



COLORADO

Colorado Water Conservation Board

Department of Natural Resources
1313 Sherman Street, Room 718
Denver, CO 80203

Memorandum

To: Governance Committee, Water Advisory Committee, Executive Director's Office
Platte River Recovery Implementation Program

From: Kara Scheel, Endangered Species Recovery Program Manager
Colorado Water Conservation Board

Date: May 3, 2022

Subject: Colorado's Annual Report for 2021, North Platte River Basin

The following information fulfills Colorado's 2021 annual monitoring and reporting requirements for the North Platte River basin pursuant to Colorado's Plan for Future Depletions:

- Colorado's North Platte annual accounting for the year 2021
- Colorado population estimates for the year 2021
- Use of water in the North Platte River basin for the water year 2021

The attached accounting form shows the overall depletions in the North Platte River basin in Colorado have not exceeded the baseline consumptive use. The total consumptive use was less than the baseline consumptive use by 37,682 acre-feet in 2021.

Colorado's 2021 annual depletion reports for the South Platte River Basin are included in a separate memo.



NORTH PLATTE ANNUAL ACCOUNTING FORM FOR YEAR 2021

| | | | | | |
|---|--------------|---|---------------------------|---|-----------|
| 1. Irrigated acres during year: | 89,105 acres | X | 0.83 acre-feet (af)/acre* | = | 73,957 af |
| 2. Population during year: | 1,372 people | X | 0.088 af/person** | = | 121 af |
| 3. Total new post-1997 industrial uses: | | | | = | 0 af |
| a) Oil and gas well development and operations by SandRidge Energy equaled 0 acre-feet of consumptive depletions for 2019. | | | | | |
| 4. Total new post-1997 piscatorial, wildlife and environmental uses (PWEUs), not incidental to agriculture: | | | | = | 25 af |
| a) The decree issued in case number 10CW57 is for an absolute instream flow water right held by the CWCB to preserve the natural environment for 4.0 cfs (April 1 – July 15) and 0.7 cfs (July 16 – March 31). The CU is 0 af. | | | | | |
| b) The decree issued in case number 10CW48 is for an absolute surface water right to maintain a 4.0-acre fish pond owned by Donald Right for 1 cfs. The diversion will occur during the irrigation season (June 1 to October 31). The CU is estimated from information from the court application and is 5.92 af for evaporation. | | | | | |
| c) The decree issued in case number 13CW3018 is for an absolute instream flow water right held by the CWCB to preserve the natural environment for 3.6 cfs (May 1 – July 31), 1.0 cfs (August 1 – September 30) and 0.5 cfs (October 1 – April 30). The CU is 0 af. | | | | | |
| d) The decree issued in case number 17CW3019 is for an absolute surface water right of 38.6 acre-feet for the Lake Creek Wetlands over 18.5 acres for wildlife propagation. Evaporative loss, CU, is 19.2 acre-feet. | | | | | |

| | | |
|------------------------------|----------|-------------------|
| TOTAL CU | = | 74,103 af |
| BASELINE CU | = | 111,785 af |
| ANNUAL CU UNDERRUN(-) | = | -37,682 af |

* This 0.83 af/acre CU factor may be significantly higher if a high altitude crop coefficient is used. Current information demonstrates that the CU for irrigated pasture grass, assuming a full water supply, could be as high as 1.82 af/acre, or higher. Nevertheless, Colorado agrees to use the 0.83 af/acre factor for the first increment, and will not seek a change of this factor from the Governance Committee during the First Increment.

** 0.2504 af/person diversion X 35% CU = 0.088 af/person. (Based on applying South Platte Basin M&I assumptions to Jackson County as of July of the year that begins the increment [i.e. July 2007]. The 2007 South Platte Basin M&I per capita use was changed to 0.2504 af/person by the Governance Committee on October 13, 2009.)

Notes

- 1) If total af of CU ever totals more than 111,785 af (177 af for population baseline and 111,608 af for agricultural baseline) under the current set of assumptions, then Colorado would propose mitigation as described below. Note, this does not add in the CU for pre-1997 PWEUs or pre-1997 industrial uses because these uses will not be used to offset other types of uses that are new depletions.
- 2) Total annual overruns and under runs to these benchmarks will be quantified and reported. If a total overrun occurs, Colorado will provide a mitigation plan for the review and approval of the Governance Committee. The mitigation plan will identify the total annual overrun that occurred, and offer a means to replace the overruns in the year following the year the overruns occurred.



COLORADO
Department of Local Affairs
Office of the Executive Director

April 20, 2022

Kara Scheel, P.E.
Endangered Species Recovery Program Manager
Colorado Water Conservation Board
Colorado Department of Natural Resources
1313 Sherman St. Room 721

Dear Ms. Scheel,

According to the Platte River Recovery Implementation Program the State Demography Office shall report annually population changes in each of the three regions and in Jackson County.

On the second page you will find a table with the defined regions and the State Demography Office (SDO) estimates for January 2021 and forecast for January 1, 2022 and population increase for the period. The population is expected to increase by 42,764 in the whole South Platte River Basin between January 1, 2021 and January 1, 2022.

You have also asked for the population estimates and forecasts for Jackson County for the same time period. Their estimates and forecasts are January 1, 2021 = 1,372 and January 1, 2022 = 1,360, and the expected decline to be 12 people. With changes this small, and margins of error, the population is considered to be flat.

Please be aware the estimates and forecasts are produced as vintages and will be revised annually. The data for these estimates and forecasts are based on vintage 2020 work and released November 2021. The estimates will change based on updates to administrative records. The forecast will change dependent upon economic and social conditions within the state and nationally. These data are available on our webpage at: demography.dola.colorado.gov.

Please contact me with any questions regarding the estimates and forecasts.

Regards,

Elizabeth Garner

Elizabeth Garner
State Demographer
Colorado Department of Local Affairs





Colorado Population Estimates and Forecasts - Platte River Recovery Implementation Program
Source: State Demography Office, Department of Local Affairs April 2022.

| Counties | SDO Jan 2021 | SDO Jan 2022 Forecast | Pop. Change 2021-22 |
|--|------------------|-----------------------|---------------------|
| Boulder | 331,879 | 333,457 | 1,579 |
| Broomfield 55% | 41,456 | 42,483 | 1,027 |
| Larimer | 361,159 | 364,899 | 3,740 |
| Logan | 21,371 | 21,386 | 15 |
| Morgan | 29,094 | 29,220 | 126 |
| Phillips | 4,540 | 4,547 | 7 |
| Sedgwick | 2,404 | 2,401 | -3 |
| Washington | 4,825 | 4,831 | 6 |
| Weld | 335,601 | 343,939 | 8,338 |
| Total Northern Region | 1,132,327 | 1,147,163 | 14,835 |
| Arapahoe 90% | 590,998 | 595,542 | 4,545 |
| Adams | 521,864 | 526,773 | 4,909 |
| Broomfield 45% | 33,919 | 34,759 | 840 |
| Clear Creek | 9,384 | 9,393 | 10 |
| Denver | 721,371 | 729,195 | 7,824 |
| Gilpin | 5,811 | 5,815 | 4 |
| Jefferson | 582,880 | 584,741 | 1,861 |
| Park | 17,390 | 17,435 | 45 |
| Total Central Region | 2,483,615 | 2,503,653 | 20,038 |
| Arapahoe 10% | 65,666 | 66,171 | 505 |
| Douglas | 364,450 | 371,298 | 6,849 |
| Elbert | 26,331 | 26,868 | 537 |
| Total Southern Region | 456,446 | 464,337 | 7,891 |
| South Platte River Basin Total | 4,072,389 | 4,115,153 | 42,764 |
| Jackson | 1,372 | 1,360 | -12 |
| SDO - State Demography Office, November 2021 | | | |





COLORADO
Division of Water Resources
Department of Natural Resources

April 8, 2022

Tom Riley, Director
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Rebecca Mitchell, Director
Colorado Water Conservation Board
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Dear Mses. Ronca and Mitchell and Messrs. Riley, Gebhart and Hayden;

Enclosed herewith is the report of the water stored for irrigation purposes, number of acres irrigated and transbasin diversions from the North Platte River drainage within the State of Colorado for water year 2021. The report covers the period from October 1, 2020 to September 30, 2021, and is prepared in compliance with Paragraph IX of the North Platte River Decree of the United States Supreme Court. The report reflects the irrigated acreage and water use as limited by Paragraph I(a), (b), and (c) of the Decree. The amount of water stored for irrigation purposes and the number of acres irrigated for each structure within North Platte River drainage of Colorado and the transbasin diversions from the North Platte River drainage, along with the 10-year cumulative total, are available for inspection upon request.

If additional information or clarification is needed, please feel free to contact me.

Sincerely,

Kevin Rein, P.E.
Director/State Engineer

Enclosure

ec: Erin Light, Division Engineer, Water Division 6
Kara Scheel, Endangered Species Recovery Program Manager, CWCB



NORTH PLATTE RIVER BASIN
USE OF WATER IN COLORADO
WATER YEAR 2021

The State of Colorado reports the following use of water from the North Platte River Basin for the period October 1, 2020 to September 30, 2021. This report is made pursuant to Paragraph IX of the decree of the Supreme Court of the United States, entered October 8, 1945, in the case of State of Nebraska vs. Wyoming and Colorado, as amended.

| | |
|--|--------------|
| Total area of land irrigated in Jackson County, Colorado | 89,105 Acres |
|--|--------------|

| | |
|---|----------|
| Total amount of water stored for irrigation in Jackson County, Colorado | 8,283 AF |
|---|----------|

Amount of water exported from the North Platte River Basin, Jackson County, Colorado by:

| | |
|--------------------|--------------|
| Michigan Ditch | 2,235 AF |
| Cameron Pass Ditch | <u>56 AF</u> |

| | |
|--------------|----------|
| Annual Total | 2,291 AF |
|--------------|----------|

| | |
|--------------------------|-----------|
| 10-Year Cumulative Total | 34,966 AF |
|--------------------------|-----------|

