

Fort Collins Weather Station Monthly Summary

March 2024



Photo credit: Noah Newman



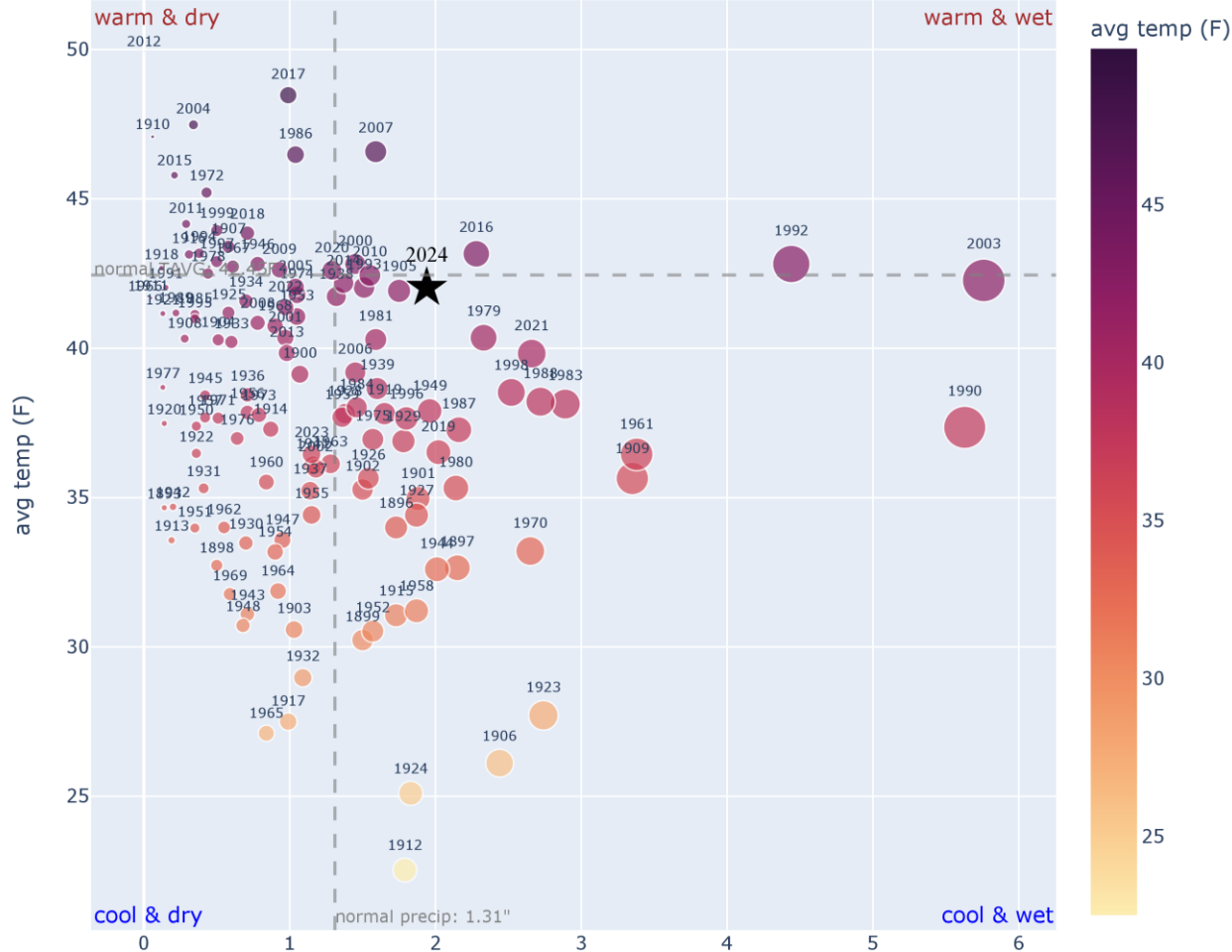
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Average Temperature and Precipitation

FORT COLLINS temperature and precipitation, March 1 - March 31



Russ Schumacher/Colorado Climate Center/CSU
Data source: ACIS

The average air temperature for March 2024 was 42.0 °F,
0.4 °F below our 1991-2020 March normal (42.4 °F)

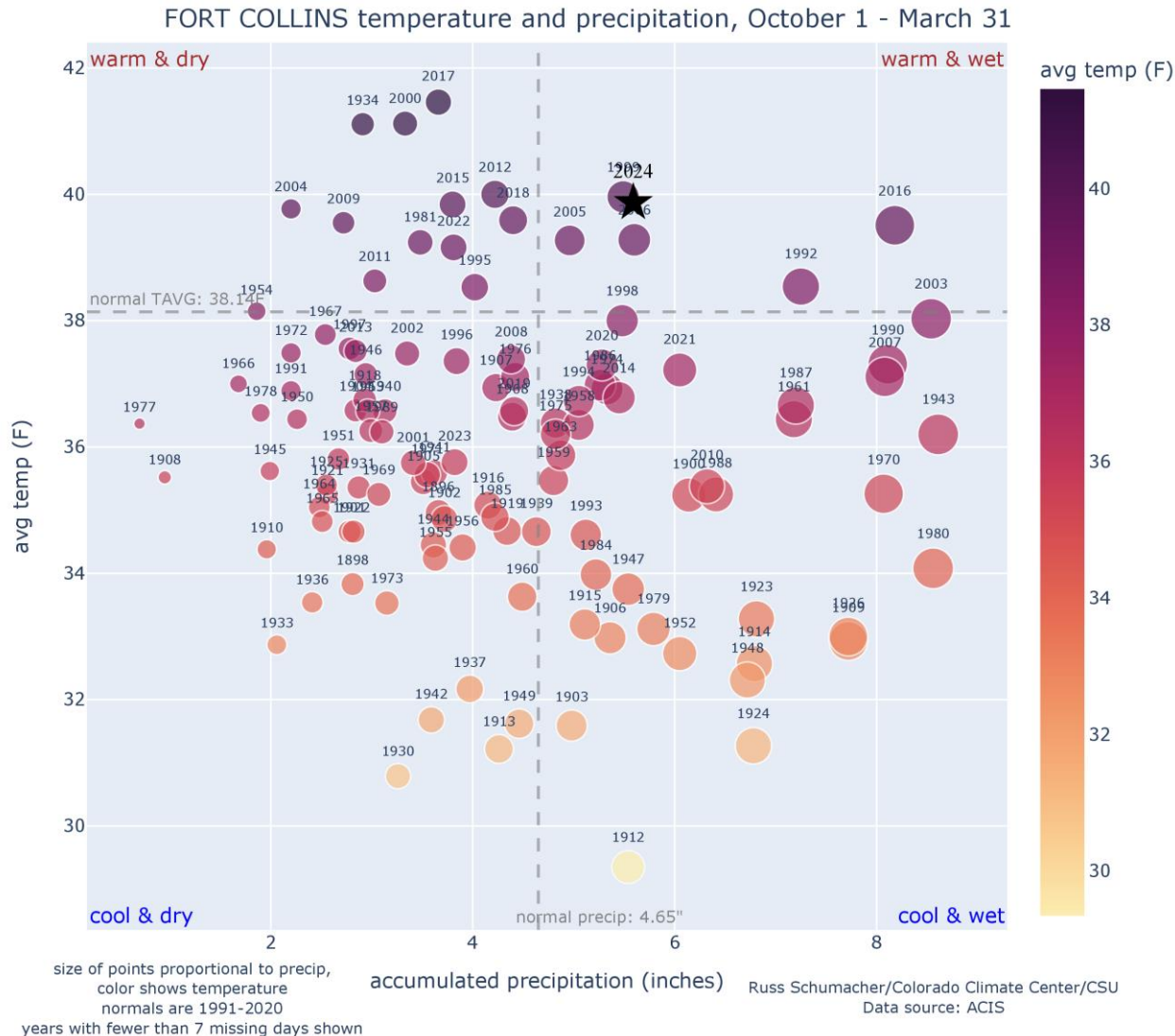
The last cooler March was 2023 (36.6 °F)

We received 1.94" of precipitation in March 2024, 148%
of our 1991-2020 March normal (1.31")

The last wetter March was 2021 (2.66")



Average Water Year Temperature and Precipitation



The average air temperature for our 2024 Water Year to date (since October 1st) is 39.9 °F. This is 1.8 °F above our 1991-2020 normal of 38.1 °F.

The last warmer October-March was 2017 (41.4 °F).

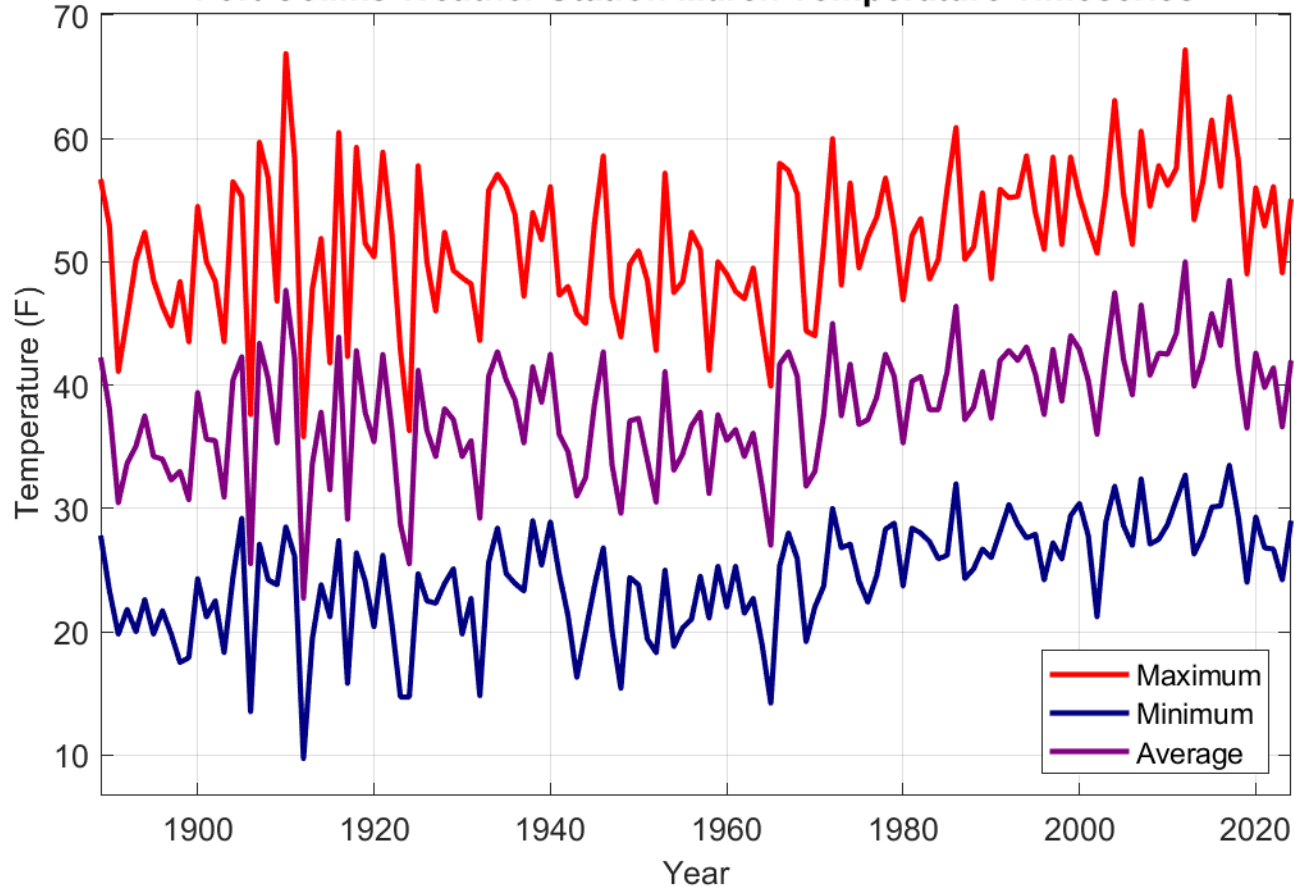
We have received 5.59" of precipitation this Water Year to date, 120% of our 1991-2020 normal (4.65")

The last Water Year to start at least this wet was 2021 (6.05"). Over 70% of our water year precipitation falls from April onwards, so a dry spring/summer could still easily reverse our fortunes.

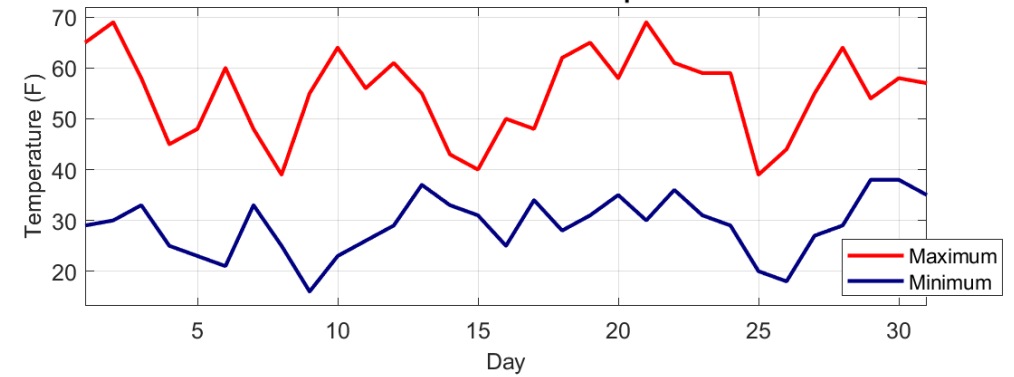


March 2024 Time Series Graphics

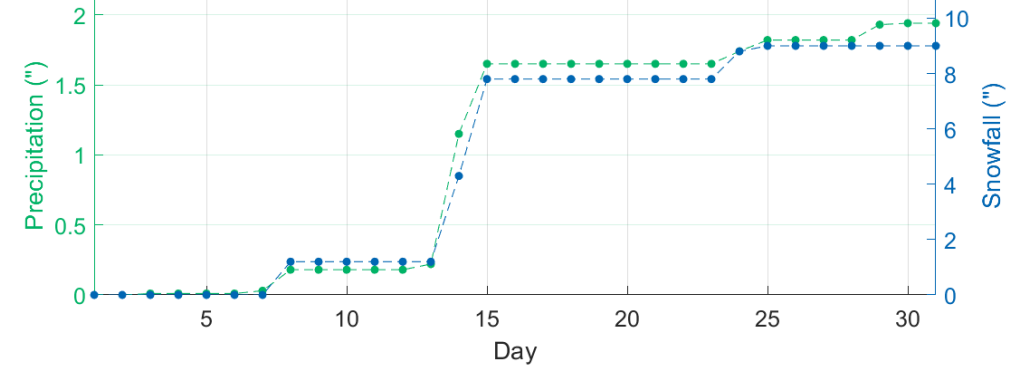
Fort Collins Weather Station March Temperature Timeseries



Fort Collins Weather Station March Temperature Timeseries



Fort Collins Weather Station March Precipitation and Snowfall Timeseries



Highest Daily T_{\max} : 69 °F on March 2nd and 21st

Lowest Daily T_{\min} : 16 °F on March 9th

Highest Daily Precipitation: 0.90" on March 14th

Highest Daily Snowfall: 3.5" on March 15th



Additional March Statistics

| | Observed | 1991-2020 Normal | POR Average | Depart from Normal | Depart from POR Average | Last Above | Last Below |
|-------------------------------------|----------|------------------|-------------|--------------------|-------------------------|------------|------------|
| T_{mean} °F | 42 | 42.4 | 38.1 | -0.4 | 3.9 | 2020 | 2023 |
| Mean(T_{max}) °F | 55.1 | 56.4 | 51.8 | -1.3 | 3.3 | 2022 | 2023 |
| Mean(T_{min}) °F | 29 | 28.5 | 24.3 | 0.5 | 4.7 | 2020 | 2023 |
| Precipitation “ | 1.94 | 1.31 | 1.18 | 0.63 | 0.76 | 2021 | 2023 |
| Snowfall “ | 9 | 9.4 | 10.3 | -0.4 | -1.3 | 2023 | 2022 |
| Water Year Precip “ | 5.59 | 4.62 | 4.28 | 0.97 | 1.31 | 2021 | 2023 |
| Seasonal Snowfall “ | 33.1 | 43 | 40.4 | -9.9 | -7.3 | 2023 | 2019 |
| POR = period of record (since 1894) | | | | | | | |

| | Value | Date |
|-------------------------|-------|-------------------------------------|
| Max(T_{max}) | 69 | 2 nd , 21 st |
| Min(T_{max}) | 39 | 8 th |
| Max(T_{min}) | 38 | 29 th , 30 th |
| Min(T_{min}) | 16 | 9 th |
| Max(Daily Precip) | 0.90 | 14 th |
| Max(Daily Snowfall) | 3.5 | 15 th |
| Peak Wind Gust (mph) | 31.6 | 3 rd |

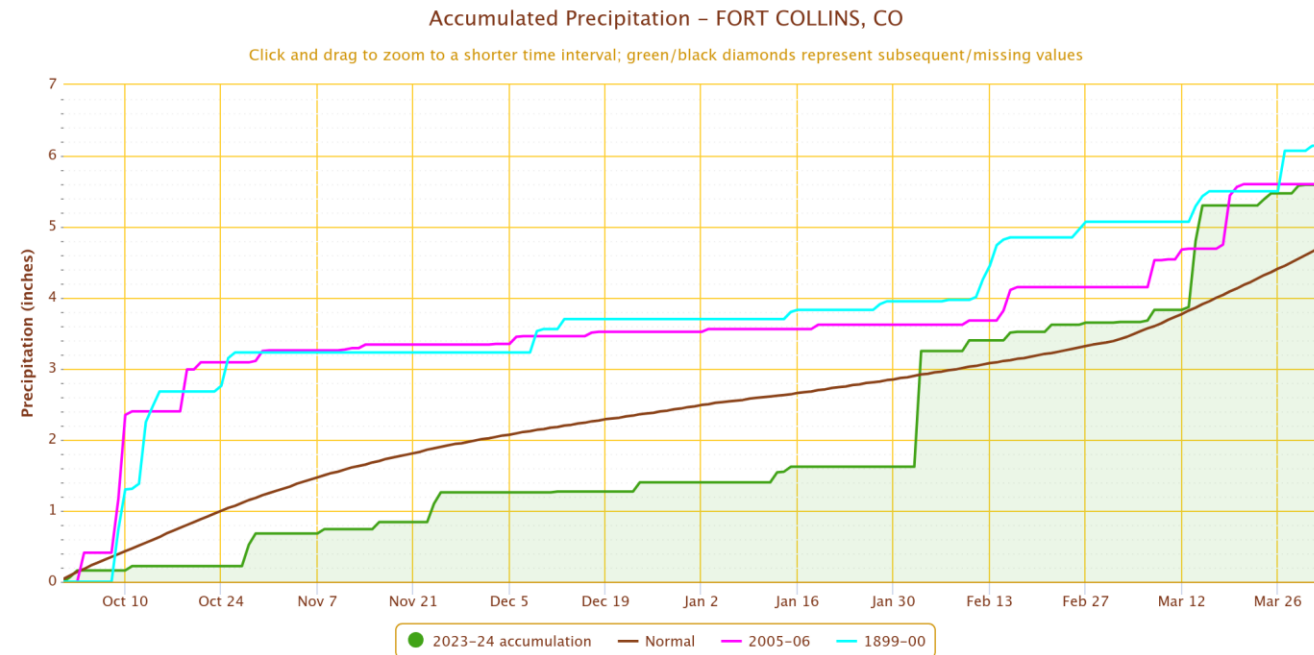
| | |
|---------------------------|-------|
| Days Precip > 0 | 13 |
| Days Snowfall > 0 | 7 |
| Days Precip > Trace | 10 |
| Days Snowfall > Trace | 5 |
| Days Wind Gust > 20mph | 11 |
| Peak Wind Gust Direction | 347 |
| Peak Wind Gust Time (MST) | 02:51 |



Feature Story: Cold Season Rain and Snow

It is unusual by historical standards to experience a cold season (October-March) this warm, but also this wet. Typically, warm winters are tied to less storm activity, and are drier than normal.

One of the most striking statistics from this cold season has been the simultaneous above normal moisture and below normal snowfall. 2024 is one of only three years in our record with October-March precipitation above the 80th percentile, and October-March Snowfall below the 50th percentile (since 1894). The other two year are 1900 and 2006. Both of these years included a substantial October rain event. Not so this year. Our large rain/snow mix events on February 3rd and March 14th are primarily responsible for producing these unusual numbers.



Powered by ACIS

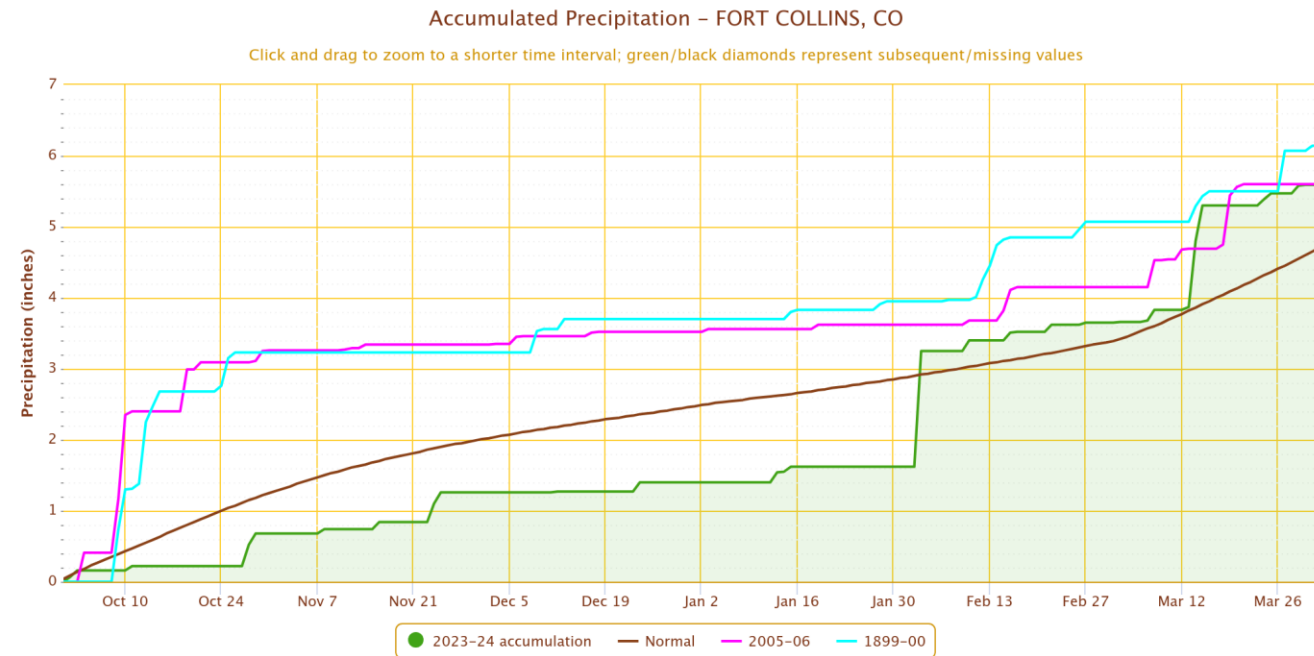


Feature Story: Cold Season Rain and Snow

Warm/wet winters are more probable in a warming climate. Climate models produce a consensus that our winters will warm though the remainder of the century, especially if carbon emissions are high. The majority of climate models show our average winters becoming marginally wetter, but there is not a consensus.

Warmer and wetter cold seasons could produce more rain/snow mix conditions. That said, most climate models show that extreme cold events, even by today's standards, will still be possible by the end of the century. Every winter will continue to come with its own unique set of weather patterns.

For more visit climatechange.colostate.edu



Records Broken

No daily or monthly records were broken in March 2024

Here is a picture of my snow-covered dog to make up for it



CONTACT US!

SUMMARY AUTHOR – PETER GOBLE – PETER.GOBLE@COLOSTATE.EDU

**ACTING WEATHER STATION MANAGER – NOAH NEWMAN –
NOAH.NEWMAN@COLOSTATE.EDU**

DATA QA/QC – KRISTIE DAVIS – KRISTIE.DAVIS@COLOSTATE.EDU

**STATE CLIMATOLOGIST – RUSS SCHUMACHER –
RUSS.SCHUMACHER@COLOSTATE.EDU**

**ASSISTANT STATE CLIMATOLOGIST – BECKY BOLINGER –
BECKY.BOLINGER@COLOSTATE.EDU**