

SUWANNEE RIVER WATER MANAGEMENT DISTRICT

MEMORANDUM

TO: Governing Board

FROM: Robbie McKinney, Hydrologic Program Manager, Office of Water Resources

THRU: Hugh Thomas, Executive Director

DATE: December 31, 2025

RE: December 2025 Hydrologic Conditions Report

RAINFALL

- Districtwide average rainfall for the month was 2.73", which was about 14 percent lower than the 1932-2024 average of 3.19" (Table 1, Figure 1). The 12-month period ending December 31 reflected a Districtwide rainfall deficit of 11.54", which was a decrease to the 12.94" deficit seen at the end of November. District counties ranged from 1.6" to 3.5" of rainfall on average, with parts of Jefferson, Madison, Hamilton, Suwannee, Taylor, and Lafayette counties receiving more than 4" of rainfall (Figure 2).
- Overall, a 12-month rainfall deficit was present in all river basins, with most decreasing in deficit by the end of December (Figure 3). An area of 12-month surplus greater than 3" was represented in the Waccasassa Basin. Sections with deficits greater than 21" were observed in both the Santa Fe and Aucilla river basins. Each of the river basins decreased their 3-month rainfall deficits by the end of December (Figure 4). While no surpluses were seen over the past 3 months, the Waccasassa Basin had small areas with neutral (-1" to 1") rainfall conditions. Portions with greater than 5" of rainfall deficit were located within the Suwannee, Coastal, Santa Fe, and Waccasassa river basins.

SURFACE WATER

- **Rivers:** Most of the river gages in Figure 5 finished the month in the below normal (10th – 25th percentile) flow ranges, with the Santa Fe (Worthington Springs and Ft. White) and Withlacoochee (Pinetta) rivers showing extremely low (<10th percentile) flows. The Worthington Springs gage also spent the last 6 days of December with record long-term daily minimum flow values. Additionally, other river gages in the Santa Fe Basin (New River and Graham) saw much below normal flows for the entire month (Figure 6). Only the Fenholloway and Suwannee (Branford) gages began and ended December with normal range (25th – 75th percentile) flows.
- **Lakes:** Water levels decreased at most of the monitored District lakes this month (Figure 7). Water levels at both Sneads Smokehouse and Alligator Lake were below the equipment sensor this month due to lower-than-average rainfall. The median decrease in stage across all measured lakes was <0.1', and each of the monitored lakes ended December below their respective long-term average.
- **Springs:** Flow measurements were made at 16 springs in December by the U.S. Geological Survey (USGS), District staff, and contractors. The Wacissa River saw flows almost exclusively in the extremely low flow range this month (Figure 8). Madison Blue Springs, on the other hand, had a normal flow range throughout the month of December (Figure 9).

GROUNDWATER

Upper Floridan Aquifer (UFA) levels across the District ranged from normal to extremely low (<10th percentile) levels this month (Figure 10). Overall, groundwater levels decreased by a median of about 0.2' since the end of November and ended December with a Districtwide average around the 24th percentile.

The Live Oak index well remained slightly higher than the historical monthly average level, while the other 11 wells remained below long-term averages at the end of the month (Figure 11). Long-term District UFA well levels ended December in either the normal, low, or very low categories (Figure 12a). The monitored long-term wells with records that extend back to at least 1964 showed decreasing water levels this month relative to last month (Figure 12b).

CLIMATE AND DROUGHT OUTLOOK

La Niña conditions continue but are followed by a 75% chance of ENSO-neutral transition likely between January and March 2026.

The NOAA three-month seasonal outlook suggests above normal temperatures and below normal precipitation within the District from January through March 2026.

The U.S. Drought Monitor report released on Thursday, January 8th shows most District counties with Moderate Drought (D1) or Severe Drought (D2). A large area of Jefferson County has also been designated as Extreme Drought (D3).

CONSERVATION

Water conservation continues to be necessary to sustain healthy groundwater levels and flows in District springs and rivers. All users are urged to eliminate unnecessary uses. Landscape irrigation during Eastern Standard Time (November 2, 2025, to March 8, 2026) is limited to once per week based on a District water conservation rule that applies to residential landscaping, public or commercial recreation areas, and businesses that are not regulated by a District-issued water use permit. Information about the District's year-round conservation measures is available at <http://www.srwmd.org/index.aspx?NID=337>

ACKNOWLEDGMENTS

The Hydrologic Conditions Report is a monthly combined effort between the Offices of Water Resources and Hydrologic Data Services data collection and review programs. Acknowledgment is made to the following staff for their contributions to the timely production of this report:

- Data Collection: Christian Holton, Matthew Jordan, Dylan Mock, Morgan Pearson, Kevin Posada, and Vince Robinson
- QA/QC and Reporting: Susie Hetrick, Robbie McKinney, Brandi Sistrunk, and Mitch Valerio
- Administrative Support/Document Preparation/IT: Paul Buchanan, Bo Cameron, Tyler Jordan, Ashley Kirby, and Andrew Neel

This report is compiled in compliance with Chapter 40B-21.211, Florida Administrative Code, using rainfall (gage-adjusted radar-derived estimates), groundwater (122 wells), surface water (35 stations), and general information such as drought indices and forecasts. Data are provisional and updated as revised data become available. Data are available at <http://www.mysuwanneeriver.com/507/Water-Data-Portal> or upon request.

Table 1: Nexrad Monthly Rainfall Totals by County (inches)

County	December 2025	December Average*	Month % of Normal	Total Last 12 Months	Annual % of Normal*
Alachua	1.79	2.82	63%	38.80	74%
Baker	2.56	2.98	86%	40.86	77%
Bradford	1.68	2.83	59%	36.96	71%
Columbia	2.78	3.06	91%	43.50	82%
Dixie	2.12	3.08	69%	43.61	75%
Gilchrist	1.99	3.00	66%	41.48	76%
Hamilton	3.38	3.29	103%	42.46	82%
Jefferson	3.42	3.80	90%	37.61	67%
Lafayette	2.99	3.21	93%	47.07	85%
Levy	1.66	2.90	57%	48.04	85%
Madison	3.37	3.62	93%	40.00	75%
Suwannee	3.25	3.18	102%	42.53	80%
Taylor	3.50	3.31	106%	45.59	80%
Union	2.16	2.95	73%	40.81	77%

*Based on PRISM LT81 monthly rainfall averages by county (1927-2023)

December 2025 District Average 2.73
 December Long-Term Average (1932-2024) 3.19
 Historical 12-month Average (1932-2024) 54.76
 Past 12-Month Total 43.22
 12-Month Rainfall **Surplus/Deficit** **-11.54**

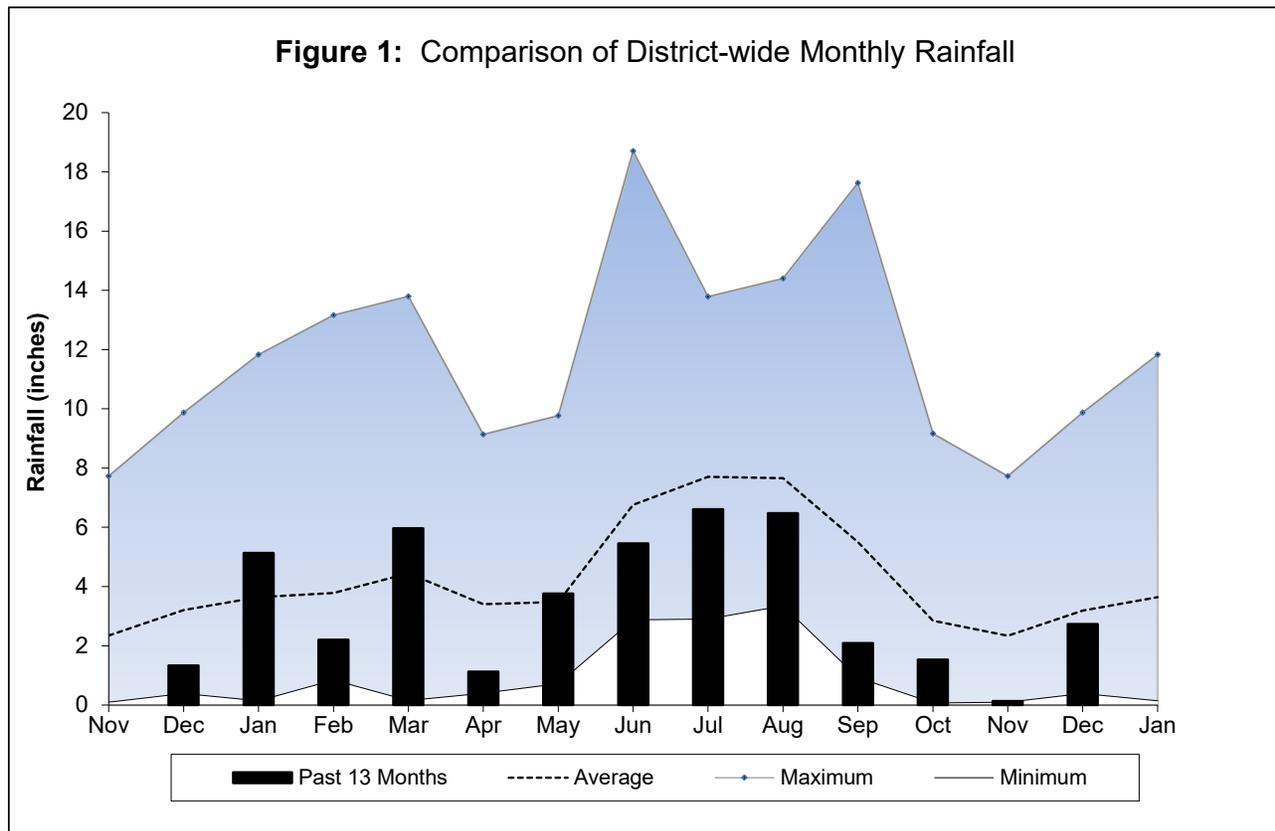


Figure 2: December 2025 SRWMD Gage-adjusted Radar Rainfall

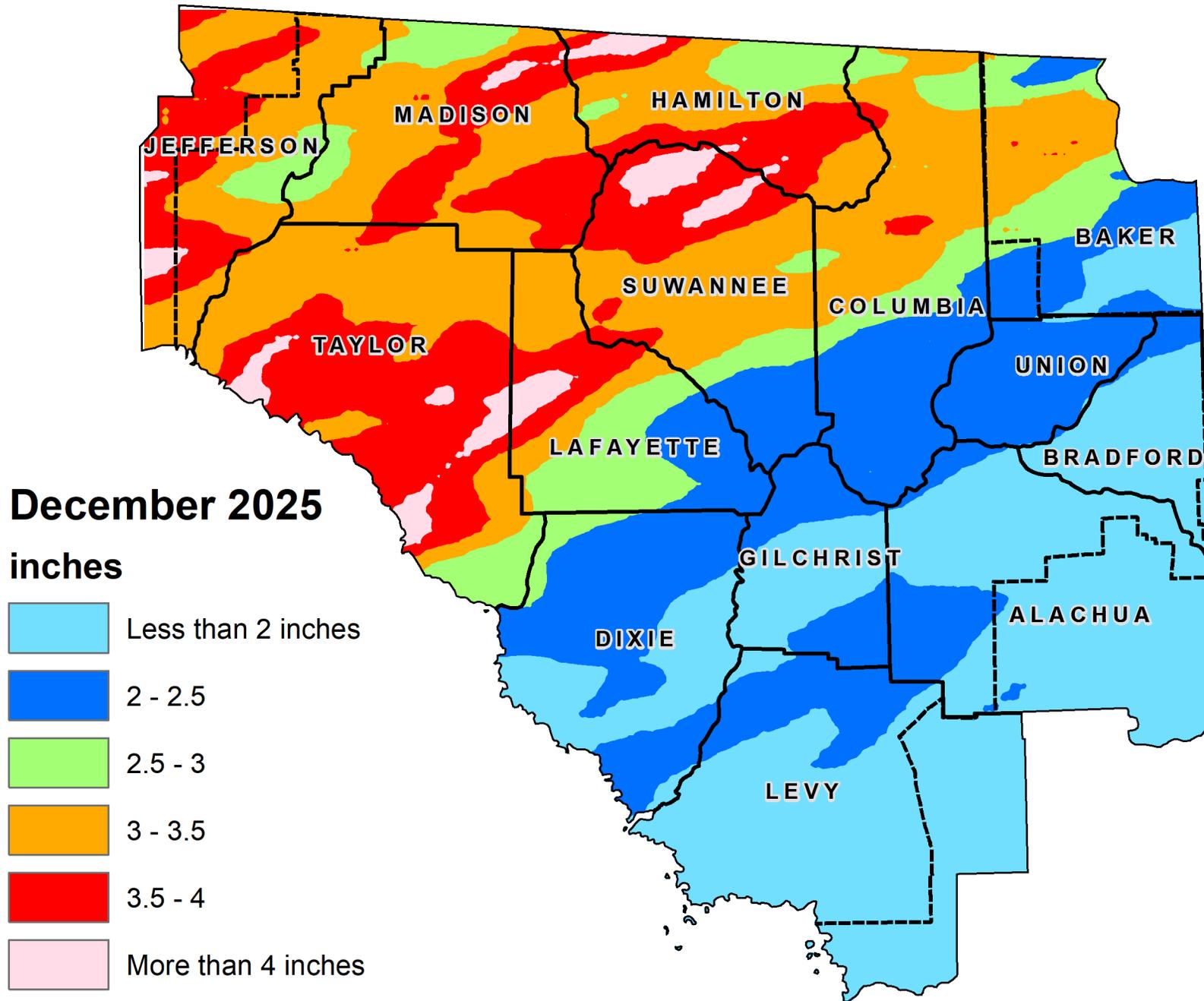


Figure 3: 12 - Month Rainfall Surplus/Deficit by River Basin through December 31, 2025

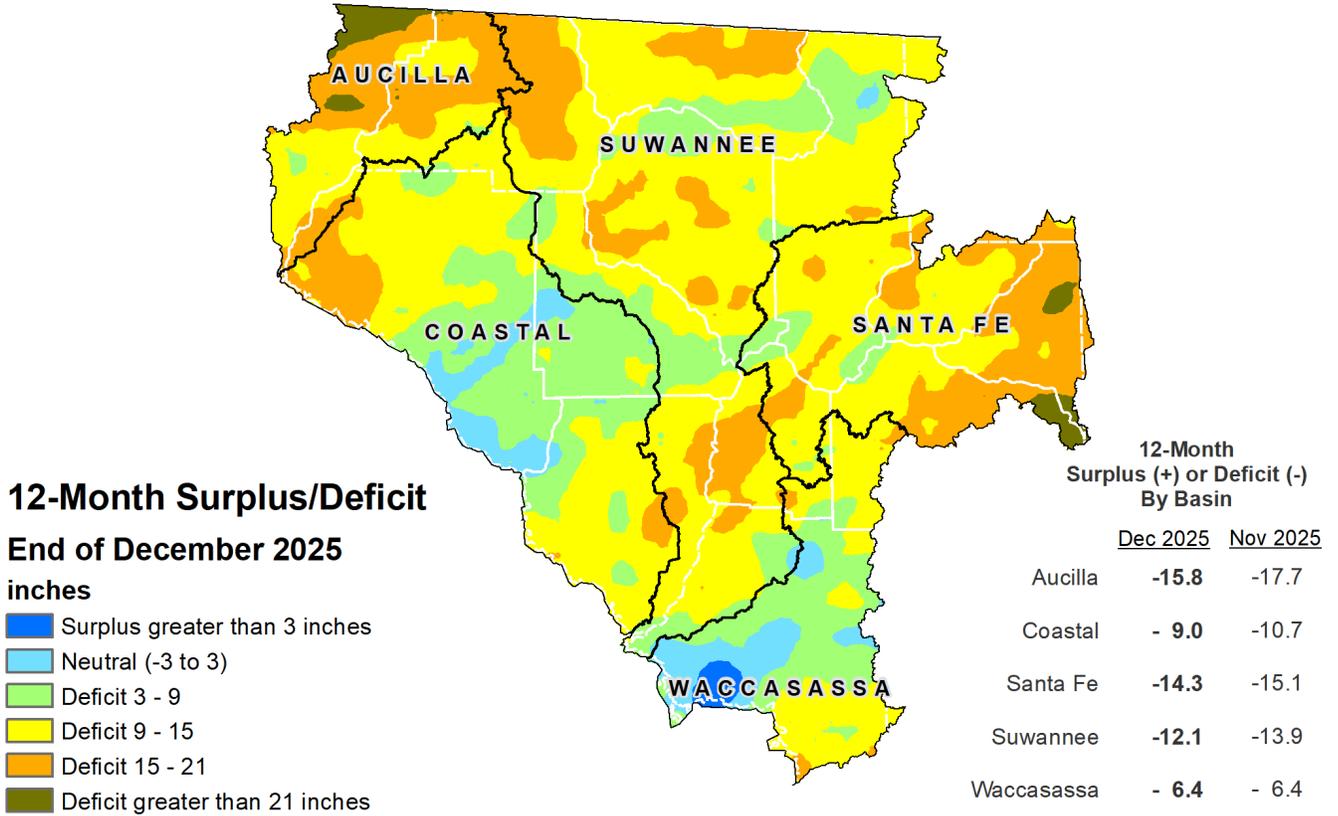


Figure 4: 3 - Month Rainfall Surplus/Deficit by River Basin through December 31, 2025

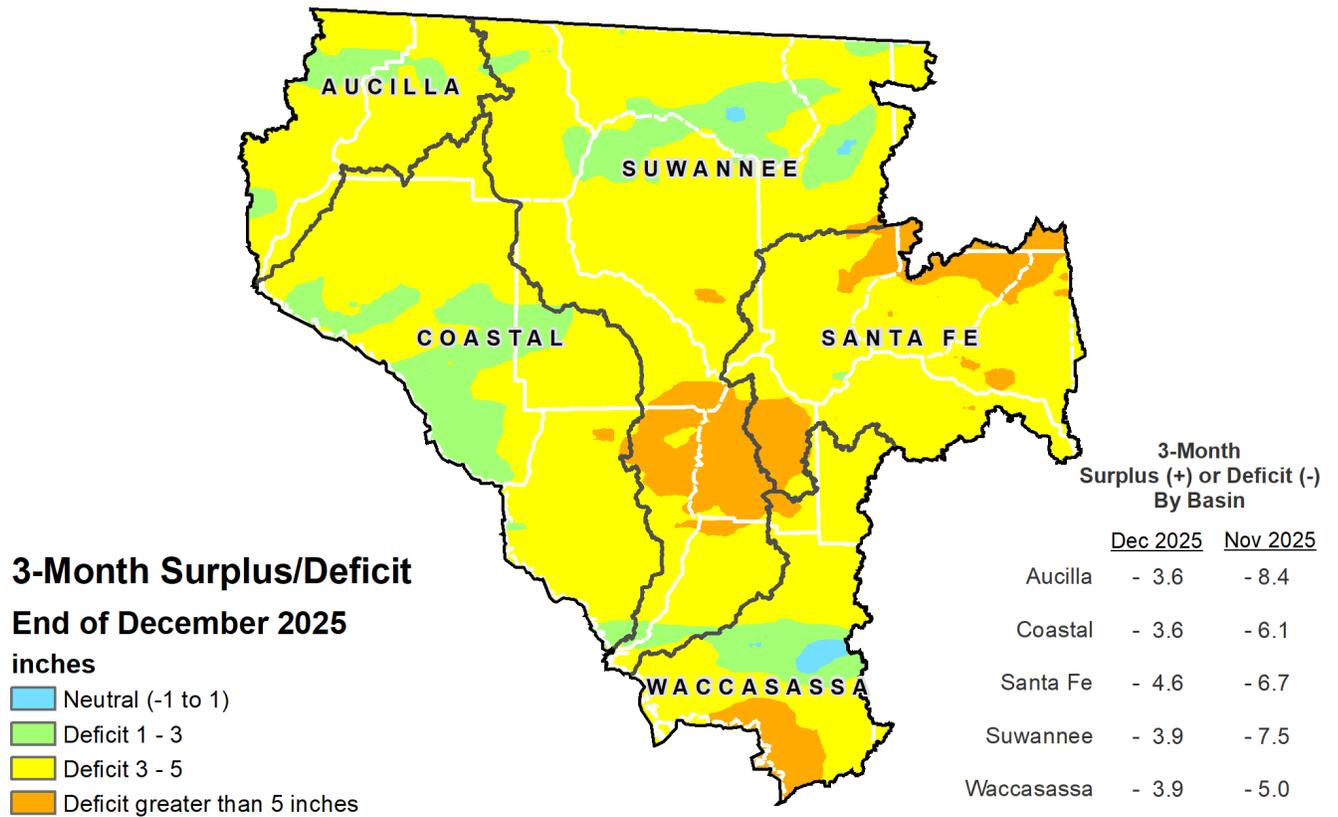


Figure 5: Daily River Flow Statistics

January 1, 2025 through December 31, 2025

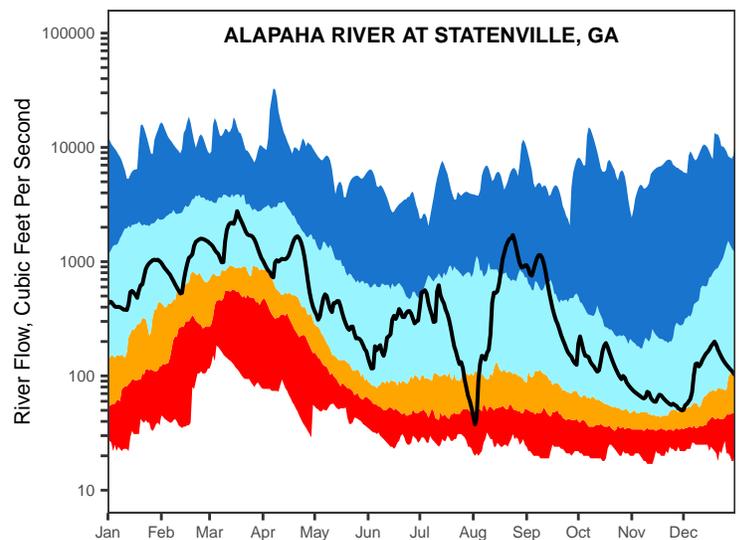
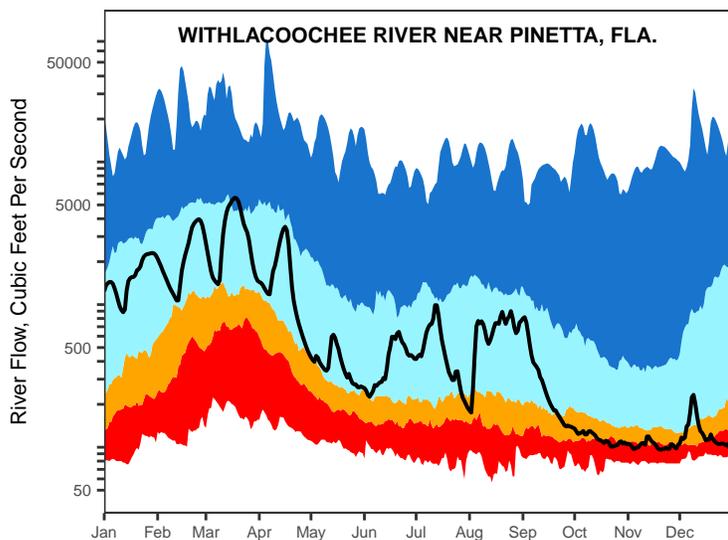
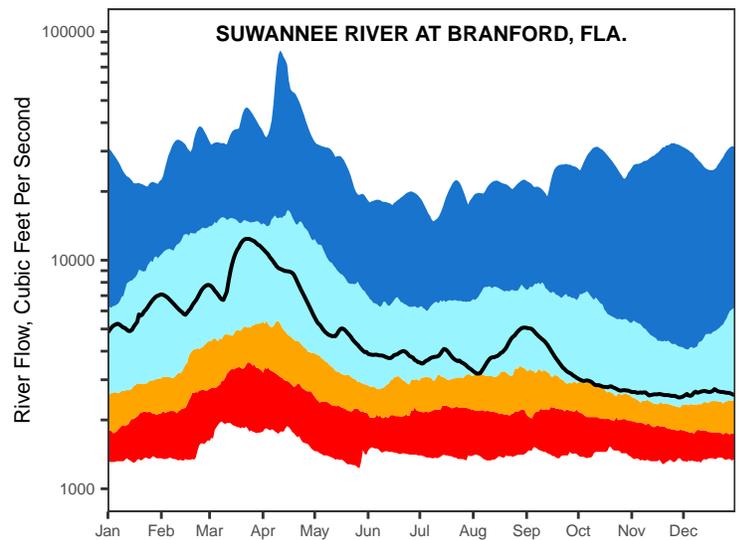
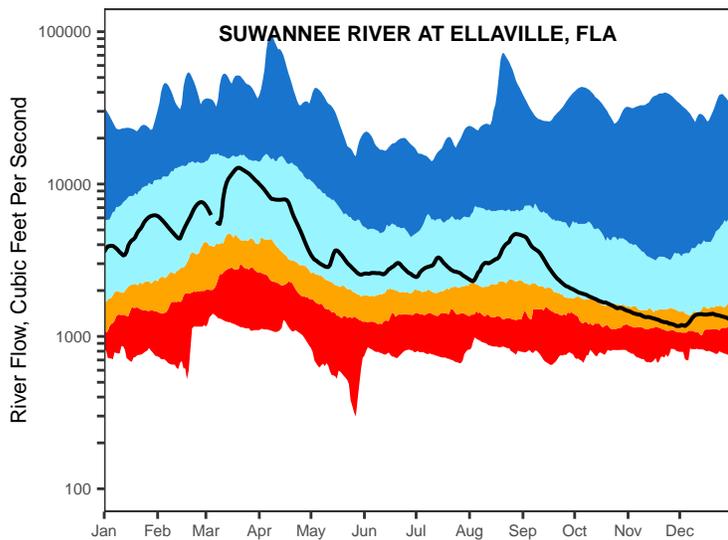
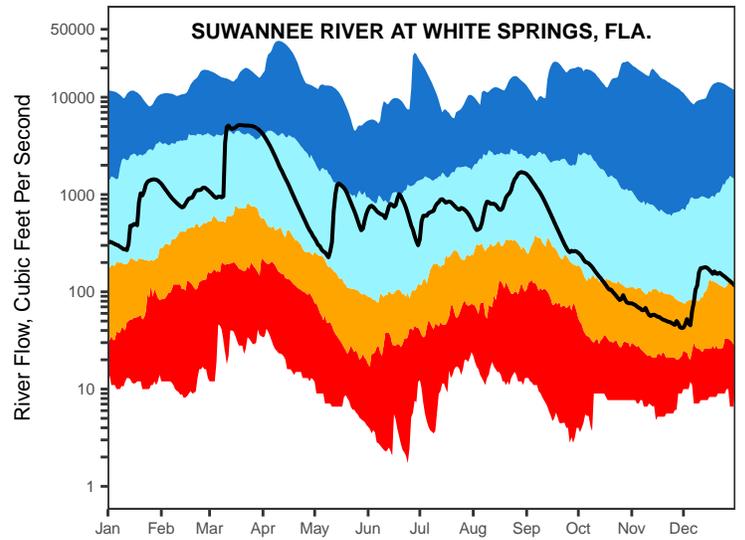
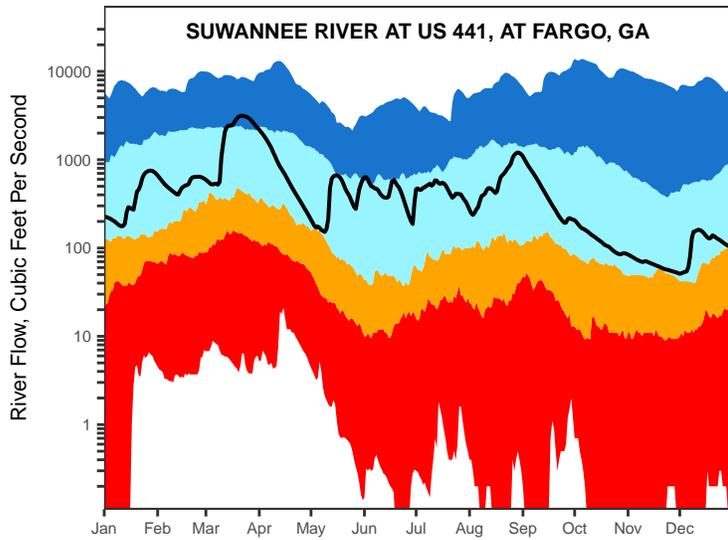
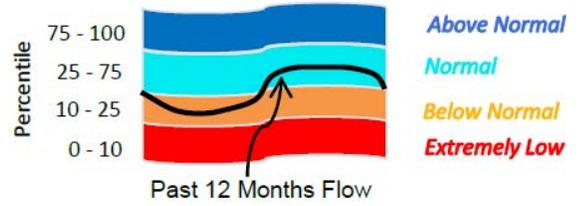
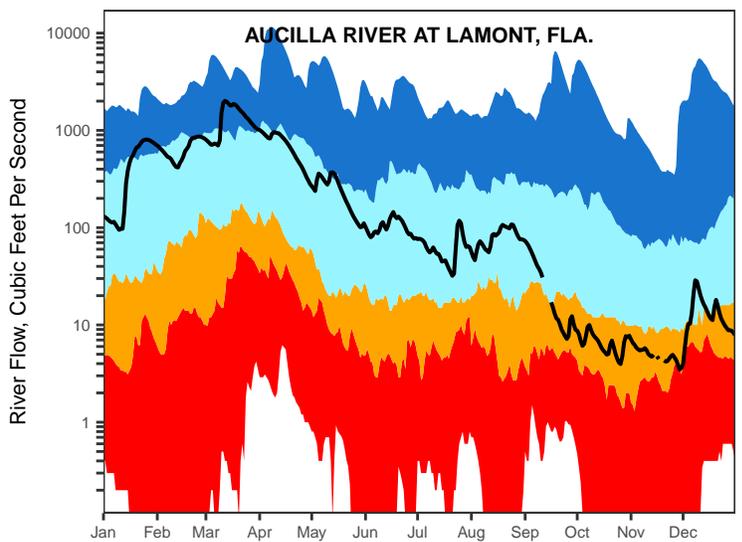
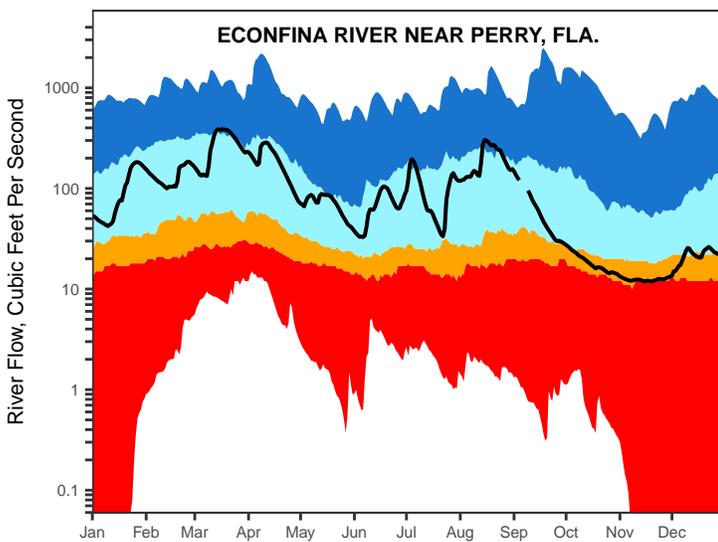
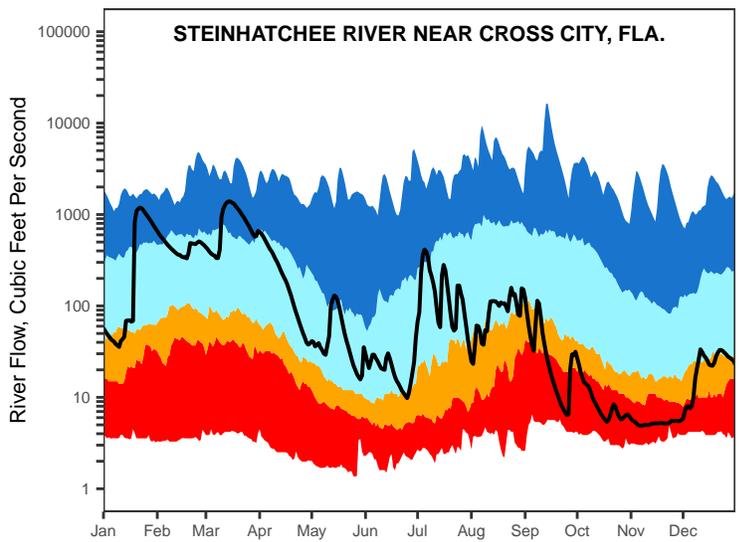
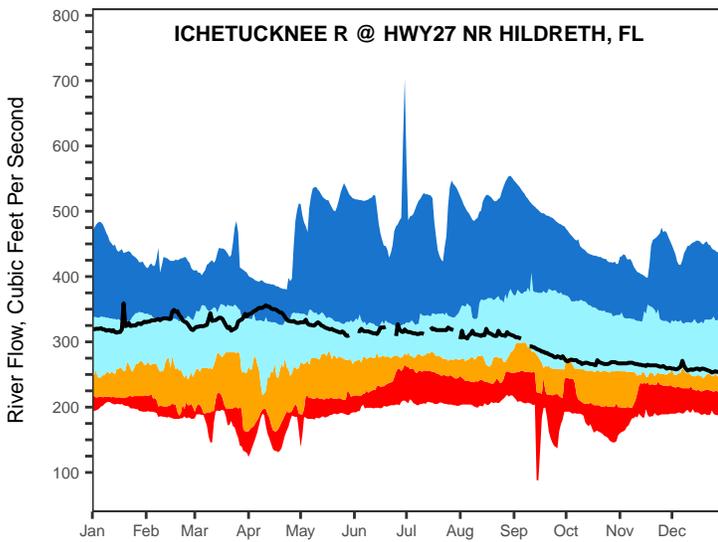
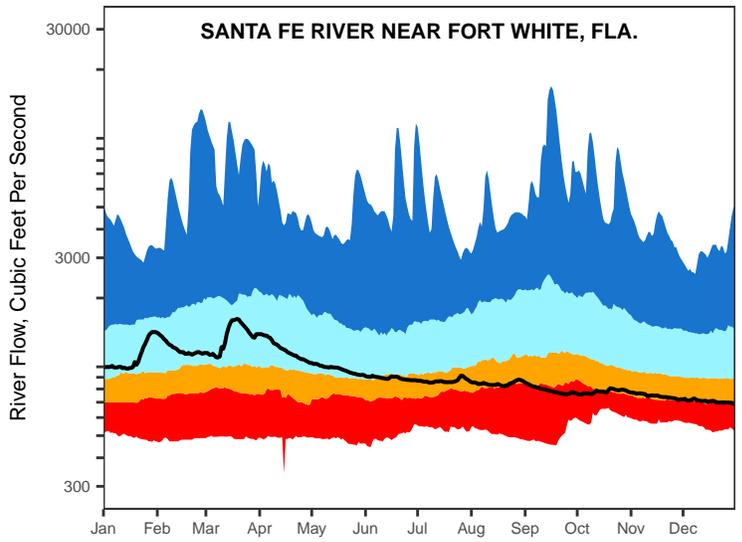
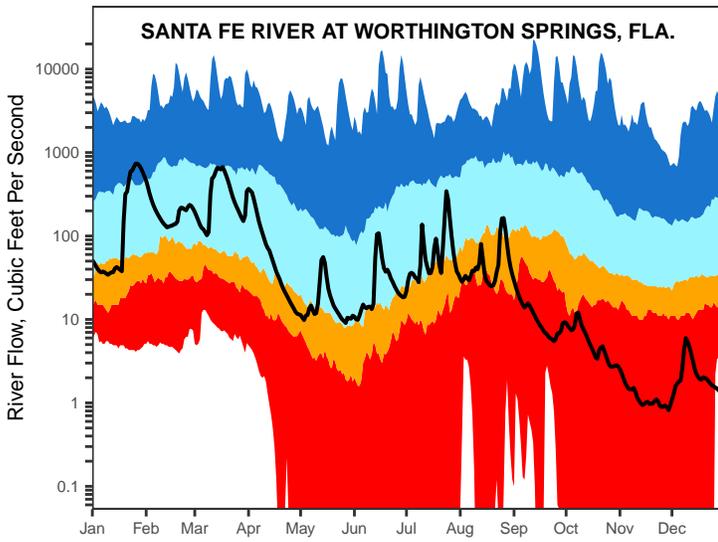
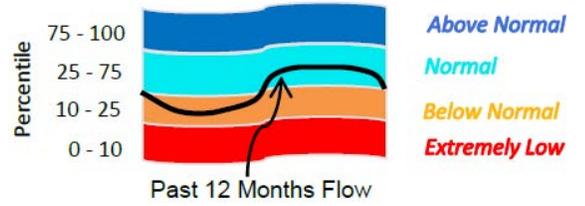


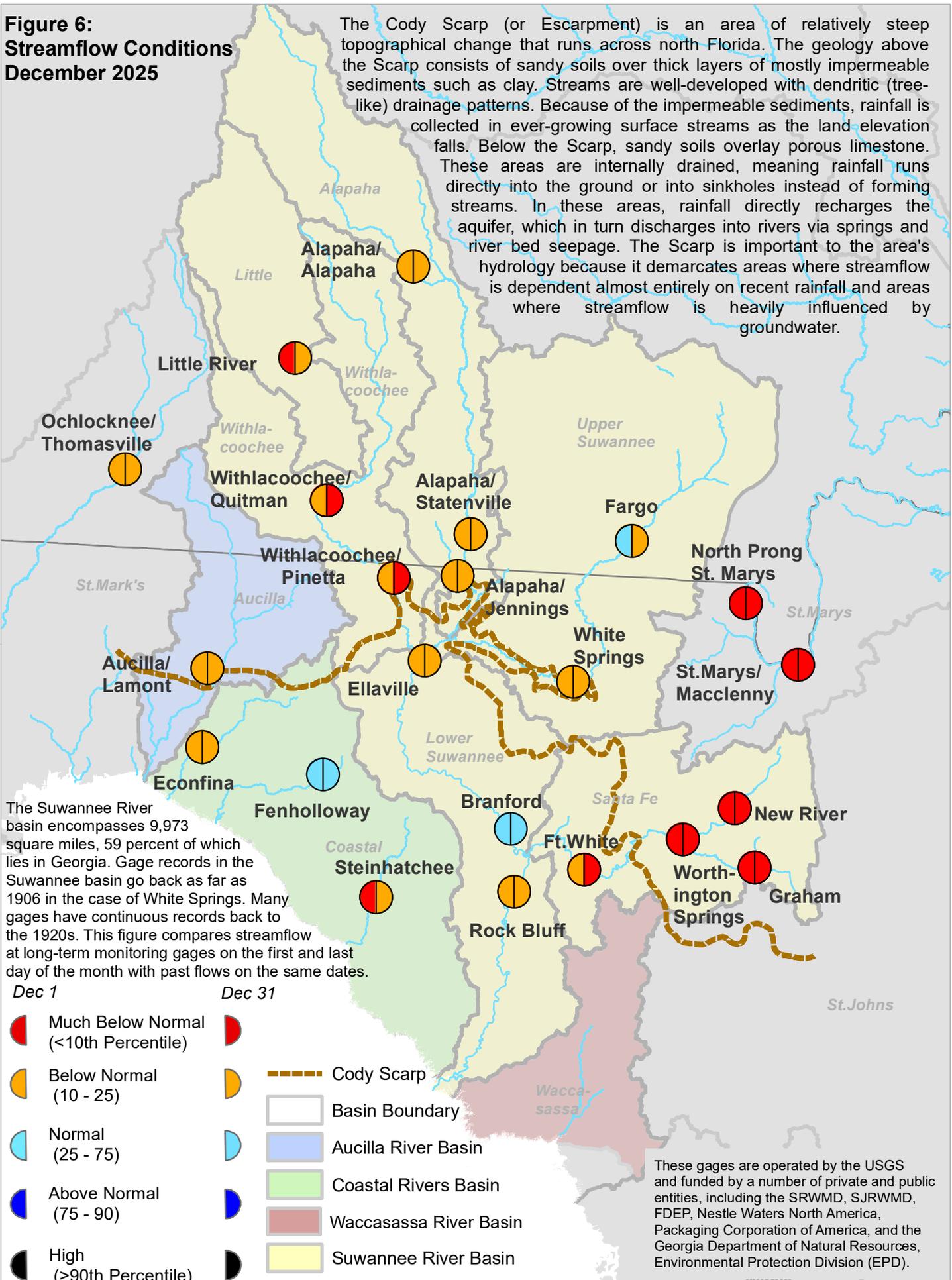
Figure 5, cont.: Daily River Flow Statistics

January 1, 2025 through December 31, 2025



**Figure 6:
Streamflow Conditions
December 2025**

The Cody Scarp (or Escarpment) is an area of relatively steep topographical change that runs across north Florida. The geology above the Scarp consists of sandy soils over thick layers of mostly impermeable sediments such as clay. Streams are well-developed with dendritic (tree-like) drainage patterns. Because of the impermeable sediments, rainfall is collected in ever-growing surface streams as the land elevation falls. Below the Scarp, sandy soils overlay porous limestone. These areas are internally drained, meaning rainfall runs directly into the ground or into sinkholes instead of forming streams. In these areas, rainfall directly recharges the aquifer, which in turn discharges into rivers via springs and river bed seepage. The Scarp is important to the area's hydrology because it demarcates areas where streamflow is dependent almost entirely on recent rainfall and areas where streamflow is heavily influenced by groundwater.



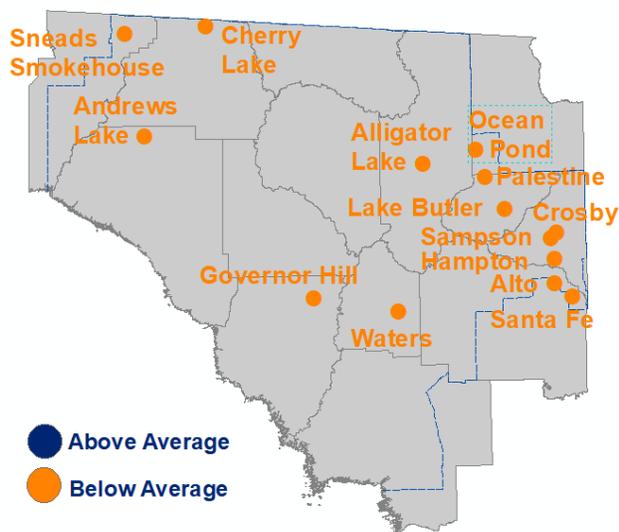
The Suwannee River basin encompasses 9,973 square miles, 59 percent of which lies in Georgia. Gage records in the Suwannee basin go back as far as 1906 in the case of White Springs. Many gages have continuous records back to the 1920s. This figure compares streamflow at long-term monitoring gages on the first and last day of the month with past flows on the same dates.

- | | |
|--------------------------------------|---------------|
| Dec 1 | Dec 31 |
| | |
| Much Below Normal (<10th Percentile) | |
| | |
| Below Normal (10 - 25) | |
| | |
| Normal (25 - 75) | |
| | |
| Above Normal (75 - 90) | |
| | |
| High (>90th Percentile) | |

- Cody Scarp
- Basin Boundary
- Aucilla River Basin
- Coastal Rivers Basin
- Waccasassa River Basin
- Suwannee River Basin

These gages are operated by the USGS and funded by a number of private and public entities, including the SRWMD, SJRWMD, FDEP, Nestle Waters North America, Packaging Corporation of America, and the Georgia Department of Natural Resources, Environmental Protection Division (EPD).

Figure 7: December 2025 Lake Levels



SRWMD lakes react differently to climatic changes depending on their location in the landscape. Some lakes, in particular in the eastern part of the District, are embedded in a surficial or intermediate aquifer over relatively impermeable clay deposits. These lakes rise and fall according to local rainfall and surface runoff. They retain water during severe droughts since most losses occur from evaporation. Other lakes, such as Governor Hill and Waters Lake, have porous or “leaky” bottoms that interact with the Floridan aquifer. These lakes depend on groundwater levels to stay high. If aquifer levels are low, these lakes go dry even if rainfall is normal.

The District currently monitors 14 lakes on a long-term basis; much of the data was originally provided by volunteer observers. Monitoring records began in the 1970s, except for Lakes Butler, Sampson, and Santa Fe, which started in 1957.

Feet Above or Below Historic Average

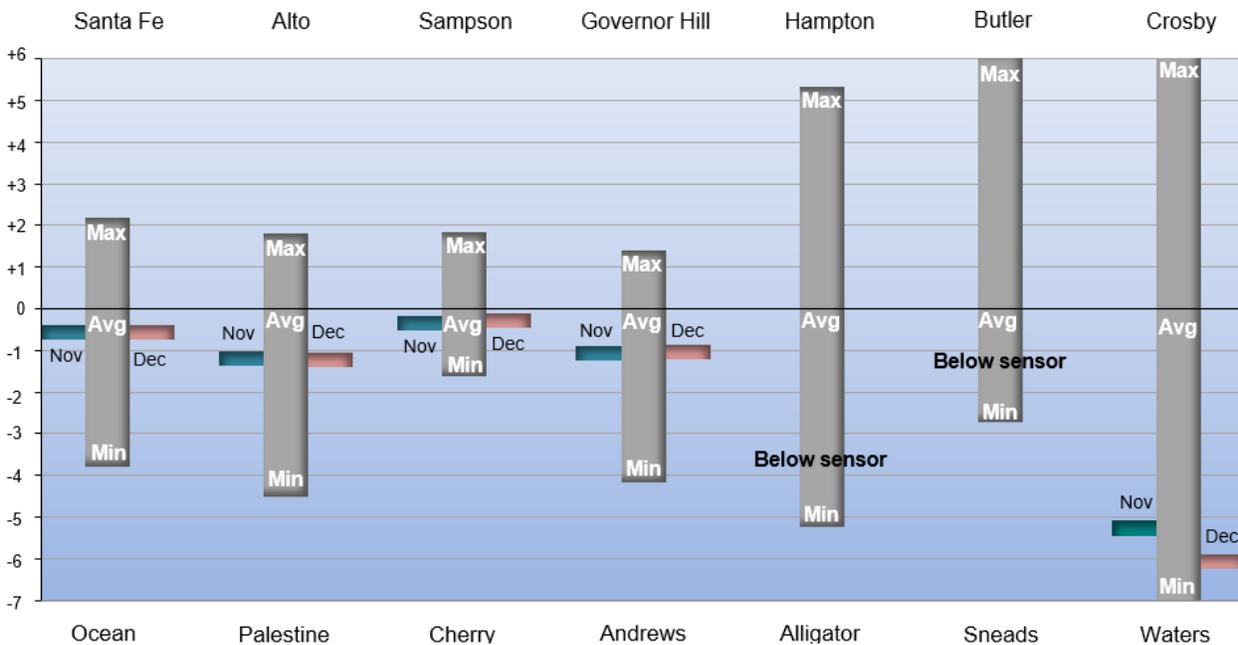
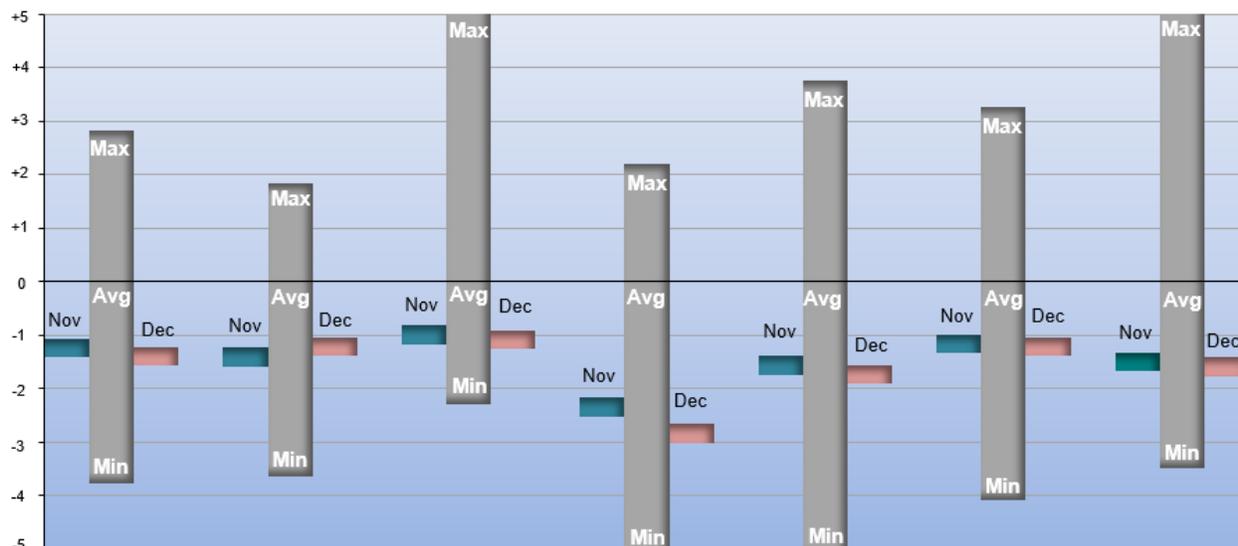


Figure 8: Flow Over the Past 12 Months, Wacissa River (cubic feet per second)

Note: This graph is based on provisional data that are subject to revision

Period 12 Month 01/01/2025 to 01/01/2026

Percentile statistics are calculated using data from 06/04/1971 to 09/30/2024

Wacissa

- Max-Q75
- Q75-Q25
- Q25-Q10
- Q10-Min
- Archived Data
- Provisional Data

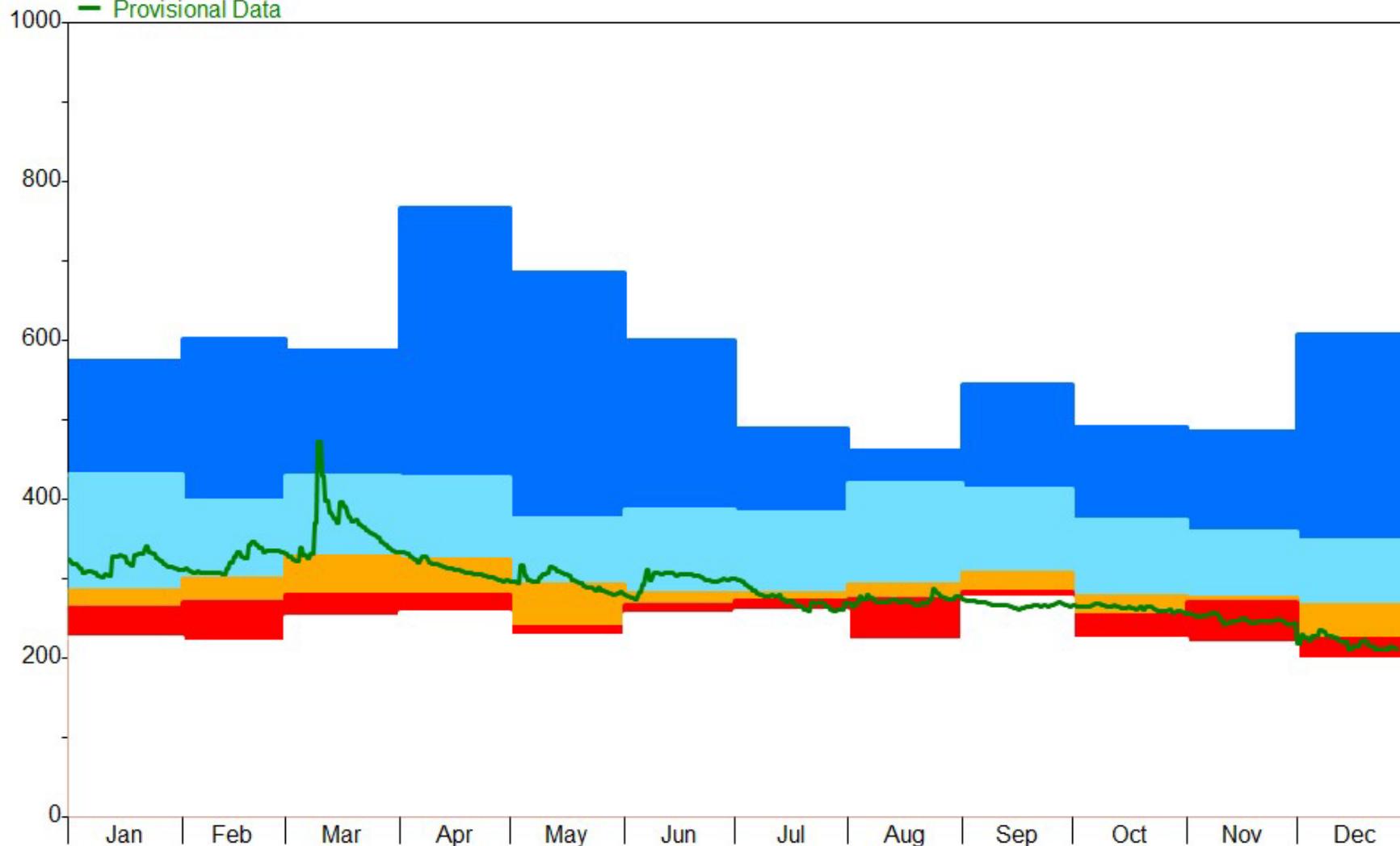


Figure 9: Flow Over the Past 12 Months, Madison Blue Springs (cubic feet per second)

Note: This graph is based on provisional data that are subject to revision

Period 12 Month 01/01/2025 to 01/01/2026

Percentile statistics are calculated using data from 03/01/1932 to 09/30/2024

Madison_Blue_Spg

■ Max-Q75

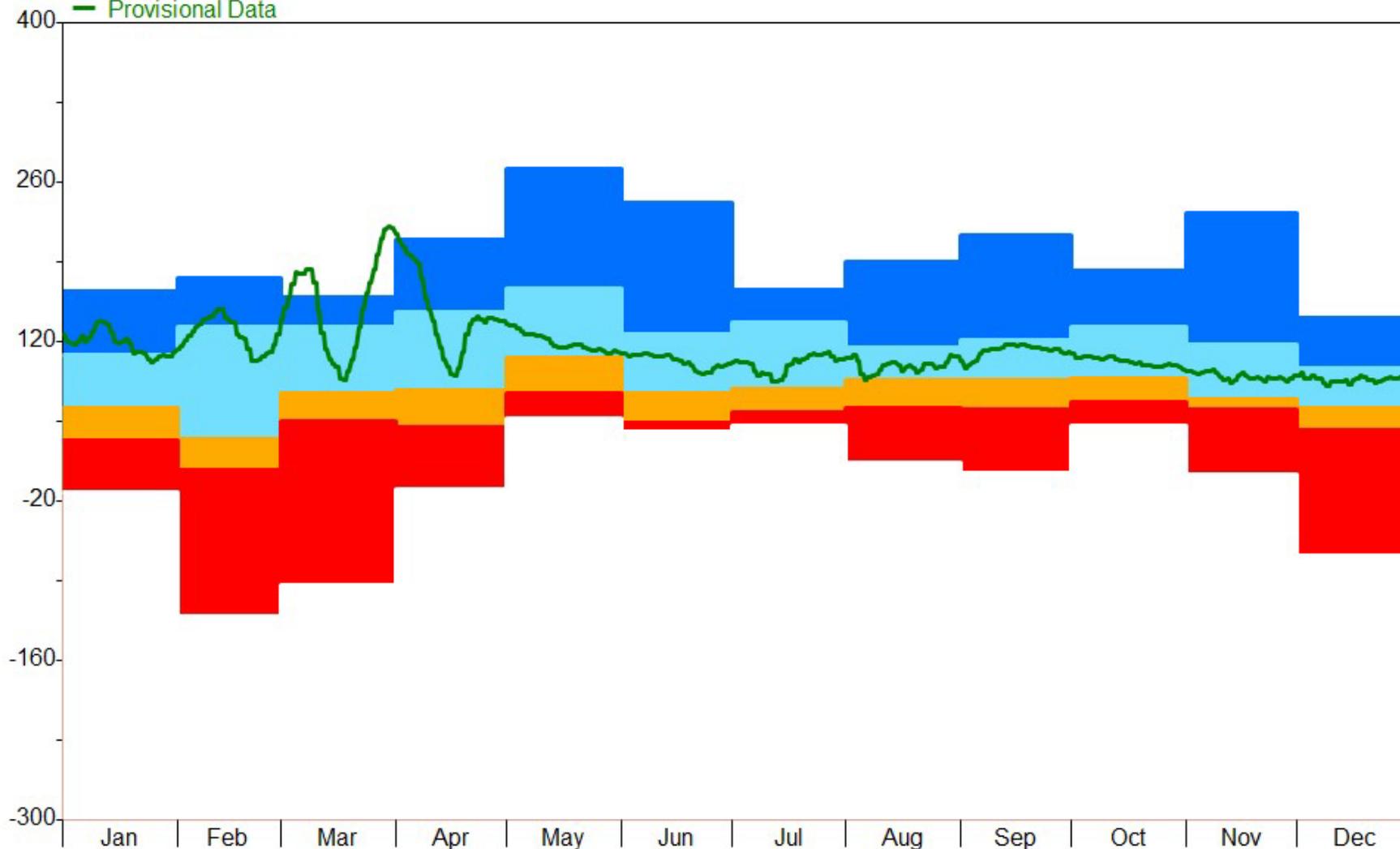
■ Q75-Q25

■ Q25-Q10

■ Q10-Min

— Archived Data

— Provisional Data



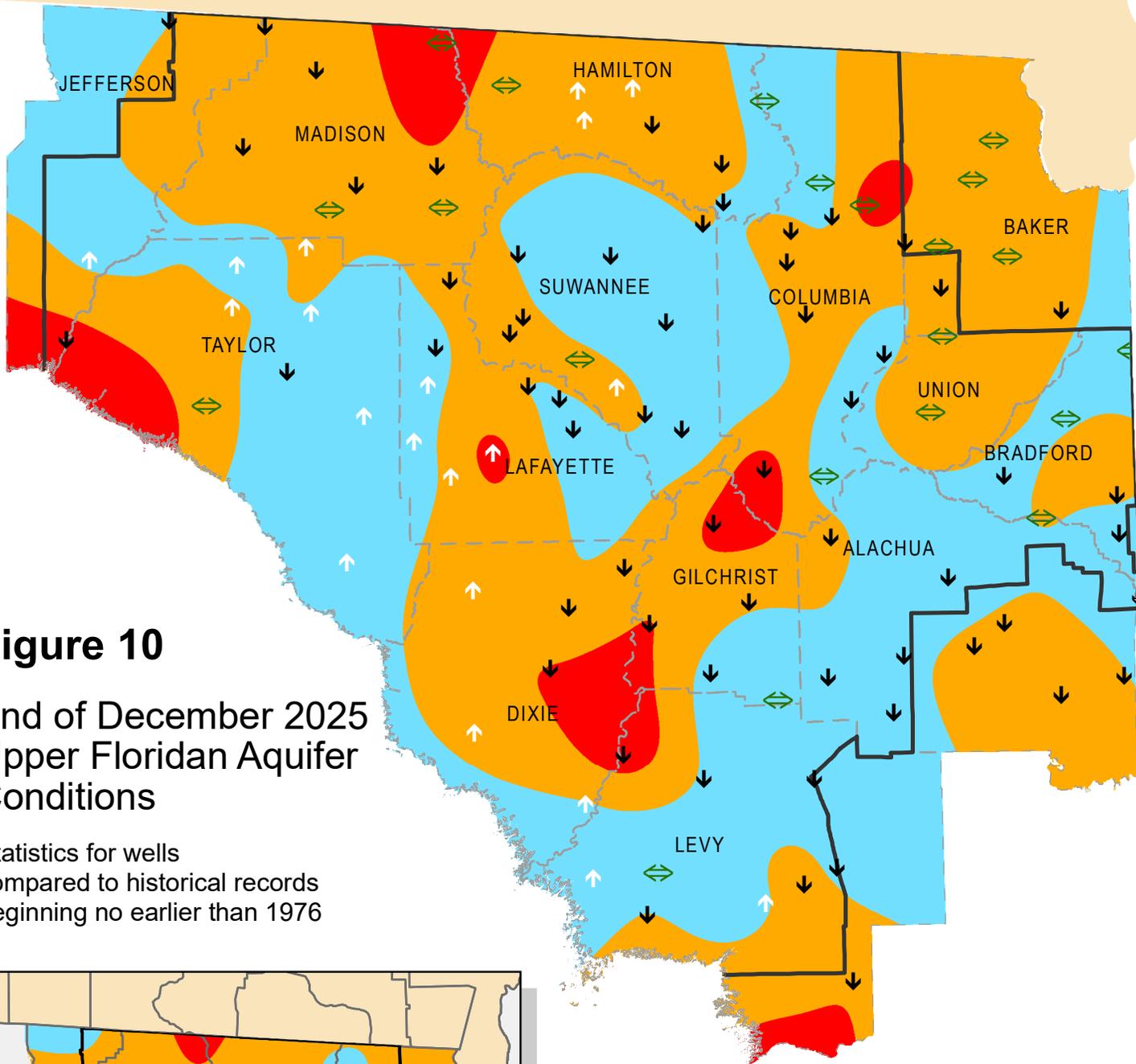
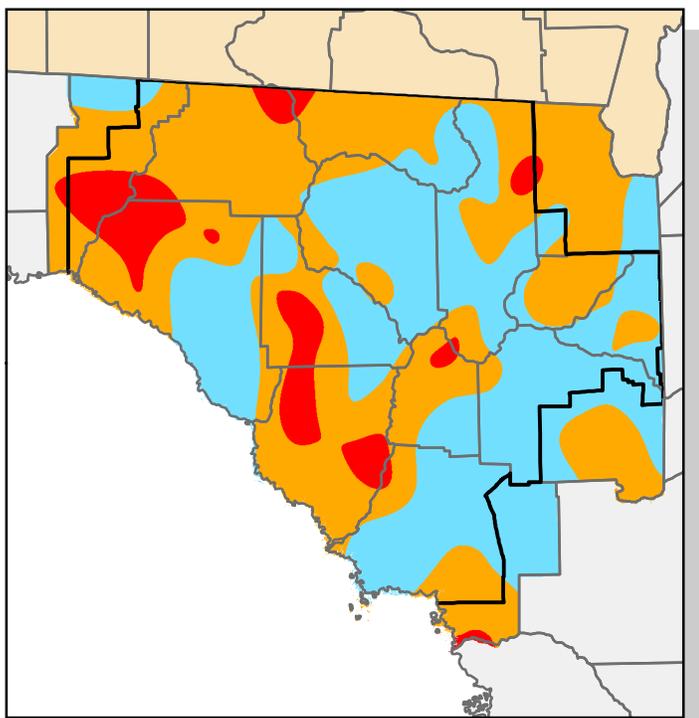


Figure 10

End of December 2025 Upper Floridan Aquifer Conditions

Statistics for wells
compared to historical records
beginning no earlier than 1976



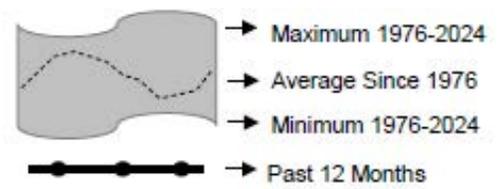
Inset: November Groundwater Percentiles

Additional wells courtesy of SJRWMD, SWFWMD and USGS

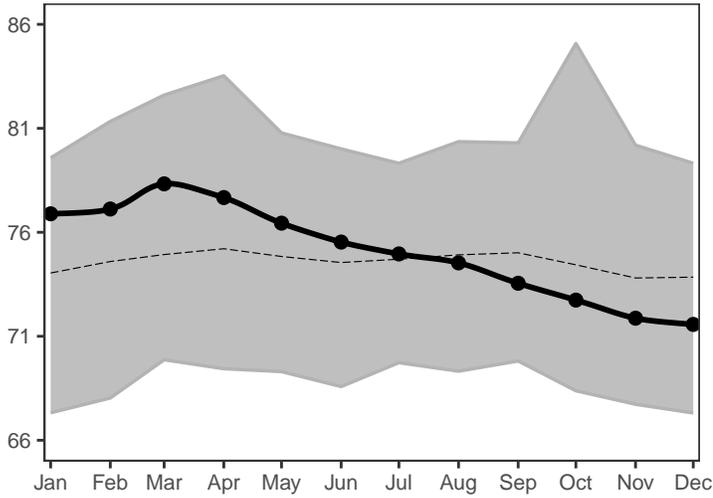
- Extremely High
(Greater than 90th Percentile)
- High
(75th to 90th Percentile)
- Normal
(25th to 75th Percentile)
- Low
(10th to 25th Percentile)
- Extremely Low
(Less than 10th Percentile)
- Increase/decrease in level since last month
- Increase/decrease since last month
less than one percent of historic range
- District Boundary

Figure 11: Monthly Groundwater Statistics

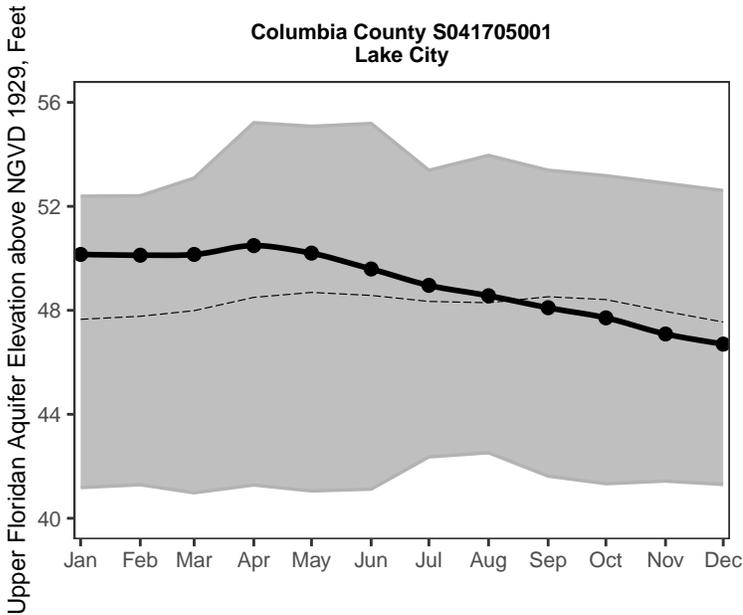
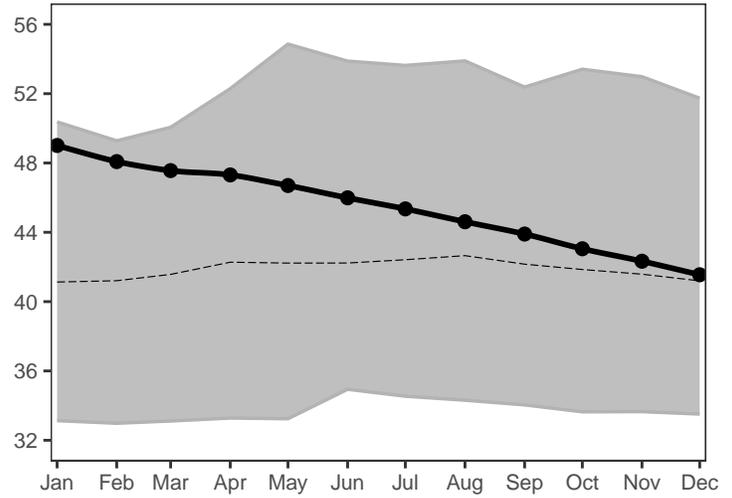
Levels January 2025 through December 2025
 Period of Record Beginning 1976



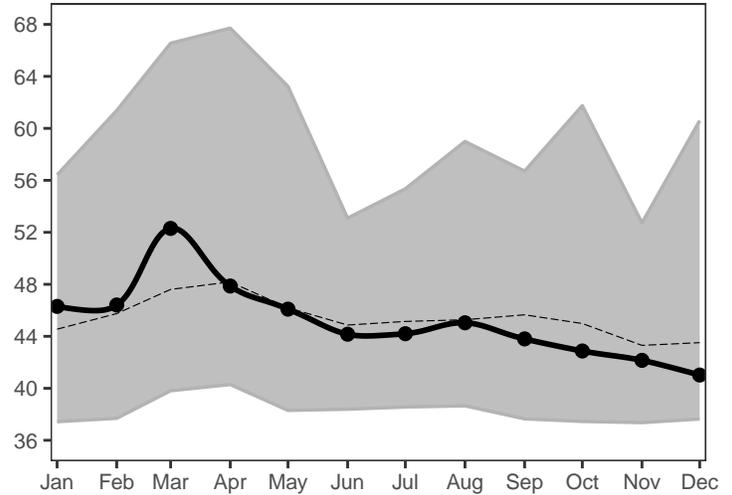
Madison County N010719001
near Greenville



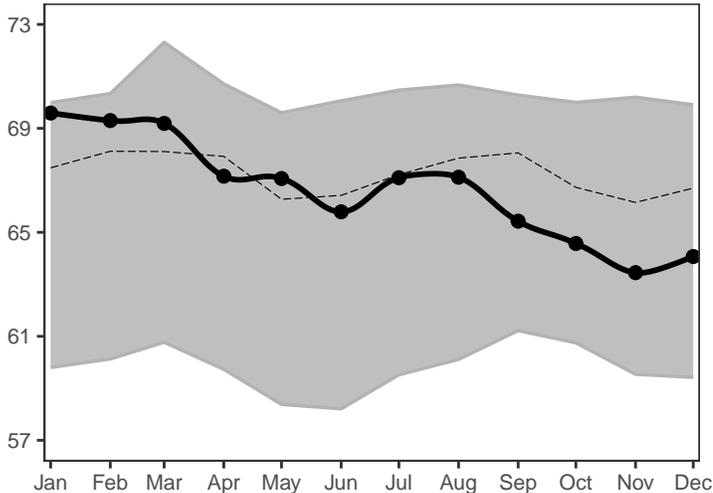
Suwannee County S021335001
near Live Oak



Hamilton County N011422007
near Jasper



Lafayette County S061114001
near Mayo



Taylor County S040736005
Perry

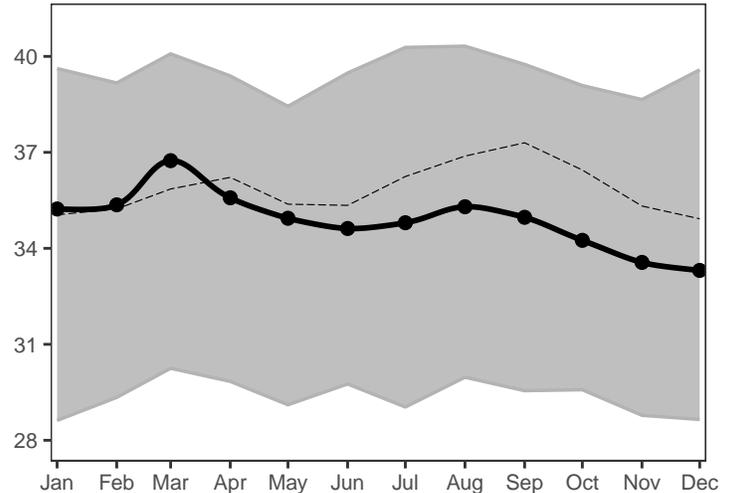
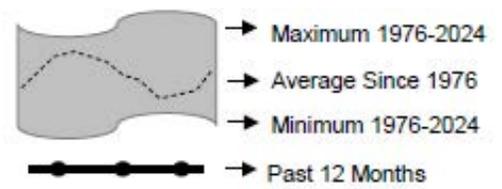
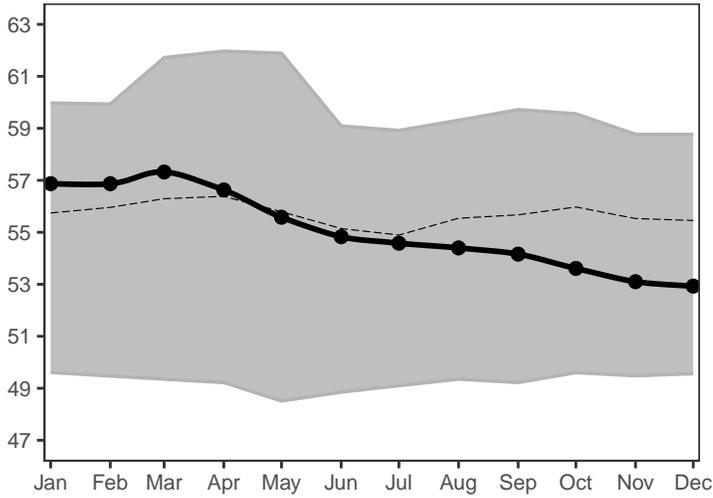


Figure 11, cont.: Monthly Groundwater Statistics

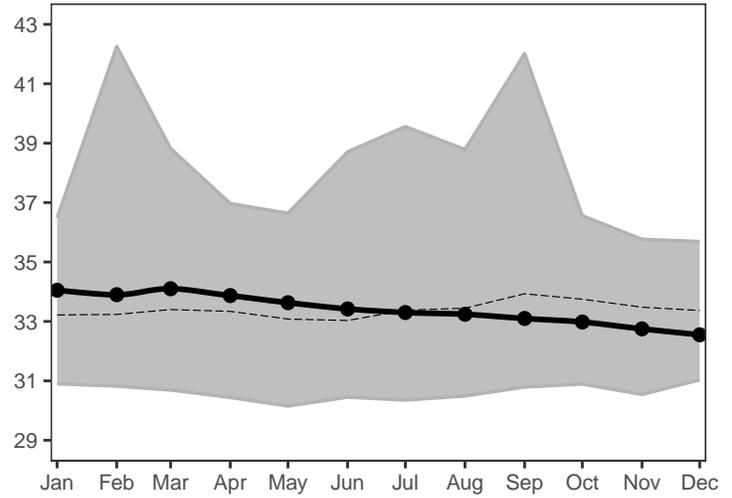
Levels January 2025 through December 2025
 Period of Record Beginning 1976



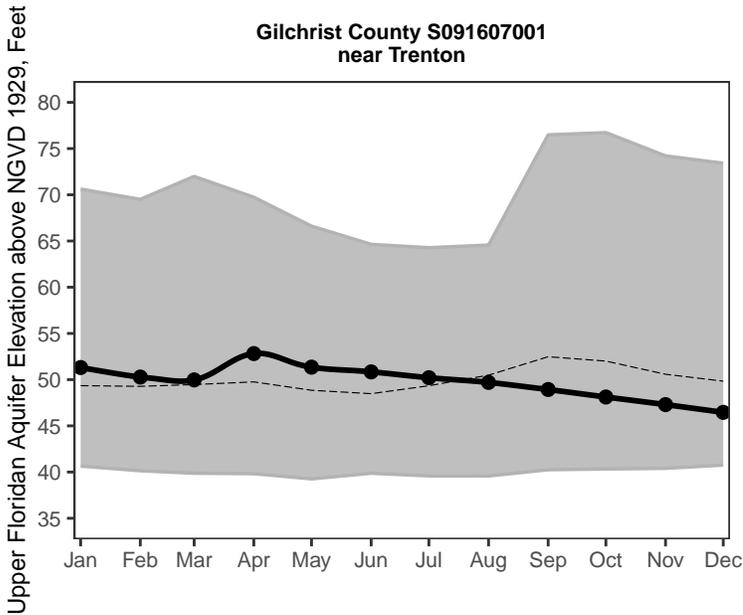
Union County S051933001
near Lake Butler



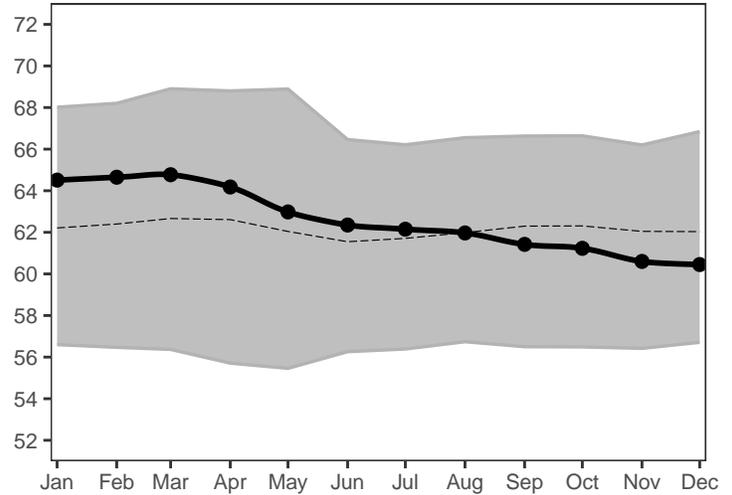
Alachua County S081703001
at High Springs



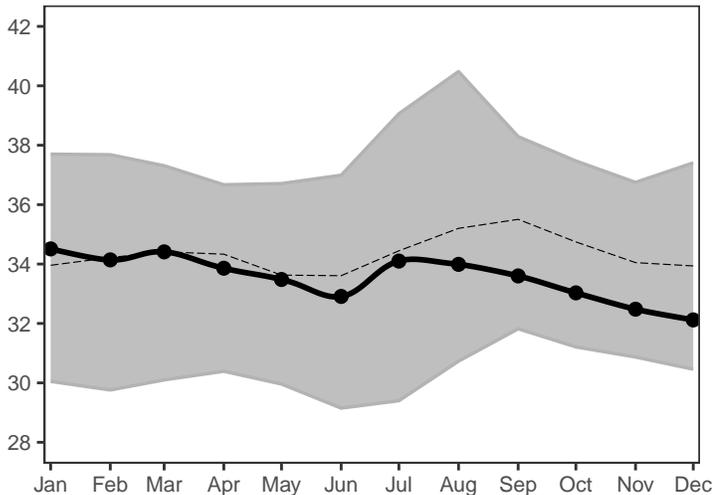
Gilchrist County S091607001
near Trenton



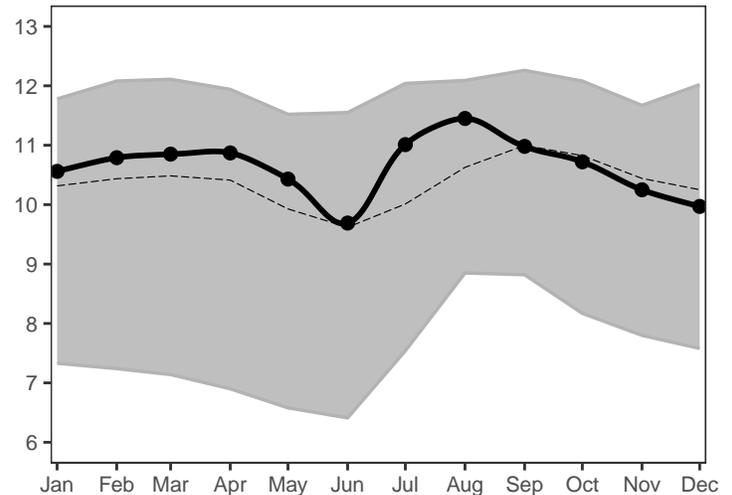
Bradford County S072132001
near Graham

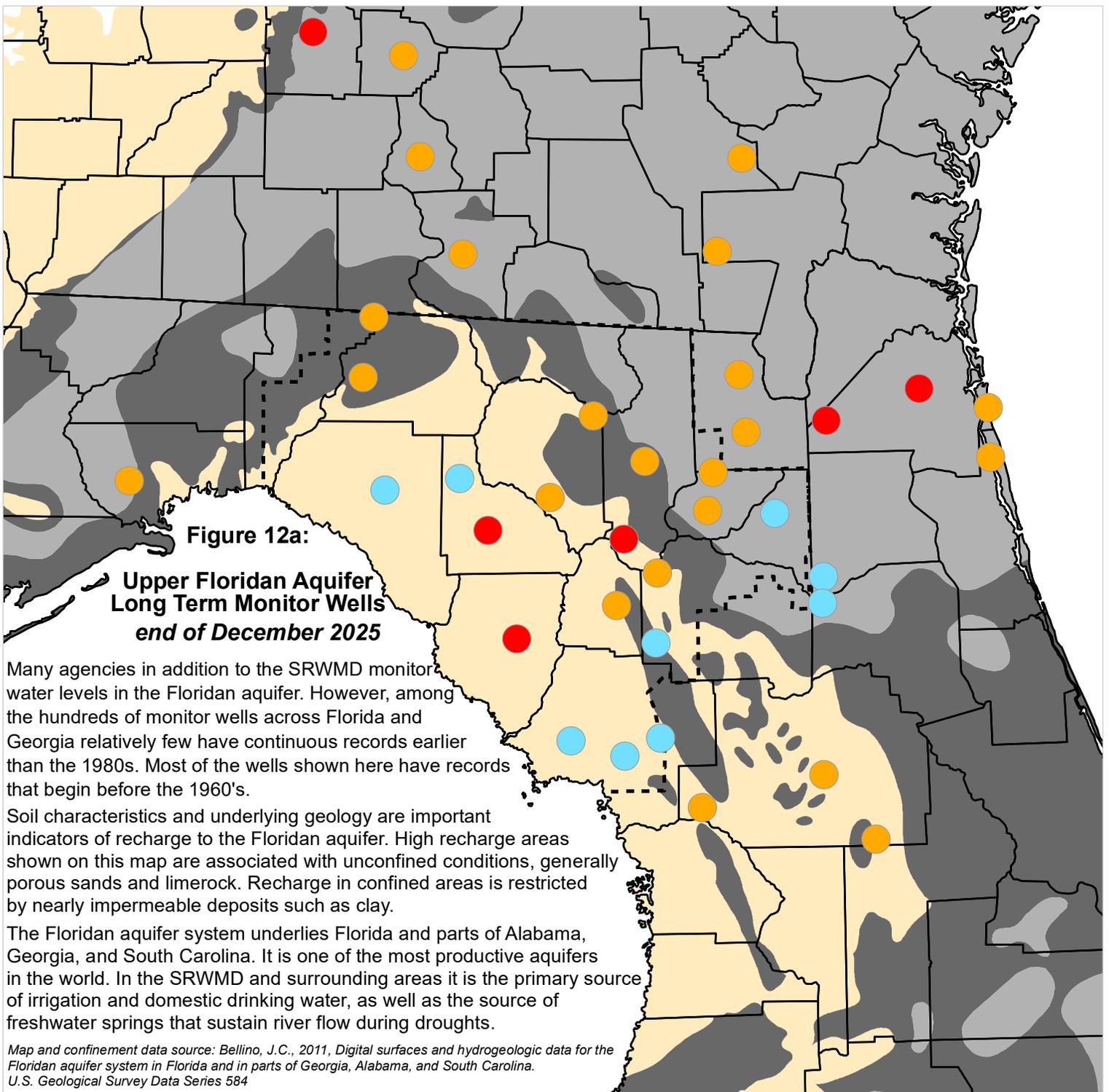


Dixie County S101210001
at Cross City



Levy County S141429001
near Cedar Key





Occurrence of Confined and Unconfined Conditions in the Upper Floridan Aquifer

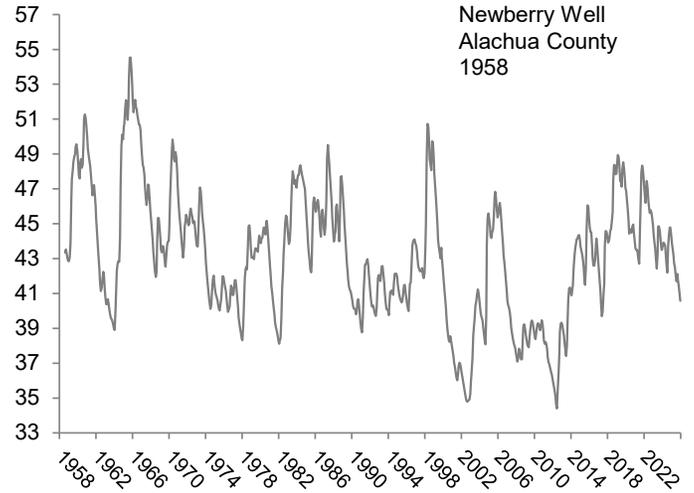
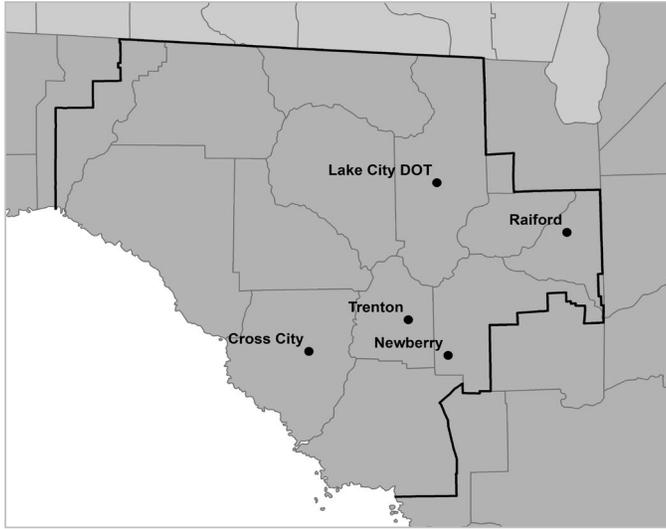
-  Confined: Upper confining unit is generally greater than 100 feet thick and unbreached. Recharge is low.
-  Semi-confined: Upper confining unit is generally less than 100 feet thick, breached, or both. Recharge is moderate.
-  Unconfined: Upper confining unit is absent or very thin. Recharge is high.
-  SRWMD Boundary

Percentile of Most Recent Water Level Relative to Entire Record

-  Very High (Greater than 90th Percentile)
-  High (75th to 90th Percentile)
-  Normal (25th to 75th Percentile)
-  Low (10th to 25th Percentile)
-  Very Low (Less than 10th Percentile)
-  Data Not Available

Figure 12b: Regional Long Term Upper Floridan Aquifer Levels

Data through December 2025



Upper Floridan Aquifer Elevation above NGVD 1929, Feet

