

# Drought Indicators Report

Georgia Environmental Protection Division

December 2023

# 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 November 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 December 11, 2023.

## Drought Indicator Analysis Summary (slide 1 of 2)

- **U.S. Drought Monitor** – Abnormally Dry (D0, the least intense level) exists in most areas except Middle and Southeast GA. Moderate Drought(D1) exists in areas north of Fall Line and few Counties in Flint Basin and Coastal Region. Severe Drought (D2) exists in North GA. Extreme Drought (D3) exists in Coosa and Tennessee Basins.
- **Precipitation** – Three-month precipitation is below normal in most areas except Southeast GA. Six-month precipitation is below normal in North GA and Southwest corner and Southeast corner. Twelve-month precipitation is below normal in Northwest corner, Northeast Corner, Southwest corner, and a few counties in other areas.
- **Soil Moisture** – Soil moisture conditions are below normal in few counties in the Middle Chattahoochee and Upper Flint Basins. In other areas, it is normal or above normal.

## Drought Indicator Analysis Summary (slide 2 of 2)

- **Streamflow** – Stream flows at nine selected USGS gages (9 out of 34) are near or above normal. Eight gages are between the lowest 20<sup>th</sup> percentile and median. 11 gages are between the lowest 10<sup>th</sup> and 20<sup>th</sup> percentiles. Two gages are between the lowest 10<sup>th</sup> and 5<sup>th</sup> percentiles and four gages are between the lowest 5<sup>th</sup> percentile and minimum.
- **Groundwater Level** – Groundwater levels are above or near normal in three selected wells (3 out of 17). Six well levels are between the lowest 20<sup>th</sup> percentile and median. Five well levels are between the lowest 10<sup>th</sup> and 20<sup>th</sup> percentiles. Two well levels are between the lowest 10<sup>th</sup> and 5<sup>th</sup> percentiles. One well level is between the lowest 5<sup>th</sup> percentile and minimum (Crystalline Rocks Aquifer in Chattahoochee Basin).
- **Reservoir Levels** – At the end of November, Lake Lanier and Hartwell are in zone 3. Thurmond and W.F.George are in zone 2. Other federal reservoirs in Georgia (ACF and ACT Basins) are in zone 1. ACF composite storage is in zone 2.
- **Short-term Climate Prediction** – National Climatic Prediction Center predicts equal chance of temperature statewide and above normal precipitation statewide in Dec 2023 – Feb 2024. U.S. Drought Outlook predicts drought remains but improves in Northeast corner of GA, and drought removal likely in other areas in Dec 2023 – Feb 2024.
- **Water Supplies** – No issues with water availability to water supply providers were reported.

# US Drought Monitor

Data Source:

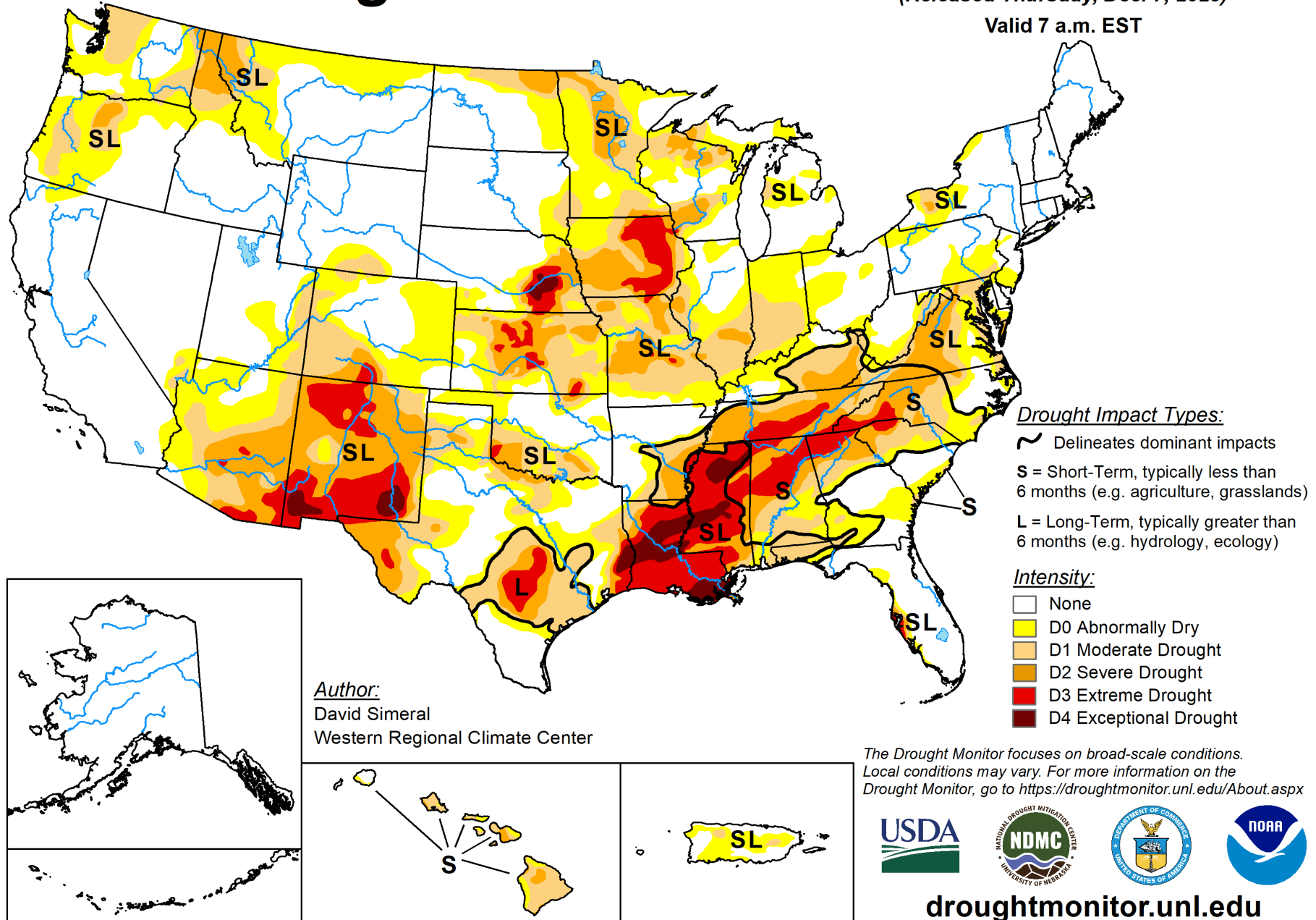
<http://droughtmonitor.unl.edu/>

# U.S. Drought Monitor

December 5, 2023

(Released Thursday, Dec. 7, 2023)

Valid 7 a.m. EST



# U.S. Drought Monitor

## Georgia

**December 5, 2023**




(Released Thursday, Dec. 7, 2023)

Valid 7 a.m. EST

*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	35.35	64.65	30.72	18.04	8.93	0.00
<b>Last Week</b> <i>11-28-2023</i>	37.88	62.12	41.07	19.91	8.69	0.00
<b>3 Months Ago</b> <i>09-05-2023</i>	90.01	9.99	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> <i>01-03-2023</i>	46.36	53.64	28.04	4.81	0.00	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>12-06-2022</i>	30.45	69.55	40.56	0.00	0.00	0.00

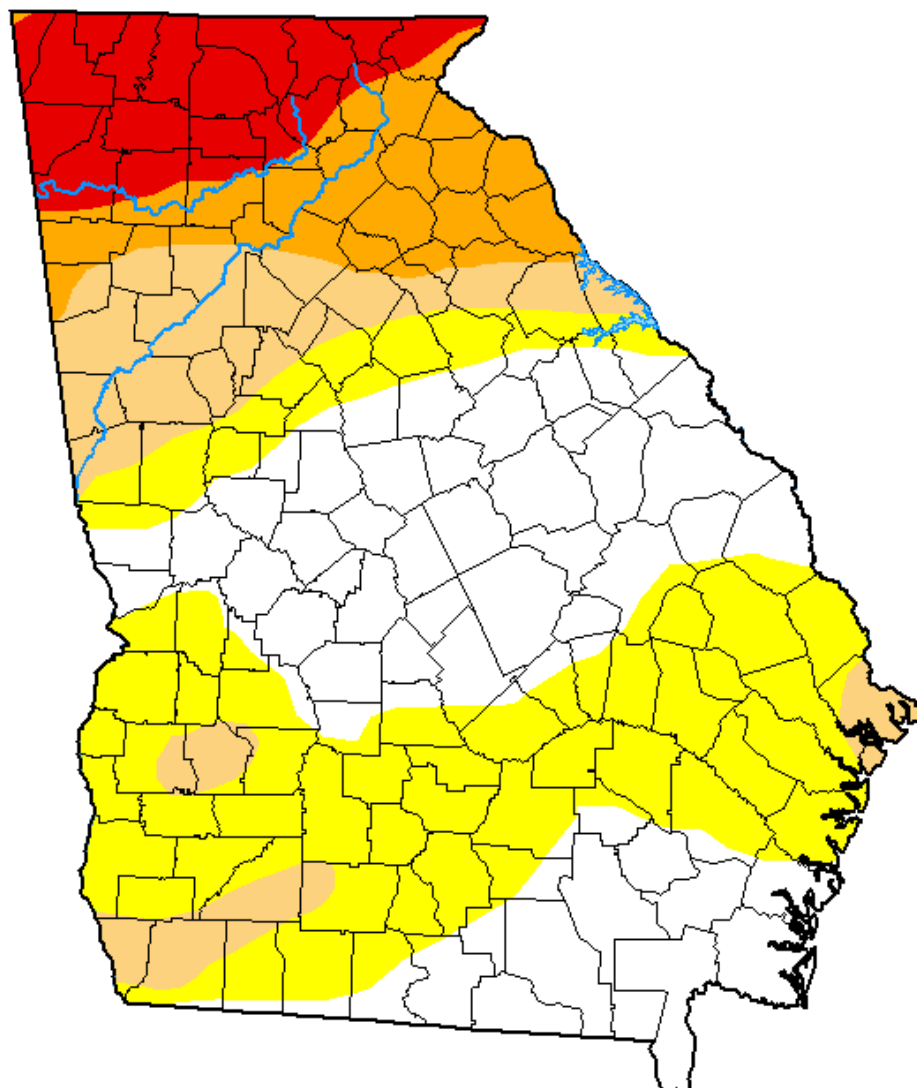
### Intensity:

 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:

David Simeral  
Western Regional Climate Center



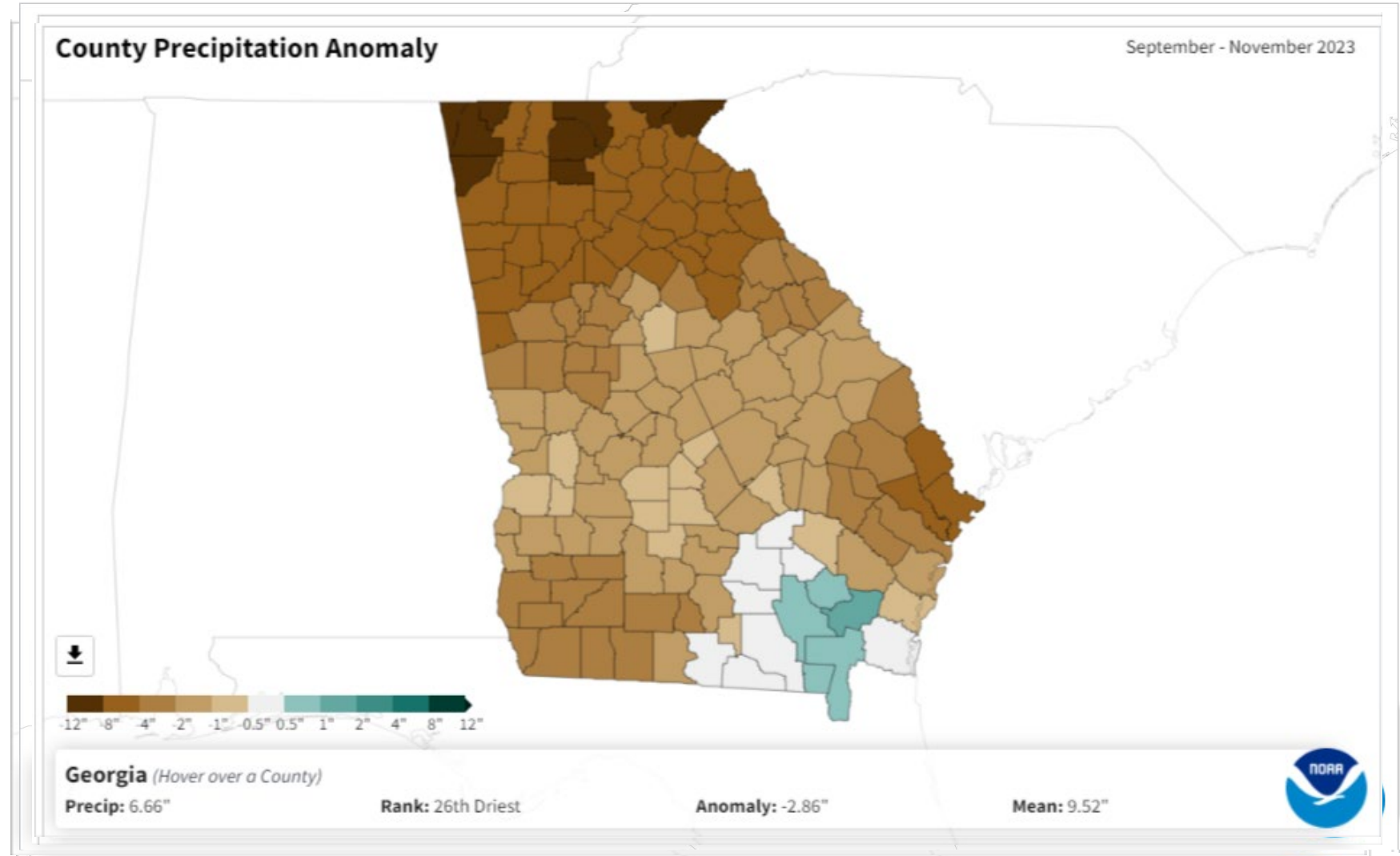
[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

# 3, 6, and 12 Month Precipitation Anomaly

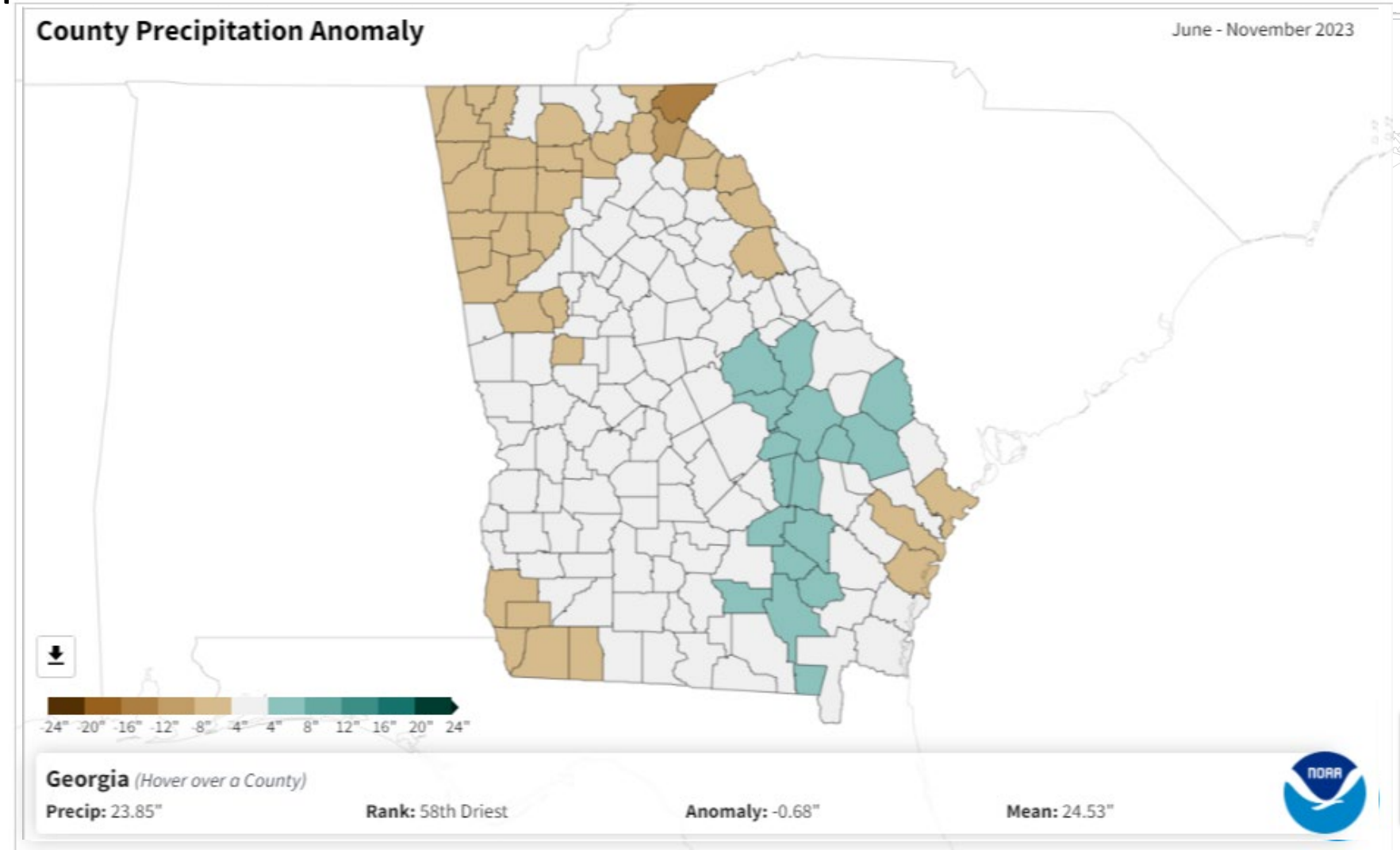
Data Source:

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

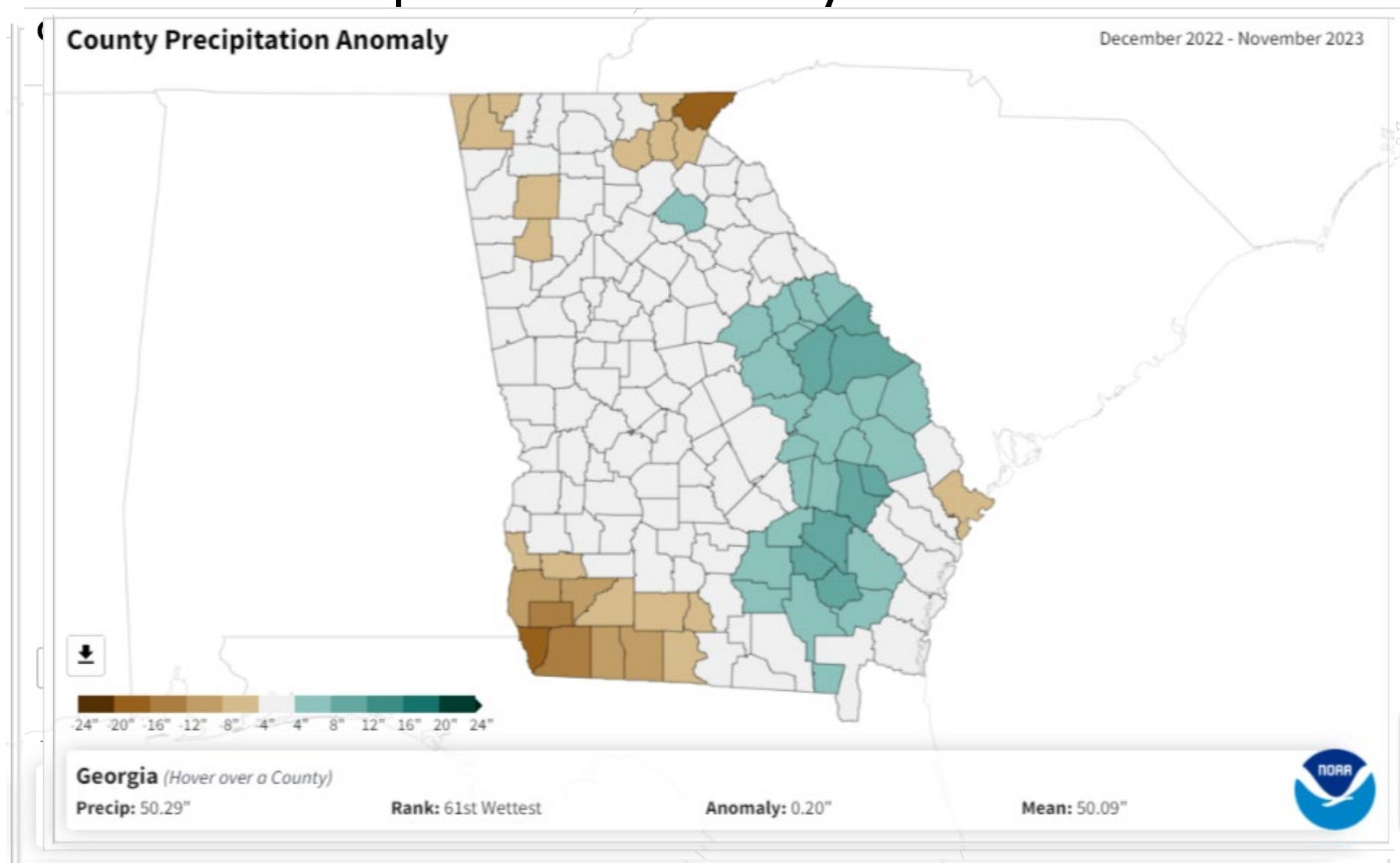
# 3 Month Precipitation Anomaly



# 6 Month Precipitation Anomaly



# 12 Month Precipitation Anomaly

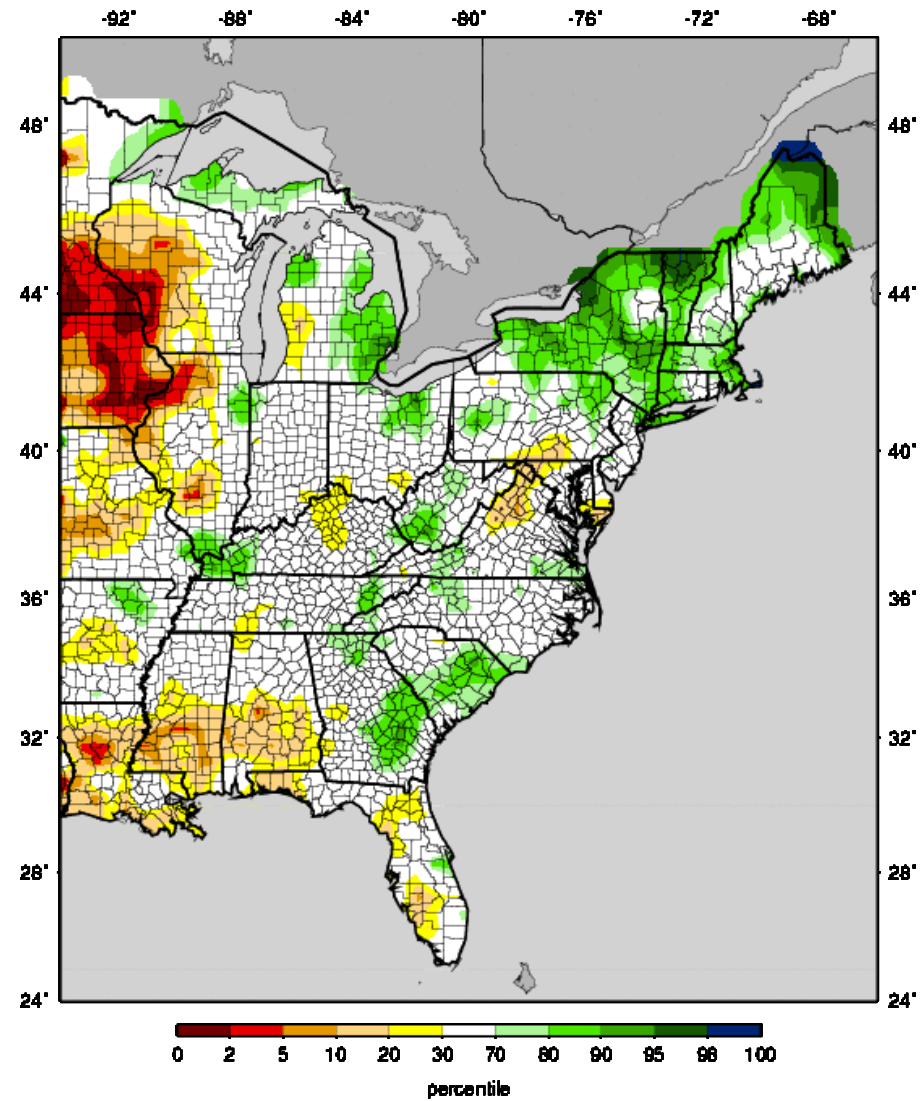


# Soil Moisture Conditions

Data Source:

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

VIC Soil Moisture Percentiles (wrt/ 1916-2004)  
Eastern United States - 2023-03-03



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

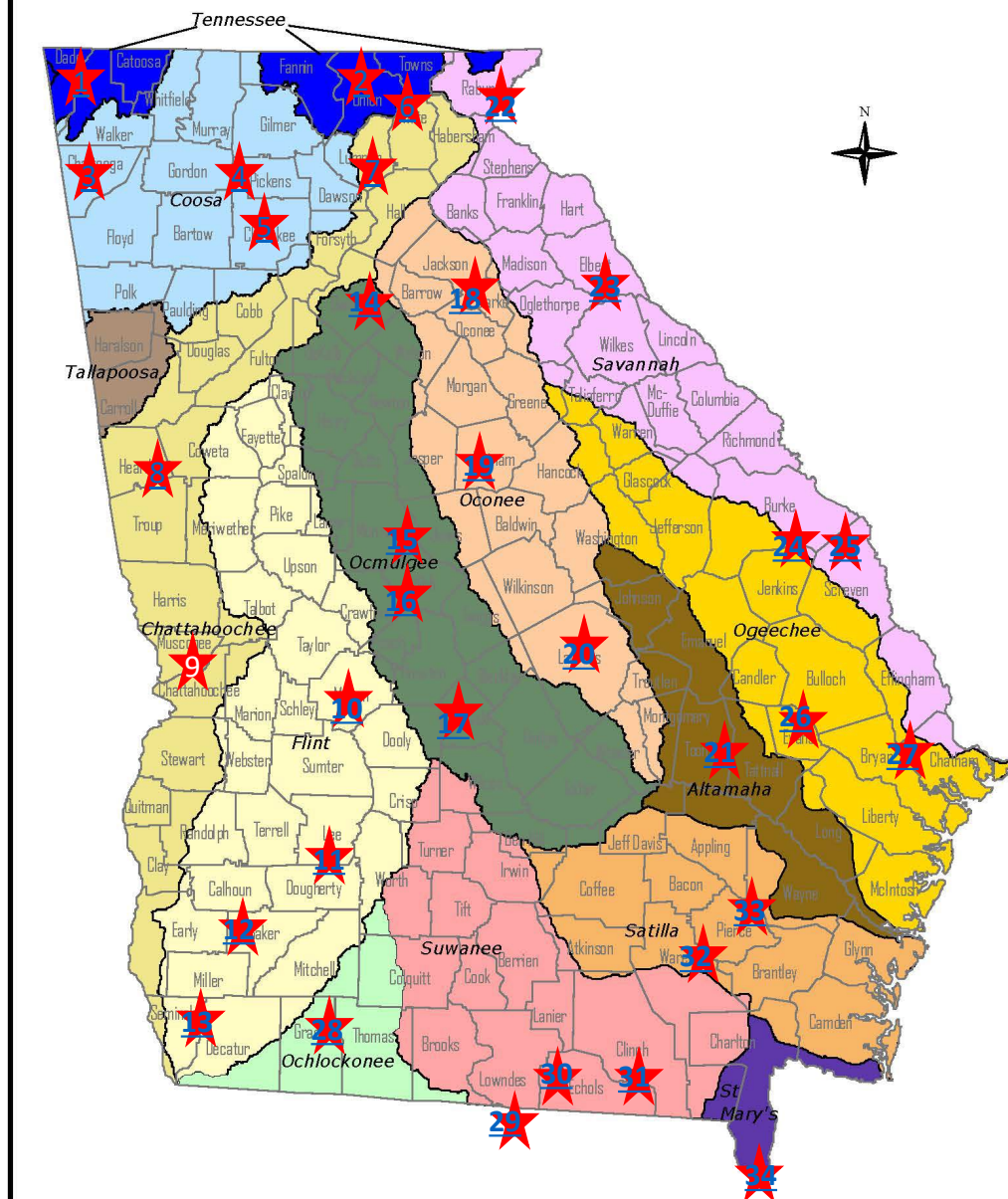
# Streamflow Conditions

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	CANOOOCHEE RIVER NEAR CLAXTON
27	OGEECHEE	OGEECHEE RIVER NEAR EDEN
28	OCHLOCKONEE	OCHLOCKONEE RIVER NEAR THOMASVILLE
29	SUWANEE	WITHLACOOOCHEE 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	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 2023 through November 2023;
- 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 November 2023 was 308 cfs. The statistical composite of all historical data for this gage shows that average streamflow in November has historically been lower than November 2023 about 5% of the time; 95% of the time in November it has been higher.
- Average stream flow in November 2011 was 461 cfs. The statistical composite of all historical data for this gage shows that average streamflow in November has historically been lower than November 2011 about 10~20% of the time; 80~90% of the time in November it has been higher.
- Average stream flow in November 2007 was 197 cfs. The statistical composite of all historical data for this gage shows that average streamflow in November has historically been lower than November 2007 about 2 % of the time; 98 % of the time in November it has been higher.

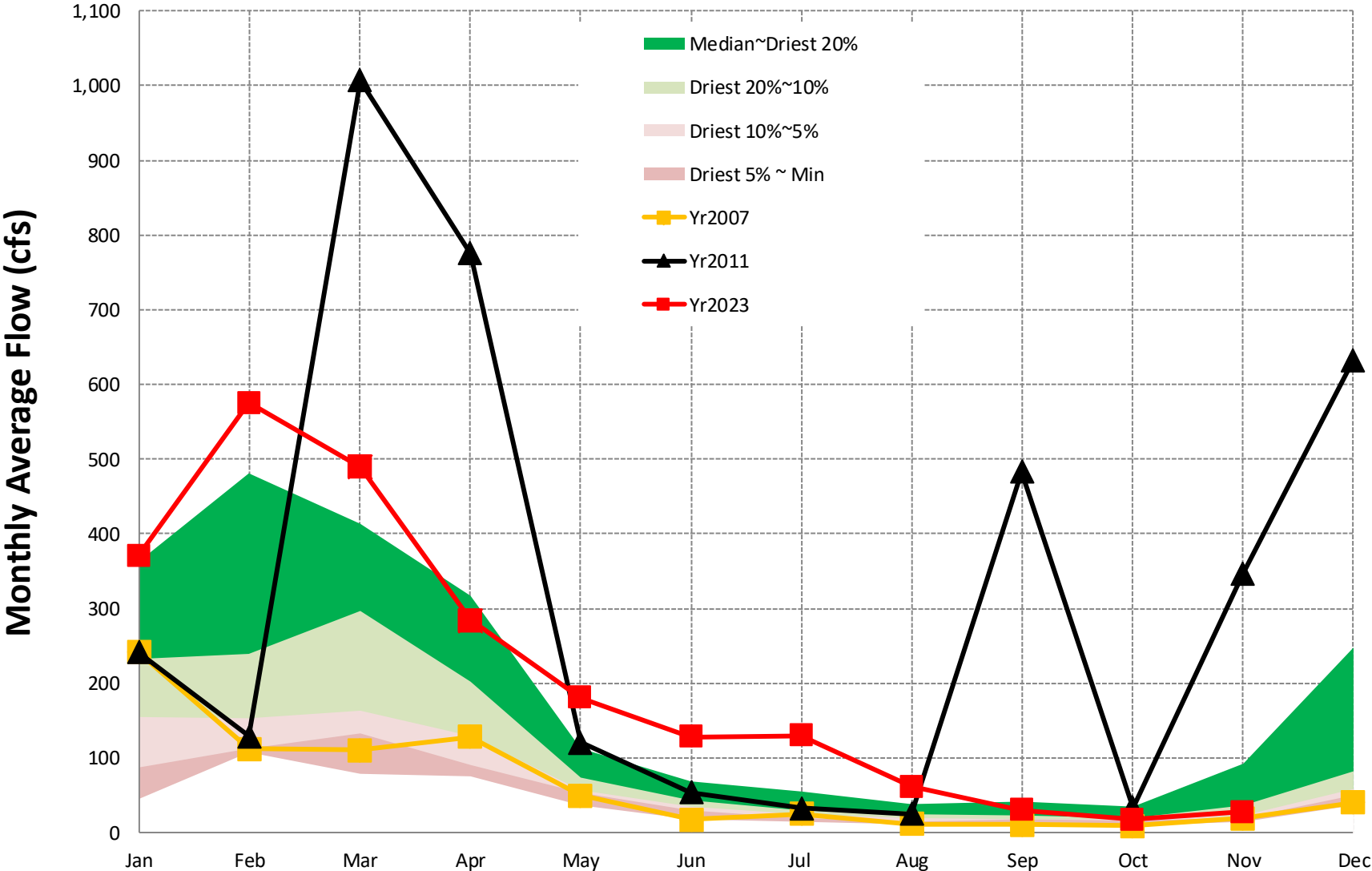
# How to Read the Streamflow Graphs

## Example #2: [Flint River at Albany](#)

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

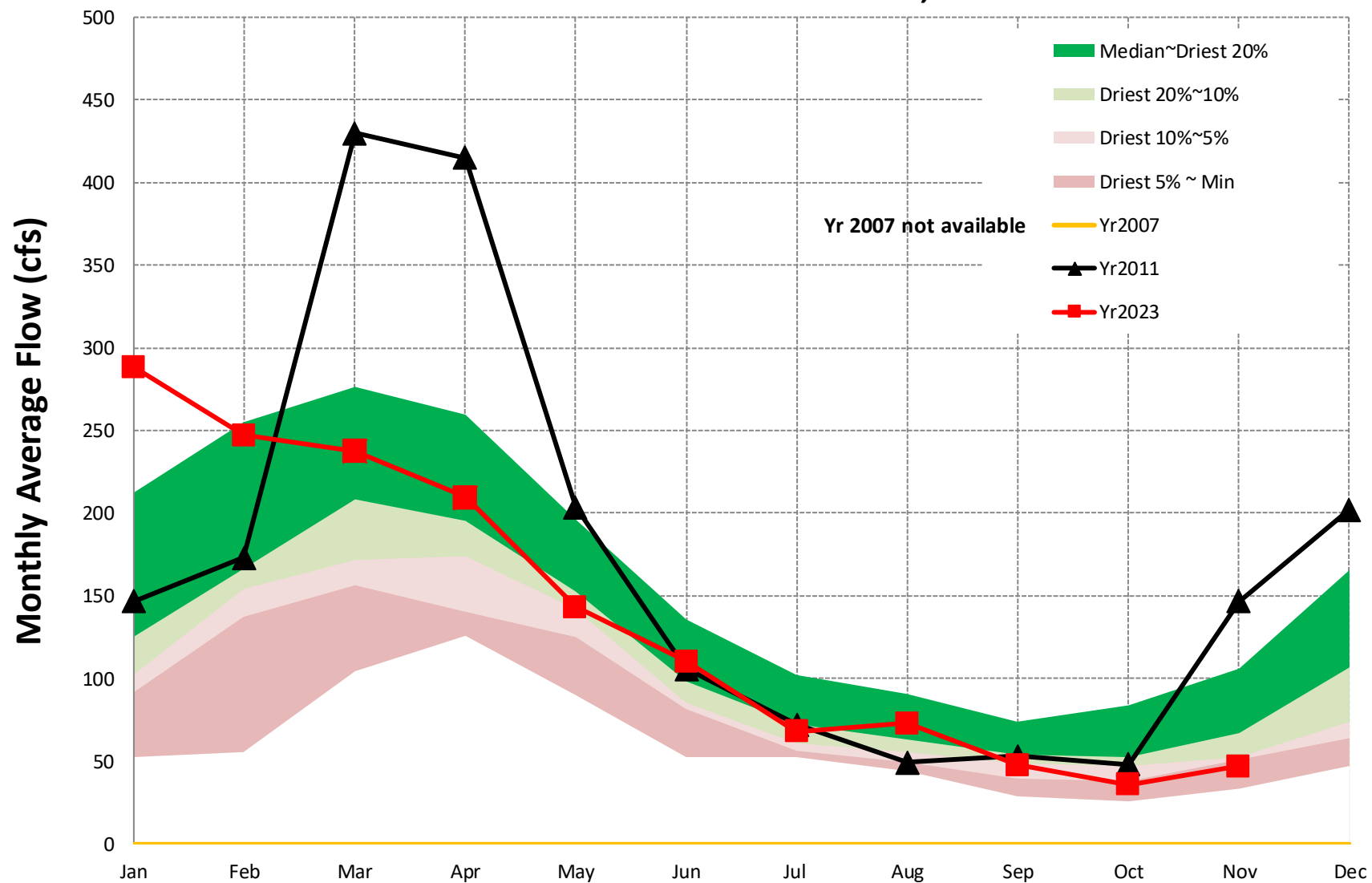
- Average stream flow in November 2023 was 2032 cfs. The statistical composite of all historical data for this gage shows that average streamflow in November has historically been lower than November 2023 about 26% of the time; about 74% of the time in November it has been higher.
- Average stream flow in November 2011 was 1171 cfs. The statistical composite of all historical data for this gage shows that average streamflow in November has historically been lower than November 2011 about 1~2 % of the time; about 98~99% of the time in November it has been higher.
- Average stream flow in November 2007 was 1119 cfs. The statistical composite of all historical data for this gage shows that average streamflow in November has historically been lower than November 2007 about 1% of the time; about 99% of the time in November it has been higher.

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



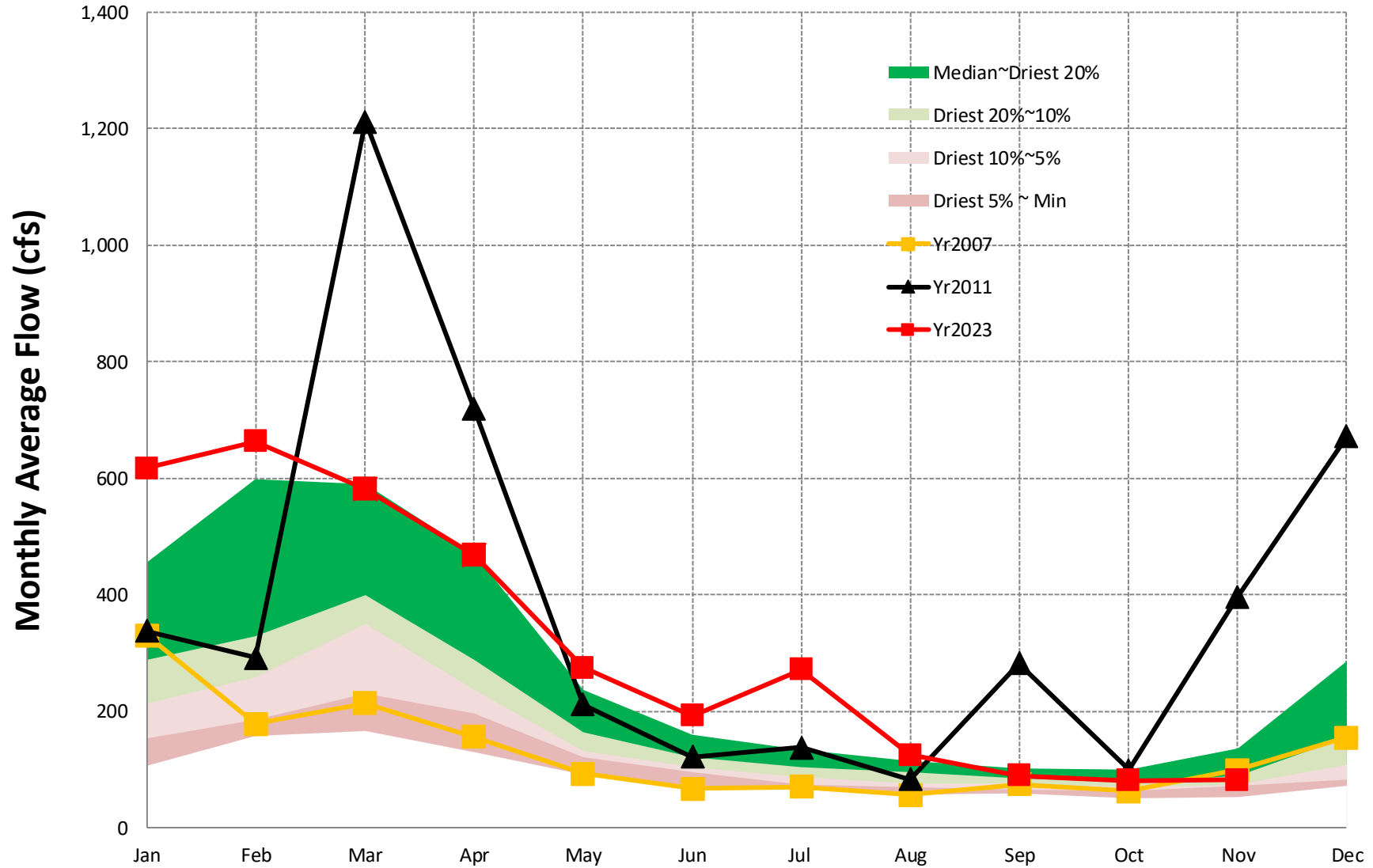
[Back to Map](#)

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



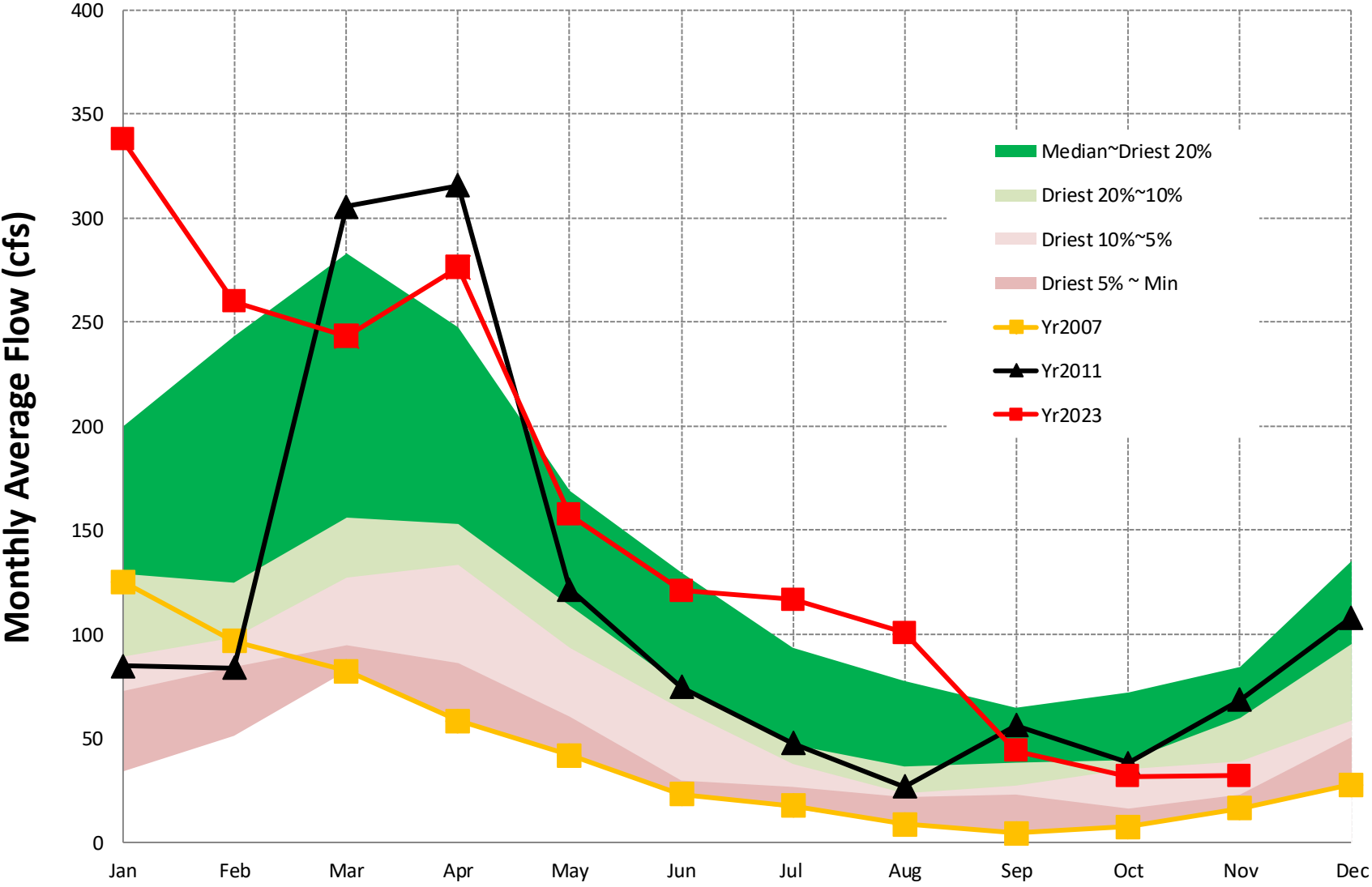
[Back to Map](#)

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



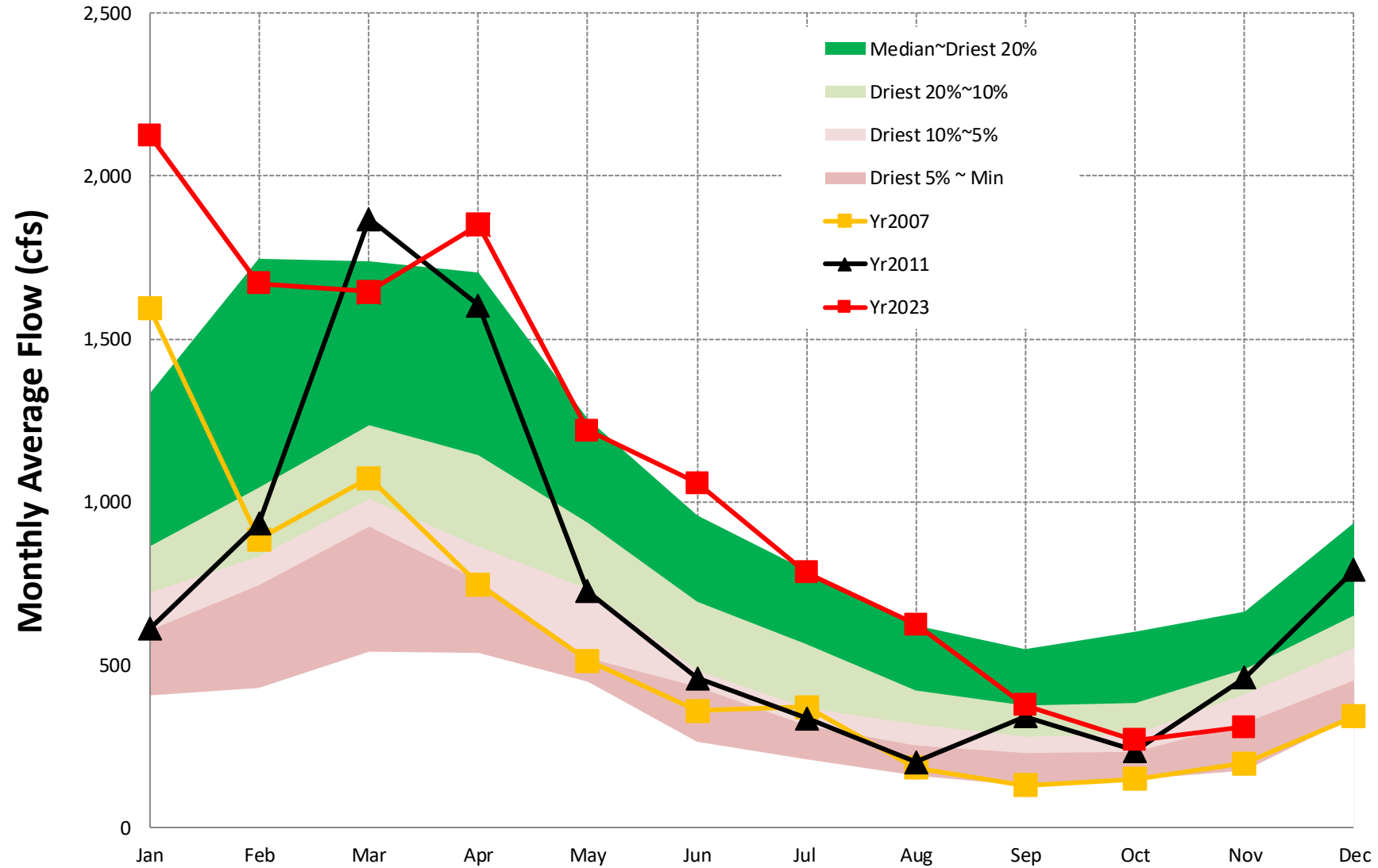
[Back to Map](#)

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



[Back to Map](#)

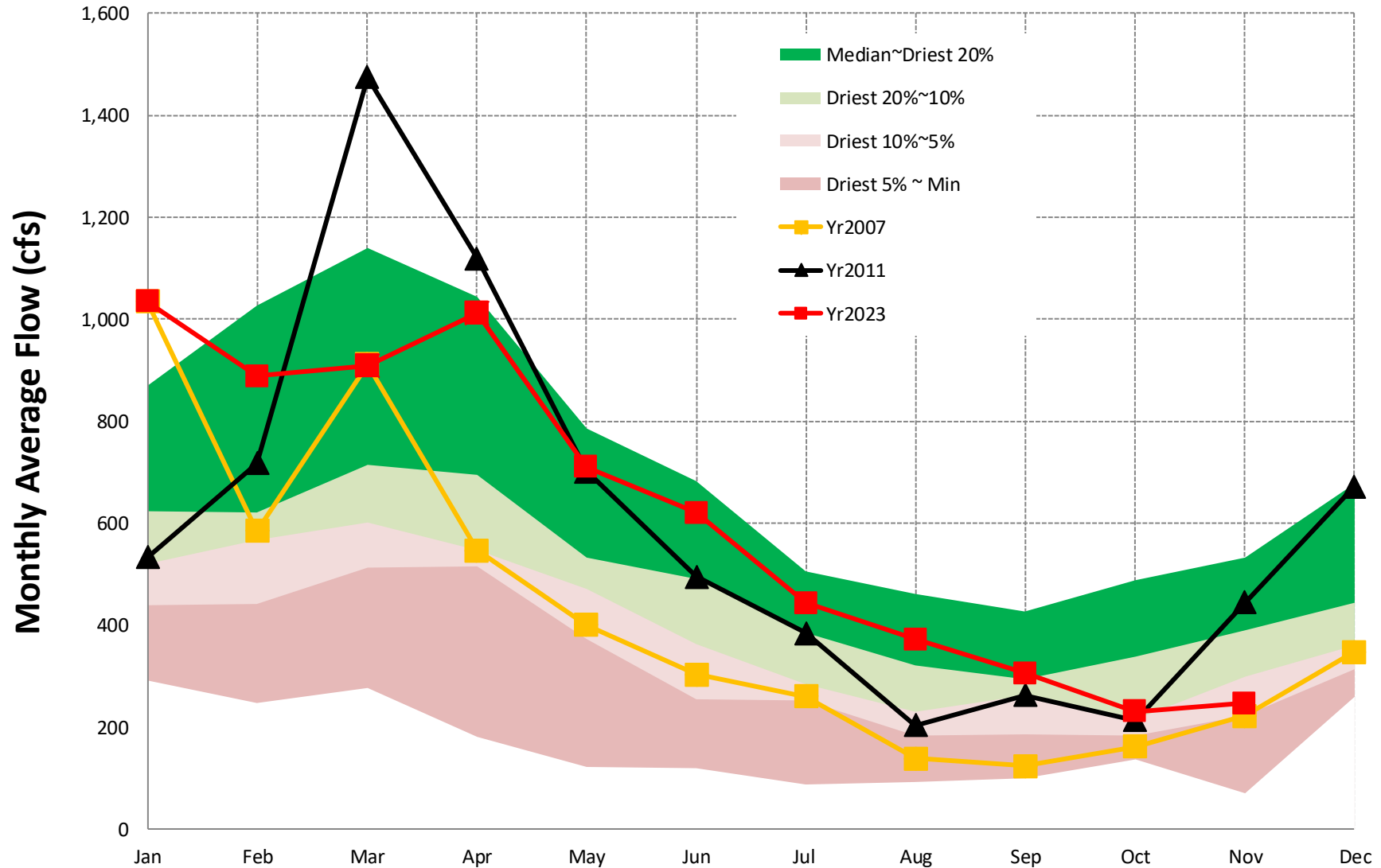
# Gage #5, USGS #02392000, Coosa Basin, Etowah River at Canton, GA



[Back to Interpretation](#)

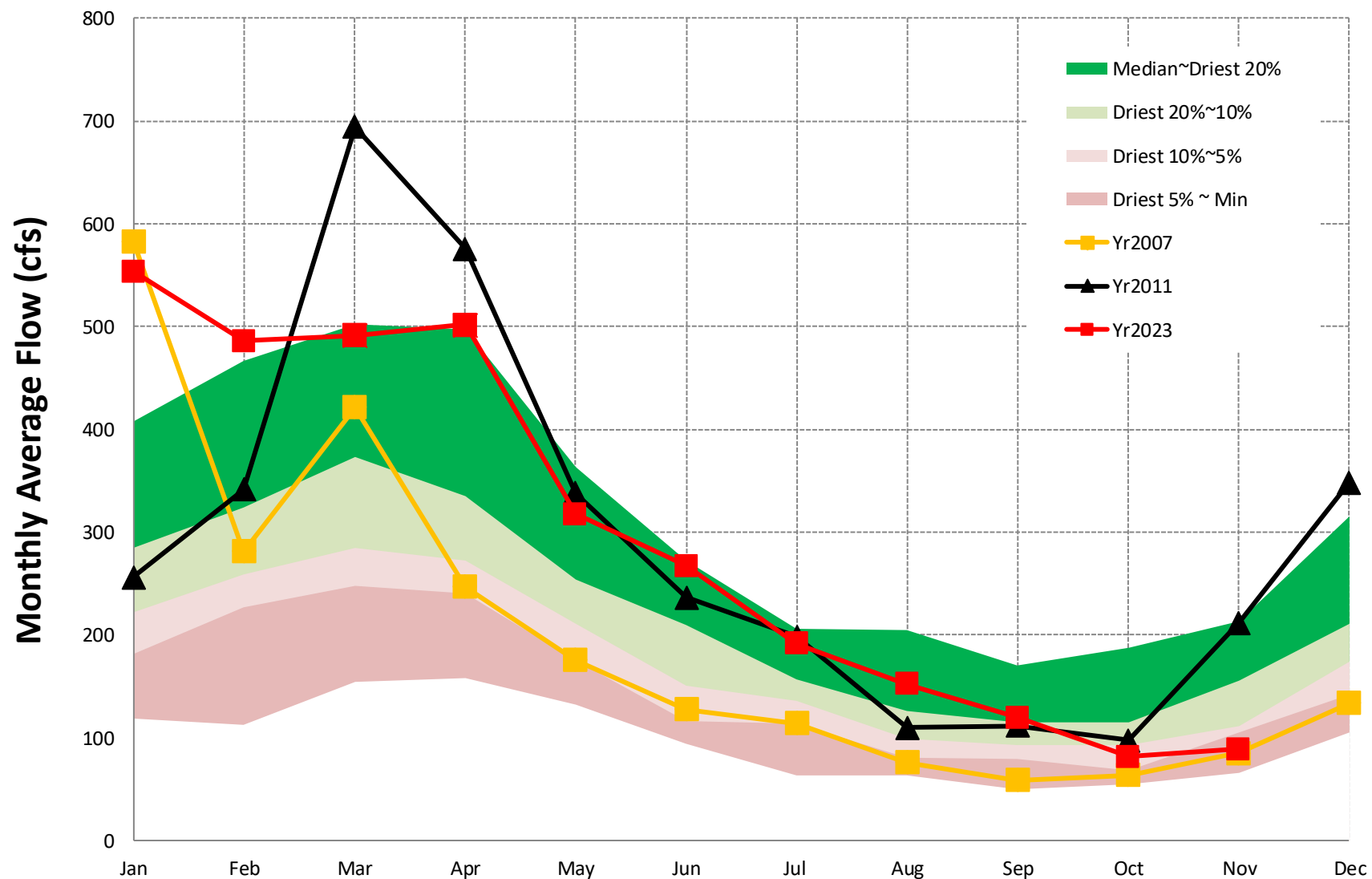
[Back to Map](#)

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



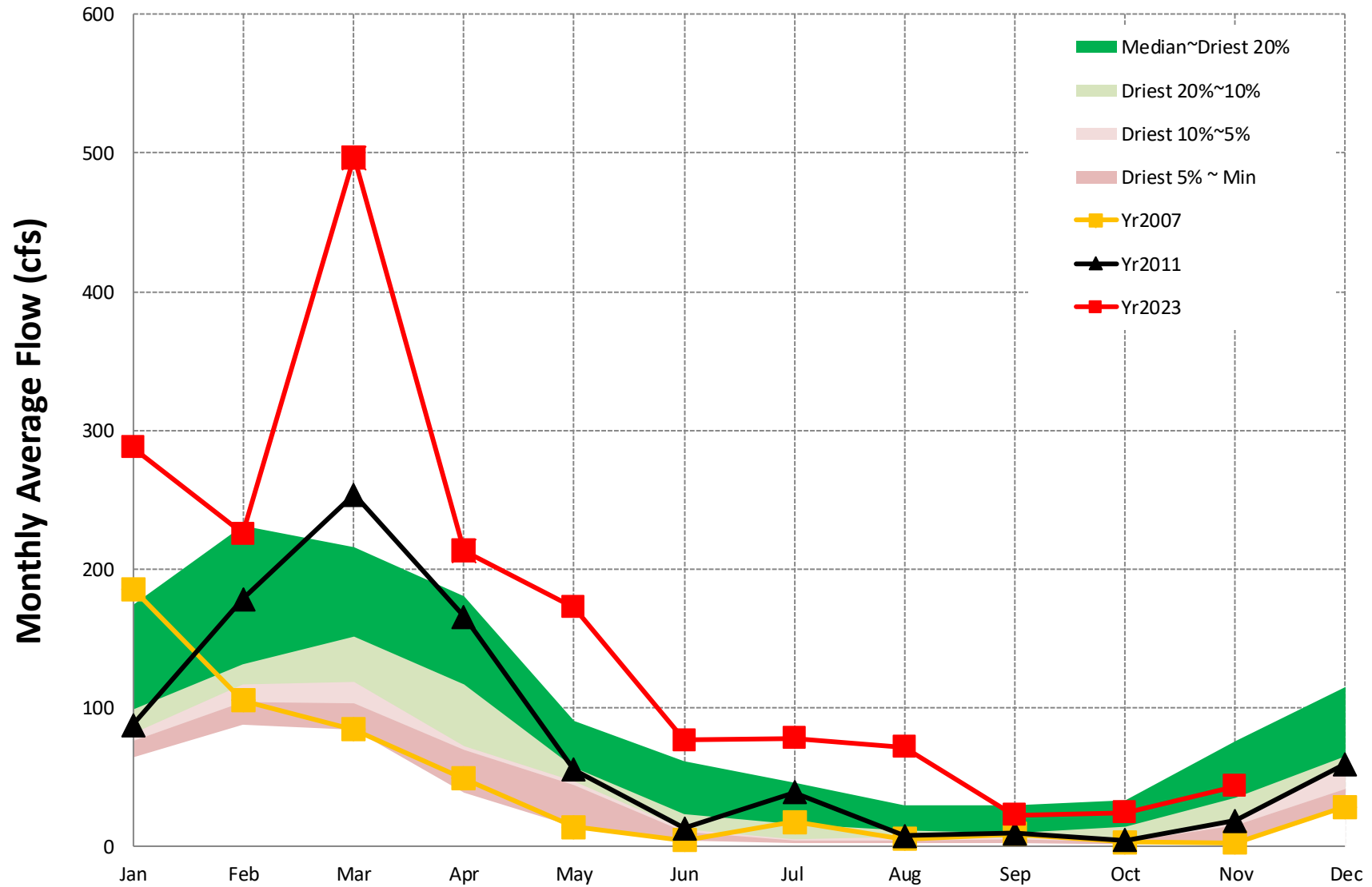
[Back to Map](#)

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



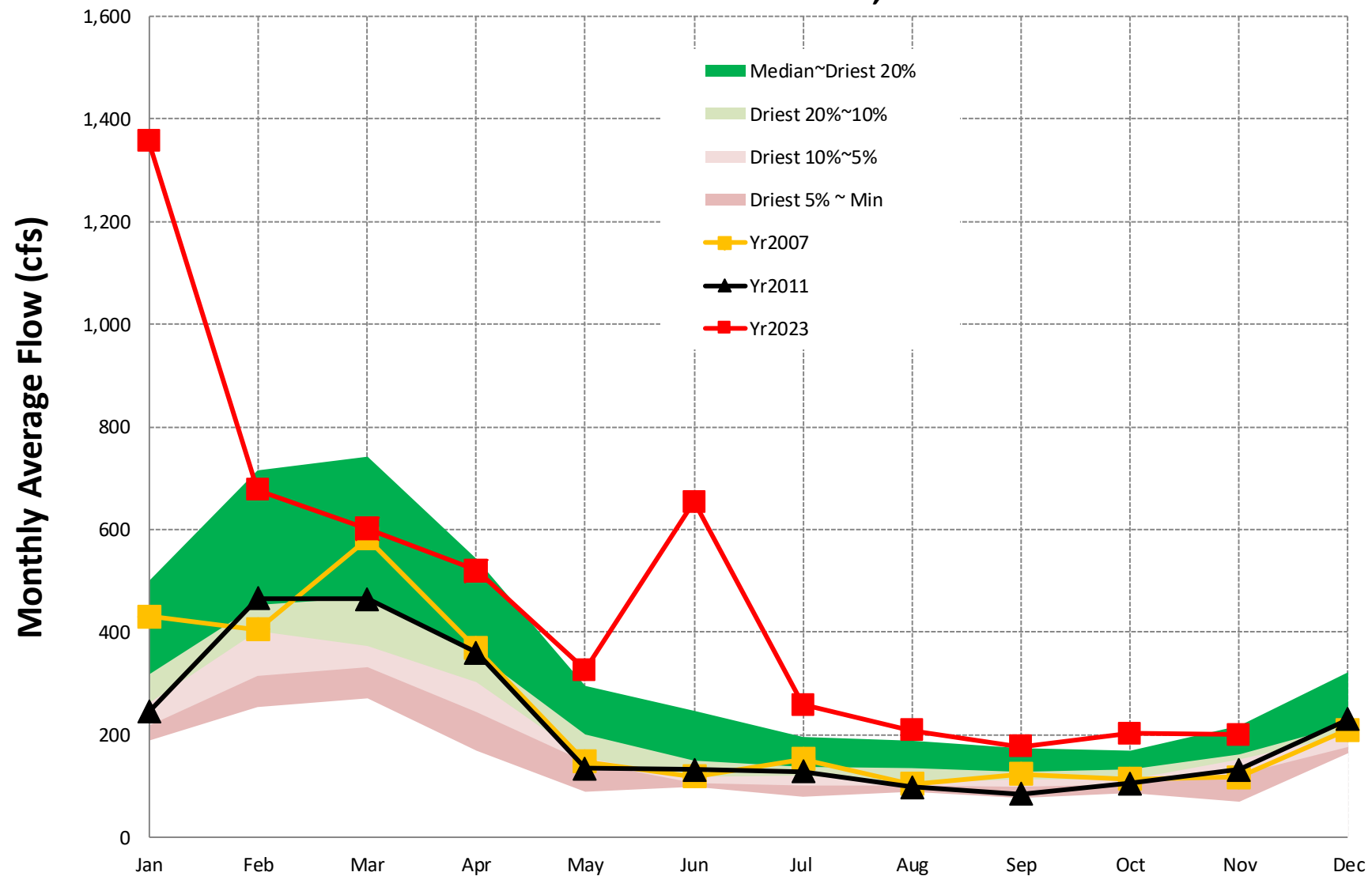
[Back to Map](#)

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



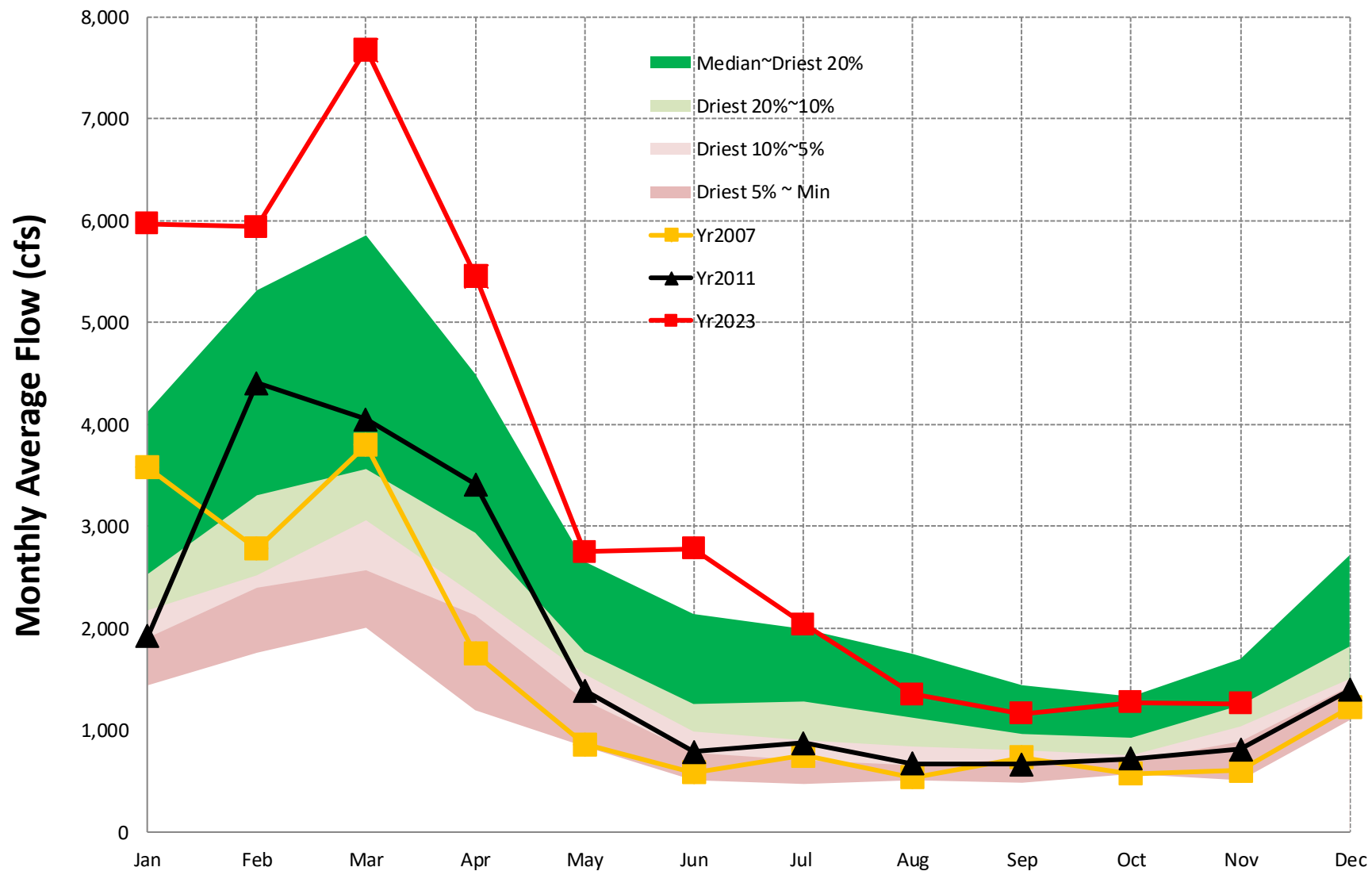
[Back to Map](#)

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



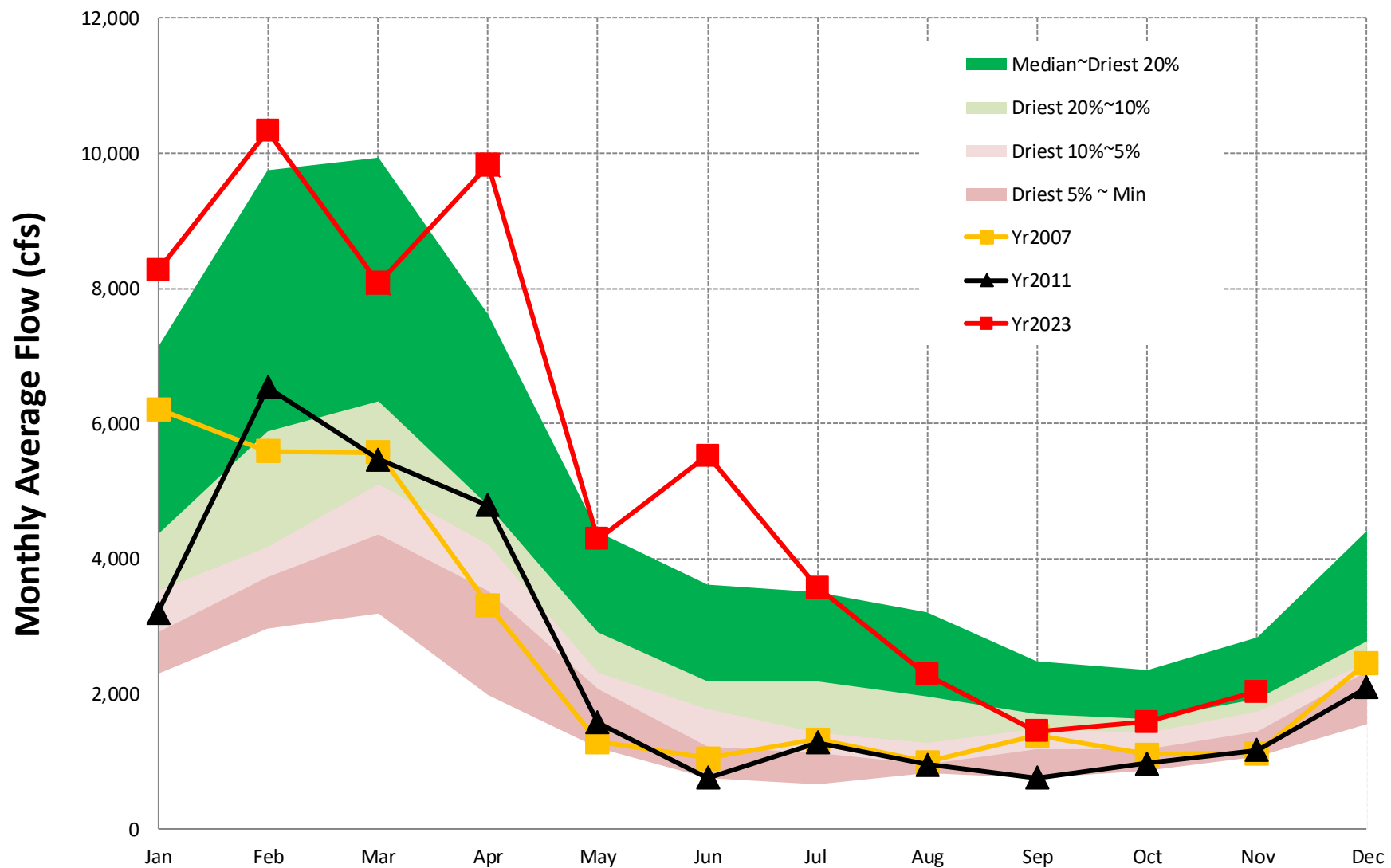
[Back to Map](#)

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



[Back to Map](#)

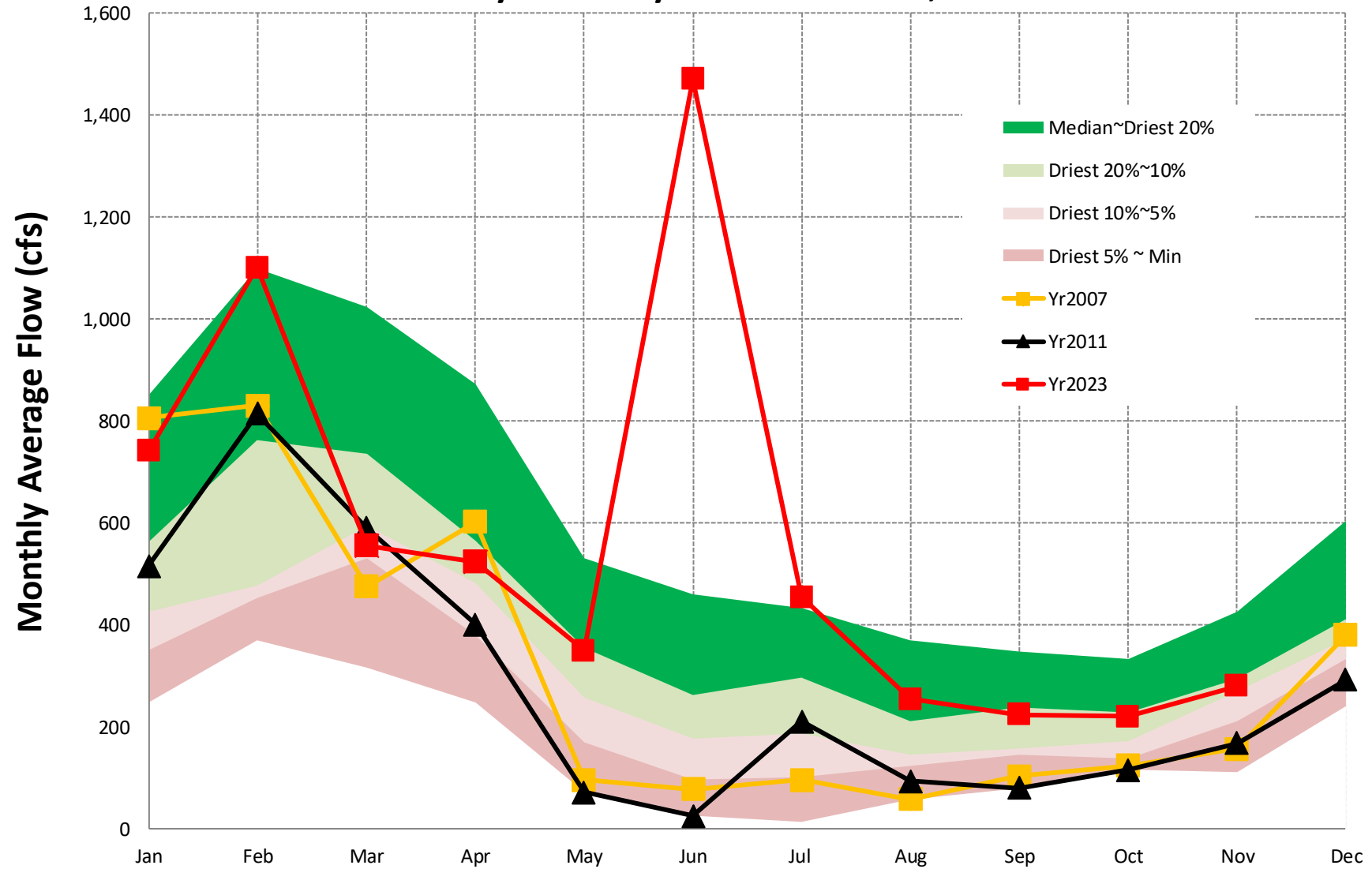
# Gage #11, USGS #02352500, Flint Basin, FLINT RIVER AT ALBANY, GA



[Back to Interpretation](#)

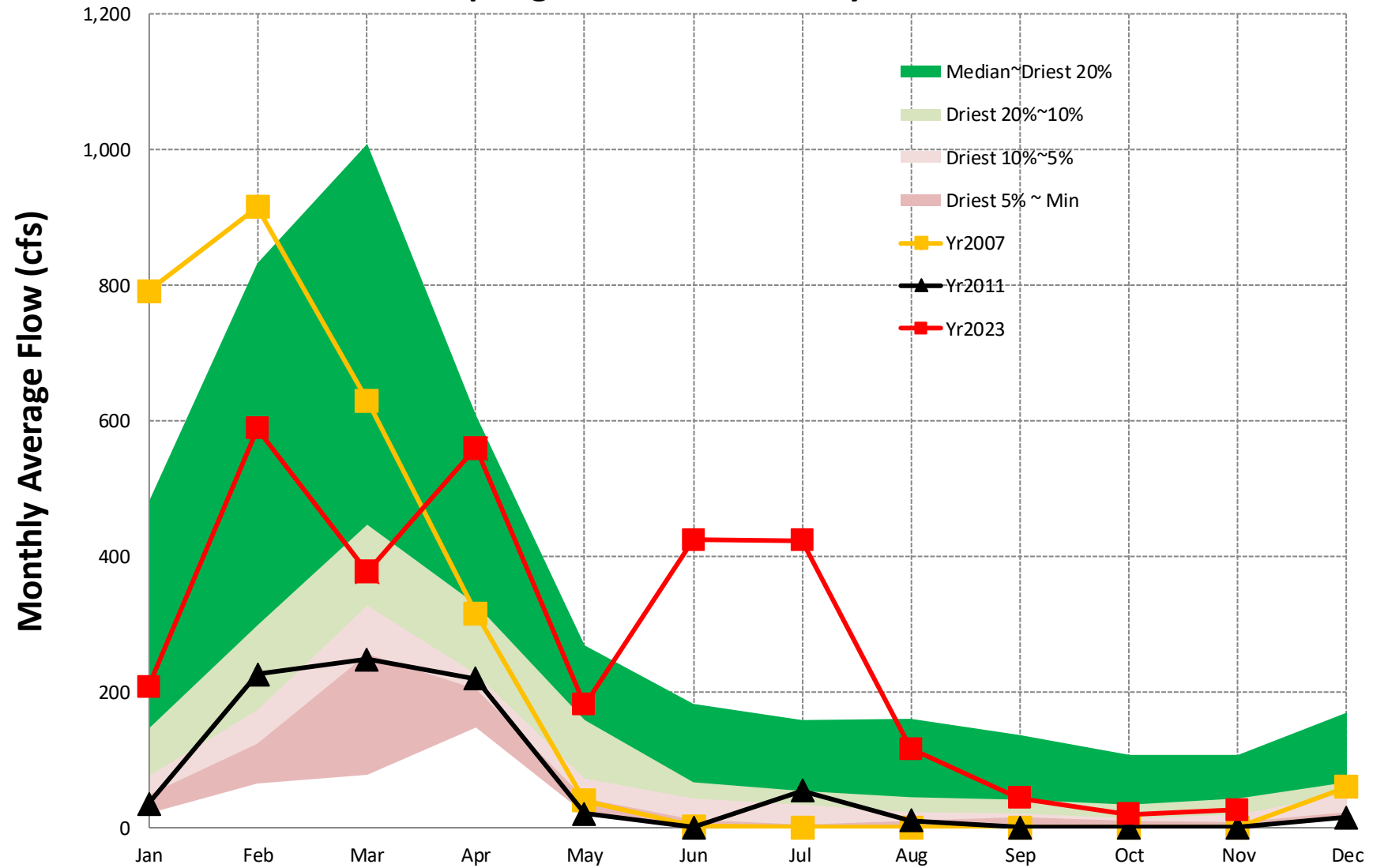
[Back to Map](#)

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



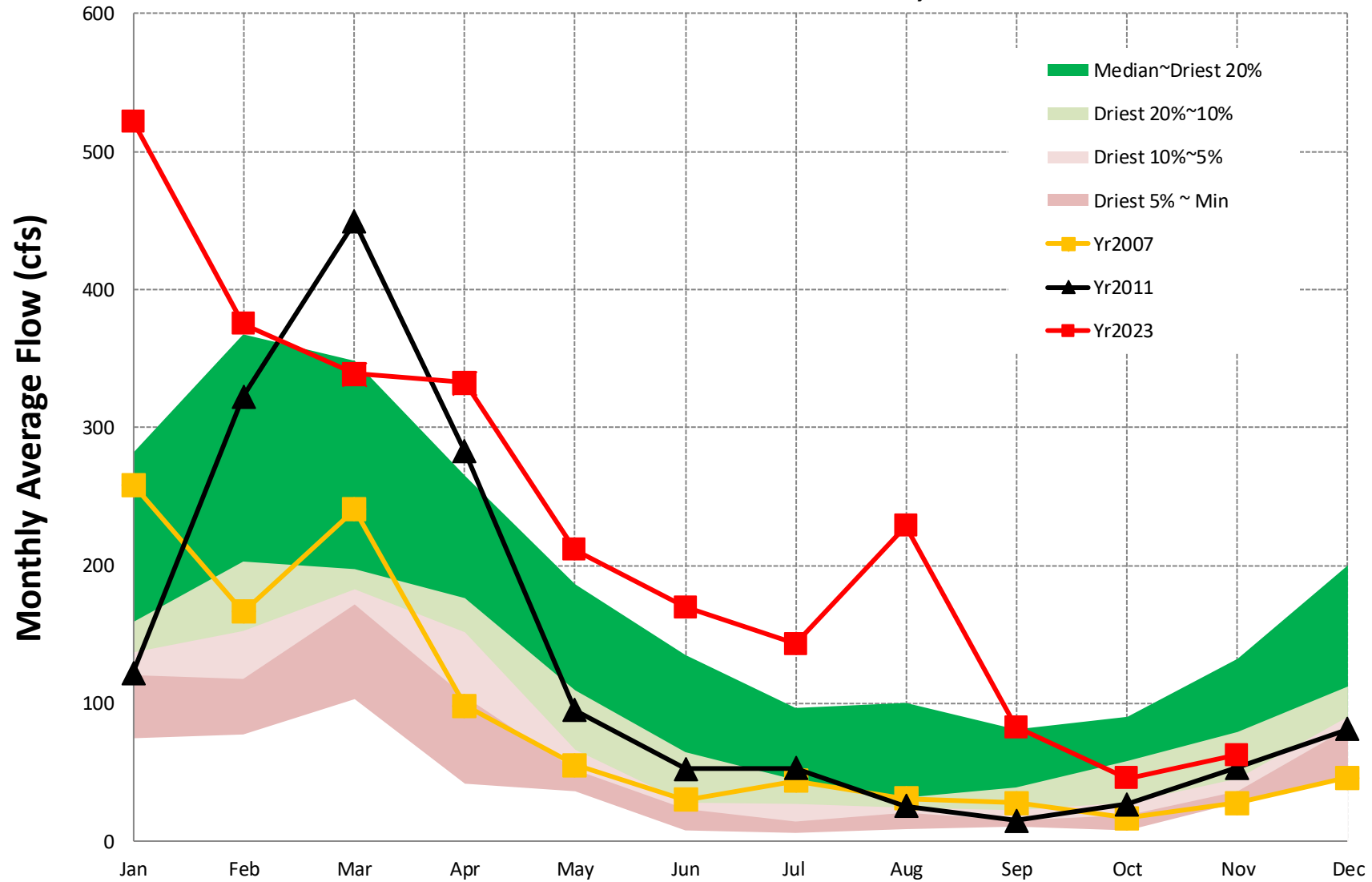
[Back to Map](#)

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



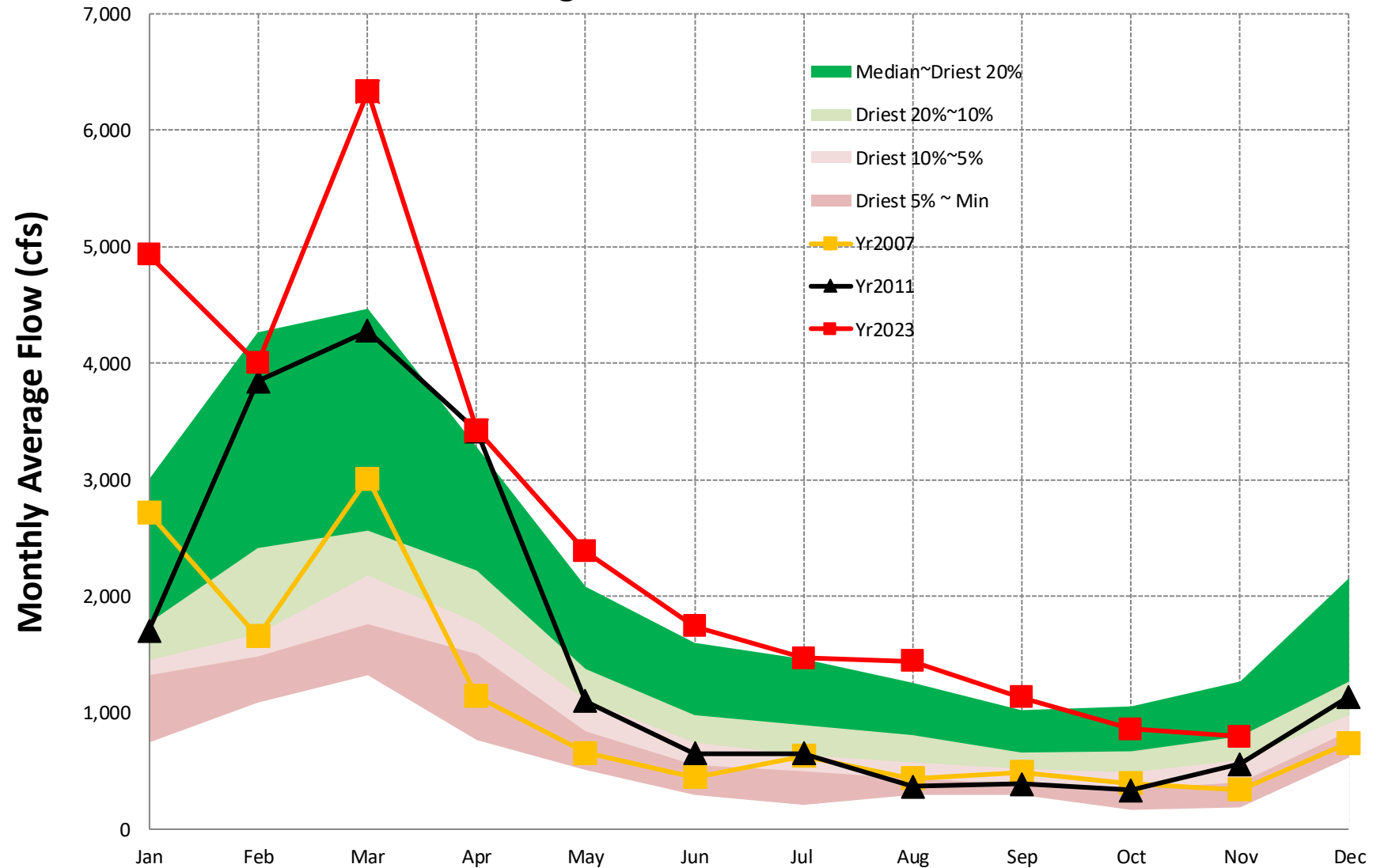
[Back to Map](#)

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



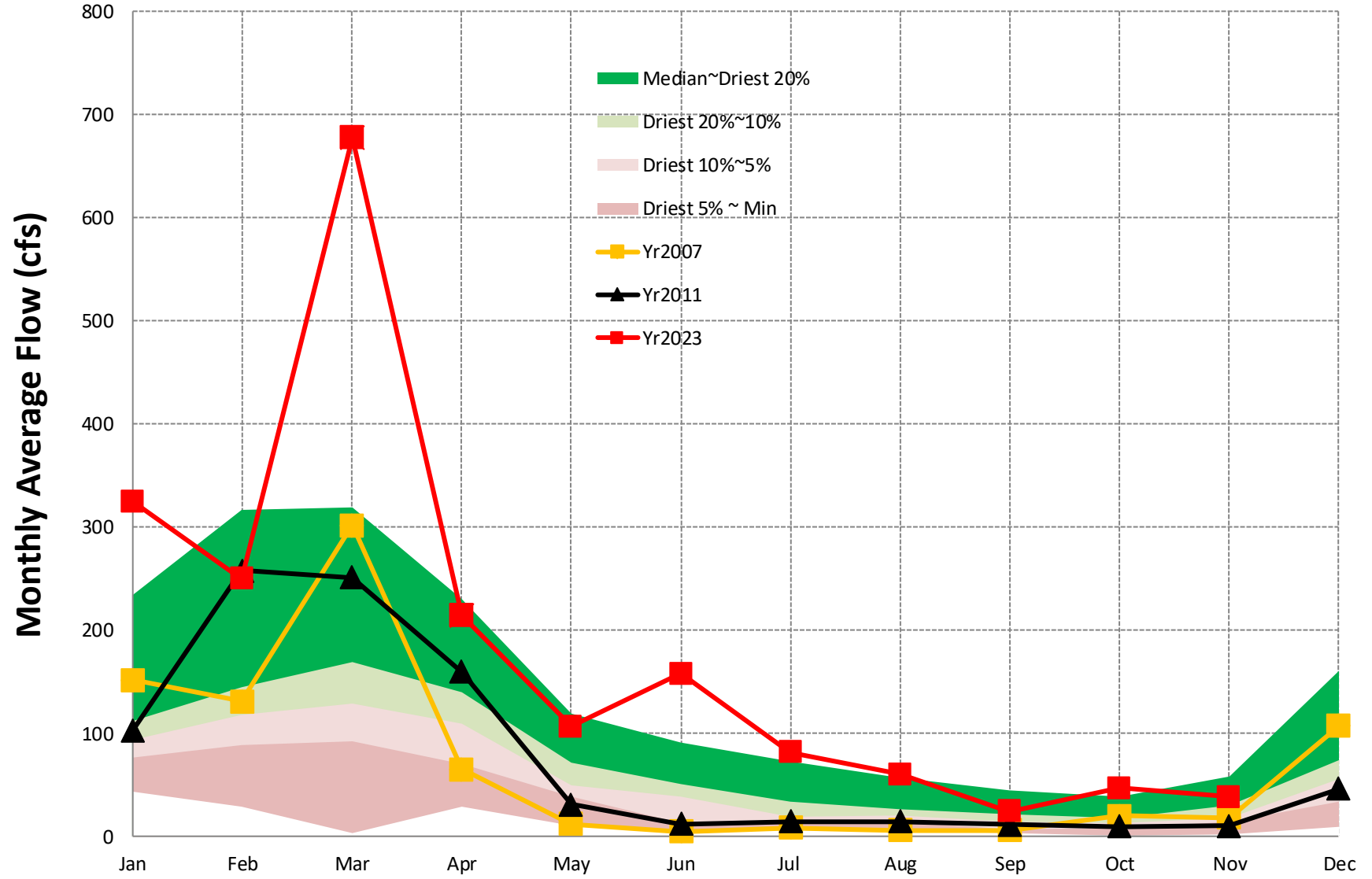
[Back to Map](#)

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



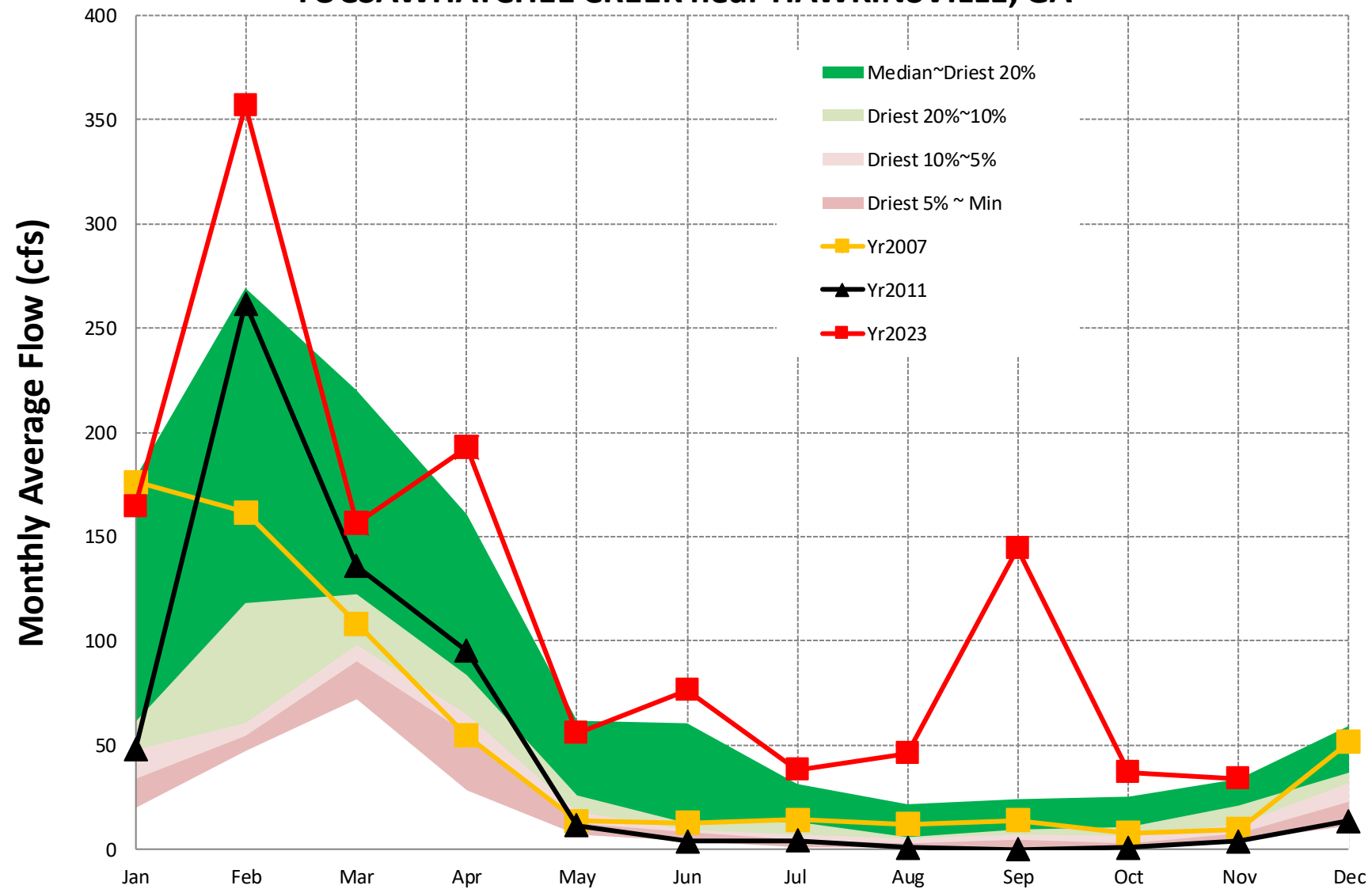
[Back to Map](#)

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



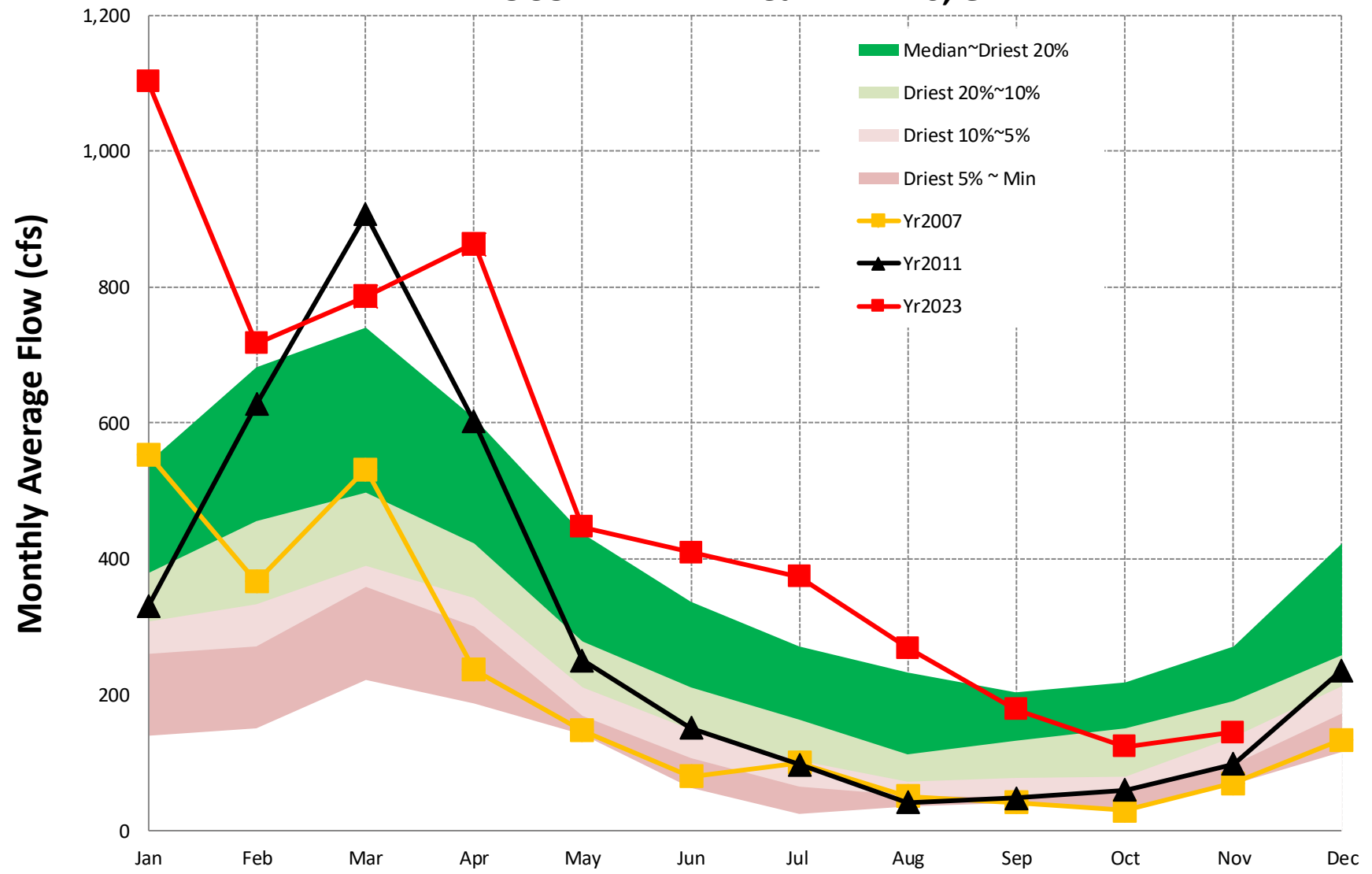
[Back to Map](#)

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



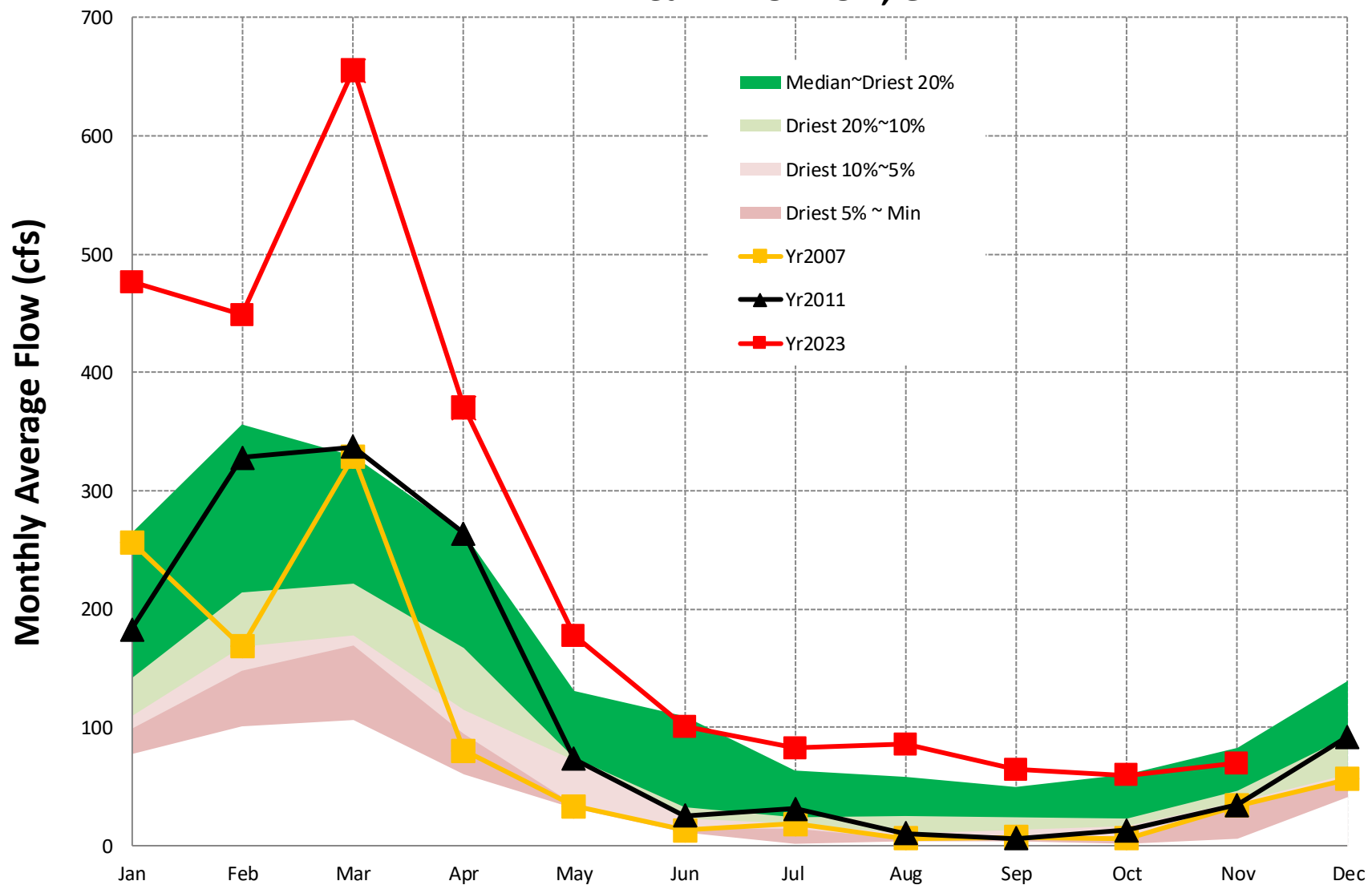
[Back to Map](#)

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



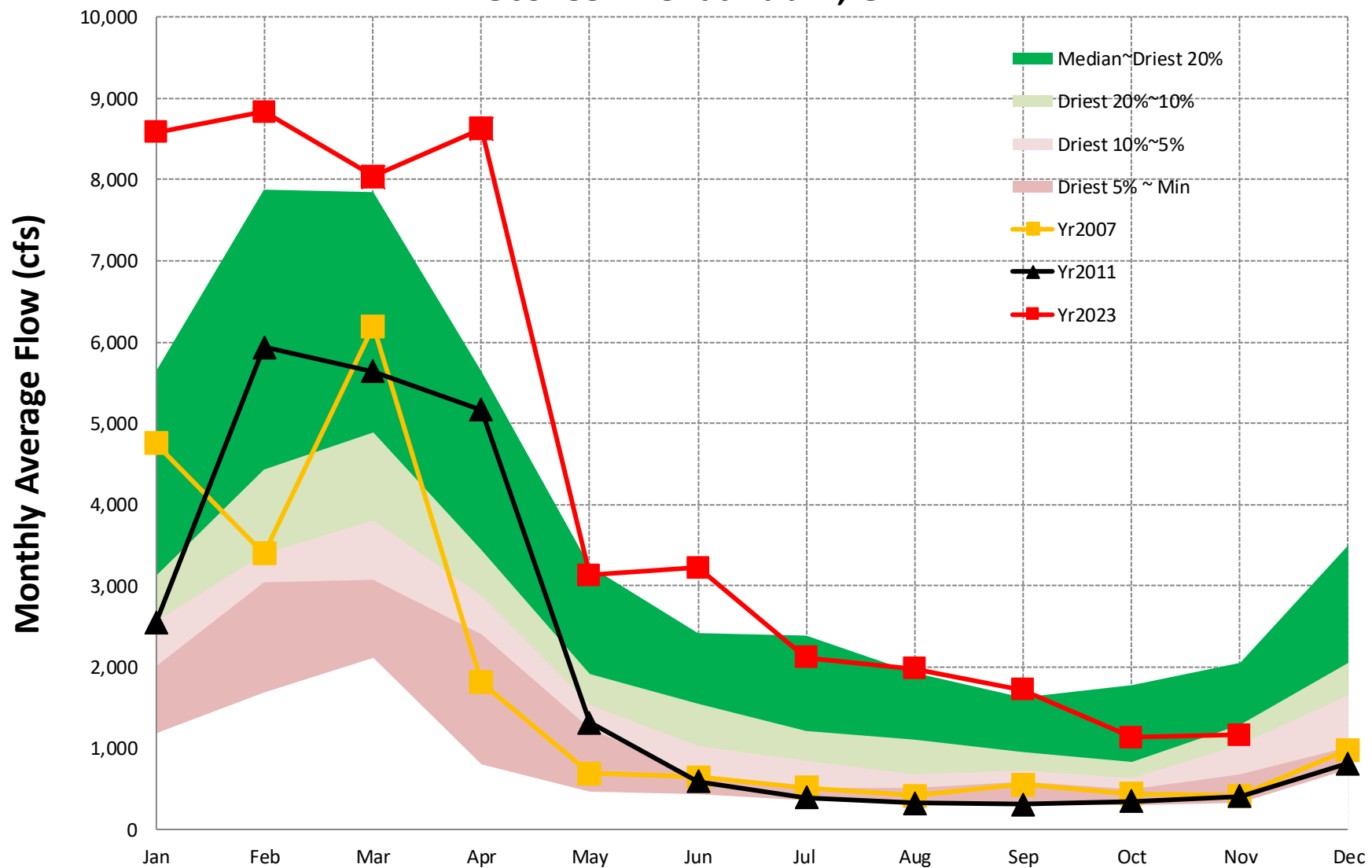
[Back to Map](#)

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



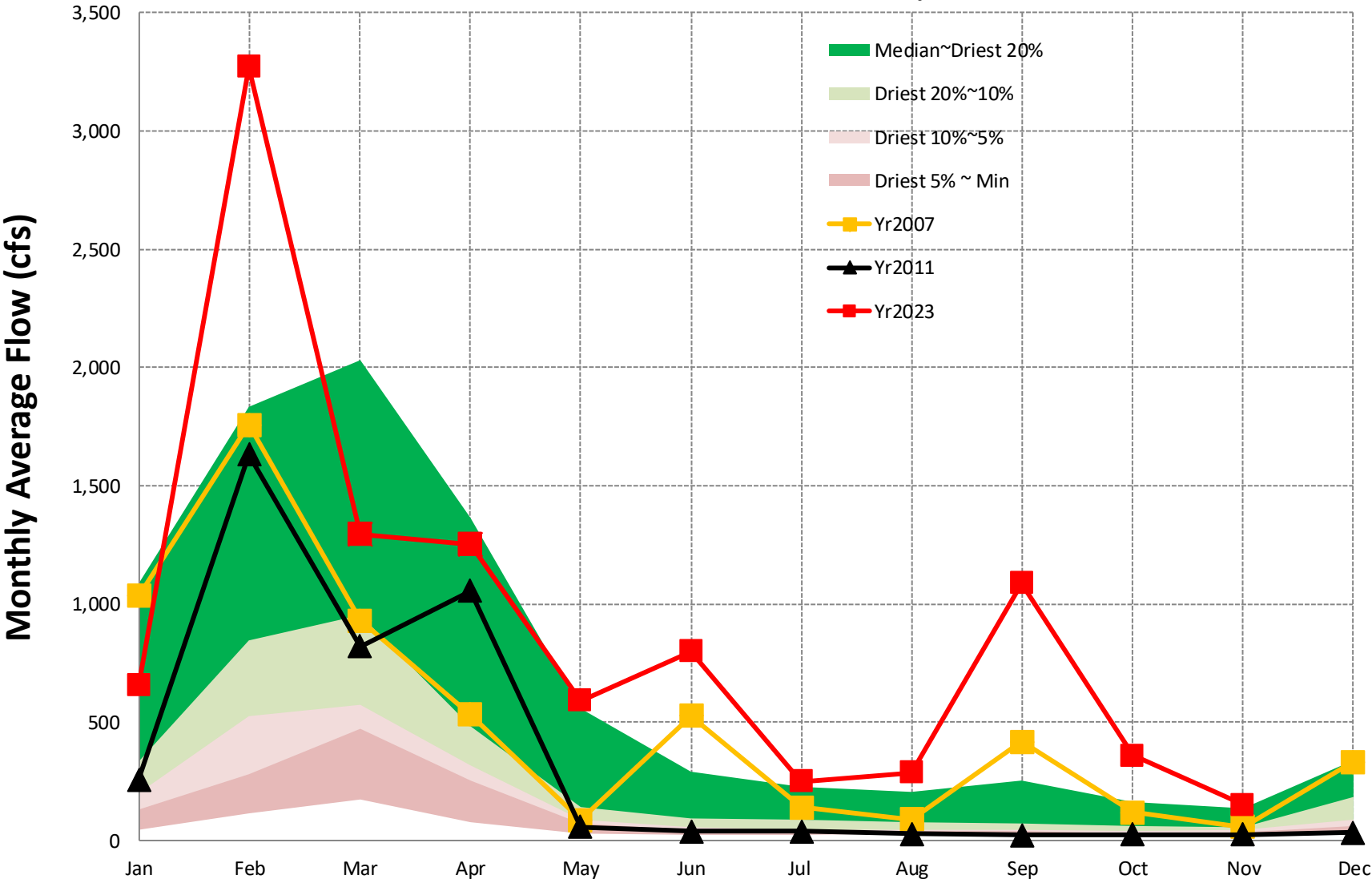
[Back to Map](#)

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



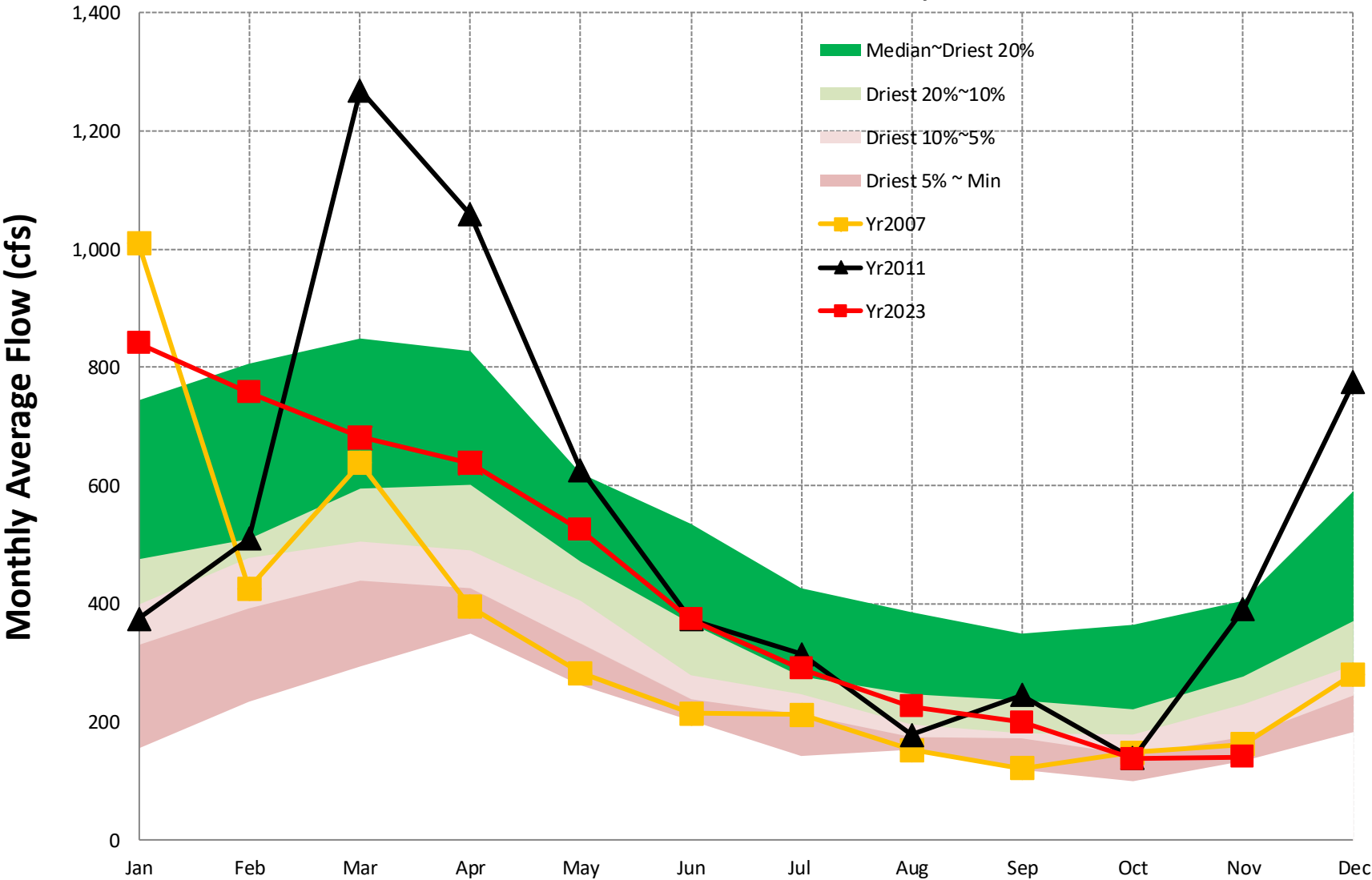
[Back to Map](#)

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



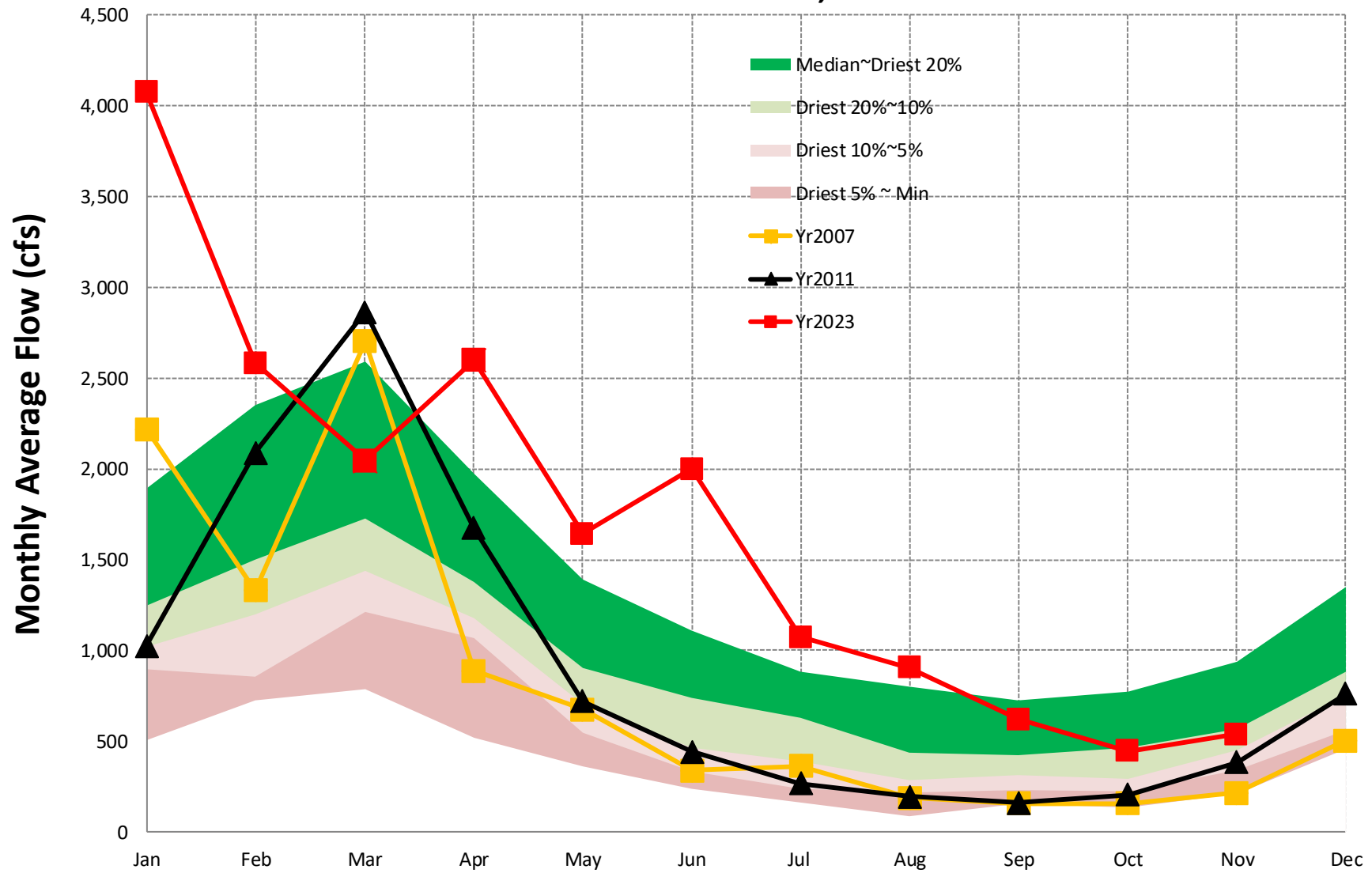
[Back to Map](#)

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



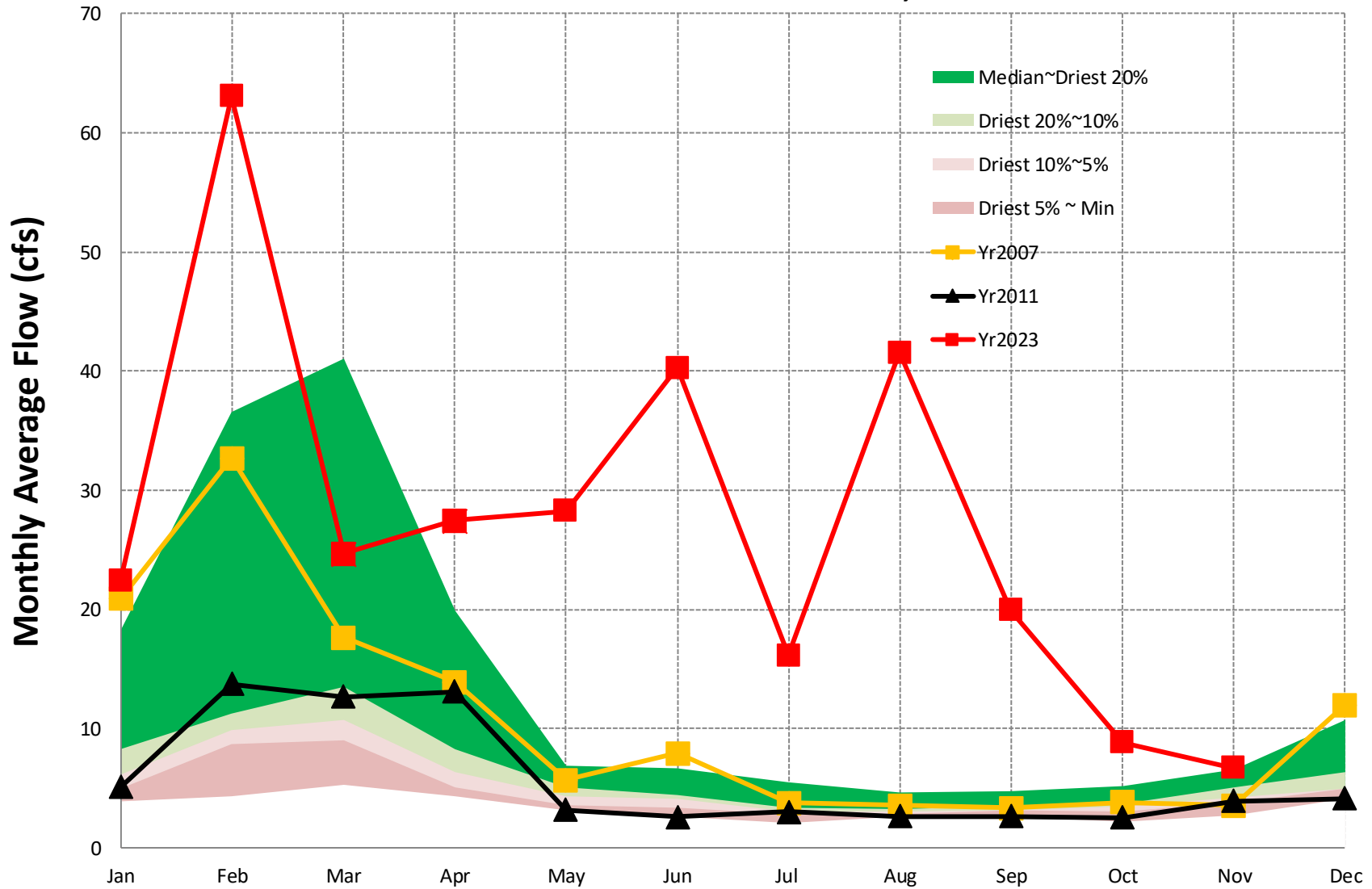
[Back to Map](#)

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



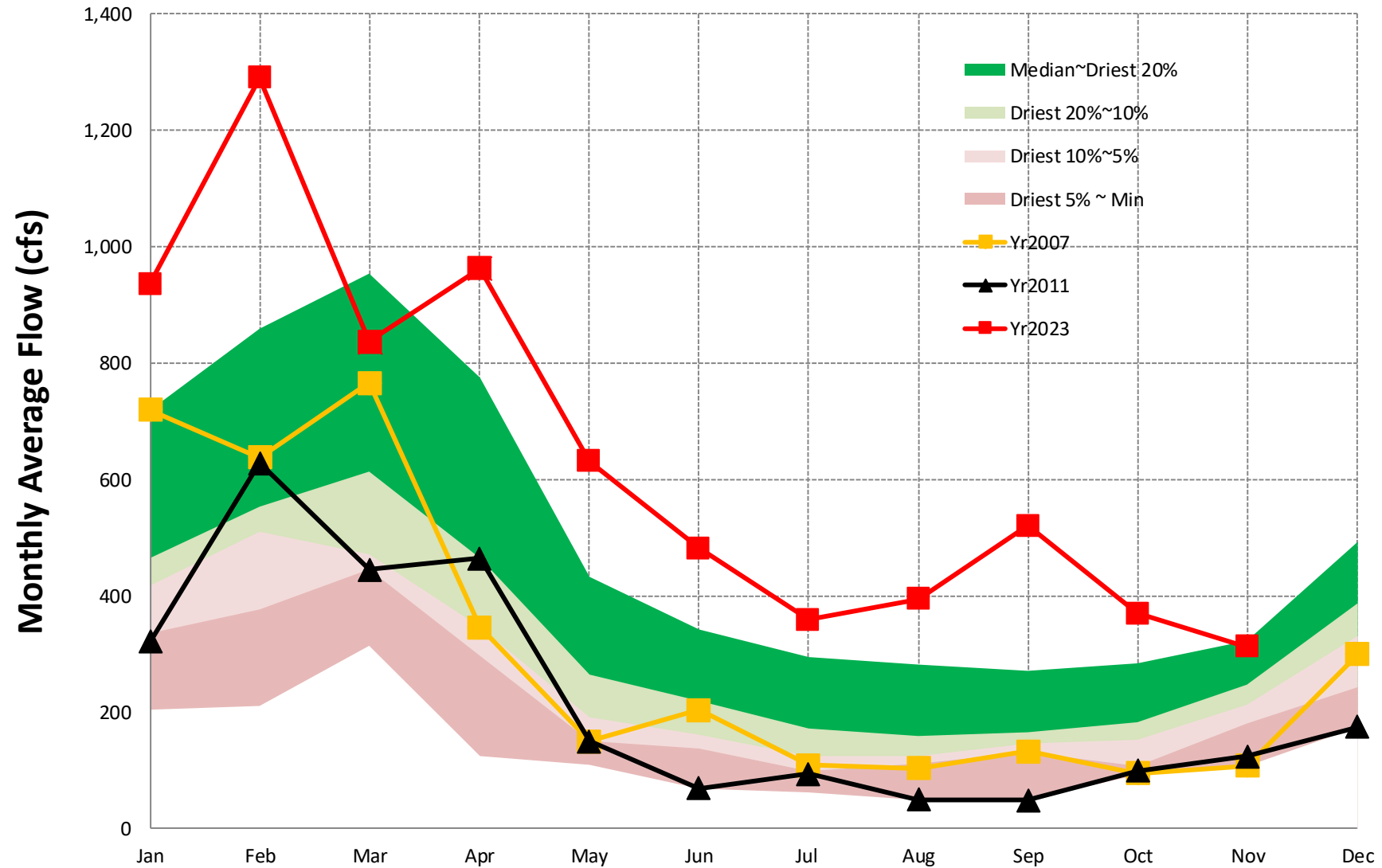
[Back to Map](#)

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



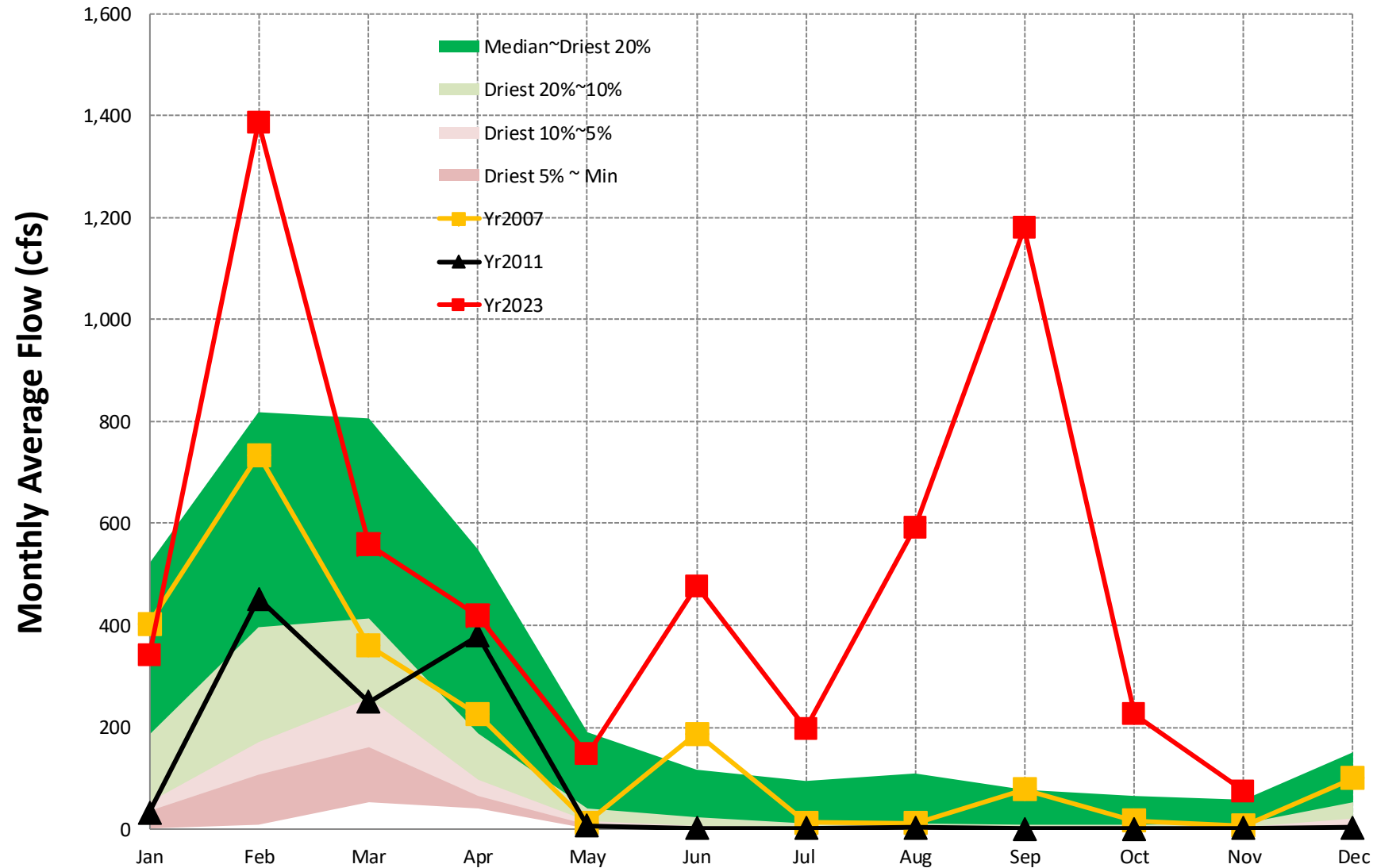
[Back to Map](#)

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



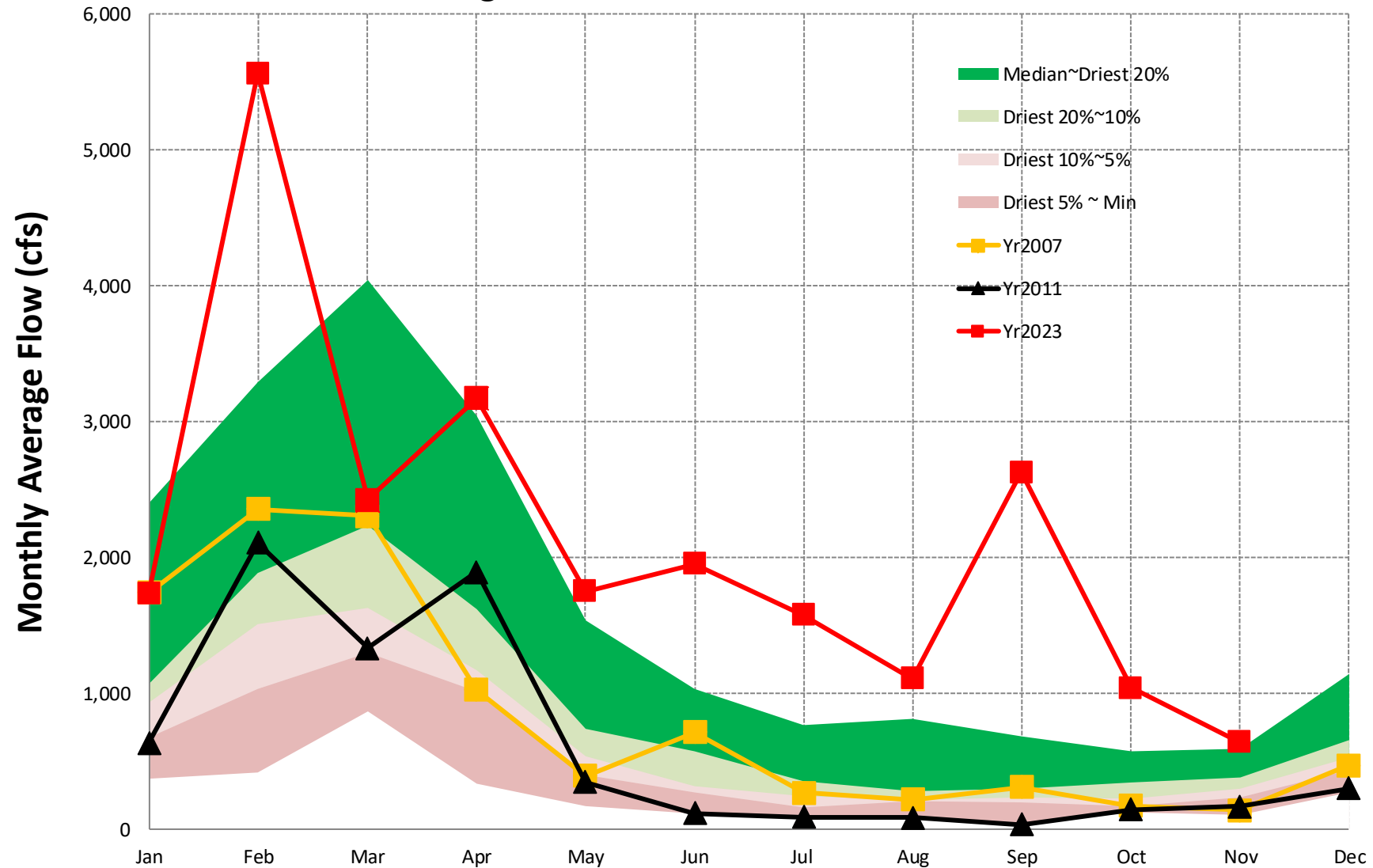
[Back to Map](#)

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



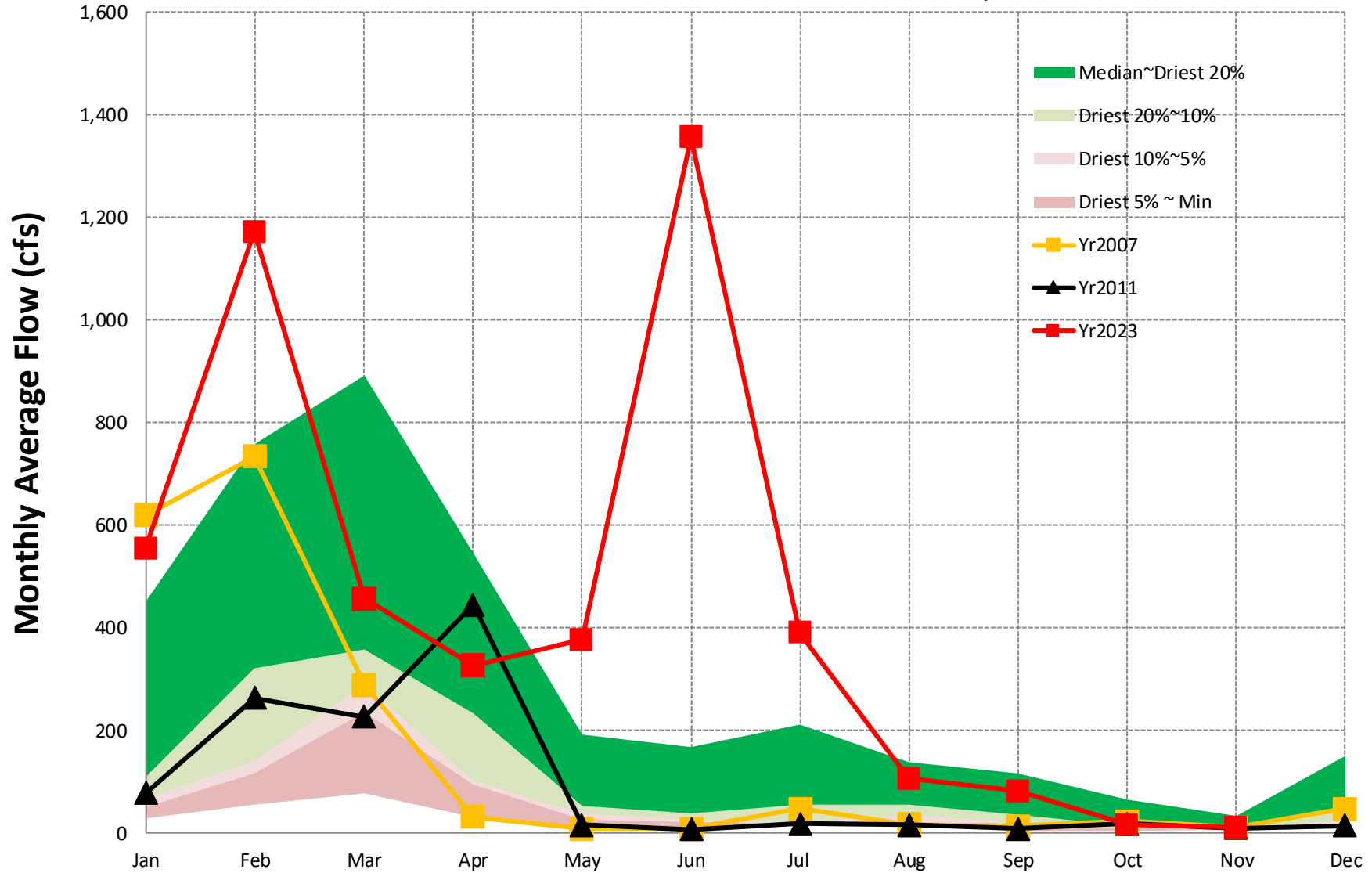
[Back to Map](#)

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

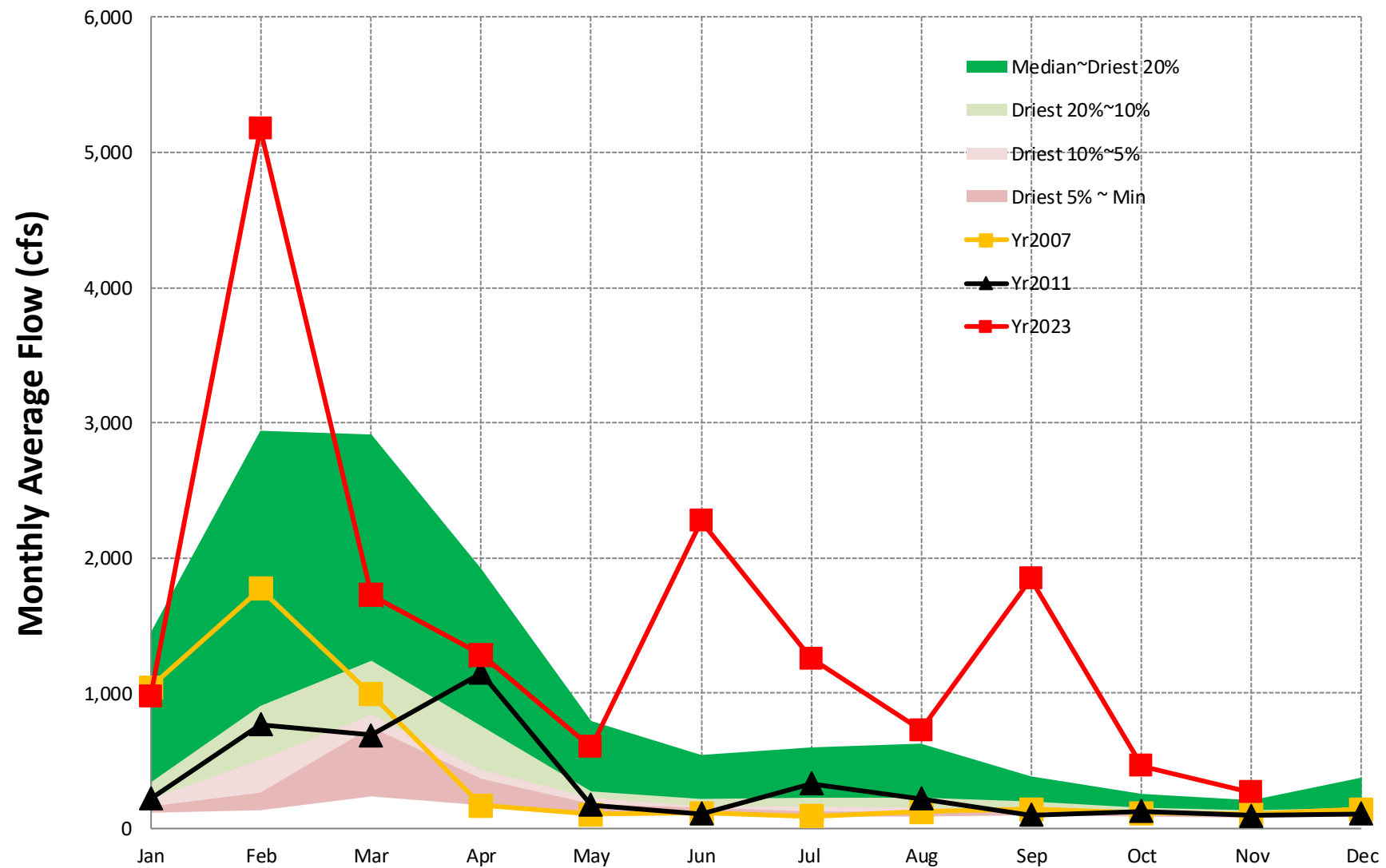


[Back to Map](#)

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

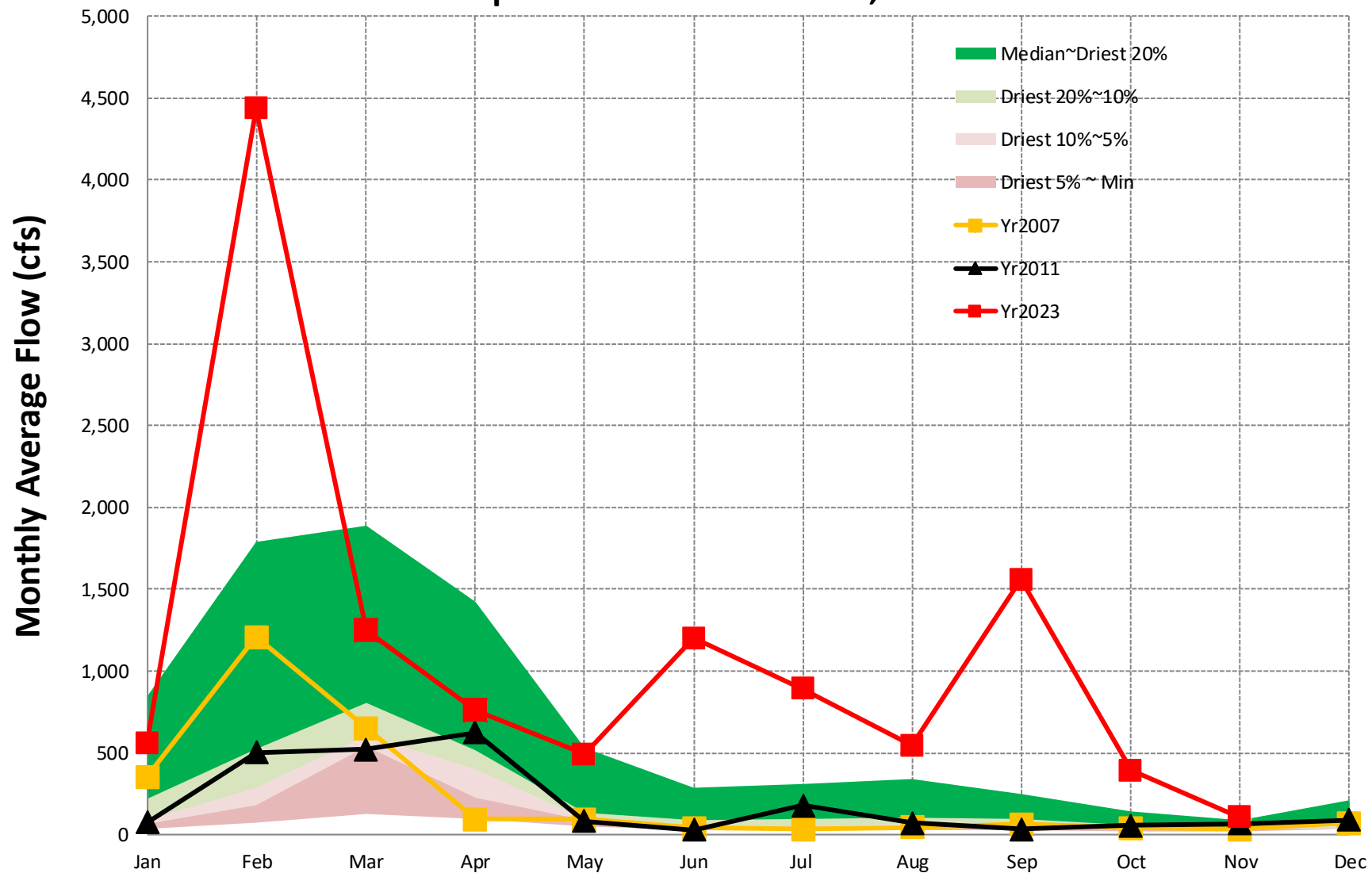


**Gage #29. USGS #02319000, Suwannee Basin,  
WITHLACOOCHEE RIVER near PINETTA, FL**



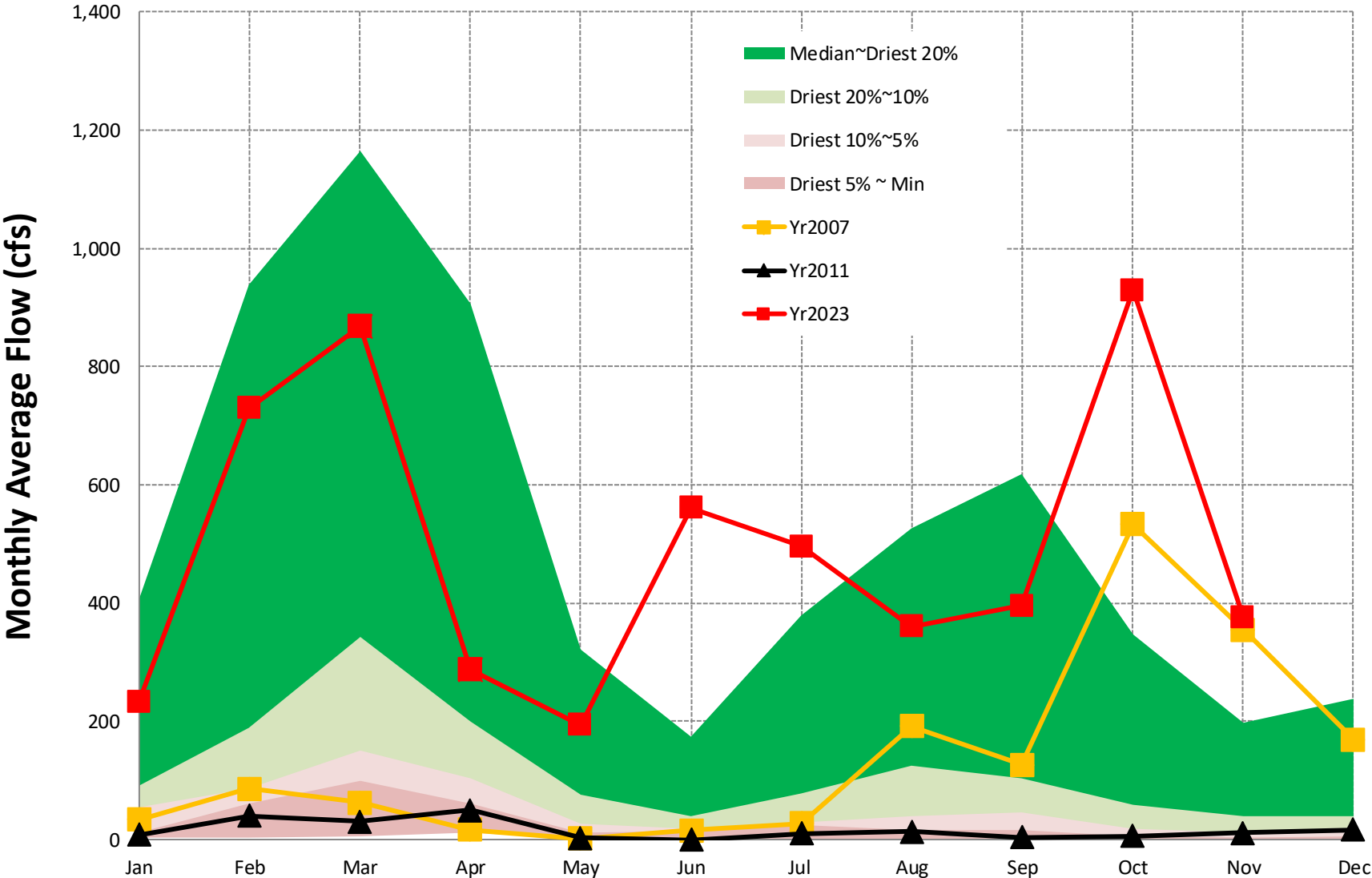
[Back to Map](#)

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



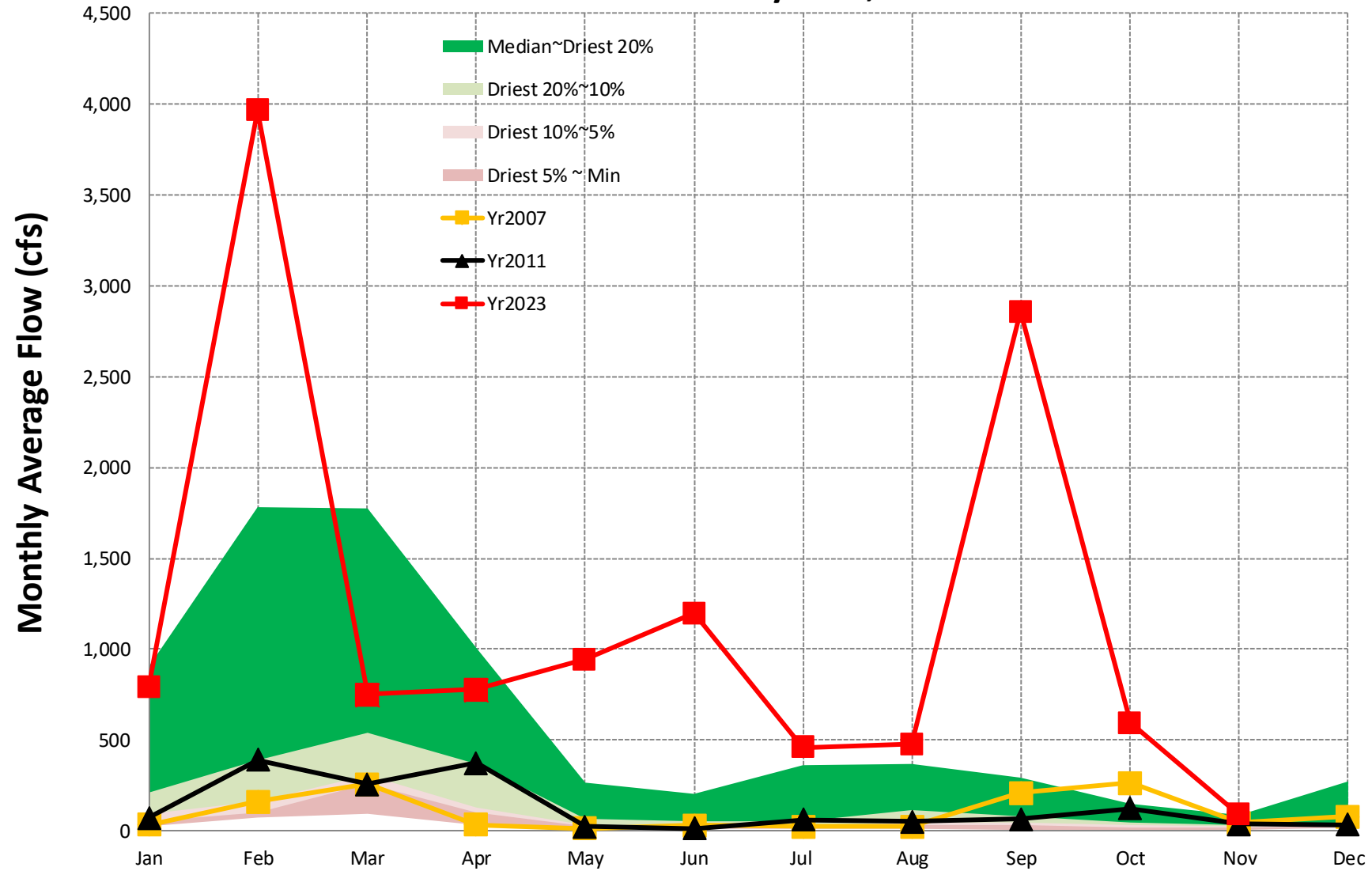
[Back to Map](#)

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



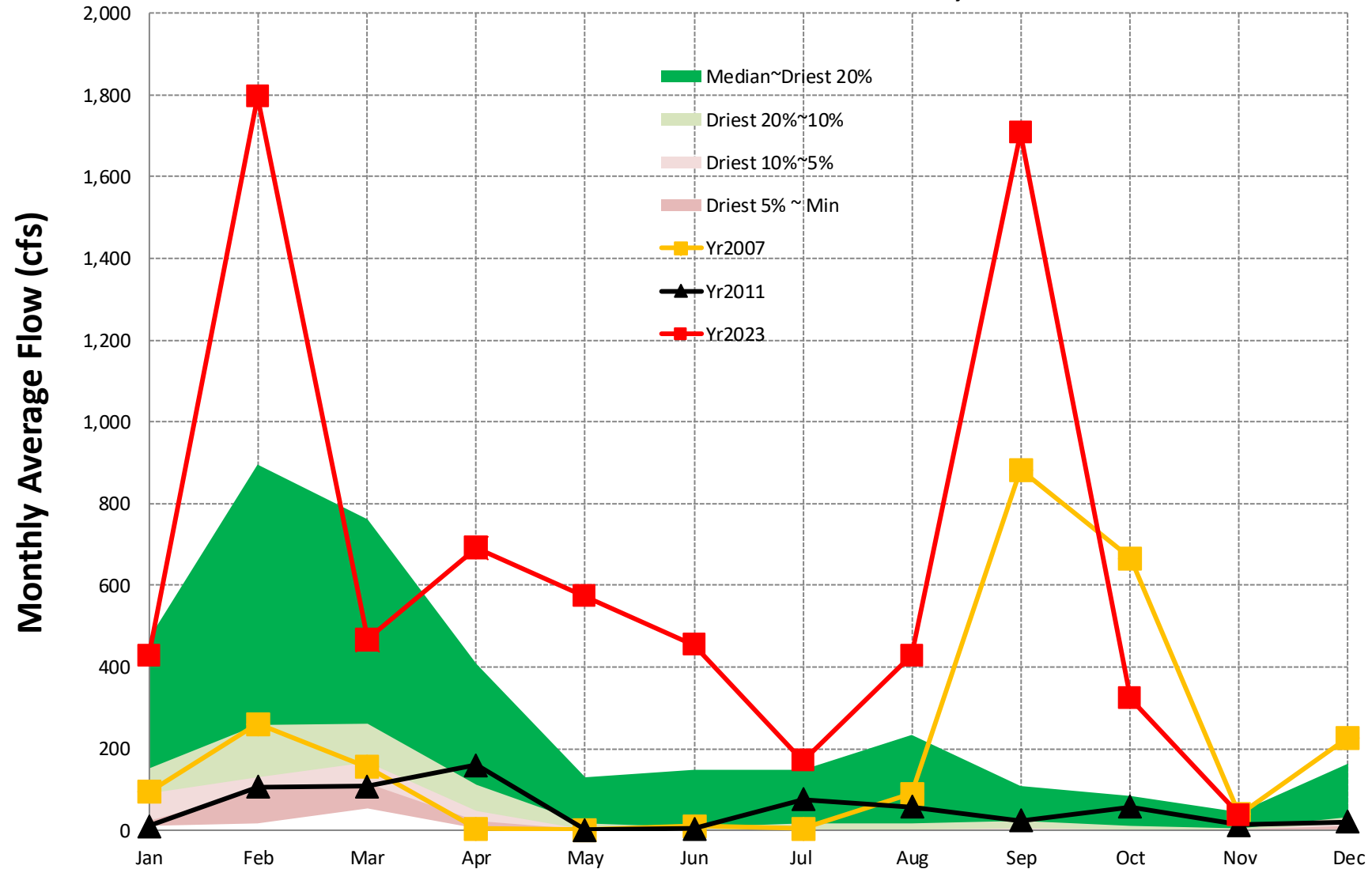
[Back to Map](#)

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



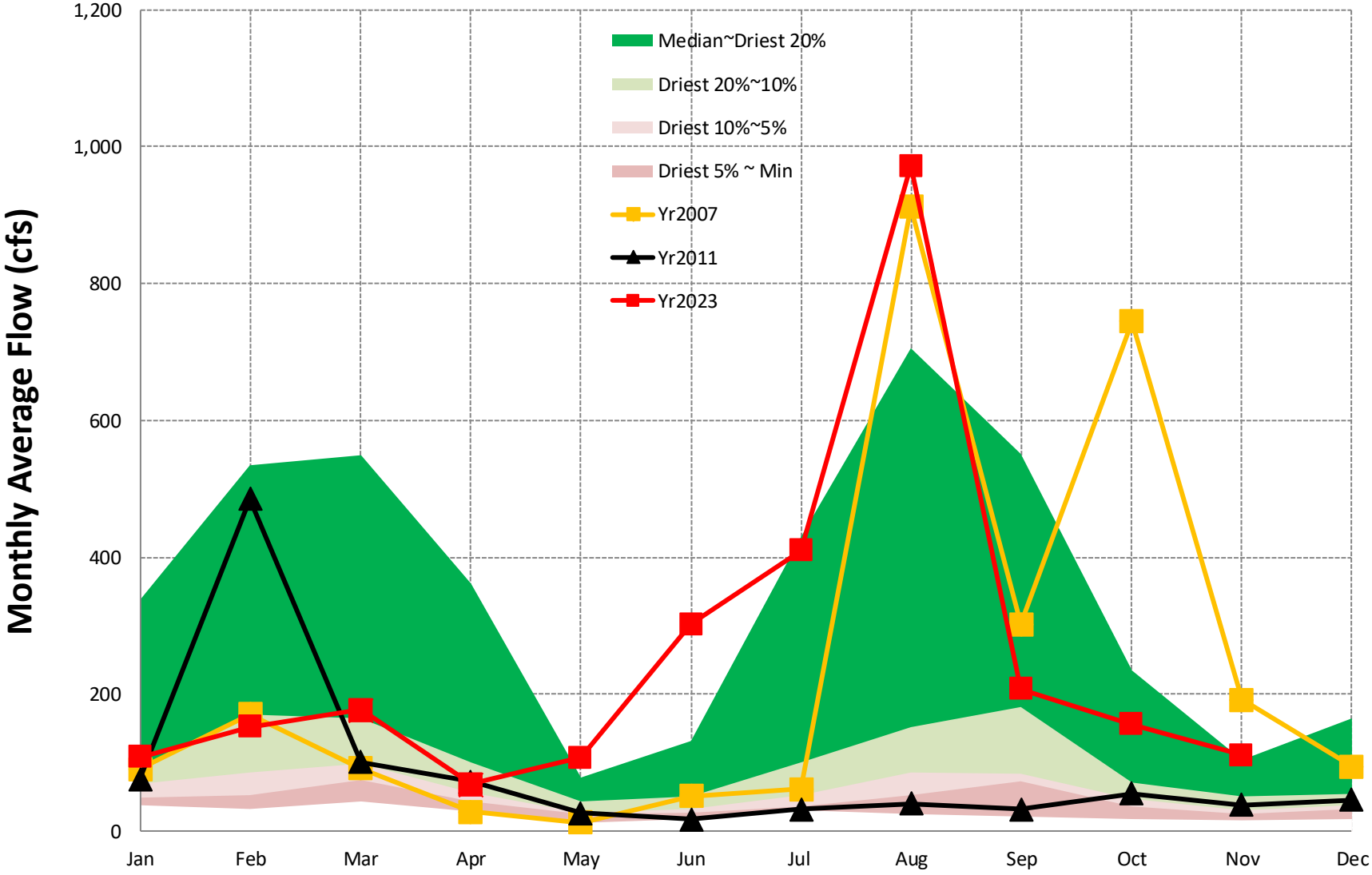
[Back to Map](#)

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



[Back to Map](#)

**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

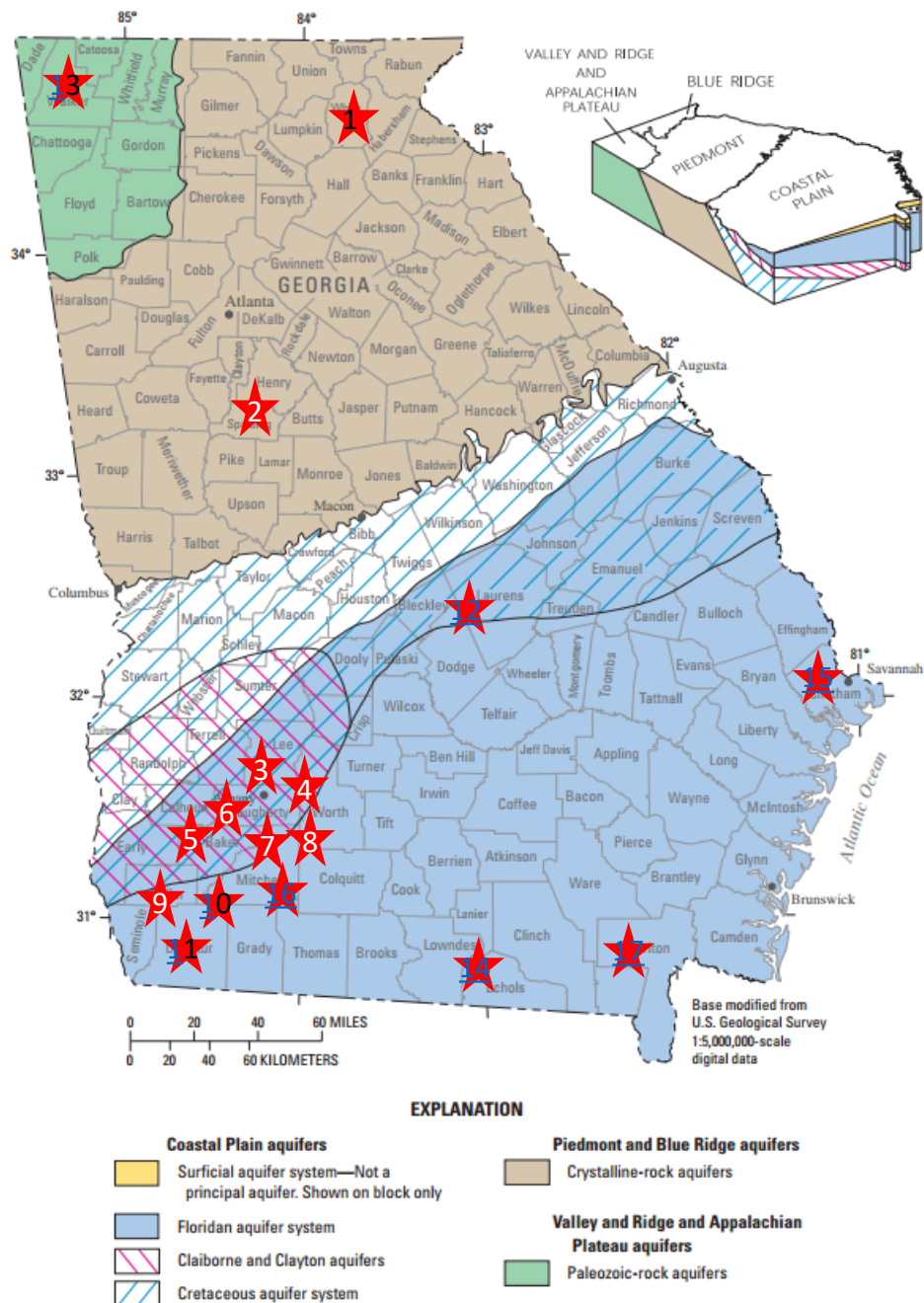
13. 03PP01

### Suwanee Basin

14. 19E009
17. 27E004

### Ogeechee Basin

15. 35P094



**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 2023 through November 2023;
- 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.

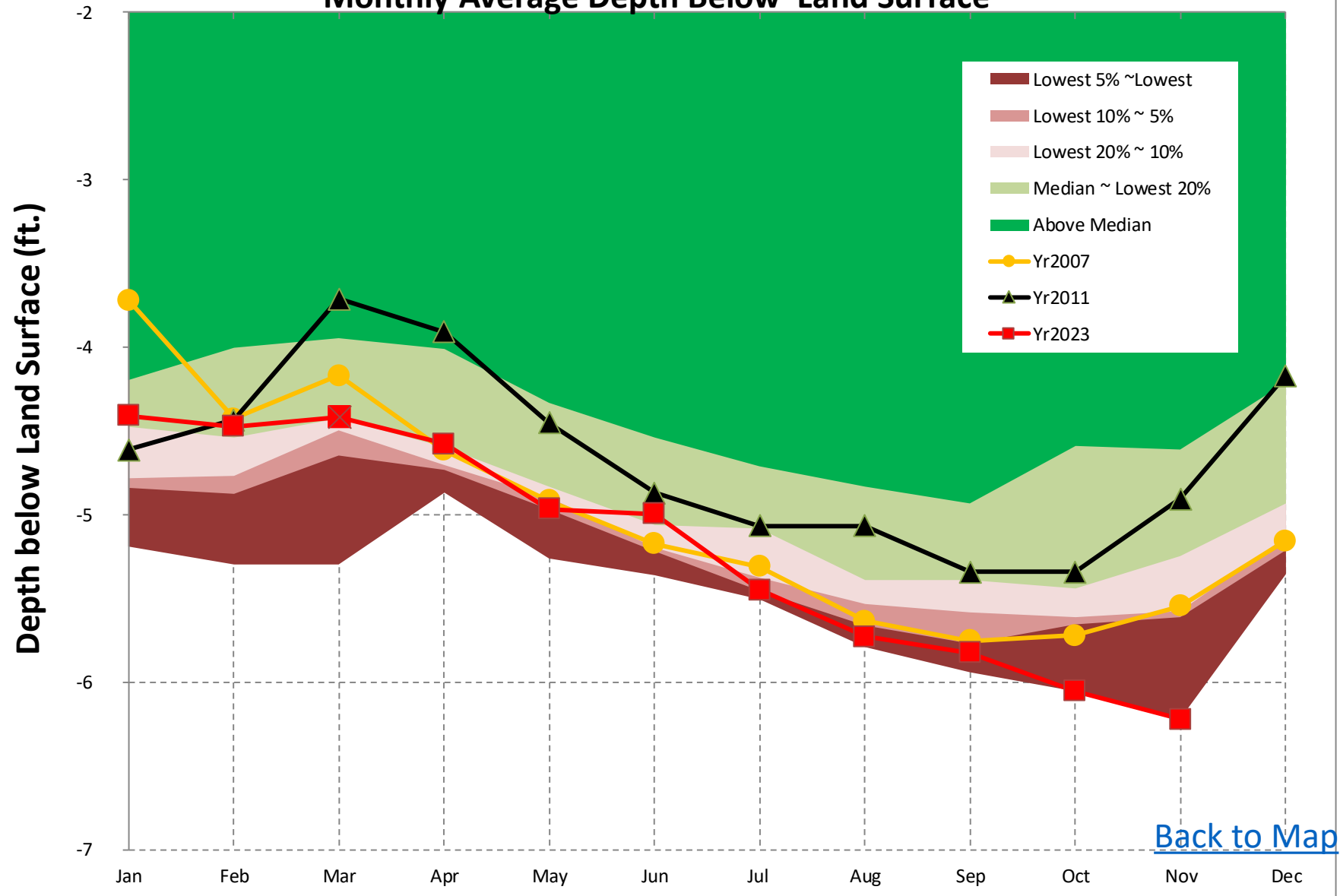
# How to Read the Groundwater Level Graphs

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

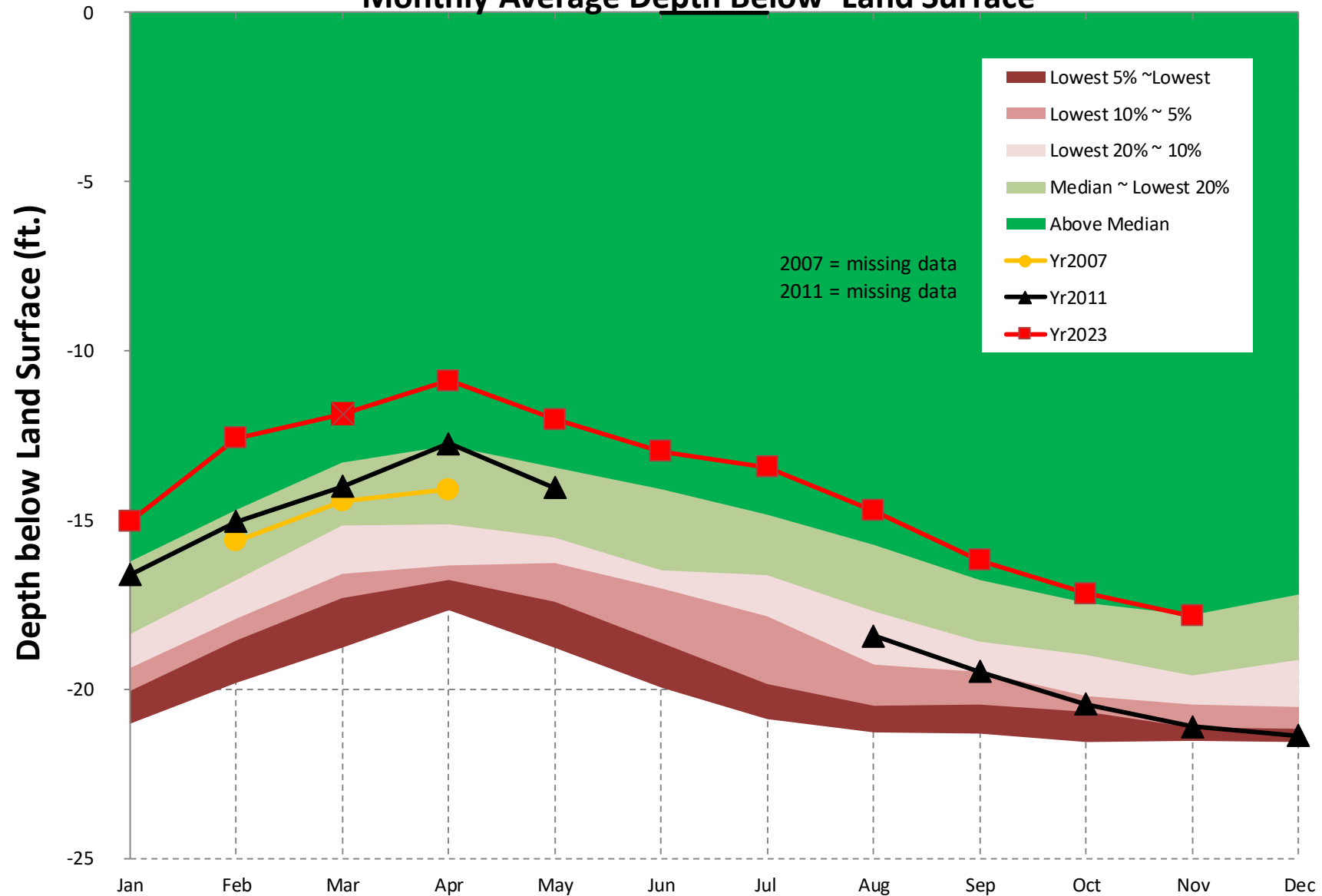
The groundwater level graph for Well #11, USGS 09F520 shows:

- The average monthly groundwater level in November 2023 was 49.9 ft below land surface. The statistical composite of all historical data for this well shows that monthly average groundwater levels in November have historically been lower than November 2023 about 14% of the time; about 86% of the time in November they have been higher.
- The average monthly groundwater level in November 2011 was 50.9 ft below land surface. The statistical composite of all historical data for this well shows that monthly average groundwater levels in November have historically been lower than November 2011 about 2% of the time; about 98% of the time in November they have been higher.
- The average monthly groundwater level in November 2007 was 50.9 ft below land surface. The statistical composite of all historical data for this well shows that monthly average groundwater levels in November have historically been lower than November 2007 about 2% of the time; about 98% of the time in November they have been higher.

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

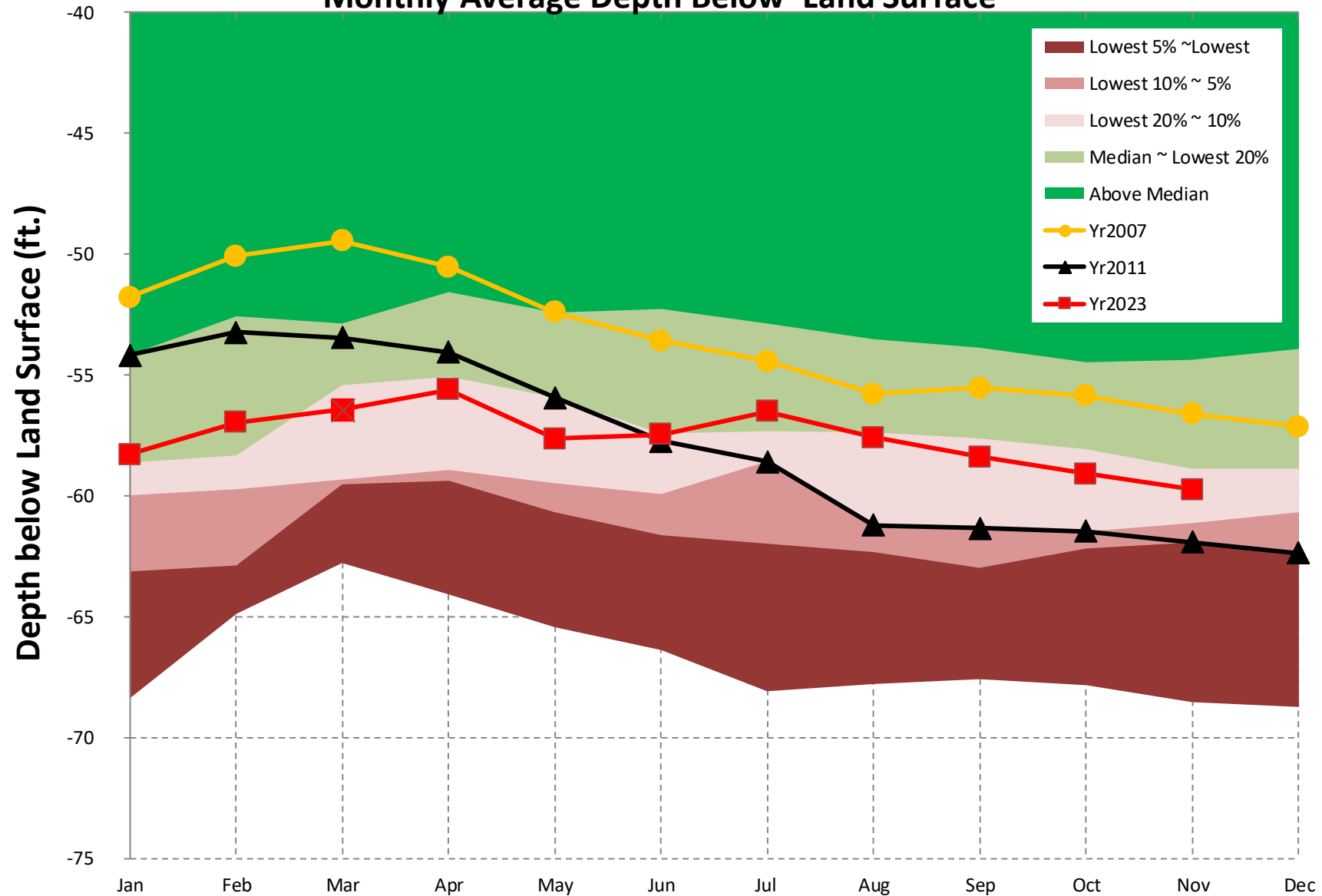


# Well #2, 11AA01, Surficial Aquifer in Flint Basin, Monthly Average Depth Below Land Surface



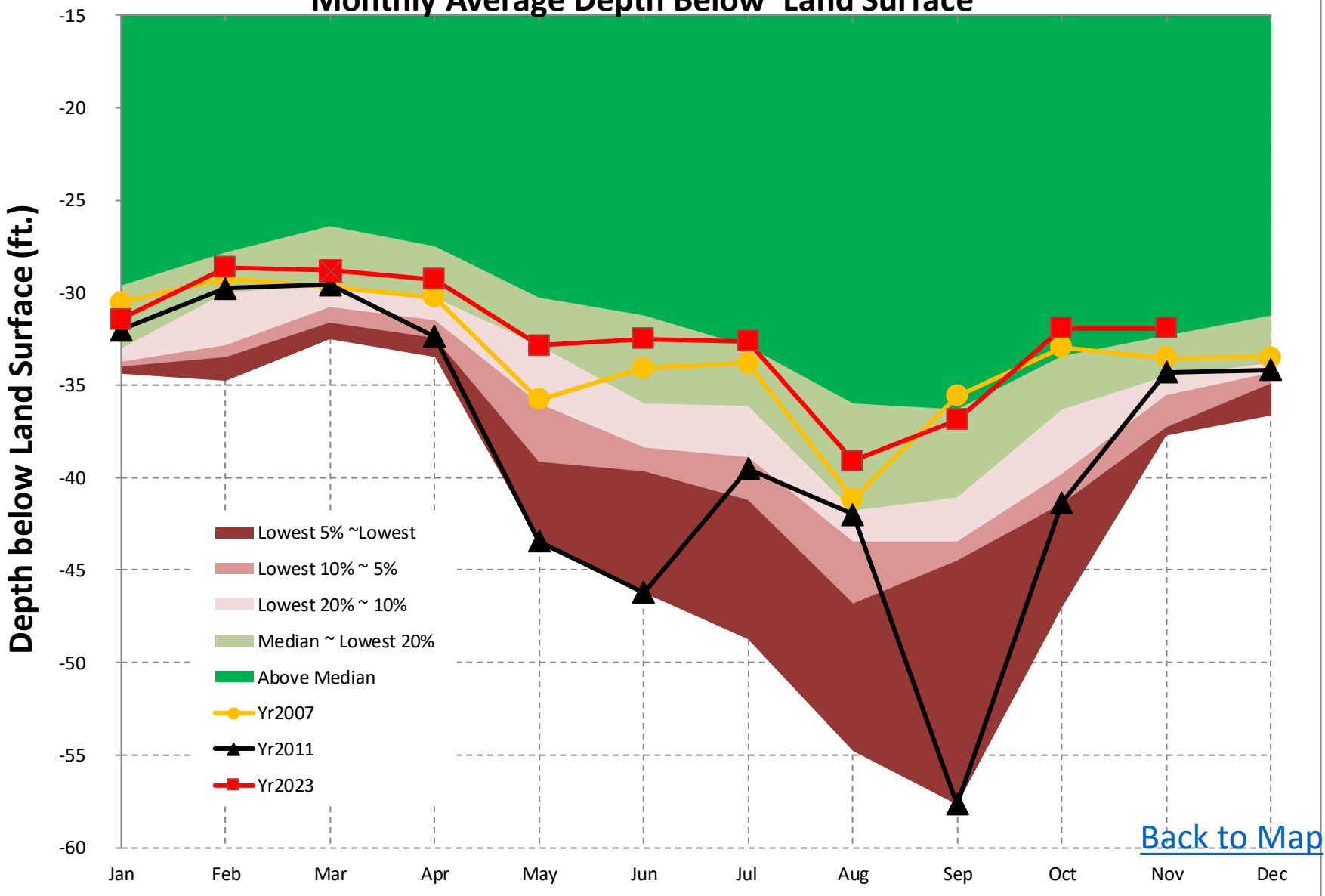
[Back to Map](#)

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

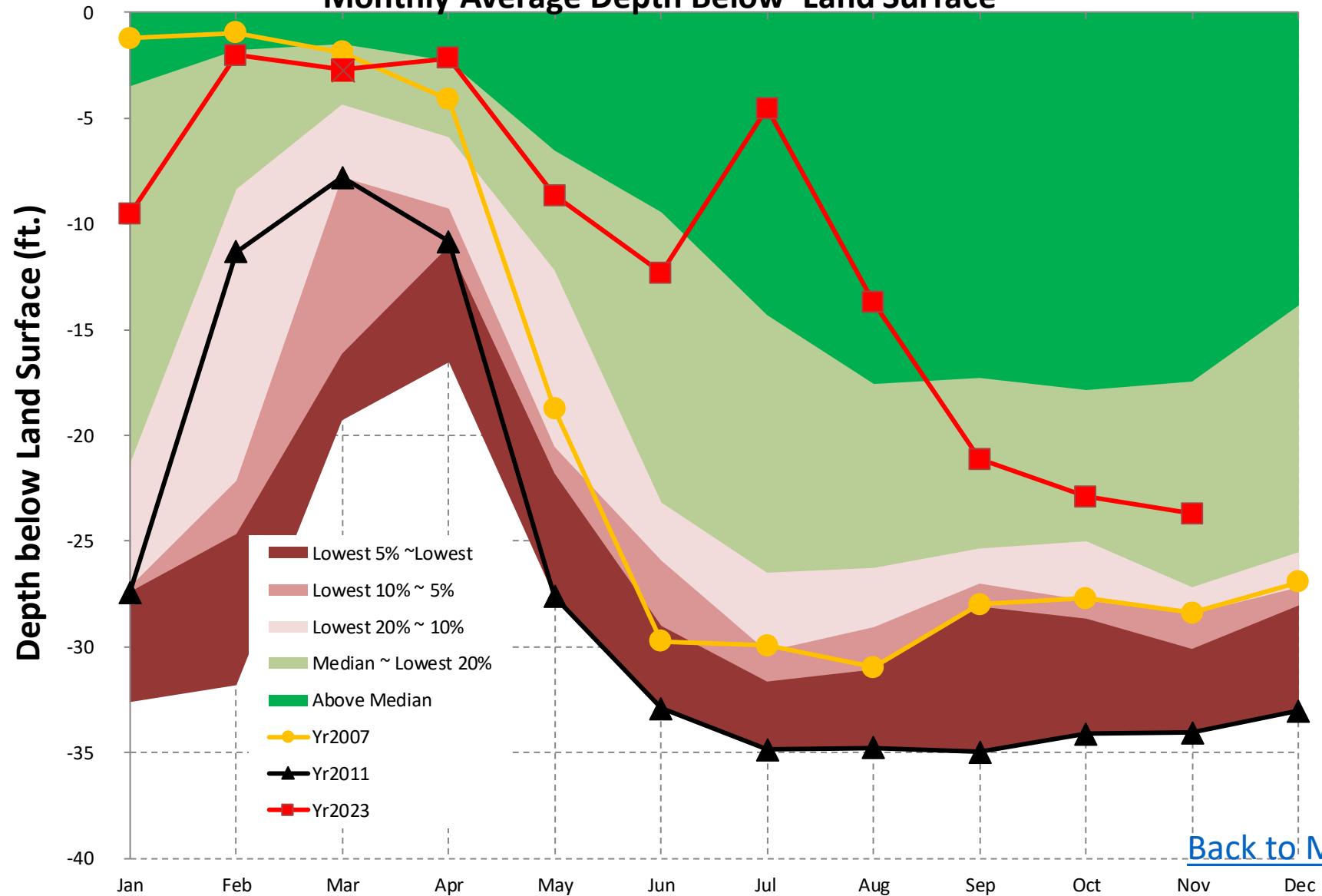


[Back to Map](#)

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

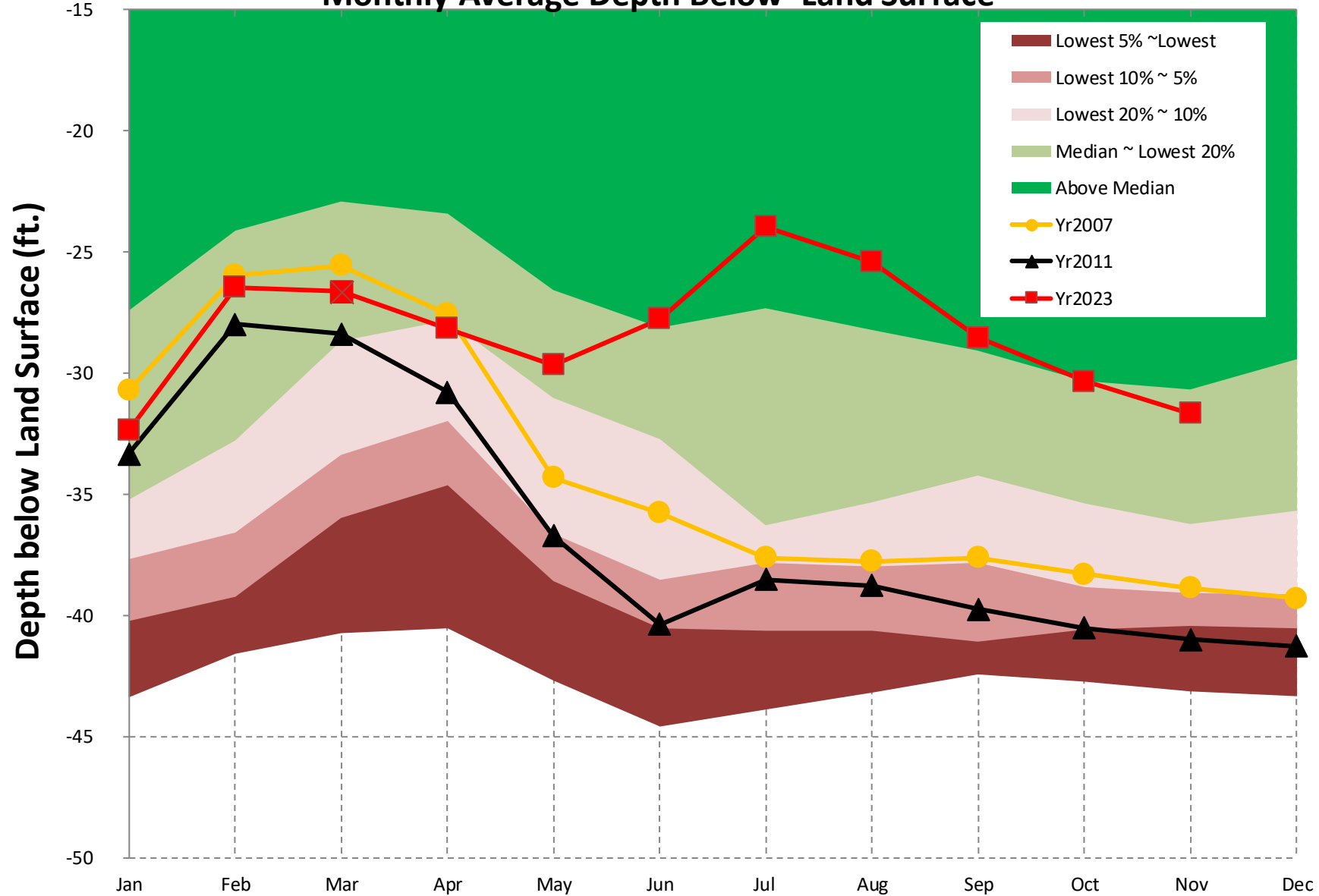


# Well #5, 08K001, Floridan Aquifer in Flint Basin, Monthly Average Depth Below Land Surface



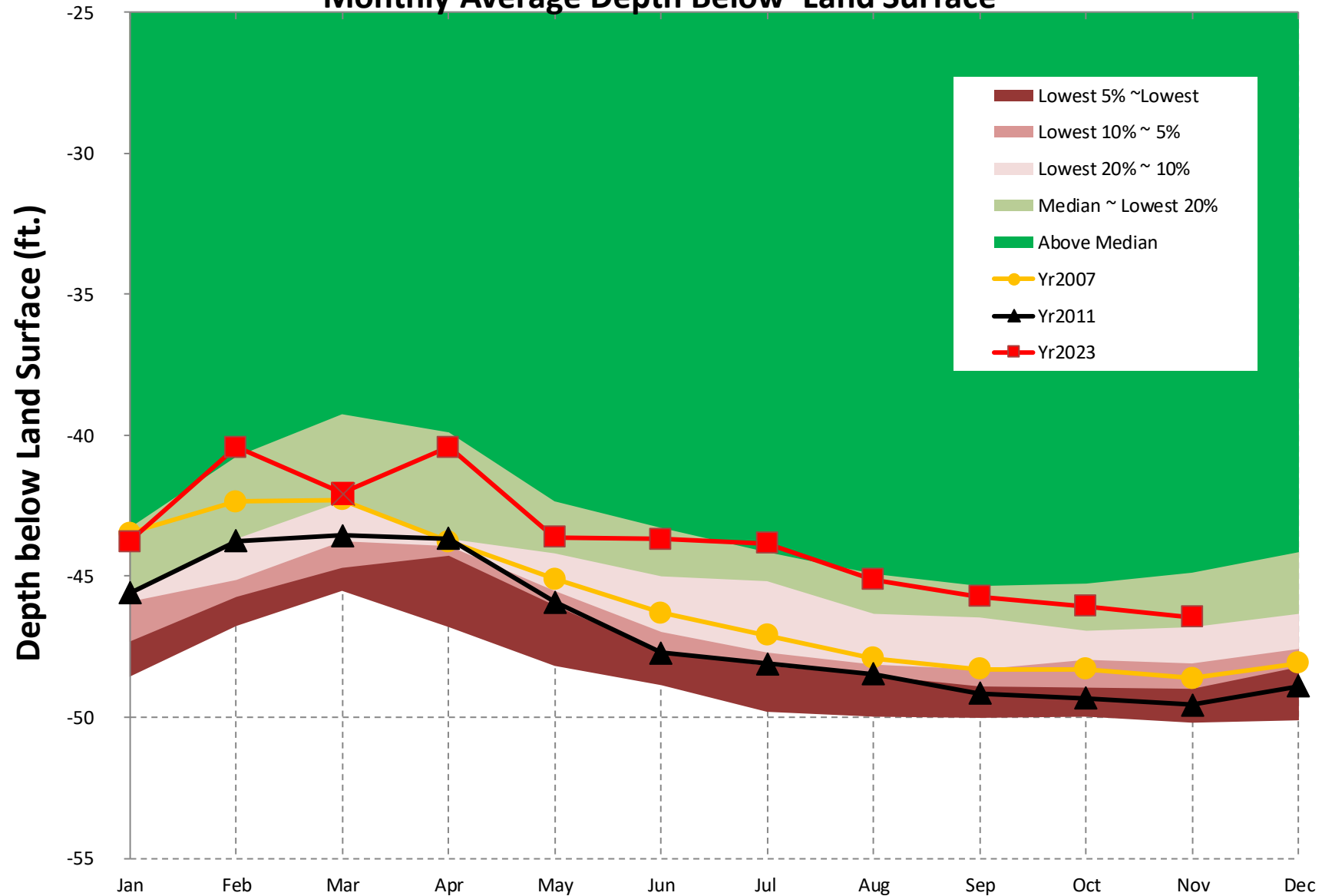
[Back to Map](#)

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



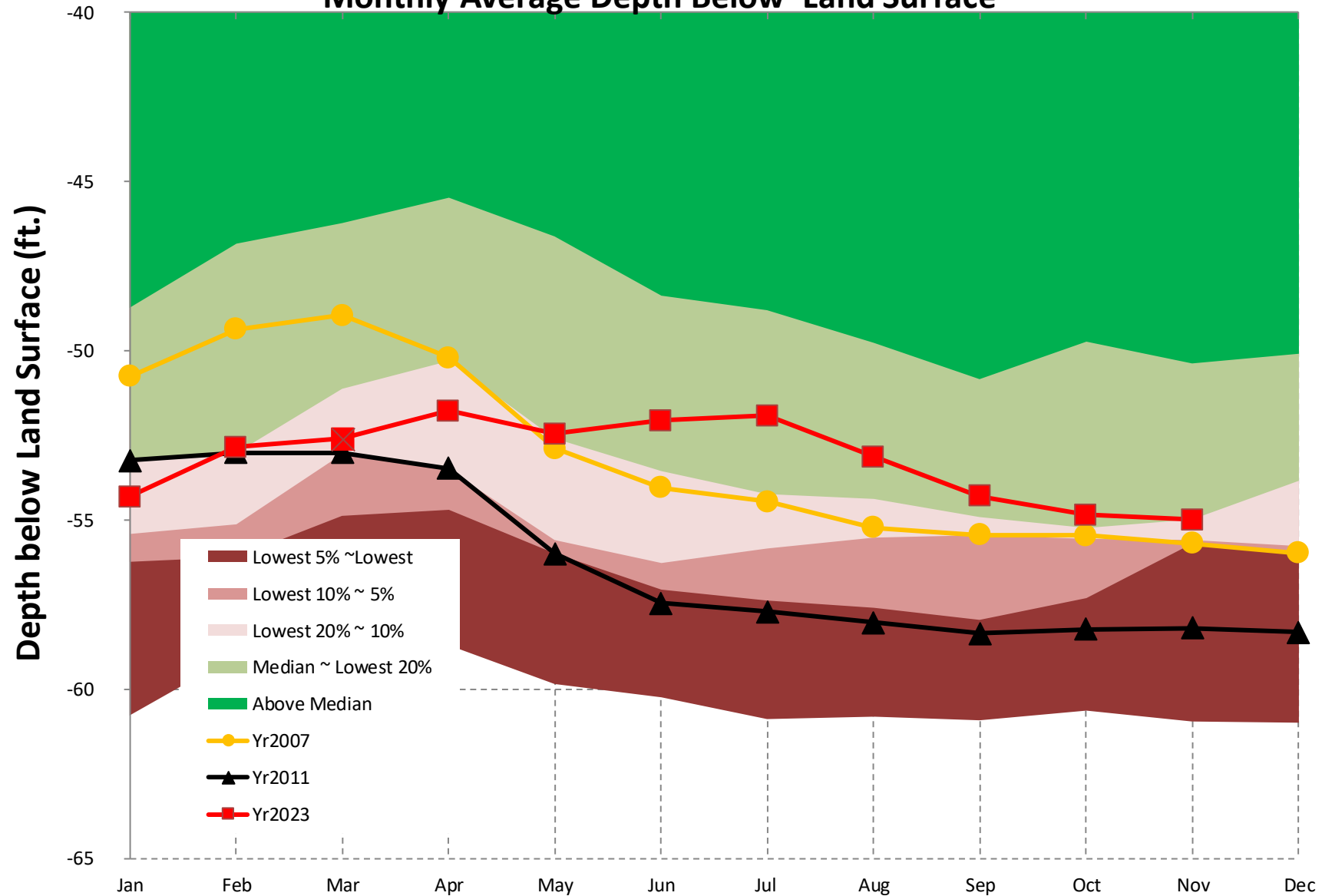
[Back to Map](#)

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



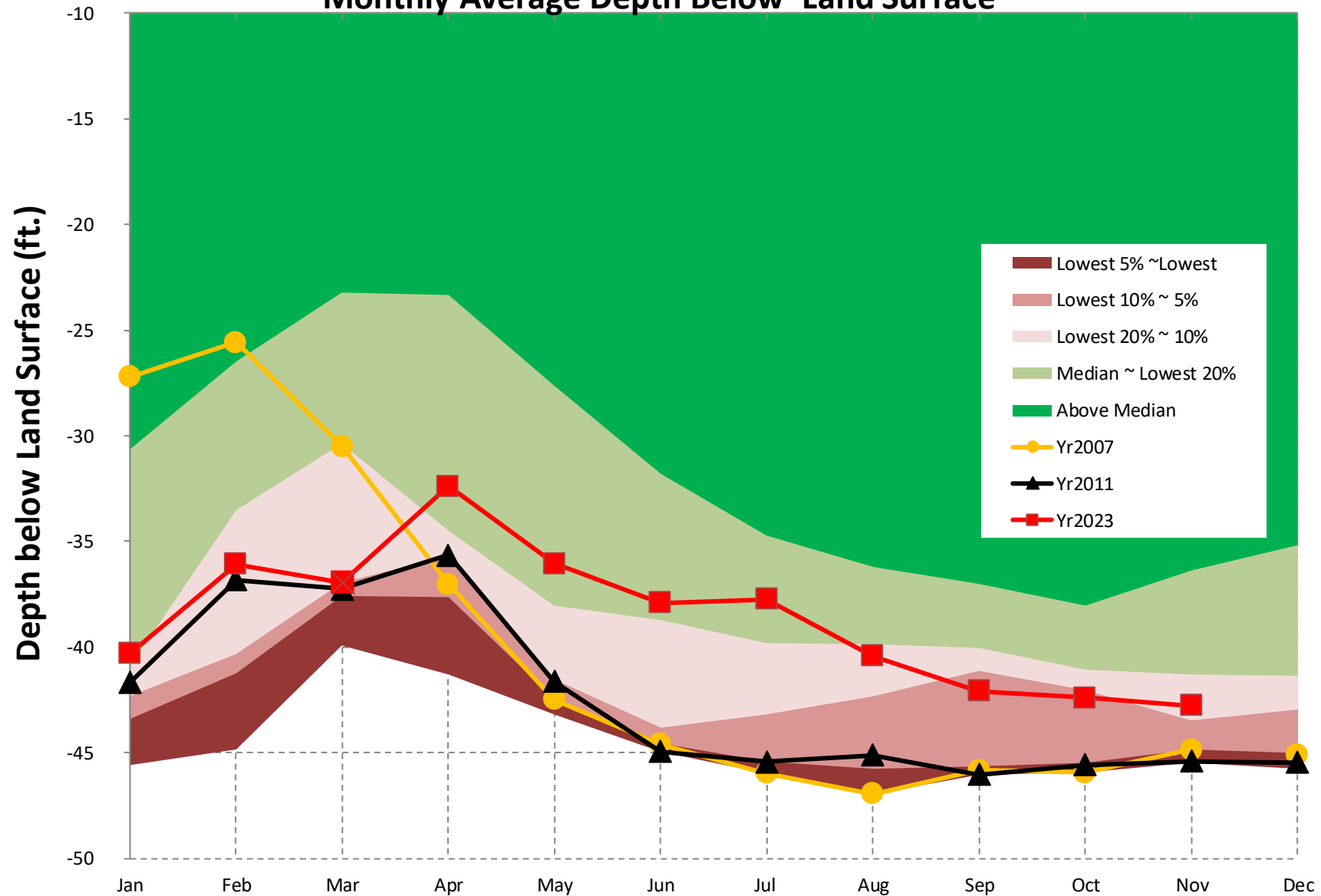
[Back to Map](#)

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



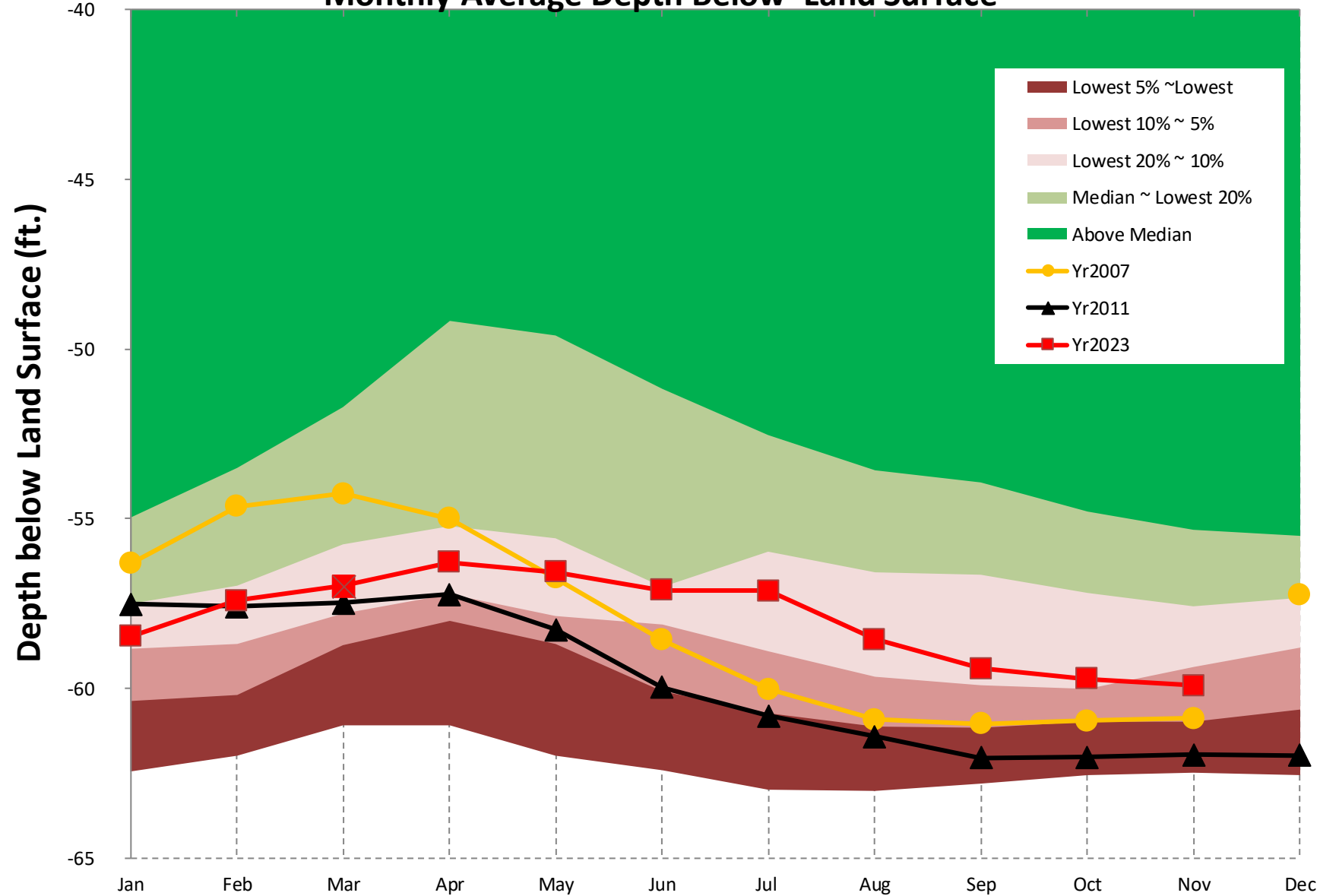
[Back to Map](#)

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



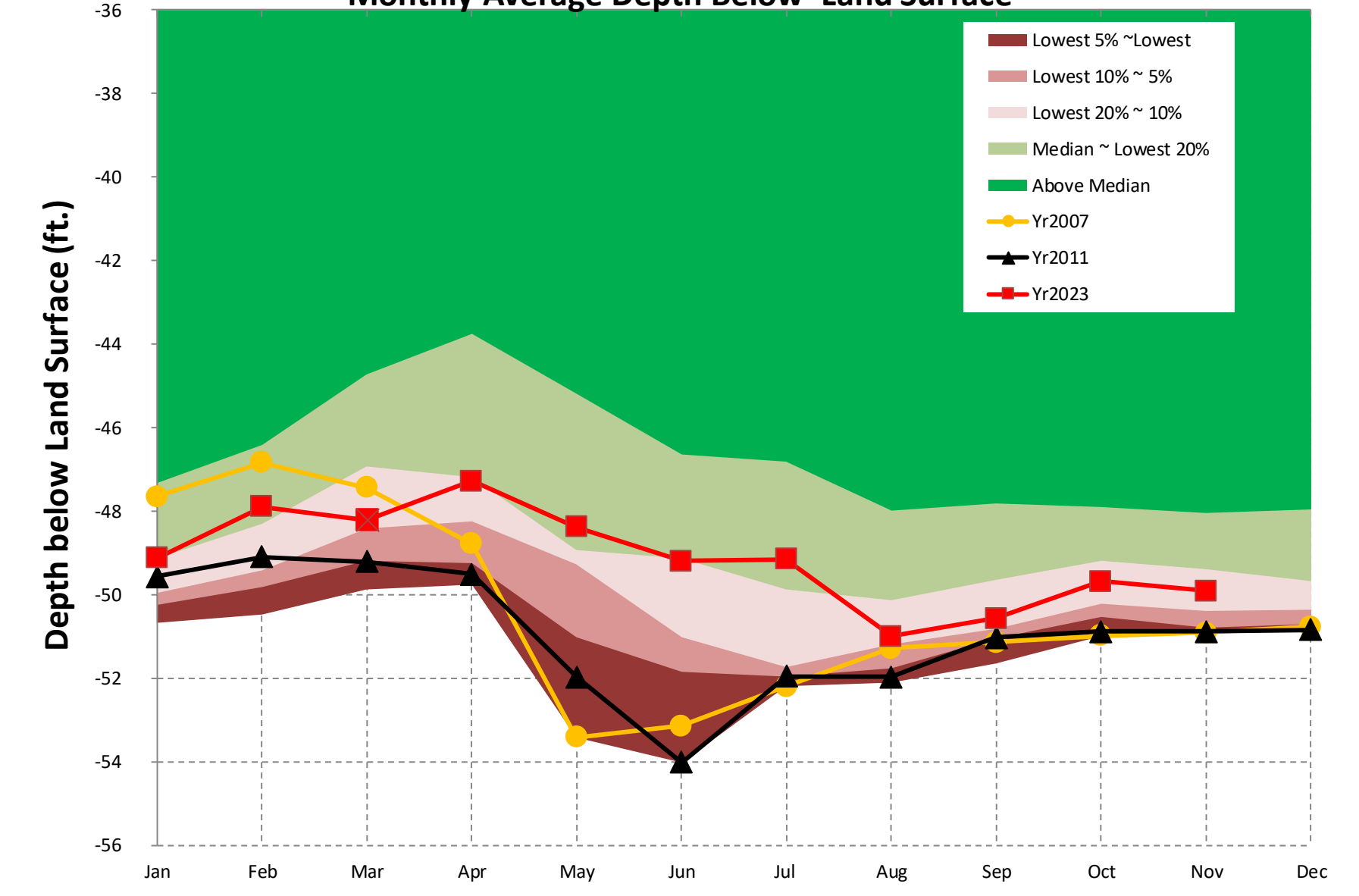
[Back to Map](#)

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

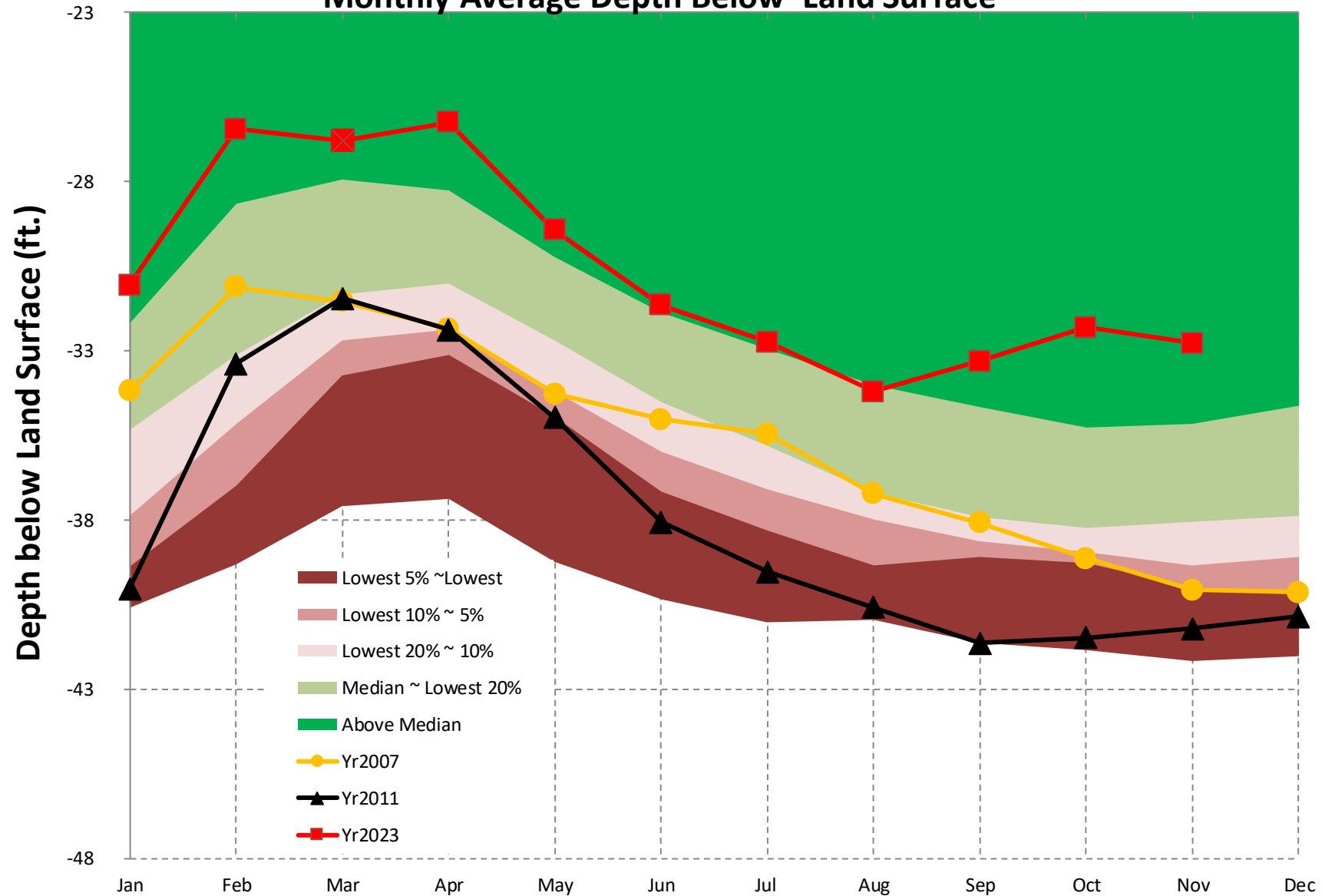


[Back to Map](#)

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

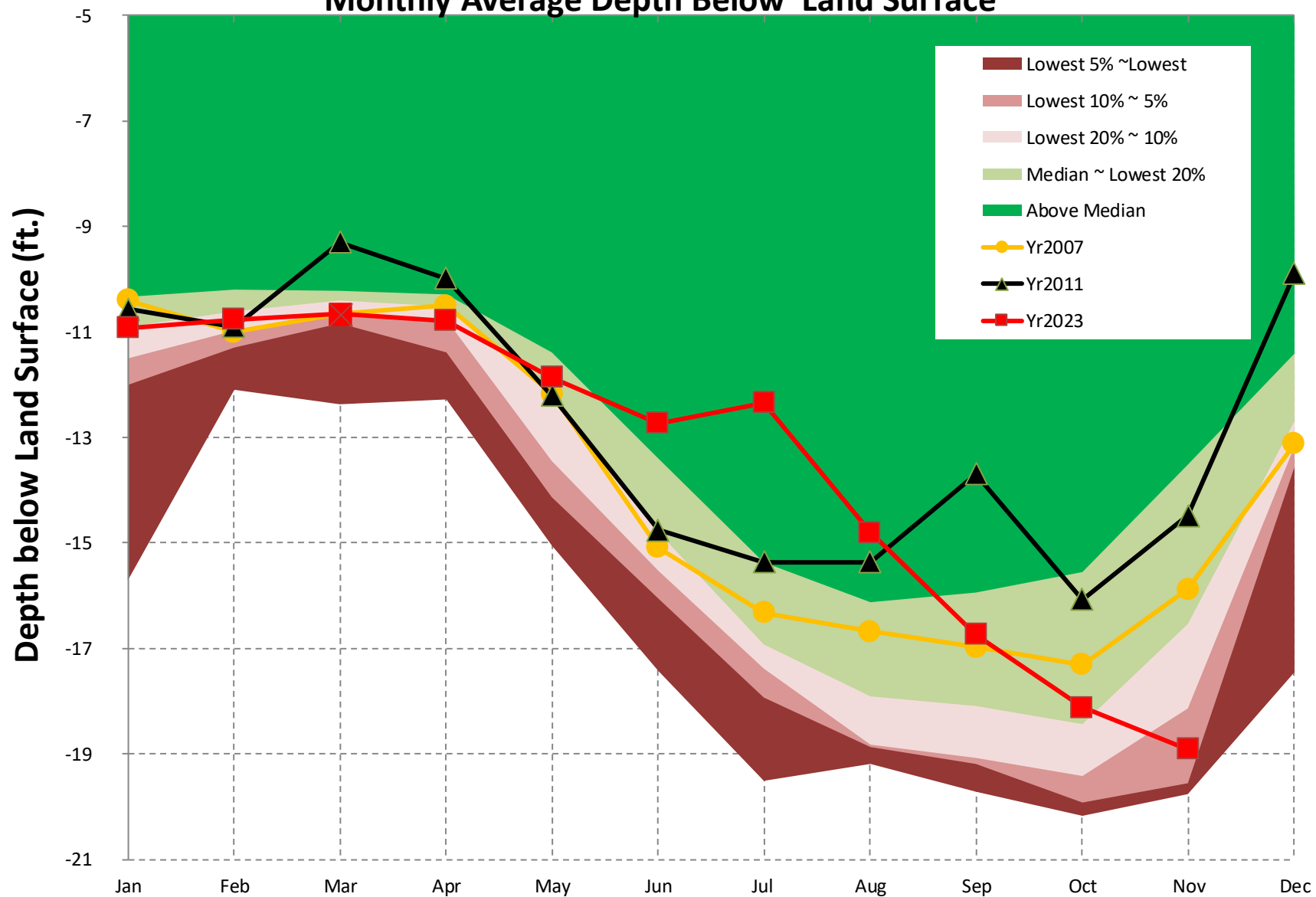


# Well #12, 21T001, Floridan Aquifer in Ocone Basin, Monthly Average Depth Below Land Surface



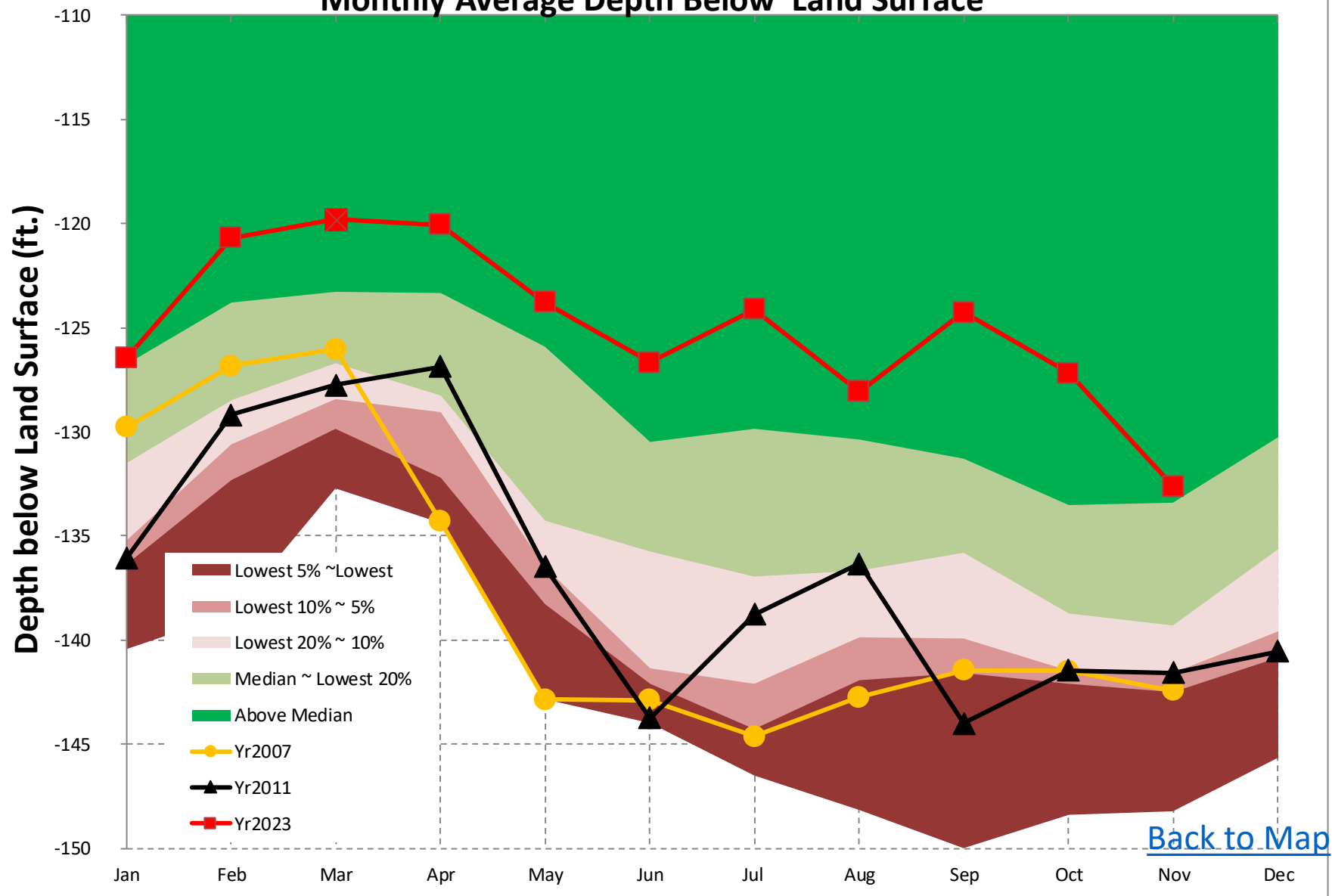
[Back to Map](#)

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



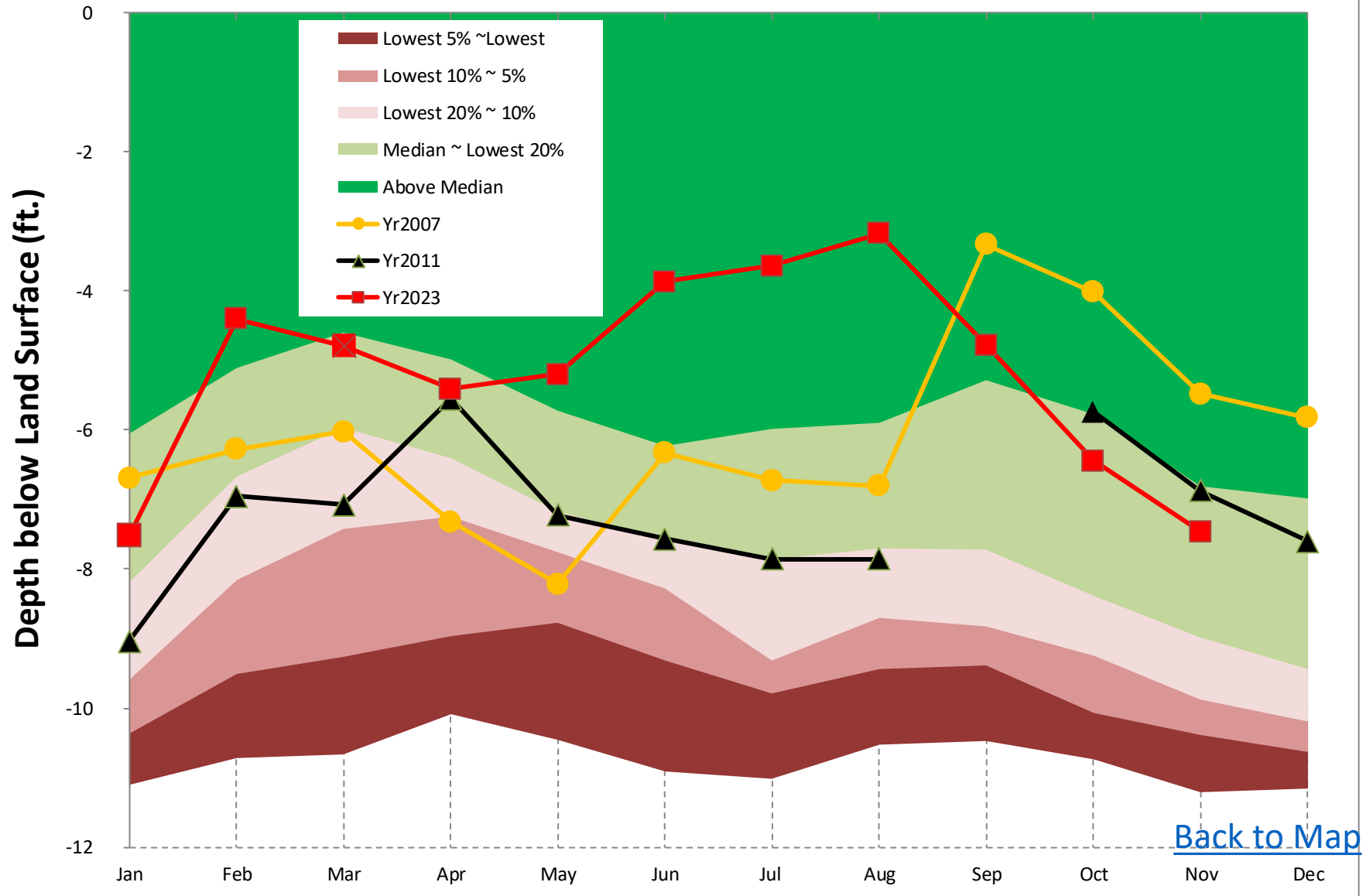
[Back to Map](#)

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



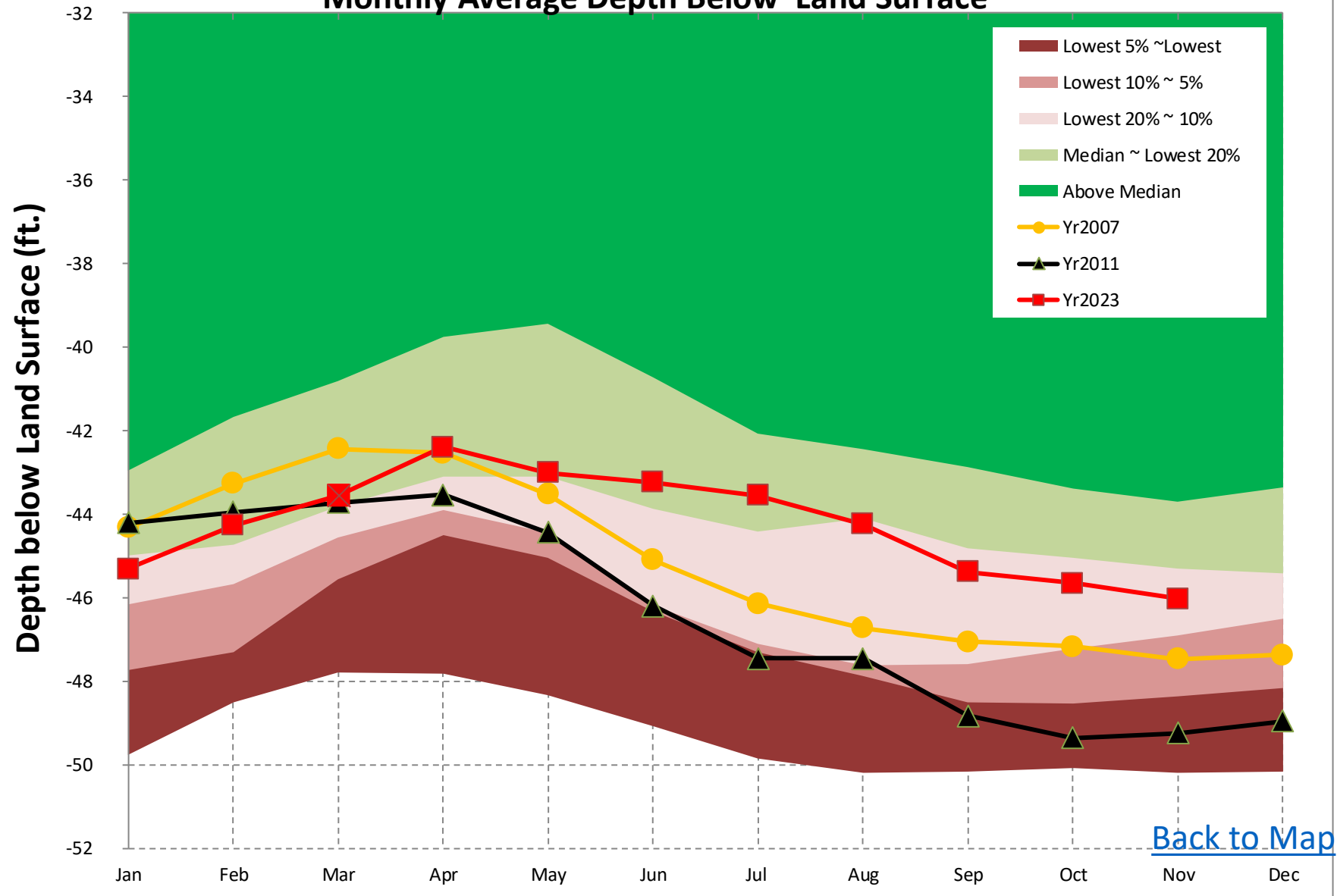
[Back to Map](#)

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



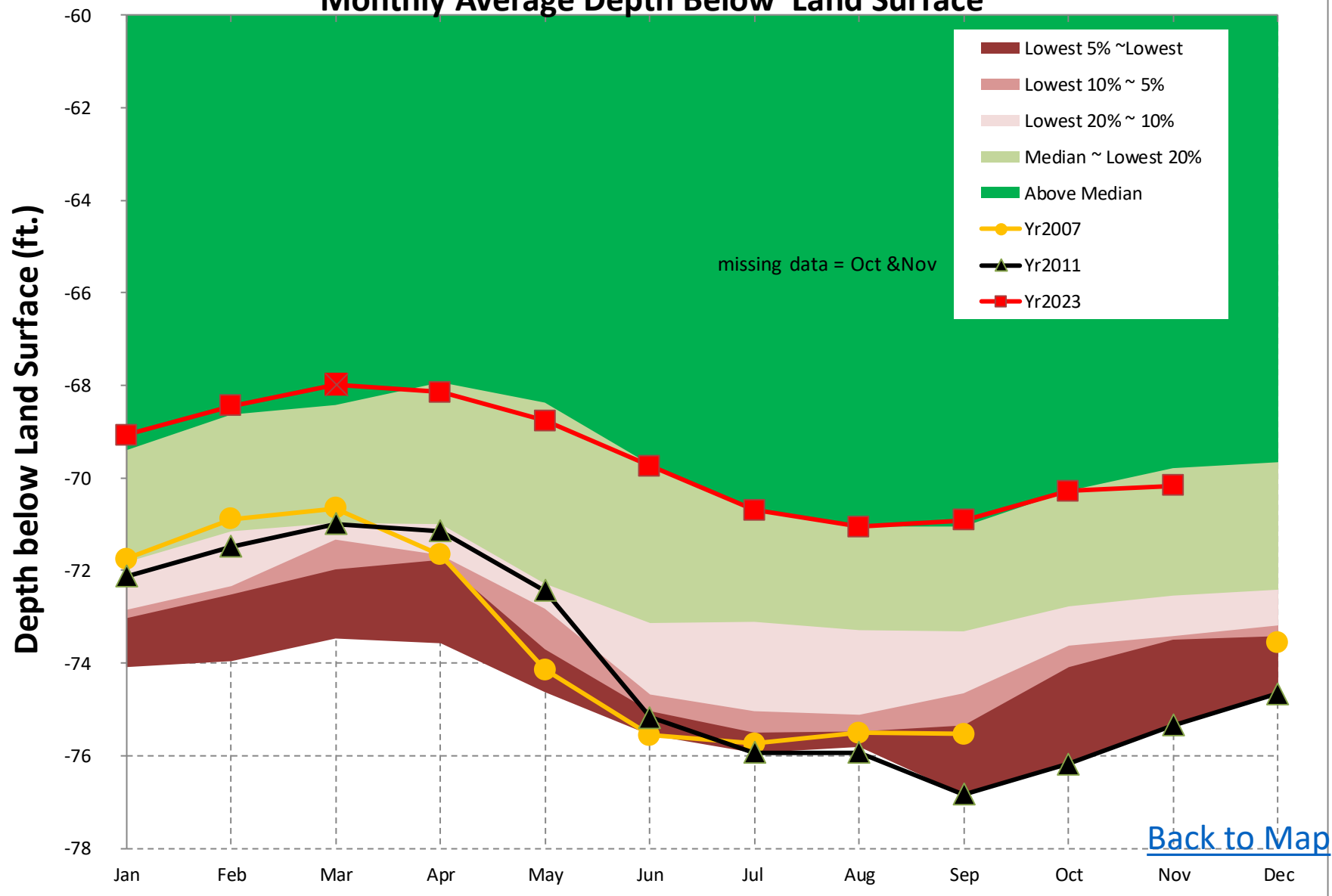
[Back to Map](#)

## 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



# 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

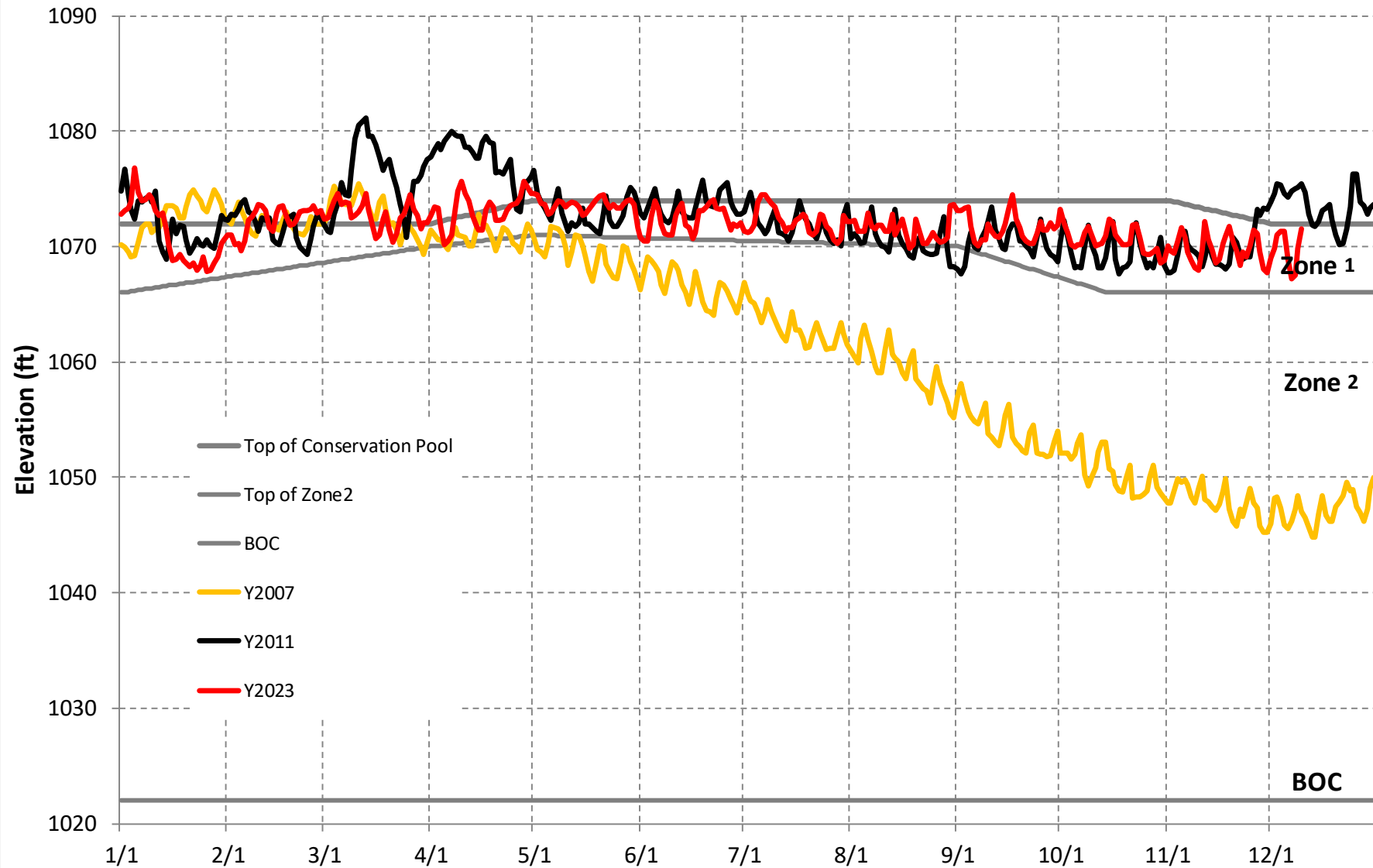


EPD monitors the water levels of seven reservoirs to assess drought conditions.

# Reservoir Elevation Graphs

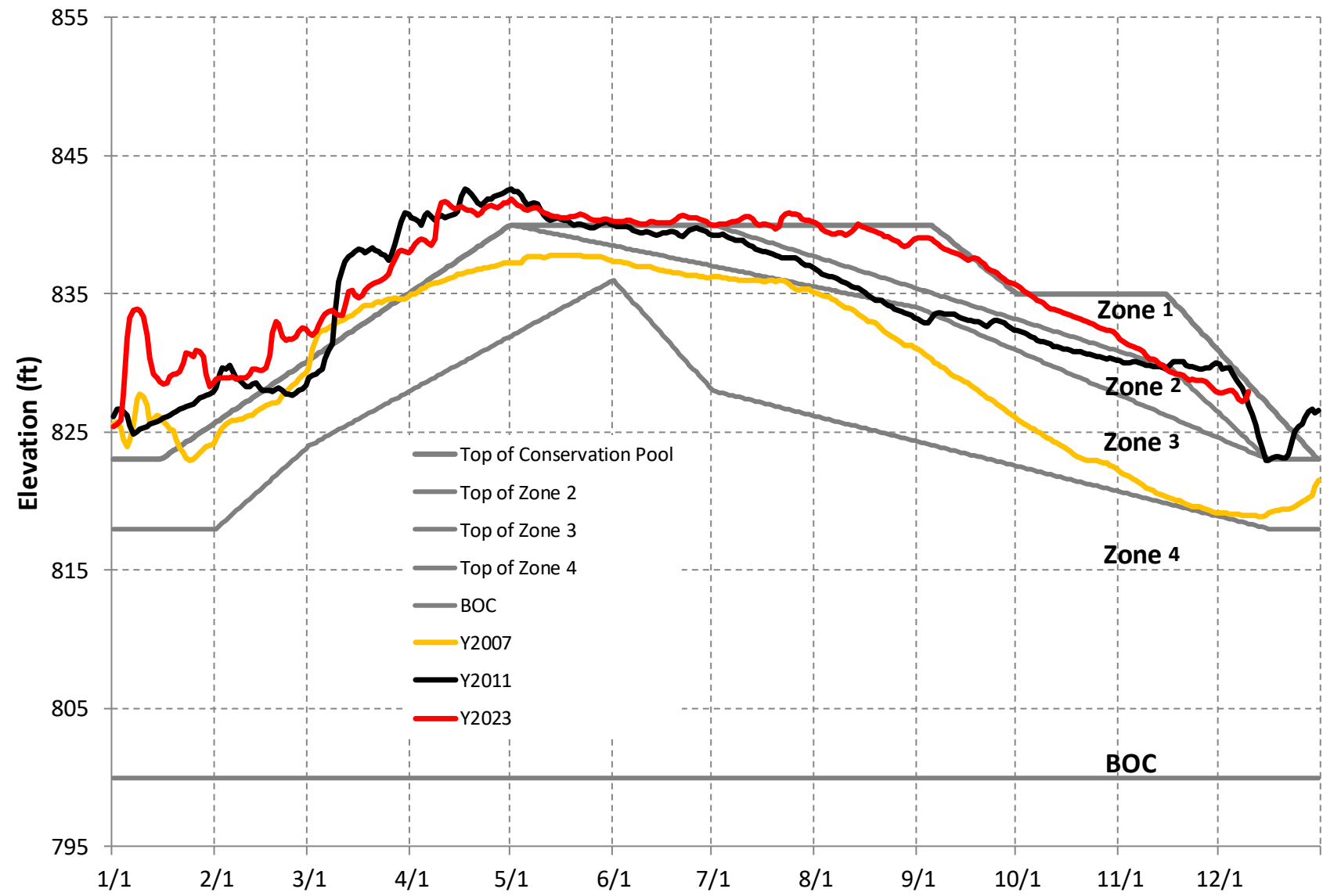
- The following graphs show the reservoir elevation curves for January 2023 through November 2023.
- Each graph also shows the Action Zone Divides (or Levels) for each reservoir
  - Zone 1 is the top layer of the conservation pool
  - Zone 2 is the layer below Zone 1
  - Zone 4 is the lowest layer in the conservation pool
  - There is no conservation storage below the bottom of Zone 4
- To put 2023 reservoir elevations into perspective, elevations for 2007 and 2011 are also shown.

## CARTERS ELEVATION

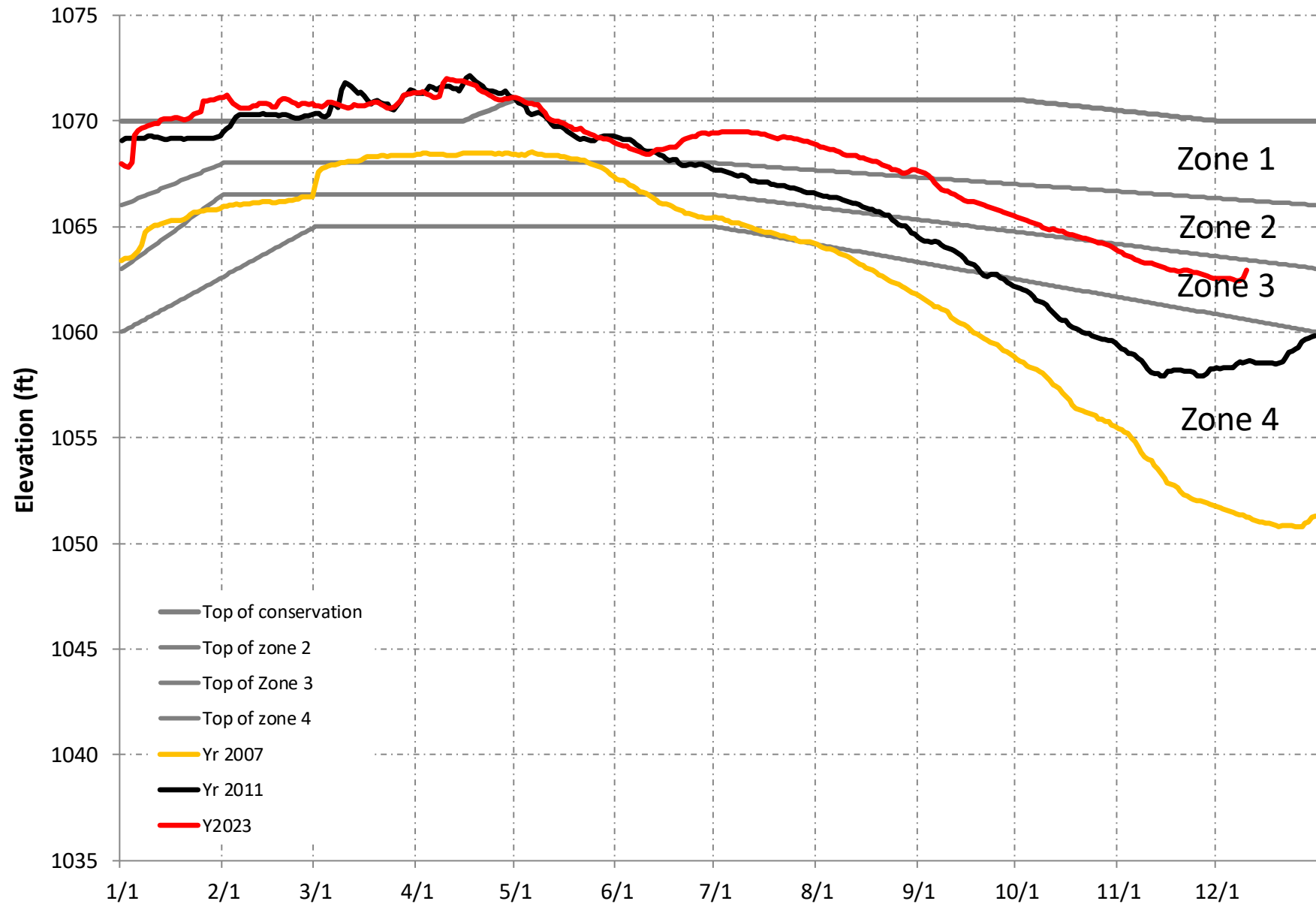


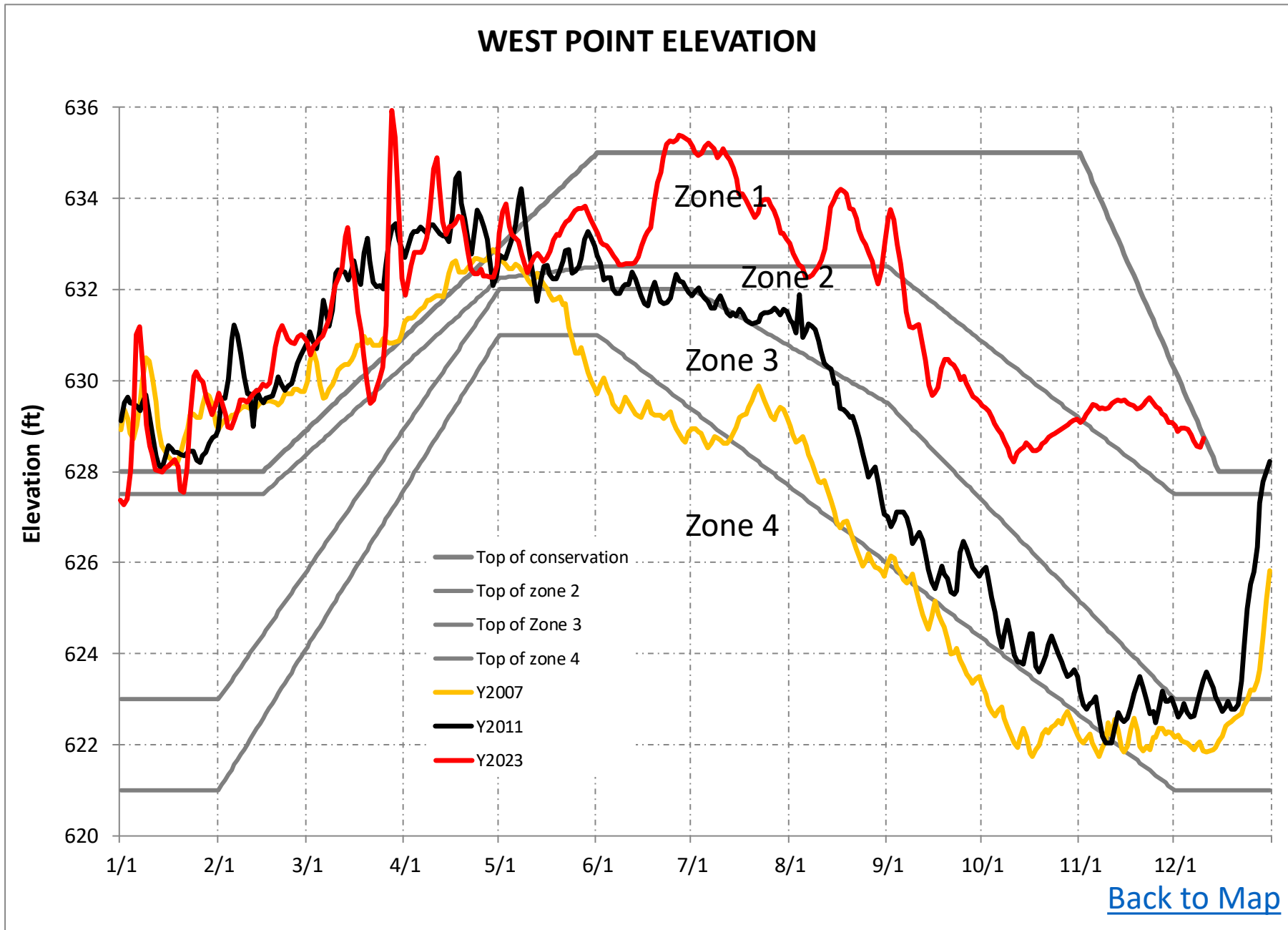
[Back to Map](#)

# ALLATOONA ELEVATION

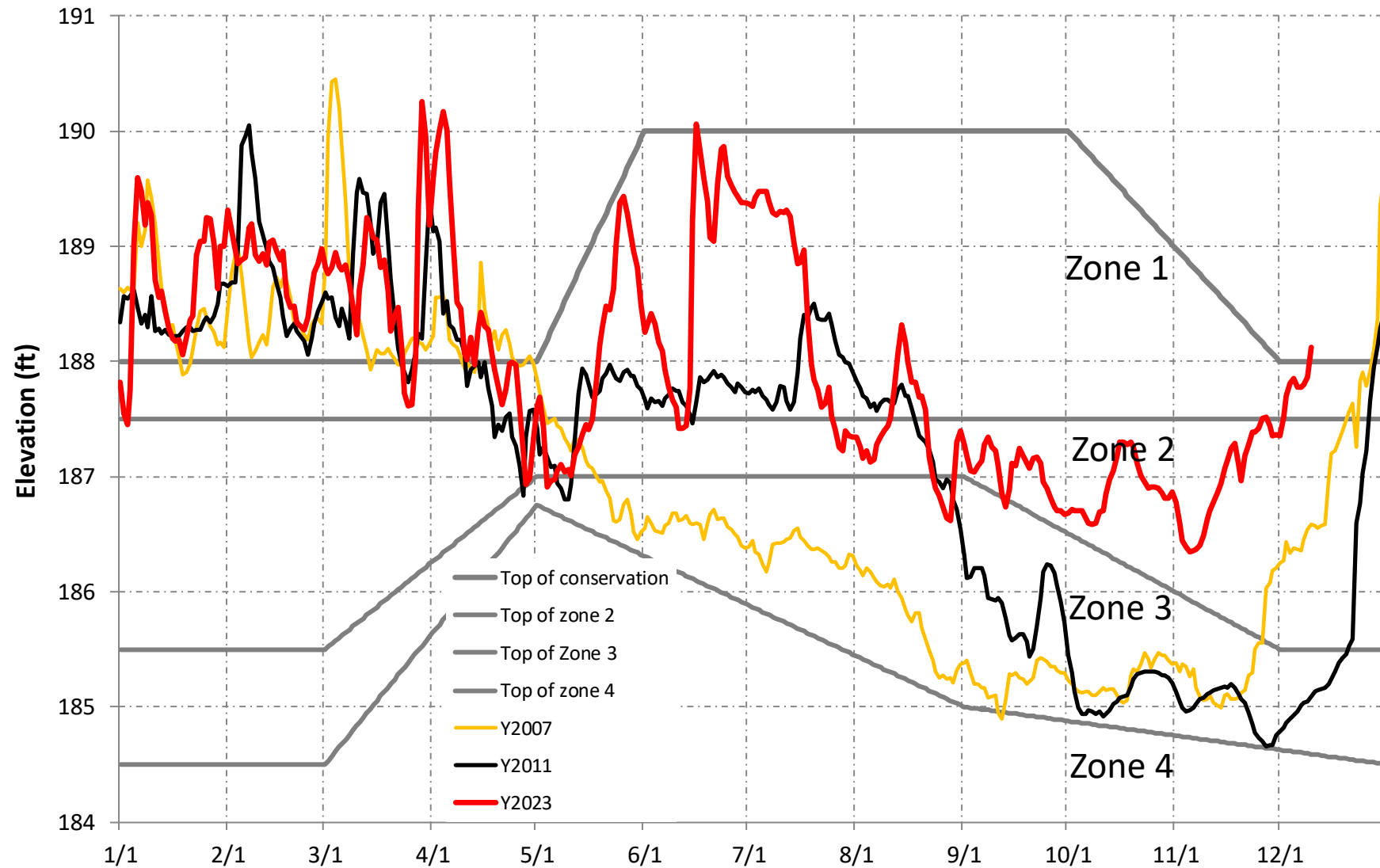


# LAKE LANIER ELEVATION



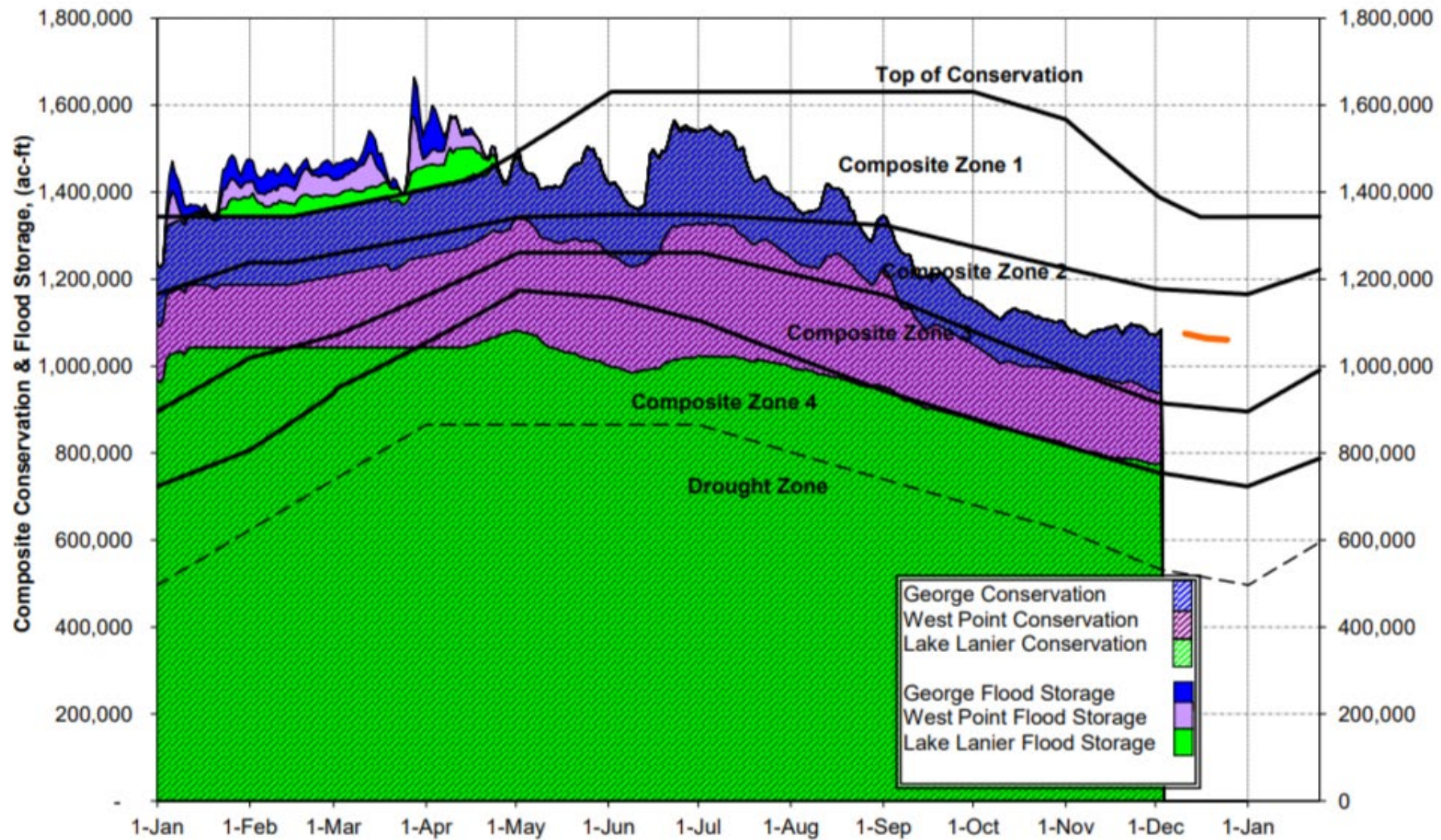


## W.F.GEORGE ELEVATION

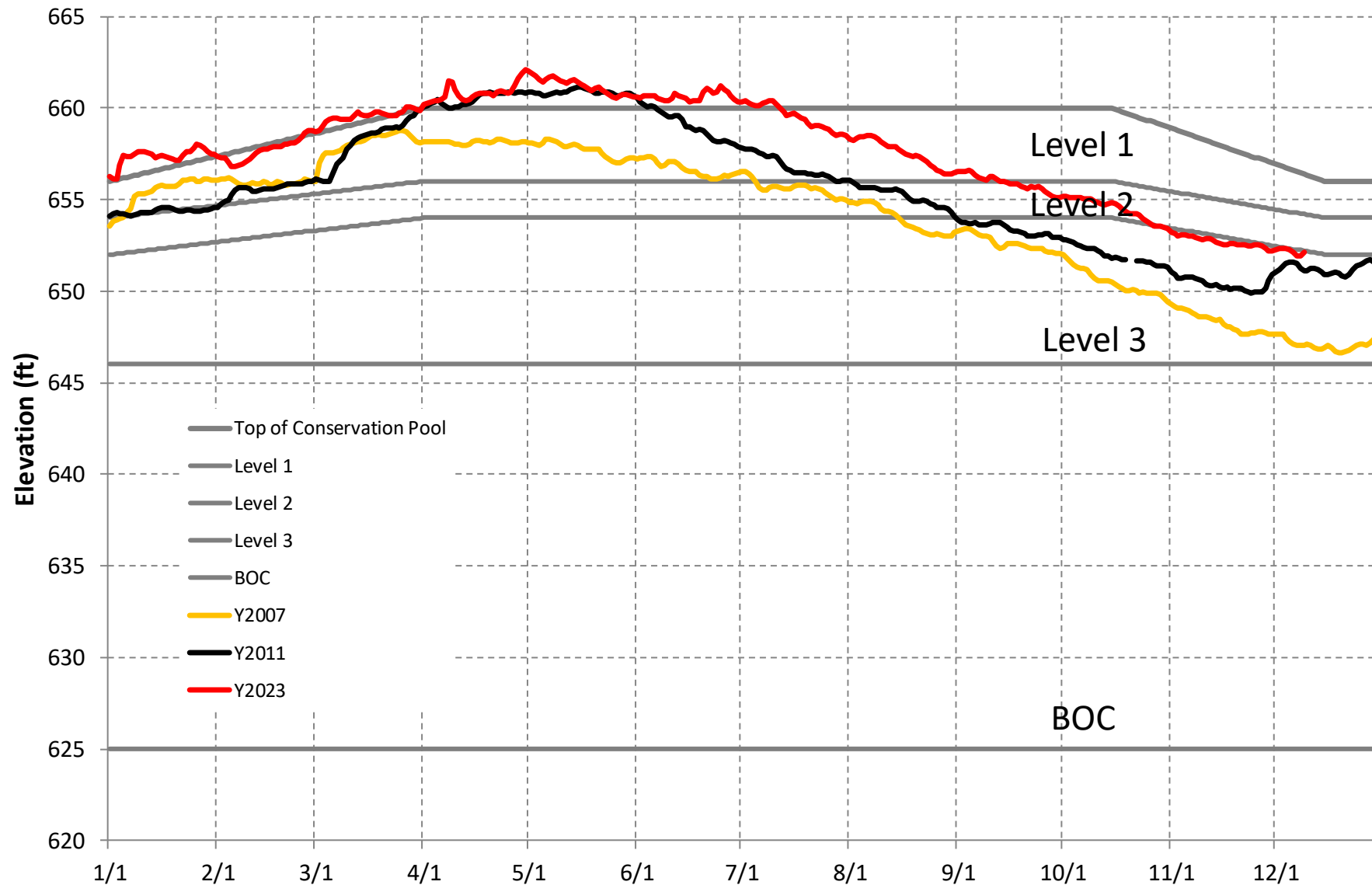


[Back to Map](#)

## 2023 ACF Basin Composite Conservation and Flood Storage

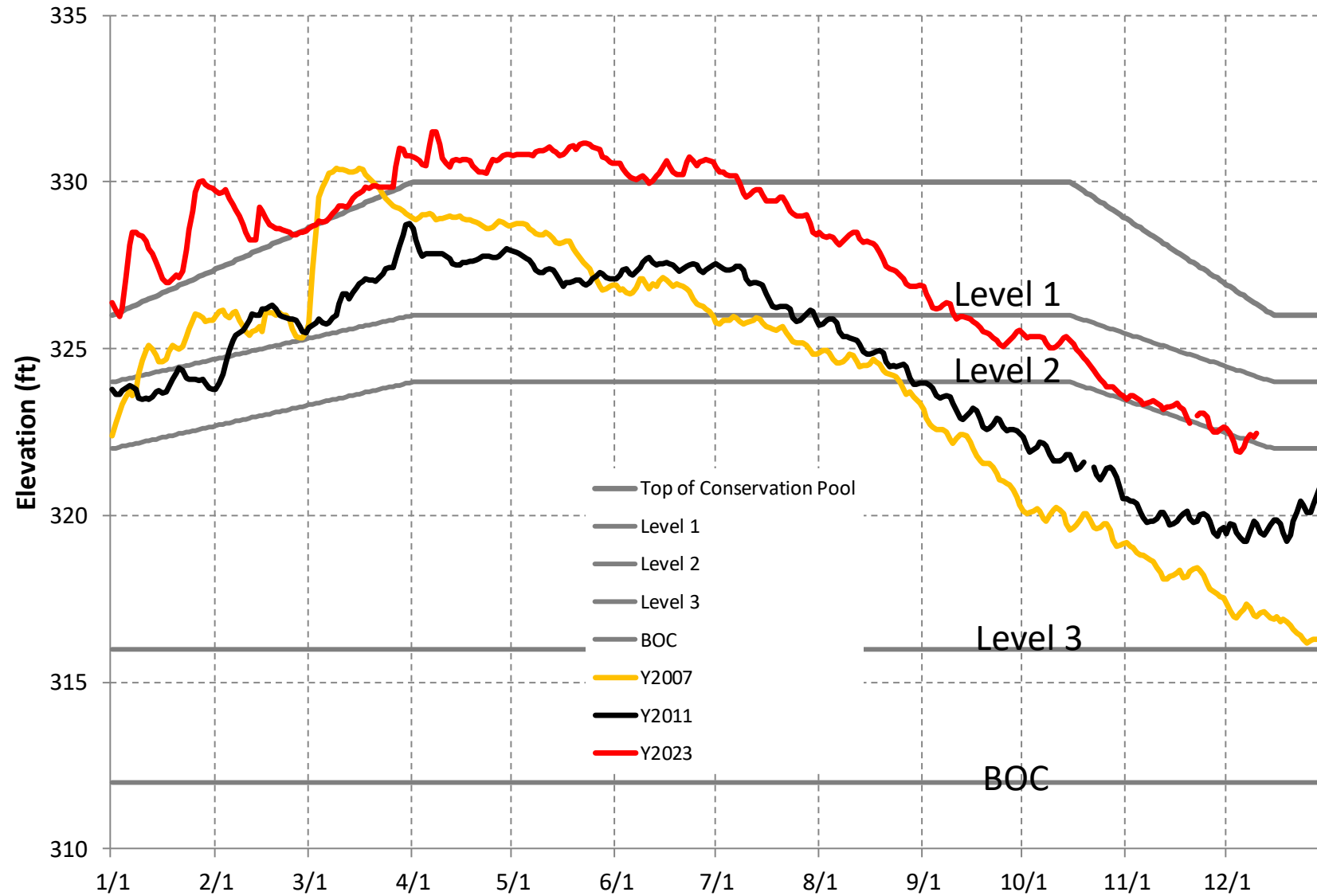


## LAKE HARTWELL ELEVATION



[Back to Map](#)

## LAKE CLARKS HILL (THURMOND) ELEVATION



[Back to Map](#)

# Probability Outlook and Seasonal Drought Outlook

Data Source:

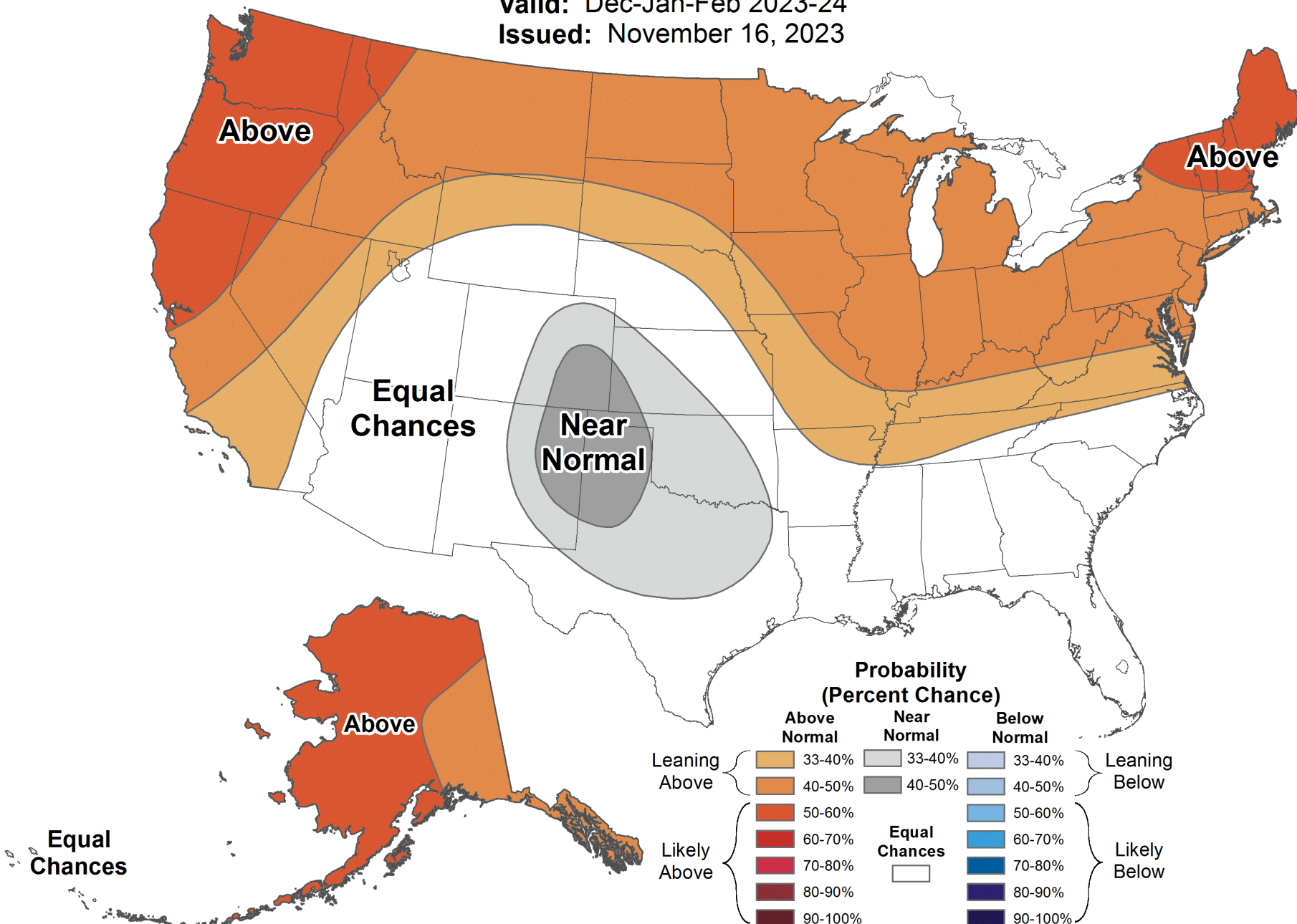
<http://www.cpc.ncep.noaa.gov/>



# Seasonal Temperature Outlook



Valid: Dec-Jan-Feb 2023-24  
Issued: November 16, 2023



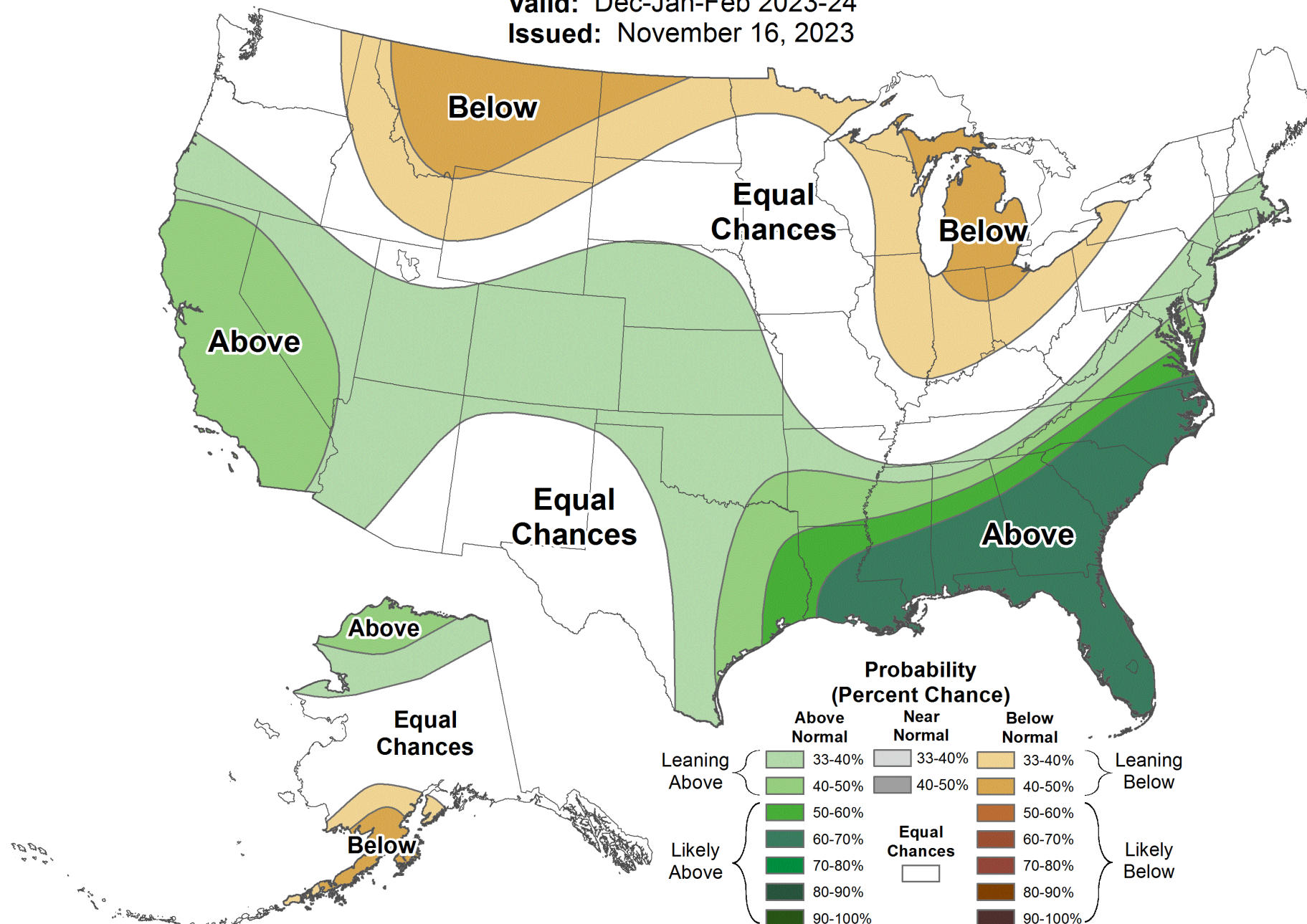


# Seasonal Precipitation Outlook



Valid: Dec-Jan-Feb 2023-24

Issued: November 16, 2023



# U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for December 1, 2023 - February 29, 2024

Released November 30, 2023

