

# Drought Indicators Report

Georgia Environmental Protection Division

July 2024

# Background

Pursuant to the Rules for Drought Management, Section 391-3-3-.04 Drought Indicators and Triggers, the Director of EPD monitors climatic indicators and water supply conditions to assess drought occurrence and severity, and its impact upon the ability of public water systems to provide adequate supplies of water. These indicators and conditions June include, but not be limited, to the following:

- U.S. Drought Monitor;
- Precipitation;
- Streamflow;
- Groundwater;
- Reservoir levels;
- Short term climate predictions;
- Soil moisture; and
- Water supply conditions.

# Background

- The Rules require EPD to report on current climatic indicators at least semi-annually or monthly when any part of the state has experienced at least two consecutive months of severe drought.
- This reports compare current conditions to historical levels (and/or reservoir rule curves) for each of the following indicators:
  - Precipitation during the prior 3, 6, and 12 months;
  - Streamflow at the select United States Geological Survey gages;
  - Groundwater levels at select United States Geological Survey monitoring wells; and
  - Reservoir levels at Allatoona Lake, Lake Hartwell, Clarks Hill Lake, and Lake Lanier.
- The following sections of this presentation provide the data and information sources analyzed by EPD in developing this drought indicators report for conditions as of July 11, 2024.

# Drought Indicator Analysis Summary (slide 1 of 2)

- U.S. Drought Monitor – Abnormally Dry (D0, the least intense level) exists in most areas of GA. Moderate drought (D1) exists in North and Central GA and St. Mary’s Basin. Severe Drought (D2) exists in 9 Counties (Paulding, Cobb, Douglas, Bibb, Jones, Peach, Macon, Twiggs and Wilkinson).
- Precipitation – Three-month precipitation is below normal in Coosa-North GA, Ocmulgee, Oconee and Savannah Basins and Coastal region. Six-month precipitation is normal or above normal statewide. Twelve-month precipitation is below normal in Coosa, Tallapoosa and Upper Savannah Basins and Chatham County.
- Soil Moisture – Soil moisture conditions are below normal in Coosa, Tallapoosa, Chattahoochee and Upper Flint Basins.

# Drought Indicator Analysis Summary (slide 2 of 2)

- **Streamflow** – Stream flows at five selected USGS gages (5 out of 34) are near or above normal. 22 gages are between the lowest 20<sup>th</sup> percentile and median. Four gages are between the lowest 20<sup>th</sup> and 10<sup>th</sup> percentiles. Three gages (in Ocmulgee, Oconee and Savannah Basins) are between the lowest 5<sup>th</sup> and 10<sup>th</sup> percentiles
- **Groundwater Level** – Groundwater levels are above or near normal in most selected wells (11 out of 17). Five well levels are between the lowest 20<sup>th</sup> percentile and median. One well level is between the lowest 20<sup>th</sup> and 10<sup>th</sup> percentiles (Crystalline Rocks Aquifer in Chattahoochee Basin).
- **Reservoir Levels** – At the end of June, all federal reservoirs in Georgia (ACF, ACT, and Savannah River Basins) are in zone 1 of conservation (normal) pools. ACF composite storage is in zone 1.
- **Short-term Climate Prediction** – National Climatic Prediction Center projects above normal temperature statewide and above normal precipitation statewide in July - Sep 2024. U.S. Drought Outlook predicts drought development likely in Central and North GA and drought persists in Ocmulgee and Oconee Basins in July - Sep 2024.
- **Water Supplies** – One local water supply provider (Coweta County) applied for a drought response variance. Two other providers (City of Griffin and Fayette County) inquired about the process.

# US Drought Monitor

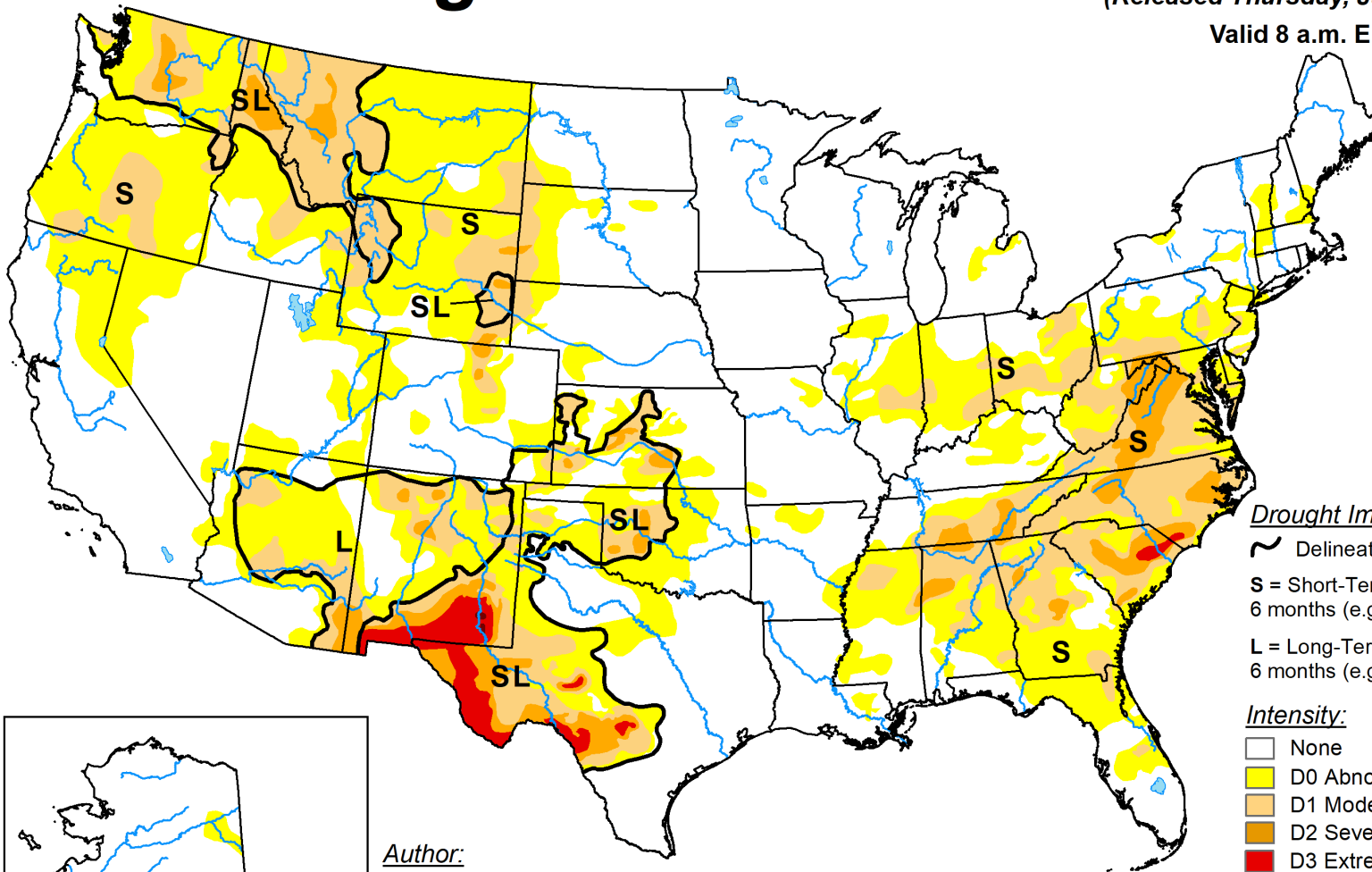
Data Source:  
<http://droughtmonitor.unl.edu/>

# U.S. Drought Monitor

July 9, 2024

(Released Thursday, Jul. 11, 2024)

Valid 8 a.m. EDT



### Drought Impact Types:

Delineates dominant impacts

**S** = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)

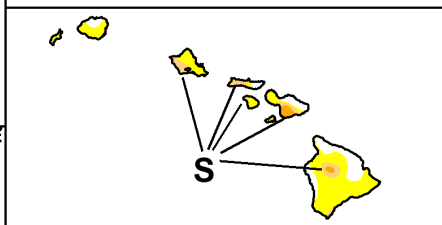
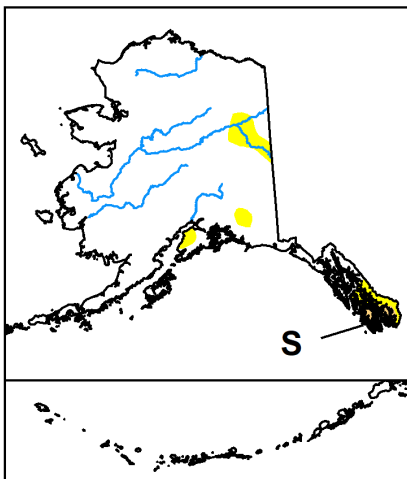
**L** = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

### Intensity:

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

Author:  
Brian Fuchs  
National Drought Mitigation Center

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>



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

# U.S. Drought Monitor Georgia

**July 9, 2024**  
(Released Thursday, Jul. 11, 2024)  
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	10.70	89.30	39.34	4.21	0.00	0.00
<b>Last Week</b> <i>07-02-2024</i>	4.39	95.61	49.36	3.66	0.00	0.00
<b>3 Months Ago</b> <i>04-09-2024</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> <i>01-02-2024</i>	46.66	53.34	28.92	11.91	0.07	0.00
<b>Start of Water Year</b> <i>09-26-2023</i>	78.43	21.57	4.17	0.00	0.00	0.00
<b>One Year Ago</b> <i>07-11-2023</i>	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:



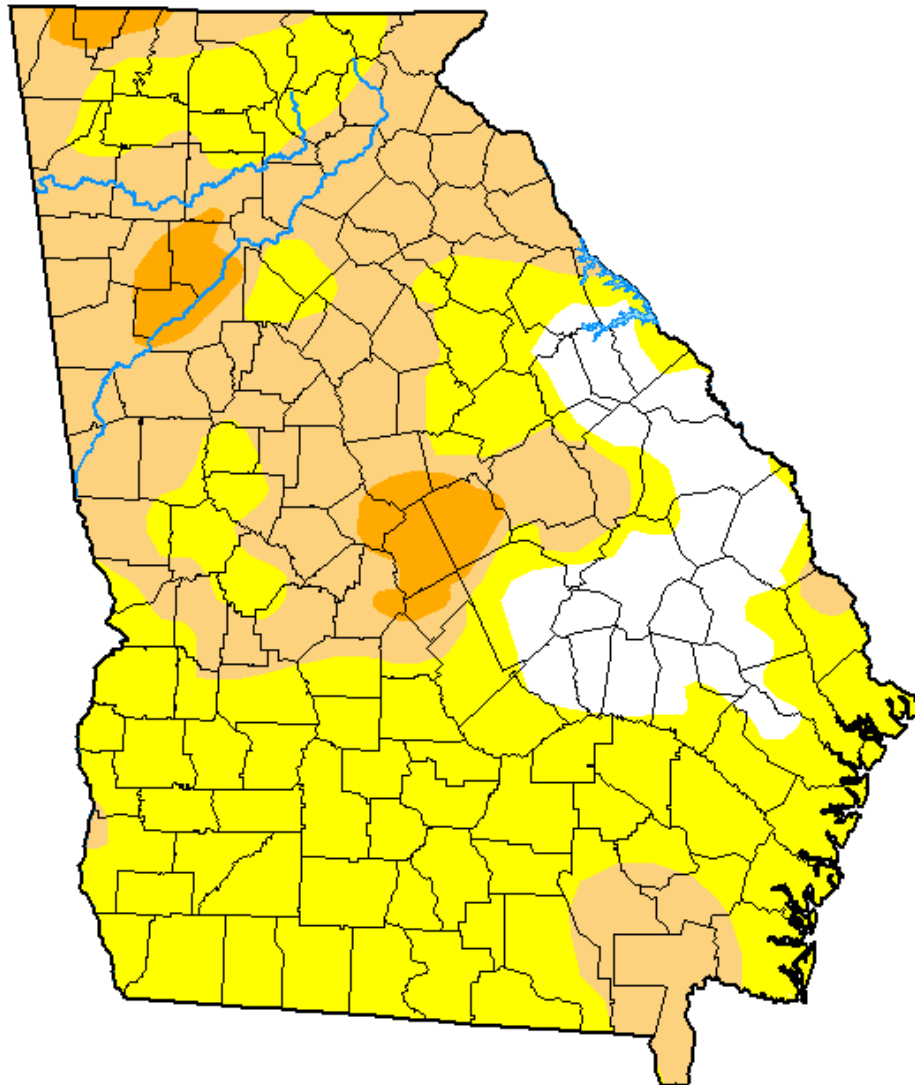
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Brian Fuchs  
National Drought Mitigation Center



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)



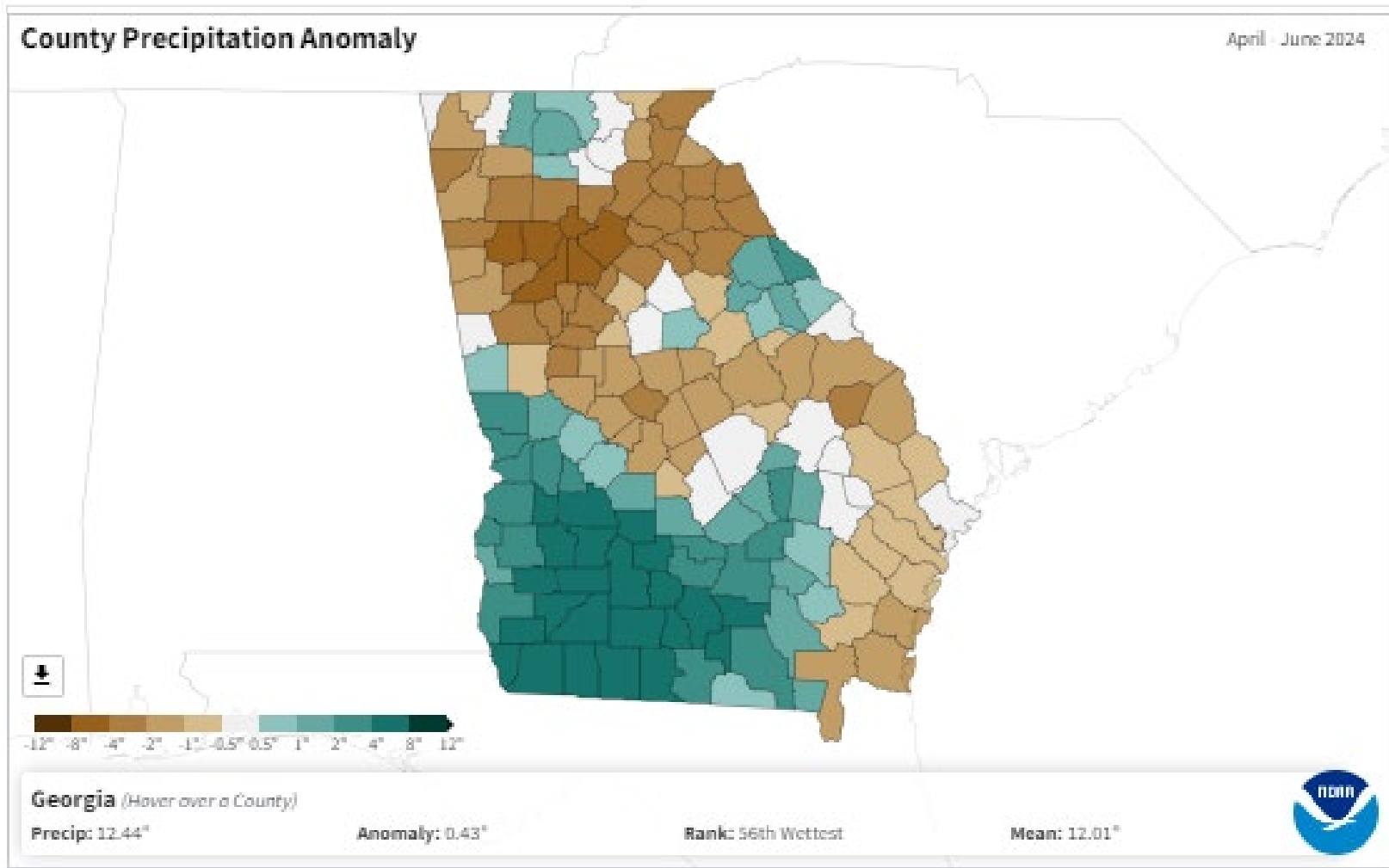


# 3, 6, and 12 Month Precipitation Anomaly

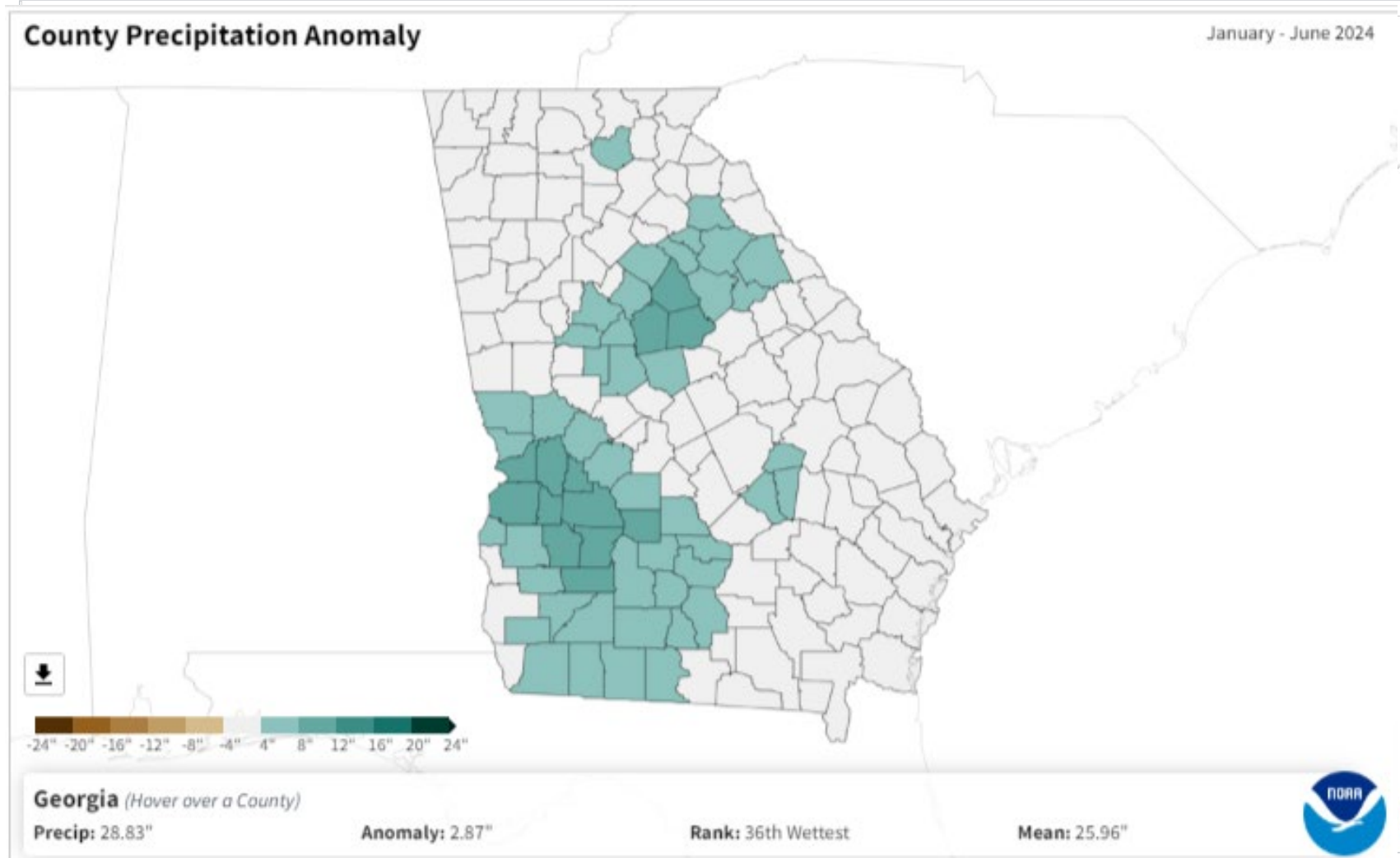
Data Source:

<https://www.ncdc.noaa.gov/cag/county/mapping/>

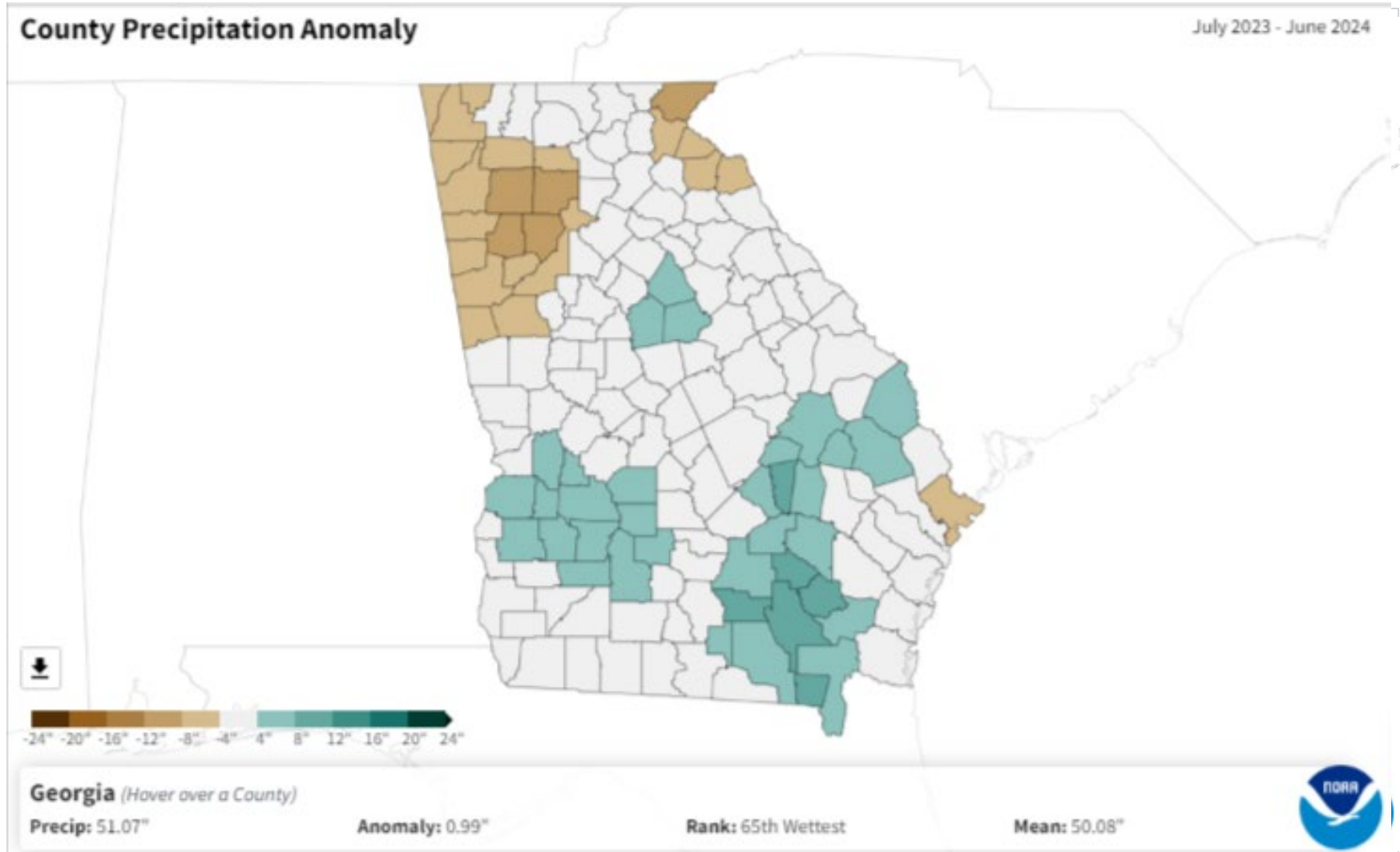
# 3 Month Precipitation Anomaly



# 6 Month Precipitation Anomaly



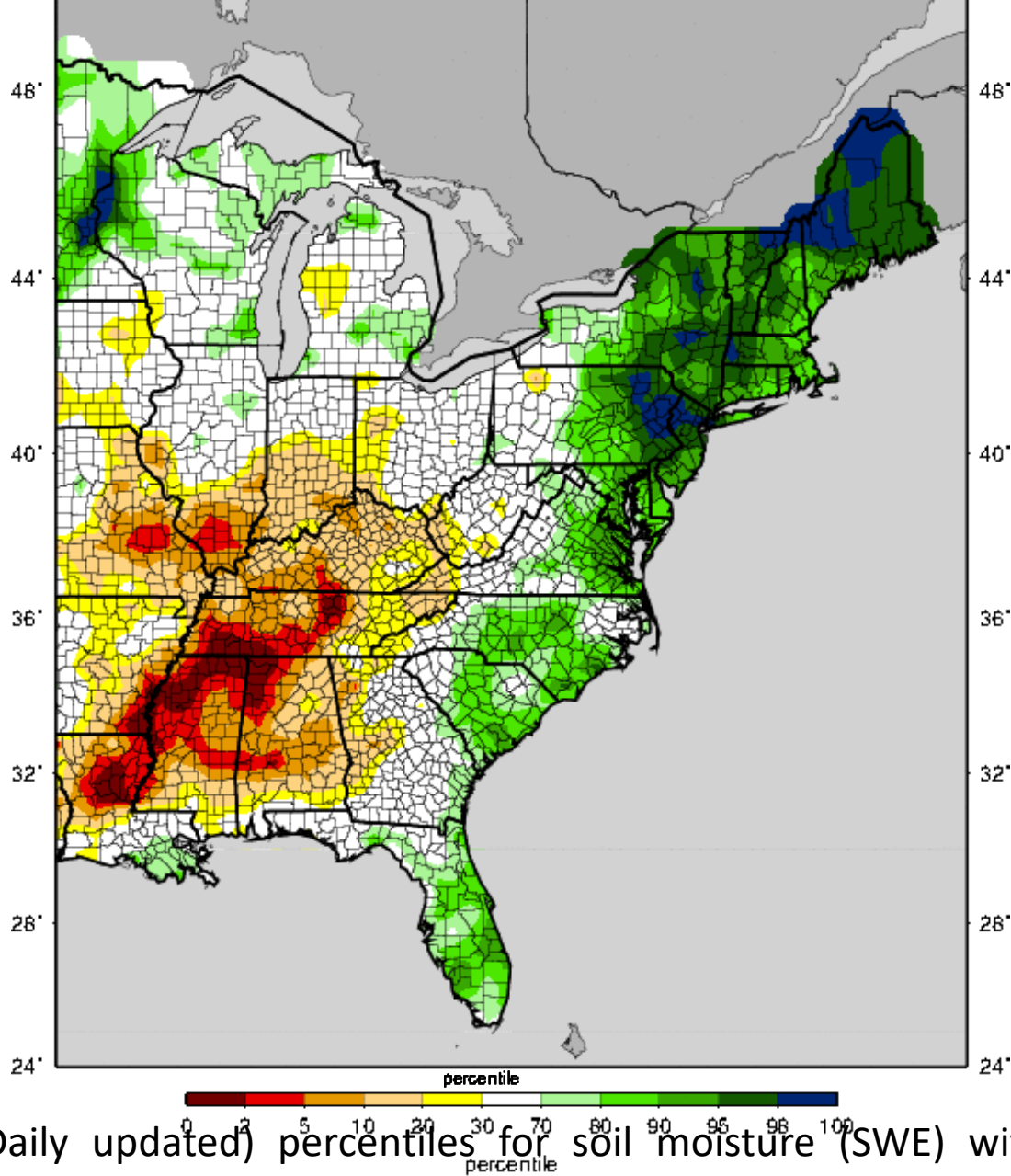
# 12 Month Precipitation Anomaly



# Soil Moisture Conditions

Data Source:

[http://www.hydro.ucla.edu/SurfaceWaterGroup/forecast/monitor/curr/conus.mexico/east.vic.sm\\_qnt.gif](http://www.hydro.ucla.edu/SurfaceWaterGroup/forecast/monitor/curr/conus.mexico/east.vic.sm_qnt.gif)



Current (Daily updated) percentiles for soil moisture (SWE) with respect to the climatological period (1916-2004).

# Streamflow Conditions

Data Source: USGS

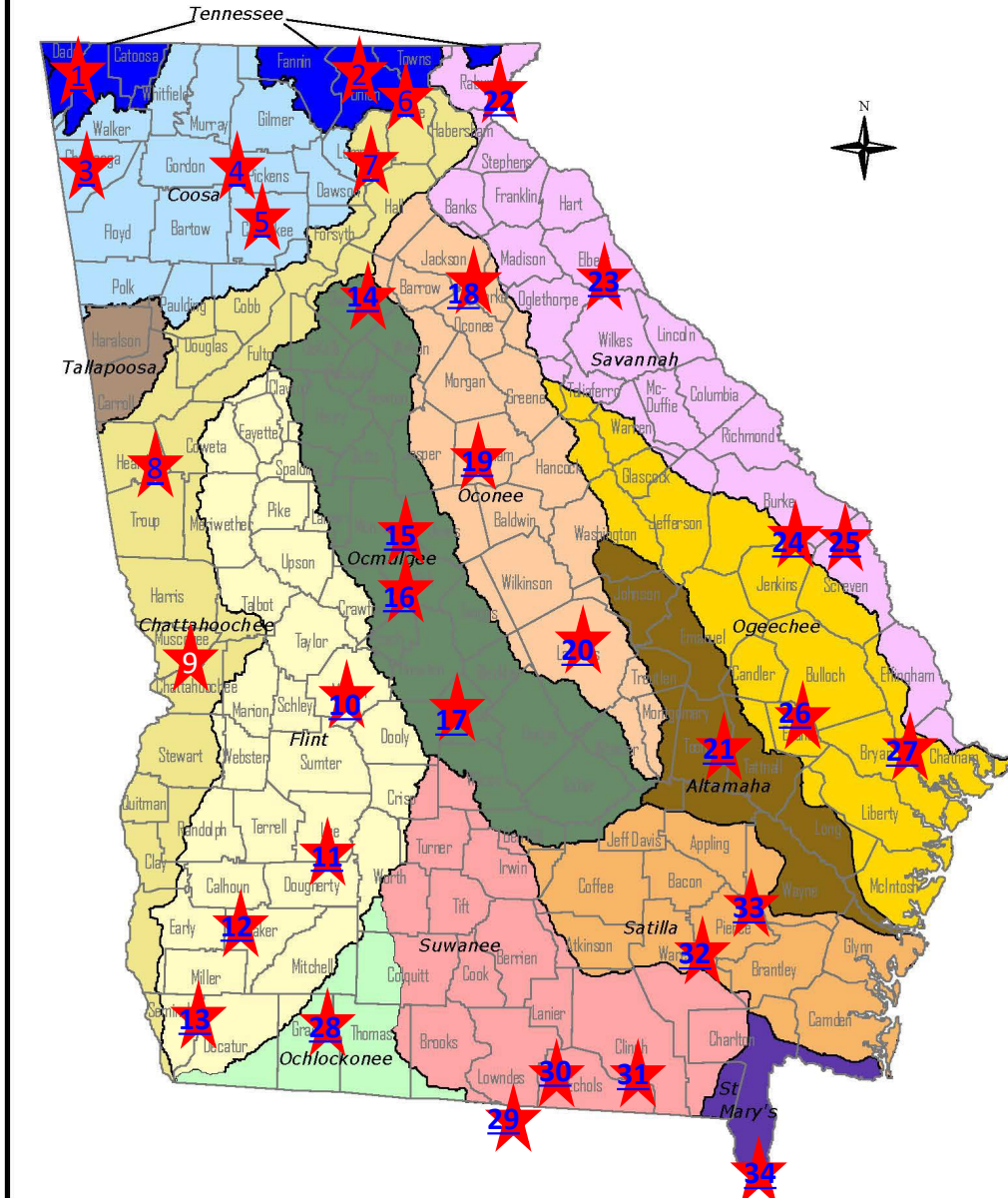
# Streamflow Monitoring

- As shown on the following slide, EPD Monitors 34 USGS stream gages in 13 of the State's major river basins to assess drought conditions.
- These gages were selected because each has:
  - Long-term and relatively complete records for recent decades; and
  - Relatively low consumptive water use implications and streamflows are not heavily influenced by dams.
- Note: Hydrologic conditions of major rivers with streamflows that are heavily influenced by dams can be assessed by reviewing status of major storage reservoirs



# Georgia's 14 River Basins

## USGS Stream Gages Monitored by EPD to Assess Drought Conditions



<u>GAGE#</u>	<u>Basin</u>	<u>GAGE NAME</u>
1	TENNESSEE	LOOKOUT CREEK NEAR NEW ENGLAND
2	TENNESSEE	NOTTELY RIVER NEAR BLAIRSVILLE
3	COOSA	CHATTOOGA RIVER AT SUMMERVILLE
4	COOSA	TALKING ROCK CREEK NEAR HINTON
5	COOSA	ETOWAH RIVER AT CANTON
6	CHATTAHOOCHEE	CHATTAHOOCHEE RIVER AT CORNELIA
7	CHATTAHOOCHEE	CHESTATEE RIVER NEAR DAHLONEGA
8	CHATTAHOOCHEE	NEW RIVER AT GA 100 NEAR CORINTH
9	CHATTAHOOCHEE	UPATOI CREEK AT COLUMBUS
10	FLINT	FLINT RIVER AT GA26 NEAR MONTEZUMA
11	FLINT	FLINT RIVER AT ALBANY
12	FLINT	ICHAWAYNOCHAWAY CREEK AT MILFORD
13	FLINT	SPRING CREEK NEAR IRON CITY
14	OCMULGEE	ALCOVY RIVER ABOVE COVINGTON
15	OCMULGEE	OCMULGEE RIVER AT MACON
16	OCMULGEE	TOBESOFKEE CREEK NEAR MACON
17	OCMULGEE	TUCSAWHATCHEE CREEK NEAR HAWKINSVILLE
18	OCONEE	MIDDLE OCONEE RIVER NEAR ATHENS
19	OCONEE	LITTLE RIVER NEAR EATONTON
20	OCONEE	OCONEE RIVER AT DUBLIN
21	ALTAMAHA	OHOOPEE RIVER NEAR REIDSVILLE
22	SAVANNAH	CHATTOOGA RIVER NEAR CLAYTON
23	SAVANNAH	BROAD RIVER NEAR BELL
24	SAVANNAH	BEAVERDAM CREEK NEAR SARDIS
25	SAVANNAH	BRIER CREEK AT MILLHAVEN
26	OGEECHEE	CANOOCHEE RIVER NEAR CLAXTON
27	OGEECHEE	OGEECHEE RIVER NEAR EDEN
28	OCHLOCKONEE	OCHLOCKONEE RIVER NEAR THOMASVILLE
29	SUWANEE	WITHLACOOCHEE RIVER NEAR PINETTA FL
30	SUWANEE	ALAPAHA RIVER AT STATENVILLE
31	SUWANEE	SUWANNEE RIVER AT US 441, AT FARGO
32	SATILLA	SATILLA RIVER NEAR WAYCROSS
33	SATILLA	LITTLE SATILLA RIVER NEAR OFFERMAN
34	ST MARY'S	ST MARYS RIVER NEAR MACCLENNY FL

# Streamflow Graphs

- For each of the 34 gages, EPD has prepared a graph that shows monthly average streamflow from January 2024 through June 2024;
- To help put these streamflow conditions into perspective, for comparison purposes, each graph also shows:
  - Monthly average streamflows for the years 2007 and 2011 when streamflows were at or near recorded low levels across much of the state; and
  - A statistical composite of historical conditions showing the “driest” 50, 20, 10, and 5 percent of all recorded monthly average stream flows at the same gage.

# How to Read the Streamflow Graphs

## Example #1: Etowah River at Canton

The streamflow graph for Gage #5, [USGS Etowah River gage at Canton](#) shows :

- Average stream flow in June 2024 was 666 cfs. The statistical composite of all historical data for this gage shows that average streamflow in June has historically been lower than June 2024 about 18% of the time; 82% of the time in June it has been higher.
- Average stream flow in June 2011 was 459 cfs. The statistical composite of all historical data for this gage shows that average streamflow in June has historically been lower than June 2011 about 5~10% of the time; 90~95% of the time in June it has been higher.
- Average stream flow in June 2007 was 359 cfs. The statistical composite of all historical data for this gage shows that average streamflow in June has historically been lower than June 2007 about 2~5 % of the time; 95~98 % of the time in June it has been higher.

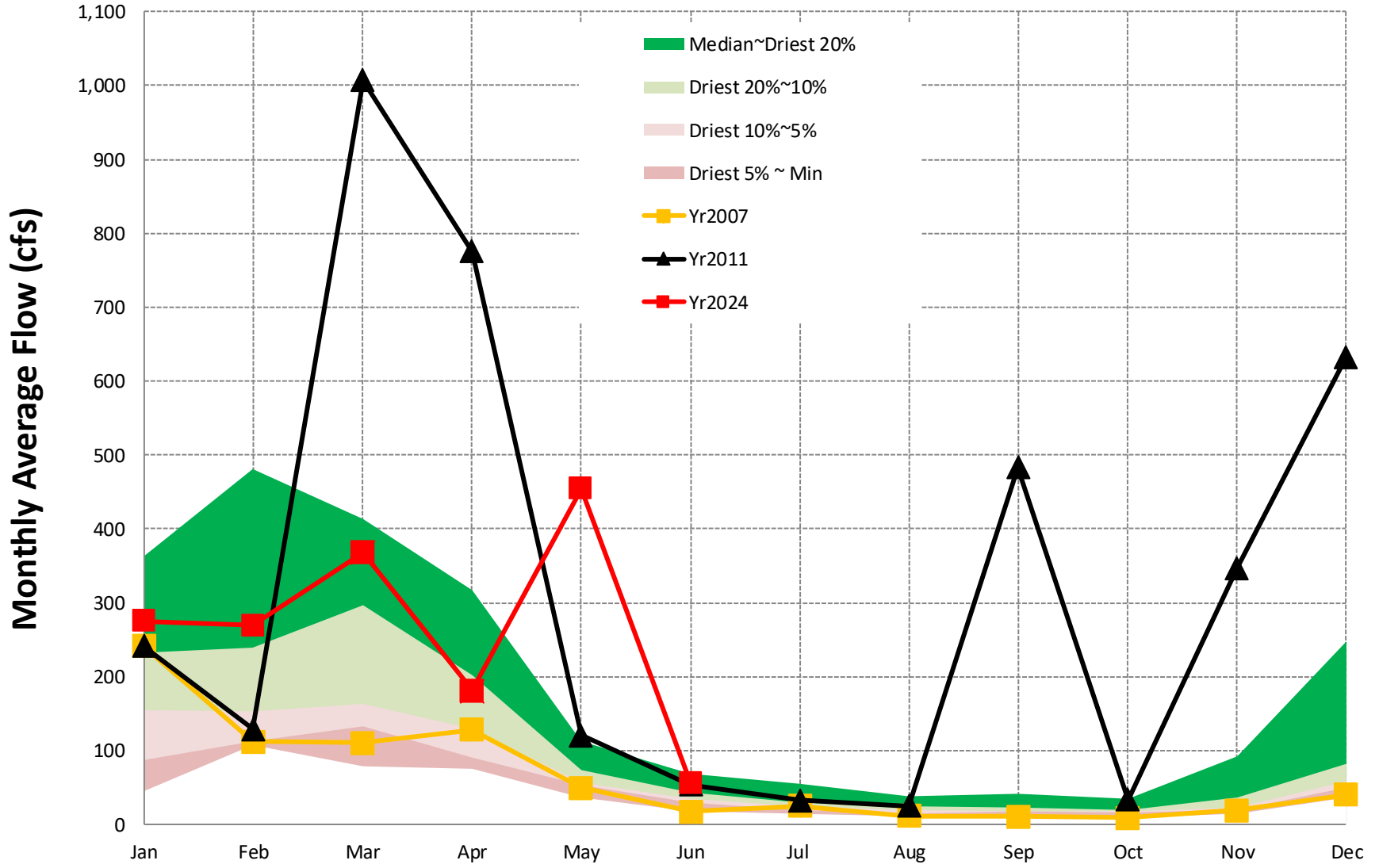
# How to Read the Streamflow Graphs

## Example #2: Flint River at Albany

The streamflow graph for Gage #11, [USGS Flint River gage at Albany](#) shows:

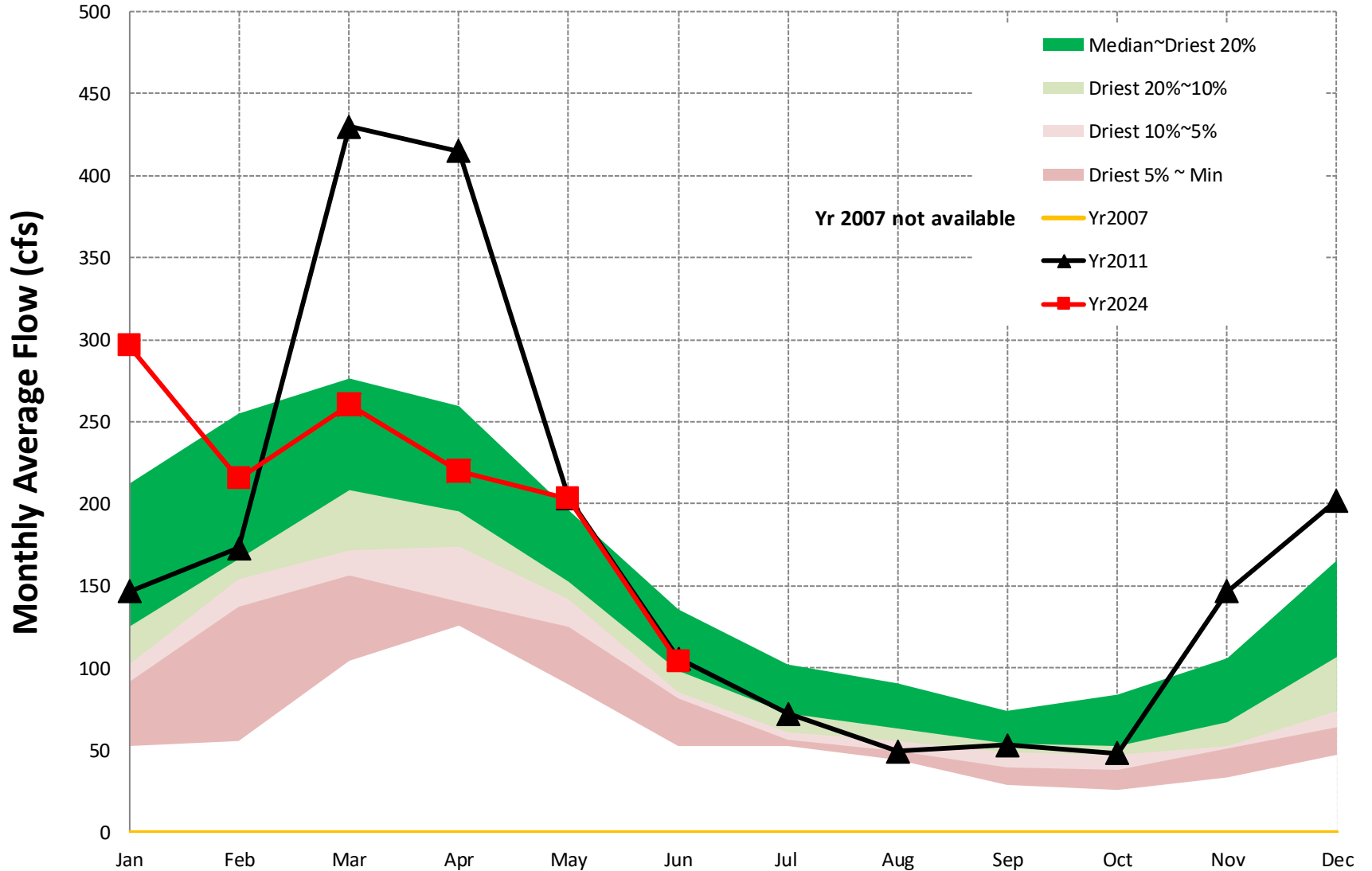
- Average stream flow in June 2024 was 2700 cfs. The statistical composite of all historical data for this gage shows that average streamflow in June has historically been lower than June 2024 about 28% of the time; about 72% of the time in June it has been higher.
- Average stream flow in June 2011 was 759 cfs. The statistical composite of all historical data for this gage shows that average streamflow in June has historically been lower than June 2011 about 0.1 % of the time; about 99.9% of the time in June it has been higher.
- Average stream flow in June 2007 was 1045 cfs. The statistical composite of all historical data for this gage shows that average streamflow in June has historically been lower than June 2007 about 2~5% of the time; about 95~98% of the time in June it has been higher.

# Gage #1. USGS #03568933, Tennessee Basin, LOOKOUT CREEK NEAR NEW ENGLAND, GA



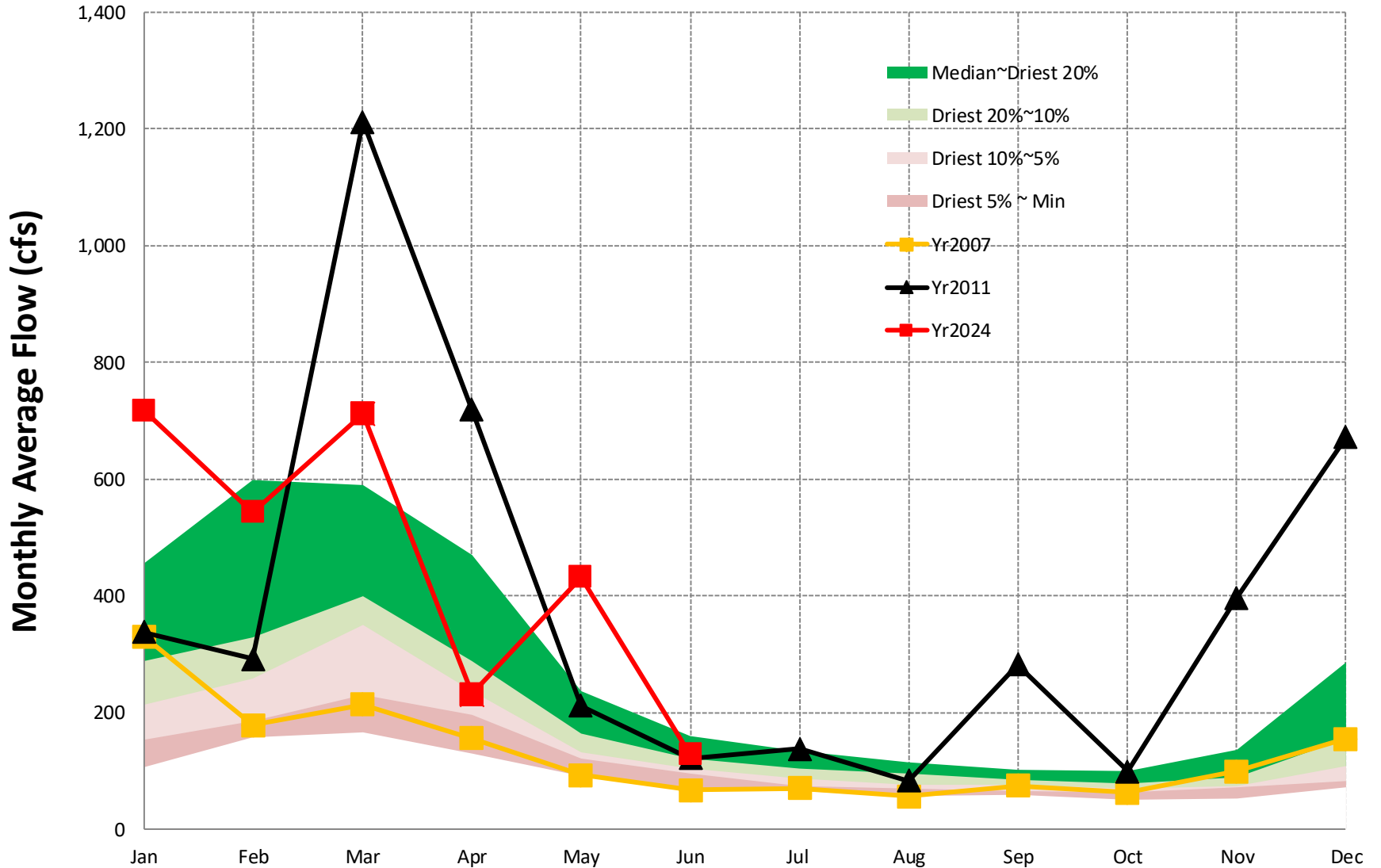
[Back to Map](#)

## Gage #2, USGS #03550500, Tennessee Basin, NOTTELY RIVER NEAR BLAIRSVILLE, GA



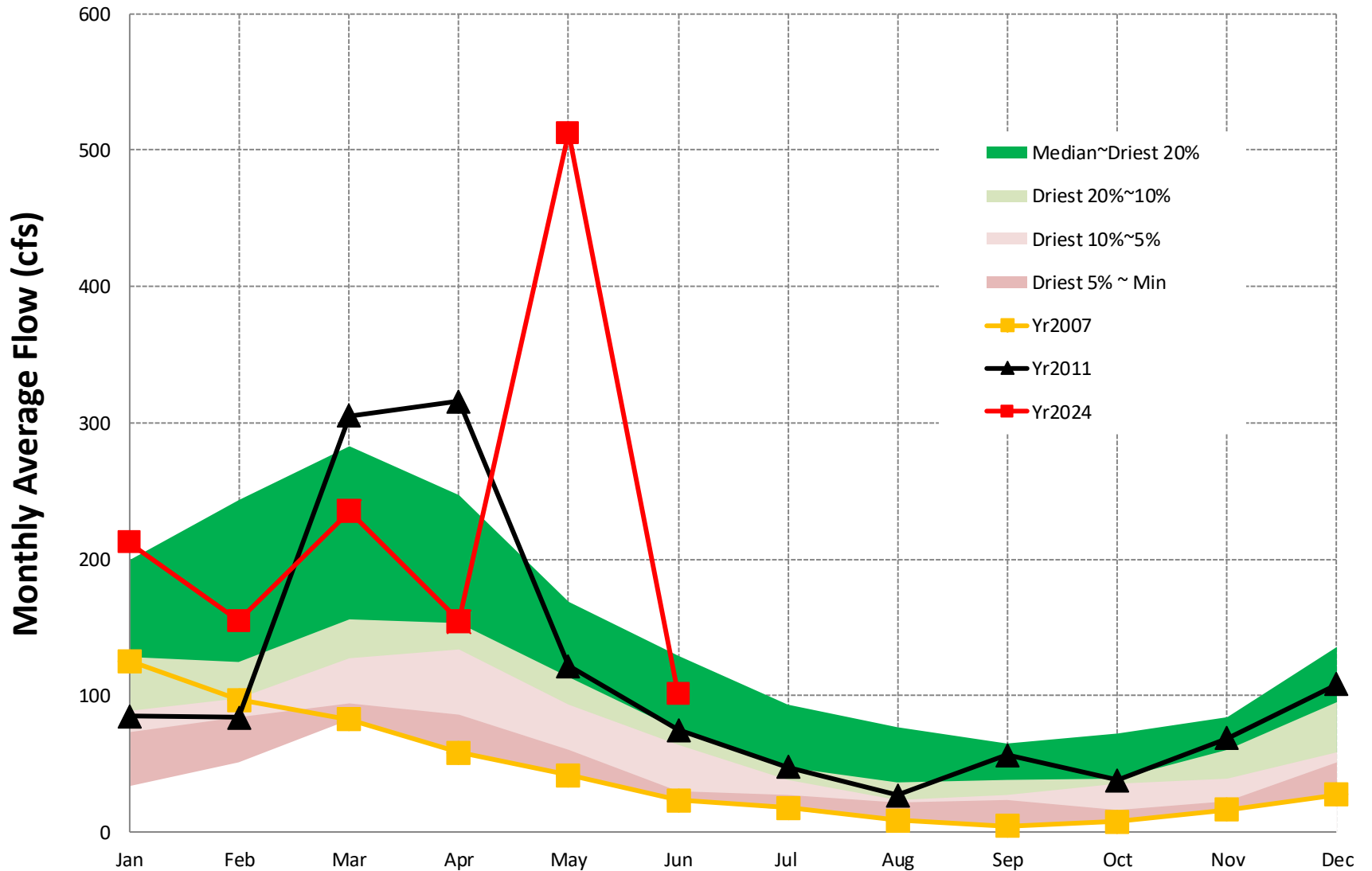
[Back to Map](#)

### Gage #3. USGS #02398000, Coosa Basin, Chattooga River at Summerville, GA



[Back to Map](#)

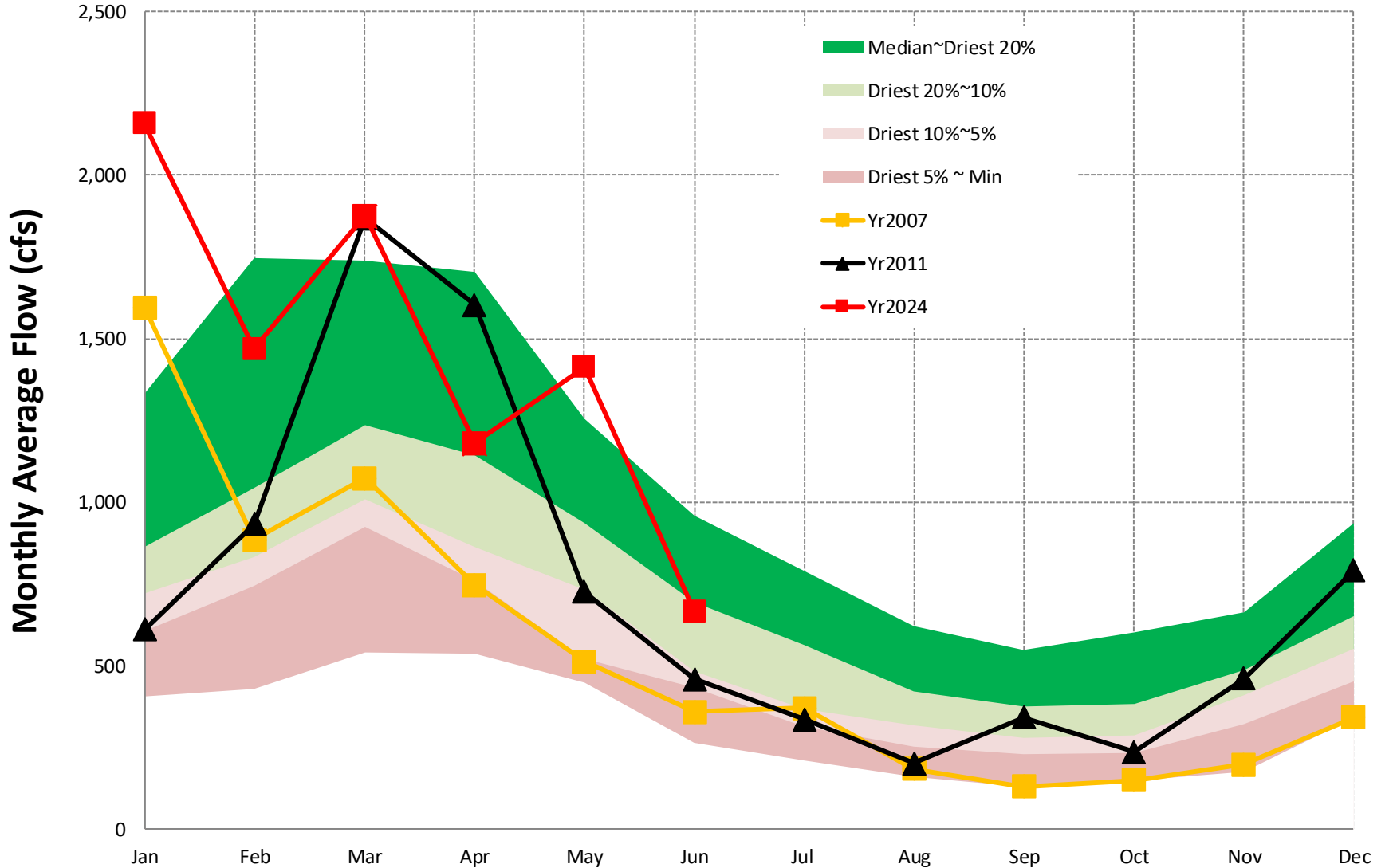
# Gage #4, USGS #02382200, Coosa Basin, TALKING ROCK CREEK NEAR HINTON, GA



[Back to Map](#)



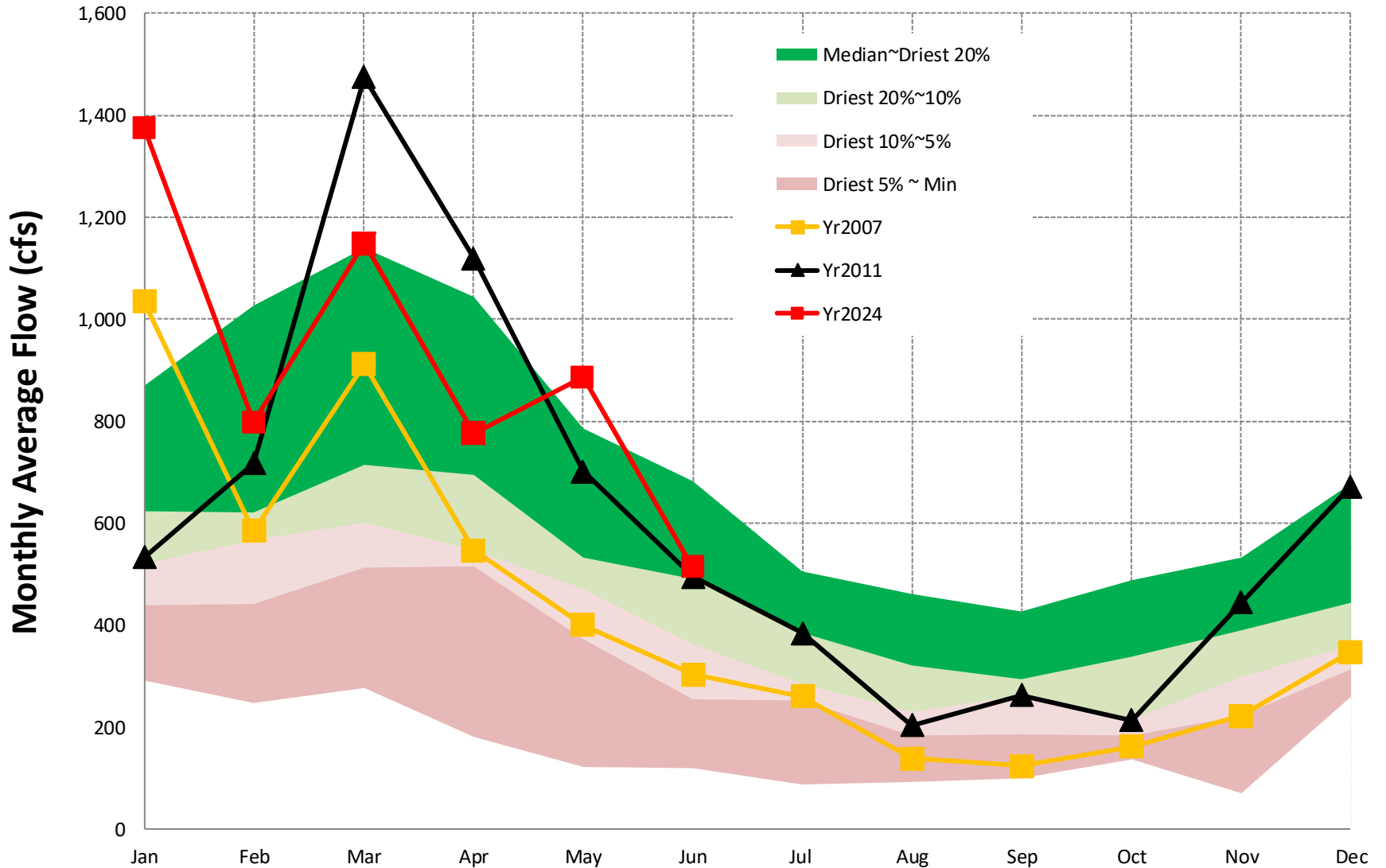
## Gage #5, USGS #02392000, Coosa Basin, Etowah River at Canton, GA



[Back to Interpretation](#)

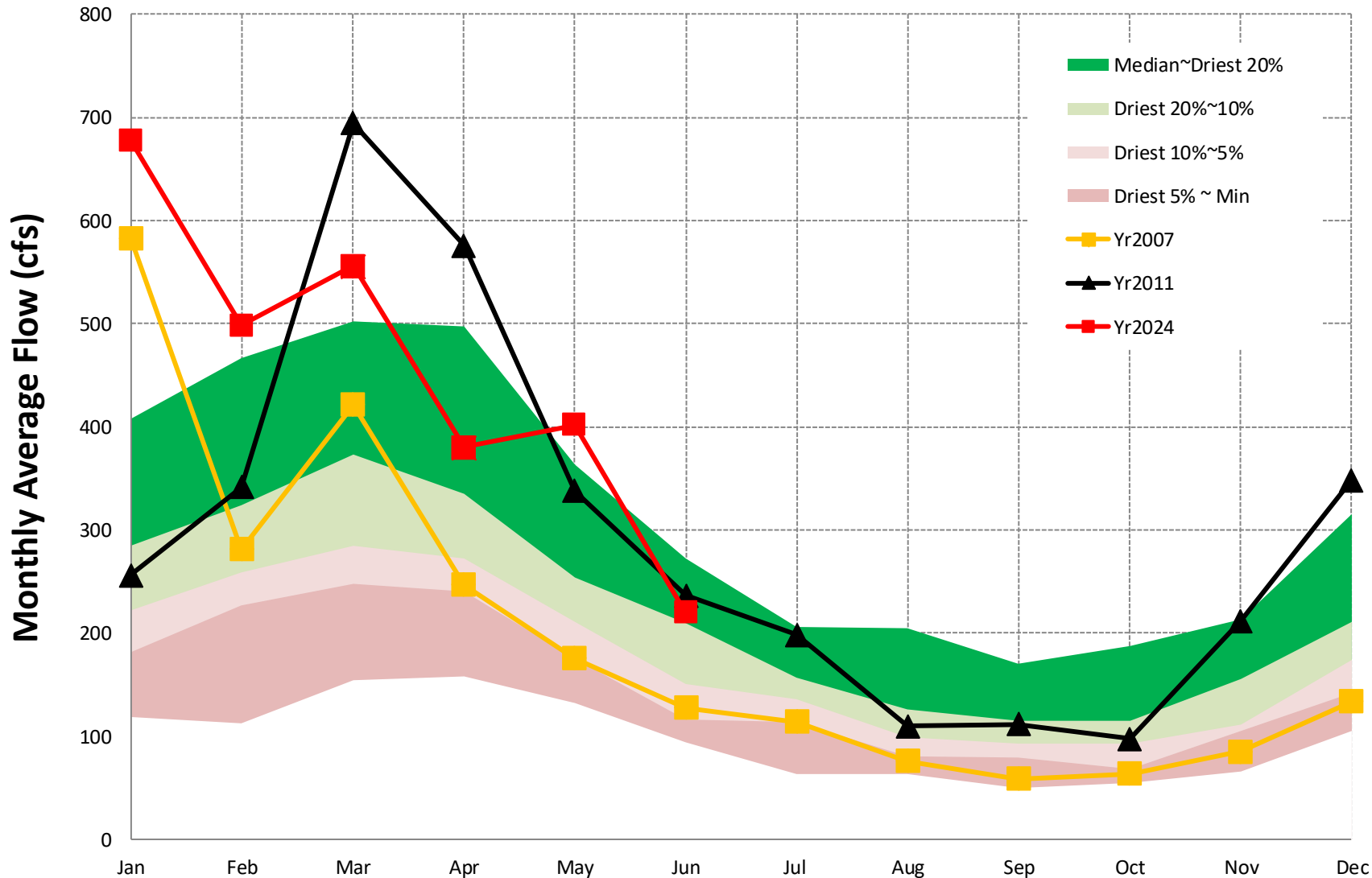
[Back to Map](#)

# Gage #6, USGS #02331600, Chatthoochee Basin, CHATTAHOOCHEE RIVER AT CORNELIA, GA



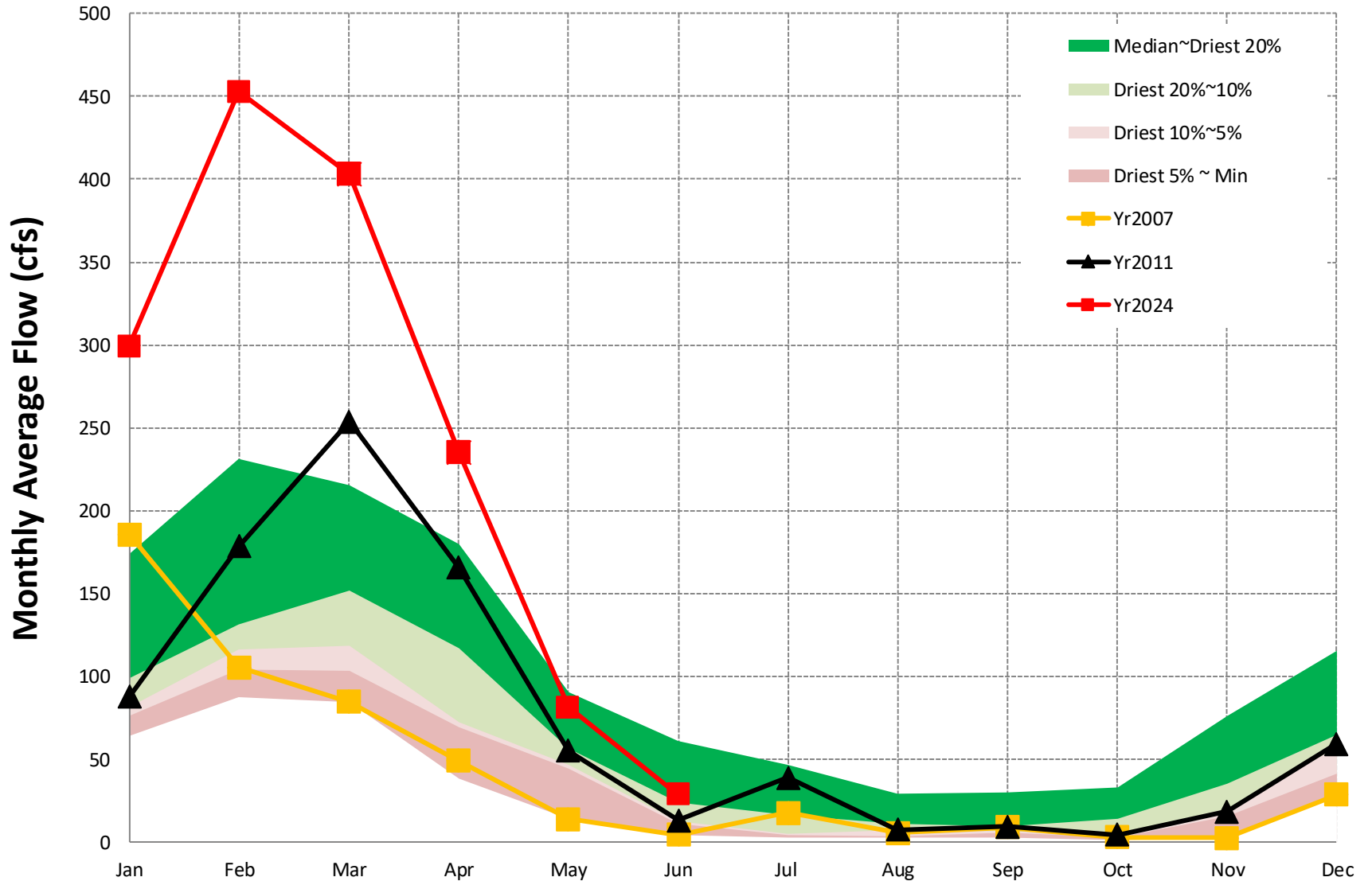
[Back to Map](#)

## Gage #7, USGS #02333500, Chatahoochee Basin, CHESTATEE RIVER NEAR DAHLONEGA, GA



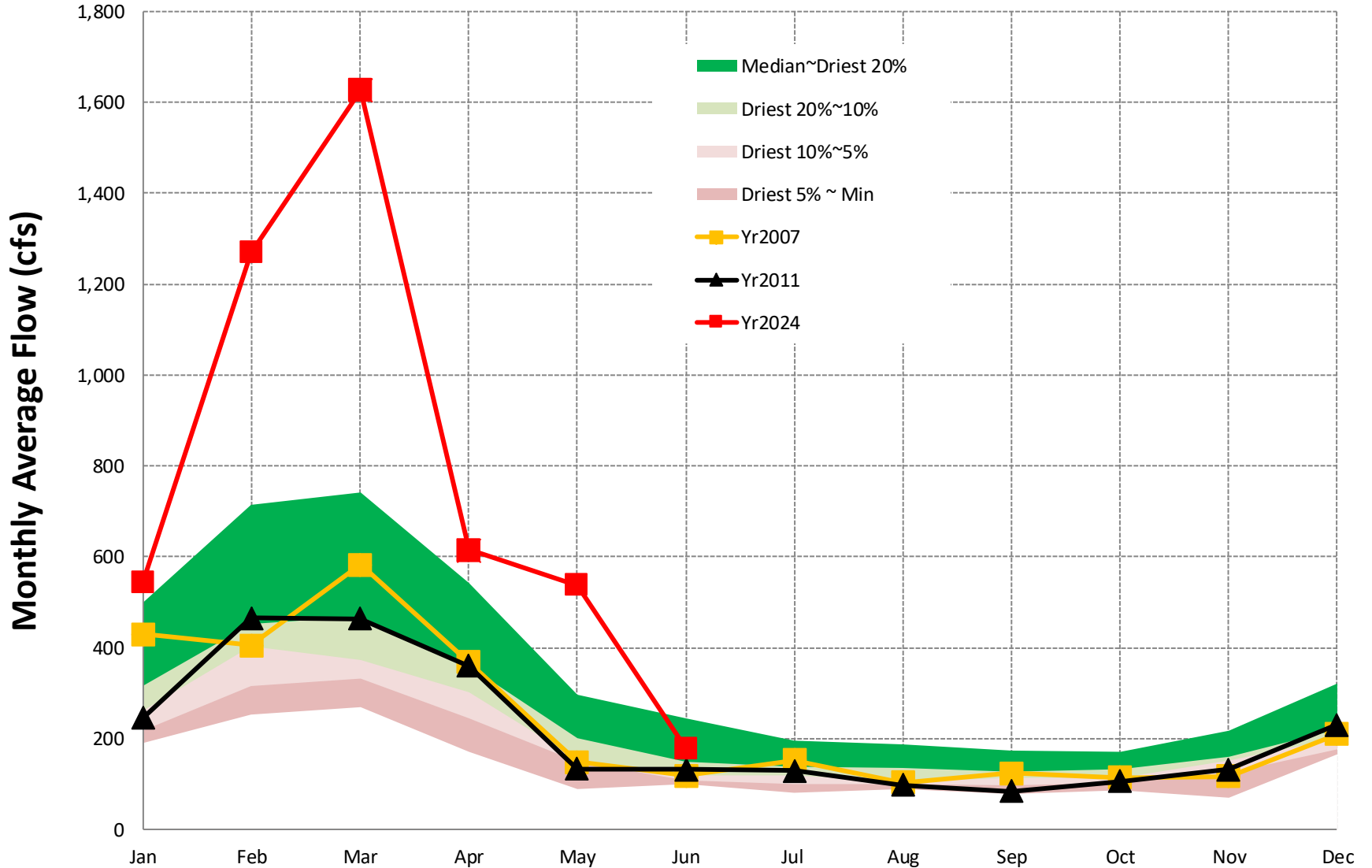
[Back to Map](#)

# Gage #8, USGS #02338660, Chattahoochee Basin, NEW RIVER AT GA 100, NEAR CORINTH



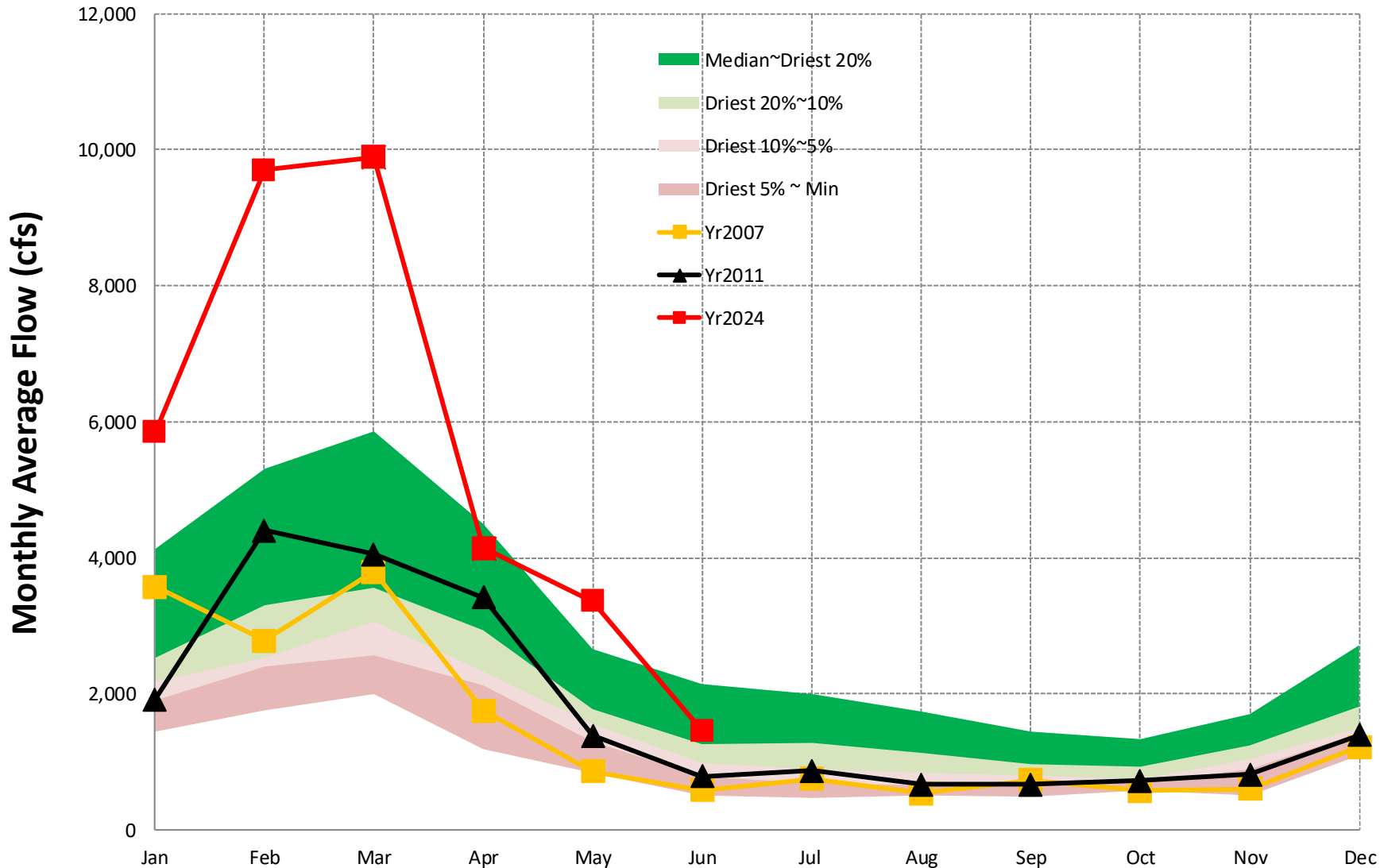
[Back to Map](#)

# Gage #9, USGS #02341800, Chattahoochee Basin, UPATOI CREEK NEAR COLUMBUS, GA



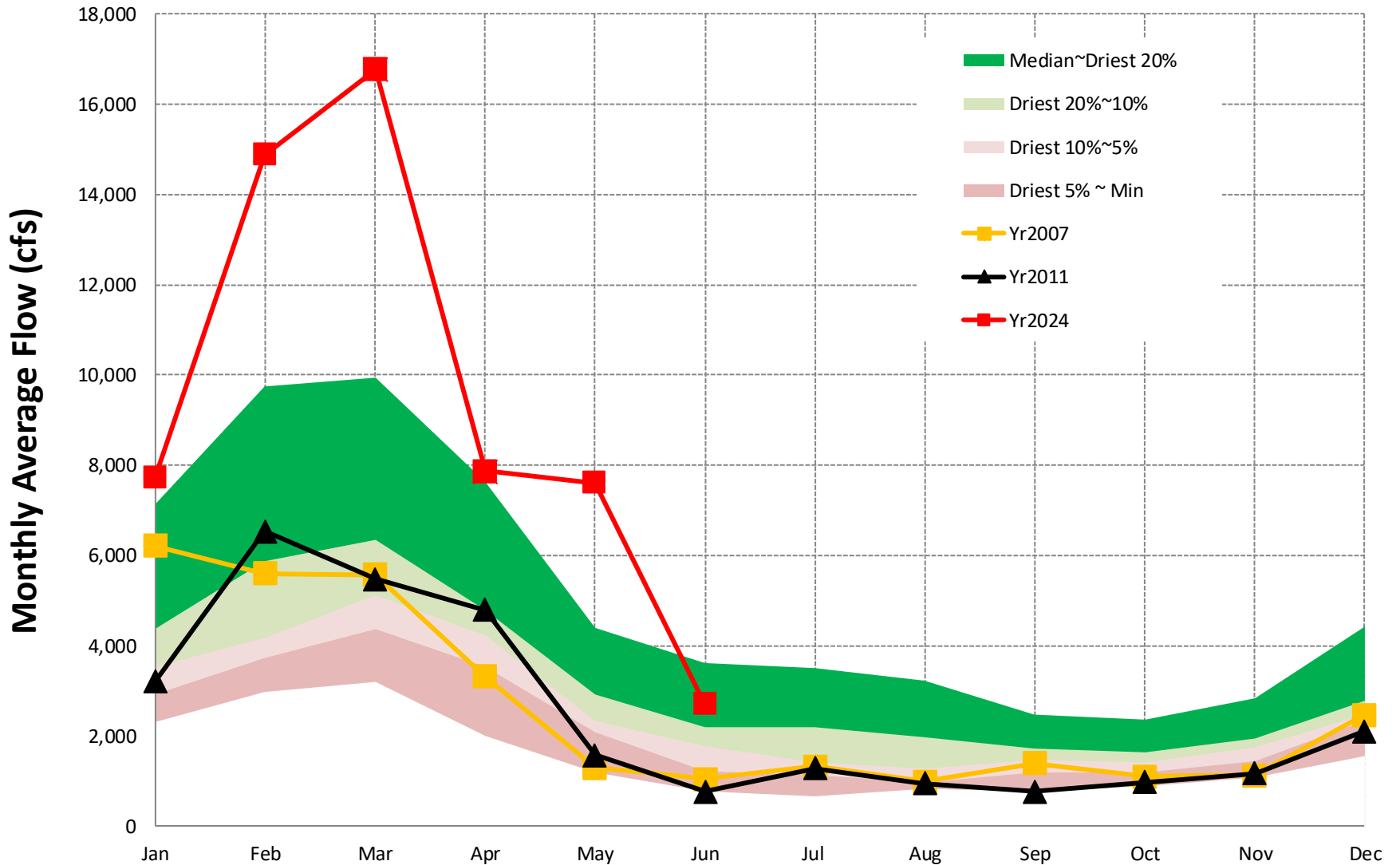
[Back to Map](#)

# Gage #10. USGS #02349605, Flint Basin, FLINT RIVER AT GA26 NEAR MONTEZUMA, GA



[Back to Map](#)

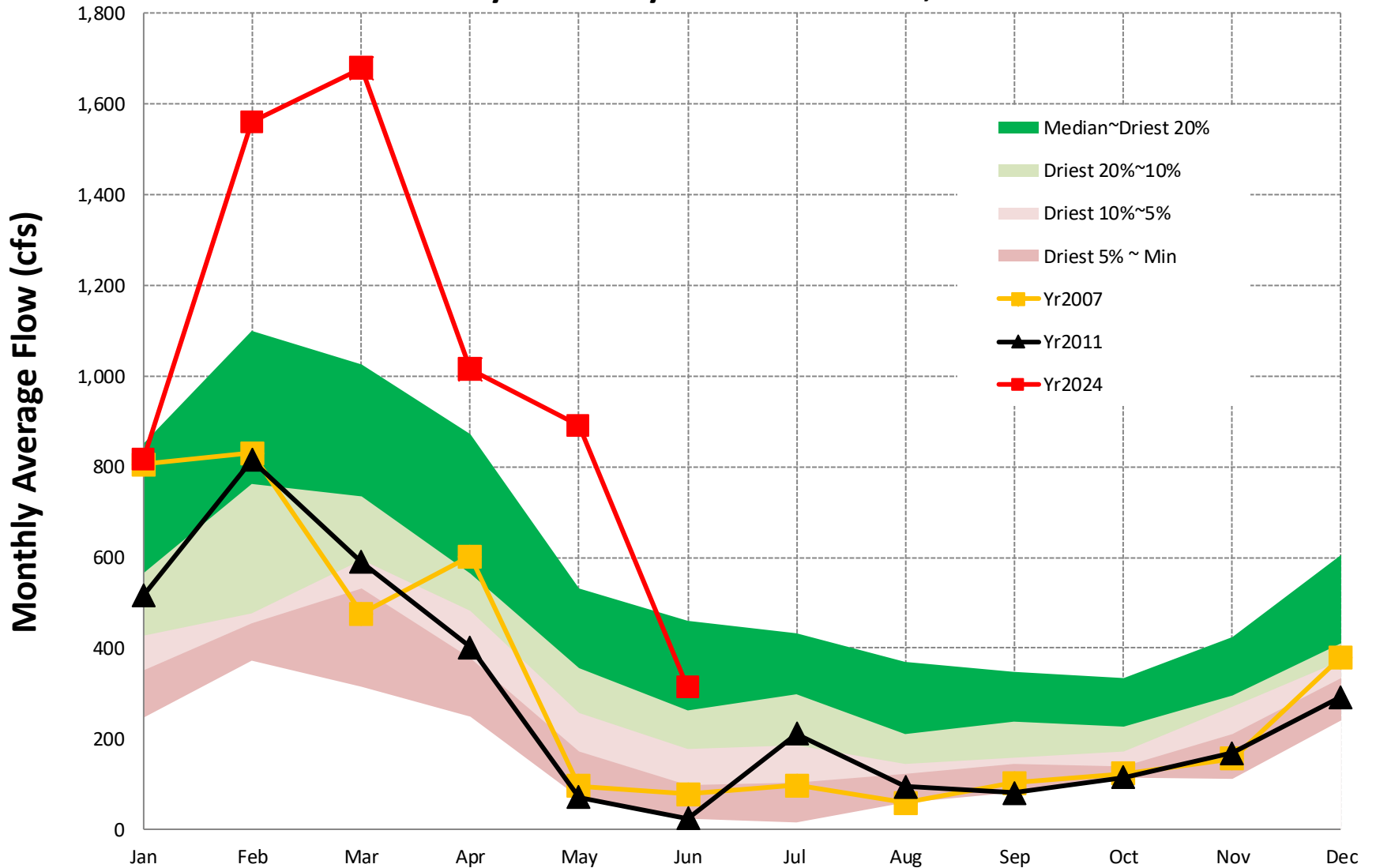
# Gage #11, USGS #02352500, Flint Basin, FLINT RIVER AT ALBANY, GA



[Back to Interpretation](#)

[Back to Map](#)

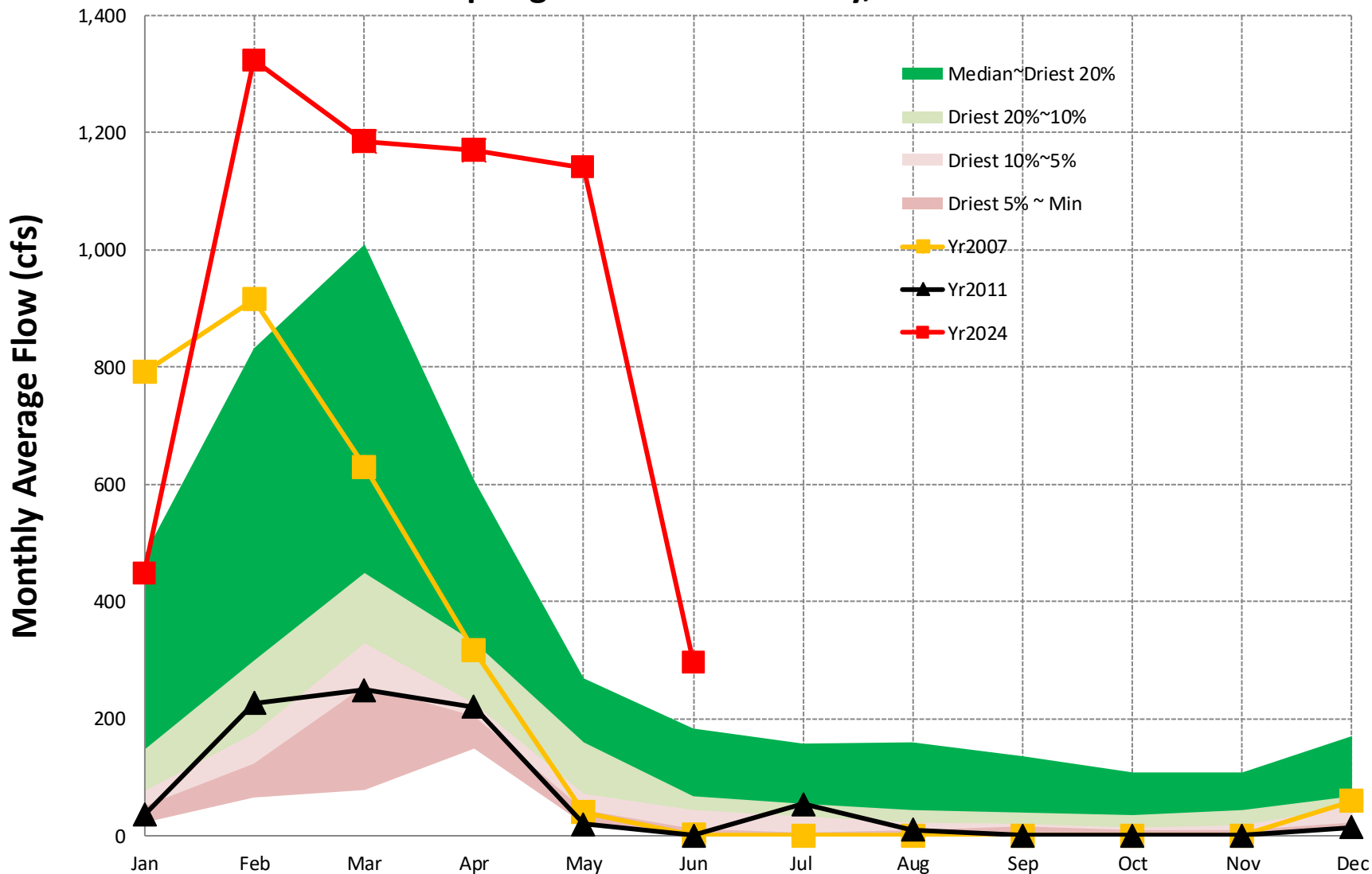
# Gage #12. USGS #02353500, Flint Basin, Ichawaynochaway Creek at Milford, GA



[Back to Map](#)

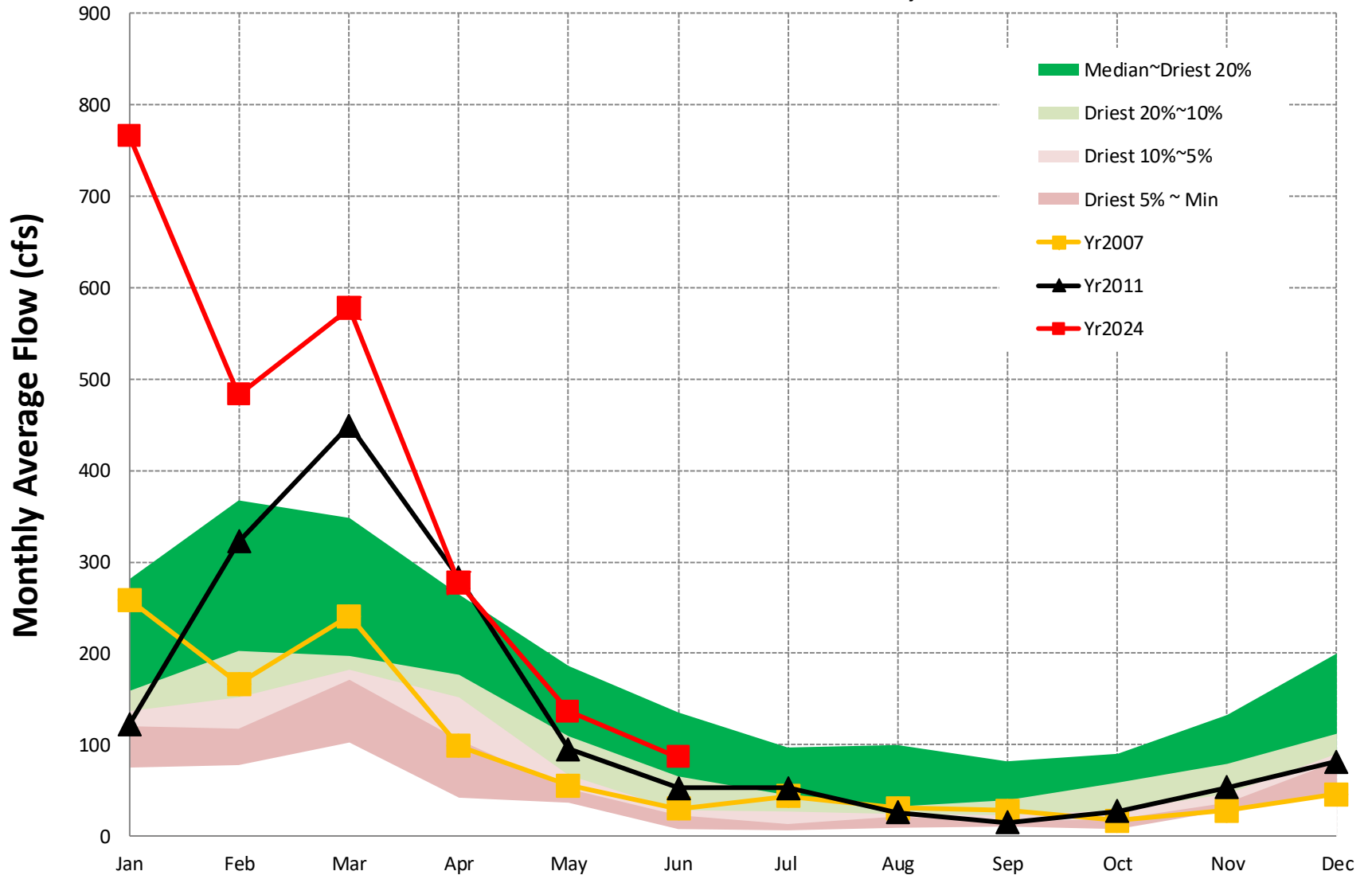


# Gage #13. USGS #02357000, Flint River, Spring Creek near Iron City, GA



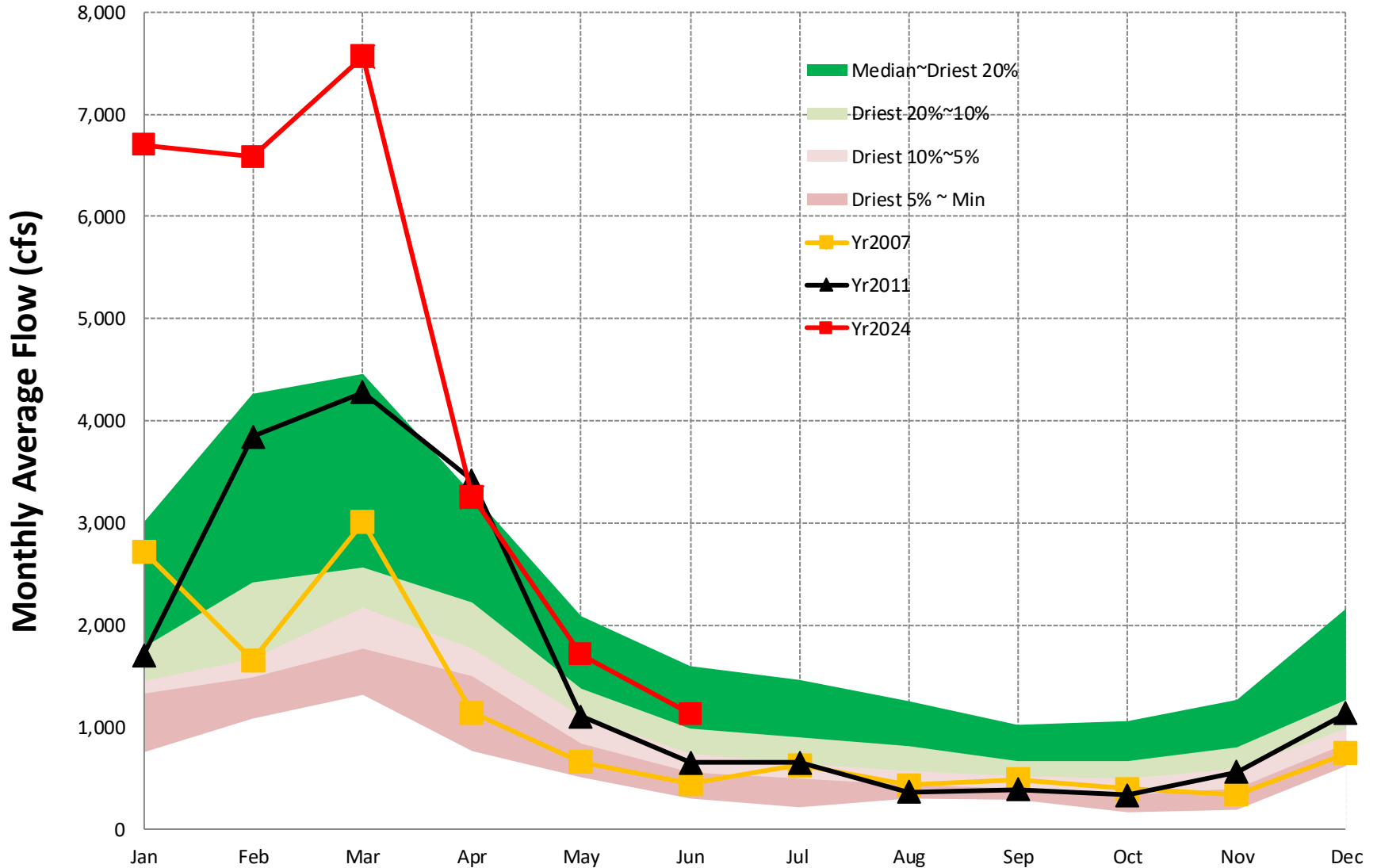
[Back to Map](#)

# Gage #14. USGS #02208450, Ocumulgee Basin, ALCOVY RIVER above COVINGTON, GA



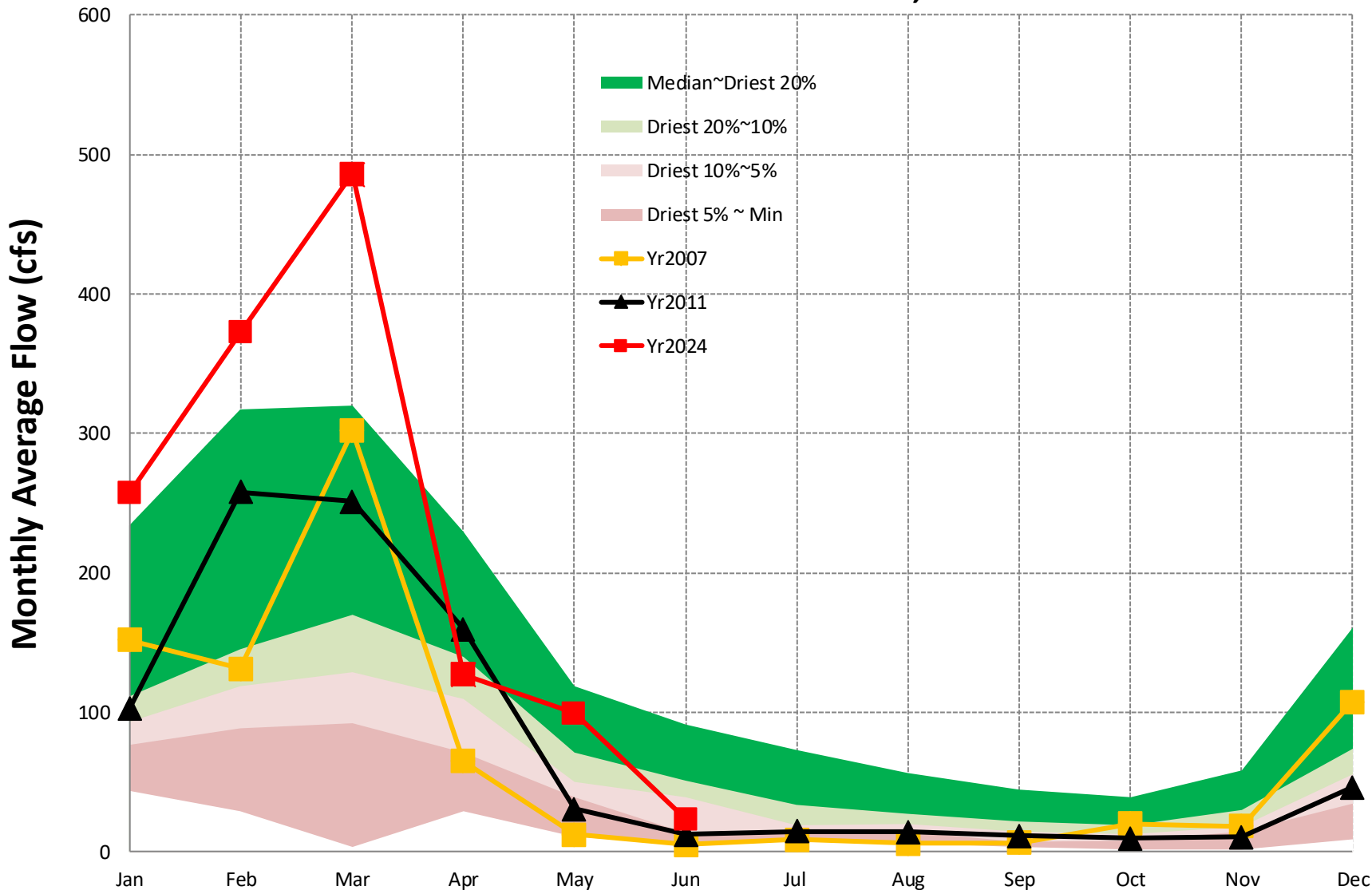
[Back to Map](#)

# Gage #15. USGS #02213000, Ocmulgee Basin, Ocmulgee River at Macon, GA



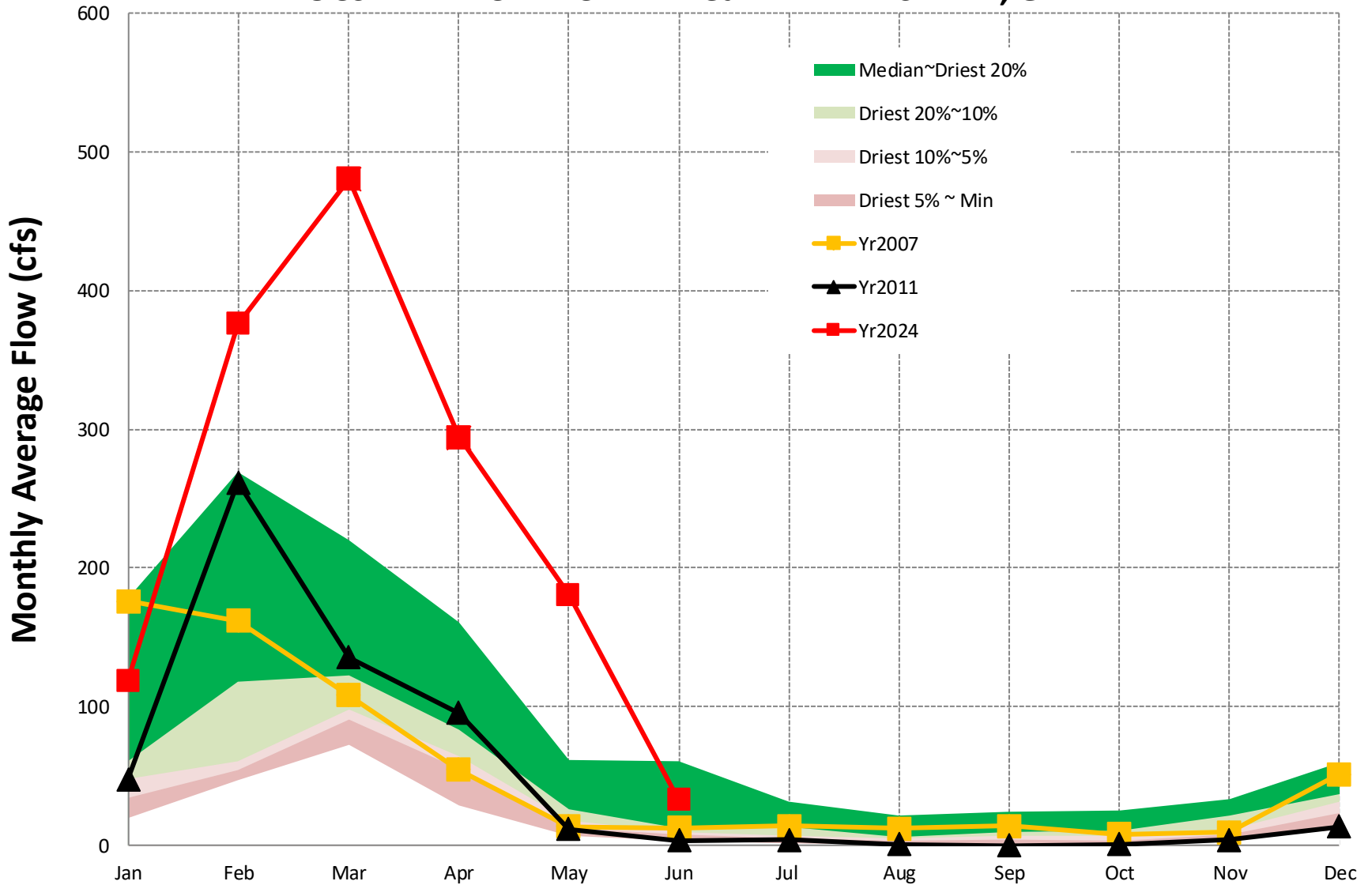
[Back to Map](#)

# Gage #16. USGS #02213500, Ocmulgee Basin, TOBESOFKEE CREEK near MACON, GA



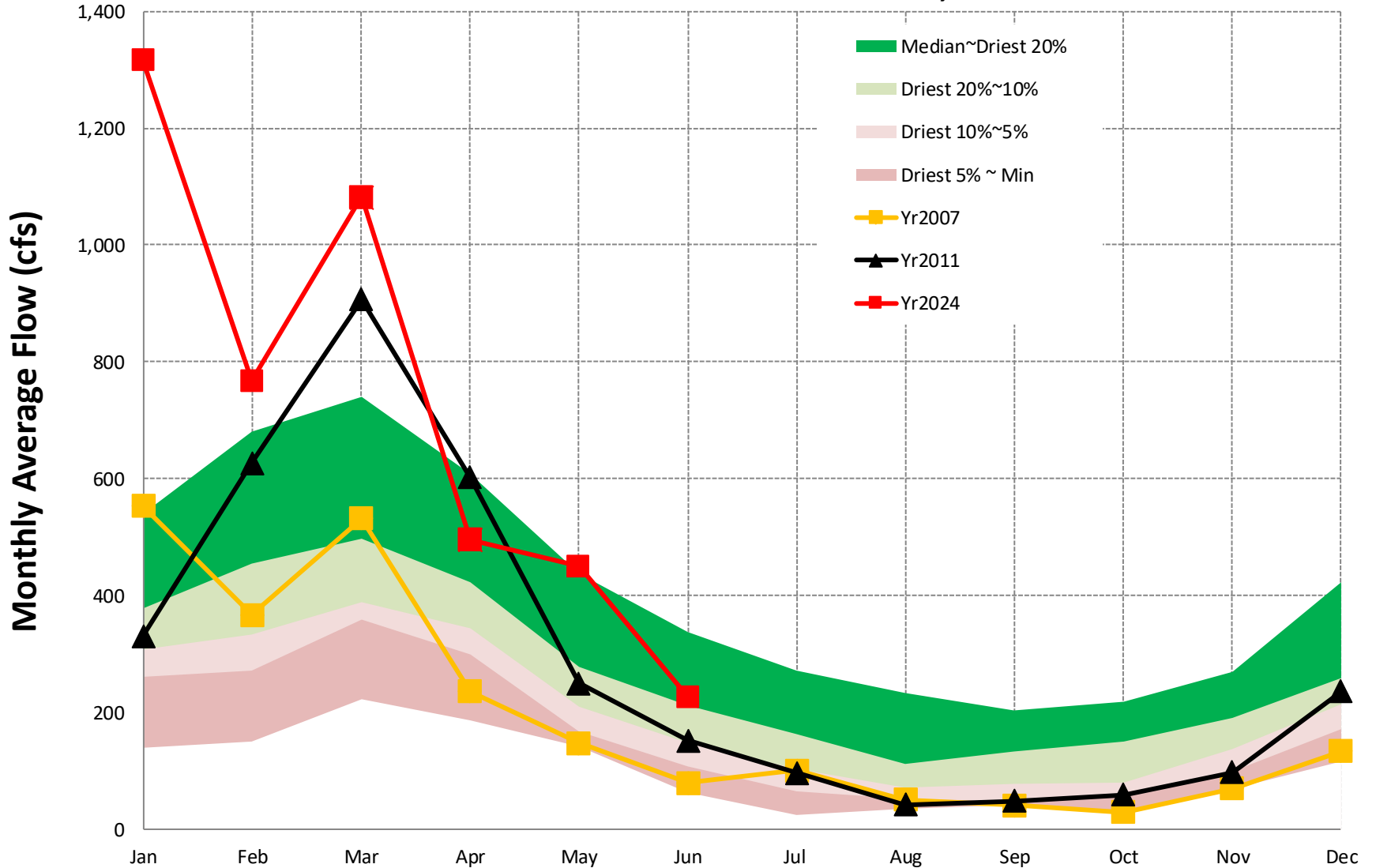
[Back to Map](#)

# Gage #17. USGS #02215100, Ocmulgee Basin, TUCSAWHATCHEE CREEK near HAWKINSVILLE, GA



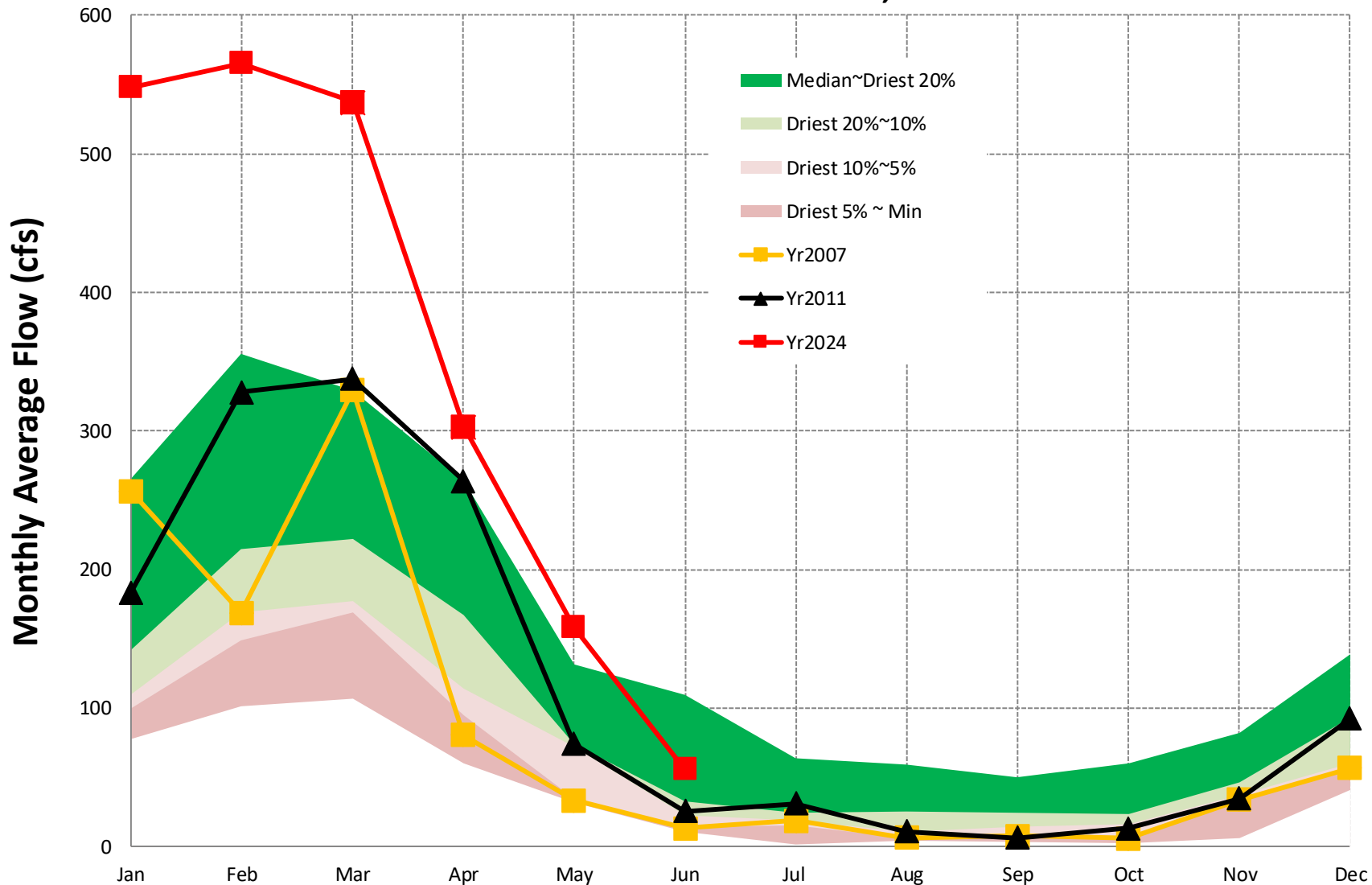
[Back to Map](#)

# Gage #18. USGS #02217500, Oconee Basin, MIDDLE OCONEE RIVER near ATHENS, GA

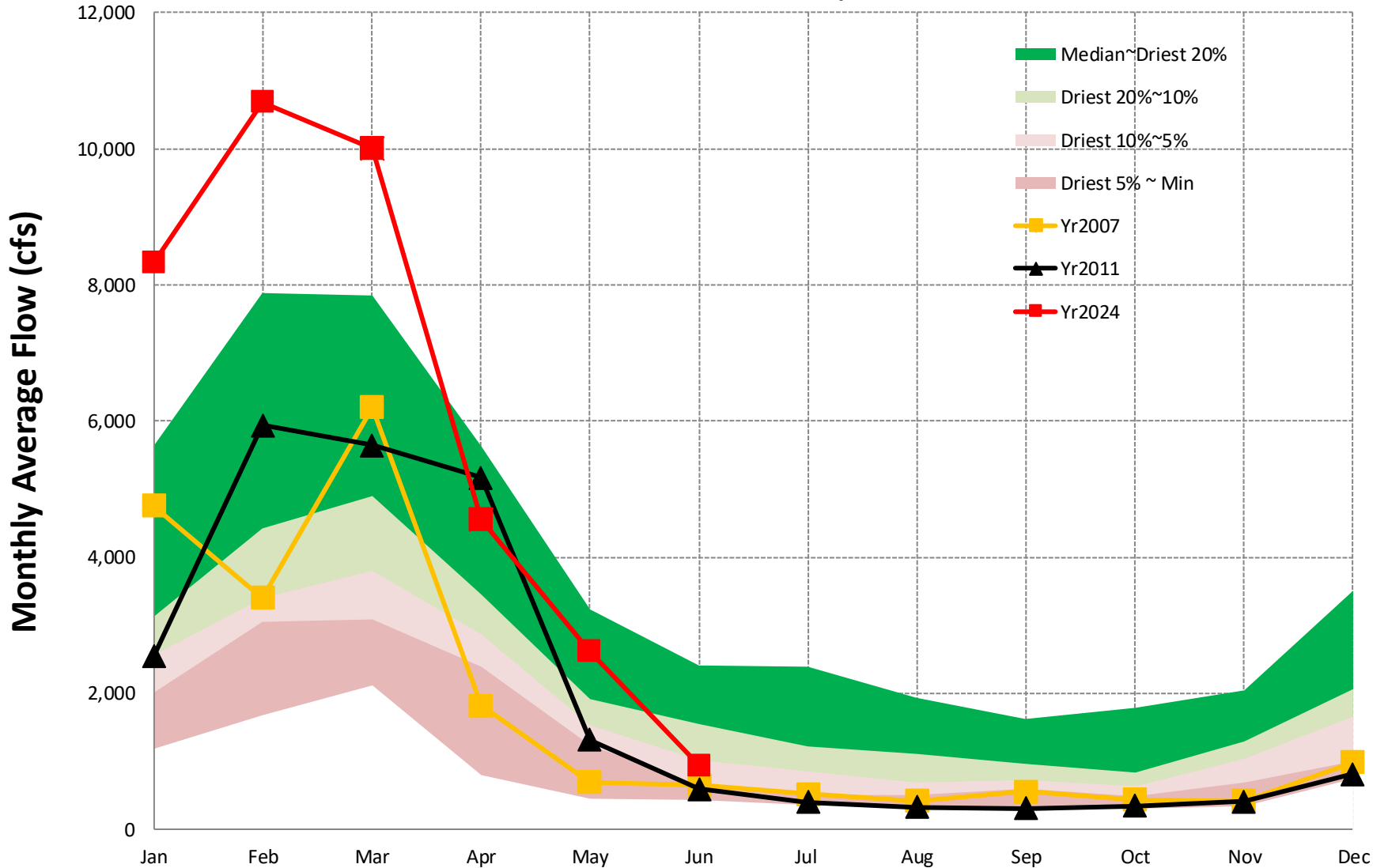


[Back to Map](#)

# Gage #19. USGS #02220900, Oconee Basin, LITTLE RIVER near EATONTON, GA



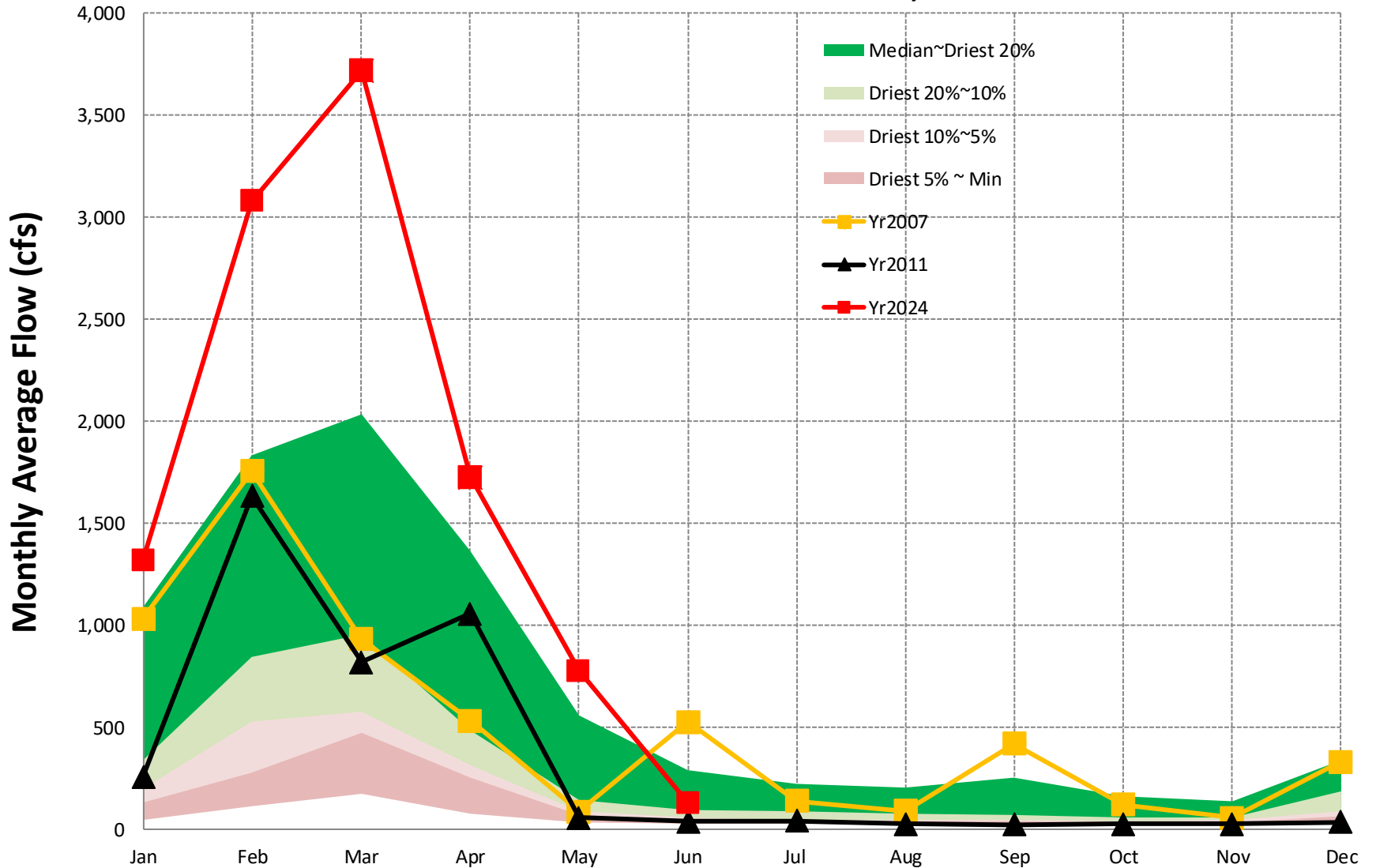
# Gage #20. USGS #02223500, Oconee Basin, Oconee River at Dublin, GA



[Back to Map](#)

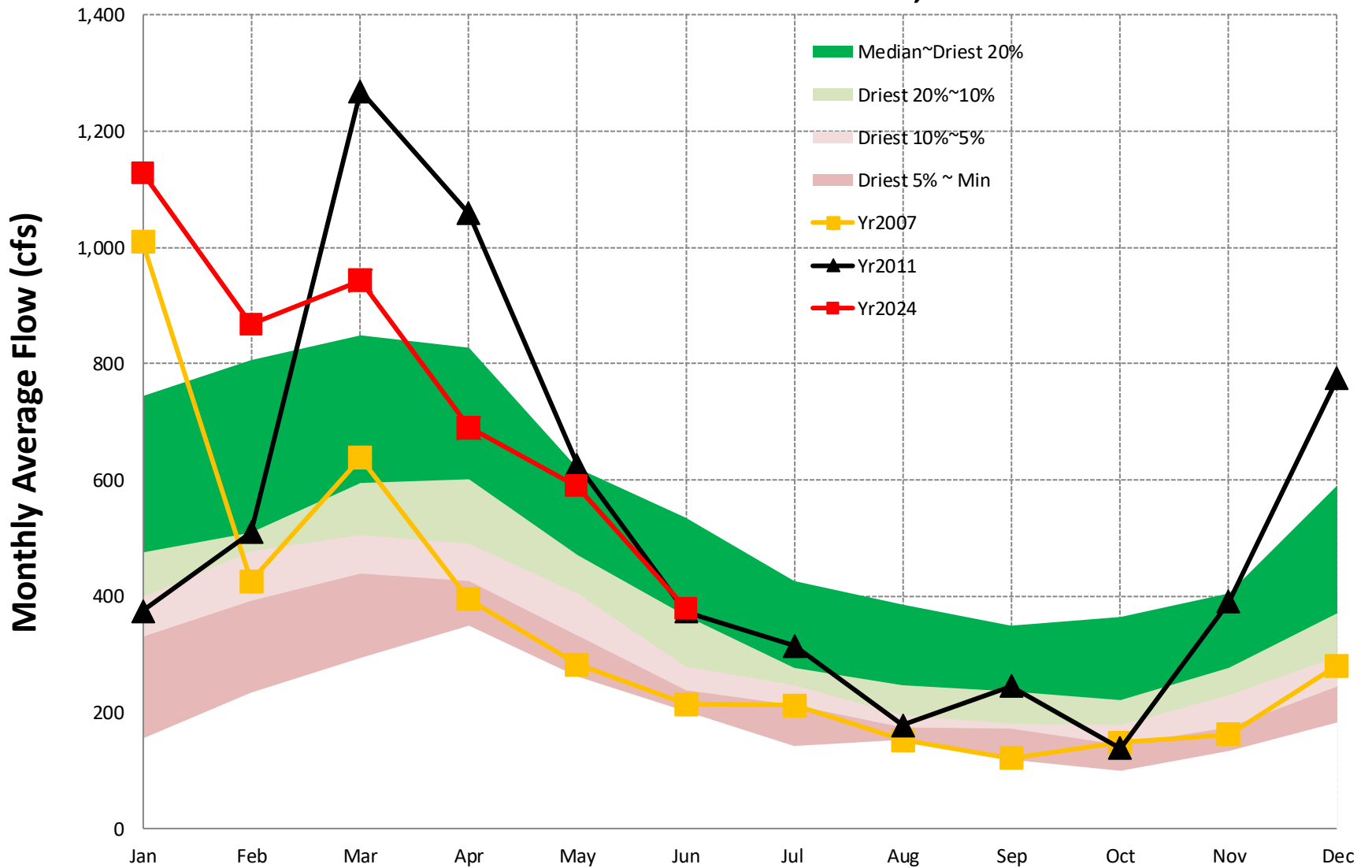


## Gage #21. USGS #02225500, Altamaha Basin, OHOOPEE RIVER near REIDSVILLE, GA

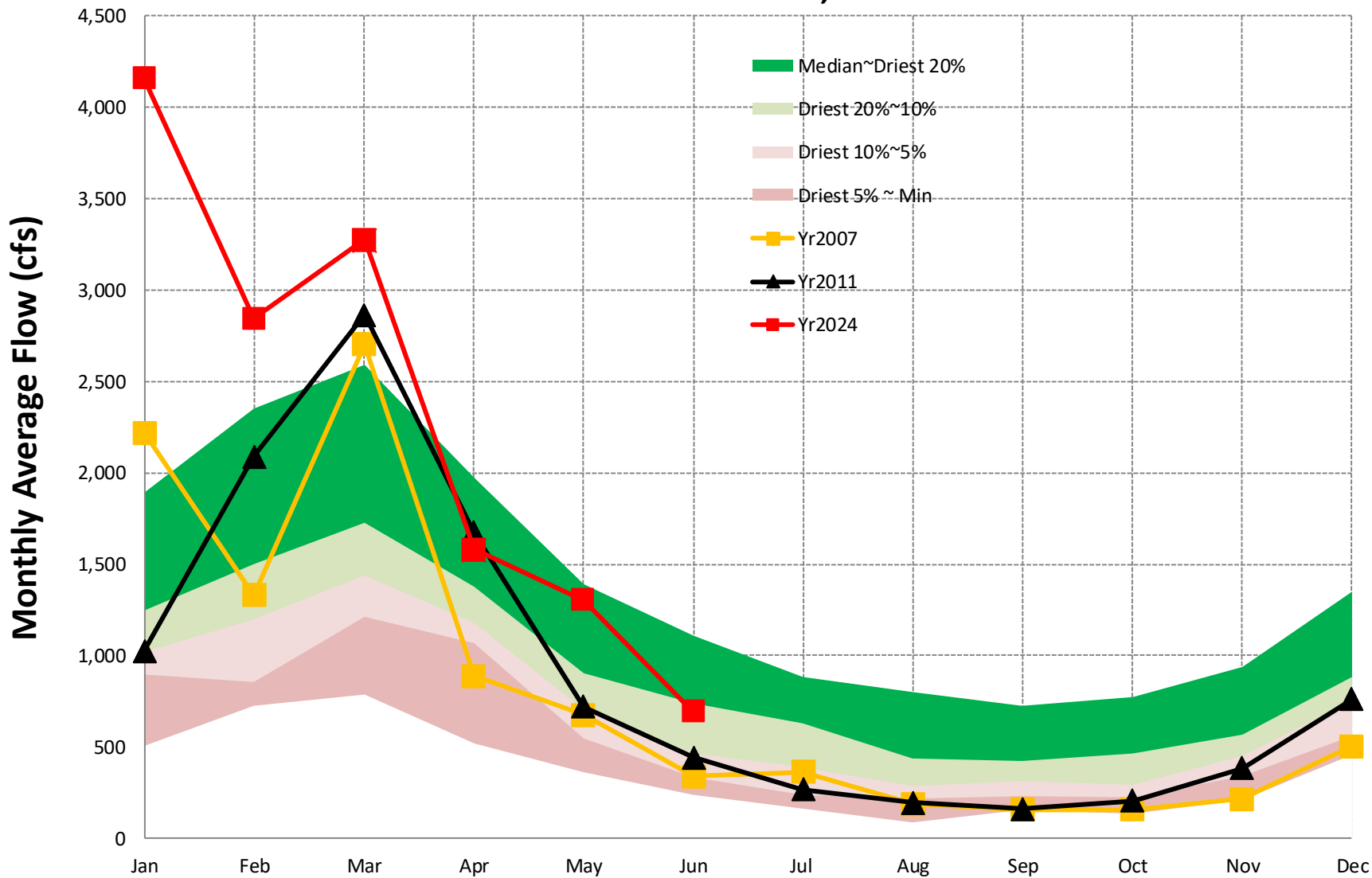


[Back to Map](#)

## Gage #22. USGS #02177000, Savannah Basin, CHATTOOGA RIVER near CLAYTON, GA

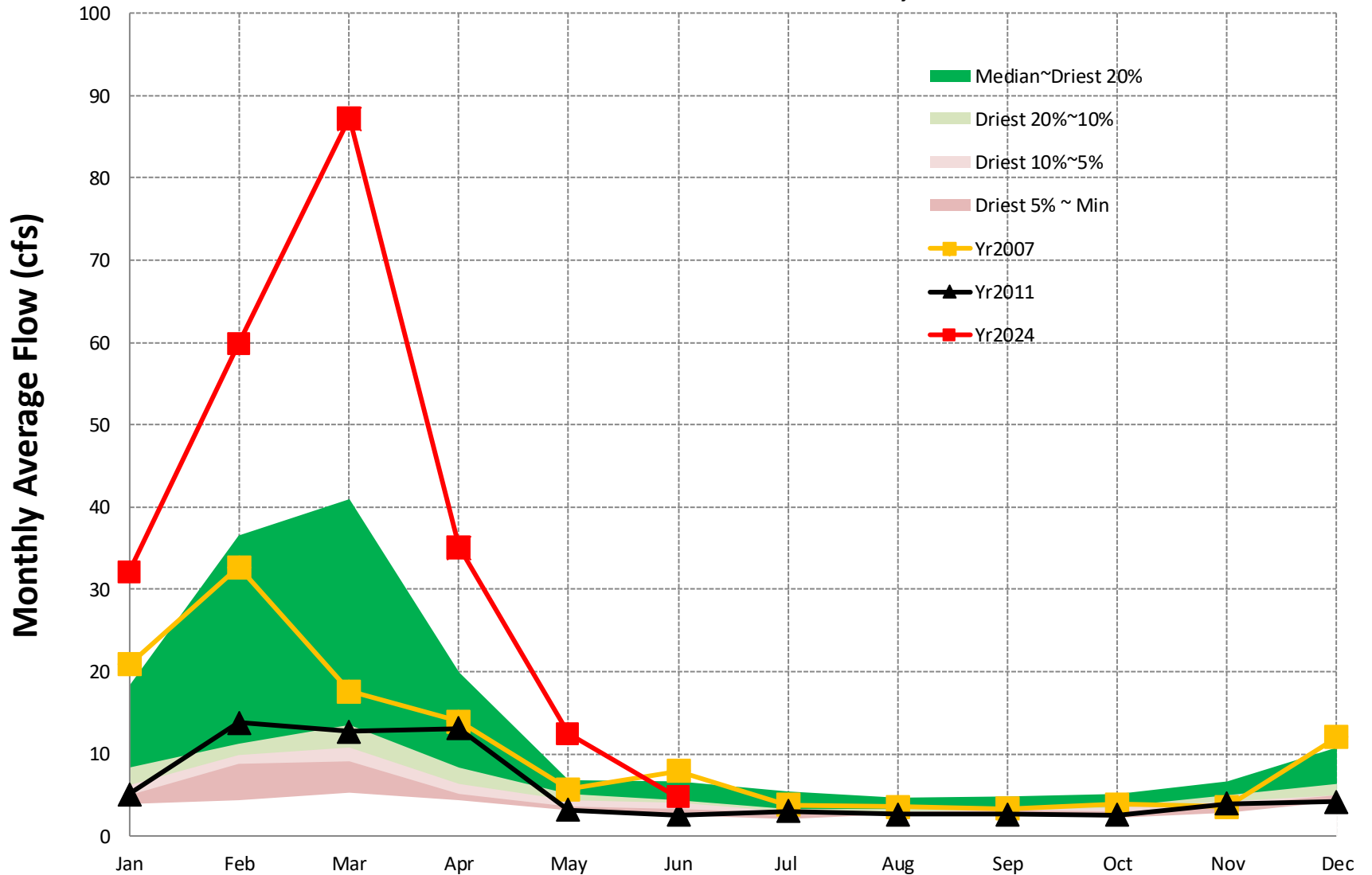


# Gage #23. USGS #02192000, Savannah Basin Broad River near Bell, GA



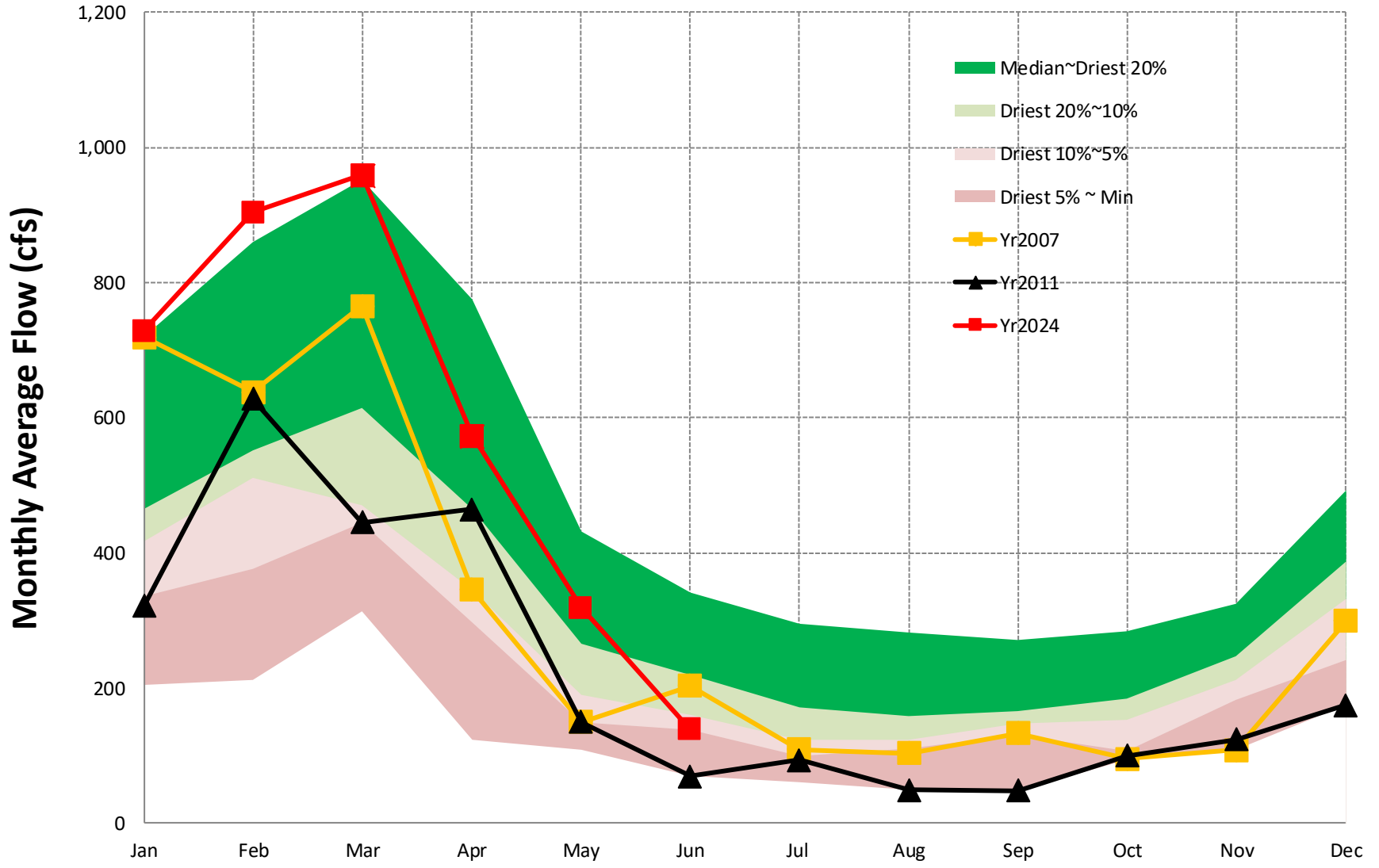
[Back to Map](#)

## Gage #24. USGS #02198100, Savannah Basin, BEAVERDAM CREEK near SARDIS, GA



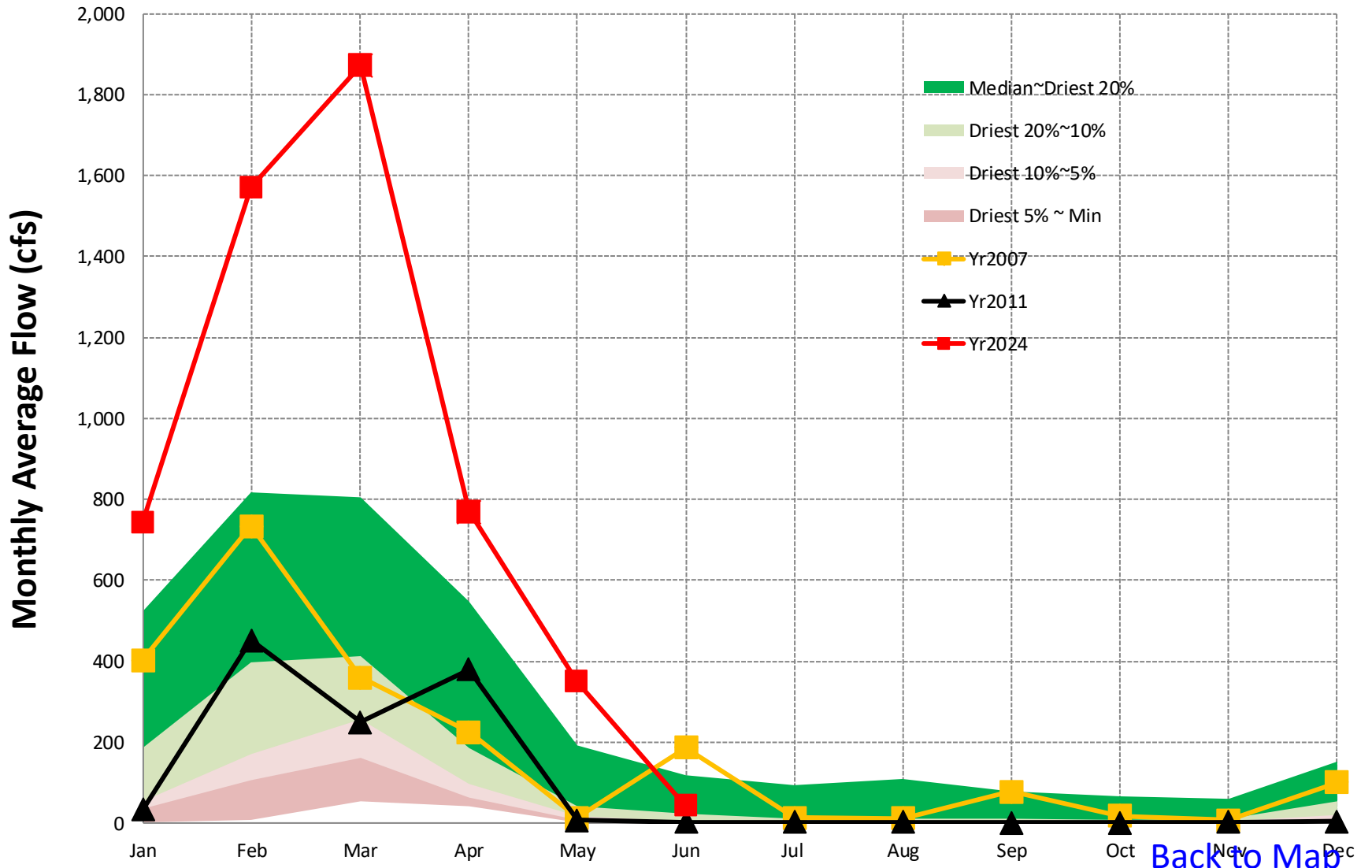
[Back to Map](#)

# Gage #25. USGS #02198000, Savannah Basin, BRIER CREEK at MILLHAVEN, GA



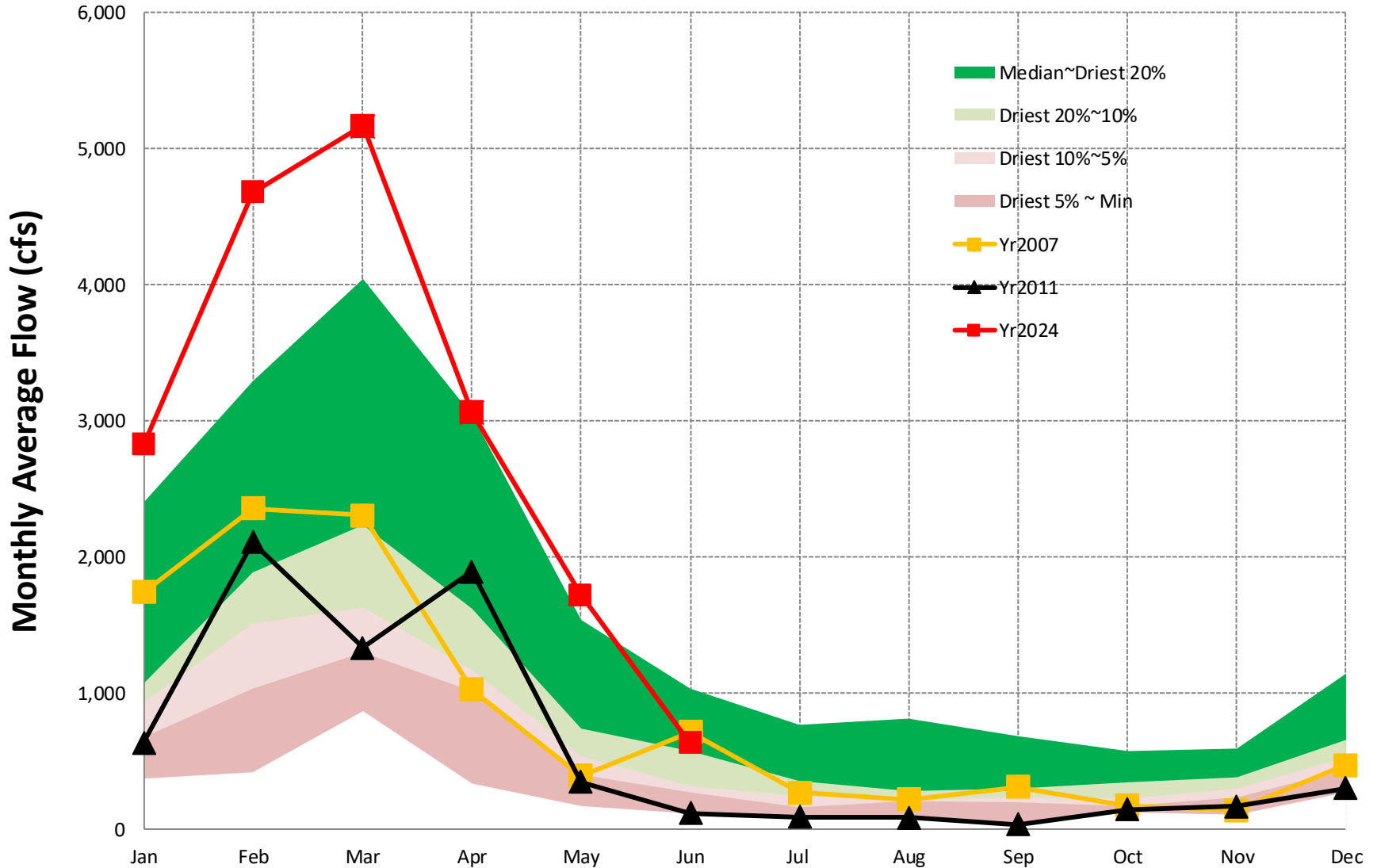
[Back to Map](#)

## Gage #26. USGS #02203000, Ogeechee Basin, CANOOCHEE RIVER near CLAXTON, GA



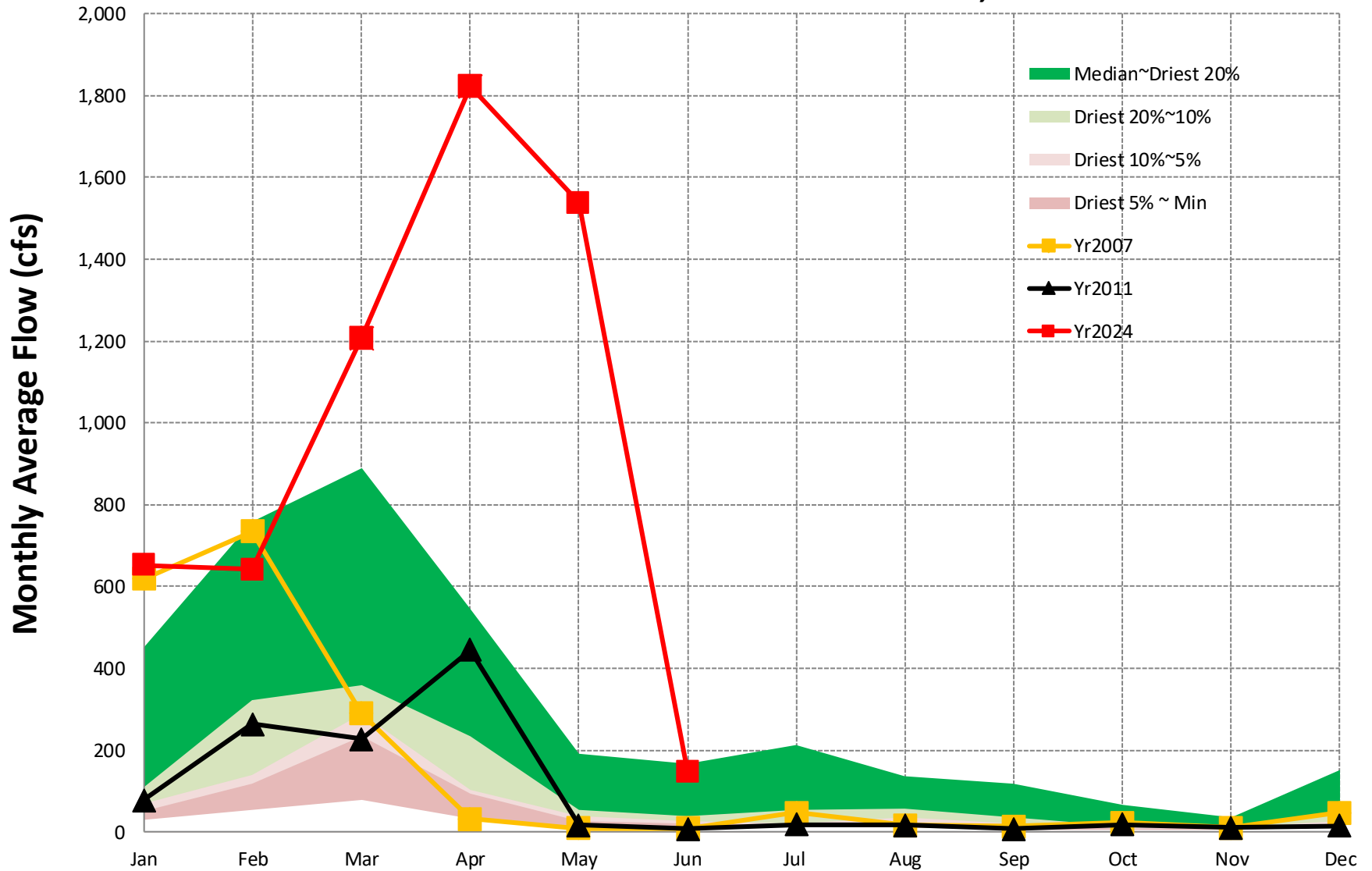
[Back to Map](#)

# Gage #27. USGS #02202500, Ogeechee Basin, Ogeechee River near Eden, GA



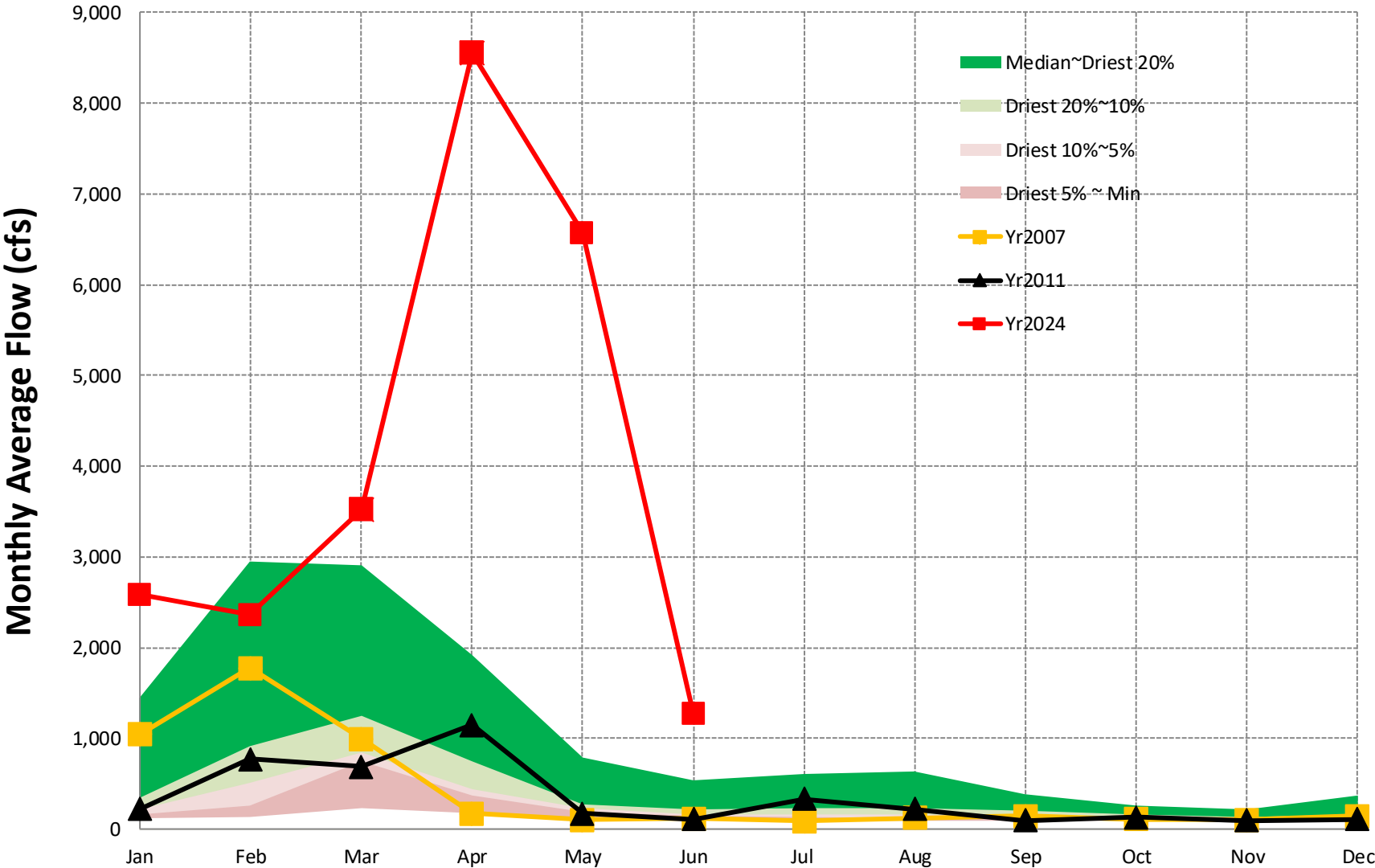
[Back to Map](#)

# Gage #28. USGS #02327500, Ochlockonee Basin, OCHLOCKONEE RIVER near THOMASVILLE, GA



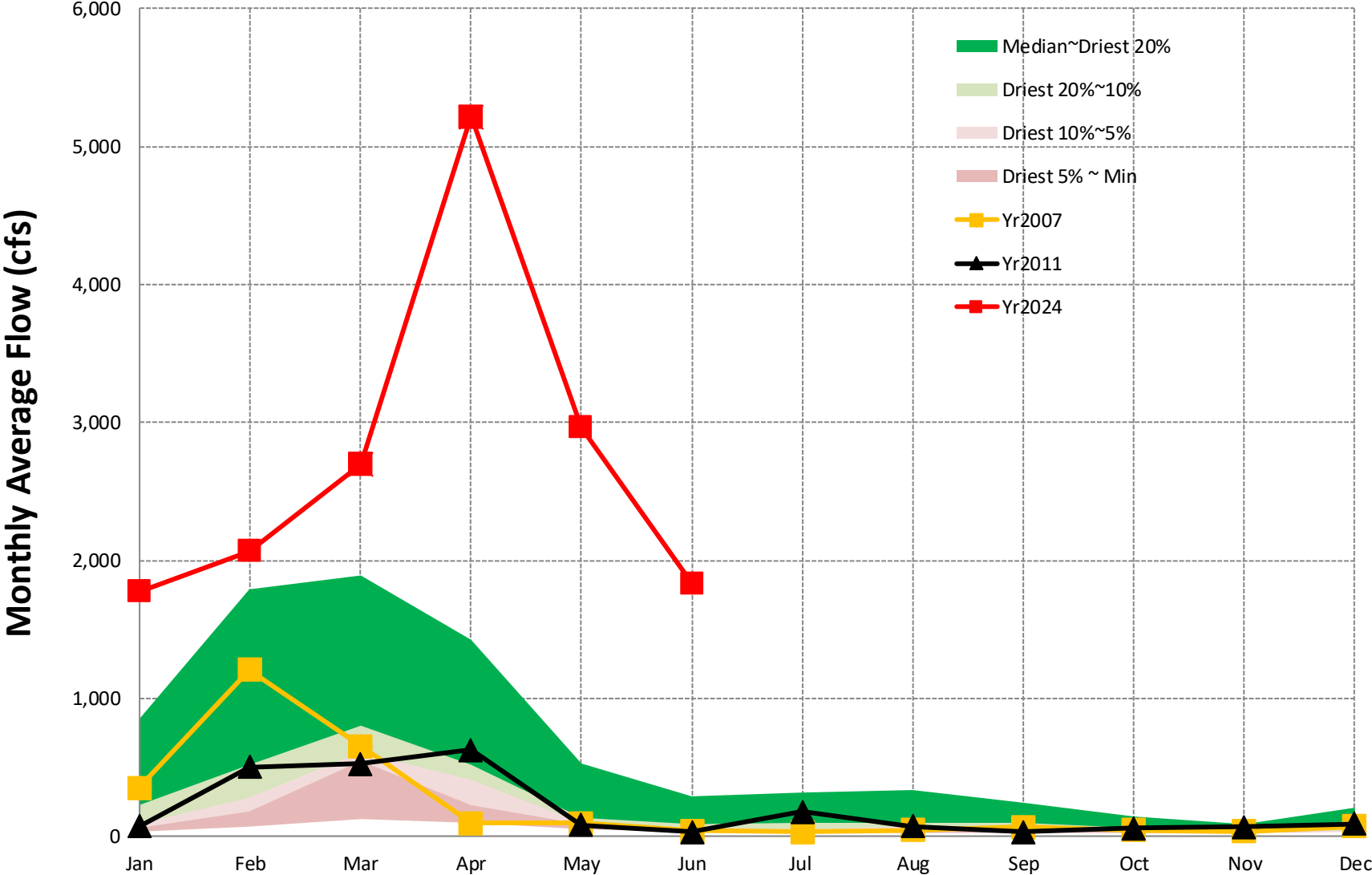


# Gage #29. USGS #02319000, Suwannee Basin, WITHLACOOCHEE RIVER near PINETTA, FL



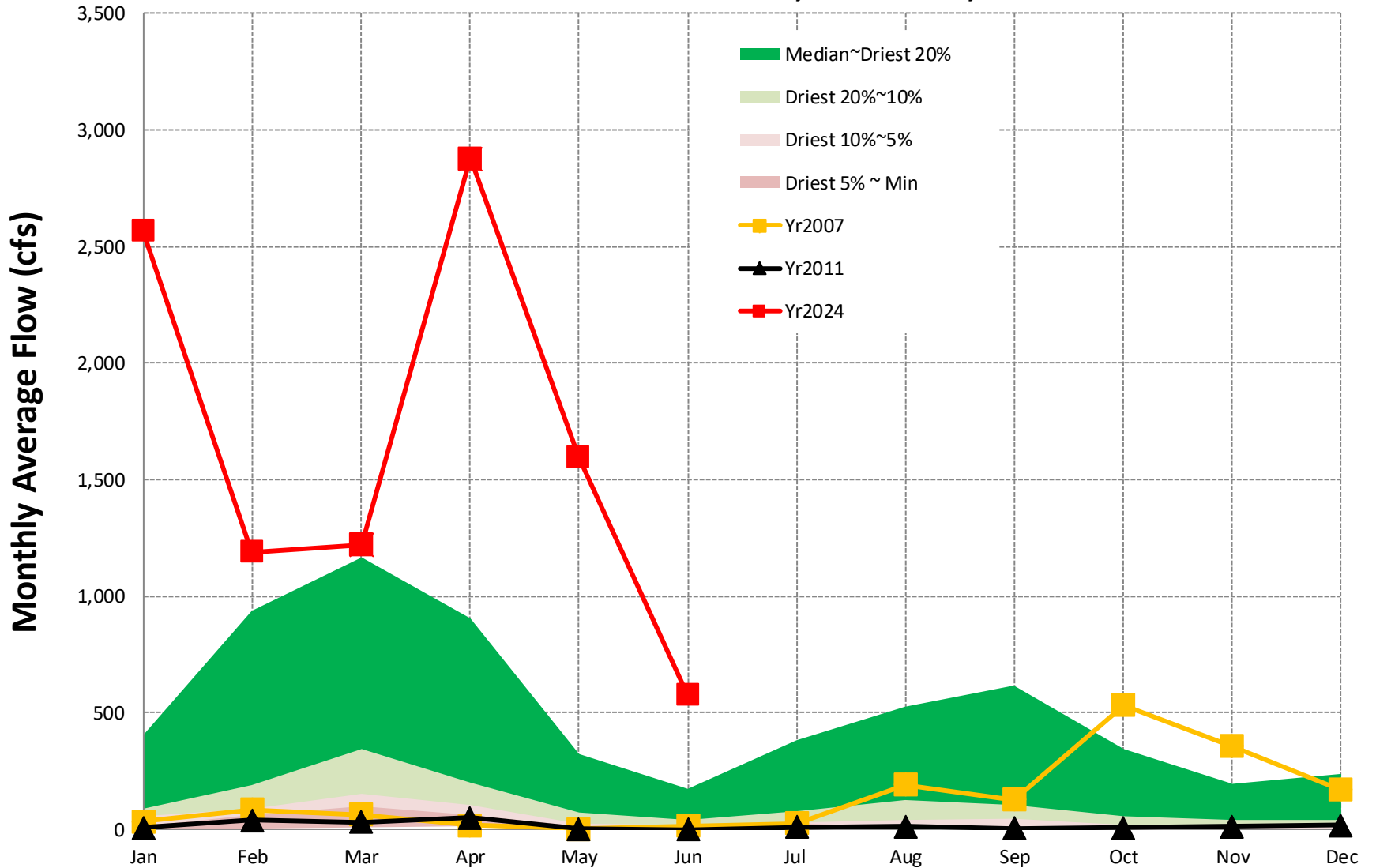
[Back to Map](#)

# Gage #30. USGS #02317500, Suwanee Basin, Alapaha River at Statenville, GA



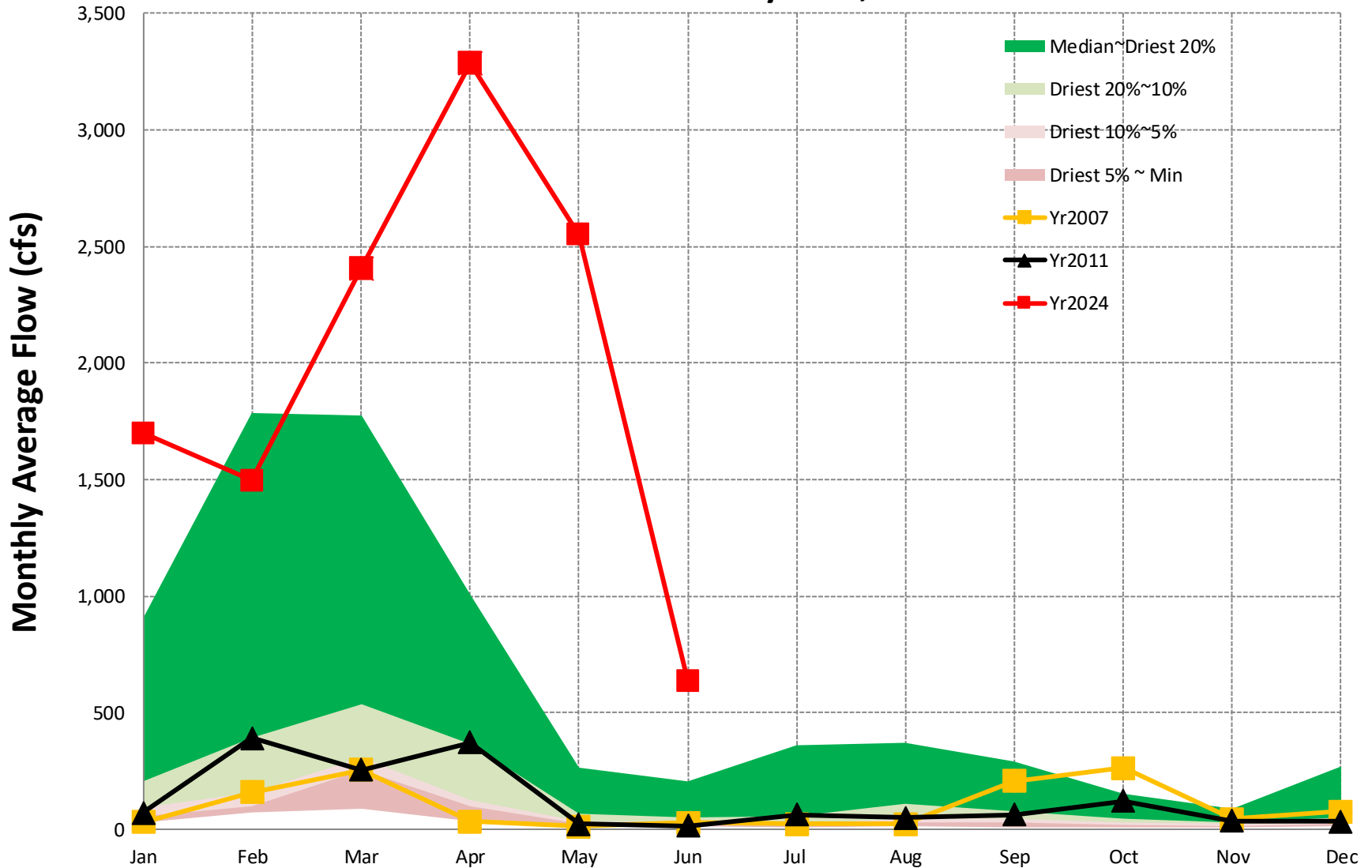
[Back to Map](#)

## Gage #31. USGS #02314500, Suwannee Basin, SUWANNEE RIVER AT US 441, AT FARGO, GA



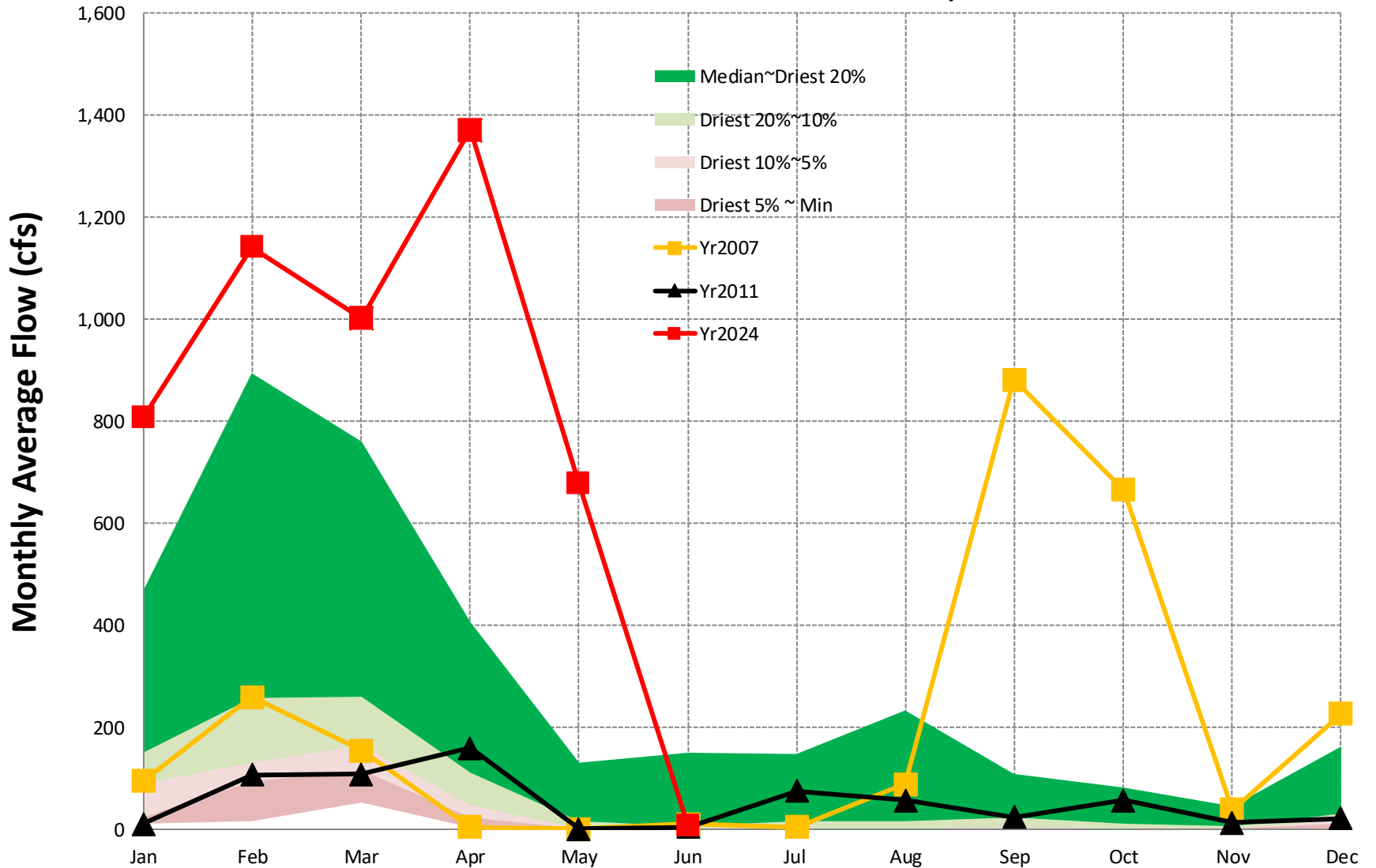
[Back to Map](#)

## Gage #32. USGS #02226500, Satilla Basin, Satilla River near Waycross, GA

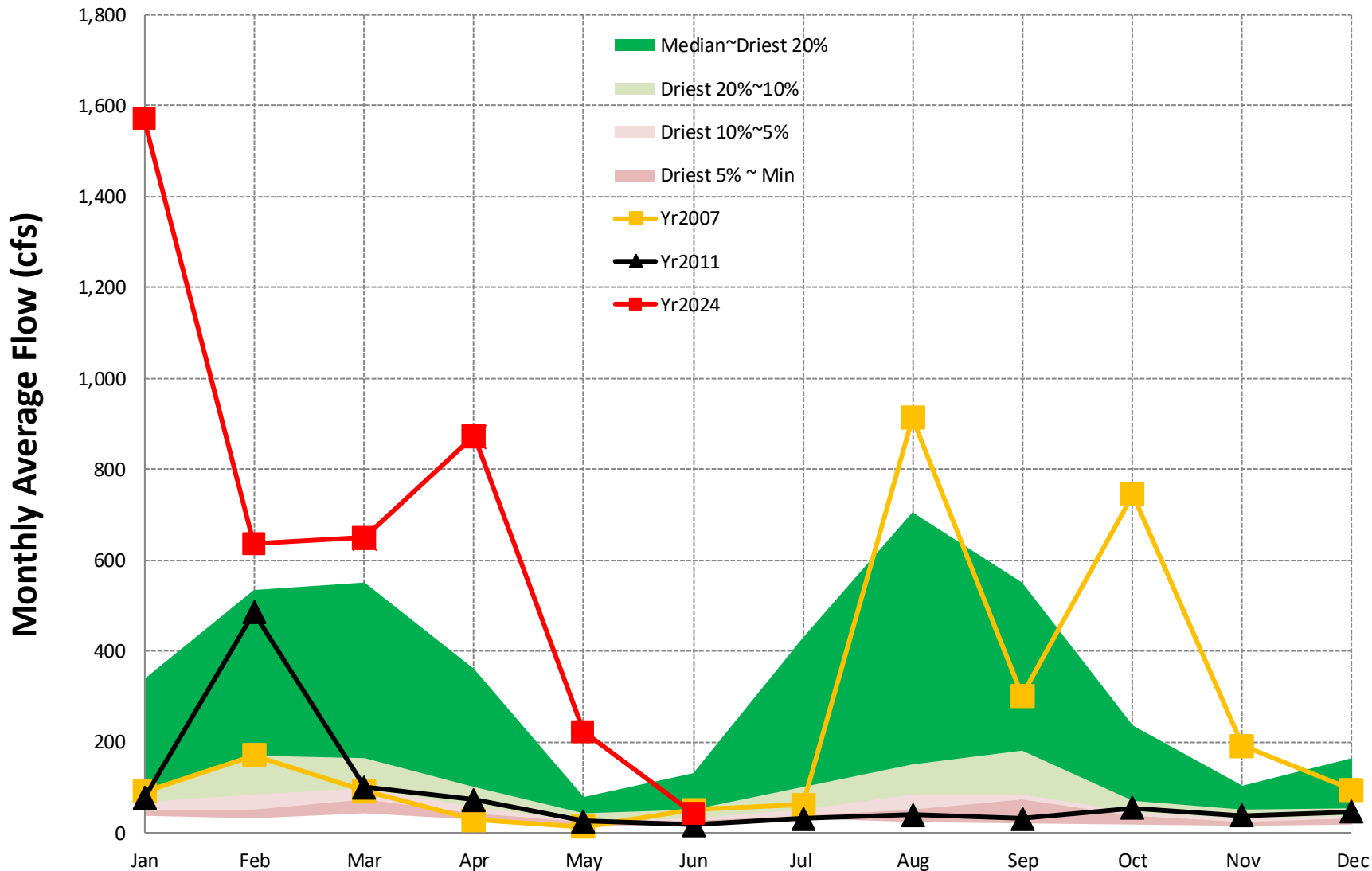


[Back to Map](#)

## Gage #33. USGS #02227500, Satilla Basin, LITTLE SATILLA RIVER near OFFERMAN, GA



## Gage #34. USGS #02231000, St Mary Basin, ST. MARYS RIVER near MACCLENNY, FL



[Back to Map](#)

# Groundwater Levels

Data Source: USGS

## Rationale for Choosing USGS Monitoring Wells

EPD monitors 17 groundwater USGS monitoring wells shown on the following slide to assess drought conditions. These wells were selected for monitoring because they have:

- Long-term monitoring records consisting of three decades or more of data; and
- Real-time monitoring that represents the most up-to-date conditions.



# USGS Wells Monitored

## Chattahoochee Basin

1. 16MM03

## Flint Basin

- 2. 11AA01
- 3. 13L180
- 4. 12M017
- 5. 08K001
- 6. 11K003
- 7. 12K014
- 8. 13J004
- 9. 08G001
- 10. 10G313
- 11. 09F520
- 16. 11J011

## Oconee Basin

12. 21T001

## Tennessee Basin

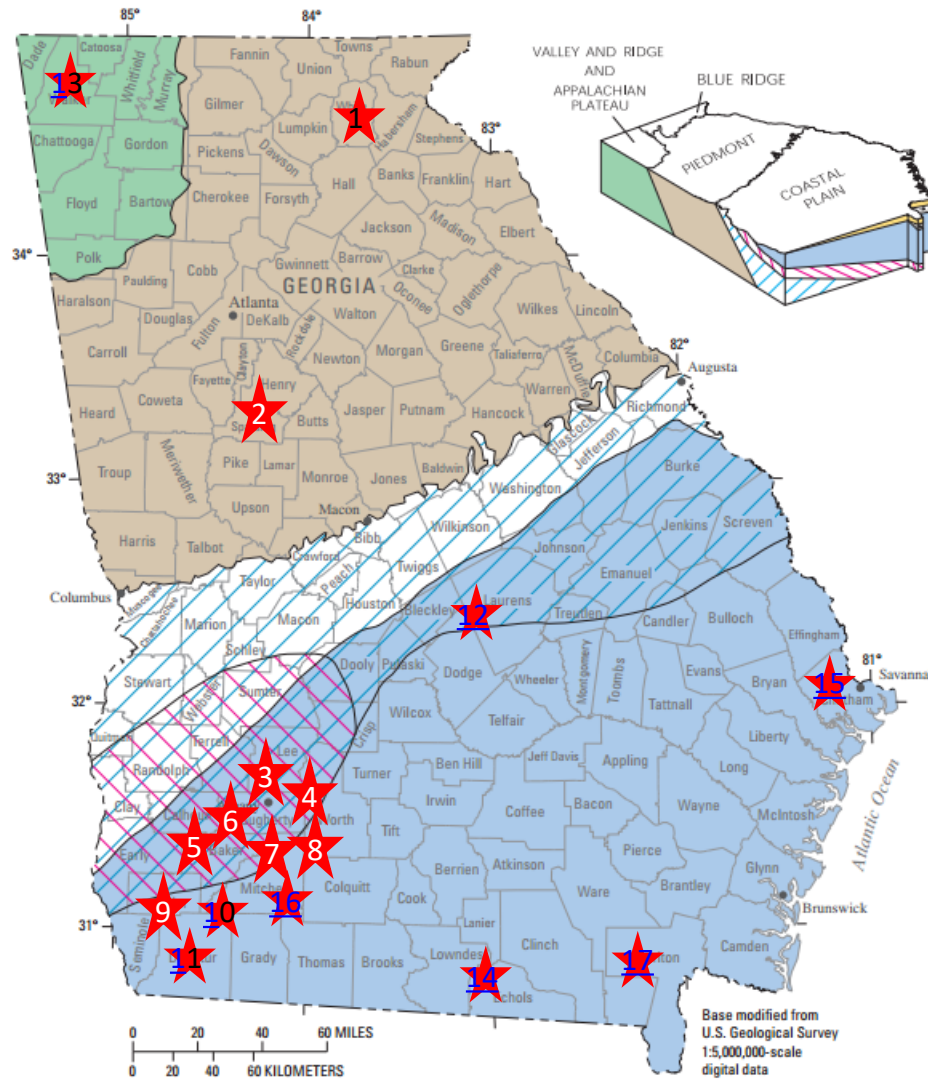
13. 03PP01

## Suwanee Basin

- 14. 19E009
- 17. 27E004

## Ogeechee Basin

15. 35P094



### EXPLANATION

<b>Coastal Plain aquifers</b>	<b>Piedmont and Blue Ridge aquifers</b>
Surficial aquifer system—Not a principal aquifer. Shown on block only	Crystalline-rock aquifers
Floridan aquifer system	<b>Valley and Ridge and Appalachian Plateau aquifers</b>
Claiborne and Clayton aquifers	Paleozoic-rock aquifers
Cretaceous aquifer system	

Figure 2. Area of use of principal aquifers and physiographic provinces in Georgia (modified from U.S. Geological Survey, 2006).

# Groundwater Level Graphs

- For each of the 17 groundwater wells, EPD has prepared a graph that shows monthly average groundwater levels from January 2024 through June 2024;
- To help put these levels into perspective, for comparison purposes, each graph also shows:
  - Monthly average levels at that same well for the years 2007 and 2011 when groundwater levels were at or near recorded low levels across much of the state; and
  - And a statistical composite of historical conditions at that same gage showing the “lowest” 50, 20, 10, and 5 percent of all recorded monthly average levels at the same well.

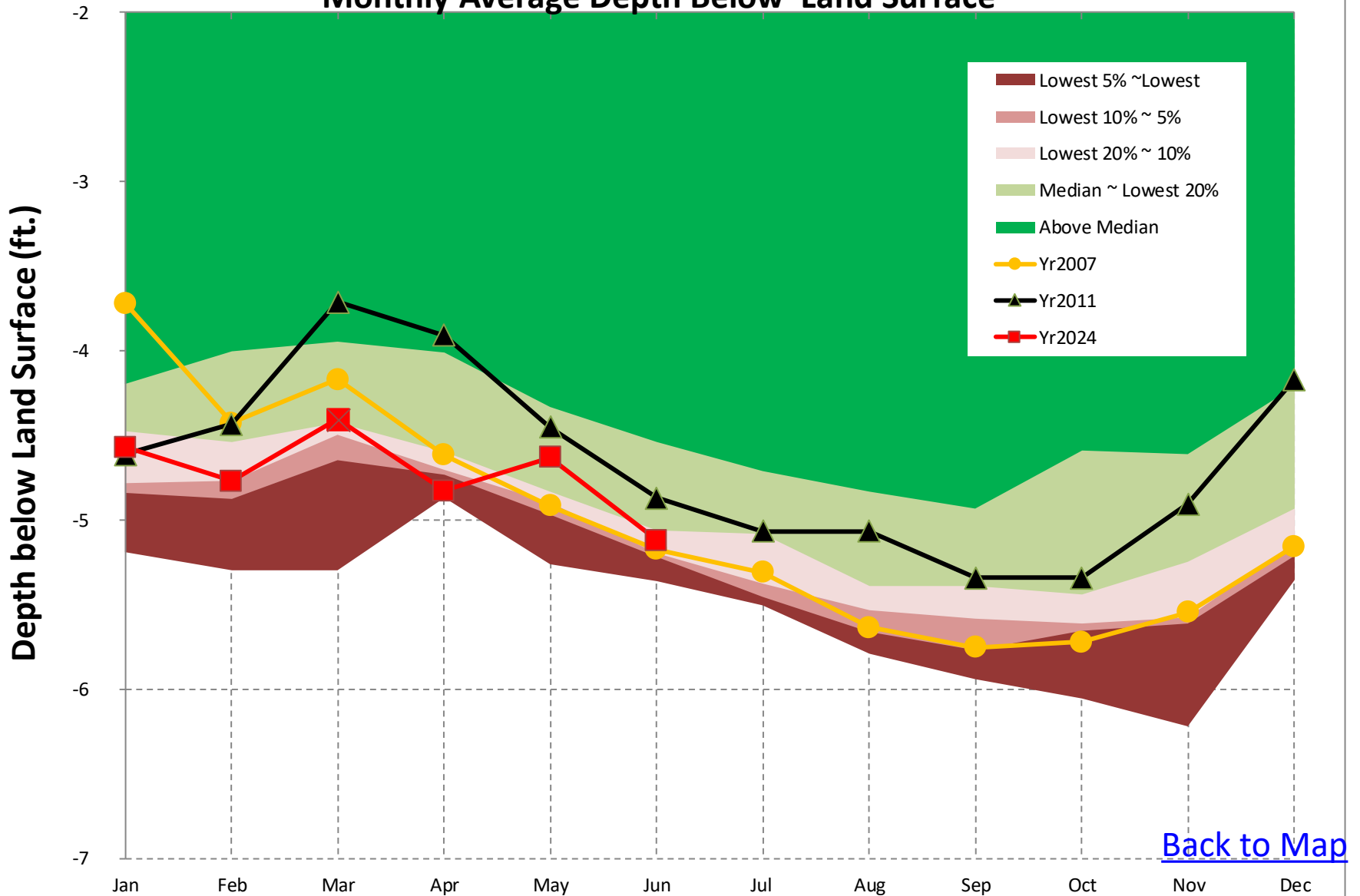
# How to Read the Groundwater Level Graphs

## Example: Well #11, 09F520, Flint River Basin

The groundwater level graph for Well #11, USGS 09F520 shows:

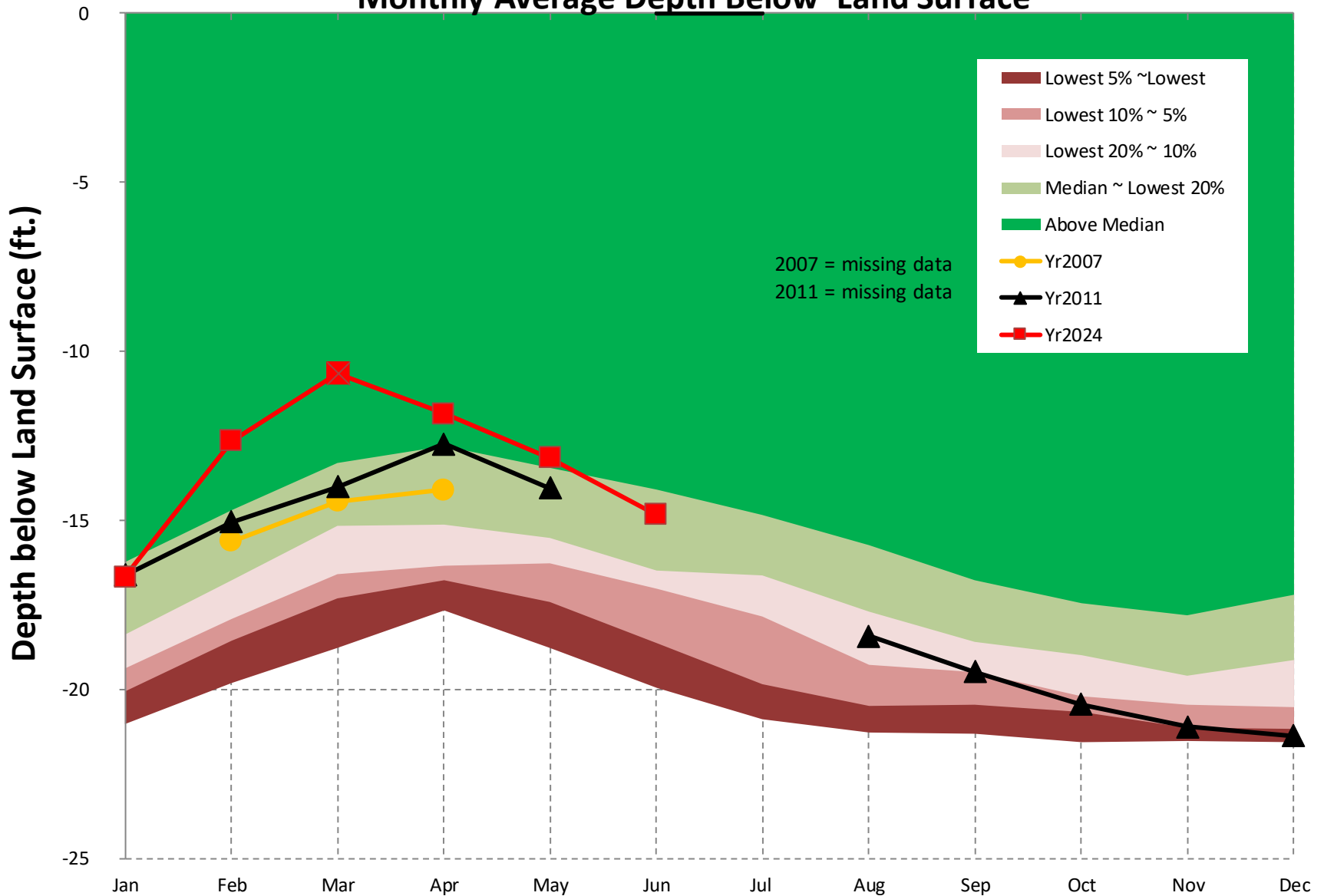
- The average monthly groundwater level in June 2024 was 49 ft below land surface. The statistical composite of all historical data for this well shows that monthly average groundwater levels in June have historically been lower than June 2024 about 27% of the time; about 73% of the time in June they have been higher.
- The average monthly groundwater level in June 2011 was 54 ft below land surface. The statistical composite of all historical data for this well shows that monthly average groundwater levels in June have historically been lower than June 2011 about 0.1% of the time; about 99.9% of the time in June they have been higher.
- The average monthly groundwater level in June 2007 was 53.1 ft below land surface. The statistical composite of all historical data for this well shows that monthly average groundwater levels in June have historically been lower than June 2007 about 2% of the time; about 98% of the time in June they have been higher.

# Well #1, 16MM03, Crystalline Rocks Aquifer in Chattahoochee Basin, Monthly Average Depth Below Land Surface



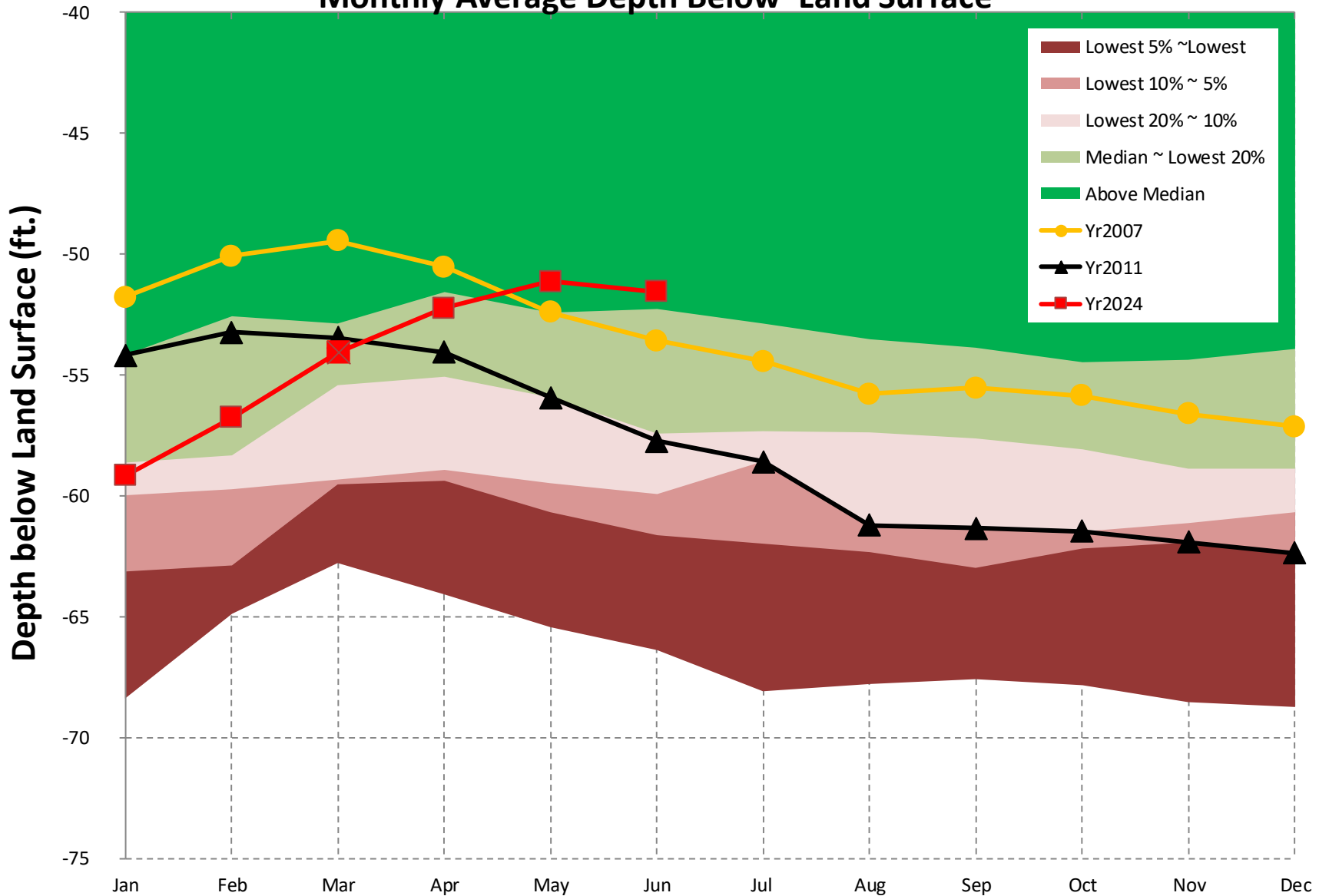
[Back to Map](#)

## Well #2, 11AA01, Surficial Aquifer in Flint Basin, Monthly Average Depth Below Land Surface



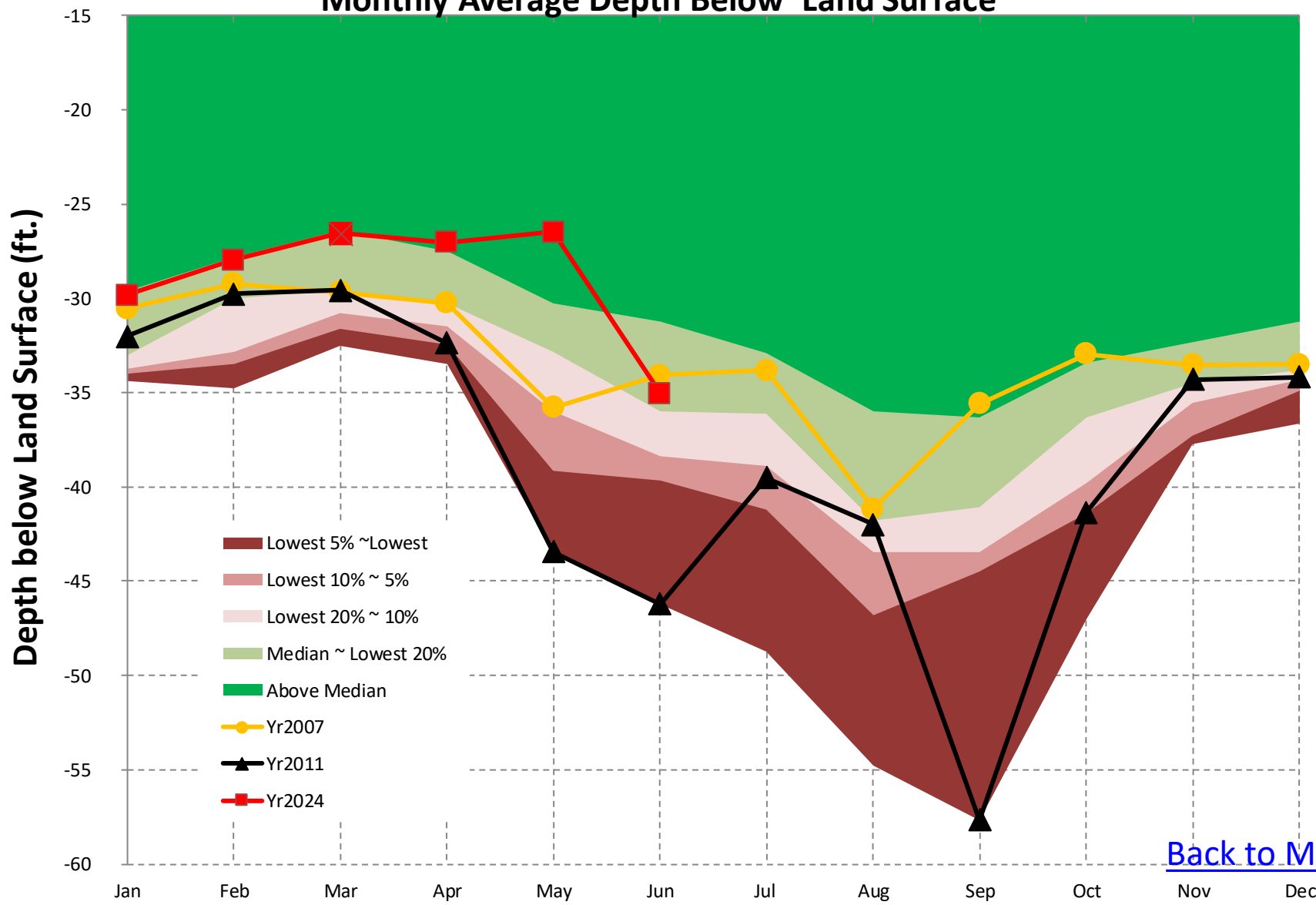
[Back to Map](#)

## Well #3, 13L180, Floridan Aquifer in Flint Basin, Monthly Average Depth Below Land Surface



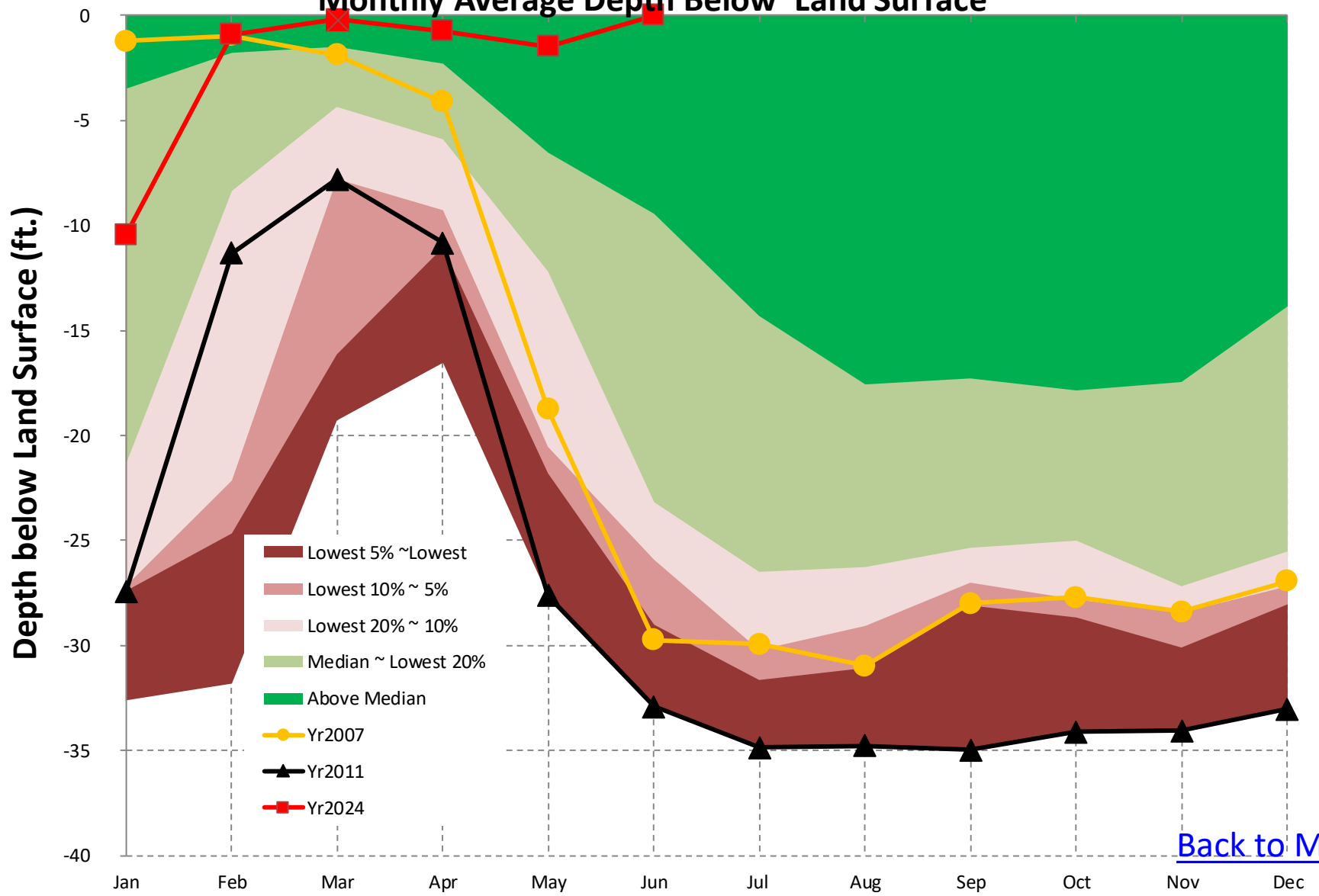
[Back to Map](#)

## Well #4, 12M017, Floridan Aquifer in Flint Basin, Monthly Average Depth Below Land Surface



[Back to Map](#)

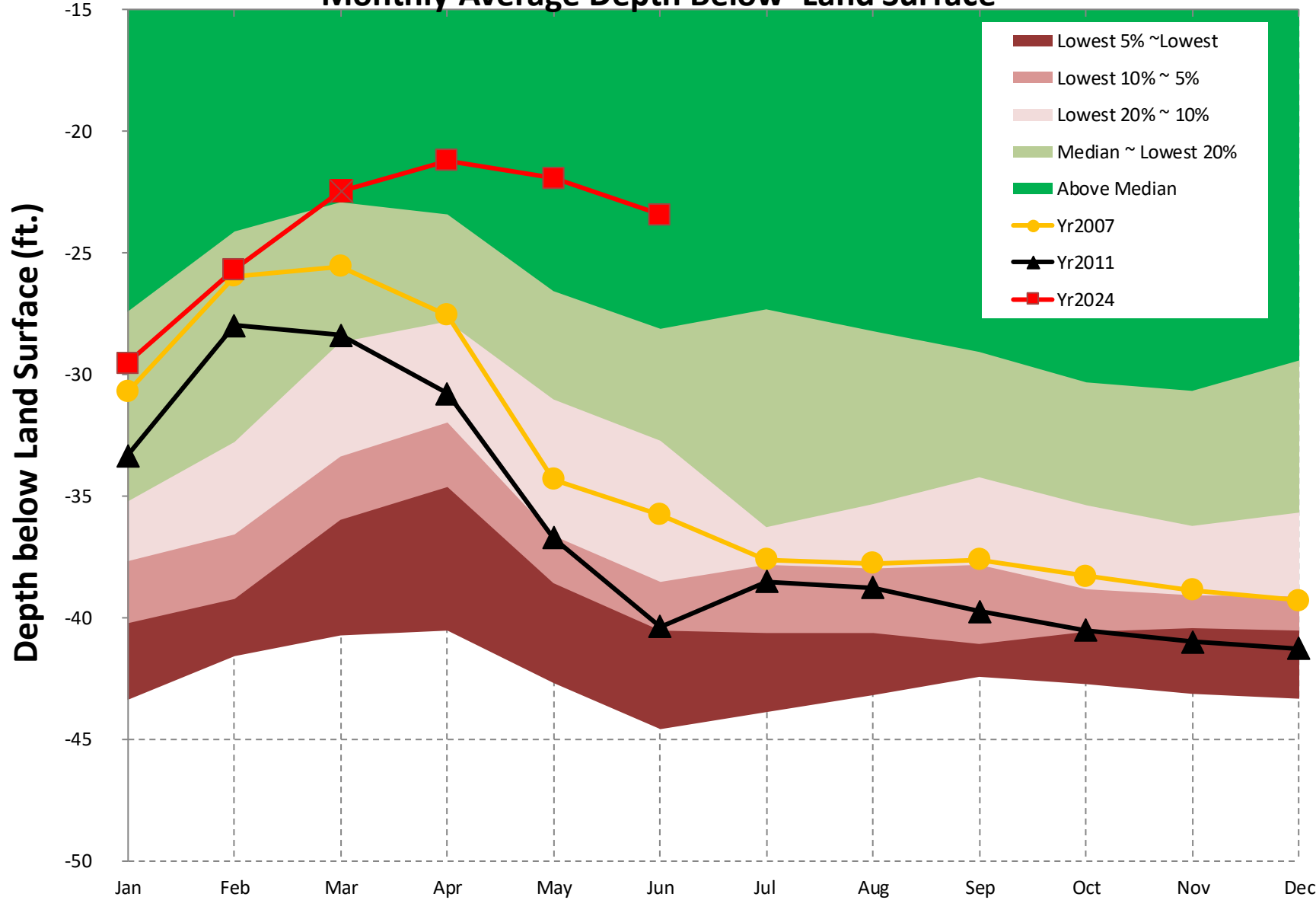
## Well #5, 08K001, Floridan Aquifer in Flint Basin, Monthly Average Depth Below Land Surface



[Back to Map](#)

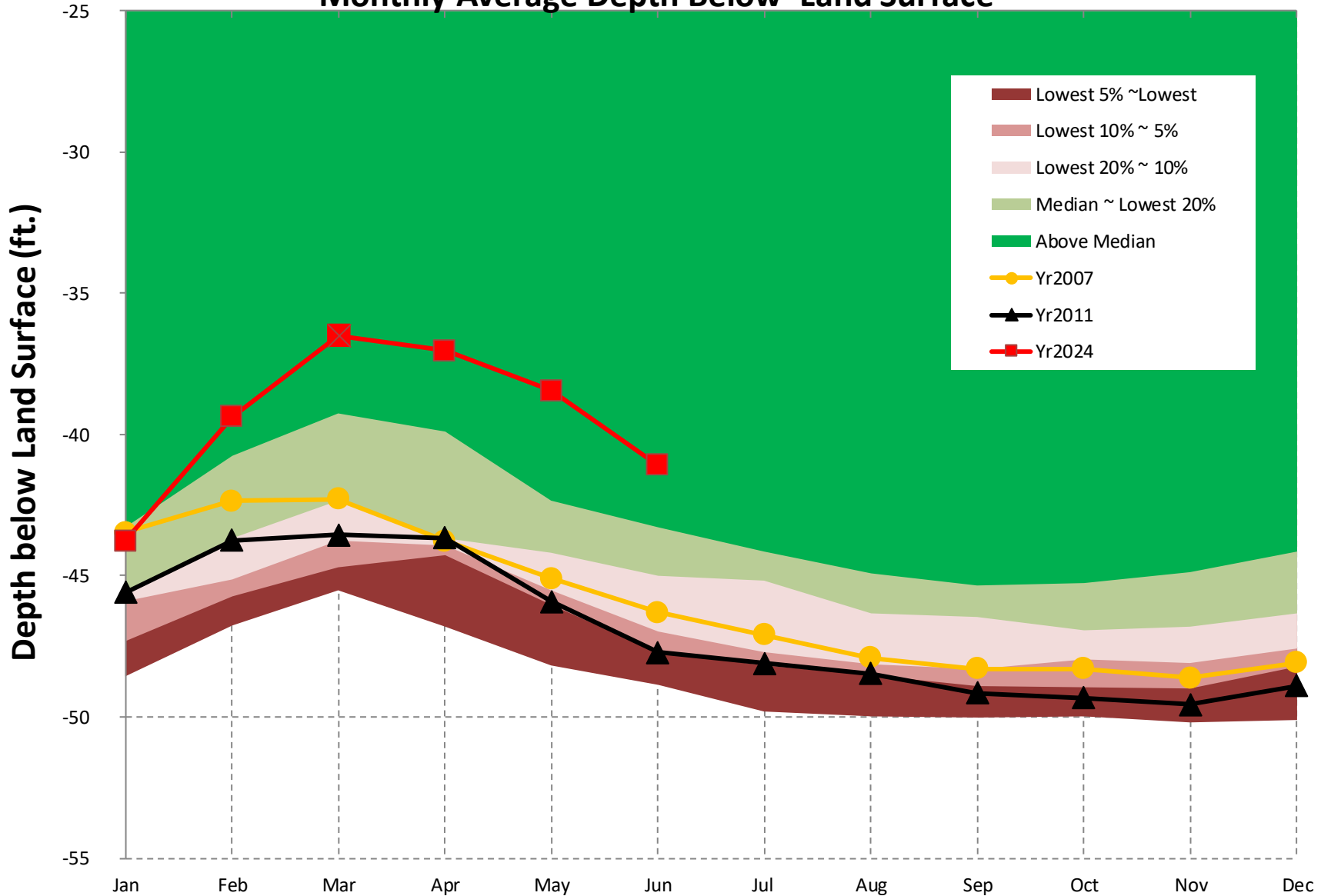


## Well #6, 11K003, Floridan Aquifer in Flint Basin, Monthly Average Depth Below Land Surface



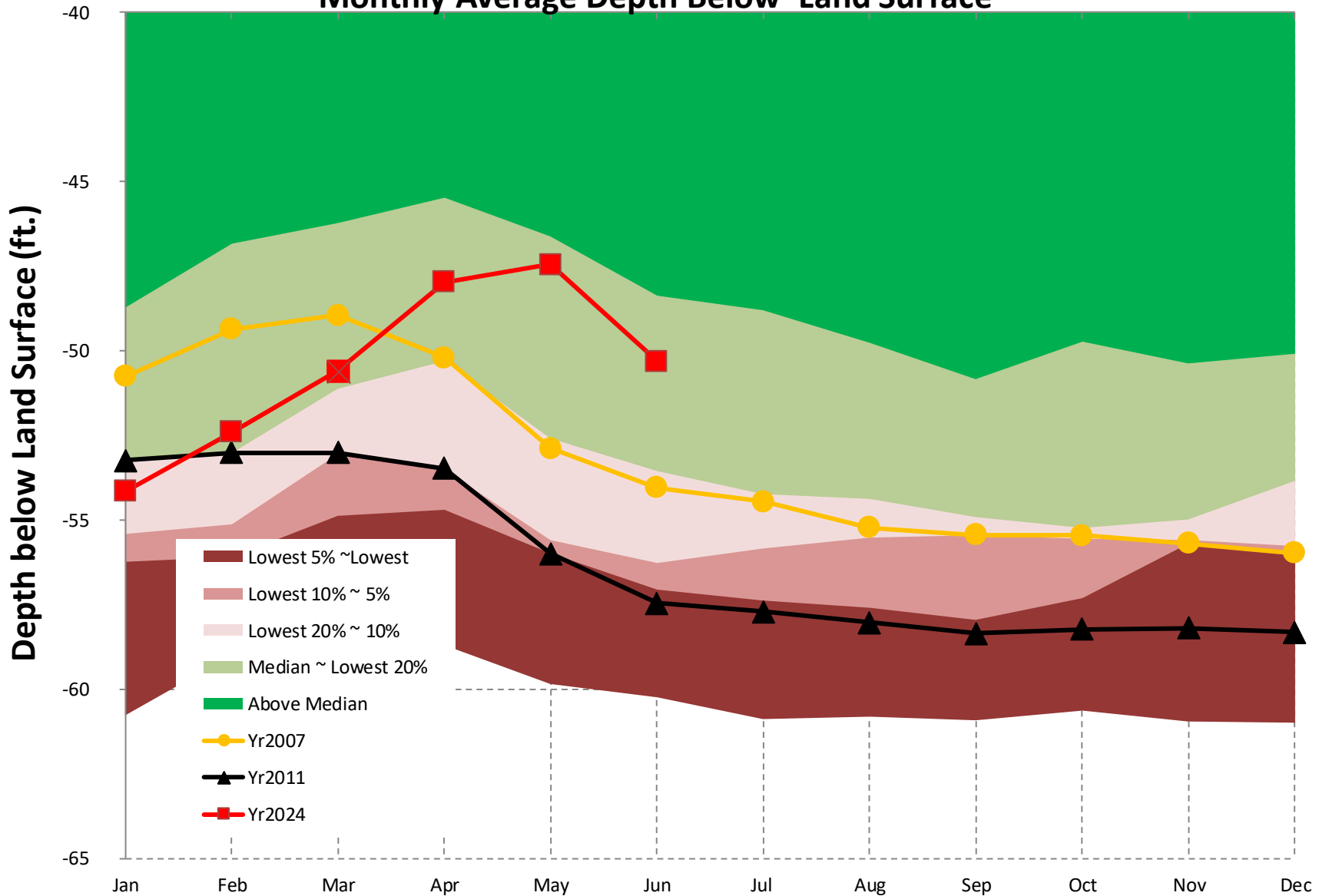
[Back to Map](#)

# Well #7, 12K014, Floridan Aquifer in Flint Basin, Monthly Average Depth Below Land Surface



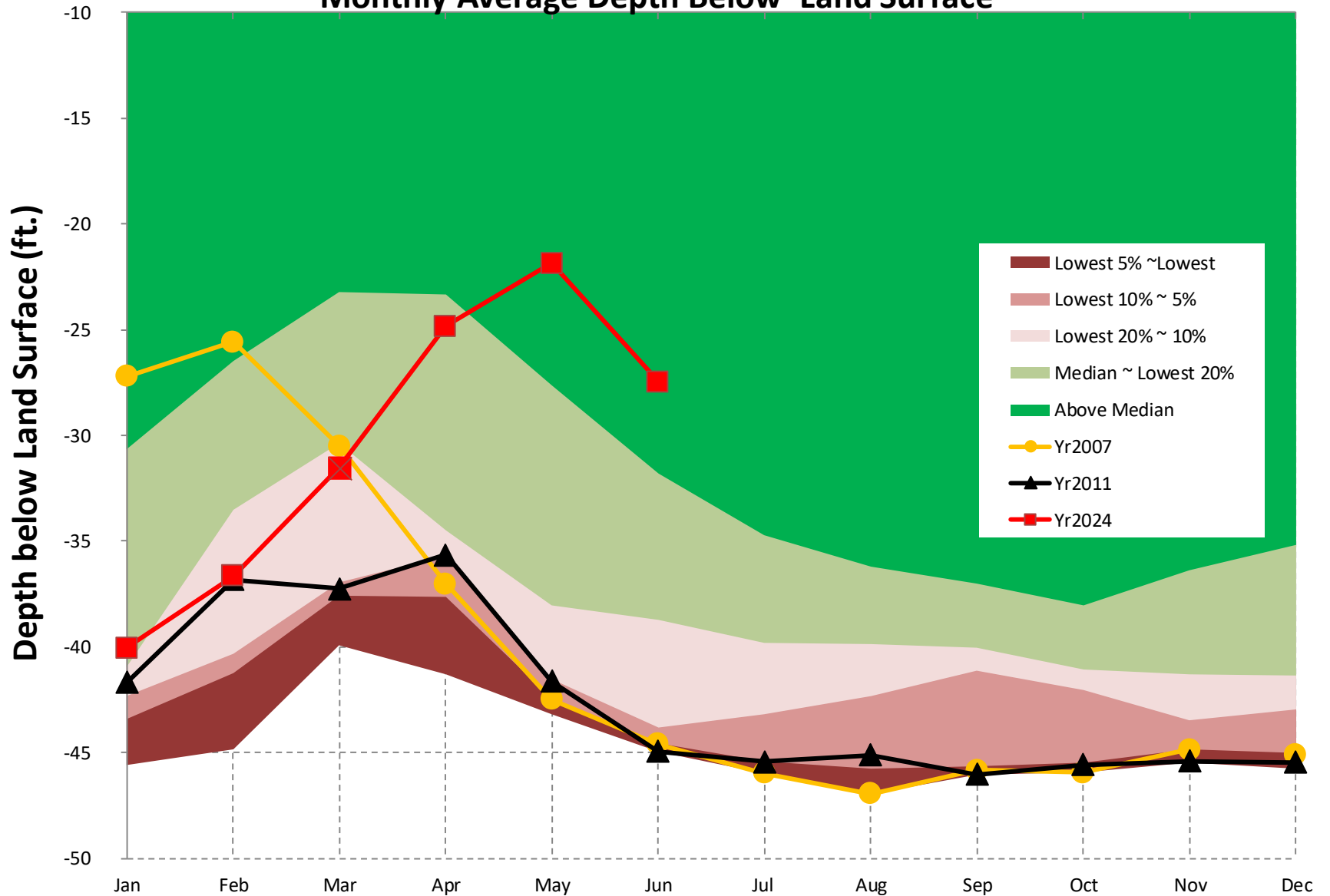
[Back to Map](#)

## Well #8, 13J004, Floridan Aquifer in Flint Basin, Monthly Average Depth Below Land Surface



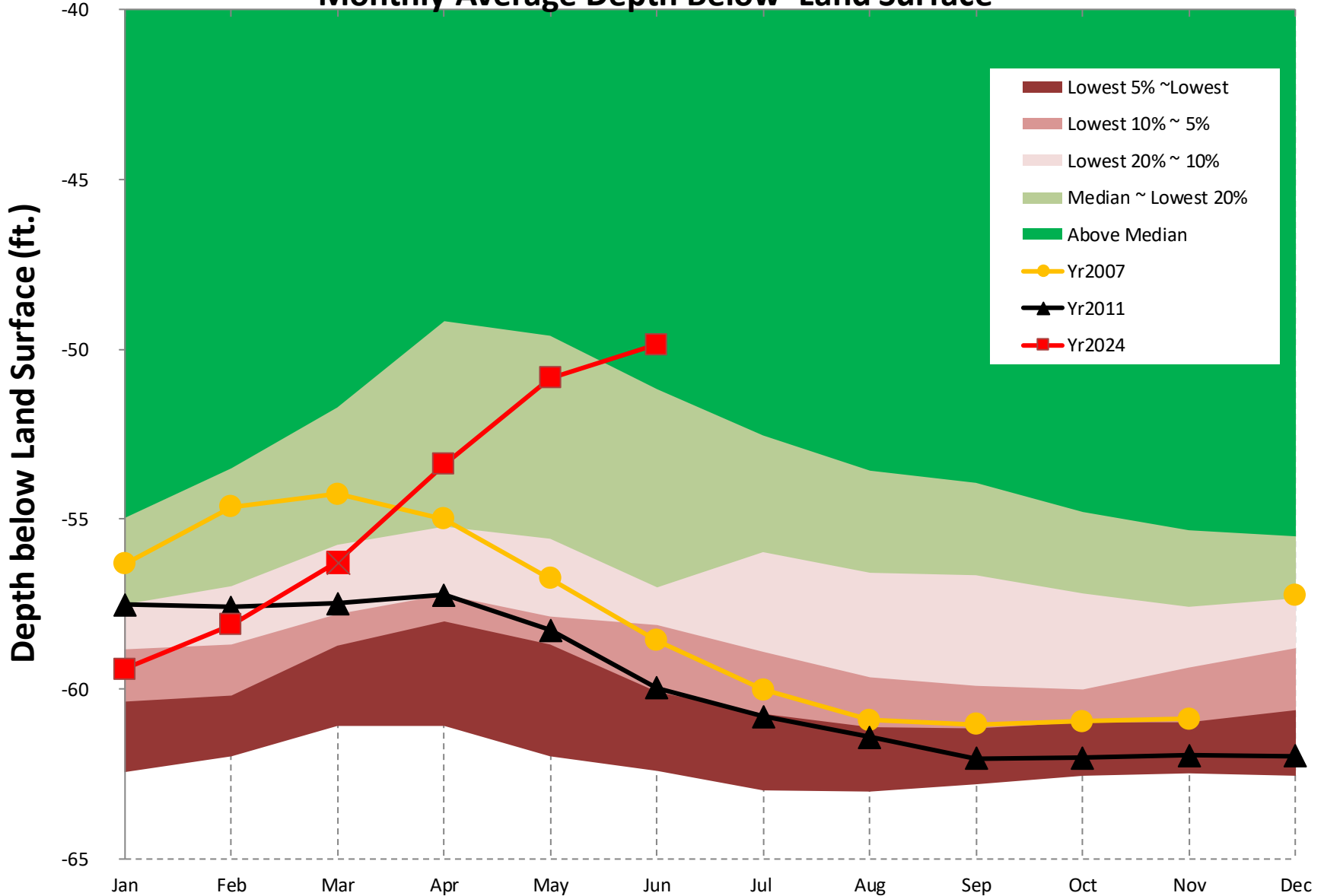
[Back to Map](#)

## Well #9, 08G001, Floridan Aquifer in Flint Basin, Monthly Average Depth Below Land Surface



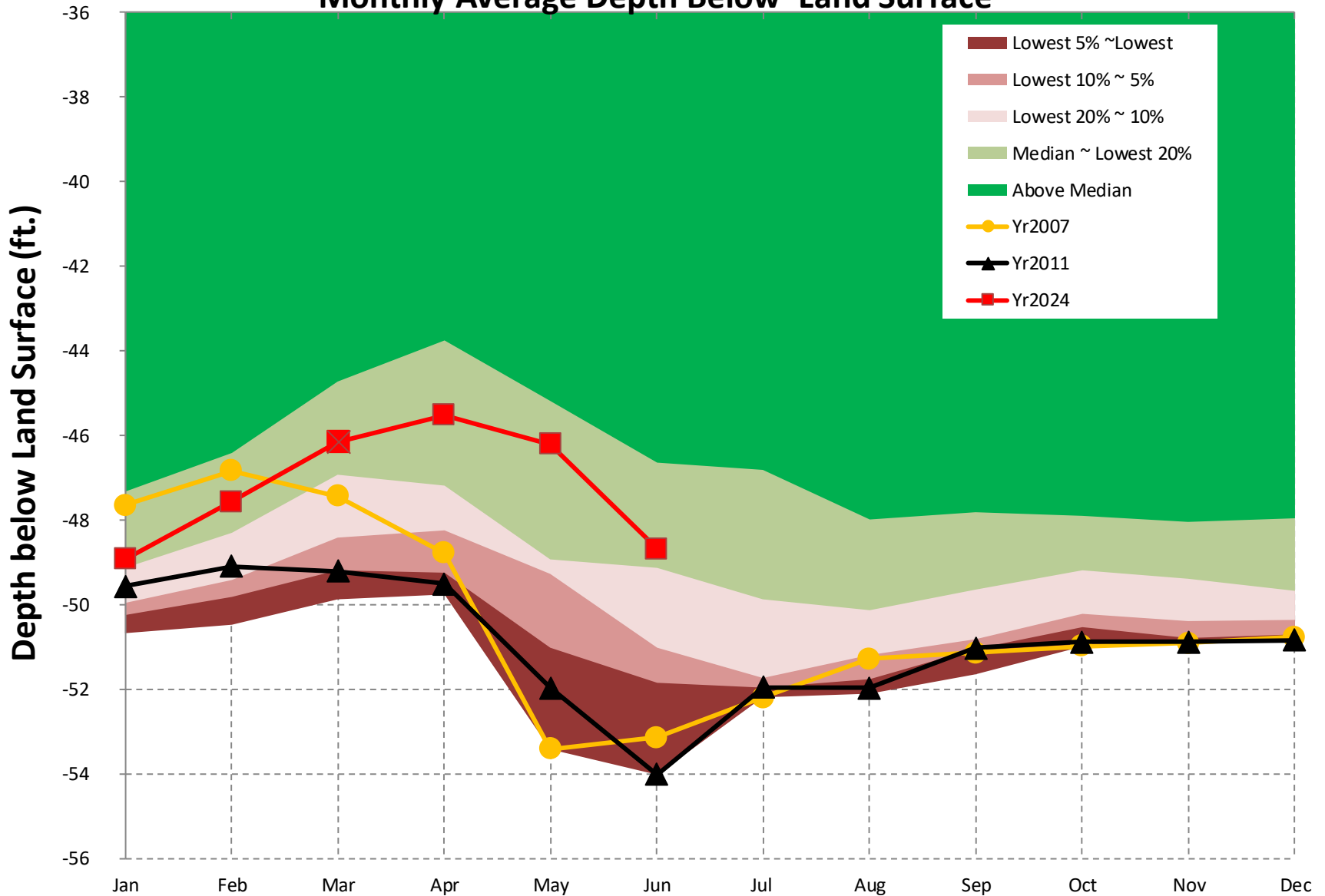
[Back to Map](#)

# Well #10, 10G313, Floridan Aquifer in Flint Basin, Monthly Average Depth Below Land Surface

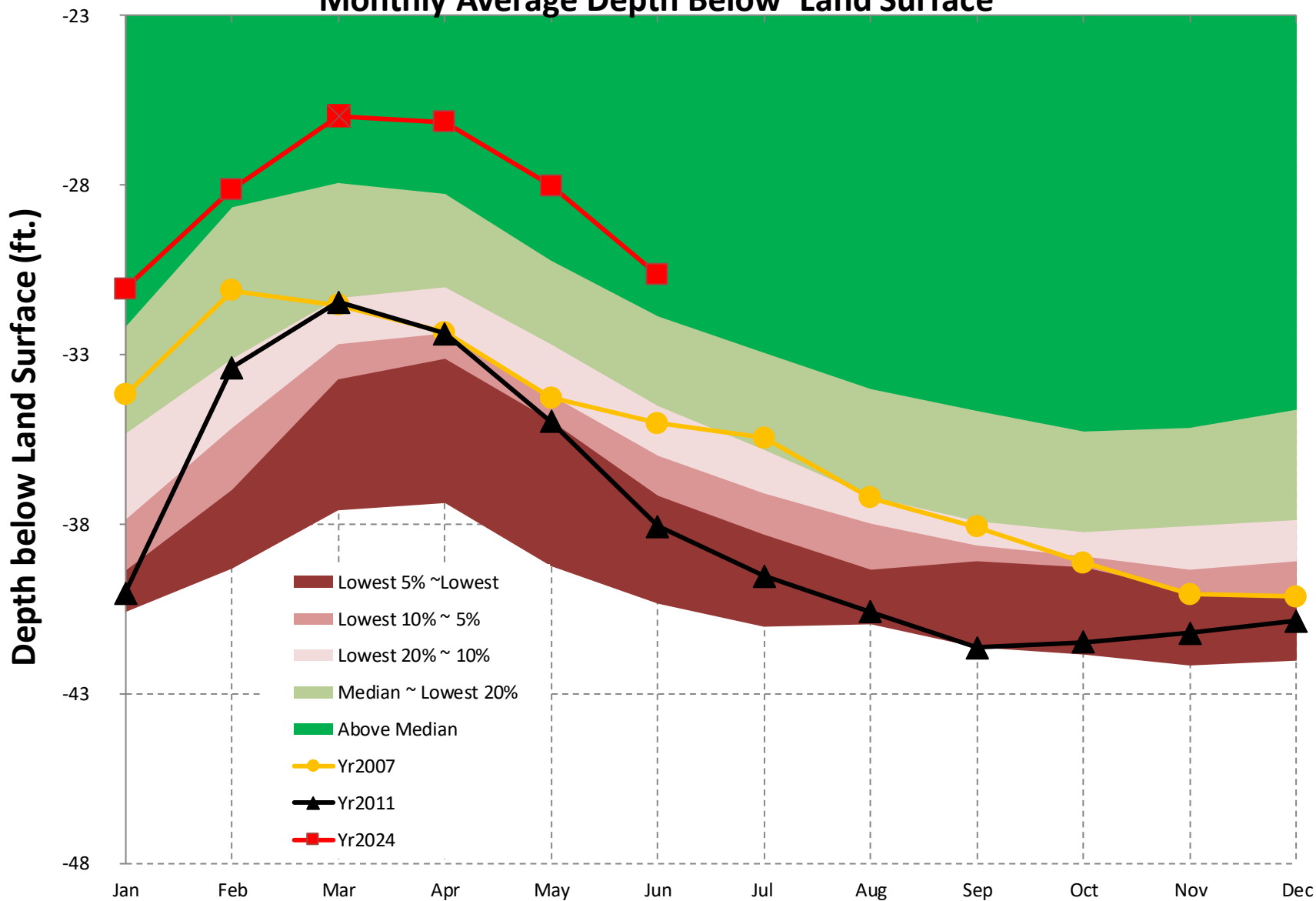


[Back to Map](#)

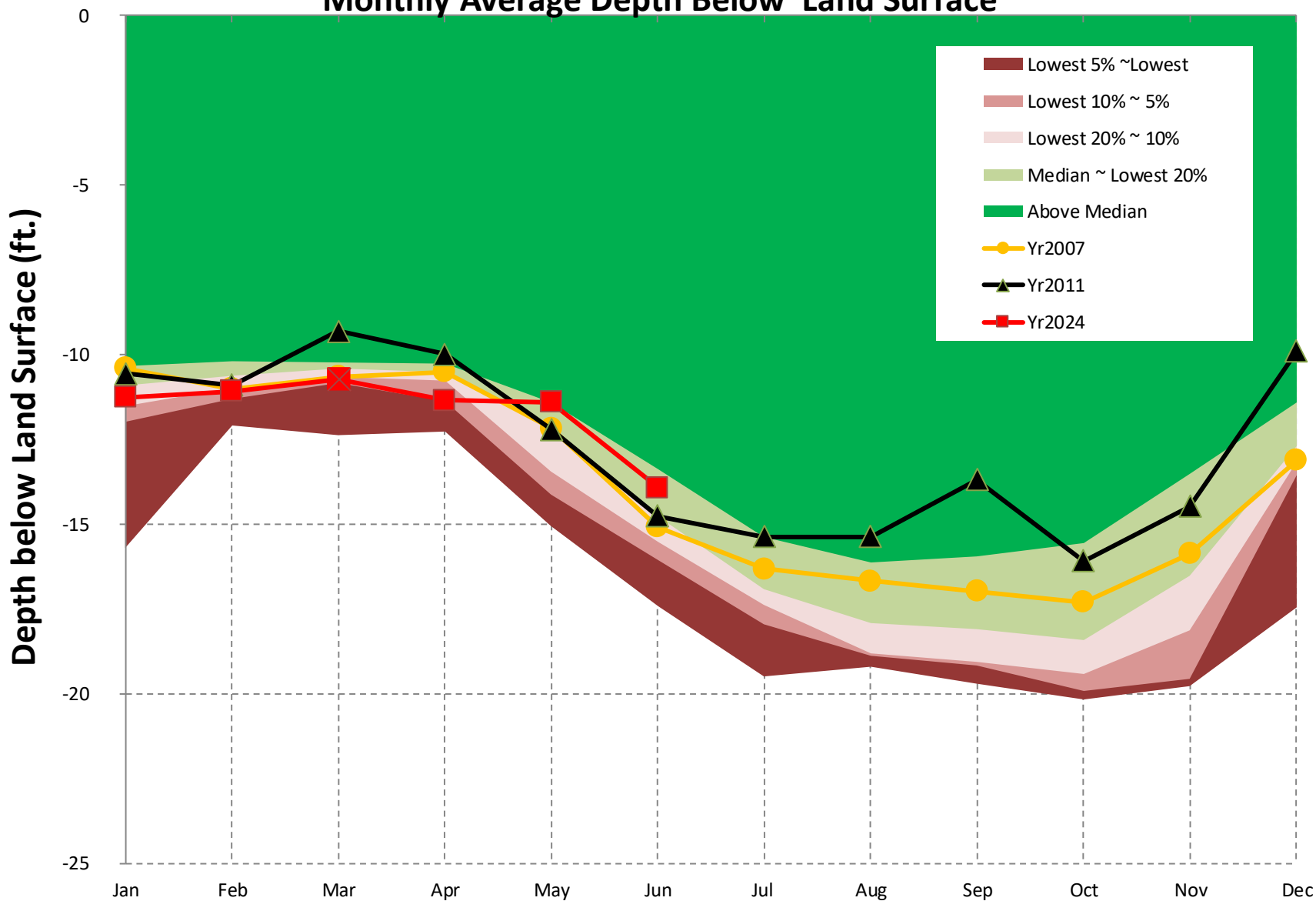
## Well #11, 09F520, Floridan Aquifer in Flint Basin, Monthly Average Depth Below Land Surface



## Well #12, 21T001, Floridan Aquifer in Oconee Basin, Monthly Average Depth Below Land Surface

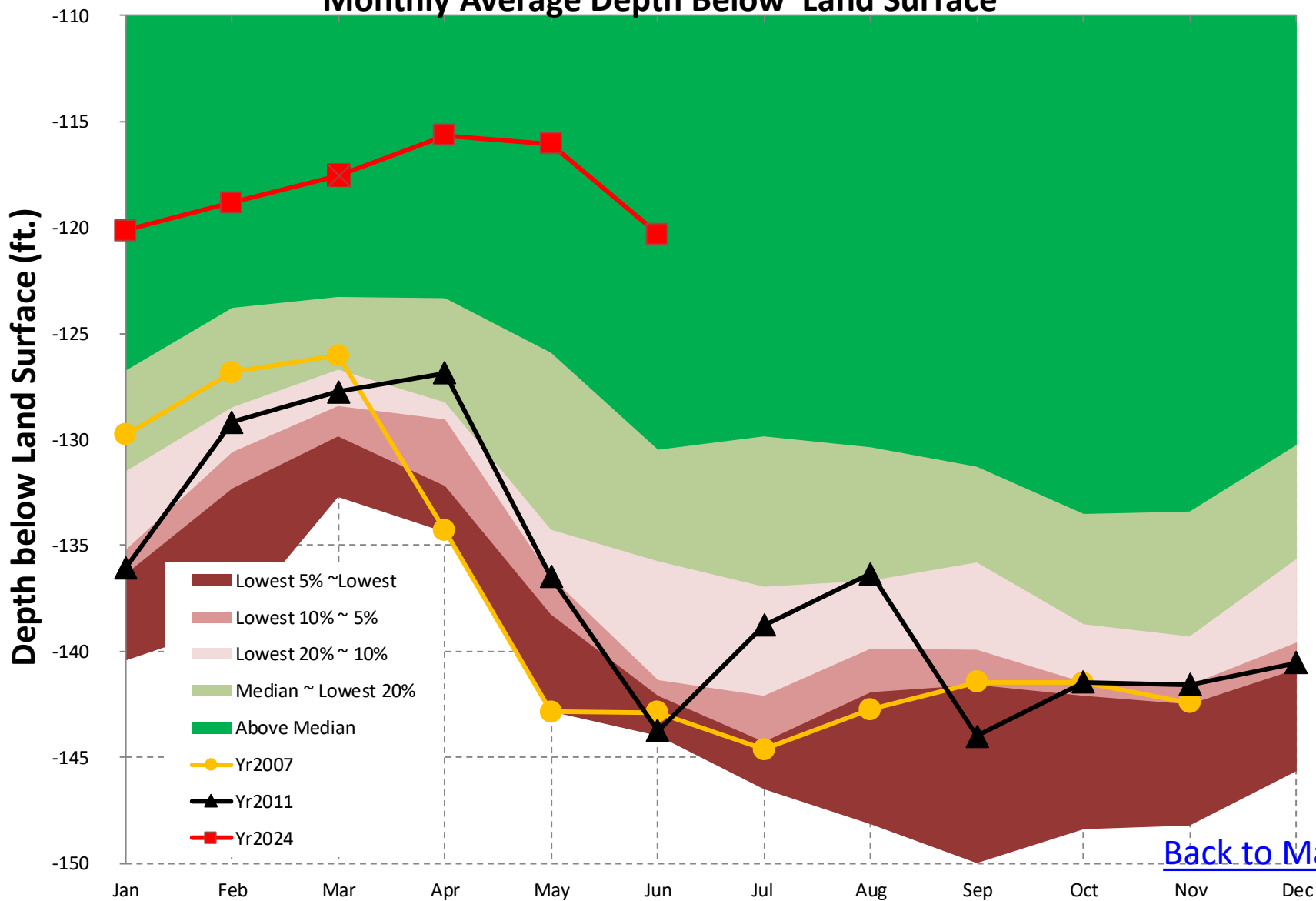


## Well #13, 03PP01, Valley and Ridge Aquifer in Tennessee Basin, Monthly Average Depth Below Land Surface



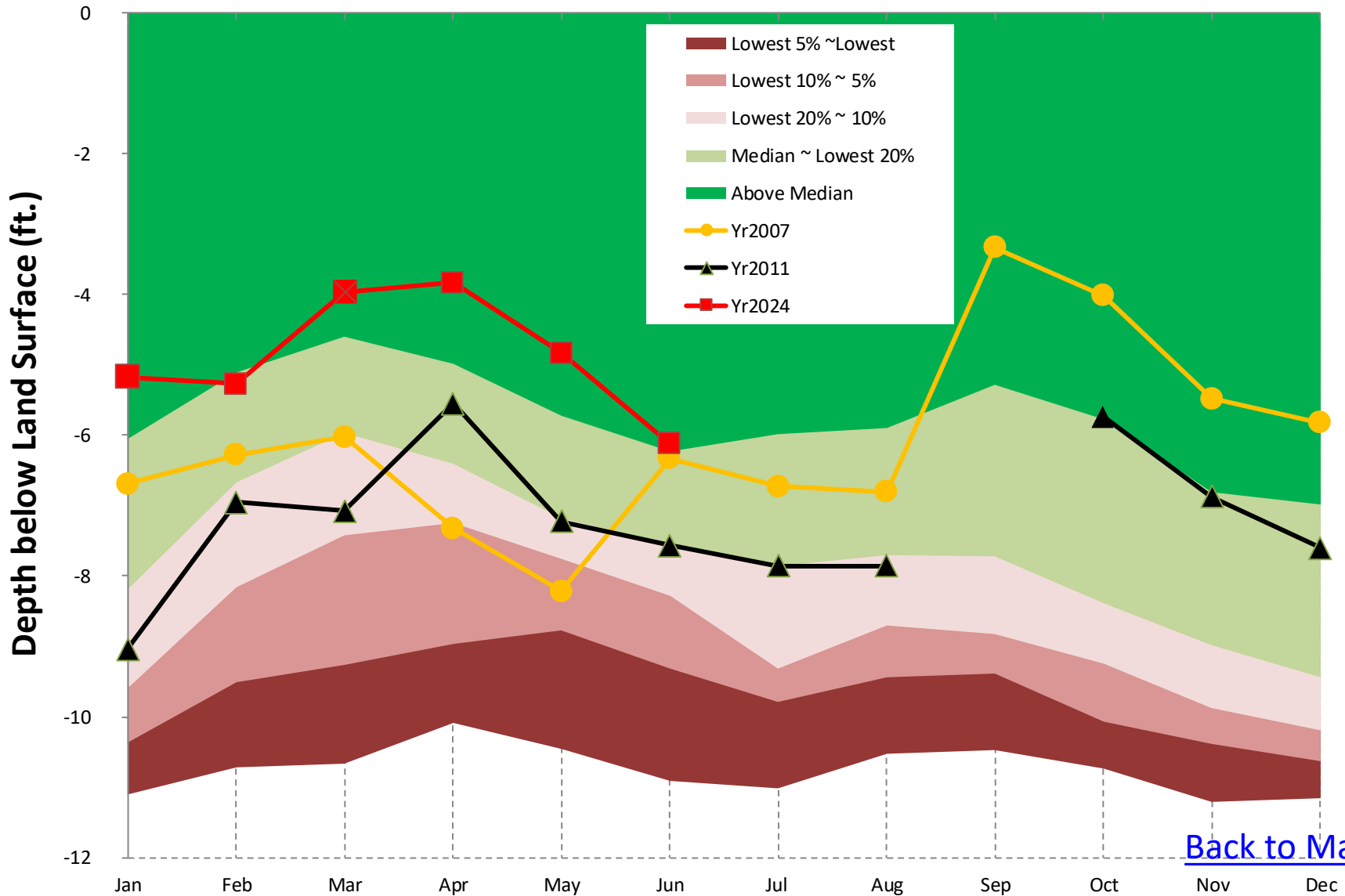


## Well #14, 19E009, Floridan Aquifer in Suwannee Basin, Monthly Average Depth Below Land Surface



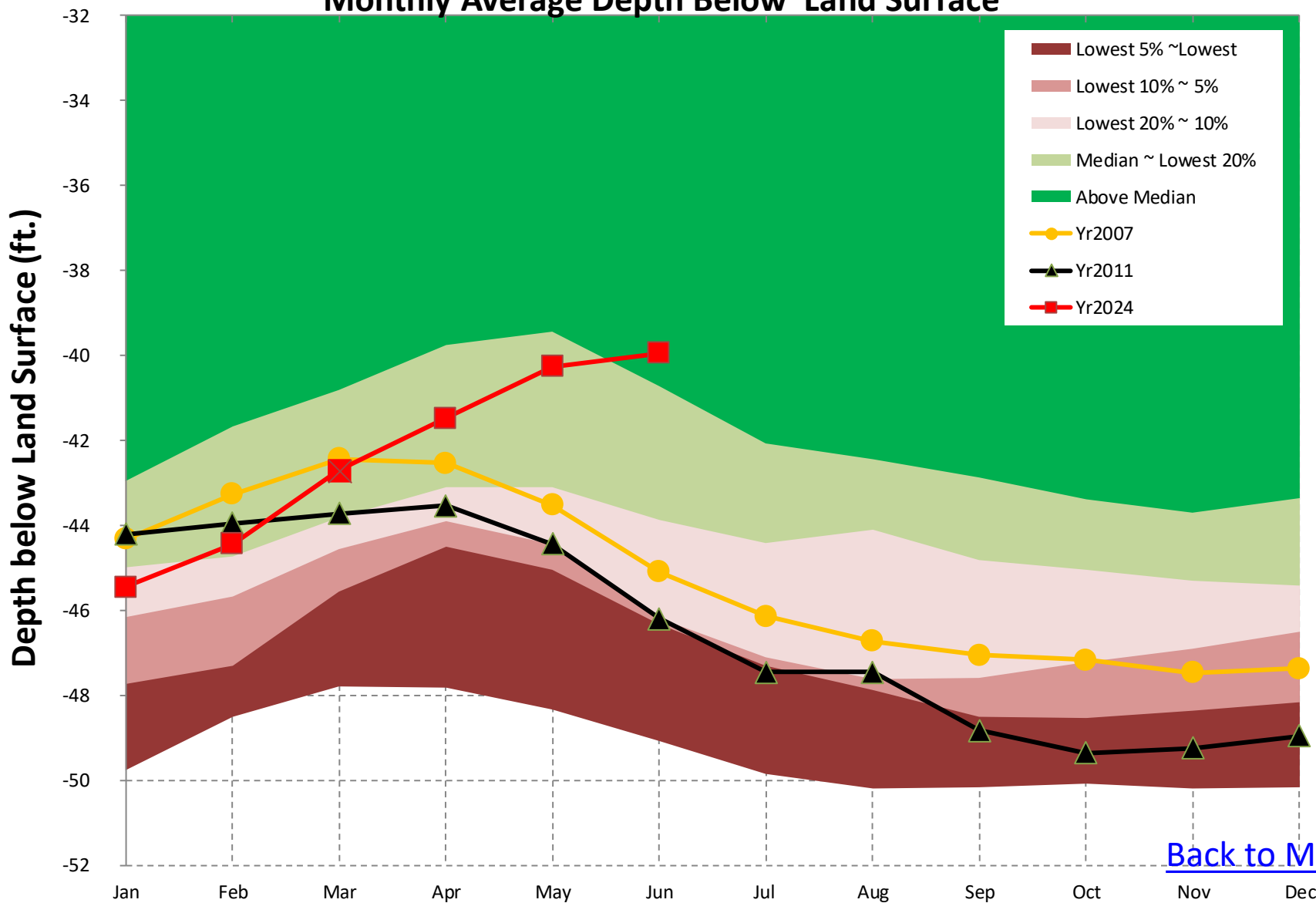
[Back to Map](#)

## Well #15, 35P094, Surficial Aquifer in Ogeechee Basin, Monthly Average Depth Below Land Surface



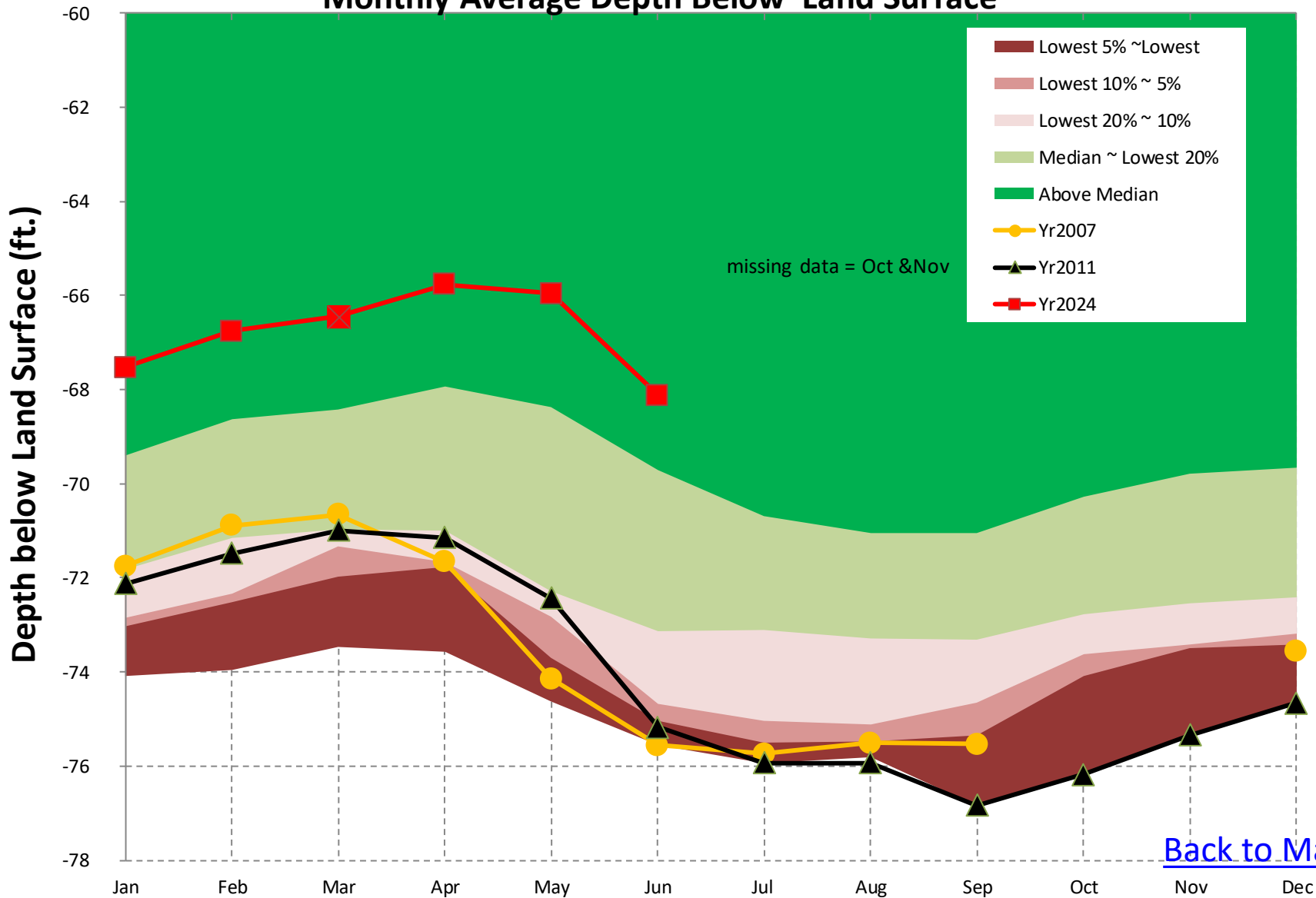
[Back to Map](#)

## Well #16, 11J011, Floridan Aquifer in Suwannee Basin, Monthly Average Depth Below Land Surface



[Back to Map](#)

## Well #17, 27E004, Floridan Aquifer in Suwannee Basin, Monthly Average Depth Below Land Surface



[Back to Map](#)

# Reservoir Levels

Data Source:  
US Army Corps of Engineers

### Coosa Basin

1. Carters
2. Allatoona

### Chattahoochee Basin

3. Lanier
4. West Point
5. W.F. George

### Savannah Basin

6. Hartwell
7. Thurmond

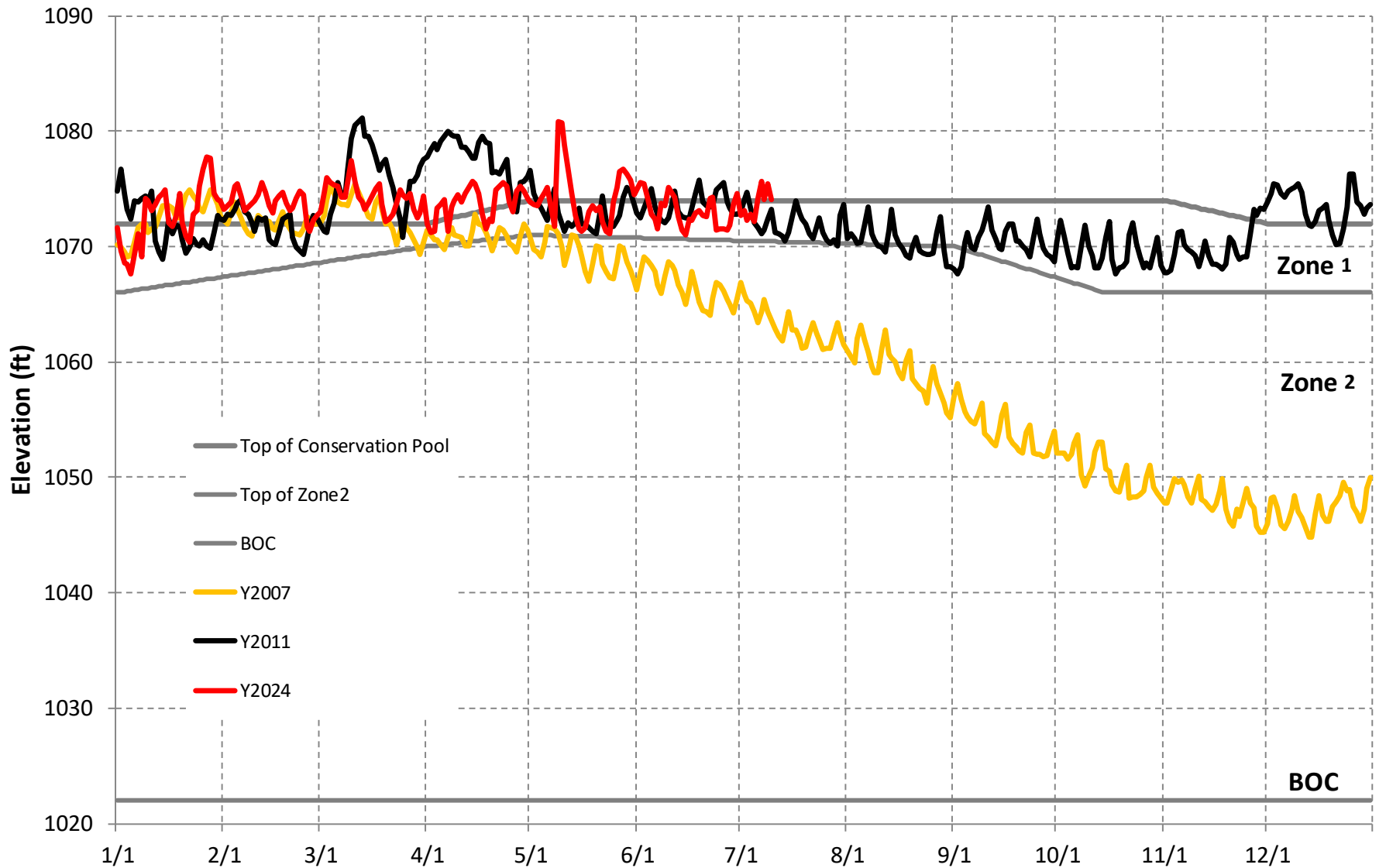


EPD monitors the water levels of seven reservoirs to assess drought conditions.

# Reservoir Elevation Graphs

- The following graphs show the reservoir elevation curves for June 2024 through June 2024.
- Each graph also shows the Action Zone Divides (or Levels) for each reservoir
  - Zone 1 is the top layer of the conservation pool
  - Zone 2 is the layer below Zone 1
  - Zone 4 is the lowest layer in the conservation pool
  - There is no conservation storage below the bottom of Zone 4
- To put 2024 reservoir elevations into perspective, elevations for 2007 and 2011 are also shown.

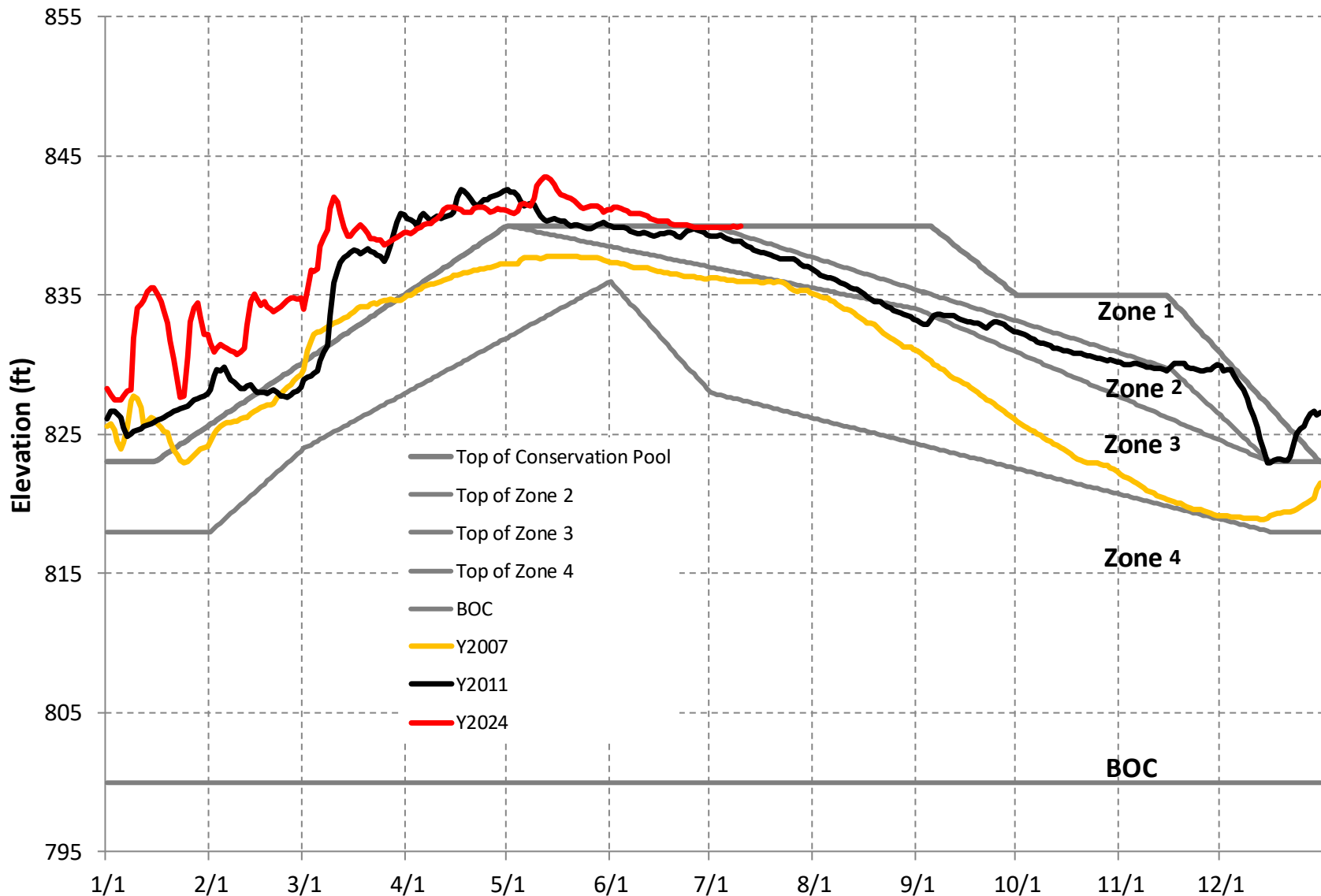
# CARTERS ELEVATION



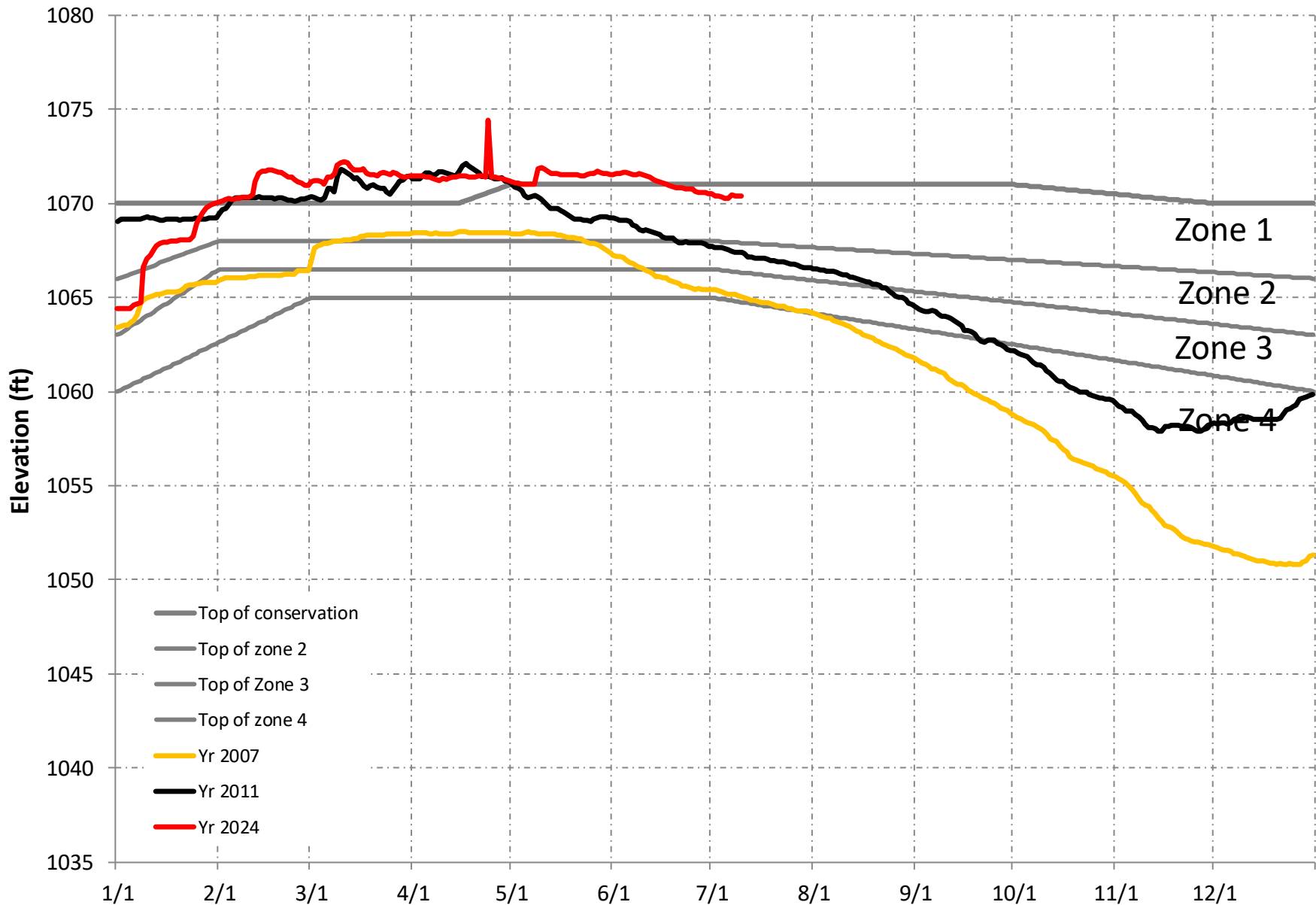
[Back to Map](#)



# ALLATOONA ELEVATION

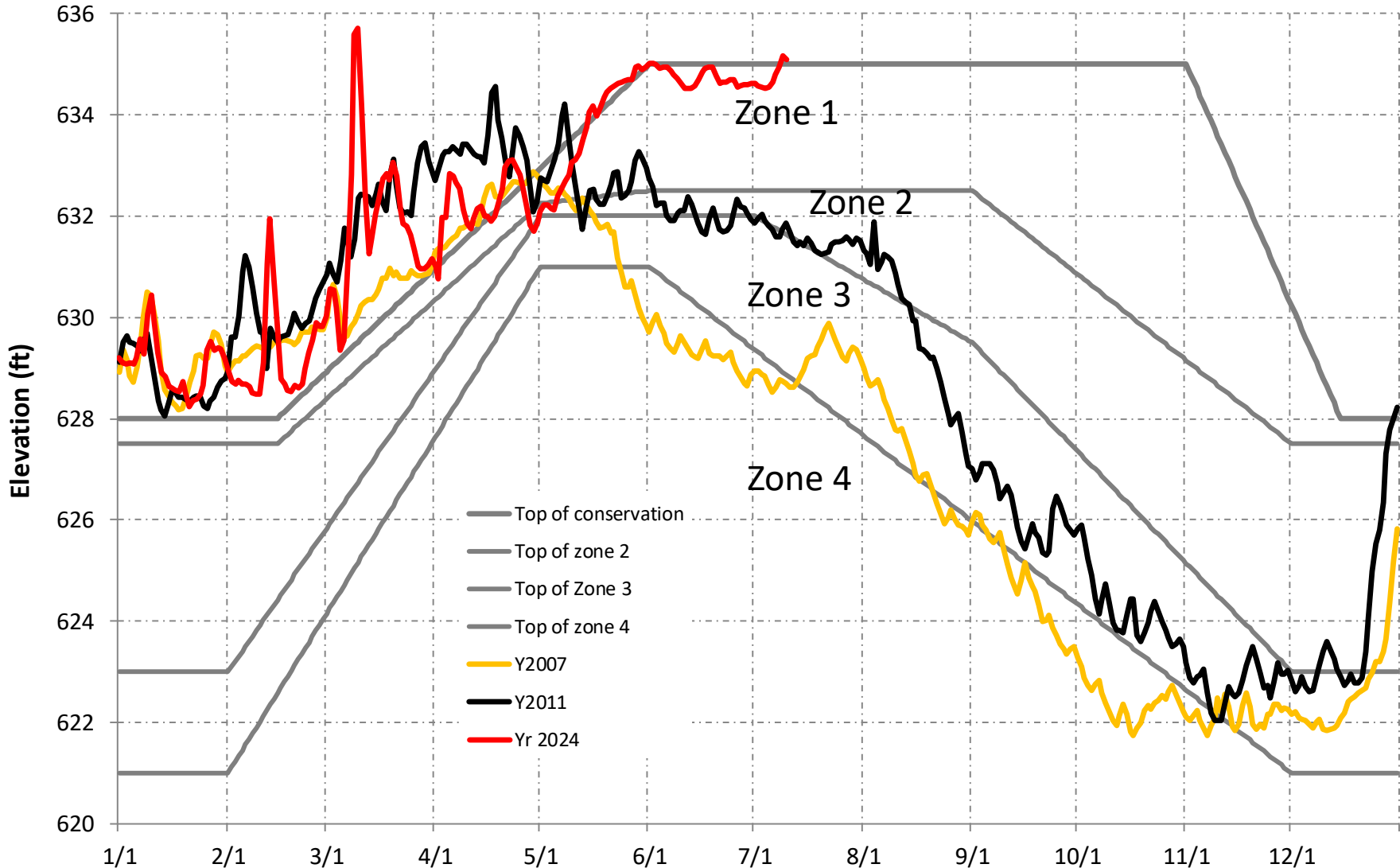


# LAKE LANIER ELEVATION



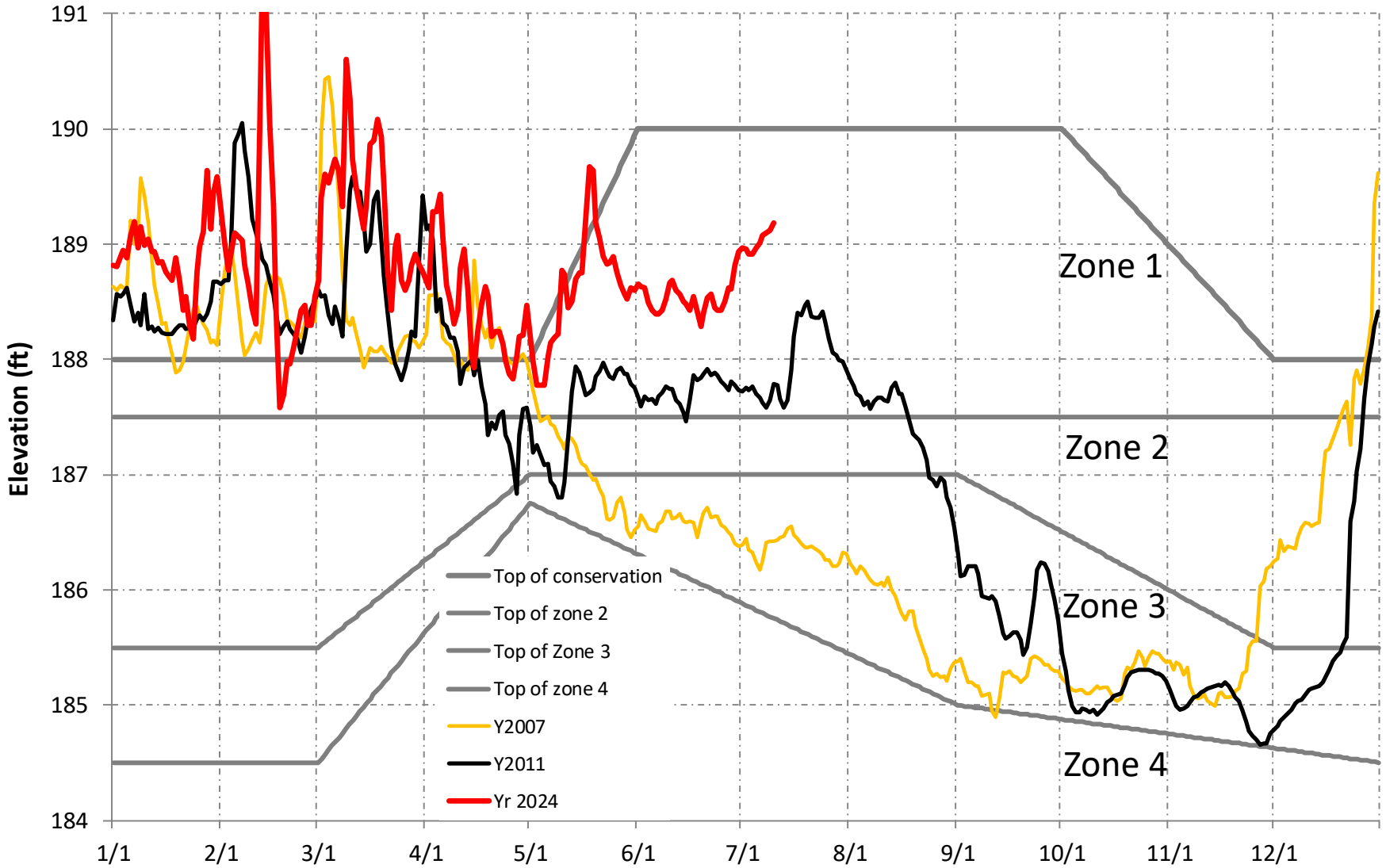
[Back to Map](#)

# WEST POINT ELEVATION

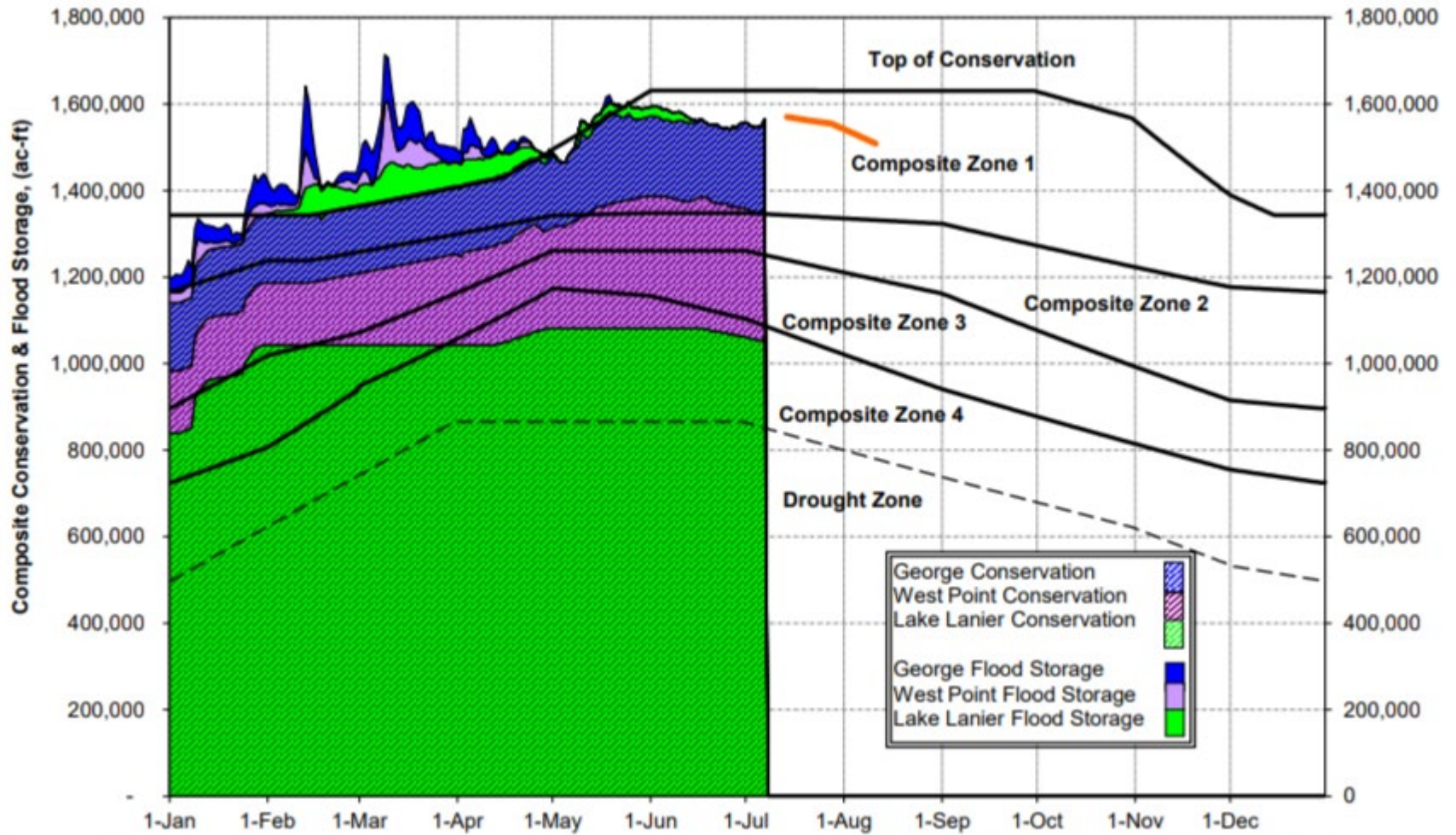


[Back to Map](#)

# W.F.GEORGE ELEVATION



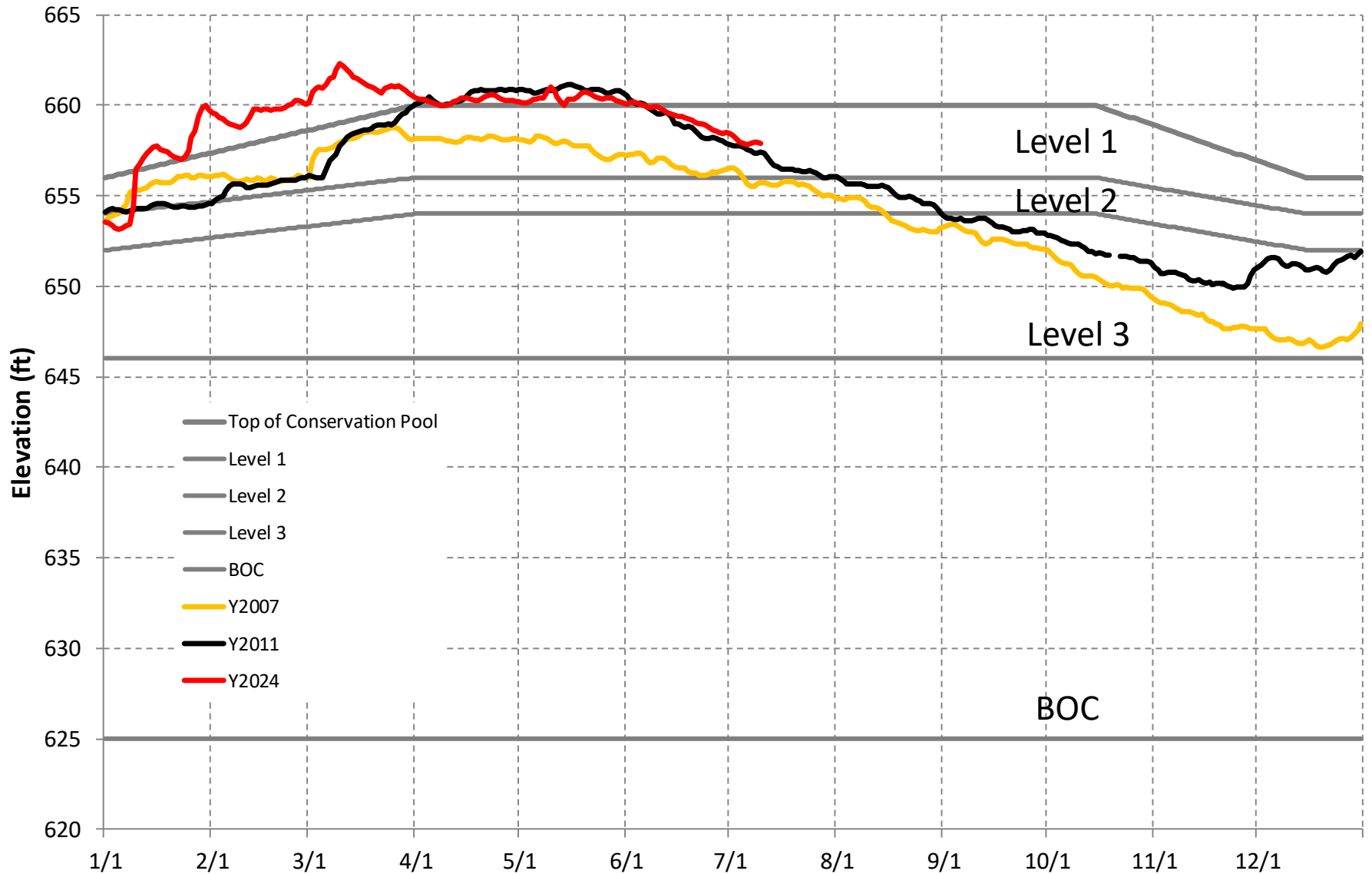
## 2024 ACF Basin Composite Conservation and Flood Storage



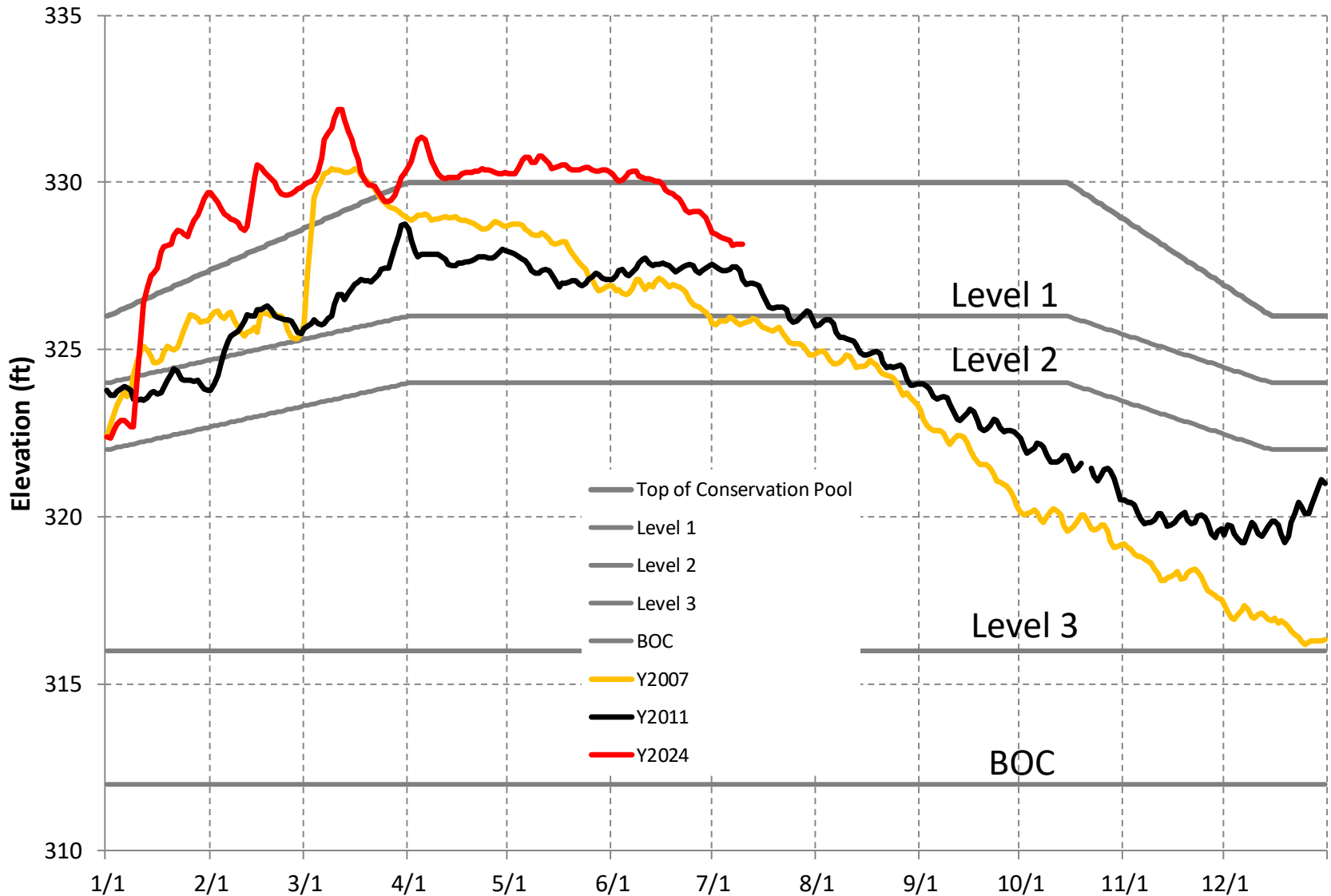
Actual data thru 7/08/2024

Add value of 1,856,000 acre-ft to include inactive storage.

# LAKE HARTWELL ELEVATION



# LAKE CLARKS HILL (THURMOND) ELEVATION



[Back to Map](#)

# Climate Prediction Center 3-month Temperature and Precipitation Probability Outlook and Seasonal Drought Outlook

Data Source:

<http://www.cpc.ncep.noaa.gov/>

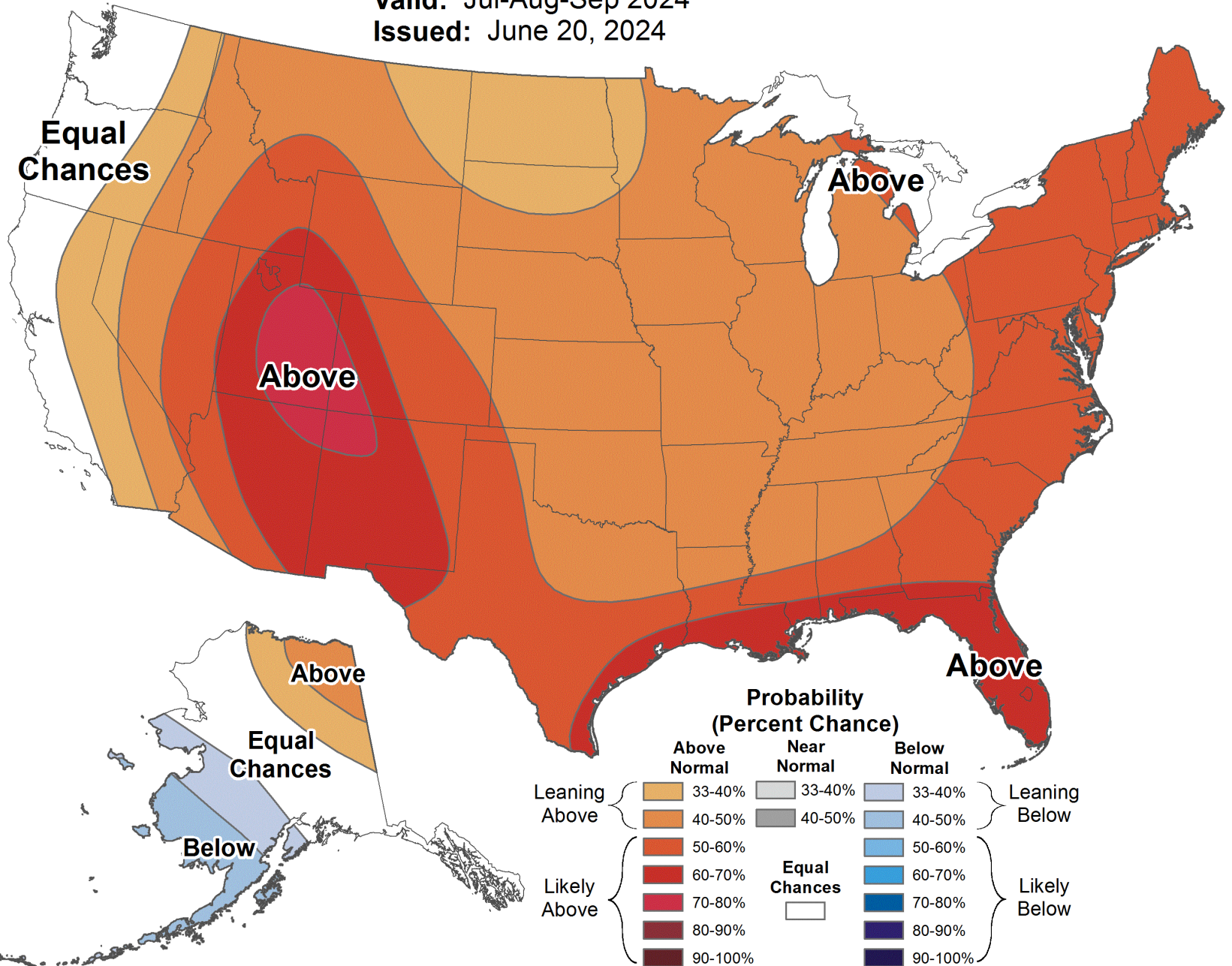




# Seasonal Temperature Outlook



Valid: Jul-Aug-Sep 2024  
Issued: June 20, 2024





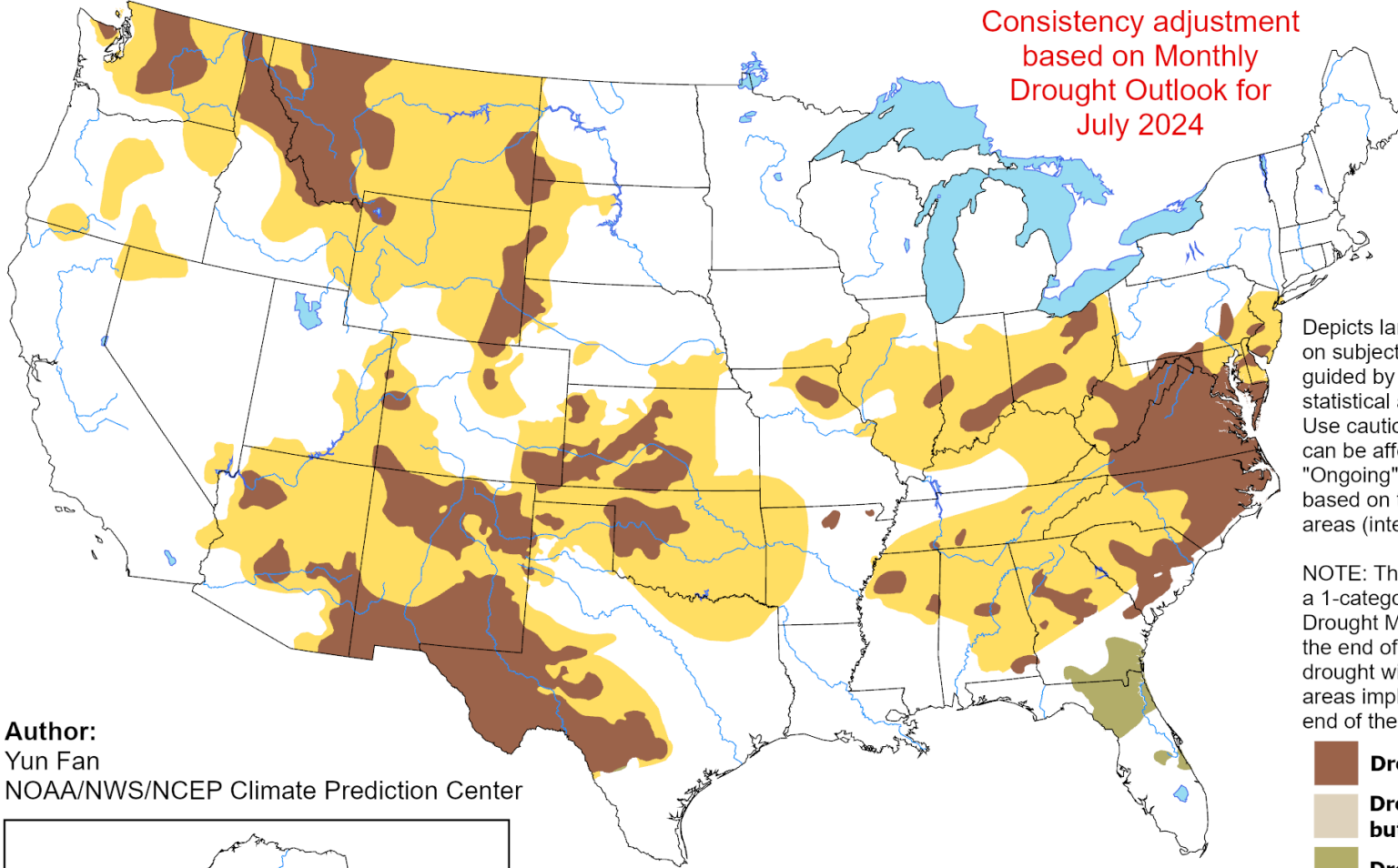
# U.S. Seasonal Drought Outlook

## Drought Tendency During the Valid Period

Valid for July 1 - September 30, 2024

Released June 30, 2024

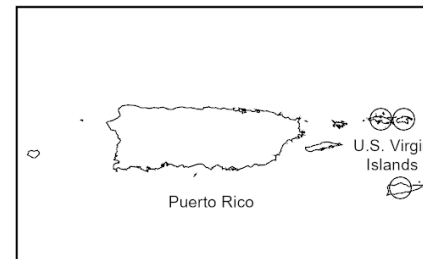
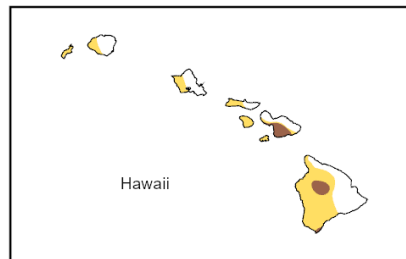
Consistency adjustment  
based on Monthly  
Drought Outlook for  
July 2024







Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

**Author:**  
Yun Fan  
NOAA/NWS/NCEP Climate Prediction Center



-  **Drought persists**
-  **Drought remains, but improves**
-  **Drought removal likely**
-  **Drought development likely**
-  **No drought**



<https://go.usa.gov/3eZ73>