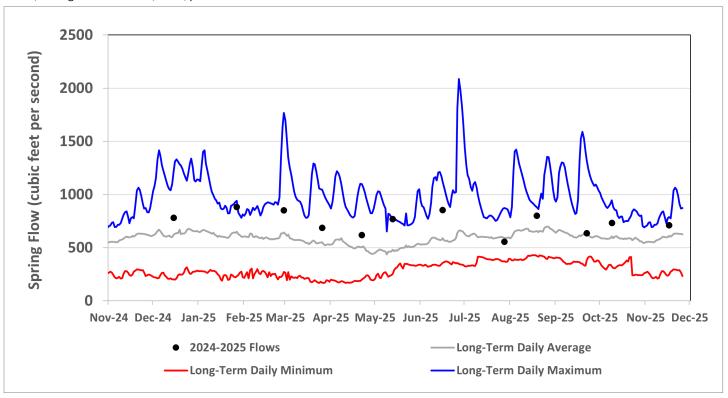
Wakulla and Sally Ward Spring System. Flow from Wakulla Spring decreased 21 cubic feet per second (cfs) between the measurements taken in October and November 2025. The most recent flow measurement for Wakulla Spring was 712 cfs, which was conducted on November 17, 2025 (Figure 19). The long-term (October 23, 2024, to November 17, 2025) average flow for the month of November is 596 cfs.

Flow at Sally Ward Spring decreased by 2.6 cfs between the measurements taken in October and November 2025. The most recent flow measurement for Sally Ward was 22.8 cfs on November 17, 2025. This measurement was 3.0 cfs higher than the long-term (November 1, 2004, to November 17, 2025) average flow for the month of November of 19.8 cfs.

The minimum flow established for the combined Wakulla and Sally Ward Spring System under Florida Administrative Code chapter 40A-8.041 continues to be met. The long-term (October 23, 2004, through October 9, 2025) average flows for Wakulla and Sally Ward springs are 589 cfs and 24.2 cfs, respectively. The combined long-term spring flow for both systems is 613.2 cfs, which exceeds the established minimum flow of 538 cfs by 75.2 cfs.

#### Figure 19: Wakulla Spring flows

Data from October 1, 2023, through November 17, 2025, represent discrete measurements. Daily statistics are based on the October 23, 2004, through November 17, 2025, period of record.



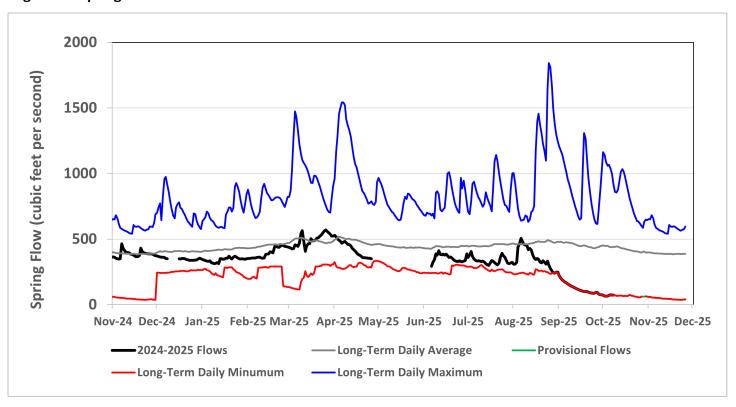


St. Marks River Rise. The mean daily spring flow for November 2025 at the St. Marks River Rise was 45 cfs, based on the available USGS provisional data which extends through November 30, 2025 (Figure 20). This was much below the long-term (October 1, 1956, through November 30, 2025) average flow for the month of November of 389 cfs. Flows this month were so low that there was a new long-term minimum flow every day in November.

The current 30-year moving average spring flow for the St. Marks River Rise based on the most recent approved USGS data (November 15, 1993, through December 3, 2024) is 423 cfs. If the provisional data from December 4, 2024, through November 30, 2025, are included, the 30-year moving average spring flow for the St. Marks River Rise is 419 cfs.

The established minimum flow for the St. Marks River Rise is 419 cfs. Whether using the approved or provisional data, the 30-year moving average flow exceeded the established minimum flow for the St. Marks River Rise by 4 cfs and 0 cfs, respectively.

Figure 20: Spring flows for the St. Marks River Rise

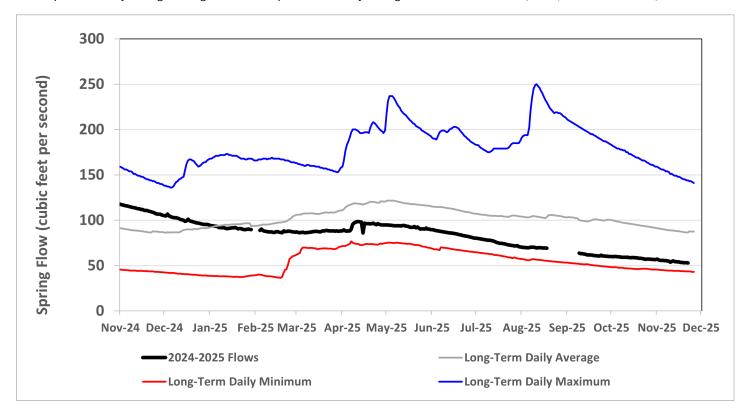




Jackson Blue Spring. Daily flows at Jackson Blue Spring for the month of November 2025 (November 1 through 22, 2025) averaged 55.0 cfs. This was below the long-term average flow of 88.3 cfs for the month of November, based on the December 21, 2004, through November 22, 2025, period of record (Figure 21). Flows from Jackson Blue Spring have been below the long-term average flow since January 2025.

Figure 21: Spring flows for Jackson Blue Spring

Data represents daily averages. Long-term flows represent the daily average between December 21, 2004, and November 30, 2025.



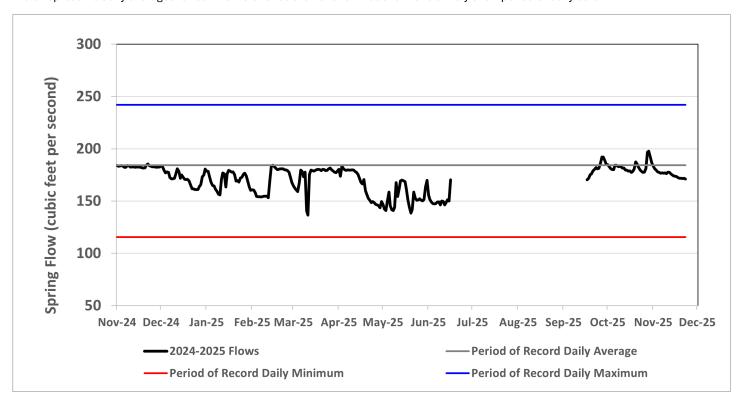


Gainer Spring Group. During November 2025 (November 1 through 23, 2025), the average flow at the Gainer Spring Group was 176 cfs (Figure 22). The record period (October 28, 2019, through November 23, 2025) average monthly spring flow for the month of November is 181 cfs. It should be noted that there is a relatively brief period of record for this system, and spring flows among the highest and lowest on record are to be expected. Data collection was interrupted on July 2, 2025, due to malfunctioning equipment and resumed September 16, 2025.

Throughout the time-series, there are several drops and recoveries in the spring flow. This is caused by Econfina Creek spiking in stage adjacent to the spring group after rain events. The extra pressure exerted on the groundwater by the higher surface water in the stream slows flow from the spring group. Since Econfina Creek does not tend to stay high for long after the conclusion of a rain event as the stage level quickly drops, the flow from the spring group recovers since there is less head pressure from the stream.

Figure 22: Gainer Spring Group flows

Data represents daily averages. Streamflow statistics are not shown due to the relatively short period of daily data.



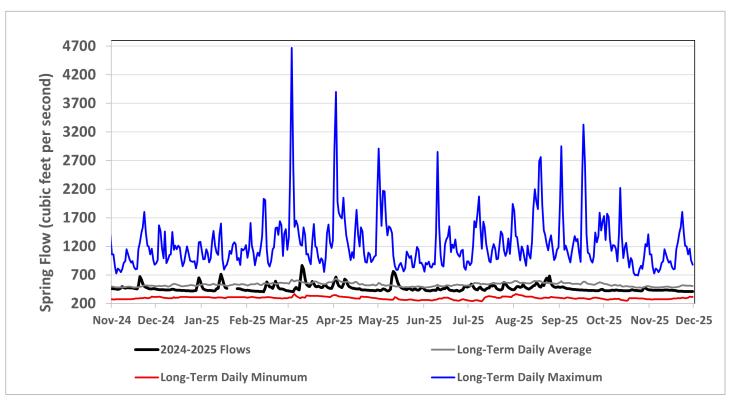


Middle Econfina Creek. The mean daily flow for November 2025 at Middle Econfina Creek was 425.5 cfs, based on the available USGS provisional data which extends through November 30, 2025 (Figure 23). This was below the long-term (October 1, 1935, through November 30, 2025) average flow for the month of November of 495 cfs.

The current 30-year moving average flow for Middle Econfina Creek based on the most recent approved USGS data (October 1, 1935, through December 3, 2023) is 537 cfs. If the provisional data from December 4, 2024, through November 30, 2025, are included, the 30-year moving average flow for Middle Econfina Creek is 517 cfs.

A minimum flow of 486 cfs was formally adopted on June 29, 2025, for Middle Econfina Creek, which includes the Gainer, Sylvan, and Williford spring groups. Whether using the approved or provisional data, the 30-year moving average flow exceeded the established minimum flow for Middle Econfina Creek by 51 cfs and 31 cfs, respectively.







### **Aquifer Levels**

In the middle of November 2025, of a total of nine Floridan aquifer monitor wells, four were classified as within normal ranges, one was classified as below normal, and four were classified as having water levels in much below normal ranges (Figures 24 – 30). Most Floridan monitor wells with percentiles continued to decline through November 2025 except for Fannin Airport monitor well (NWFID 697). Groundwater levels at Pittman VISA Floridan monitor well (NWFID 5266) in eastern Jackson County continued to decline and were classified as much below normal (Figure 27). Jackson Still Floridan monitor well (NWFID 5417) in northern Walton County and Sand Hill Upper Floridan monitor well (NWFID 5597) in northwestern Okaloosa County had below normal water levels for the past several months but decreased even further into much below normal ranges. The areas surrounding the Pittman VISA (NWFID 5266), Jackson Still (NWFID 5417), and Sand Hill (NWFID 5597) Floridan monitor wells received very little rainfall September through November 2025 and were under exceptional drought conditions (Figure 9) during the month which contributed to the low water levels recorded at these wells (Figure 1).

Two of three sand-and-gravel aquifer monitor wells had water levels that were classified as within normal ranges in mid-November 2025. Weller Ave Deep monitor well (NWFID 1382) in southern Escambia County, which has been classified as within normal ranges since June 2025, increased throughout October and November 2025 to be just below the threshold for above-normal ranges (Figure 30). Oak Grove Deep monitor well (NWFID 5479) continued to record below normal groundwater levels, as it has for several months (Figure 24).



Figure 24: Floridan aquifer monitor wells and aquifer level percentiles for mid-November 2025

Percentile class rankings are based on each well's period of record. All wells have a minimum of 20 years of data.

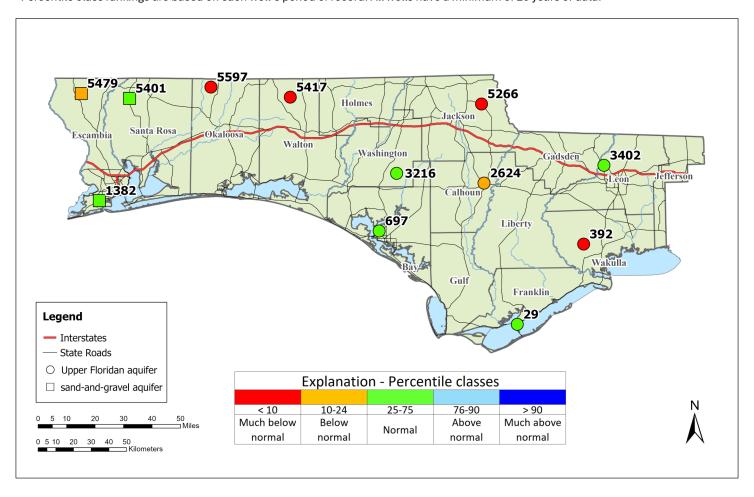




Figure 25: Daily Upper Floridan aquifer levels at USGS-Lake Jackson well (NWFID 3402), Leon County Land surface elevation is 121.40 ft, NAVD 88

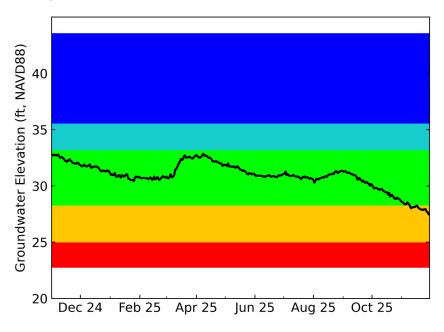


Figure 26: Daily Upper Floridan aquifer levels at USGS Benchmark well (NWFID 392), Wakulla County Land surface elevation is 46.27 ft, NAVD 88

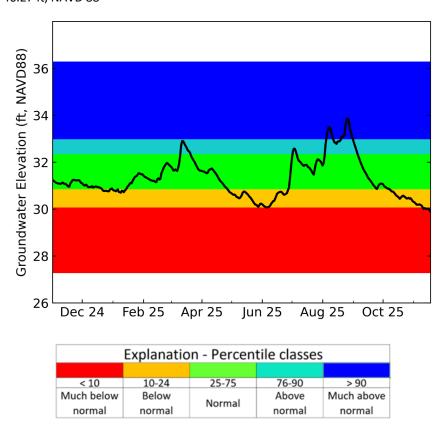




Figure 27: Daily Upper Floridan aquifer levels at NWFWMD Pittman Visa well (NWFID 5266), Jackson County Land surface elevation is 127.31 ft, NAVD 88

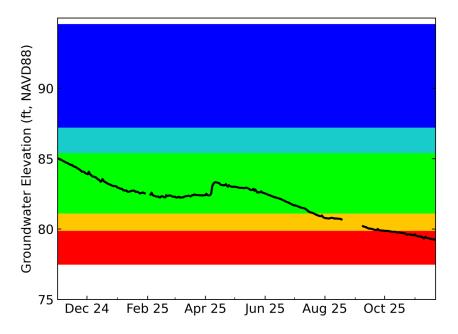


Figure 28: Daily Upper Floridan aquifer levels at USGS-422A Near Greenhead well (NWFID 3216), Washington County

Land surface elevation is 66.75 ft, NAVD 88

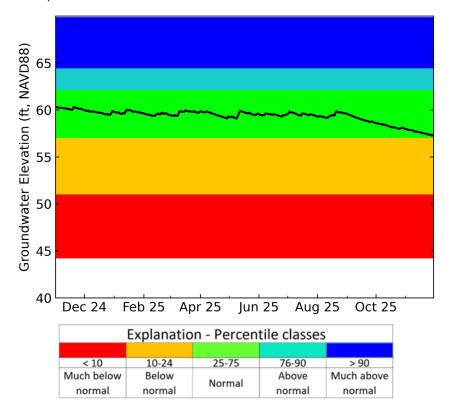




Figure 29: Daily Upper Floridan aquifer levels at Fannin Airport well (NWFID 697), Washington County Land surface elevation is 4.05 ft, NAVD 88

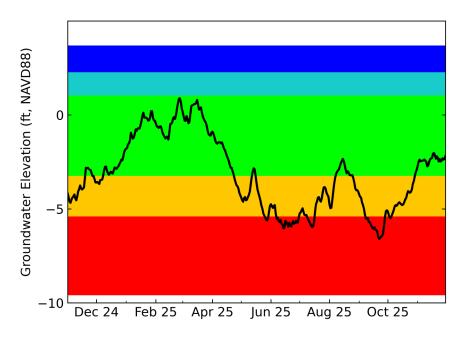


Figure 30: Daily sand-and-gravel aquifer levels at NWFWMD Weller Ave Deep well (NWFID 1382), Escambia County

Land surface elevation is 25.09 ft, NAVD 88

