

DIVISION 6

2013 ANNUAL SUMMARY



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COLORADO
Division of Water Resources
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2013 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 in 2013, presents an overview of the administration activities that took place during both the calendar and irrigation year 2013 and provides statistical data for both the water and irrigation year 2013.

Year 2013

Basin Hydrology

Snow Pack

Table 1 below shows the snow water equivalent for the period October 2012 through May 2013. As one can see, for each month, the snow water equivalent was below the median.

TABLE 1

**End of Month Snow Water Equivalent as Percent of Median
Water Year 2013**

Drainage	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Laramie/North Platte River	92	51	81	71	75	81	93	81
Yampa/White River	68	42	86	76	77	79	92	69

Though the numbers did not look good, they were slightly better than in 2012 and were actually substantially better in May 2013 in comparison to May 2012. What can't be seen in this table is the fact that April was a very wet month, with the snowpack peaking very near the average by the end of the month.

Stream Flows

As one can imagine given the below "average" snowpack, the stream flows also ended up below average. Table 2, below, shows the January 1st, March 1st and May 1st runoff forecasts developed by the NRCS in comparison to the actual runoff between April 1 and July 31 as measured at the selected USGS gauging stations.

TABLE 2

2013 Runoff Forecast in 1000's of Acre-Feet

<u>Station Name</u>	<u>1-Jan</u>		<u>1-Mar</u>		<u>1-May</u>		<u>Actual</u>	
	Runoff	% Avg	Runoff	% Avg	Runoff	% Avg	Runoff	% Avg
North Platte nr Northgate (Apr-Jul)	155	69	86	38	155	83	137.3	58
White River nr Meeker (Apr-Jul)	205	73	170	61	150	61	163.6	58
Little Snake River nr Lily (Apr-Jul)	225	65	177	51	191	55	112.4	32
Yampa River nr Maybell (Apr-Jul)	650	70	540	58	640	68	563.5	59

Provided in Table 3 below are the annual runoff values for the water year for these stations as well as the minimum flow at each station.

Table 3

Annual Runoff

Station Name	Historic Lowest Flow (AF)	Total Flow 2013 (AF)	Historic Average (AF)	% of Average
North Platte River near Northgate	~66,240	189,400	309,700	61
White River below Boise Creek	~198,400	283,800	447,800	63
Little Snake River at Lily	~79,600	146,200	412,100	35
Yampa River near Maybell	~345,300	659,000	1,124,000	59

Lowest Daily Mean

Station Name	Minimum on Record (cfs)	Minimum in 2013 (cfs)	Date of Occurrence
North Platte River near Northgate	15	42	Oct. 5, 2013
White River below Boise Creek	78	120	Sept. 7, 2013
Little Snake River at Lily	0.0	0.0	Aug. 17, 2013
Yampa River near Maybell	1.8	78	Aug. 22, 2013

Of the data above worth noting: 1.) the Little Snake River at Lily gage recorded zero flow for the period starting August 17 running through September 9, 2013; 2.) The Yampa River near Maybell flows on August 22, 2013 were supplemented by releases from Elkhead Creek Reservoir. The

Elkhead Creek Reservoir releases between August 19 and August 22 increased from 50 cfs on August 19 to 90 cfs on August 22.

Precipitation

Table 3 below shows the monthly precipitation data for the towns of Walden, Meeker and Steamboat Springs.

Table 4
Monthly Precipitation Data for Selected Sites
Water Year 2013

Site	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Walden (inches)	0.78	0.21	0.94	0.15	0.42	0.22	1.29	1.11	0.00	1.36	1.24	3.92	8.07
% Avg	88	25	159	24	69	27	121	74	0	106	118	324	70
Meeker (inches)	0.97	0.44	1.96	--	--	--	2.98	2.11	0.00	1.03	1.60	3.14	--
% Avg	59	40	218	--	--	--	213	141	0	79	128	262	--
Steamboat (inches)	1.56	0.71	3.52	1.63	1.50	--	2.56	2.16	0.01	2.18	0.76	4.44	--
% Avg	81	30	149	63	70	--	111	94	1	149	52	258	--

Monthly Precipitation Data for Selected Sites
Calendar Year 2013

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Walden (inches)	0.15	0.42	0.22	1.29	1.11	0.00	1.36	1.24	3.92	--	0.47	0.26	--
% Avg	24	69	27	121	74	0	106	118	324	--	57	44	--
Meeker (inches)	--	--	--	2.98	2.11	0.00	1.03	1.60	3.14	3.33	1.14	1.15	--
% Avg	--	--	--	213	141	0	79	128	262	202	104	128	--
Steamboat (inches)	1.56	0.71	3.52	1.63	1.50	--	2.56	2.16	0.01	3.16	2.29	--	--
% Avg	81	30	149	63	70	--	111	94	1	165	97	--	--

Water Administration

Water administration in water year 2013 was greater than what Division 6 typically experiences during normal to even slightly below normal precipitation years. In the North Platte River basin this included administration on the Michigan River including its largest tributary, the Illinois River, Grizzly Creek and several other tributaries of the North Platte River. In the Yampa River basin, administration included, but was not limited to, our normal calls on Bear River, the Hunt Creek systems, Elk River, Trout Creek, Morapos Creek, Little Bear Creek, and Fortification Creek. In the Green River basin, administration was limited to Talamantes Creek. Finally, in the White River

basin, administration was limited to Piceance Creek. A complete list of the calls that occurred within Division 6 can be found on the CDSS website. In addition to administrative calls, releases from several reservoirs had to be protected. Releases made that required our involvement were from Walden and Meadow Creek Reservoirs in the North Platte River basin and Stillwater, Yamcolo, Allen Basin and Elkhead Creek Reservoirs in the Yampa River Basin.

Trout Creek Over-Appropriation

Because Trout Creek above the Orno Ditch had been subject to administration six times since 2002, a request was made to the State Engineer to designate the basin as over-appropriated. The request was approved and as of January 1, 2014, Trout Creek upstream of the Orno Ditch has been considered over-appropriated.

Elk River Administration

As was expected, the Elk River went under administration again in 2013 however for quite a shorter time than in 2012 - August 22 through September 11. The Elk River instream flow water right, the calling water right, is decreed in the amount of 65 cfs and the flows got as low as 45 cfs at their measuring structure - the Elk River near Milner gage. However, despite the fact that in February 2013, this office sent out notices to every water right owner within the Elk River basin requesting that they assure that their structures complied with CRS 37-84-112, which gave the owners until June 30, 2013 to come into compliance if they weren't already, there were many structures still lacking suitable and proper headgates and/or measuring devices. As such, most of the administration involved shutting off those ditches lacking these devices.

Field investigations were performed in July 2013 to determine which structures were still not in compliance, and what was found was that there were nearly 100 structures not equipped with suitable and proper headgates and/or measuring devices. This was better than the nearly 150 structures found to not be in compliance in 2012. In September 2013, 75 orders were issued to the water right owners not in compliance. Several people did install Nu-Way Flumes after the Division Engineer approved them as adequate measuring devices. Though these devices are cheaper, they are made out of a relatively thin flexible material and appear as though they may not last very long.

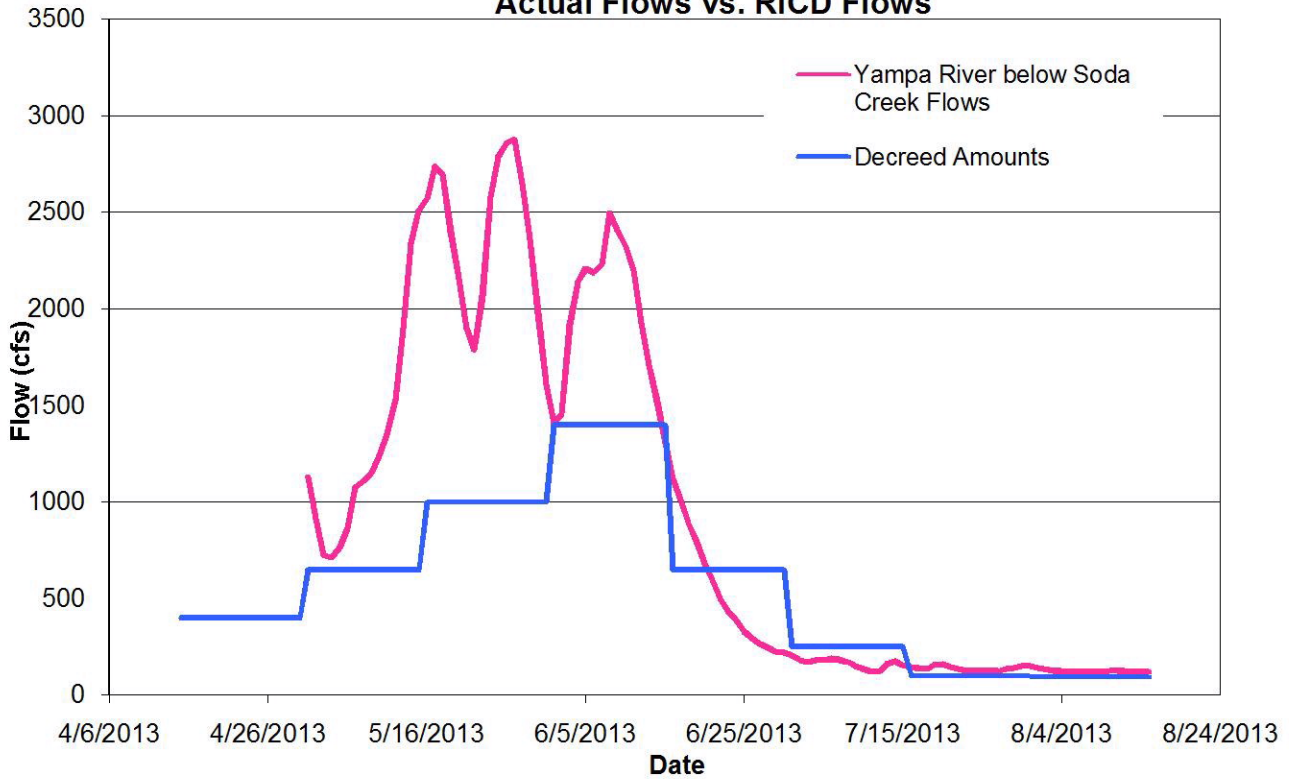


Nu-Way Flumes installed in ditches located within the Elk River Basin

Yampa River RICD Flows

Though the Yampa River has never been subject to administration as a result of a call for water by the City of Steamboat Springs for their Recreational In-Channel Diversion (RICD) water right, this office tracks the flows through the diversions in the event the potential for a call were to arise. The decreed amounts for the RICD are: 400 cfs from April 15 to April 30, 650 cfs from May 1 to May 15, 1000 cfs from May 16 to May 31, 1400 cfs from June 1 to June 15, 650 cfs from June 16 to June 30, 250 cfs from July 1 to July 15, 100 cfs from July 16 to July 31 and 95 cfs from August 1 to August 15. Figure 1 below shows the average daily flows at the Yampa River below Soda Creek gauge station in comparison to the decreed flows. The flows on the Yampa River below Soda Creek dropped below the decreed amounts on June 15 and June 21 through July 15.

**Figure 1
Actual Flows vs. RICD Flows**



Stagecoach Reservoir Releases

In the summer of 2013, Upper Yampa Water Conservancy District (UYWCD), the owner and operator of Stagecoach Reservoir, and the Colorado Water Trust (CWT) entered into a contract for 4,000 acre-feet of water to be delivered to the Colorado Water Conservation Board’s (CWCB) instream flow reach located just downstream of Stagecoach Reservoir. This temporary loan for water was approved pursuant to Section 37-83-105, C.R.S on August 20, 2013. Pursuant to this statute, the approved loan shall not be exercised for more than three years in a ten-year period. The 2013 request for water was the second year of operation of this loan.

On July 23, 2013, prior to the loan being approved, the CWT requested releases be made from Stagecoach Reservoir at a rate of 30 cfs. Since the loan had not yet been approved, these releases were not protected by DWR. The release of 30 cfs continued until August 29, 2013 when the request was reduced to 20 cfs and such releases continued until September 12, 2013. Throughout this release approximately 2,184 AF was released under the loan.

Elkhead Creek Reservoir

Releases were made from Elkhead Creek Reservoir between August 11, 2013 and October 31, 2013. A total of 4,852 acre-feet of water was released during this time for the purpose of in-river fish habitat and river flow maintenance and enhancement under the Upper Colorado River Endangered Fish Recovery Implementation Program (Recovery Program). The Recovery Program typically requests that releases from the endangered fish pool in Elkhead Creek Reservoir be made when flows in the Yampa River at the Maybell gauging station fall below 134 cfs, which typically can occur between August and October. The Yampa River at Maybell dropped to as low as 78 cfs on August 22, 2013 which included reservoir releases. Absent the reservoir releases, the flows would have dropped below 50 cfs. As in the past, the reservoir water was protected by this office to and through the Critical Habitat Reach and the division engineer also participated in weekly conference calls between Recovery Program staff and all other interested stakeholders to discuss the river conditions and determine whether an adjustment to the release was needed.

Ultimately a total of approximately 7,000 acre-feet of water was released for these environmental purposes in the Yampa River basin in 2013. By way of comparison, approximately 9,305 acre-feet was released for irrigation purposes in the Yampa River basin.

Groundwater and Well Permitting

There were no unusual groundwater administrative or well permitting issues in 2013.

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 gauge 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 2013 at this gauge was 659,000 acre-feet and the ten year (2004 to 2013) aggregate flow was 11,146,700 acre-feet; obviously well above that required under Article XIII (a).

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. There were no calls made in water year 2013. Releases were made from High Savory Reservoir located in Wyoming for use by both Colorado and Wyoming water users.

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

Under the North Platte River 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 drainage of Colorado. In water year 2013, a total of 105,128 acres were irrigated and 17,438 acre-feet were stored for irrigation purposes. Transmountain diversions out of the basin totaled 5,139 acre-feet. The ten-year total transmountain diversions out of the basin were 41,539 acre-feet. The storage limitation established by the Supreme Court Decree was exceeded in 2013. The State of Colorado worked with the States of Wyoming and Nebraska and the United States Bureau of Reclamation to assure that Colorado came into compliance with the Decree as more fully described below.

Going into the spring of 2013, those reservoirs located in the North Platte River basin of Colorado used for irrigation purposes were down a total of approximately 19,700 acre-feet from full. As a result, the State of Colorado closely tracked the amount of water stored for irrigation purposes in the spring of 2013 in an effort to ensure the 17,000 AF limit would not be exceeded. As of the middle of July approximately 16,630 AF had been stored for irrigation purposes. Because this number was so close to the 17,000 AF limit, letters were sent in August to all owners of reservoirs used for irrigation purposes requesting that they contact our office if they desired to store any water before the end of September, and were informed that after September 30, 2013 they could begin refilling their reservoirs as needed if water was physically and legally available. Only one water user contacted our office and this individual was allowed to store water in all of his reservoirs. Because of unexpected heavy rains in late August and September and one reservoir being lower than was thought, just over 800 AF of water was stored within these months resulting in an over-storage of 438 AF. Unfortunately, this over-storage was not discovered until the beginning of October which marks the new storage season under the decree.

Colorado informed the North Platte Decree Committee (NPDC) of this over-storage at the fall NPDC meeting held on October 9, 2013 and subsequently offered several options for Colorado to come into compliance now that they were into a new storage year. Ultimately, it was decided that the one reservoir that stored the most amount of water in the fall was not to store any additional water until they had bypassed 438 AF. This bypass requirement was met by February 16, 2014 and the owner was allowed at that time to store again if needed.

A Division 6 representative was able to participate in the NPDC meetings held by phone in April 2013 and October 2013.

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. There was no administration of the waters of Pot Creek in 2013.

Division Highlights

Lysimeter Project

The Yampa-White Lysimeter Study (Study) is a five year study that began in the summer of 2012 with 2013 being the second year of operation. The purpose of the Study is to provide a quantitative assessment of irrigated hay meadow consumptive use and its relationship to local weather conditions. The Study site consists of four lysimeter plots, collectively referred to as Andy's Garden in honor of Andy Schaffner who started the lysimeter project in Division Six. Two of the plots were seeded in 2012 with an ET grass reference crop and the other two had sod from the surrounding irrigated meadow planted in them.



In 2013 the site was visited by the water commissioner or an intern of the Carpenter Ranch every four to seven days. The primary data collected at each visit are the weight of each plot upon arrival, the amount of water added to each plot and the weight of each plot after anywhere between 1 and 2 hours of allowed saturation time.

Under the operating guidelines for the Division Six Lysimeters, “the goal is to maintain the individual lysimeter surfaces and the weather station/plot area with green active growing vegetation in and around the lysimeters mimicking the vegetation condition of the larger nearby irrigated hay field of Carpenter Ranch. For the lysimeters to represent and yield an accurate measurement of ET of the surrounding irrigated hay fields, it is important that the grass/vegetation in the lysimeter and plot area be the same height, density and moisture status as the surrounding larger grass hay field area.” This was not totally accomplished in 2013 as grass has been slow to grow around the plots, but effort continues to be made to encourage the plant growth.

2014 Activities

A study on the lysimeter core samples will be conducted to determine when they have reached field capacity. In order to do this, each lysimeter plot will be irrigated with between 5 and 7 gallons of water to fully saturate. The plots will then be weighed after 1, 2, 4, 8, 12, and 24 hours with the field capacity expected to be reached in 24 hours. Taking these measurements for all 4 plots and averaging the results should give a good indication of what time interval measurements through the rest of the growing season should be taken. Thus the typical operation will be to weigh the plots upon arrival, add measured amount of irrigation water, and return after specified time as determined above and re-weigh the plots.

Abandonment Process

The Revised Abandonment List filed with the water court on December 21, 2011, included a total of 201 water rights either in whole or in part. Twenty-nine protests to the inclusion of 40 water rights included on the list were filed with the court, each of which was assigned a separate case number. The division engineer and Attorney General’s Office continue to work with the Protestants to resolve their cases and as of April 2014, 27 of the 29 cases had been resolved. Table 5, below, shows the number of water rights on the Revised Abandonment List in each water district and the number of water rights protested.

Table 5
Number of Water Rights on Revised Abandonment List
Versus Number of Water Rights Protested

Water District	Number of Water Rights on List	Number of Water Rights Protested	% of Total Protested
43	13	2	15%
44	15	1	7%
47	70	26	37%
54	6	0	0%
55	2	0	0%
56	5	0	0%
57	37	5	14%
58	53	6	11%
Total	201	40	20%

In the resolution of the protest cases, in most instances, the amount of water included on the abandonment list was reduced, although there were some cases where a water right was removed from the list altogether as well as some cases where the protest was withdrawn, in which case no changes to the abandonment list were made.

Important Court Cases

Water Court Case Nos. 06CW61, 08CW54, and 08CW89

In Division 6 Water Court Case No. 08CW89, Raftopoulos Brothers requested the court award three new conditional surface water rights, two new conditional water storage rights and various changes of water rights. Vermillion Ranch opposed the case and the case ultimately went to trial on June 7, 2010. After the decree was entered by the court, Vermillion Ranch appealed the decisions by the water court; such appeal was assigned Case No. 11SA86.

In Division 6 Case Nos. 06CW61, Vermillion Ranch requested the court award new conditional water storage rights for Sparks Reservoir, Sparks 1A Reservoir, Sparks 1B Reservoir and House Reservoir in the amount of 1200 acre-feet for industrial, commercial, and domestic uses; and in Case No. 08CW54, Vermillion Ranch requested the court grant a finding of reasonable diligence for the water right awarded to Sparks Reservoir in the amount of 1200 AF. John Raftopoulos opposed both cases and the cases ultimately went to trial on September 27, 2010. After a decree was entered by the

water court, Raftopoulos appealed the decisions by the water court; such appeal was assigned Case No. 11SA124.

A hearing before the Supreme Court was held on January 24, 2012 for both cases. In Case No. 11CW86, the issues raised on appeal by Vermillion Ranch were whether the trial court erred in awarding a new conditional storage right that included industrial and commercial uses; properly interpreted the water decrees that were at issue in the water court proceeding; whether the trial court properly concluded that a beneficial use not used for a period of more than thirty years was not abandoned; whether the term “and other beneficial purposes” in the water decrees that were at issue in the water court proceeding is ambiguous on its face; whether the trial court properly interpreted the term “and all other beneficial purposes” by including an enumerated use; and whether an applicant in a water court proceeding for a change of water right has the burden to quantify the historic consumptive use for all decreed uses.

In Case No. 11SA124, the issues raised on appeal were that the water court erred in granting Vermillion’s applications because Vermillion failed to meet its burden of establishing, pursuant to section 37-92-305(9)(b), that the reservoirs “can and will” be completed with diligence and in a reasonable time and that the water court applied an incorrect standard that effectively shifted that burden to Raftopoulos to prove the impossibility of construction. The State and Division Engineers were not opposers in any of the three cases and thus did not participate in the hearing before the Supreme Court.

The Supreme Court entered a ruling in each of these cases on June 23, 2014. In Case No. 11CW86, the Supreme Court ruled on only one issue - that pertaining to the new water storage right awarded including the uses of industrial and commercial. Here they determined that the water court erred in determining that Raftopoulos met its burden to demonstrate a “specific plan” to store “a specific quantity of water” for industrial and commercial purposes. §37-92-103(3)(a)(II) As to the other issues raised, the Supreme Court ruled that the water court’s interpretation of these issues were not necessary for Raftopoulos’ requested change of water right. In Case No. 11CW124, the Supreme Court ruled Vermillion failed to meet its burden to prove by a preponderance of the evidence that there is a substantial probability that the reservoirs are necessary to the effect the appropriation “can and will” be completed with diligence within a reasonable time. As such, in both cases, the Supreme Court reversed the decisions by the water court.

Water Court Case Nos. 09CW48 and 09CW50

The Yellow Jacket Water Conservancy District (YJWCD) has been a long time holder of several conditional water rights within the Yampa and White River basins and given the fact that they appeared to have no plan what-so-ever to develop these rights, when they came up for diligence in 2008 and 2009, several parties filed statements of opposition including the State and Division Engineers. More specifically, YJWCD owned multiple conditional surface water rights totaling 2,275 cfs and multiple conditional water storage rights totaling 278,340 acre-feet; all of which were adjudicated between 1966 and 1981. There were four diligence applications filed with the court each with different water rights involved and two of these cases have come to a conclusion with the cancellation of the water rights. Specifically, all of the water rights located in the Yampa River basin and two water rights located in the White River basin have been cancelled; leaving the YJWCD with 1,200 cfs and 141,533 acre-feet of conditional water rights remaining in the White River basin. These water rights are the subject of Case Nos. 09CW48 and 09CW50.

In these two cases all of the opposers, with the exception of the State and Division Engineers, jointly filed a motion for summary judgment with the water court in April 2011 arguing that YJWCD lacked the legally required quorum to conduct District business in 2009 before the diligence applications were filed; YJWCD's secretary/attorney did not have the authority to file the diligence applications; the YJWCD board of directors lacked the intent to maintain the conditional water rights which are the subject of Case Nos. 09CW48 and 09CW50; and as such the water rights should be cancelled. Ultimately, the court agreed with these arguments and cancelled the conditional water rights. YJWCD later appealed this decision to the Supreme Court which was assigned Case No. 11SA306. The Supreme Court heard oral arguments on the matter on November 7, 2012 and on December 23, 2013 entered a decision in the case.

The Supreme Court ruled that the holdover provision in the Water Conservancy Act allows for a holdover director to remain in office as a de jure officer and does not impose a temporal limit on a holdover director's authority to act on behalf of a district and Yellow Jacket's Board had authority to file the diligence applications, thus reversing the judgment of the water court. These cases are now back before the water judge. Several opposers have stipulated in these cases, however the State and Division Engineers have not.

Involvement in the Water User Community

The Division 6 staff continues to assist the public in preparing water court and well permit applications, by providing water right and diversion record information, by providing information on

proper selection and installation of water measuring devices, and by providing assistance to dam owners with completing Notices of Intent to Construct Non-Jurisdictional Dams, Livestock Water Tank Permits and Emergency Action Plans. The Division 6 field office in Craig continues to be a vital aspect of our public relations.

Following is a list of meetings attended by Division 6 staff in 2013. This list is not meant to be all inclusive, but rather provide an idea of the types of meetings attended.

- Spring North Platte Decree Committee meeting held by conference call
- Fall North Platte Decree Committee meeting held by conference call
- Annual meeting of the Pot Creek Distribution System in Vernal, UT
- Majority of all board meetings held by the Upper Yampa Water Conservancy District
- Two board meetings held by the Yellow Jacket Water Conservancy District
- Bear River Irrigators annual meeting
- Stillwater Ditch Company annual meeting
- Michigan River Water Conservancy District annual meeting
- Walden Reservoir Company annual meeting
- All roundtable meetings for the Yampa/White River and North Platte River
- Six employees attended the CWOA annual conference in South Fork

In addition to the above, Division 6 staff held two public meetings to discuss water administration and the requirement of control structures and measurement devices.

Division 6 Organization Chart

