

# DIVISION 6

# 2022 ANNUAL SUMMARY



**Gardner Park Reservoir**

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Division Engineer  
September 6, 2023



**COLORADO**  
Division of Water Resources  
Department of Natural Resources

# 2022 ANNUAL SUMMARY

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## Introduction

The following report summarizes the activities of the Division 6 office of the Colorado Division of Water Resources, presents an overview of the administration activities that took place, and provides statistical data for 2022.

## Basin Hydrology

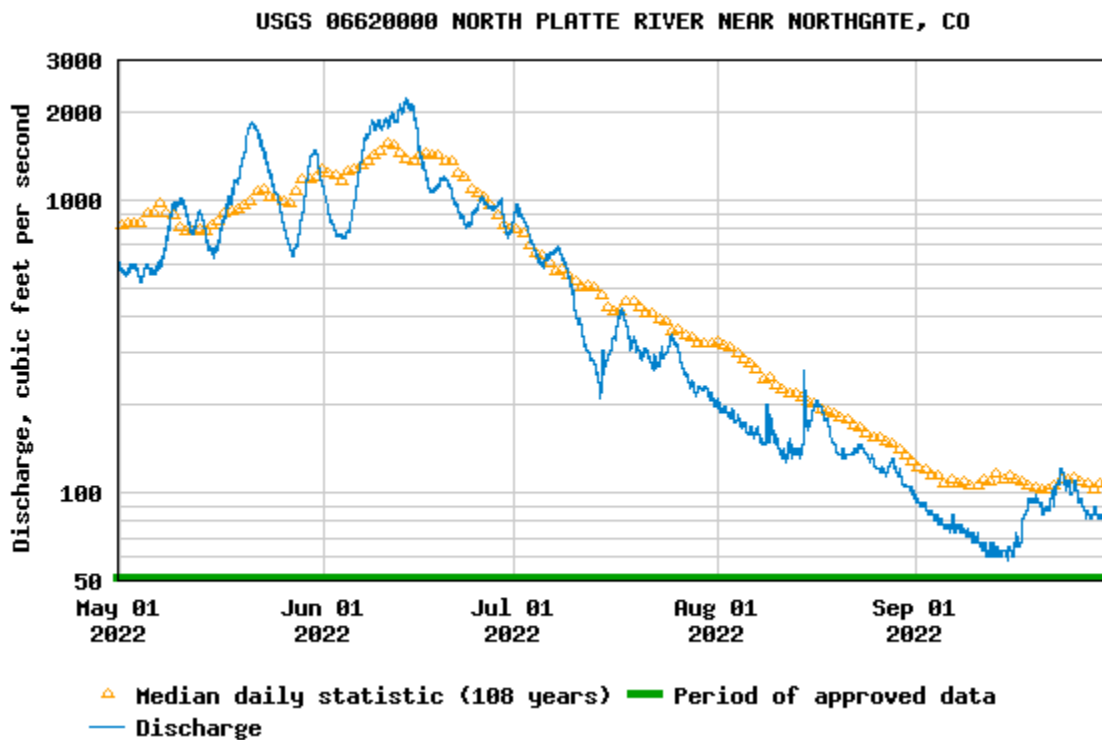
### Snowpack

Peak snow water equivalent (SWE) in the Yampa-White-Little Snake basins peaked on April 18 at 17.8 inches; while the median SWE based on the period 1991 through 2020 is 20.2 inches with the median peak occurring on April 8.

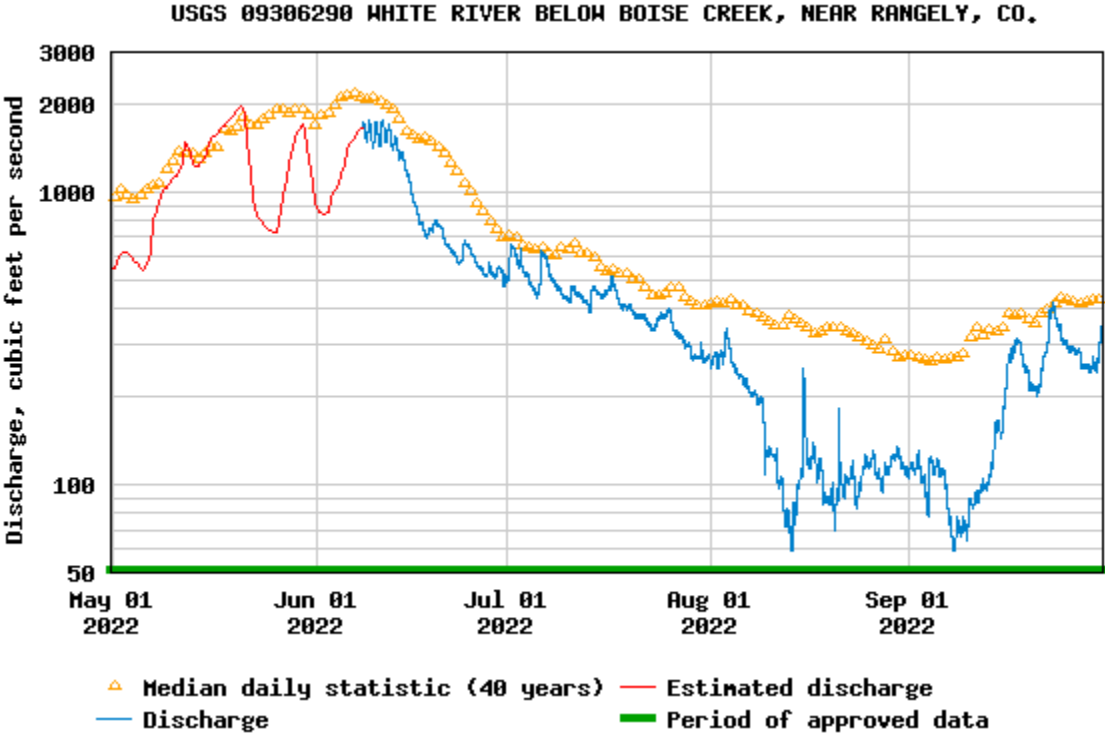
Peak SWE in the Laramie-North Platte basins peaked on April 2 at 20.8 inches; while the median SWE based on the period 1991 through 2020 is 23.3 inches with the median peak occurring on April 23.

### Streamflows

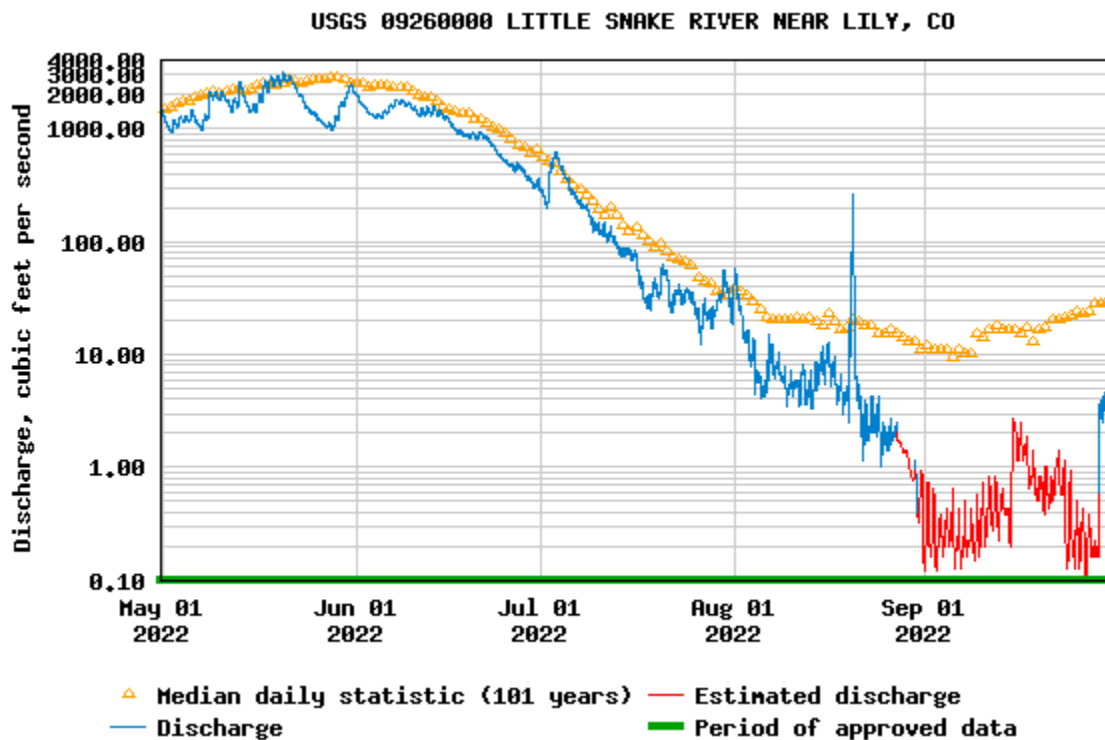
The graphs below show the streamflows for 2022 between May 1 and September 30 for the North Platte River near Northgate, CO; White River below Boise Creek, near Rangely, CO; Little Snake River near Lily, CO; and Yampa River near Maybell, CO.



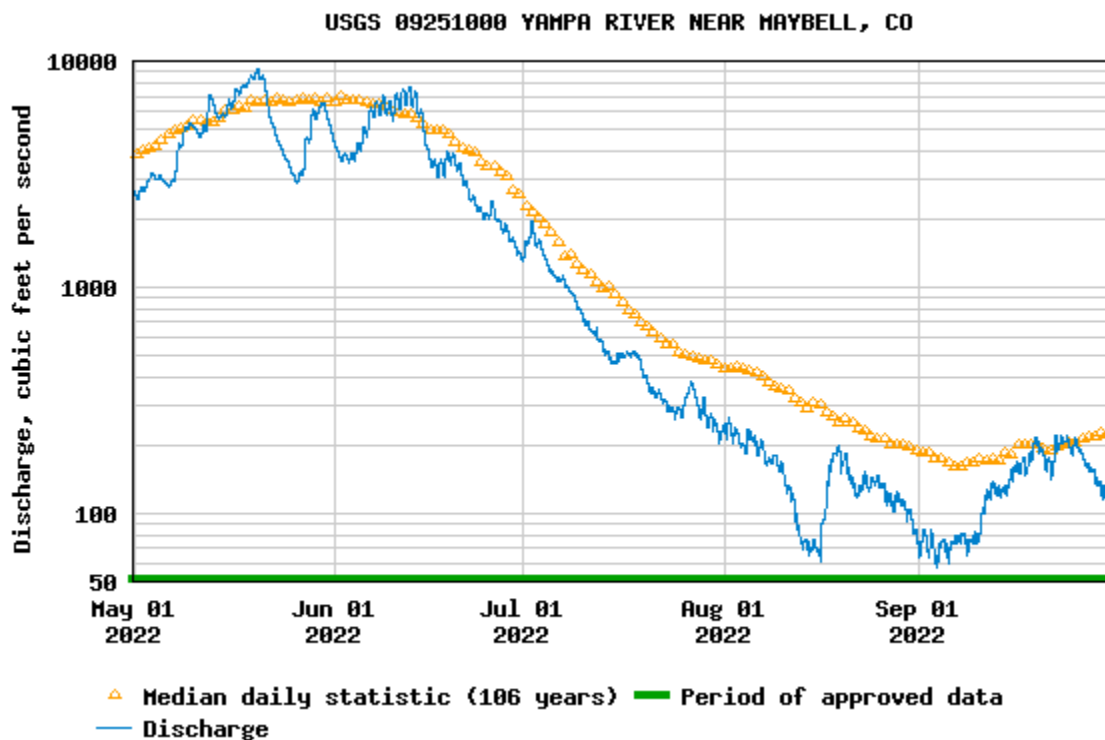
The peak flow on the North Platte River near Northgate in 2022 occurred on June 13 at a daily median discharge of 2,390 cfs. The historical peak at this gage occurs on June 11 with a daily median peak discharge of 1,717 cfs.



The peak flow on the White River below Boise in 2022 occurred on May 20 at a daily median discharge of 1,900 cfs. The historical peak at this gage occurs on June 8 with a daily median peak discharge of 2,153 cfs.



The peak flow on the Little Snake River near Lily in 2022 occurred on May 21 at a daily median discharge of 2,780 cfs. The historical peak at this gage occurs on May 23 with a daily median peak discharge of 2,865 cfs.



The peak flow on the Yampa River near Maybell in 2022 occurred on May 20 at a daily median discharge of 8,710 cfs. The historical peak at this gage occurs on May 23 with a daily median peak discharge of 7,170 cfs.

Provided in Table 1 below are the annual runoff values for the water year for these same stations as well as the minimum annual runoff recorded at each station and the historical average.

**Table 1**

**2022 Annual Discharge**

| Station Name                      | Historic Lowest (AF) | Total 2022 (AF) | Historical Average (AF) | % of Average |
|-----------------------------------|----------------------|-----------------|-------------------------|--------------|
| North Platte River near Northgate | 66,243               | 242,600         | 309,570                 | 78           |
| White River Below Boise Creek     | 240,936              | 309,420         | 493,240                 | 63           |
| Little Snake River at Lily        | 79,564               | 253,320         | 402,380                 | 63           |
| Yampa River near Maybell          | 345,115              | 799,980         | 1,110,600               | 72           |

Provided in Table 2 below are the minimum flows recorded at each station in water year 2022 and the minimum flows on record at each station.

**Table 2**

**Lowest Daily Mean**

| Station Name                      | Minimum on Record (cfs) | Minimum WY2022 (cfs) | Date of Occurrence |
|-----------------------------------|-------------------------|----------------------|--------------------|
| North Platte River near Northgate | 15.0                    | 61.9                 | December 7, 2021   |
| White River below Boise Creek     | 52.6                    | 68.5                 | September 8, 2022  |
| Little Snake River at Lily        | 0                       | 0.18                 | September 28, 2022 |
| Yampa River near Maybell*         | 1.8                     | 66.6                 | September 3, 2022  |

\* Includes reservoir water in the river

## Water Administration

### Stream Calls

Calls occurred on the following systems in Irrigation Year 2022:

#### Yampa River Basin

Bear River  
Dry Fork Little Bear Creek  
Elk River  
Fortification Creek  
Little Bear Creek  
Little Cottonwood Creek  
Little Snake River  
Middle Hunt Creek  
Oak Creek  
Smith Creek  
South Hunt Creek  
Tow Creek  
Trout Creek

#### Green River Basin

Talamantes Creek

#### White River Basin

Piceance Creek

#### North Platte River

Illinois River

A complete list of the calls that occurred within Division 6 can be found on the Colorado Decision Support System (CDSS) website. Additionally, releases of reservoir water were made from Elkhead Creek Reservoir, Stagecoach Reservoir, Yamcolo Reservoir, and Stillwater Reservoir that were protected and delivered by our office to its point of diversion or use.

### Elk River Administration

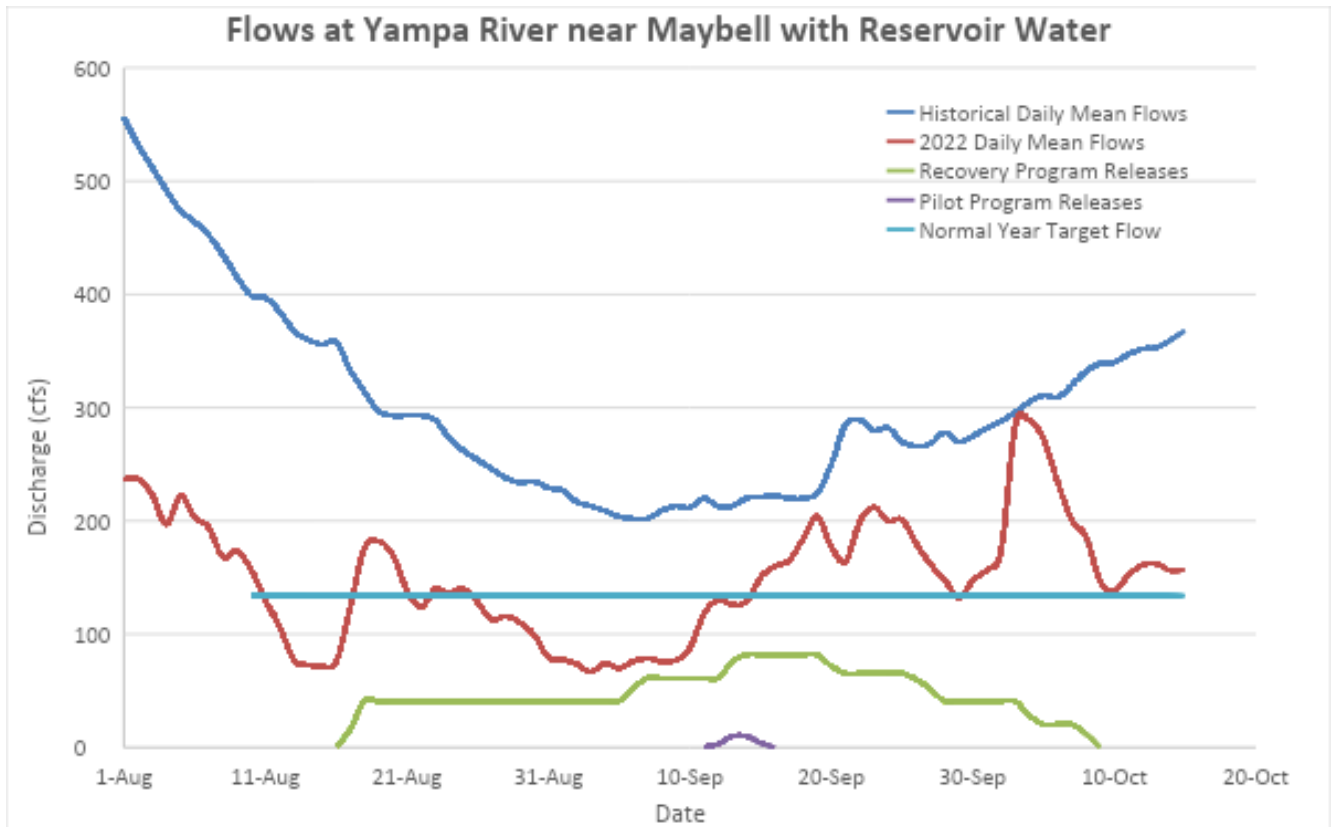
The Elk River went on call in 2022 for the Colorado Water Conservation Board (CWCB) instream flow water right. The Elk River instream flow water right is decreed for 65 cfs year-round. The lowest daily mean flow, as measured at the Elk River near Milner gage station, that occurred in 2022 was 30 cfs on September 13. The call was on the Elk River for this water right from August 26 through October 5, 2022.

### Elkhead Creek Reservoir

Releases were made from Elkhead Creek Reservoir between August 15 and October 3, 2022. A total of 6,112 acre-feet was released for the purpose of river flow maintenance and enhancement under the Upper Colorado River Endangered Fish Recovery Implementation Program (Recovery Program). Water released from Elkhead Creek Reservoir for the Recovery Program was protected through the entire length of the critical habitat reach, which extends from the City of Craig downstream to the confluence of the Yampa River and Green River.

In addition to the water released for the Recovery Program, approximately 75 acre-feet was released from Elkhead Creek Reservoir and protected to the Yampa River below Craig, CO gage station (“Craig Gage”) under a Pilot Project operated by the Colorado River District. The purpose of this release was to help maintain and enhance habitat conditions for various native fish between the confluence of the Yampa River and Elkhead Creek and the Craig Gage, and to keep the call of the Yampa River by protecting water to the gage station, after which point the water became waters of the state available for diversion.

Shown in the following graph are the flows at the Yampa River near Maybell, CO gage station (“Maybell Gage”) during the summer of 2022 including releases made from Elkhead Creek Reservoir. The Recovery Program’s target flows at the Maybell Gage depends on the water year: dry, normal or wet. In dry years, the target flow at this gage is 93 cfs, in normal years it is 134 cfs, and in wet years it is 200 cfs. The water year started out normal; it got dry, and then the basin received some rain. This resulted in the target flow toggling between 93 cfs and 134 cfs. As one can see, the flows on the Yampa River fluctuated quite a bit during the summer with flows dropping below both 93 cfs and 134 cfs but also at times exceeding 200 cfs. Regardless, had the reservoir water not been released, the amount of water in the River would have gotten critically low. As discussed later in the report, flows were also released from Stagecoach Reservoir for non-consumptive purposes, and though not for the Recovery Program, they likely enhanced the flows in the River at the Maybell Gage to a small degree.



### Stagecoach Reservoir Releases

Releases were made from Stagecoach Reservoir for the Colorado Water Trust and City of Steamboat Springs to reduce streamflow temperature at the City of Steamboat Springs wastewater discharge point into the Yampa River. Releases for this purpose were made from August 12 through September 17 and totaled just under 2,100 AF. Additional releases from the reservoir continued after September 17 and through October 14 to help the fish population immediately below the reservoir. Because this water released was first run through the hydropower turbine at Stagecoach Reservoir, the release was considered for a decreed beneficial use, which is power generation.

### Yampa River Administration

The Yampa River mainstem experienced its first call in 2018 which was followed by calls in 2020 and 2021 as well. The call in 2021 was very short-lived running only from July 30 through August 2. The reasons for this short-lived call were due to a rain event and the Colorado River District requesting a release of water from Elkhead Creek Reservoir under a Pilot Program established for 2021. The primary purpose of this release was to take the call of the river. The mechanism by which this was accomplished was by considering the release for the purpose of helping maintain and enhance habitat conditions in the River to the Maybell Gage. Once the water went past the Maybell Gage,

the water became waters of the state available for diversion. The flows released in 2022 were also under the Pilot Program which had been extended for the 2022 season, though in 2022, the releases were protected to the Craig Gage rather than the Maybell Gage. As mentioned above, only a small amount was released from Elkhead Creek Reservoir under the Pilot Program in 2022, since there were generally sufficient flows to meet the needs of the water users.

### White River Administration

The mainstem of the White River was not subject to an administrative call in irrigation year 2022, however discussions with the Rio Blanco Water Conservancy District concerning the request for a call started in August 2022. This discussion resulted in several staff investigating the diversions and their relative priority taking place at that time. The calling water right and structure would have been the Taylor Draw Power Conduit. Ultimately and for various reasons, a call was not placed on the White River until December 1, 2022.

Within the White River basin, the only administrative calls in irrigation year 2022 were on Piceance Creek.

### North Platte River Administration

The Illinois River was the only system that went on call in 2022. The call ran from October 18 through December 6, 2021 and April 27 through May 10 to fulfill the Walden Reservoir water storage right.

### Measurement Devices and Measurement Rules

In October 2016 and January 2017, this office mailed Notices to the owners of all known structures within the entire North Platte River basin that were not equipped with an operable headgate and/or measuring device. Likewise, in March 2019, this office mailed Notices to the owners of all known structures within the entire Yampa River basin that were not equipped with an operable headgate and/or measuring device. The Notices requested water right owners to install these devices and failure to do so would result in an Order being issued by the Division Engineer pursuant to CRS 37-92-502. After inventorying which structures had not complied with the Notices, Orders were issued on September 30, 2019 requiring installation of operable headgates and measuring devices by November 30, 2019. In total, approximately 580 orders were issued to individual owners.

In March and May 2020, this office mailed Notices to the owners of all known structures within the entire White River basin and Green River basin of Colorado that were not equipped with an operable headgate and/or measuring device. The Notices requested water right owners to install these devices and failure to do so would result in an Order being issued by the Division Engineer pursuant to CRS 37-92-502. As a result of COVID and extreme drought, the issuance of Orders was put on hold.



In the fall of 2021, the State Engineer started the measurement rule processes for Division 6. The rules are referred to as “Rules and Regulations for Governing the Measurement of Surface Water and Groundwater Diversion and Storage of Water Located in Division 6” (referred to herein as “Measurement Rules” or “Rules”). The Measurement Rules are applicable to all surface water diversions, groundwater diversions, and the storage and release of surface water and groundwater

located within Water Division 6. The purpose of the Rules is to establish consistent and reliable standards to assist the State Engineer and Division Engineer in the administration, distribution, and regulation of the waters of the state in Water Division 6 and are intended to: (1) establish standards for the selection and installation of Measurement Methods and Diversion Structures for the purpose of controlling and measuring diversions; (2) establish consistent and reliable standards for the recording and reporting of data for water diversions, the storage and release of water, and the means by which the Division Engineer will receive the data; and (3) establish consistent and reliable standards for assessing compliance with the State Engineer's and Division Engineer's authority to implement and enforce the statutory requirement for installation of Measurement Methods and headgates. As currently written, the Measurement Rules will require many more structures to be equipped with Measurement Methods (as defined in the Rules) compared to the number that Division 6 currently requires measurement on. The biggest increase will likely be the requirement for many more ponds/reservoirs to be equipped with Measurement Methods.

To introduce the Measurement Rules, in October 2021, the State Engineer held 6 in-person Measurement Rule stakeholder meetings located in Steamboat, Oak Creek, Craig, Rangely, Meeker and Walden, and in November 2021 he held a virtual stakeholder meeting. Many of the meetings were well attended. Then in February 2022, the State Engineer distributed to all the attendees of the meetings a draft of the Measurement Rules giving them an opportunity to provide comments. Many comments were received and several modifications were made to the Rules to address these comments. To go over the modified Rules with the public, the State Engineer held four additional in-person and one virtual stakeholder meeting in June and July 2022. After further, minor edits following the June and July stakeholder meetings the State Engineer filed the Rules with the Water Court on October 28, 2022. There were seven protests to the Rules filed with the Water Court, and a five day trial is set to commence on February 26, 2024.

## **Groundwater and Well Permitting**

Nearly the entire Yampa River went on call in 2018, 2020 and 2021. This raised the question of whether all remaining portions of the Yampa River upstream of its confluence with the Little Snake River should be designated as over-appropriated. The Division Engineer, in March 2021, recommended to the State Engineer, that the basin be considered over-appropriated. Designating a basin as over-appropriated has a large impact on how wells are permitted in those areas not already designated as such. In preparation for the basin becoming over-appropriated, the Division 6 office

held several meetings to educate the public on the impacts of the designation as well as did other outreach to help education the public.

In irrigation year 2022, a total of 476 well permits were issued. Of this number, 27 were monitoring hole notices, 41, were for monitoring/observation wells, 2 were for dewatering wells, and 406 were for production wells or groundwater ponds. This is a significant increase in the number of permits issued in previous years due mostly in part to the over-appropriated designation of the Yampa River in March 2022, which allowed people with existing unpermitted wells or uses to get new permits before December 31, 2022.

## **Compacts and Inter-State Agreements**

Following is a description of the interstate compacts and agreements administered by Division 6.

### **Upper Colorado River Compact**

Under Article XIII (a) of the Upper Colorado River Compact, the State of Colorado will not cause the flow of the Yampa River at the Maybell Gage to be depleted below an aggregate amount of 5,000,000 acre-feet for any period of ten consecutive years. The annual runoff for water year 2022 at this gage was 799,983 acre-feet compared to 376,406 acre-feet in 2021, 969,779 acre-feet in 2020, 1,379,200 acre-feet in 2019, 727,600 acre-feet in 2018, 541,820 acre-feet in 2012 and 363,938 acre-feet in 2002. The ten-year (2013 to 2022) aggregate flow was 9,398,756 acre-feet; well above that required under Article XIII (a). The lowest 10-year consecutive total over the 105 years of data at the Maybell Gage is 9,141,644, which occurred in 2021.

The Little Snake River is administered jointly with the State of Wyoming during times of shortage pursuant to Article XI of the Upper Colorado River Compact. A call on the Little Snake River occurred between August 25 and September 27, 2022. Additionally, releases were made from High Savory Reservoir, located in Wyoming, for use primarily by Wyoming water users though Colorado water users benefit from the added return flows from the reservoir water applied to irrigation.

### **Nebraska v. Wyoming, U.S. Supreme Court Decree**

Under the Nebraska v. Wyoming Decree (“North Platte Decree”), Colorado is limited to a total of 145,000 acres of irrigation, no more than 17,000 acre-feet per year of storage for irrigation purposes and no more than 60,000 acre-feet of transmountain diversions in any period of ten consecutive years from the North Platte River drainage in Colorado. In water year 2022, a total of 105,656 acres were irrigated and 16,805 acre-feet of water was stored for irrigation purposes.

Transmountain diversions out of the basin totaled 5,008 acre-feet. The cumulative ten-year transmountain diversion out of the basin was 38,350 acre-feet. Though none of the limits established by the North Platte Decree were exceeded in 2022, Colorado was very close to exceeding its limit for storage for irrigation. Historically, when an extremely dry year is followed by a moderate to wet year, the 17,000 acre-foot limit is either reached or exceeded. In dry years, water users heavily rely on water stored in their reservoirs for irrigation, so the reservoir levels are low going into the next season. If the following season is wet enough in the spring, the reservoirs are then filled.

A Division 6 representative virtually attended the North Platte Decree Committee meetings held in April 2022 and November 2022.

### Pot Creek MOU

Pot Creek is a small tributary of the Green River; the headwaters of which are in Utah and enter the Green River in Colorado. Pot Creek water is apportioned among the users of Utah and Colorado under a Memorandum of Understanding (MOU) last updated and signed by the State Engineers of Utah and Colorado on March 1, 2005.

The Pot Creek system is comprised primarily of five reservoirs; three of which are located in Utah and two of which are located in Colorado. The three Utah reservoirs are Matt Warner, Calder and Crouse with Matt Warner being the highest, most upstream reservoir in the system, and Crouse the lowest. Matt Warner Reservoir is used primarily for recreation and is considered a gold water fishery. Crouse Reservoir on the other hand is no longer used.

At the end of the storage season (April 30, 2022), Dry Lake Reservoir and Offield Reservoir (both located in Colorado) were dry. Conditions on Pot Creek in 2022 were very dry with only 3.6 acre-feet in March and 0.2 acre-feet in April delivered past the Stateline.

The 2022 Pot Creek Distribution System Water Users meeting was held in person in Vernal, Utah on February 22, 2023. The 2021 Pot Creek Distribution System Water Users meeting was held virtually on February 23, 2021. Division 6 staff attended both meetings.

## Division Highlights

### Abandonment Process

In 2020, Division 6 staff completed and published the 2020 Division Engineer’s Abandonment List (“Division Engineer’s List”). The Division Engineer’s List included just over 700 water rights in whole or in part. Of the 700 rights listed, approximately 200 of such rights were alternate points of diversion for pre-compact water rights. Prior to the objection period ending, all of the alternate points of diversion associated with a pre-compact water right were removed from the Division Engineer’s List since they are a component of a pre-compact right. Furthermore, several other rights were removed from the Division Engineer’s List based on further evaluation of the rights at the request of several water right owners. Once published, the Division received objections to the inclusion of 250 water rights on the Division Engineer’s List, all of which were responded to by mid-December 2021. After the removal of water rights for the above listed reasons and in response to the objections received, the Final Revised Abandonment List (“Revised List”) was filed with the Court in December 2021 and included 301 water rights. Water Right owners had until June 30, 2022 to file a protest to the inclusion of their water right on the Revised List. Fifty-five protests were filed with the Water Court and each was assigned its own case number. Division 6 staff continue to work with the protestants to stipulate in the protested case.

### Important Court Cases

The State Engineer and Division 6 Engineer are currently objectors in Case Nos. 06CW243 (Division 5), 17CW3045, 19CW3003, 20CW3007 (consolidated with 22CW3112), 20CW3019, 20CW3020, 20CW3057, 20CW3060, 21CW14, 21CW3029, 21CW3049, 20CW3018, 22CW2, 22CW18, and 22CW3118.

Below is a table showing the number of Reports of the Division Engineer (Summaries of Consultation) filed with the Water Court each year.

| <u>Year</u> | <u># of Court Cases Filed</u> | <u># of Reports Filed</u> |
|-------------|-------------------------------|---------------------------|
| 2014        | 69                            | 79                        |
| 2015        | 88                            | 90                        |
| 2016        | 77                            | 89                        |
| 2017        | 65                            | 72                        |
| 2018        | 77                            | 59                        |
| 2019        | 49                            | 75                        |
| 2020        | 84                            | 62                        |
| 2021        | 84                            | 66                        |
| 2022        | 142*                          | 111                       |

\* - includes the 55 protest cases.

## Involvement in the Water User Community

Regardless of an office move at the end of 2021 and settling into the new space in 2022 and moving to hybrid working, the Division 6 staff successfully assisted the public in preparing water court and well permit applications, providing water right and diversion record information, providing information on proper selection and installation of water measuring devices, and assisting dam owners with completing Notices of Intent to Construct Non-Jurisdictional Dams, Livestock Water Tank Permits and Emergency Action Plans.

Following is a list of meetings attended by Division 6 staff in 2022; many of which were attended virtually. This list is not intended to be all-inclusive, but rather provide an idea of the types of meetings attended.

- Spring North Platte Decree Committee meeting
- Fall North Platte Decree Committee meeting
- Annual meeting of the Pot Creek Distribution System in Vernal, UT
- Board meetings held by the Upper Yampa Water Conservancy District
- Board meetings held by Yellow Jacket Water Conservancy District in Meeker, CO
- Board meetings held by Rio Blanco Water Conservancy District in Rangely, CO
- White River and Douglas Creek Conservation District's annual meeting
- All roundtable meetings for the Yampa/White River and North Platte River
- Colorado Water Congress Annual Convention held in Denver, CO
- State of the River Conferences held by the Colorado River District in Craig, Steamboat Springs and Rangely

Division 6 staff also made several presentations both in-person and virtually in 2022.

## Division 6 Organization Chart (as of 10/31/2022)

