

Utilities

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MEMORANDUM

DATE: March 9, 2022

TO: Water Commission

FROM: Michael Neale, MSc, Water Resources Engineer

RE: February 2022 Water Resources Division Staff Report

Purpose

This memorandum is intended to update the Water Commission on water resource conditions for the City of Fort Collins Water Utility (Water Utility) over the month of February and provide updated future outlook information. For additional information, please refer to the City's website: https://www.fcgov.com/utilities/water-status

Water Resources Summary

Supply and Demand Projections for the remainder of WY2022

- Water Supply For the month of February, water supply consisted of 100% Horsetooth supplies. This due to the sediment removal work at our Poudre River intake. The work was completed successfully and intake from the Poudre resumed on March 7th.
- Water Demand- Demands for the month of February were slightly below projected. Please refer to the attached graphs and tables. Water demands within the Water Utility service area for February were 96% of the projected demand.

Weather: https://climate.colostate.edu/

The conditions in February were slightly cooler than average however significantly wetter. Measured at the Fort Collins weather station:

- Mean daily high temperature recorded for the month: 43.6 °F.
 - Long term average daily high temperature for the month is: 44.5 °F.
- Total recorded monthly precipitation: 0.98 inches.
 - Long term normal (30-year average) precipation for the month: 0.49 inches.

Reservoir Storage: Northern allocated an initial 50% quota in November. Project reserves are at 90% quota at this time, this increases the likelihood of receiving additional quota in April. As of March 1st and presented in Northern District Storage and Delivery Report:

- Colorado-Big Thompson project reservoirs (Granby, Carter, and Horsetooth): 70% full.
- Horsetooth Reservoir: 95% full.
- Joe Wright Reservoir: 72% full (114% of average based on 14 years of data).



Snowpack: Natural Resources Conservation Service SNOTEL program percent of 1991-2020 median snow water equivalent as of 02/07/2021:

- Upper Colorado Basin: 99% of median.
- South Platte Basin: 95% of median.
- Poudre Basin (5 SNOTEL site average): 100% of the 1991-2020 combined median.

Poudre River flow: Graphical data for the Poudre River is available on-line at:

- Cache La Poudre River at the Canyon Mouth https://dwr.state.co.us/Tools/Stations/CLAFTCCO?params=DISCHRG
- Cache La Poudre River at Fort Collins https://dwr.state.co.us/Tools/Stations/CLAFORCO?params=DISCHRG

Drought Monitors:

- Larimer County and Colorado https://climate.colostate.edu/drought_info.html Larimer County and upper South Platte basin are abnormally dry at this time.
- Colorado and the USA https://droughtmonitor.unl.edu/ The Colorado River basin remains in a drought.

Climate Outlook: https://www.cpc.ncep.noaa.gov/

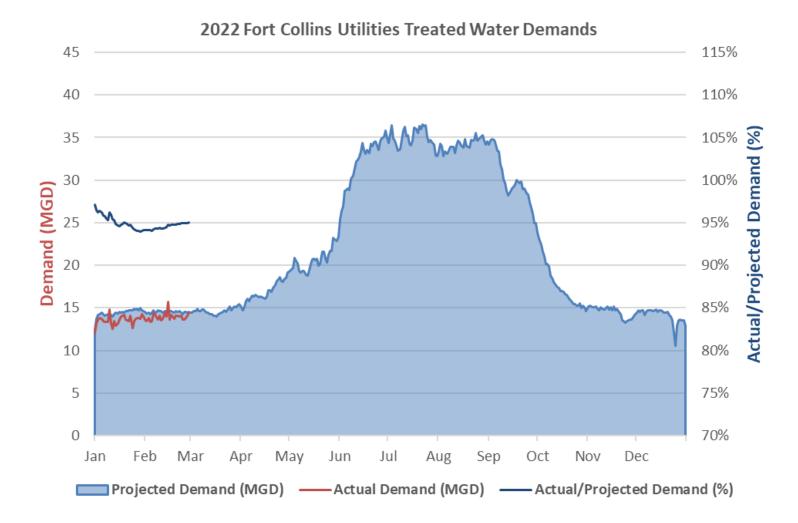
National Oceanic and Atmospheric Administration (NOAA) climate outlooks for the northern Front Range and northern mountains, over the next three months:

- Leaning below normal precipitation
- Leaning above normal temperature.

Other Water Supply Considerations:

• The Colorado River basin remains in a significant drought. Utilities staff will continue to monitor conditions throughout the year.







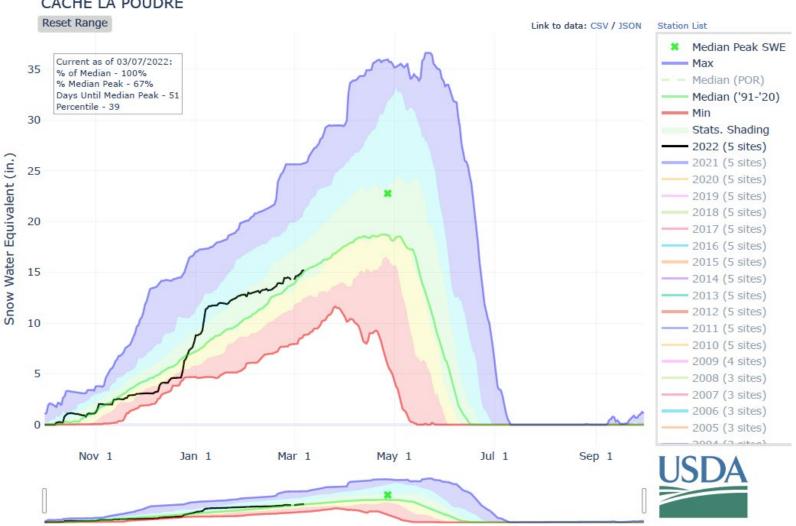
City of Fort Collins Utilities Treated Water Monthly Summary 2022

0.0 433.3	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to
										DCC	Date
433.3											161.6
755.5											723.3
433.3											884.8
415.4											851.3
-1.0											-2.6
416.4											854.0
7.1											28.9
0.0											0.0
-33.2											-72.8
390.3											810.1
15.7											15.7
13.4											12.1
13.9											13.7
1,247	1,392	1,551	1,961	2,959	3,329	3,251	2,760	1,685	1,338	1,339	24,181
1,198											2,486
96%											10%
2,616	4,008	5,559	7,520	10,479	13,808	17,058	19,819	21,503	22,842	24,181	24,181
2,486											2,486
95%											10%
	-1.0 416.4 7.1 0.0 -33.2 390.3 15.7 13.4 13.9 1,247 1,198 96%	-1.0 416.4 7.1 0.0 -33.2 390.3 15.7 13.4 13.9 1,247 1,198 96% 2,616 2,486 4,008	-1.0 416.4 7.1 0.0 -33.2 390.3 15.7 13.4 13.9 1,247 1,198 96% 2,616 4,008 5,559 2,486	-1.0 416.4 7.1 0.0 -33.2 390.3 15.7 13.4 13.9 1,247 1,392 1,551 1,961 1,198 96% 2,616 4,008 5,559 7,520 2,486	-1.0 416.4 7.1 0.0 -33.2 390.3 15.7 13.4 13.9 1,247 1,392 1,551 1,961 2,959 1,198 96% 2,616 4,008 5,559 7,520 10,479 2,486	-1.0 416.4 7.1 0.0 -33.2 390.3 15.7 13.4 13.9 1,247 1,392 1,551 1,961 2,959 3,329 1,198 96% 2,616 4,008 5,559 7,520 10,479 13,808	-1.0 416.4 7.1 0.0 -33.2 390.3 15.7 13.4 13.9 1,247 1,392 1,551 1,961 2,959 3,329 3,251 1,198 96% 2,616 4,008 5,559 7,520 10,479 13,808 17,058	-1.0 416.4 7.1 0.0 -33.2 390.3 15.7 13.4 13.9 1,247 1,392 1,551 1,961 2,959 3,329 3,251 2,760 1,198 96% 2,616 4,008 5,559 7,520 10,479 13,808 17,058 19,819 2,486	-1.0 416.4 7.1 0.0 -33.2 390.3 15.7 13.4 13.9 1,247 1,392 1,551 1,961 2,959 3,329 3,251 2,760 1,685 1,198 96% 2,616 4,008 5,559 7,520 10,479 13,808 17,058 19,819 21,503	-1.0 416.4 7.1 0.0 -33.2 390.3 15.7 13.4 13.9 1,247 1,392 1,551 1,961 2,959 3,329 3,251 2,760 1,685 1,338 1,198 96% 2,616 4,008 5,559 7,520 10,479 13,808 17,058 19,819 21,503 22,842 2,486	-1.0 416.4 7.1 0.0 -33.2 390.3 15.7 13.4 13.9 1,247 1,392 1,551 1,961 2,959 3,329 3,251 2,760 1,685 1,338 1,339 1,198 96% 2,616 4,008 5,559 7,520 10,479 13,808 17,058 19,819 21,503 22,842 24,181 2,486

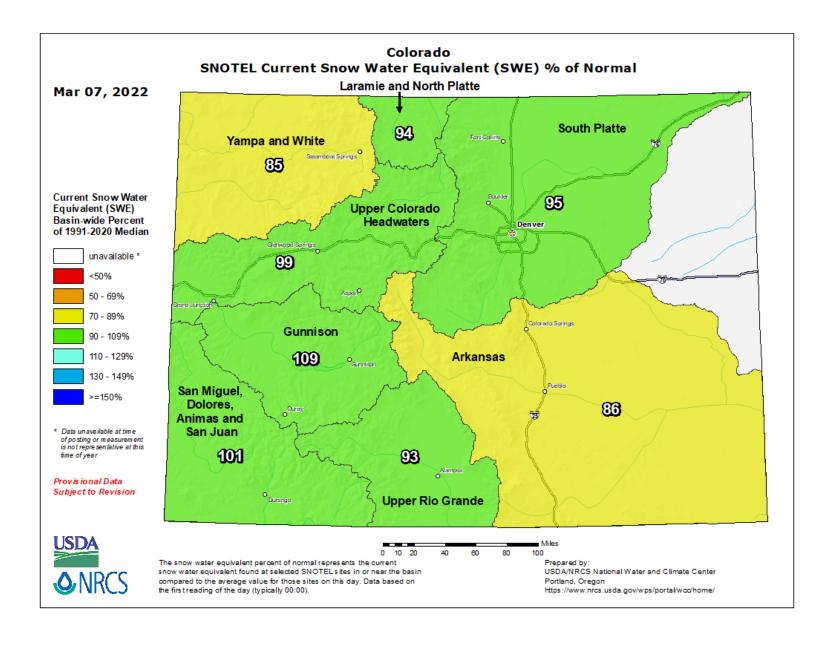


Upper Cache la Poudre Basin SNOTEL - Daily time series for water year 2022







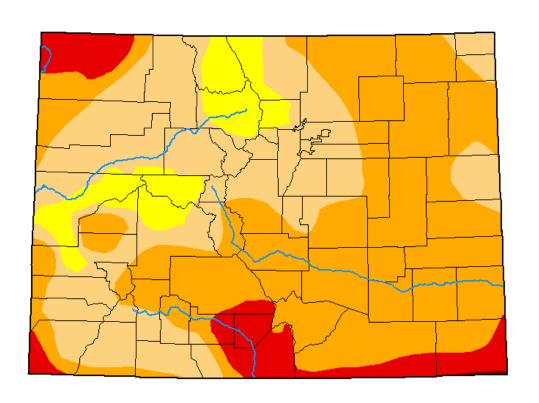




U.S. Drought Monitor Colorado

March 1, 2022

(Released Thursday, Mar. 3, 2022) Valid 7 a.m. EST



Intensity:

None

D0 Abnormally Dry

D1 Moderate Drought

D2 Severe Drought

D3 Extreme 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:

Brad Rippey U.S. Department of Agriculture









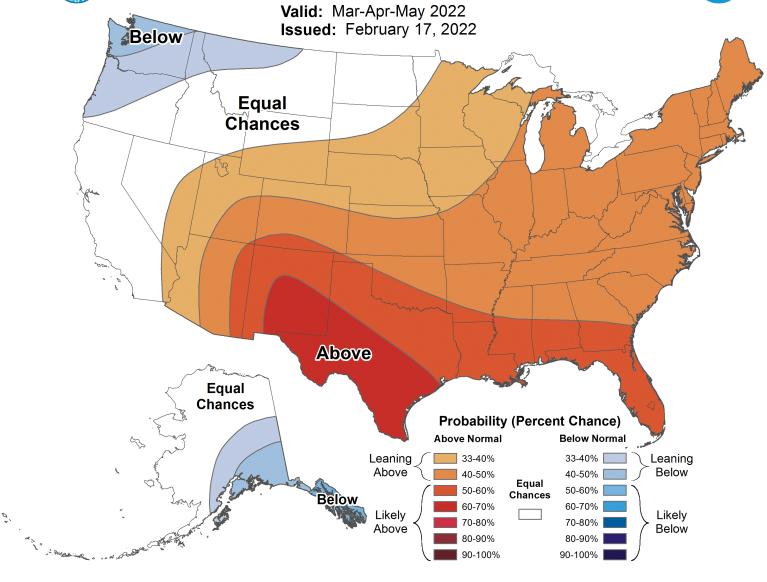
droughtmonitor.unl.edu





Seasonal Temperature Outlook



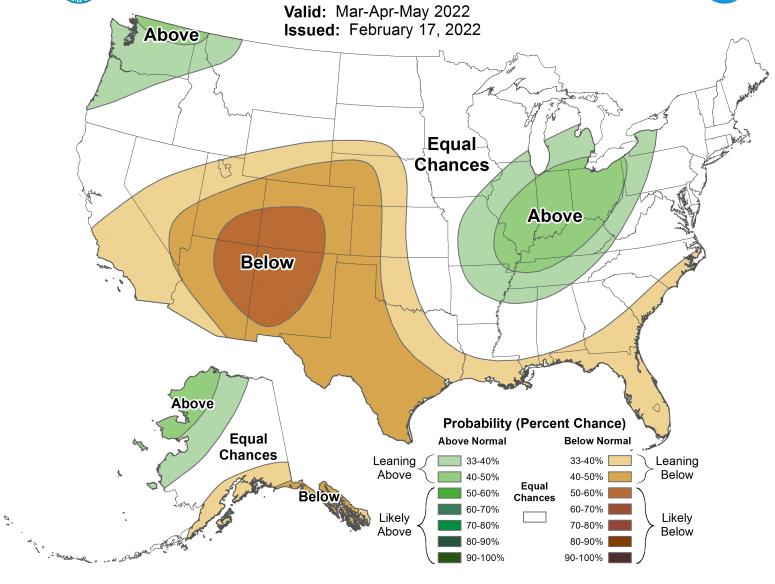






Seasonal Precipitation Outlook

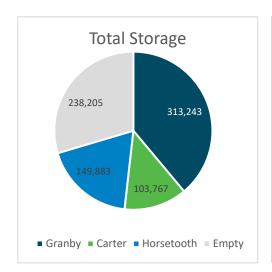


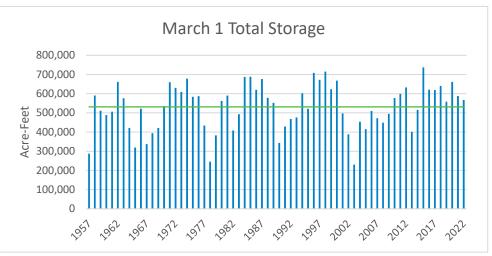


C-BT Project Storage

March 1, 2022

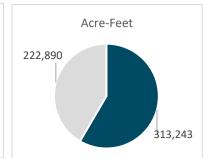






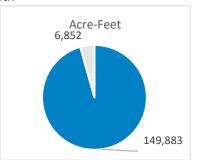
Lake Granby Storage in Lake Granby decreased 27,220 acre-feet last month





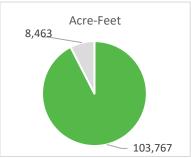
Horsetooth Reservoir Storage in Horsetooth Reservoir increased 10,379 acre-feet last month





Carter Lake Storage in Carter Lake increased 12,861 acre-feet last month



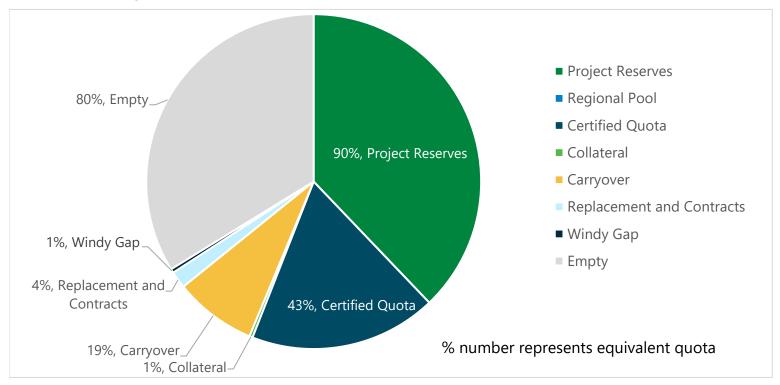


C-BT Project Allocated Water

March 1, 2022

Northern Water

C-BT Active Storage

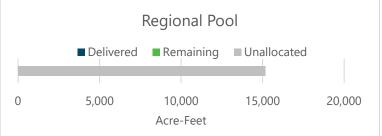


C-BT Delivery Obligations









Notes:

- 1) Quota set at 50%
- 2) Carryover Carryover will not be certified until April 30. Until that date, the Maximum Potential Carryover is reported for Carryover so that adequate supplies are set aside to fulfill all potential obligations.
- 3) Regional Pool Additional water acrued to the Regional Pool on April 30, 2022. There is 15,159.9 Acre-Feet in the Regional Pool for WY 2022.

C-BT Project Deliveries

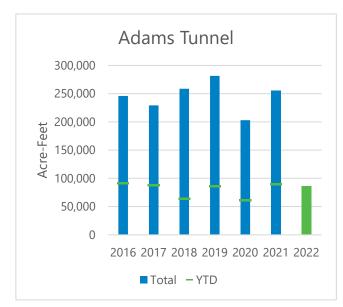
March 1, 2022

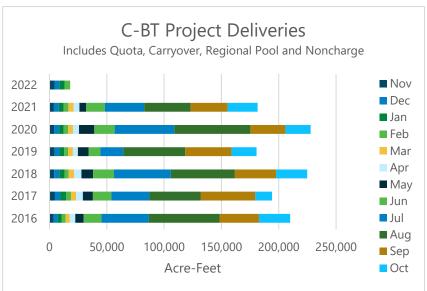


Water Year

Agriculture

■ M&I





■ M&I

Deliveries by Area

February

Carter

Other

Horsetooth

9%

Water Year Water Year February Agriculture Horsetooth

Other

