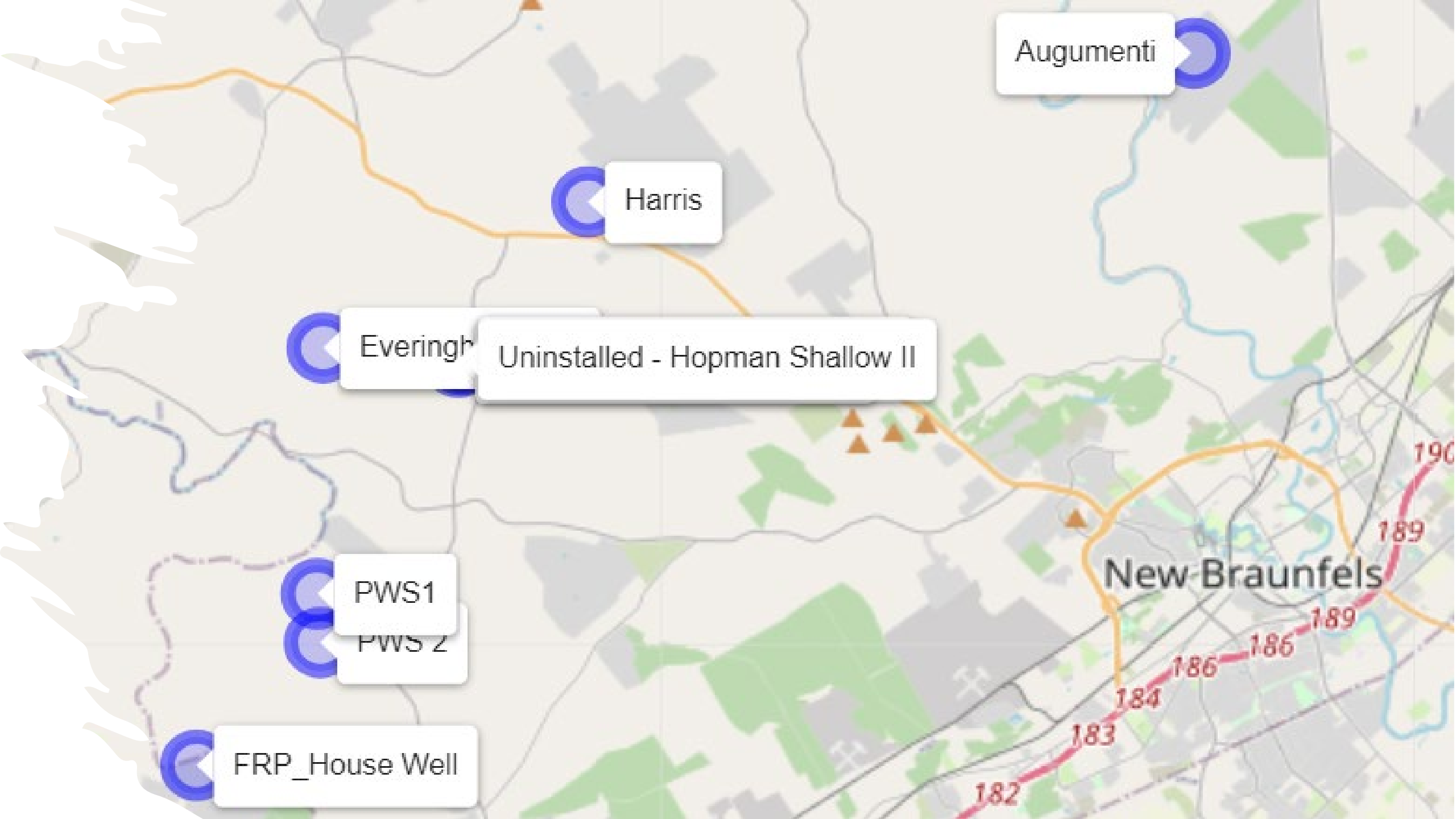


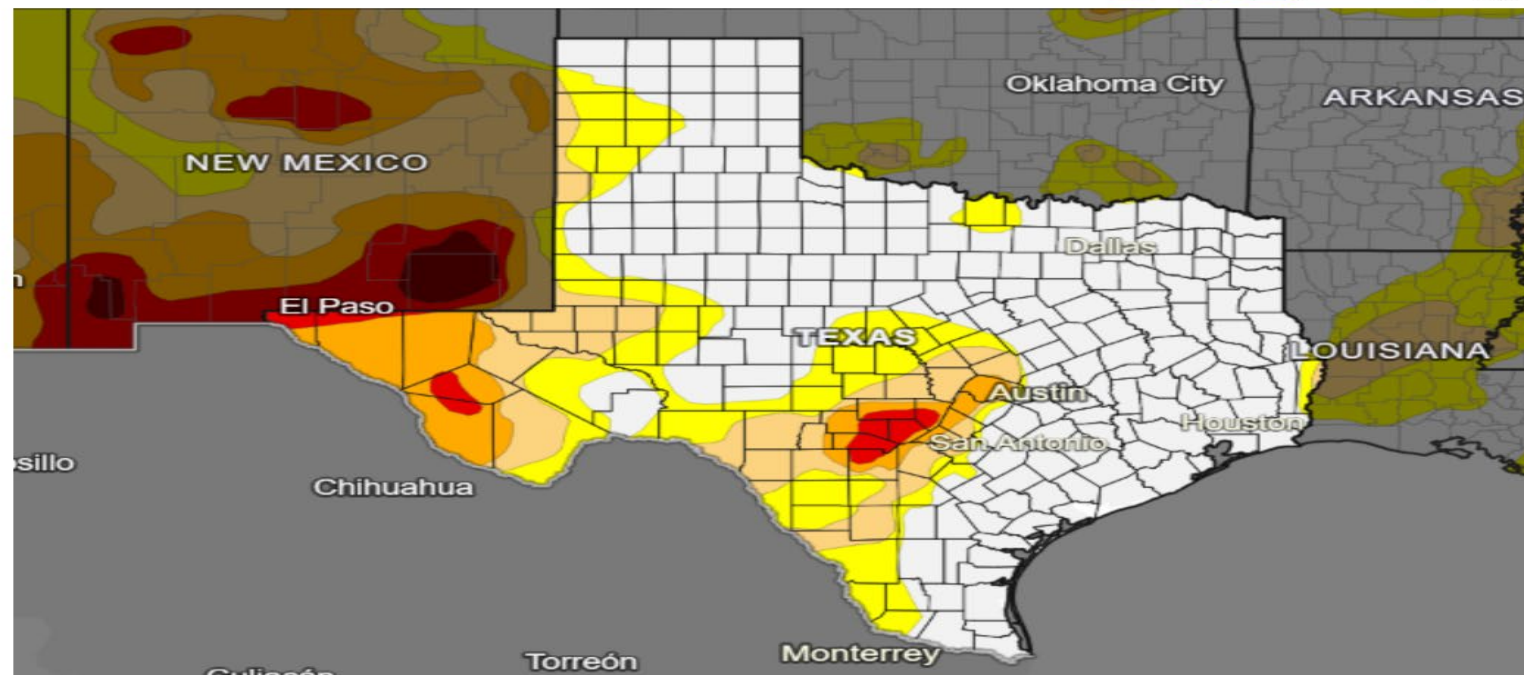




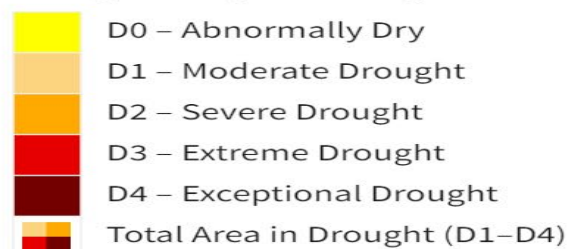
Comal Trinity  
Groundwater Conservation District  
General Manager Report  
February 19, 2024

# Texas Drought Information- February 2024

## U.S. Drought Monitor: Texas



### Drought & Dryness Categories



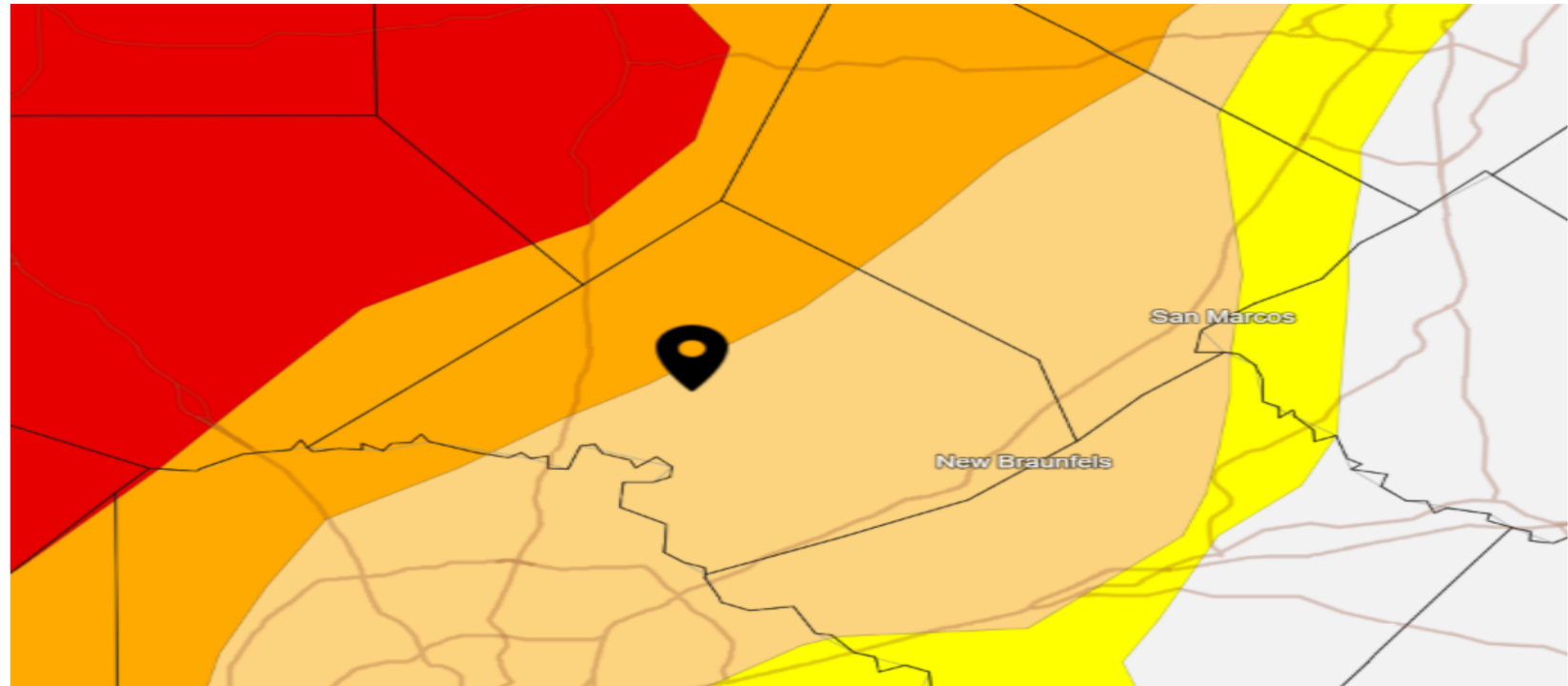
| % of TX |
|---------|
| 17.8%   |
| 11.8%   |
| 7.0%    |
| 2.0%    |
| 0.0%    |
| 20.7%   |

The U.S. Drought Monitor depicts the location and intensity of drought across the country. The map uses 5 classifications: Abnormally Dry (D0), showing areas that may be going into or are coming out of drought, and four levels of drought (D1–D4). This map is used by the U.S. Department of Agriculture to trigger some disaster declarations and loan eligibility. Individual states and water supply planning may use additional information to inform their declarations and actions. [Learn more](#)(link is external). How has drought impacted this state in the past? View examples of past drought impacts or explore historical Drought Monitor maps. Source(s): NDMC, NOAA, USDA

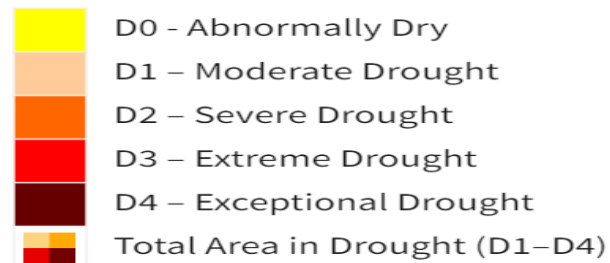
Source(s): NDMC, NOAA, USDA  
Data Valid: 02/13/24

# Comal County Drought Information- February 2024

## U.S. Drought Monitor



### Drought & Dryness Categories



### % of Comal County

|                               |         |
|-------------------------------|---------|
| D0 - Abnormally Dry           | 0%      |
| D1 - Moderate Drought         | 62.80%  |
| D2 - Severe Drought           | 37.20%  |
| D3 - Extreme Drought          | 0%      |
| D4 - Exceptional Drought      | 0%      |
| Total Area in Drought (D1-D4) | 100.00% |

The U.S. Drought Monitor depicts the location and intensity of drought across the country using 5 classifications: Abnormally Dry (D0), showing areas that may be going into or are coming out of drought, and four levels of drought (D1-D4). The U.S. Drought Monitor is a joint effort of the National Drought Mitigation Center, U.S. Department of Agriculture, and National Oceanic and Atmospheric Administration. Source(s): NDMC, NOAA, USDA

Source(s): NDMC, NOAA, USDA  
Data Valid: 02/13/24

**Drought.gov**

## Comal County Drought Facts- January 2024

4th

wettest January on record,  
over the past 130 years

---

3.5

inches from normal

4th

wettest year to date over  
the past 130 years (January  
2024)

---

3.5

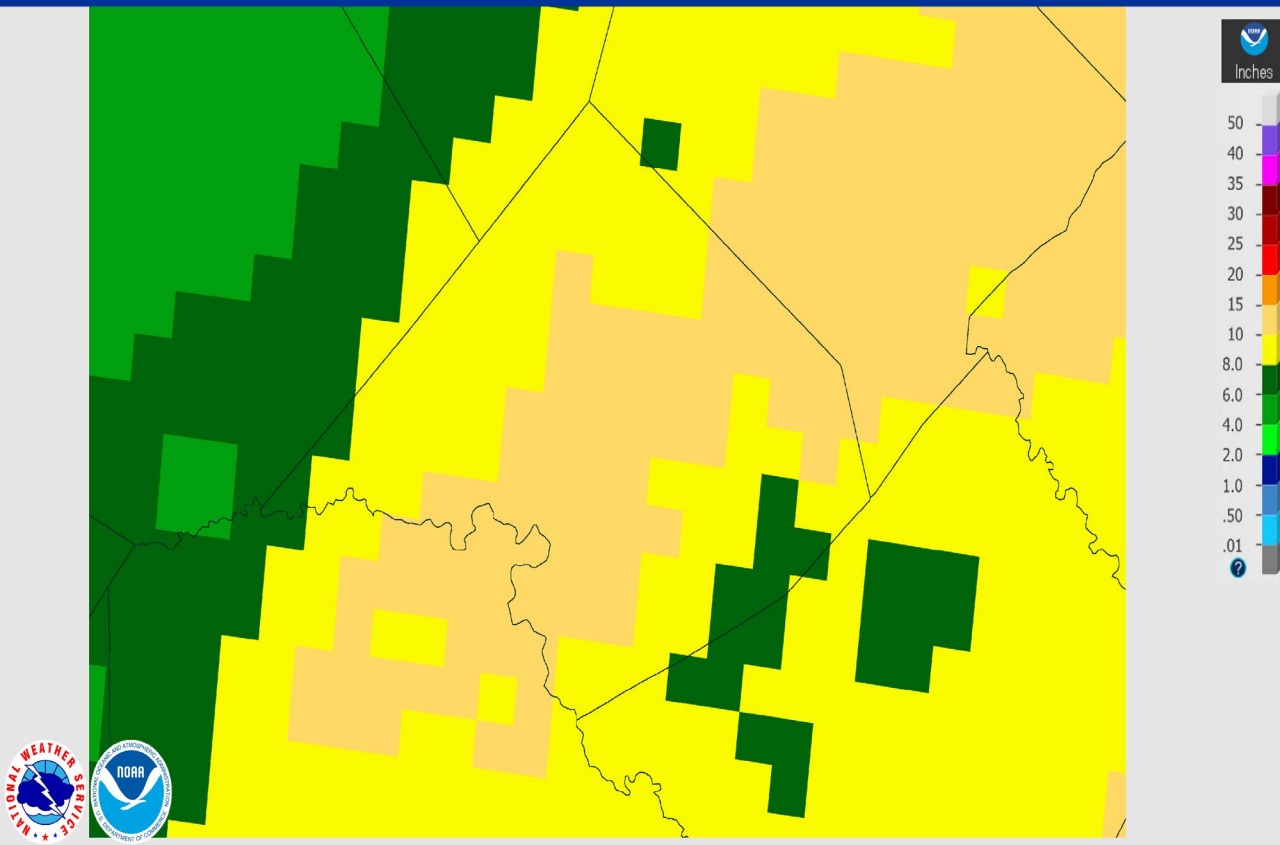
inches from normal



# Precipitation 90 Day Observed And Departure February 2024

## February 12, 2024 90-Day Observed Precipitation

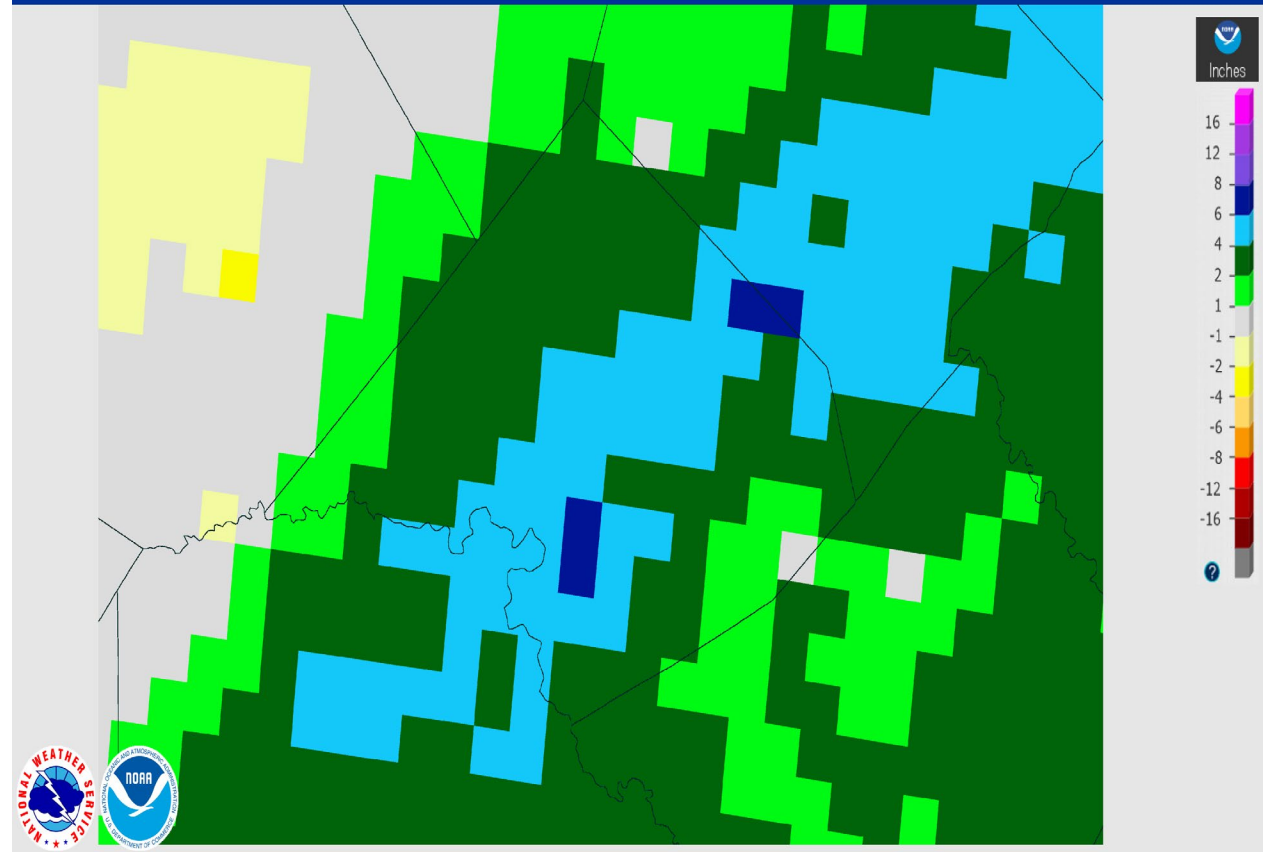
Created on: February 12, 2024 - 22:04 UTC  
Valid on: February 12, 2024 12:00 UTC



8 to 15 inches Observed

## February 12, 2024 90-Day Departure Precipitation

Created on: February 12, 2024 - 22:07 UTC  
Valid on: February 12, 2024 12:00 UTC

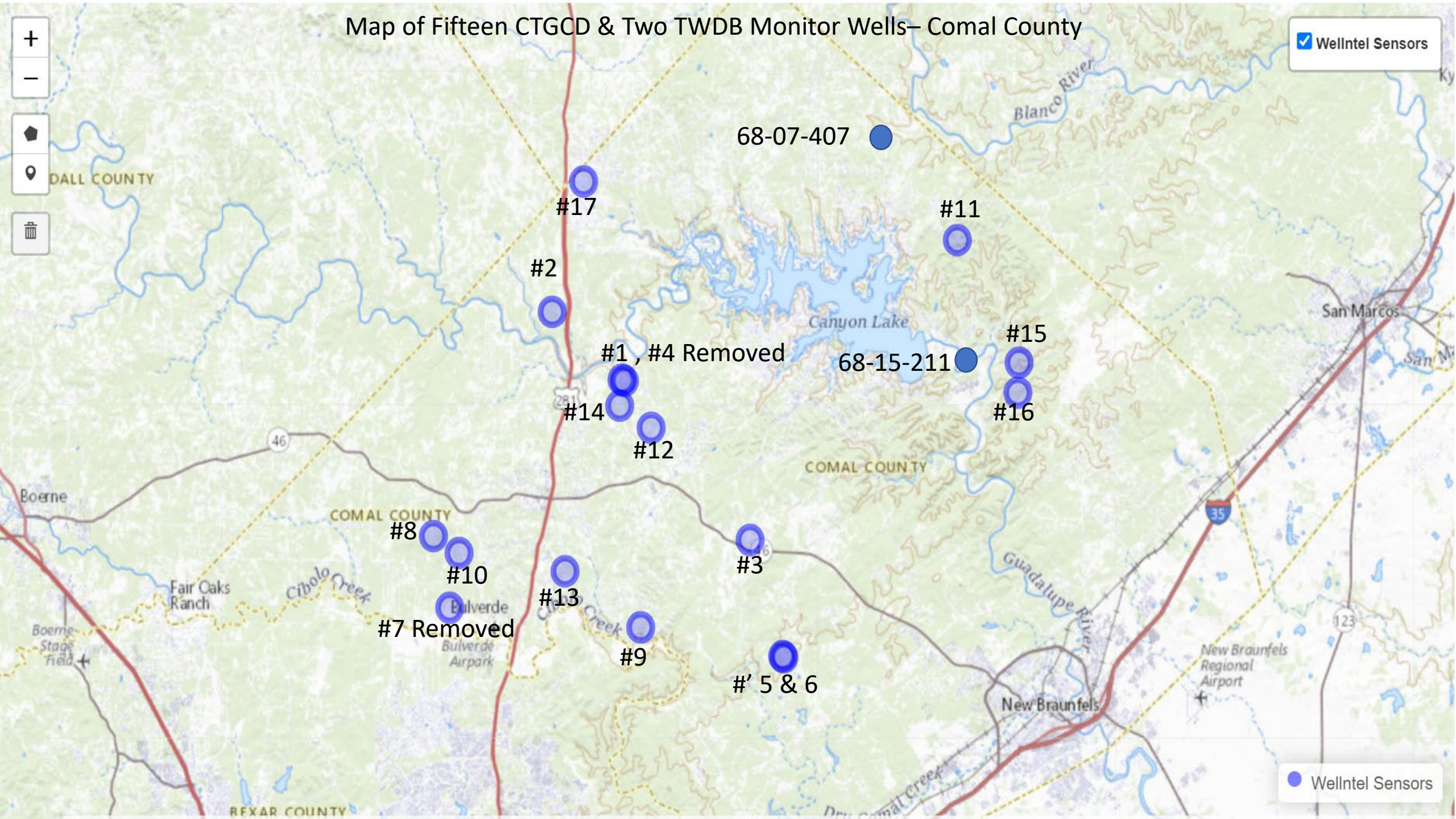


1 to 8 inches Above Normal



# Map of Fifteen CTGCD & Two TWDB Monitor Wells— Comal County

☒ WellIntel Sensors



☒ WellIntel Sensors



# ALL CTGCD MONITORING WELLS 4th Q 2023

| Name    | Minimum Date | Maximum Date | # of Readings | Minimum Value | Maximum Value          | Start Reading | Last Reading | Difference |
|---------|--------------|--------------|---------------|---------------|------------------------|---------------|--------------|------------|
| #1      | 10/1/2023    | 1/1/2024     | 4             | 210.64        | 211.09                 | 210.90        | 210.89       | 0.01       |
| #2      | 10/1/2023    | 1/1/2024     | 4             | 96.79         | 97.56                  | 96.93         | 97.56        | -0.63      |
| #3      | 10/1/2023    | 1/1/2024     | 4             | 523.57        | 530.88                 | 530.88        | 523.57       | 7.31       |
| #5      | 10/1/2023    | 1/1/2024     | 4             | 353.25        | 355.36                 | 355.36        | 353.43       | 1.93       |
| #6      | 10/1/2023    | 1/1/2024     | 4             | 476.79        | 522.12                 | 522.12        | 476.79       | 45.33      |
| #8      | 10/1/2023    | 1/1/2024     | 4             | 400.35        | 400.75                 | 400.41        | 400.35       | 0.06       |
| #9      | 10/1/2023    | 1/1/2024     | 4             | 299.27        | 302.32                 | 299.27        | 302.32       | -3.05      |
| #10     | 10/1/2023    | 1/1/2024     | 4             | 323.63        | 324.65                 | 324.65        | 323.63       | 1.02       |
| #11     | 10/1/2023    | 1/1/2024     | 4             | 362.57        | 362.93                 | 362.70        | 362.59       | 0.11       |
| #12     | 10/1/2023    | 1/1/2024     | 4             | 425.76        | 431.30                 | 431.30        | 425.76       | 5.54       |
| #13     | 10/1/2023    | 1/1/2024     | 4             | 340.74        | 341.04                 | 341.04        | 340.74       | 0.3        |
| #14     | 10/1/2023    | 1/1/2024     | 4             | 233.42        | 238.05                 | 238.05        | 233.42       | 4.63       |
| #15     | 10/1/2023    | 1/1/2024     | 4             | 306.72        | 333.33                 | 306.72        | 327.70       | -20.98     |
| #16     | 10/1/2023    | 1/1/2024     | 4             | 229.17        | 234.39                 | 234.33        | 234.39       | -0.06      |
| #17     | 10/1/2023    | 1/1/2024     | 4             | 154.43        | 156.39                 | 154.43        | 156.39       | -1.96      |
| 6807407 | 10/1/2023    | 1/1/2024     | 4             | 352.34        | 354.55                 | 353.49        | 354.55       | -1.06      |
| 6815211 | 10/1/2023    | 1/1/2024     | 4             | 110.74        | 112.12                 | 112.12        | 110.82       | 1.3        |
|         |              |              |               |               | Average for 4th Q 2023 |               |              | 2.34       |



Date to Plot:

2023-10-01

2024-01-01

2023-10-01

2024-01-01

Change from 2023-10-01 to 2024-01-01

Groundwater Elevation AMSL (ft)

-20

-10

0

10

Shallower

Deeper

Shallower

Shallower

Shallower

Deeper

Shallower

Shallower

Shallower

Shallower

Deeper

Deeper

Deeper

Comal County WellIntel #01

Comal County WellIntel #02

Comal County WellIntel #03

Comal County WellIntel #06

Comal County WellIntel #08

Comal County WellIntel #09

Comal County WellIntel #11

Comal County WellIntel #12

Comal County WellIntel #13

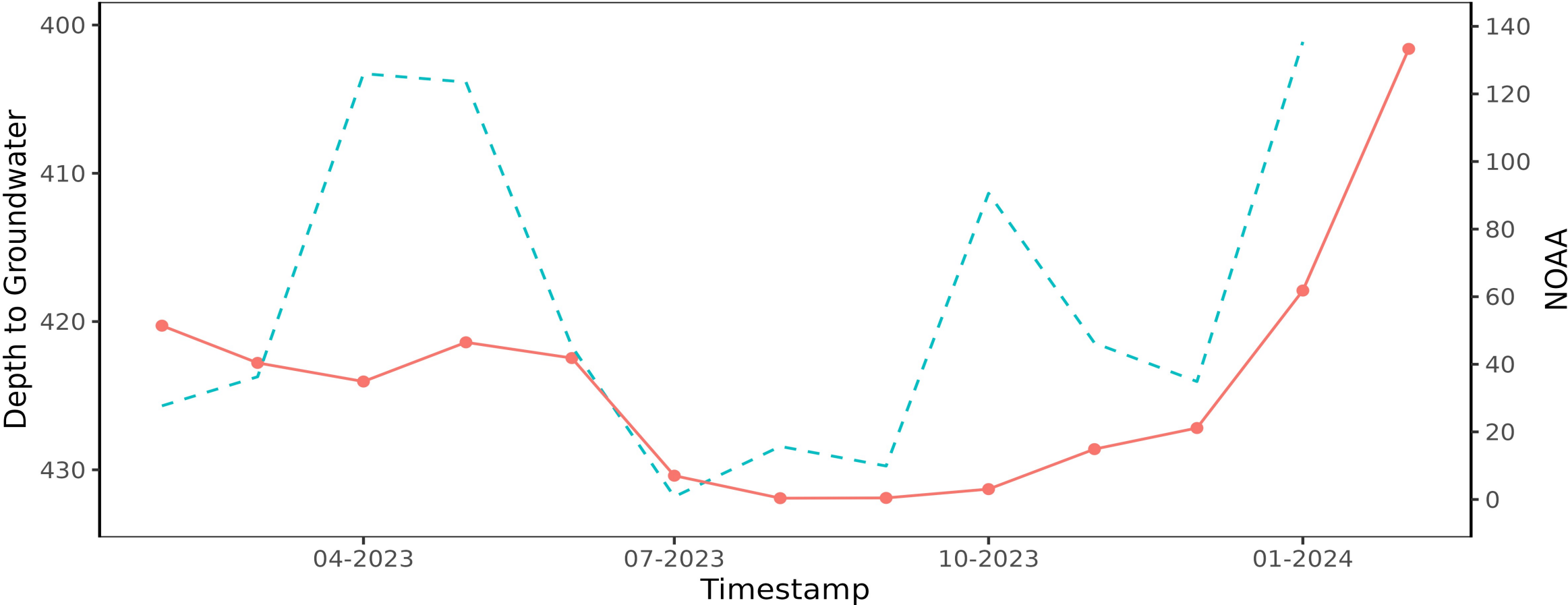
Comal County WellIntel #14

Comal County WellIntel #15

Comal County WellIntel #16

Comal County WellIntel #17

# Retrieved Data



## Sensor ID

(y1) Comal County WellIntel #12    (y2) SPRING BRANCH 2.6 ESE, TX US

| Period of Record |            |          |               |               |               |               |              |            |
|------------------|------------|----------|---------------|---------------|---------------|---------------|--------------|------------|
| Name             | Start Date | End date | # of Readings | Minimum Value | Maximum Value | First Reading | Last Reading | Difference |
| #1               | 9/1/2019   | 1/1/2024 | 53            | 200.73        | 217.55        | 204.81        | 210.89       | -6.08      |
| #2               | 1/1/2019   | 1/1/2024 | 61            | 96.79         | 97.56         | 96.99         | 97.56        | -0.57      |
| #3               | 1/1/2019   | 1/1/2024 | 57            | 462.21        | 544.55        | 466.76        | 523.57       | -56.81     |
| #5               | 1/3/2019   | 1/1/2024 | 58            | 331.51        | 355.18        | 332.77        | 353.43       | -20.66     |
| #6               | 1/3/2019   | 1/1/2024 | 57            | 393.35        | 522.12        | 393.35        | 476.79       | -83.44     |
| #8               | 12/1/2019  | 1/1/2024 | 37            | 380.74        | 400.75        | 380.74        | 400.35       | -19.61     |
| #9               | 12/1/2019  | 1/1/2024 | 44            | 238.46        | 310.16        | 303.05        | 302.32       | 0.73       |
| #10              | 1/1/2020   | 1/1/2024 | 47            | 297.26        | 326.57        | 307.87        | 323.63       | -15.76     |
| #11              | 3/1/2022   | 1/1/2024 | 23            | 362.57        | 363.36        | 363.09        | 362.59       | 0.5        |
| #12              | 9/1/2022   | 1/1/2024 | 17            | 420.28        | 431.91        | 421.88        | 425.76       | -3.88      |
| #13              | 11/1/2022  | 1/1/2024 | 15            | 337.99        | 342.9         | 340.76        | 340.74       | 0.02       |
| #14              | 10/1/2022  | 1/1/2024 | 16            | 228.99        | 239.12        | 232.92        | 233.42       | -0.5       |
| #15              | 4/1/2023   | 1/1/2024 | 10            | 282.97        | 333.33        | 282.97        | 327.7        | -44.73     |
| #16              | 8/1/2023   | 1/1/2024 | 6             | 229.17        | 241.48        | 241.48        | 234.39       | 7.09       |
| #17              | 9/1/2023   | 1/1/2024 | 5             | 154.4         | 156.39        | 154.4         | 156.39       | -1.99      |
| 6807407          | 9/14/1998  | 1/1/2024 |               |               |               | 272.42        | 354.6        | -82.18     |
| 6815211          | 7/20/2010  | 1/1/2024 |               |               |               | 103.12        | 110.82       | -7.7       |



# 2023 Non-Exempt Reported Pumpage and MAG

|            |                  | GMA-9 Pumped | GMA-9 MAG Availability |  | GMA-10 Pumped | GMA-10 MAG Availability |
|------------|------------------|--------------|------------------------|--|---------------|-------------------------|
| 1Q2023     |                  |              | 9,383                  |  |               | 33,554                  |
|            | Gallons:         | 288,209,352  |                        |  | 646,383,098   |                         |
|            | Acre-ft:         | 884          | 8,499                  |  | 1,984         | 31,570                  |
| 2Q2023     |                  |              |                        |  |               |                         |
|            | Gallons:         | 349,224,466  |                        |  | 678,686,817   |                         |
|            | Acre-ft:         | 1,072        | 7,427                  |  | 2,083         | 29,488                  |
| 3Q2023     |                  |              |                        |  |               |                         |
|            | Gallons:         | 460,707,187  |                        |  | 753,584,083   |                         |
|            | Acre-ft:         | 1,414        | 6,013                  |  | 2,313         | 27,175                  |
| 4Q2023     |                  |              |                        |  |               |                         |
|            | Gallons:         | 191,684,091  |                        |  | 624,821,724   |                         |
|            | Acre-ft:         | 588          | 5,425                  |  | 1,918         | 25,257                  |
| 2023 Total | Acre-ft:         | 3,958        |                        |  | 8,297         |                         |
|            | MAG Used to-date | 42%          |                        |  | 25%           |                         |

# Well Drilling Applications By Type

| Type of Application                | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter | Total for Year | GMA 9 | GMA10 |
|------------------------------------|-------------|-------------|-------------|-------------|----------------|-------|-------|
| a) Domestic/Livestock              | 25          | 29          | 25          | 18          | <b>97</b>      | 85    | 12    |
| a)L Livestock                      | 0           | 0           | 1           | 0           | 1              | 1     |       |
| a)I Domestic Landscape Irrigation  | 0           | 0           | 1           | 0           | 1              | 1     |       |
| b) < 25,000 GPD                    | 1           | 1           | 1           | 1           | <b>4</b>       | 3     | 1     |
| c) > 25,000 GPD                    | 0           | 1           | 0           | 0           | 1              | 1     |       |
| d) Plugging                        | 1           | 3           | 7           | 3           | 14             | 10    | 4     |
| e) Test Bore                       | 0           | 0           | 0           | 0           | 0              |       |       |
| f) Completion of test < 25,000 GPD | 0           | 1           | 0           | 0           | 1              |       | 1     |
| g) Completion of test > 25,000 GPD | 0           | 0           | 0           | 0           | 0              |       |       |
| Geothermal                         | 0           | 0           | 2           | 0           | <b>2</b>       | 2     |       |
| Monitor well                       | 0           | 0           | 0           | 0           | 0              |       |       |
| Total Applications Received 2023   | 26          | 32          | <b>30</b>   | 19          | <b>107</b>     |       |       |
|                                    |             |             |             |             |                |       |       |
| Applications Approved 2023         | 29          | 35          | 27          | 18          | <b>109</b>     |       |       |
|                                    |             |             |             |             |                |       |       |
| Borings in Quarter                 | 26          | 35          | 31          | 24          | <b>116</b>     |       |       |

*We make the  
West ... Wetter*

Hosted by: Comal Master Gardeners  
Comal Trinity Groundwater Conservation District



*Rain Bees*



Call us: Larry - 210.286.8050

Steven - 903.452.0801

Our services are always free and we welcome questions anytime.

### 1<sup>st</sup> Quarter 2024 Update – February 19, 2024

#### Since last Meeting

#### This quarter

#### 2023

#### 2024

#### To date

- | Since last Meeting                                                            | This quarter | 2023 | 2024 | To date |
|-------------------------------------------------------------------------------|--------------|------|------|---------|
| • Consultations their homes:                                                  | 14           | 147  | 14   | 210     |
| • Visits to our harvesting sites:                                             | 5            | 92   | 5    | 109     |
| • Rain harvest articles published:                                            | 4            | 25   | 4    | 55      |
| • Presentations/Events (attendees - 122):                                     | 8            | 33   | 8    | 58      |
| • Chamber of Commerce, Leadership Class – <i>Rain Harvesting</i> – Jan 4 (20) |              |      |      |         |
| • Gonzales Master Gardeners, Seguin - <i>Rain Harvesting</i> – Jan 23 (26)    |              |      |      |         |
| • Gonzales Master Gardeners, Seguin - <i>Drip Irrigation</i> – Jan 23 (26)    |              |      |      |         |
| • Gonzales Master Gardeners, Seguin - <i>Rain Barrels</i> – Jan 23 (26)       |              |      |      |         |
| • Gonzales Master Gardeners, Seguin - <i>Wicking Gardening</i> – Jan 23 (26)  |              |      |      |         |
| • Economic Development Foundation – <i>Rain Harvesting</i> – Jan 24 (46)      |              |      |      |         |
| • Chamber of Commerce, Coffee – <i>Rain Harvesting</i> – Feb 14 (60)          |              |      |      |         |
| • Reliance Realty Bulverde – <i>Rain Harvesting</i> – Feb 15 (16)             |              |      |      |         |

*We make the  
West ... Wetter*

Hosted by: Comal Master Gardeners  
Comal Trinity Groundwater Conservation District



*Rain Bees*



Call us: Larry - 210.286.8050

Steven - 903.452.0801

Our services are always free and we welcome questions anytime.

1<sup>st</sup> Quarter 2024 Update – February 19, 2024

## Upcoming presentations:

- **Reliance Realty New Braunfels – *Rain Harvesting* – Feb 27 (16)**
- **Comal Master Gardeners – *Rain Harvesting* – Mar 7 (350)**
- **Guadalupe Master Gardeners – *Rain Harvesting* – Apr 2 (25)**
- **Guadalupe Master Gardeners – *Drip Irrigation* – Apr 2 (25)**
- **Guadalupe Master Gardeners – *Rain Barrels* – Apr 2 (25)**
- **Guadalupe Master Gardeners – *Wicking Gardening* – Apr 2 (25)**
- **Agri-life Open House – *Rain Harvesting, Rain Barrels, Drip Irrigation, Wicking Gardening* - Apr 6 (100)**
- **Hidden Trails Garden Group – *Xeriscape* – Apr 20 (15)**

**Tri-fold CTGCD brochures distributed (0)**