

Division 2 Annual 2022 Report

Arkansas River Basin

Department of Natural Resources

Division of Water Resources



August 2023



COLORADO

Division of Water Resources

Department of Natural Resources

Jared S. Polis
Governor

Dan Gibbs
Executive Director, DNR

Kevin G. Rein, P.E.
State Engineer/Director

Rachel A. Zancanella, P.E.
Division Engineer

Kevin Rein
State Engineer/Director of Colorado Division of Water Resources
1313 Sherman St. - Rm. 818
Denver, CO

This document is provided as an executive summary report of activities and accomplishments of Division 2 personnel during 2022 in partial fulfillment of the requirements of CRS 37-80-105.

Special thanks and recognition is due for the many Division 2 employees who helped compile the key information in this report and to all of the Division 2 employees who continued to perform their work in a manner that assisted in the effective and efficient use of water during 2022.

2022 was again a challenging year for Division 2 for many reasons including staffing losses starting with the loss of Bruce Smith, long time, once previously retired, Water Commissioner and the retirements of many key personnel, especially veteran Water Commissioner Doug Brgoch, Reservoir Operations Specialist, Phil Reynolds and Division Engineer Bill Tyner all on December 31st, 2022.

Bruce Smith passed away on Wednesday July 13, 2022. For those of you who knew Bruce, there are few examples to be found that match the level of dedication to family and the water community that Bruce had, he will be sorely missed. Bruce worked a 40 year career with DWR, retired in 2013, and then returned to DWR to keep helping in the Upper Arkansas Basin as a Deputy Water Commissioner. Bruce worked as a Water Commissioner on the Laramie River and Cache La Poudre River before coming to Division 2 and then spent all of the remainder of his career in Water District 11 in Salida.

In preparation for the retirements of Ina Bernard, Bill Tyner, Phil Reynolds and Doug Brgoch, and to overcome the other vacancies caused by transition of other key staff, significant staff time in 2022 was dedicated to transition training. To facilitate the transition of a new Division Engineer, I was appointed on December 2, 2022 in an effort to create some short overlap with Bill Tyner and ensure adequate representation for Division Two at the annual ARCA meeting in December. All DWR Division 2 staff worked to the best of their abilities to ensure the continuation of key administrative operations into 2023 which included working through very severe drought conditions, water court trial preparation participation and difficult compact conditions.

Our survival over the past year is a huge credit to the dedicated Division 2 employees who hung in there and took on extra workload to help meet our commitments. Division 2 efforts to perform critical tasks were only achieved through amazing dedication and hard work by those who remained committed to being successful.

I offer this report in partial fulfillment of my statutory obligations as Division Engineer.



Rachel A. Zancanella, P.E.
Division Engineer

Date: August 29, 2023

TABLE OF CONTENTS

1 2022 Water Supply and Administration Operations	4
1.1 Water supply indicators	4
1.1.1 U.S. Drought Monitor	4
1.1.2 Snow Pack	6
1.1.3 Precipitation and Streamflow	6
1.2 Administration Activities	12
1.2.1 Pueblo Winter Water Storage Program	12
1.2.2 Transmountain Diversions	12
1.2.3 Surface Water Administration	12
1.2.4 Ground Water Administration	13
1.2.5 Water Court Activity	15
2022 caseload summary:	15
1.2.6 Administration of Decreed Plans for Augmentation	16
2 Compact Issues	17
2.1 Compact Operations	17
2.2 Compact Compliance	18
2.2.1 Post Compact Wells	18
2.2.2 Surface Water Irrigation Improvements	18
2.2.3 Special Engineering Committee	19
Highlights of 2022	19
2.3 Pond Management Program	19
3 Organizational Changes	21

1 2022 Water Supply and Administration Operations

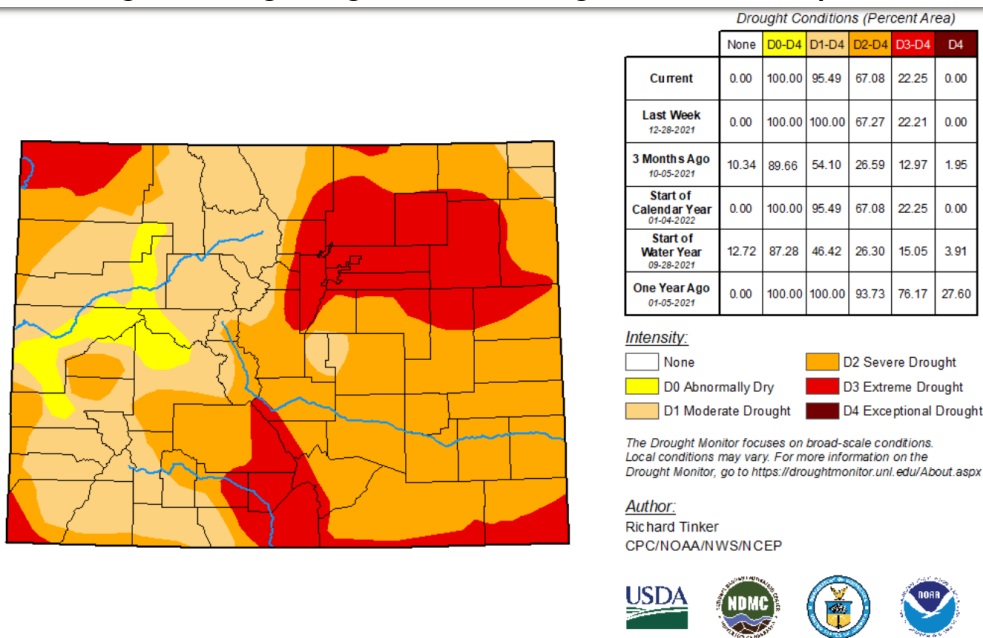
Water supply conditions in 2022 were below average within the Arkansas River basin and was considered a “Very Dry” year in the year-type calculations used in the basin for the 1950 period forward. In order to compare years for water supply conditions in the larger mainstem irrigation areas along the mainstem from Pueblo to the stateline, a comparative tool has been used that totals the flow through Pueblo Reservoir, the flow to the Arkansas River from Fountain Creek and the flow to the Arkansas River from the Purgatoire River and compares that total to each year from 1950 through 2022. Using this criteria, 2022 ranked as the sixth worst year in the 73 year period.

1.1 Water supply indicators

1.1.1 U.S. Drought Monitor

Drought conditions in the Arkansas Basin at the beginning of 2022 began broadly as severe and extreme drought throughout the Arkansas Basin and across much of the Front Range of Colorado as reflected in the January 4, 2022 Drought Monitor map below:

Figure 1: Beginning of Season Drought Conditions Map



At the end of 2022 the drought conditions had improved as shown below, however large portions of the basin were in Severe Drought:

Figure 2: End of Season Drought Conditions Map

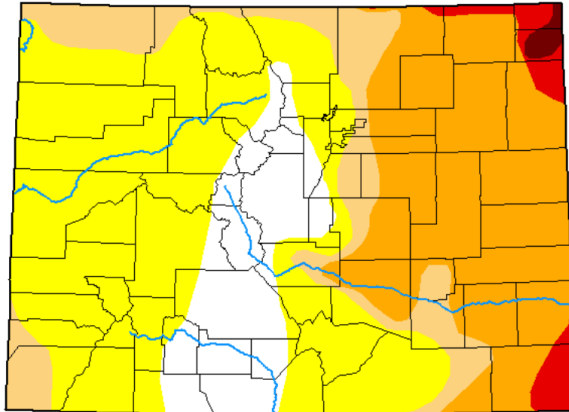
U.S. Drought Monitor

Colorado

December 27, 2022

(Released Thursday, Dec. 29, 2022)

Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	13.75	86.25	42.37	30.79	3.23	0.53
Last Week 12-20-2022	16.26	83.74	43.34	30.79	3.23	0.53
3 Months Ago 09-27-2022	15.46	84.54	45.65	15.47	3.73	0.57
Start of Calendar Year 01-04-2022	0.00	100.00	95.49	67.08	22.25	0.00
Start of Water Year 09-27-2022	15.46	84.54	45.65	15.47	3.73	0.57
One Year Ago 12-28-2021	0.00	100.00	100.00	67.27	22.21	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

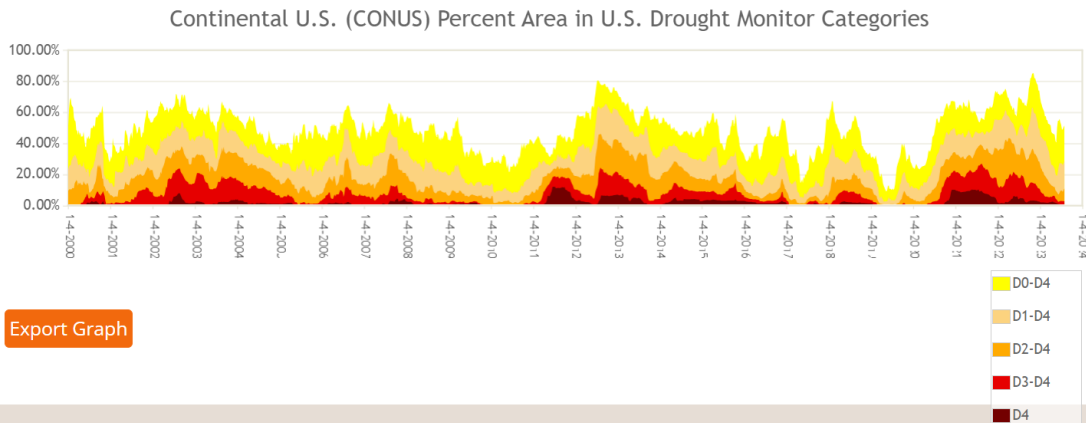
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Richard Heim
NCEI/NOAA

The figure below shows how drought conditions have cycled during the past twenty years and gives a reference for how severe the drought has been in the past few years.

Figure 3: Time Series Drought Conditions



1.1.2 Snow Pack

The snowpack in the Arkansas Basin was below average on March 1, 2022, but improved by April 1, 2022. The soil moisture remained below normal, which inhibited better stream flows.

Figure 4: Monthly Snowpack Summary Map March 1, 2022

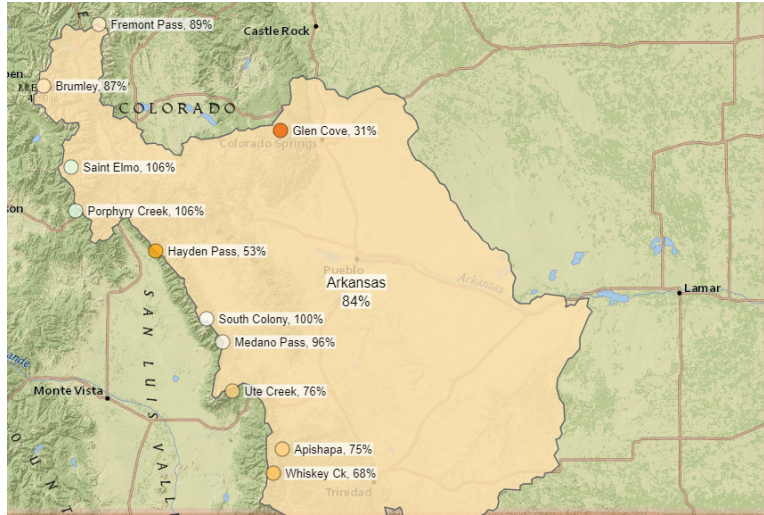
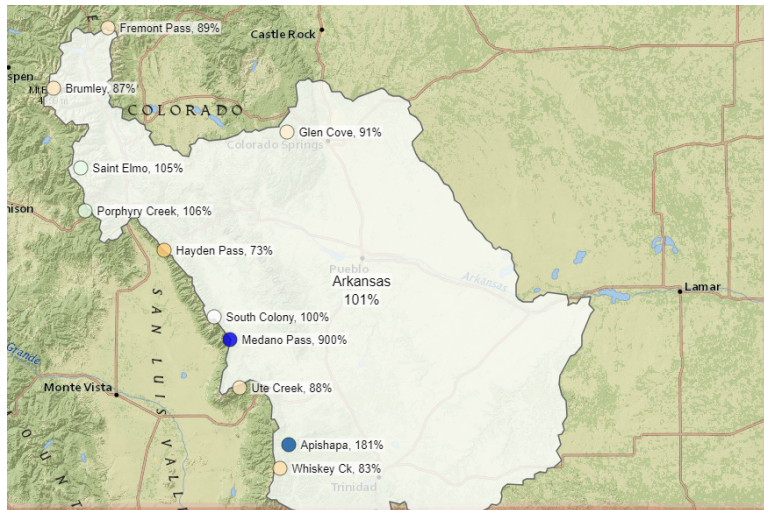


Figure 5: Monthly Snowpack Summary Map April 1, 2022



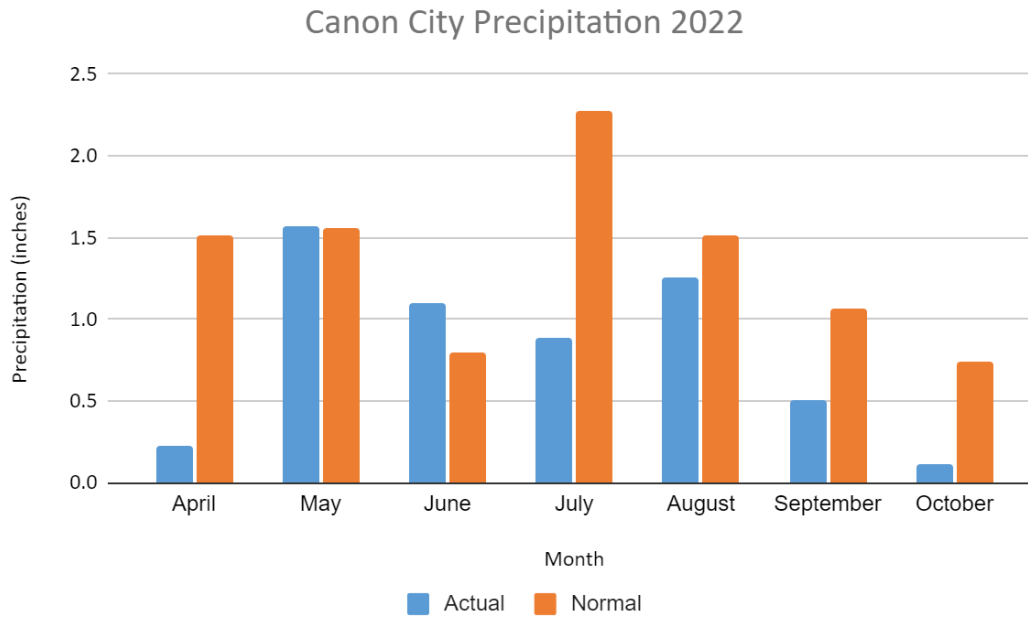
1.1.3 Precipitation and Streamflow

Individual regions of the Arkansas River Basin can experience very different seasonal patterns depending on precipitation. It is rare to have an occasion where the entire basin has similar precipitation and streamflow. However, each region of the basin contributes to the overall outlook of the basin and in 2022, that was generally a very dry year.

1.1.3.1 Arkansas Mainstem

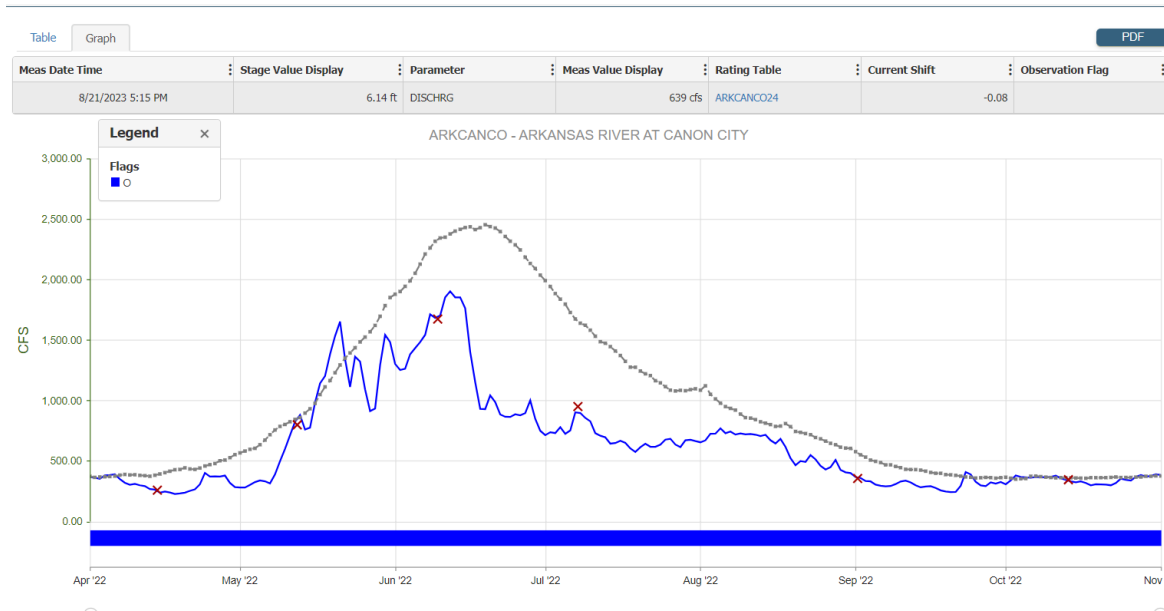
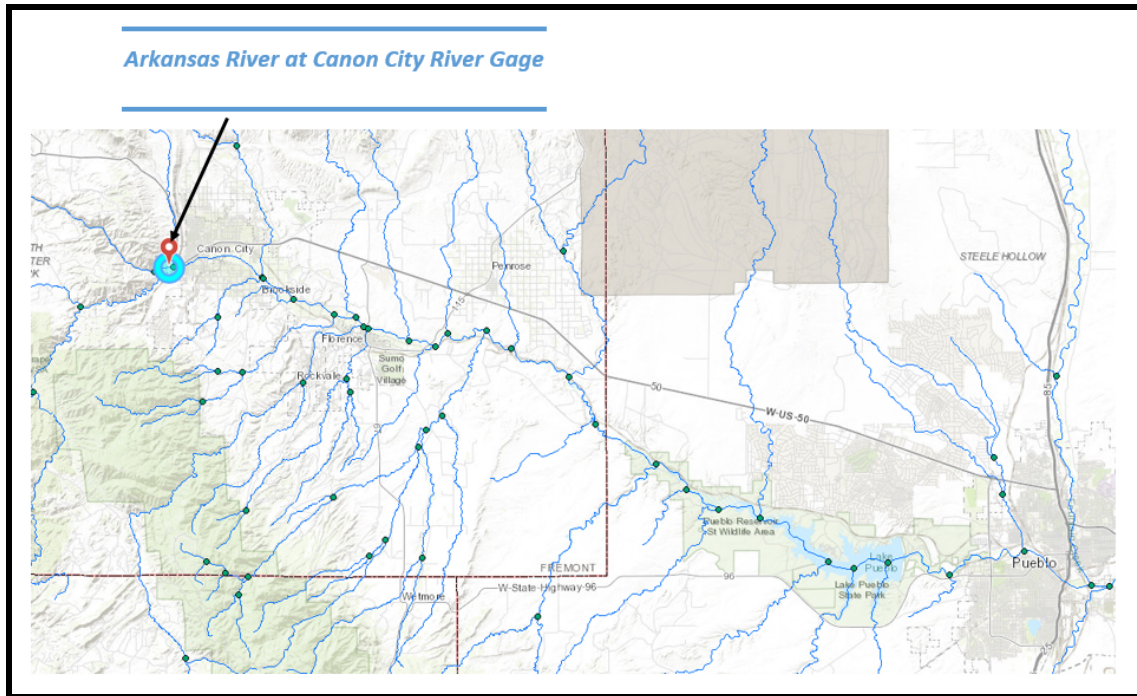
On the mainstem of the Arkansas River at the Canon City precipitation station, April 2022 yielded very little precipitation to start off the irrigation season. May saw average precipitation for what has been considered normal since 2000. Generally speaking however, the later half of the 2022 irrigation season precipitation was well below the average monthly precipitation. The monsoons did not really develop and this led to a very dry end of the season and start to the winter water storage season.

Figure 6: Average Precipitation at Canon City compared to Measured Precipitation 2022



The lack of precipitation in the upper basin translated to a similar lack of streamflow as measured at the Arkansas at Portland stream gage.

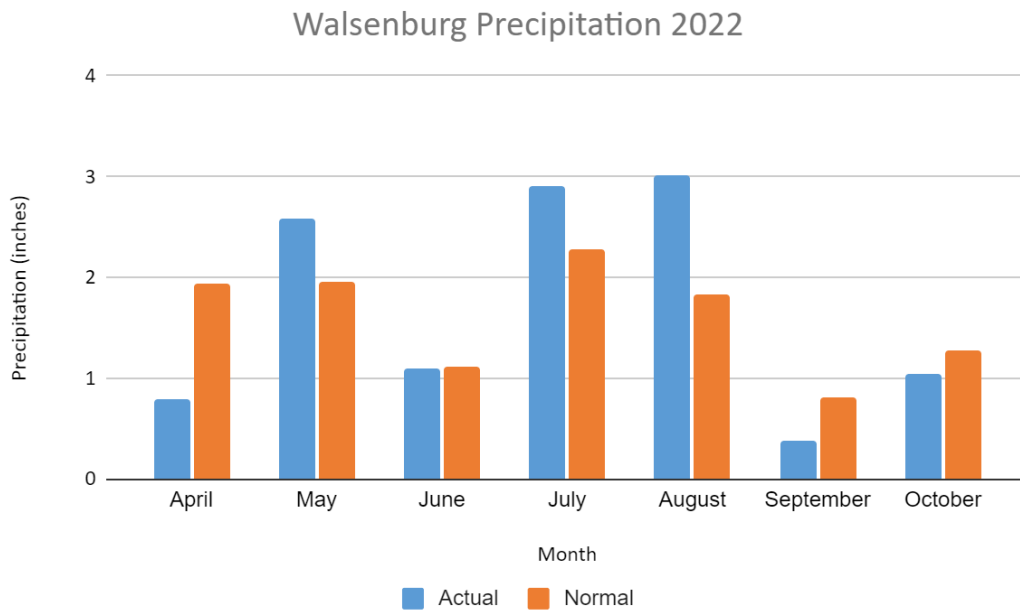
Figure 7: Average Annual Streamflow vs. Historic Streamflow 2022 at ARKCANCO



1.1.3.2 Middle Arkansas

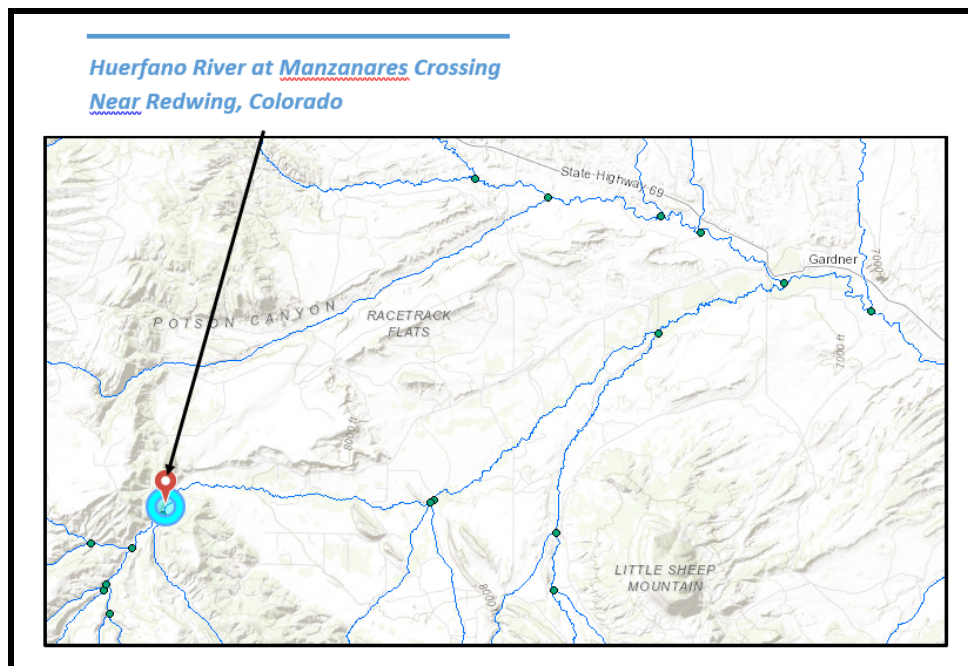
The area around Walsenburg did experience some seasonal monsoon weather and the precipitation in July and August was greater than normal.

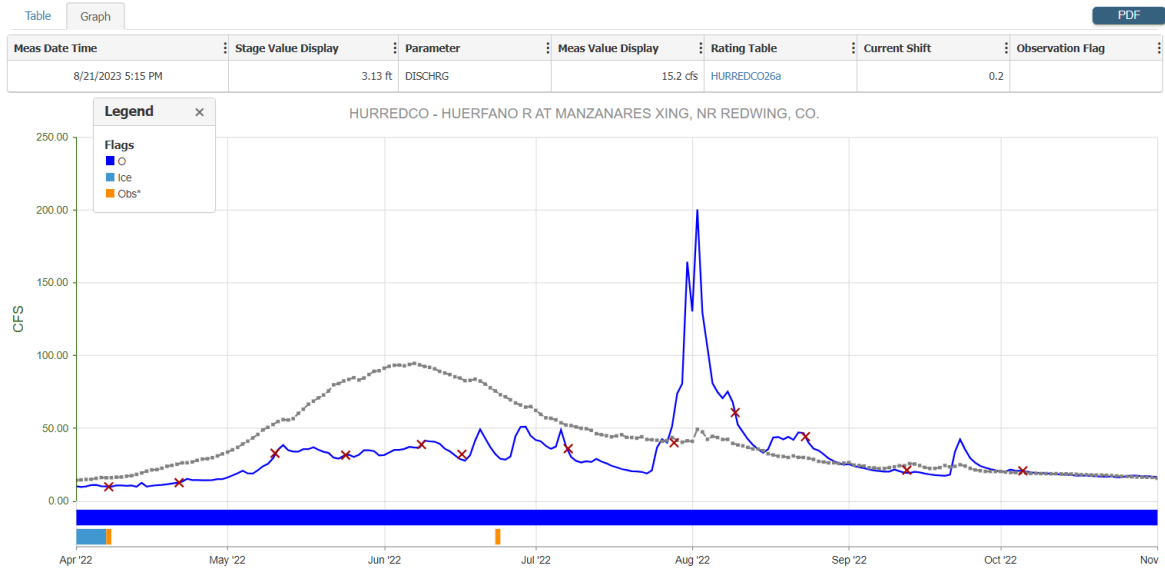
Figure 8: Average Precipitation at Walsenburg compared to Measured Precipitation 2022



This precipitation translated to streamflows that were also above the historic average in July and August.

Figure 9: Average Annual Streamflow vs. Historic Streamflow 2022 at HURREDCO

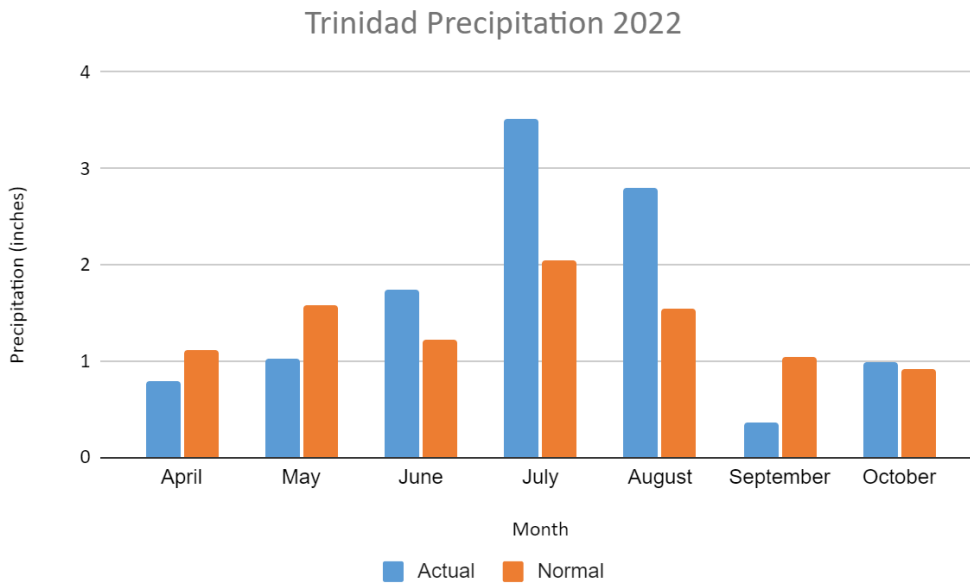




1.1.3.3 Lower Basin

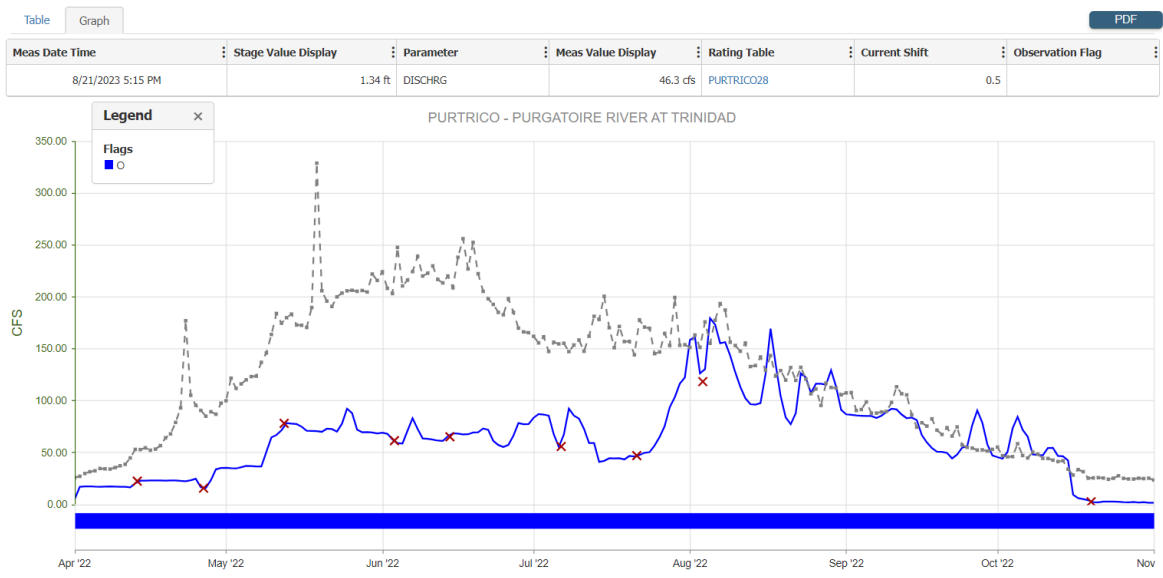
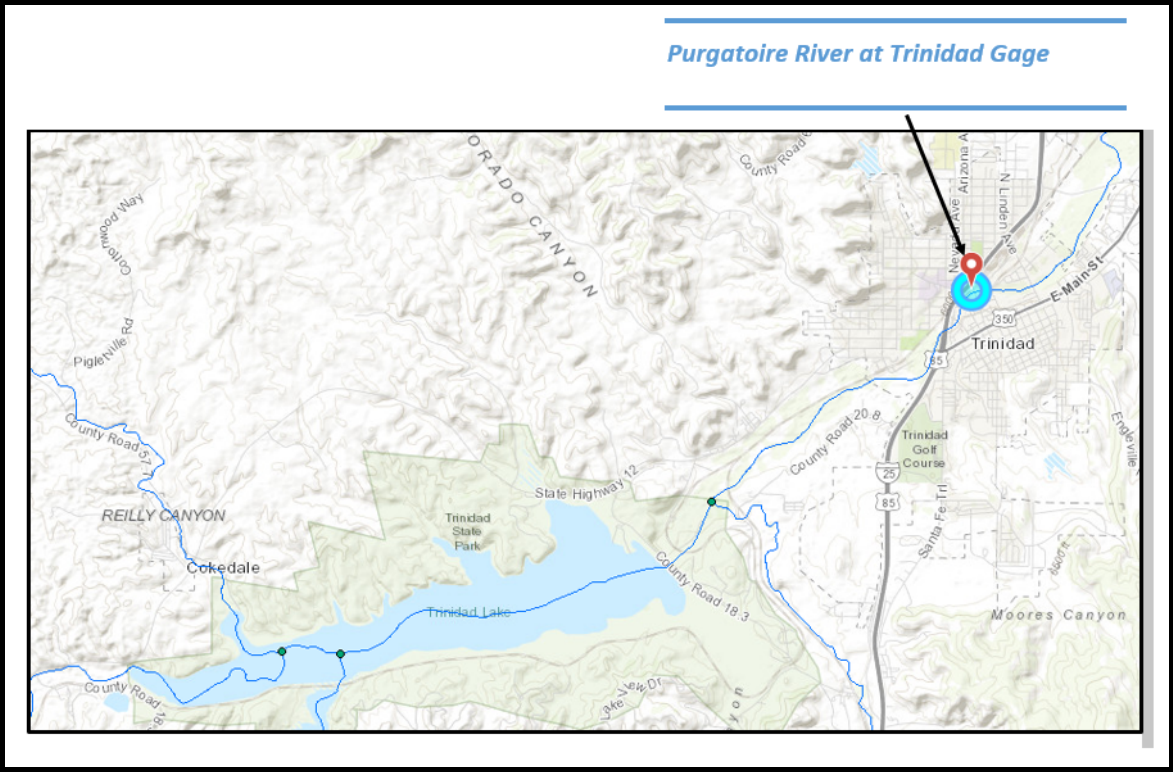
The Trinidad area did receive above average precipitation in June, July and August which helped bring up base flows. However, this precipitation did not translate into higher streamflow contributions for the Arkansas River.

Figure 10: Average Precipitation at Trinidad compared to Measured Precipitation 2022



Excluding a few isolated rainfall events, the Purgatoire did not contribute much to the overall Arkansas Basin streamflows in 2022 as most of the local precipitation was consumed in the upper basin. The base flows at the mouth of the Purgatoire hovered in the less than 5 cfs range most of the year.

Figure 11: Average Annual Streamflow vs. Historic Streamflow 2022 at PURTHACO



1.2 Administration Activities

1.2.1 Pueblo Winter Water Storage Program

The final report for the period November 15, 2021 through March 14, 2022 showed a system grand total of 92,219 acre-feet which was 8,551 acre-feet or 10.2% more than was stored in the previous year and 28,559 acre-feet or 23.6% less than the previous 20-year average.

One of the terms and conditions of the decree entered in 84CW179, which approved of the Winter Water Storage Program, is that the conservation storage in John Martin Reservoir is to be monitored to ensure that over time, the program does not have an adverse effect on Compact storage in John Martin Reservoir. During the winter of 2021-22, a total of 13,543 acre-feet was accumulated in John Martin Reservoir as conservation storage prior to March 15, 2022. This was 10,489 acre-feet or 45.6% less than the amount stored during the period 1950 - 1975, and 18,637 acre-feet less than in 2020-2021.

Colorado and Kansas continue to discuss the possibility of documenting the procedures that have been used to allocate the inflow to John Martin as measured at Las Animas, Colorado between conservation storage and water to be stored pursuant to Section III of the 1980 Operating Resolution.

1.2.2 Transmountain Diversions

Table 1: WY 2022 Transmountain Water Imported to Division 2

RECIPIENT				
DIV/WD	DIVERSION STRUCTURE	STREAM	ACRE-FT	STREAM
2/11	COLUMBINE DITCH	ARKANSAS RIVER	1,346	EAGLE RIVER
2/11	EWING DITCH	TENNESSEE CREEK	601	EAGLE RIVER
2/11	WURTZ DITCH	TENNESSEE CREEK	2,229	EAGLE RIVER
2/11	HOMESTAKE TUNNEL	LAKE FORK CREEK	23,576	EAGLE RIVER
2/11	BOUSTEAD TUNNEL	LAKE FORK CREEK	51,752	FRYINGPAN RIVER
2/11	BUSK-IVANHOE TUNNEL	LAKE FORK CREEK	2,255	FRYINGPAN RIVER
2/11	TWIN LAKES TUNNEL	LAKE CREEK	36,310	ROARING FORK RIVER
2/11	LARKSPUR DITCH	PONCHA CREEK	425	TOMICHI CREEK
2/79	HUDSON DITCH	HUERFANO RIVER	225	MEDANO CREEK
2/79	MEDANO DITCH	HUERFANO RIVER	731	MEDANO CREEK
2/10	BLUE RIVER PIPELINE	FOUNTAIN CREEK	8,640	BLUE RIVER
	TOTAL:		128,090	

The Fryingpan-Arkansas Project reported that their imports of transmountain water in 2022 were 88% of average. This import amount was a substantial increase from 2021 Project imports.

1.2.3 Surface Water Administration

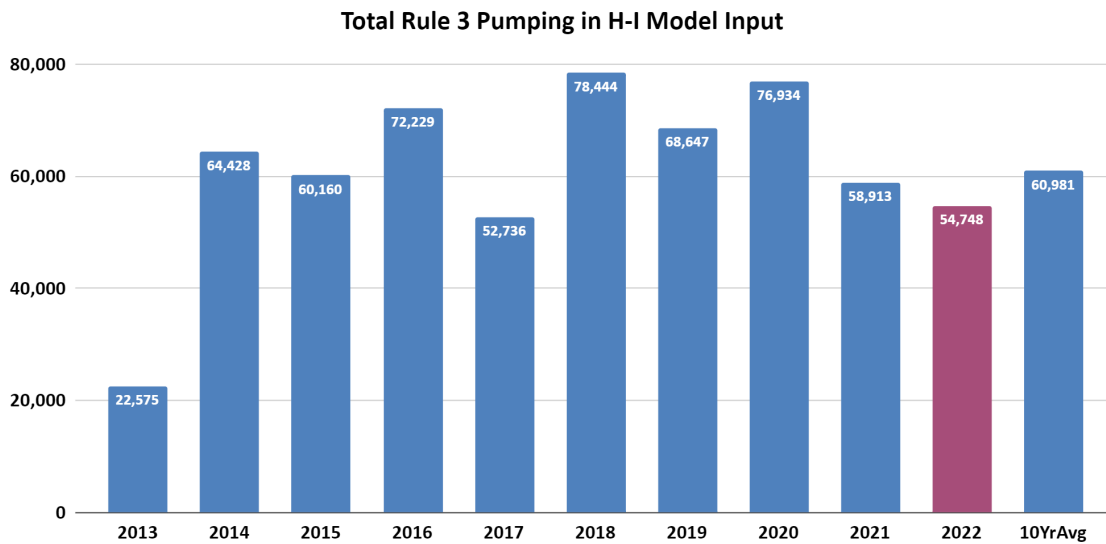
Below average snowpack, followed by below average rainfall, particularly during the monsoon season, for multiple years in a row combined for a well below average water supply in the Arkansas Basin in 2022. Reservoir storage from previous years was nearly fully utilized and

brought Division 2 into the start of the 2022-23 Winter Water Storage year with record low storage. For the first time, seven participating reservoirs began the storage season with zero storage. John Martin Reservoir, for example, saw a below average amount of storage during the 2021-2022 winter months with a peak storage amount of 45,256 acre-feet on April 19, 2022. Storage content at the end of the irrigation season in John Martin Reservoir was 11,480 acre-feet. The 2022 irrigation season surface supply was in fact so low, that the most junior the mainstem call got to was a September 25, 1889 Holbrook on May 25, 2022. This meant that even a large canal like the Colorado Canal, did not come into priority under their native rights during the season at all.

1.2.4 Ground Water Administration

During 2022 the irrigation well pumping represented in the H-I Model totaled 54,748 acre-feet. For User Groups 1-14 (above John Martin Reservoir Area) the total pumping was 36,980 acre-feet and for User Groups 15-24 (below John Martin Reservoir) the total pumping was 17,768 acre-feet.

Figure 12: Irrigation Well Pumping - Ten Year Comparison



For 2022 supplemental flood Rule 3 irrigation wells were assigned 36% presumptive depletion factors pursuant to Appendix A.4 of the Decree in Kansas v. Colorado. Rule 3 irrigation pumping delivered to fields via flood and furrow irrigation was assessed the 50% presumptive depletion factor unless flood irrigation of dry-up lands occurred under a Rule 6 temporary change of water rights. In this circumstance the presumptive depletion factor was increased to 65% for flood and furrow irrigation. Rule 3 irrigation wells supplying sprinkler systems were assigned a 75% presumptive depletion factor except for those wells irrigating dry-up lands per a Rule 6 temporary change of water rights. Under this circumstance the depletion factor was set at 85%. Rule 3 irrigation wells supplying drip irrigation systems were assigned a 100% depletion factor.

Overall irrigation well pumping in 2022 was below average for the past ten year period. The 2022-2023 Rule 14 Plan approvals for AGRA and LAWMA provided for an estimated amount of pumping and stream depletions as follows:

Table 2: Rule 14 2022-2023 Estimated Plan Values

Plan	Estimated Total Pumping (Original Plan without Amended Pumping) (AF)	Estimated Rule 3 Irrigation Pumping (Original Plan without Amended Pumping) (AF)	Estimated Stream Depletions (Original Plan without Amended Pumping) (AF)
AGRA	43,967	34,071	22,970
LAWMA	29,352	22,656	21,620
TOTALS	73,313	56,727	44,590

The 2022 calendar year actual pumping and stream depletions for AGRA and LAWMA were as follows:

Table 3: Rule 14 2022-2023 Actual Plan Values

Plan	Actual 2022 Calendar Year Pumping (AF)	Actual 2022 Calendar Year Rule 3 Irrigation Pumping Included in H-I Model (AF)	Actual 2022 Calendar Year Stream Depletions (AF)
AGRA*	37,555	28,479	23,812
LAWMA	25,224	23,070	8,981
TOTALS	68,638	51,549	32,793

*Pumping and depletions from AGUA and CWPDA Rule 14 Plans are grouped into the pumping and depletions under AGRA. CWPDA and AGUA only operated for January, February and March 2022. Depletions from the AGRA Rule 14 Plan include depletions as a result of prior pumping from both AGUA and CWPDA plans.

1.2.5 Water Court Activity

2022 caseload summary:

- 77 new cases were filed.
- 8 Statement of Oppositions were filed
- 2 2022 cases we were parties to were decreed
- 26 cases we are parties to remain un-decreed

Futile Call

During 2022 many discussions between the State Engineer and Division Engineers were held regarding the application of the Futile Call Doctrine and its applicability in current administration. As part of those discussions The Futile Call Written Instruction was updated, “Written Instruction and Order 2015-03, Amended 2023 Futile Call”. This document has been active since 2015 and has given direction to the Division Engineers on how to handle cases that are being made absolute based on diversion under a futile call, among other things. However, one area that much consideration was given is in section 6 of the Order which states:

“Division Engineers will require that the junior appropriator requesting a futile call determination provide scientific evidence that their diversion will not reduce the water available to senior water rights at the time and place of their need, unless the Division Engineer determines the scientific evidence is not necessary. The evidence shall be a report completed by an expert that may use modeling, mapping and discussion of geologic barriers to flow, or other analysis supporting the request, considering all factors relevant to the particular location, including those factors described in 37-92-502(2)(a). The analysis must consider whether the junior diversion will affect tributary groundwater conditions, such that downstream senior water rights will be deprived of water to which they are entitled, even if that deprivation of flow is not immediate.”

This language has significant implications for an over-appropriated basin like Division 2 where there has been a call on the Arkansas River everyday for the last 24 years straight. In essence, there is generally always a downstream calling senior.

Trial Activities

In November of 2021 the State and Division Engineer participated in a three week trial for Case No. 17CW3069. After the trial, the case was stayed to allow parties time to negotiate the terms of a global settlement in 17CW3069 and Case Nos. 18CW3072, 19CW3087, 20CW3015, and 20CW3084 with a deadline of August 1, 2023.

In November of 2022 the State and Division Engineer were preparing for a December trial in 21CW3008 Angelview LLC. This case involved, among other things, a dispute regarding the point at which natural drainage became a ditch. The case was required to go through mediation with retired Water Judge Kuenhold where a settlement was reached that required

the applicant to amend the application and for the Division Engineer to conduct further investigation in Lake County related to the administration of water in the area associated with the case.

2020 Abandonment Update

Judge Schwartz signed Case No 21CW3078 Final Judgement and Decree Regarding Non-protected Water Rights abandoning 660 water rights.

The State and Division Engineers stipulated in 8 Pre-Protected cases and 15 Protected cases.

1.2.6 Administration of Decreed Plans for Augmentation

23 new augmentation plans were decreed in 2022, with the current total number of decreed plans shown here:

Table 4: Number of Augmentation Plans by Water District and Year

WD	2017	2018	2019	2020	2021	2022
10	340	379	387	400	402	412
11	127	129	130	132	133	134
12	48	51	53	56	57	58
13	30	31	31	33	33	33
14	34	34	38	42	43	44
15	13	13	13	14	14	14
16	28	28	29	29	29	29
17	15	19	20	20	20	20
19	14	14	14	15	15	15
67	19	19	19	20	23	23
79	2	2	3	3	3	3
Total	670	719	737	764	772	785

The majority of the Augmentation Plans are in Water District 10, most of them are subdivision augmentation plans utilizing individual on-lot wells in the Denver Basin Aquifers with replacements dependent on septic returns. However, the successful utilization of this non-renewable resource depends on the active administration of these plans to prevent over pumping as these plans only allow for a finite pumping life (typically between 100 and 300 years at their maximum pumping rates) before pumping must cease and post pumping replacements begin, absent a return to water court to identify a new source of water. These subdivisions are generally cooperative in providing annual, biannual or monthly diversion records to the Water Commissioner. The remaining plans for augmentation in District 10 are heavily municipal or small individual well augmentation plans that are outside the Denver Basin and are administered by the District 10 Water Commissioner and augmentation coordinator. The non-Denver Basin Plans generally operate by utilizing replacement sources generated from historical consumptive use generated from changed surface ditch water rights.

In Districts 11, 12 and 13, effort continues to increase obtaining use reports from individual on-lot wells. There is a high turnover in property and a large population of part-time occupancy. The attempt to educate these individuals of state statutes pertaining to water

administration, as well as the terms and conditions of the court decrees and permit conditions continues to improve.

In the Fall of 2022, 882 emails and letters were sent to property owners requesting meter readings and use reports, 657 responded for a 75% response rate. Emphasis continues on obtaining email addresses from all well owners contacted in order to reduce the expense of mailing reporting forms. While only a handful reported that they have no computer or email, many more reported by mail without comment, however, owners provided their email addresses for future contact via email. This effort is believed to be more efficient and will be continued in 2023.

In order to determine annual uses for published diversion records DWR estimated a diversion amount for the entire subdivision by using the available actual uses, as reported, and adding the maximum decreed amounts for those lots or wells where actual uses are not known.

Augmentation plans relying on the Independence Pass Transmountain Diversion System in Twin Lakes Reservoir had adequate water supplies. Reporting was used to update release schedules from the SEO Account in Twin Lakes to match depletions. This effort, which began in 2021, has tailored releases to match actual depletions and is currently saving approximately 75 acre-feet per year. This gives much needed drought protection to the augmentation plans that rely on Twin Lakes as a replacement source. The State Engineers Account currently has over 120 AF of transbasin water stored. At this time in 2021 the account had an account balance of zero.

Efforts in the coming year will be to expand what has been done in District 11-13 to improve reporting and ensure depletions are adequately covered.

2 Compact Issues

2.1 Compact Operations

During the period of Winter Compact storage from November 1, 2021 through March 31, 2022, 19,432.96 acre-feet was stored as Compact Water. Additionally Offset Transfers to Winter Compact storage in December (353.40 acre-feet), January (16.45 acre-feet) and February (29.53 acre-feet) were made to Winter Compact storage for well depletions and return flow maintenance. An additional 1299.99 acre-feet was shown as inflow to Summer Compact storage after March 31, 2022 prior to and during the distribution of Compact storage into accounts. Distribution into accounts began on April 7, 2022, in accordance with Subsection II A of the revised 1980 Operating Plan and continued at the prescribed rates until exhausted on April 17, 2022. The transfer of 20,033.62 acre-feet as prescribed by Section II D of the 1980 Operating Plan (including 1,286.02 acre-feet of summer stored water from April 1, 2022 through April 17, 2022).

In contrast, the previous year's storage totaled 15,737.29 acre-feet (net). The 1950 to 1975 historical average amount of Winter Compact Water storage was 21,849 acre-feet in the period prior to the beginning of the Pueblo Winter Water Program operations.

During the 2022 Summer Compact Storage season, there were no events that resulted in additions to Conservation Storage beyond April 17, 2022.

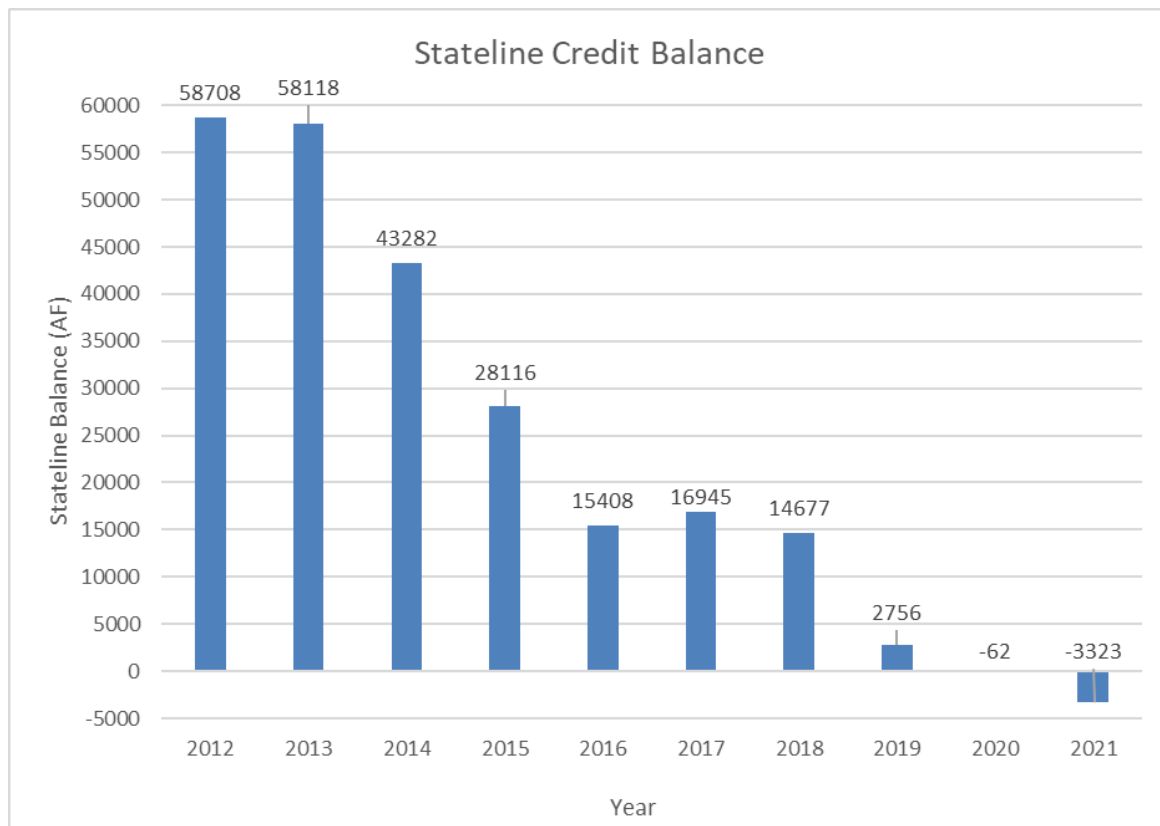
For additional details concerning the operation of John Martin Reservoir, the reader is referred to the Operations Secretary’s Report for CY 2022 and the Report of the Colorado State Engineer to the Arkansas River Compact Administration concerning the Offset Account.

2.2 Compact Compliance

2.2.1 Post Compact Wells

The H-I Model is used for the purpose of determining depletions to usable stateline flow caused by well pumping of a ten-year period, which is updated annually. The update made in 2022 was for the period 2012-2021. This update showed a deficit or shortfall of 3,323 acre-feet which had to be made up along with associated evaporation and transportation losses by LAWMA. The following figure illustrates the status of Compact compliance over the past decade.

Figure 13: Stateline Credit Balance



2.2.2 Surface Water Irrigation Improvements

Administration of the Irrigation Improvement Rules began the eleventh year of operations since the Rules were promulgated in 2011.

Four Rule 10 Plans were approved for operation during 2022-23 including a plan by the Lower Arkansas Water Management Association (LAWMA) for sprinkler improvements under the Lamar Canal, Fort Lyon Canal and Amity Canal involving approximately 5,603 acres of improvements and a plan by the Purgatoire River Water Conservancy District (PRWCD) for sprinkler

improvements under the Enlarged Southside Ditch and Model Canals east of Trinidad involving 2,099 acres of improvements. The Lower Arkansas Valley Water Conservancy District (LAVWCD) applied for two Rule 10 Plans in 2022. The Fort Lyon LAVWCD Plan involved approximately 223,124 acres of sprinkler improvements and 1,173 acres of lateral improvements under the Fort Lyon Canal while the Non-Fort Lyon LAVWCD Plan involved approximately 12,098 acres of sprinkler improvements, 757 acres of drip improvements and 2,695 acres of lateral improvements.

2.2.3 Special Engineering Committee

In 2022 the Special Engineering Committee met on several occasions. The meetings were held virtually on February 15th, April 27th, June 2nd and September 20th 2022. The primary focus for the SEC was related to the Colorado Multi-Purpose Account in John Martin Reservoir and related topics and those discussions resulted in ultimate approval of a Pilot Project for the Multi-Purpose Account being approved at a special meeting of the Arkansas River Compact Administration held on July 1, 2022.

Highlights of 2022

2.3 Pond Management Program

2.3.1 Overview

Division 2, the Arkansas River basin, covers 18,093,485 acres. In Phase 1 of the study, the division evaluated only very limited sections immediately around the Arkansas mainstem and live tributaries, which equated to approximately 25 percent of the total basin (4,407,687 acres). In this first phase, 16,000 Ponds were identified. After taking out decreed ponds, natural depressions, non-ponds, and duplicates we have reduced the number of ponds to 15,600.

Since the program was initiated DWR has completed our review of about 540 ponds which encompassed a total surface area of 1260 acres. Therefore, 7,200 acres of ponds identified in phase 1 of the program have not yet been classified or addressed.

In the first effort to reach out to identified pond owners, DWR mailed about 500 letters and educational pamphlets to the pond owners describing options to bring the structures into compliance. DWR mailed 127 second notices and 67 third notices. In 2022 DWR sent approximately ten orders to cease and desist if the owners failed to contact the water commissioner to address the issue.

To date, the program has had a mixed response from owners. Some owners who were not sent letters but were made aware of the program have reached out to DWR to voluntarily comply. While others have refused receipt of letters and Orders and Orders had to be served by the Sheriff.

The Pond Management Program will continue as time and resources allow.

2.3.2 2022 Actions

During 2022 Division 2 Water Commissioners and staff worked diligently to collect information on ponds in the targeted program areas. In addition water commissioners added ponds to the study where necessary, such as along a tributary where one pond was initially identified and then several more were located on the same reach.

Pond Enforcement Water Commissioner Resources were collected in a shared google folder for staff to use along with a training documents folder containing XMap resources.

The field data collection program was launched using DeLorme XMap and an XMap Pond Guideline. Water commissioners were asked to first perform a desk audit of the ponds in their target area and eliminate any ponds that were duplicates, shadows, low spots in a field, etc. A status column was created in the XMap data collection form to allow identification of pond types at a glance.

A layer with the Livestock Water Tank and Erosion Control Dam locations was utilized to identify permitted structures that could be eliminated from the study. And a layer of decreed structures from Hydrobase allowed elimination of ponds that didn't need further action. Weekly data exports from XMap were then added to Hydrobase in the structure activity page and in the revised structure code history dropdown list (see table below). This information was used to determine and track pond enforcement progress and allow final determination of pond structure type.

Figure 14: Pond Classifications

Structure Code Description	Long Description
POND - LSWT PERMITTED	Pond constructed and permitted pursuant to Livestock Water Tank Statute 35-49-101 through 116, C.R.S.
POND - ECD PERMITTED	Pond constructed and permitted pursuant to Erosion Control Dam Statute 37-87-122 C.R.S.
POND - ADMINISTERED, NO PERMIT NO DECREE	ADMINISTERED with low level outlet works - Constructed as a Pond, Reservoir, ECD, or LSWT that cannot be permitted as such after DE evaluation.
POND - AUGMENTED, NO PERMIT NO DECREE	AUGMENTED Constructed as a Surface Water Pond, Reservoir, ECD, or LSWT that cannot be permitted as such after DE evaluation, NOT GW
POND - INVENTORY PENDING, NO PERMIT NO DECREE	Evaluation in progress
POND - CAFO - CONFINED ANIMAL FEEDLOT OPERATION	NRCS - Conservation Practice Standard Waste Treatment Lagoon Code 359-To biologically treat waste, such as manure and wastewater, to reduce pollution potential by serving as a treatment component of a waste management system. NEEDS augmentation
POND - POST-1981 GRAVEL PIT IN REPLACEMENT PLAN	Required to be permitted and augmented per the replacement plan, plan must be revised if the size changes
POND - EXEMPT PRE-81 GRAVEL PIT	Not required to be permitted or augmented, must stay the same size.
POND - 72 HR HEAD STABILIZATION PER SEO POLICY	General permit areas non-HI area
POND - 72 HR HEAD STABILIZATION POND PRE 2011	Exempt from Irrigation Improvement Rules
POND - 72 HR HEAD STABILIZATION POND PER RULE 10	Subject to Irrigation Improvement Rules
POND - RECHARGE POND IN PRIORITY PER DECREE	
POND - RULE 10 TAILWATER RECOVERY PIT PERMITTED	Subject to Irrigation Improvement Rules, MUST use on the original field, NOT on other ground
POND - EXEMPT TAILWATER POND PER SEO POLICY	General permit areas non-HI area, MUST use on the original field, NOT on other ground
POND - ADMINISTERED PER DECREE/REPLACEMENT PLAN	Replacement plan includes SWSP or Augmentation
POND - EXEMPT STORMWATER DETENTION PER STATUTE	37-92-602(8)(a) C.R.S. Continuously releases or infiltrates at least ninety-seven percent of all of the water from a rainfall event that is equal to or less than a five-year storm within seventy-two hours after the end of the rainfall event
POND - POST-WILDLAND FIRE FACILITY PER STATUTE	37-92-602(8)(a) C.R.S. Continuously releases or infiltrates at least ninety-seven percent of all of the water from a rainfall event that is equal to or less than a five-year storm within seventy-two hours after the end of the rainfall event
POND - FIRE PROTECTION UNDER EVALUATION	Under Legislative Review
POND - EXEMPT NATURAL	

The XMap data layer was continually updated with new information and as the season progressed ponds were identified as compliant structures or needing more actions. Rolodex information was added that allowed water commissioners to initiate contact with pond

owners and begin the compliance process. This was tracked in the Structure Activities page in Hydrobase.

Fire Suppression Ponds were introduced to the Legislature in Senate Bill 22-114 which was signed by Governor Polis on June 8, 2022. The Colorado Revised Statutes will include definitive language and rules and regulations in Section 37-80-124. Basically, each county may designate up to 30 surface acres of ponds that will be exempt from administration and are to be used solely for fire protection purposes. In preparation for passage of the legislation Division 2 staff prepared maps and lists of potential fire protection ponds in each county. This data will be provided to county officials if requested to aid their planning process.

3 Organizational Changes

During 2022 Division 2 had a significant number of personnel changes. Division 2 started the year with quite a few vacancies, but there were many new hires, changes to positions, and some notable retirements at the end of December.

Retirements: Bill Tyner (Division Engineer), Phil Reynolds (Reservoir Operations) and Doug Brgoch (Water District 16 Water Commissioner).

Transfers: Doug Hollister (Water District 10 Water Commissioner) transferred to Denver.

Position changes: Jacob Olson moved from Water District Deputy Water Commissioner to Hydrographer and then to lead Water District 10 Water Commissioner; Lonnie Spady moved from East Lead Water Commissioner to River Operations; Dan Henrichs became West Lead Water Commissioner; Brandy Cole became East Lead Water Commissioner; Jeanette Myers became Water District 17 Water Commissioner; Brian Lenherr moved from Hydrographer to Reservoir Operations; Rachel Zancanella moved from Assistant Division Engineer to Division Engineer.

Promotions: Bethany Arnold from PEI to PEII

New hires: Alexandra Wernle (Water Data Analyst), Ivan Valles (Water Data Analyst), Kain DiRezza (Groundwater Commissioner), Lucas Hoff (Groundwater Commissioner), Brian McCormick (Dam Safety Engineer), Talon Canterbury (Water District 12 Deputy Water Commissioner), Noah Friesen (Augmentation Engineer), Cassidy Davis (Augmentation Accounting-a new position) and Theron Verna (hybrid Groundwater staff and Water District 10 Deputy Water Commissioner).

Other changes: Russ Dash's position was changed from half time to full time by combining two half time groundwater positions. Ed Diemer's position was changed from 9 months to full time. Jerry Livengood's position was changed from 8 months to full time. Two part time positions held by deputy water commissioners in Water District 12 were combined to make one full time position.

Resignations: Alexandra Wernle (Water Data Analyst), Joe Regur (Augmentation).

Temporary employees: Ashleigh Cogan (Water District 11 Deputy) and Elizabeth Nosker Bruce Smith (Water District 11 Deputy Water Commissioner) passed away July 13, 2022.

Training/Staff Development

Employee training/educational opportunities include the following:

- January 2022 - Colorado Water Congress: Bill Tyner and Rachel Zancanella
- April 2022 - Arkansas River Basin Forum: Bill Tyner, Lonnie Spady, Dan Henrichs, Ivan Valles, Phil Reynolds, Brian Sutton, Will Scott, Wendy Hunker, Lucas Hoff, Jessica Wodiuk (virtual), Janet Dash (virtual), Doug Hollister (virtual)
- June 2022 - Kansas vs Colorado Summary presented to all staff by Rachel Zancanella
- July 2022 - Board of Water Works Tour: Rachel Zancanella and Bethany Arnold

CWOA

The CWOA annual meeting was held in Montrose, hosted by Division 4 and was attended by Brian Sutton, Dan Henrichs, Will Scott, Rachel Zancanella, Monica Long, John Canaday, Ivan Valles, Jacob Olson, Cheston Hart and Phil Reynolds.

Budget & Pay

Division 2's operational budget was increased to include additional funds due to increased fuel costs and also to purchase uniform and safety equipment for staff (\$620 for field staff and \$75 for office staff).

Pay for Performance was once again unfunded. Salary Survey was a 3% across the board salary increase. Again, an additional 0.5% went to PERA contributions.

Overtime was paid for by Denver's funds and was allocated on a month by month basis. Funding for winter work was approved for Lenna Rauber.

Vehicles

No new vehicles were received this year although we had two on order. We received 2 seasonal vehicles which went to Lenna Rauber and Russ Dash.

One vehicle was denied repair and return to Fleet (344TTV) and one vehicle sustained significant damage due to an accident and was returned to Fleet (DIN819).

Two vehicles and equipment were stolen from the locked, gated yard in July 2022 (830HZF and DIN213). Both were recovered, but damaged.

Awards

Doug Brgoch was named Water Commissioner of the Year.

Above and Beyond Awards went to Bethany Arnold, Monica Long, Brian Sutton at the Fall Meeting.

Cheers for Peers went to the following employees throughout the year: Brian Lenherr (4), Joey Talbott (2), John Canaday, Jacob Olson (2), Jessica Wodiuk, Monica Long (2), Phil Reynolds, Dan Henrichs, Steve Stratman, Rachel Zancanella, Lonnie Spady (2), Lori Lest, Wendy Hunker and Ivan Valles.

Other notes of interest

The Division 2 Office was closed with remote working from January through June 2022. Return to office occurred in July 2022 with employees working a minimum of two days per week in the office. The office was opened to the public on Tuesdays and Thursdays and an Info Desk established and staffed by personnel in 2 1/2 hour shifts.

Serial testing for non-vaccinated employees ended February 28, 2022.

The HVAC system in the Pueblo office did not function for approximately 8 weeks from mid-April to mid-June. Office temperatures were approximately 90 degrees each day during that time and remote work was initiated to a great extent.

June 10, 2022 Division 2 staff and families attended a memorial hike and picnic that was held in John Van Oort's memory and was attended by his wife, Tammy Van Oort.

Figure 15: Division 2 Organizational Chart 2022

