2009

Annual Report
Water Division VI

Yampa, White and
North Platte River Basins

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TABLE OF CONTENTS

Water Year 2009

Water Year 2010

Water Administration Data Summaries

Introduction

This report summarizes the activities of the Division 6 office of the Colorado Division of Water Resources in 2009. It presents an overview of the administration activities that took place during both the calendar and irrigation year 2009 and statistical data for both the water and irrigation year 2009. Please direct any questions regarding the information in this report to the Division 6 office in Steamboat Springs.

Year 2009

Basin Hydrology

Snow Pack

In water year 2009 the snow water equivalent (SWE) started out well below average in the months of October and November, but gradually grew to being above average by January in all three basins: North Platte River, White River and Yampa River, as shown in Table 1. With spring conditions being warmer than average, the SWE by May dropped once again to well below average.

TABLE 1

End of Month Snow Water Equivalent as Percent of Average
Water Year 2009

Drainage	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
North Platte River	41	65	90	107	104	101	94	47
White River	16	81	110	113	106	101	87	54
Yampa River	15	62	92	115	114	111	96	32

Despite the high SWE in the winter and the warm, early spring, there was little flooding. Table 2 shows the January 1st, March 1st and May 1st runoff forecasts developed by the Natural Resources Conservation Service (NRCS) in comparison to the actual runoff as measured at the selected USGS gauging stations.

TABLE 2

2009 Total Runoff Forecast in 1000's of Acre-Feet

Station Name	1-Jan		1-Mar		1-May		Actual	
	Runoff	% Avg	Runoff	% Avg	Runoff	% Avg	Runoff	% Avg
North Platte nr Northgate (Apr-Sept)	197	73	255	94	205	89	250	96
White River nr Meeker (Apr-Jul)	290	100	290	100	255	98	312	111
Little Snake River nr Lily (Apr-Jul)	350	96	430	118	405	131	520	150
Yampa River nr Maybell (Apr-Jul)	910	92	1070	108	840	101	1134	120

Precipitation

Table 3 below shows the monthly precipitation data for the towns of Walden, Meeker and Steamboat Springs. Precipitation for these selected weather stations was well below average for the month of October and then all over the board until June where the precipitation at all three stations were well above average. June was undoubtedly a wet month, with one water commissioner/rancher joking that he was beginning to grow webbed feet. The Meeker station in particular had precipitation in excess of 280% of average for the month of June. This however was followed by two very dry months where the precipitation was just below 20% of average. Table 4 shows the NRCS Snotel site precipitation for all three basins combined (North Platte, White and Yampa Rivers). Based on the precipitation recorded at the NRCS Snotel sites, precipitation was at its highest in January at 154% of average and at its lowest in August at 51% of average. At the end of the water year, the total annual precipitation was 102% of average, which was very similar to the water year total in 2008 of 103%.

Table 3

Monthly Precipitation Data for Selected Sites
Water Year 2009

Site	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Walden (inches)	0.50	0.42	0.76	0.52	0.16	0.54	1.02	0.90	1.90	1.52	0.90	0.57	9.71
% Avg	56	51	129	84	26	66	95	60	179	119	86	47	84
Meeker (inches)	0.56	1.35	1.07	1.77	0.42	1.80	1.80	1.89	2.87	0.25	0.23	2.14	16.15
% Avg	34	123	119	221	56	133	129	126	287	19	18	178	113
Steamboat (inches)	1.20	1.91	2.21	4.60	1.51	1.50	2.04	2.19	2.65	1.22	0.86	0.69	22.58
% Avg	62	81	93	178	70	74	88	95	185	84	59	40	94

Monthly Precipitation Data for Selected Sites
Calendar Year 2009

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Walden (inches)	0.52	0.16	0.54	1.02	0.90	1.90	1.52	0.90	0.57	1.23	0.57	0.77	10.6
% Avg	84	26	66	95	60	179	119	86	47	138	69	131	92
Meeker (inches)	1.77	0.42	1.80	1.80	1.89	2.87	0.25	0.23	2.14	0.98	0.85	1.29	16.29
% Avg	221	56	133	129	126	287	19	18	178	59	77	143	114
Steamboat (inches)	4.60	1.51	1.50	2.04	2.19	2.65	1.22	0.86	0.69	2.88	0.81	1.62	22.57
% Avg	178	70	74	88	95	185	84	59	40	150	34	68	93

Table 4

Basin-Wide Monthly Precipitation Data from NRCS SNOTEL Sites
Water Year 2009

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Inches	40.1	82.9	128.4	154.3	86.2	97.0	106.5	61.2	84.5	33.3	20.9	40.7	936
% Avg	59	90	120	147	90	90	110	72	191	87	51	92	102

Stream Flows

Stream flow on the North Platte River near Northgate were as low as 64% of average for the month of September and as high as 155% of average in February. The total runoff for the water year at this site was 98% of average. As shown in Table 5, the peak discharge occurred on June 5, 2009 at a rate of 2,450 cfs. Historically, the peak has occurred on May 25 with an average peak discharge of 3,081 cfs. The highest peak of record (1904 through 2009) occurred on June 11, 1923 at 6,720 cfs.

Stream flow on the White River below Boise Creek (the most downstream gauging station on the White River in Colorado) dropped as low as 64% of average in August and was as high as 136% of average in May. The total runoff for the water year was 101% of average. As shown in Table 5, the peak discharge occurred on May 26, 2009 at a value of 3,680 cfs. Historically, the peak has occurred on May 28 with an average peak discharge of 3,267 cfs. The highest peak of record (1983 through 2009) occurred on June 7, 1984 at 6,440 cfs.

Stream flow on the Little Snake River near Lily dropped to as low as 86% of average in August and was as high as 156% of average in May. The total runoff for the water year was 144% of average. As shown in Table 5, the peak discharge occurred on May 27, 2009 at a value of 6,510 cfs. Historically, the peak has occurred on May 24 with an average peak discharge of 5,302 cfs. The historic peak of record (1922 through 2009) occurred on May 18, 1984 at 16,700 cfs.

Stream flow on the Yampa River near Maybell dropped to as low as 70% of average in October 2008 and was as high as 132% of average in May. The total runoff for the water year was 115% of average. As shown in Table 5, the peak discharge occurred on May 26, 2009 at a discharge of 10,700 cfs. Historically, the peak has occurred on May 25 with an average peak discharge of 10,379 cfs. The historic peak of record (1916 through 2009) occurred on May 17, 1984 at 25,100 cfs.

Table 5

Total Runoff for Water Year 2009

Station Name	Total Flow (AF)	Average (AF)	% of Average
North Platte River near Northgate	303,300	308,200	98
White River below Boise Creek	531,000	527,000	101
Little Snake River at Lily	588,600	409,700	144
Yampa River near Maybell	1,295,000	1,125,000	115

Peak Flow Rate and Date of Occurrence

Station Name	Peak Flow (cfs)	Date
North Platte River near Northgate	2,450	June 5, 2008
White River below Boise Creek	3,680	May 26, 2009
Little Snake River at Lily	6,510	May 27, 2009
Yampa River near Maybell	10,700	May 26, 2009

Water Administration

As a result of above or near average snowpack and runoff and a wet month of June, the Michigan River of the North Platte River was only subject to administration for a very short time during the month of May. The Illinois River of the Michigan River of the North Platte River was not subject to administration at all. Unlike these two main tributaries of the North Platte River, Piceance Creek of the White River and all other systems typically subject to administration were under administration for a substantial portion of the summer as more fully described below. Additionally, releases were made from Elkhead Creek Reservoir for which this office is responsible for protecting. Releases were made in accordance with the Upper Colorado River Endangered Fish Recovery Implementation Program (Recovery Program) as a result of flows in the Yampa River at the Maybell gage station dropping to as low as 186 cfs in August and 111 cfs in September. Additional releases were made at the request of the City of Craig and Tri-State Generation and Transmission, regardless of the fact that there was sufficient stream flow water available for their diversion. A list of the stream systems under administration in water year 2009 is provided in Appendix B.

Yampa and Green River Drainages

The Yampa River drainage encompasses Water Districts 44, 54, 55, 57 and 58 and the Green River drainage encompasses Water District 56. In irrigation year 2009, water administration occurred within the upper Yampa River basin (Water District 58) on Bear River, Middle and South Hunt Creeks, and Soda Creek. In the middle region of the Yampa River basin (Water Districts 44 and 57), water administration

occurred only on Little Bear Creek of Fortification Creek. In the Green River basin (Water District 56), administration occurred on Talamantes Creek of Vermillion Creek and Vermillion Creek of the Green River.

Report from Water Commissioner, Water Districts 57 and 58

After a wet year in 2008, Division 6 went into the winter of 2008-09 in good shape despite the dry fall. The snowpack for 2009 was near normal, and spring 2009 was wetter than normal. From May 20 through June 30, 3.58 inches of precipitation was recorded at the CYCC lysimeter site, located in Water District 57 and 3.10 inches of precipitation was recorded at Five Pine Mesa located in south Routt County Water District 58. The rains were continuous enough that numerous ditches were turned off in the first week of June because the ground was already saturated and when they did turn back on late in the month, it was for a shortened irrigation season.

The spring snowmelt runoff was moderate, mostly due to several late cold spells, with three moderate peaks occurring on the lower Elk River near Milner on May 21, May 25, and June 3 with daily average flows of 4,310, 4,290, and 4,280 cfs, respectively, with the instantaneous peak occurring on May 21, 2009 at 4,930 cfs. The Yampa River at Steamboat peaked at 3,060 cfs on May 20. There was no significant flooding in the area last spring.

By Labor Day, regional flows had dropped below average, with the Elk River near Milner falling below its minimum instream flow of 65 cfs on September 3. However a call from the Colorado Water Conservation Board (CWCB) for their instream flow water right was avoided as a result of water being released from Pearl Lake. Water from Pearl Lake was released at a rate of approximately 80 cfs so as to lower the reservoir to a level that allowed repair of the outlet structure. In total, 4,570 AF was released from Pearl Lake between September 11 and October 26. Additionally, water was voluntarily released throughout the summer from Steamboat Lake so as to avoid a call for the CWCB minimum instream flow water right on Willow Creek of the Elk River.

Our first regulation of a “household use only” well occurred this summer in Water District 58 just south of Steamboat Springs. Numerous visits to the residence, beginning July 24, were necessary to verify the well’s use, possible impact on neighboring wells, and tagging the well. Unfortunately the owner and developer of the new house was unaware of the limitation on the in-house use only well permit and proceed to install an elaborate sprinkler system to irrigate thousands of dollars worth of newly plant grass, trees and shrubs. Due to the controversy surrounding this well, this office has ordered the installation of a flow meter which is to be installed by May 31, 2010.

The development near Hayden, on lower Trout Creek in Water District 57, and on the Elk River in Water District 58 has subsided due to the economy, so few new structures have been completed and used. Most

of the Marabou ponds and wells on the Elk River have been constructed, but there is little build-out in the subdivision that would require water.

Staff from the Craig field office assisted with some of the collection of diversion records on seven major structures in Hayden. These very senior, large ditches are time consuming to check because they have to be viewed in multiple places where water not used for irrigation purposes is released back to the river. Additional water in the ditches is used to help push the irrigation water through the relatively flat systems. Water returned the river without being used for irrigation is estimated at several waste gates on each ditch.

This office continues to operate and maintain the lysimeter plots at the CYCC site; two evaporation pans, one at the CYCC site and one on Five Pine Mesa; and three Hobo temperature data sensors and precipitation gages, located at the CYCC site, on Five Pine Mesa and Yamcolo Reservoir. The 2009 Lysimeter Report produced by this office can be obtained through the Division 6 Water Resources office upon request. Efforts are currently underway to hire a consultant to review all of our reports associated with our lysimeter and consumptive use study as well as to establish a new site which would include new lysimeter plots and a CoAGMet Station.

Report from Water Commissioner, Water District 44

For the most part, things were business as usual in Water District 44. As a result of June being a very wet month, Little Bear Creek did not go on call until mid July. Fortification Creek did not go on call at all. In addition, there were no calls on any other streams. Releases from Elkhead Creek Reservoir for the Recovery Program began on August 10 and ran through October 3. This office makes every effort to assure that the water released is not inadvertently diverted by other water users. Being that this was the third year in a row of having to protect such releases, the process was much easier and the water users are becoming more familiar with the process.

In April 2008, the Recovery Program provided notification with supporting rationale that it would typically request that water releases from the Elkhead Creek Reservoir endangered fish pool be managed to ensure minimum flows of at least 93–134 cfs at the Maybell gage throughout the months of August, September and October. However, a caveat to that notification was the Recovery Program may request other release scenarios to support research and management actions deemed appropriate to assist in recovery of the endangered fishes.

Later that year on August 25, the Recovery Program submitted a late-summer research flow request to facilitate studies ongoing since 2003 conducted by Colorado State University's Larval Fish Laboratory on the spawning and young-of-the-year dynamics of nonnative smallmouth bass and the response of native fishes to nonnative fish management efforts in the middle Yampa River. The objective of that request was to

augment Yampa River flows with releases from the 5,000 AF fish pool in Elkhead Creek Reservoir to help maintain a daily mean target flow of greater than or equal to 300 cfs at the Maybell gage through September. In the past lower base flow years, smallmouth bass spawning and first occurrence of young-of-year have been documented as early as late June. The growth of young smallmouth bass is very high, and in lower flow years, young smallmouth bass within a few weeks of hatching are at a size capable of eating small-bodied native fish. In late July and early August of 2008 young-of-year smallmouth bass were captured and were found to be of relatively small size. The intent of the releases made in 2008 was to maintain higher and potentially cooler flows in the Yampa River to retard the growth of young smallmouth bass, reduce their overwinter survival, and possibly reduce the strength of the year class. Table 6 shows the daily average flows for the months of July, August and September for the period of record 2003 through 2009. The numbers in red font represent months in which reservoir releases for the Recovery Program were being made.

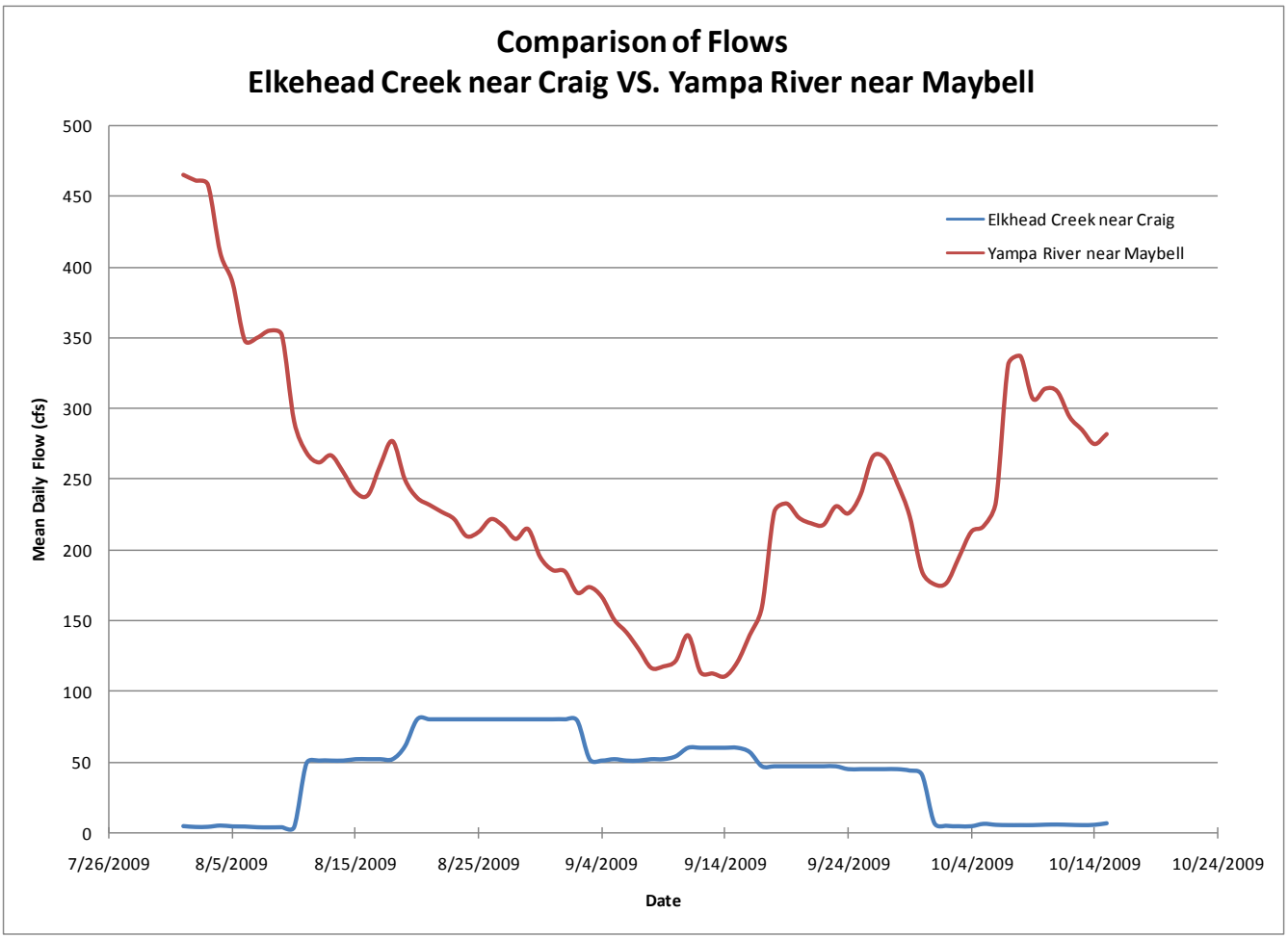
Table 6

Summer Month Daily Average Flows at Maybell

Month	Historic	2003	2004	2005	2006	2007	2008	2009
July	1350	589	573	1,338	589	284	1,881	1,338
August	368	102	107	287	170	173	409	283
September	243	147	243	121	270	238	259	179

Not knowing what the flows at Maybell would have been like absent releases from Elkhead Creek Reservoir, it is hard to determine the effect these releases had on the flows at Maybell; however, it appears that only the releases in 2008 could have pushed the flows to above the historic average.

Based on the preliminary 2008 results, it appeared that late-summer flows in the Yampa River enhanced by releases from Elkhead Creek Reservoir achieved the desired effects of benefiting native fishes and their habitats while disadvantaging nonnative smallmouth bass. Also based on these results, the United State Fish and Wildlife Service determined that additional years of data collection under increased summer flows would serve to further understand the relationships between flow, temperature, and changes in the Yampa River fish community, and would likely assist the Recovery Program's efforts to restore native fishes in the Yampa River and reduce the abundance of smallmouth bass. As a result, releases from the Elkhead Creek Reservoir's endangered fish pool was made in 2009 to help maintain a daily mean target of greater than or equal to 300 cfs at the Maybell gage. By observing Table 6 above and the following graph, which shows the daily average flows on Elkhead Creek below Elkhead Creek Reservoir (Elkhead Creek near Craig) in comparison to the flow on the Yampa River at Maybell, it can be observed that not only did the release not accomplish the desired flow of 300 cfs at the Maybell gage but also that the releases appeared to have very little effect on the flows at this gage.



Finally, during the time in which releases were being made for the Recovery Program, releases were also made for the City of Craig and Tri-State Generation and Transmission, as mentioned above. A total of 221 AF was released for the City of Craig and 741 AF was released for Tri-State Generation and Transmission.

Report from Water Commissioner, Water Districts 54, 55, and 56

There were several challenging and learning experiences with the administration of Talamantes Creek and Vermillion Creek, both of which are located in Water District 56. A call was first placed on Talamantes Creek on March 26, 2009. This was a very early call and when first visited after the call was placed, the lands being irrigated were covered by approximately 4-inches of snow from a weather event the night before. None-the-less, this office honored the call based on the notion that the application of water to the lands could be aiding in the growth and greening of the plants.

In order to administer the call, several decrees and applications had to be studied to understand the decreed uses, irrigated acreage and place of use. Specifically, as to the uses, several of the water rights in priority to divert are decreed for all other beneficial uses, and though the primary use was for irrigation purposes, there was some water being diverted for industrial purposes. Additionally, to add to the complexity of the water system and its administration, it takes nearly two hours to drive to the site, there are

multiple alternate points of diversion to administer, and the amount of water in the system can fluctuate tremendously early in the season. As shown in Appendix B, Talamantes Creek was on call from March 26 through October 15 and Vermillion Creek was on call from July 2 through September 2 when the call became futile.

A call was placed on Pot Creek by a Colorado water user for their direct flow water right in 2009 but was not honored due to the measuring device not operating properly. Regardless of the fact that Offield Reservoir does not have a rated staff gage, in May of 2009, water stored out of priority in reservoirs located in Utah was released from Crouse Reservoir to fulfill the Offield Reservoir senior water right. No other water was released for Colorado water users on Pot Creek. The total amount of water that entered the State of Colorado based on records at the Pot Creek at State Line near Vernal gage for water year 2009 was 212 AF with the peak daily average flow of 6.4 cfs occurring on May 24 and 25.

White River Drainage

Report from Water Commissioner, Lower Portion of Water District 43

Piceance Creek went on call on May 21, 2009 though there was more water available to users than in 2006 and 2007. As expected the oil and gas industry continues to thrive in the Piceance Creek basin resulting in increased water usage and tighter administration. Exxon Mobil who is a major player in the Piceance Basin dried up nearly all of their irrigable land in 2009 so as to be able to claim the consumptive use credits off this land and use their senior water rights for industrial purposes. Unlike in previous years when the system has been under administration, administration in 2009 was relatively easy as a result of water users being very cooperative with this office and our efforts to properly administer the system.

North Platte River Drainage

Report from Water Commissioners, Water District 47

There was very little spring type weather with climate going directly from winter to summer. In May and June temperatures were quite cool and much like the rest of the northwest part of Colorado, June was a very wet month. This held back the growing season and the runoff. The Fall on the other hand was dryer and warmer than usual.

Regardless of the cooler temperatures some irrigators began diverting water in early May and on May 13 the Michigan River was placed on call, with the calling structure being the Kiwa Ditch. This call was short lived however and was taken off call on May 19 when warmer weather resulting in increased snowmelt runoff occurred. There were only two other calls within the basin, one on Spring Creek of the Illinois River and one on Newcomb Creek of Chedsey Creek of Little Grizzly Creek of the North Platte River.

The Michigan River near Meadow Creek Reservoir peaked on May 26 at 437 cfs, the Michigan River at Walden peaked on May 27 at 374 cfs, and the Illinois River near Rand peaked on May 26 at 276 cfs. All of which were lower than the previous year.

This office continues to operate and maintain two lysimeter plots, a Hobo temperature data sensors and precipitation gage in the North Platte River basin located on the National Wildlife Refuge. Also maintained by this office is an evaporation pan located on one of the water commissioner's property.

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), 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 2009 at this gage was 1,295,000 acre-feet and the ten year (2000 to 2009) aggregate flow was 9,703,600 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. Our office has worked with the State of Wyoming to update the combined administration list for the Little Snake River. This effort has stalled and is in the hands of Wyoming for their final approval. The administrative schedule developed many years ago has proved to be sufficient for use in recent administration and will continue to be used until such time that the revised one is finalized and approved. There were no calls placed on the Little Snake River in 2009.

North Platte River (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 2009, a total of 114,410 acres were irrigated and 5,081 acre-feet were stored for irrigation use. Both these values were less than those reported for 2008. Transmountain diversions out of the basin totaled 6,112 acre-feet, also less than that reported for 2008. The ten-year total transmountain diversions out of the basin were 46,516 acre-feet. None of the limitations of the Supreme Court Decree were exceeded in 2009. A Division 6 representative attended the two meetings of the North Platte Decree Committee held in April 2009 and October 2009.

Pot Creek

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 provisions of the current MOU concerning the installation of headgates and/or measuring devices were officially waived for the 2005 irrigation season and the states mutually agreed to waive these provisions for the 2006 irrigation seasons. To date, a measuring devise has been installed on the calling structure in Colorado (Miles Ditch), and efforts are being made to install staff gages on the two reservoirs located in Colorado (Dry Lake Reservoir and Offield Reservoir). Per the MOU, a measuring device is to be installed in Pot Creek above Calder Reservoir. To date, this device has not been installed. Additionally, the MOU requires that the State of Utah operate and maintain a gauging station on Pot Creek upstream of Matt Warner Reservoir and the State of Colorado operate and maintain a gauging station on Pot Creek at the state line. A ramp flume has been installed on Pot Creek upstream of Matt Warner Reservoir but is not operating properly and there is no gauging equipment in place to record flows. A gage station located at the state line has been in operation and has been maintained by the State of Colorado for many years.

Dam Safety

The two primary functions of the Dam Safety Branch are the review of designs for the construction, modification, or repair of a dam with subsequent construction inspections; and periodic safety inspections of existing dams to insure their integrity. In the design review and construction area, repair projects in Division 6 and the upper area of Division 5 remained steady during 2009. The dam rehabilitation and outlet repair project was continued for Lester Creek Dam that holds Pearl Lake with the lake being partially lowered and a new gate installed by a dive team in the fall to substantially complete the project. A significant hazard dam was drained down during the early irrigation season and the dam and two dikes were rehabilitated to remove heavy brush and tree growth and repair the slopes, plus the emergency spillway channel was repaired. A second significant hazard dam was also drained so that heavy vegetation could be removed from the dam, the outlet could be repaired and lined, and sand filter drains could be added on the downstream groins and toe. Also, continued planning work was completed by the Upper Yampa Water Conservancy District to determine the feasibility of raising the spillway crest of the Stagecoach Dam by four feet to increase storage on the upper reach of the Yampa River with continued work toward obtaining the required FERC permit.

Diver at Lester Creek Dam

In Division 5, a significant testing program was completed at the Ritschard Dam that holds Wolford Mountain Reservoir to investigate settlement issues at the dam. Two other significant hazard dams needed to have repair projects started in 2009 but the current economic climate has hampered the start of these projects.

During 2009 the Division 6 Dam Safety Engineer inspected nine of thirteen high hazard dams, nine of fourteen significant hazard dams, and 25 of over 100 low hazard dams in the Division in accordance with a long range inspection schedule. In addition, Federal Energy Regulatory Commission (FERC) engineers completed inspections on both of the high hazard, power generating dams in Division 6; one in conjunction with the state inspection. The remaining two high hazard dams were not scheduled for typical safety inspections during 2009 based on the risk based evaluations of these dams. In addition to the safety inspections, outlet inspections were completed at two high hazard dams with engineers entering the pipes for visual observations and pictures. A dam survey and an outlet inspection of the new Elkhead Creek Dam were requested after a mild earthquake occurred a short distance north of the dam.

In support of Division 5, two of seven high hazard dams, seven of eleven significant hazard dams, and six of 24 low hazard dams were inspected according to the long range inspection plan for that division. Three of the remaining high hazard dams belong to the Bureau of Reclamation and are inspected in-house. FERC inspected one hydro dam that was also inspected this year by the state, and the last two dams were postponed due to the risk based “health” of the dams.

Several safety issues were again noted at some of the significant and low hazard dams in Division 6 during inspections in 2009. Two significant hazard dams did complete repair projects as mentioned above and these projects should make the dams safer for future water storage. Fourteen low hazard dams still need repair work and restrictions have been issued to most of them. One dam was partially breached by the owner to prevent an uncontrolled failure pending evaluation by an engineer. Preliminary engineering studies have been done for several dams but no designs have been submitted for review. Of the 25 low hazard dams inspected, twelve were rated unsatisfactory mainly due to significant seepage and repair issues or previous restrictions, thirteen were rated conditionally satisfactory mainly due to a general lack of maintenance and repair, and **none were rated satisfactory**. A similar breakdown in the rating was noted during the last five inspection years. Due to safety issues found during inspections, four new storage restrictions were issued in 2009 and no owners of low hazard dams completed repairs in 2009 to bring their dams up to a satisfactory rating. Most owners seem to lack the necessary resources to be able to hire an engineer and begin the repair process. One restriction for a low hazard dam was lifted due to past work that had yet to be fully reviewed.

The dam safety engineer attended a tabletop exercise of the EAPs for both Yamcolo Dam and Gardner Park Dam which are located along the Bear River several miles upstream of the City of Steamboat Springs. several other dam owners used the Division's boilerplate format posted on the internet to upgrade their EAPs. FERC also required a review of the Potential Failure Mode Analysis for the Taylor Draw Dam and requested participation of the State dam safety engineer.

There were no erosion control dams constructed in Division 6 during 2009 and no applications submitted for livestock water tanks. However, applications for 37 non-jurisdictional dams were approved. A ranch owner who has been cited in the past for constructing ponds without approval, submitted applications for both water storage rights and livestock water tanks to the Water Court two years ago for approximately 135 ponds. The owner was required to submit the appropriate dam safety applications for these structures. We continue to review and approve these dams. Twenty of these structures were approved in 2009. The Seneca Mine south of Hayden is also reclaiming several large areas and submitted additional applications to convert their erosion control dams to non-jurisdictional dams as the land above them is reclaimed and reverted over to local owners. Processing of the mine ponds and the large list of ponds in the water right cases required a substantial amount of time in 2009 and most likely will not be totally completed for yet another year.

So far, the construction of numerous non-jurisdictional dams has not caused any significant water administration issues, but some areas around the Division are experiencing a proliferation of these small dams that could result in future problems. Any of these small dams that are on-channel structures are required to have adequate outlet pipes capable of passing inflow to help avoid any future water

administration issues. With the upper section of the Yampa River basin now designated as over-appropriated, the large number of non-jurisdictional dams in this area could become a substantial administration workload and augmentation plans may be needed to cover the evaporative losses if their owners desire to maintain the ponds at a full level in the event of administration.

A full summer of inspections was completed for Division 6 in 2009 plus support was given to Division 5 for inspections in the upper reaches of that Division. In addition, the Division 6 Dam Safety Engineer attended the spring and fall meetings of the Dam Safety Branch to keep current with the latest policies for the Branch and discuss the latest design review and modeling techniques to be used to evaluate dams.

The dam safety engineer has been asked to assist with stream flow measurements requiring the use of bridge measuring equipment in Division 6. Support was given for two bridge measurements, surveying and rebuilding of one bubbler system for depth measurements in 2009.

Hydrographic Program

Forty-one active stream gage sites are currently operated in the Yampa, White, and North Platte River basins by Division 6 and the USGS combined. Division 6 operates fourteen of these gage stations, thirteen of which are equipped with satellite monitoring. Of these, three transmit reservoir water surface elevations, nine transmit stream flow gage heights, and one transmits both parameters. The remaining gage is equipped with a data collection platform (DCP) to record gage height.

In 2001, the USGS operated 33 stations in the Yampa, White, and North Platte basins, as compared to 27 stations they are currently operating. Several of the gage stations were discontinued due to lack of available funding for the USGS stream flow program. Reduced funding has resulted in cooperators either having to pay more for the operation of the gages or totally discontinuing their operation.

In addition to operating and maintaining the gage sites, the Division 6 Hydrographer, in coordination with the Water Commissioners, conducts flow measurements on ditches, reservoir releases, and streams. One hundred and eighteen measurements were taken at the gage sites in water year 2009 and approximately 10 additional measurements were taken on ditches, reservoir releases, and other streams. Water year 2009 hydrographic records will be published for nine stations: Walton Creek near Steamboat Springs, Yampa River above Lake Catamount, Michigan River near Meadow Creek Reservoir, Michigan River at Walden, Illinois River near Rand, Williams Fork at the mouth near Hamilton, Pot Creek at Stateline, Willow Creek below Steamboat Lake, and Morrison Creek below Silver Creek.

Division 6 currently has thirteen gage stations equipped with high data rate (HDR) equipment. A Sutron HDR SatLink2 data logger was installed in 2009 at the Yamcolo Reservoir site and the existing HDR DCP at the Michigan River at Walden was upgraded to a SatLink2. The Bear River below Bear Lake gage station, which is the one site that does not have satellite monitoring, is scheduled for upgrade to HDR in 2010/2011.

During 2009, Division 6 conducted inspection, maintenance, and refurbishment activities at several sites. The DCP at Steamboat Lake was replaced on several occasions, due to repeated lightning storms at the Steamboat Lake dam.

Steamboat Lake Gage Station

The DCP at Pearl Lake stopped functioning over the winter months and was replaced in the spring of 2009. In addition, due to vandalism at the gage station, the GIS unit was also replaced in the spring. State Parks conducted construction activities at the dam and dam outlet and drained the reservoir below the bubbler level in the fall of 2009. The corroded conduit to the bubbler was replaced at that time.

Pearl Lake Gage Station

Corroded Conduit at Pearl Lake

After several years of struggling with sediment issues at the Williams Fork gage station, the Accubar bubbler was replaced with a constant flow bubbler in August 2008. Initial results were positive; however, sediment related gage height chatter later began to occur. Therefore, the bubbler muffler was removed in August 2009 to determine if the constant flow bubbler would function more accurately without a muffler. The effects of this action have not yet been determined.

Sediment Laden Williams Fork River

One new gauging station was added to the satellite monitoring system in water year 2009. The station was funded by the Upper Yampa Water Conservancy District and is located on Morrison Creek immediately below the confluence of Morrison Creek and Silver Creek.

Morrison Creek below Silver Creek

The new Morrison Creek gage station, constructed in October 2008, included a stilling well, doghouse shelter, intake pipes, HDR DCP, and solar panel/satellite telemetry system. A published record was prepared for this station in water year 2009.

New Gage Station on Morrison Creek

During the summer and fall of 2009, the Division 6 Hydrographer continued to work closely with the Water Commissioners on Elkhead Creek Reservoir releases for the Upper Colorado River Basin Fishes Recovery Program. Data collected during the release are being compiled and reviewed by participating agencies and a transit loss study is being conducted by the USGS.

Ongoing and planned gage station projects for 2010/2011 include the following:

- Bear River below Bear Lake: reinstate the satellite telemetry system/solar panel; upgrade to HDR DCP
- Pot Creek: reconstruct the gage platform and replace HDR DCP with new generation HDR DCP.
- Michigan River at Walden: Colorado Department of Transportation (CDOT) is planning to replace the bridge at the Michigan River at Walden site and will have to replace the gage station at this location. This project may or may not occur in 2010, depending upon CDOT's budget and schedule.
- In addition, miscellaneous minor station upgrades and refurbishments will take place, as the need arises.

Groundwater and Well Permitting

The Division continues to assist the public with questions and concerns relating to the drilling of wells and completing well permit applications. The Division issued 121 exempt well permits in 2009 versus 155 permitted the previous year. A considerable amount of time is spent educating realtors and water users about the statutes concerning the use of groundwater in Colorado.

In December 2008, the Water Judge for Division 6 decreed an "umbrella" plan for augmentation applied for by the UYWCD. This plan was developed to provide a replacement source of water for water users desiring to obtain a well permit which would not limit them to in-house use only or for other out-of-priority uses.

Water Records and Information

Summaries of diversion records for irrigation year 2009 are shown in Appendix A. The data indicate that the total diversions for all uses were 1,680,970 acre-feet, an increase of approximately 0.8% from 2008. Water Districts 43, 44, and 55 experienced decreases in total diversions, while the other five water districts experienced increases from the previous year. Diversion increases were primarily attributed to increased use for irrigation, municipal, recreation and fishery purposes. The total number of structures visited by the Water Commissioners increased by approximately 8 percent. As water administration and other demands on the Water Commissioners increase, the reliance of user-supplied data also increases.

The water rights tabulation and diversion records are maintained in Hydrobase. Ownership, decreed water rights, structure information, and structure comments are updated on a regular basis and distributed to all of the Water Commissioners semi-annually. Well data is updated in Well Tools, and dam information is kept up-to-date in various dam safety databases. Hydrobase and new Well View Web are used extensively when responding to inquiries from the public and the public is being informed that all of this information is available on the internet.

This office has maintained a lysimeter site on the Colorado Yampa Coal Company (CYCC) property since 1993 and on the North Park Wildlife Refuge since 2000. Consumptive use data for the various drainage basins is calculated using data collected at the two lysimeter sites. This data is used for several purposes, such as in the review of water court applications for changes of water rights.

Water Court Activities

In comparison to last year, Water Court activities for the Water Commissioners in Districts 57 and 58 were significantly reduced. Specifically, one of the Water Commissioner's hours spent were reduced from approximately 450 hours in 2008 to 110 hours in 2009. The Division Engineer's time invested in Water Court activities however seems to never decline.

As of August of 2009, all new cases associated with the White River are now filed in the Division 6 Water Court rather than Division 5. All cases pending in the Division 5 Water Court up to that point remained in that court. The Division 6 Water Court had 75 new applications filed in 2009, 7 applications filed in 2008 but not published until 2009 and 14 amended applications filed in 2009, as shown in Table 7. Sixty-eight of the 75 new applications filed in 2009 were actually published in 2009. The remaining 7 have been published in 2010. In total, 89 applications were published in 2009 in the Division 6 Water Court. In Division 5 Water Court, there were 2 new cases and 2 amended cases filed and published in 2009. For every case published (original or amended) a Report of the Division Engineer is submitted to the Water Court.

In comparison, in Division 6 there were 110 and 89 applications (new and amended) filed in 2008 and 2009, respectively, and in Division 5 Water Court there were 24 and 4 applications (new and amended) filed in 2008 and 2009, respectively. In 2009, the Division Engineer prepared 136 Reports of the Division Engineer - 113 for the Division 6 Water Court and 23 for the Division 5 Water Court. In comparison, a total of 138 Reports of the Division Engineer were filed in 2008 in the Division 5 and 6 Water Courts combined. In addition, the Division Engineer wrote numerous letters in response to responses to the Reports of the Division Engineer and proposed referee rulings. Three statements of opposition were filed in Division 5 and 6 combined. There were no protests to any of the Rulings of the Referee. The Division Engineer testified in two Court cases, one civil and one water, which the State and Division Engineers were not parties to.

In December of 2008, Shell Frontier Oil and Gas filed for a new surface water right in the amount of 375 cfs and water storage right in the amount of 45,000 AF on the Yampa River and Cedar Springs Draw, respectively. There were nineteen statements of opposition in this case (one of which was filed by the State and Division Engineers). Applicant Shell Frontier Oil and Gas has since withdrawn this application.

Table 7

Water Court Cases Filed in 2009

Month	New Cases Filed in 2009	Cases filed in 2008, but Published in 2009	Amended Cases Filed in 2009
January	2	2	3
February	0	3	1
March	2	0	3
April	6	1	4
May	7	1	0
June	6		1
July	7		0
August	3		1
September	12		0
October	4		0
November	6		1
December	13		0
TOTAL	**68**	**7**	**14**

This office works (worked) closely with the Division 5 and 6 Water Courts. Meetings are held once every three or four months between this office and the Division 6 Water Judge, Referee and Clerks to discuss operating procedures between the Court and the Division of Water Resources and the status of particular cases. The Division 6 office continues to review new Water Court applications for the Court prior to publication in the resume to assure that applicants have provided all the required information. We also closely review all proposed Rulings of the Referee and Rulings and final Rulings of the Referee to assure no mistakes have been made and that all of the Division Engineer's concerns raised in the Reports of the

Division Engineer have been satisfactorily addressed. At the request of the Water Referee this office does not confer with him prior to submitting the Reports of the Division Engineer, thus the reason they are referred to as Reports of the Division Engineer rather than Summaries of Consultation.

Involvement in the Water User Community

The Division staff continues to assist the public in preparing Water Court and well permit applications, provide water right and diversion information, assist water users with the proper selection and installation of water measuring devices, and provide assistance to dam owners with completing Notices of Intent to Construct Non-Jurisdictional Dams, Livestock Water Tank Permits and Emergency Action Plans. Our field office in Craig continues to be a vital aspect of our public relations. The Craig office likely handles as many walk-ins as the Steamboat office.

Following is a list of meetings attended by Division staff in 2009.

- Annual meeting of the Pot Creek Distribution System
- All meetings held by the Upper Yampa Water Conservancy District
- Spring and fall meetings of the North Platte Decree Committee
- Bear River Irrigators annual meeting
- Stillwater Ditch Company annual meeting
- The majority of the HB1177 Roundtable meetings for the Yampa/White River and North Platte River
- Two employees attended the CWOA annual meeting in Denver

Appendix D summarizes other activities of the office staff and Water Commissioners of the Division.

Issues and Achievements

Five thousand acre-feet of the 11,957 acre-feet stored in the Elkhead Creek Reservoir enlargement is designated for in-river fish habitat and enhancement uses and in furtherance of the Upper Colorado River Basin Fishes Recovery Program (Recovery Program) in the critical habitat reach of the Yampa River for four endangered fish species. An additional 2,000 acre-feet of water is available through a 20-year lease with the Colorado River Water Conservation District (River District). Water not dedicated to the Recovery Program is available for contract through the River District. In 2009, water was successively protected to and through the critical habitat reach from August 10 through October 3. Upon notice of such release, this office visited all structures located downstream of Elkhead Creek Reservoir on Elkhead Creek and the Yampa River, as well as contacted many water users. When visiting the structures, the water commissioners adjusted all headgates so that they were at the water level or slightly below. Additionally, the water commissioners read the measuring devices to establish the base diversions prior to the reservoir release. For all pump diversions, the flow meters were read and recorded.

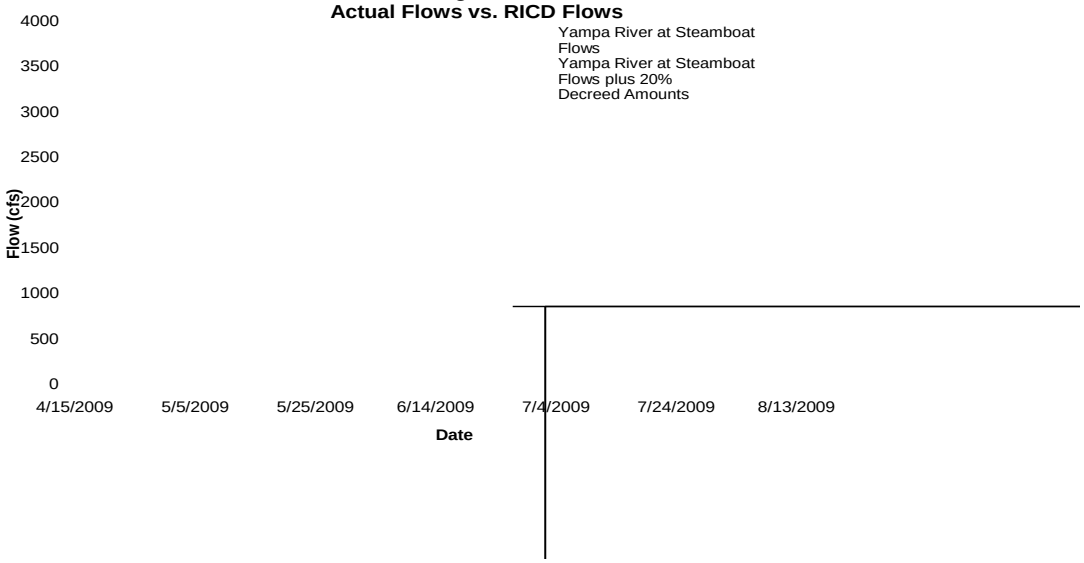
Administrative procedures were developed in 2007 to deliver water released from Elkhead Creek Reservoir past numerous structures and through the critical habitat reach. In 2008, the CWCB contracted with the USGS to perform a transit loss study on Elkhead Creek. Only the initial phase of this study began in 2008 with the installation of a new gauging station located on Elkhead Creek at the Highway 40 Bridge just upstream of its confluence with the Yampa River. Much of this study was performed in 2009 and further study is being continued into 2010.

Energy development in the Piceance Creek basin of the White River still is and will continue to present water administration challenges for years to come. Piceance Creek is heavily over-appropriated and water short. The major energy companies continue to purchase many of the senior water rights and have obtained decrees for changes of use and plans for augmentation and exchange. Many of these decrees are complicated and the fact that there are yet even more pending in Water Court that are intertwined with one another, complicates matters even further. Understanding how these decrees interrelate and the proper administration of them during periods of shortage, is a task that will have to be undertaken in the near future. Because the energy companies contract with other companies based outside of Colorado, this office has spent a considerable amount of time educating these contractors as to what they can and cannot do when it comes to water usage when the system is under administration.

The Water Court decreed the City of Steamboat Springs Recreational In-Channel Diversion (RICD) in December 2005 and amended it in March 2006. In previous annual reports, this office has reported on the flows through this reach and this office constantly tracks the flows in the event they drop below the decreed amount. In 2009, the Yampa River never fell below the decreed amounts. The decreed amounts for this water right 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.

In June of 2008, the USGS installed and began operation of a new gage located just downstream of the confluence of the Yampa River and Soda Creek at the 13th Street Bridge. The City of Steamboat Springs is the sole cooperator with the USGS for the operation and maintenance of this gage. This gage station can and will operate as the City of Steamboat Spring's measuring device for their RICD water right. Figure 1 shows the average daily flows at the Yampa River at Steamboat Springs gage station, these daily flows plus an additional 20% assumed by the City of Steamboat Springs in the Water Court application as being those flows contributing from Soda and Butcherknife Creeks between the Yampa River at Steamboat Springs gage and the RICD structures, flows at the Yampa River below Soda Creek gage and the decreed flows.

Figure 1
Actual Flows vs. RICD Flows



As one can observe from the above graph, the City's estimated flows at the RICD structures are close, but definitely below the actual flows which are determined at the Yampa River below Soda Creek gage.

The UYWCD continued to work with FERC throughout the year to amend their existing license to raise the spillway of Stagecoach Reservoir by four feet which would result in an increased capacity of approximately 3,185 acre-feet. The present storage capacity of the reservoir is 33,275 acre-feet. The four foot raise would only be in the spillway and not the dam itself. The justification for this additional storage is water supply, recreation use, threatened and endangered fisheries, increased power generation, and compliance with the Colorado Water Supply for the 21st Century Act. FERC has approved the amendment to the license and construction of the raise will begin in the fall of 2010.

Some of the accomplishments in the past year for Division 6 include:

- Operated within our budget.
- Completed a full schedule of dam inspections.
- Met all final deadlines for the submittal of diversion and hydrographic records.
- The Division Engineer prepared and submitted to the Water Court 136 Reports of the Division Engineer and is now up to date on all the Reports per the new established submittal requirements.
- Tabulated all newly decreed water rights (no backlog). Division 6 has not yet tabulated the majority of the decreed plans for augmentation and exchange plans. Our intention is to wait until Hydrobase has been upgraded to better accommodate the tabulation of these plans.

Workload

As demands for more water and the number of new water users increases, the workload of the field staff is becoming immense. The time demand on the Water Commissioners has gone beyond just water administration to include more field inspections, public relations, and educating the public on well permitting, basic Colorado water law and water administration. As for the office staff, the scenario is the same. The hydrographic branch continues to add more gages, develop more published hydrographic records, review more hydrographic records for other divisions, and be more involved with statewide hydrographic issues and activities. The dam safety branch has an increasing amount of design review and follow-up inspections of aging dams and the number of Notices of Intent to Construct Non-Jurisdictional Water Impoundments and Livestock Water Tank Permits submitted for review and approval has also increased. The Division Engineer continues to review proposed rulings and decrees prior to their signing; provide assistance to the Water Court when needed; review all engineering reports and provide comments to Denver or applicant's attorneys; and write all Reports of the Division Engineer. While a tremendous amount of effort is put into the review of proposed rulings and decrees of the Water Court and engineering reports, in the long run this effort pays off by obtaining decrees that are accurate, assure no injury to other water users, and are consistent with statutes and this agency's policies.

As the workload continues to increase, additional staff becomes more necessary. However, as a result of the State of Colorado budget shortfall, no decision items were considered by the State; however this office will continue to submit decision items requesting more staff in the future.

Personnel

For the entire year, Division 6 was fully staffed. However several employees intend to retire in the near future. Two staff members for certain will retire in 2010 and two additional staff members will likely retire in 2011. Given the fact that the Division 6 staff consists of 12 employees, these numbers are not insignificant.

The Division 6 Water Commissioner of the Year was Elvis Iacovetto. Mr. Iacovetto is responsible for water administration on the Yampa River and its tributaries upstream of the City of Steamboat Springs to its headwaters, which is part of Water District 58. The main tributaries that he covers are Bear River, Hunt Creek, Morrison Creek, Walton Creek and Fish Creek. Many of the large reservoirs located within the upper portion of the Yampa River basin are within the area covered by Mr. Iacovetto – namely Stillwater, Yamcolo, Stagecoach and Fish Creek Reservoirs. In 2009, he completed the reservoir accounting spreadsheets for Fish Creek Reservoir, Stagecoach Reservoir, Elkhead Creek Reservoir (located in Water District 44) and Walden Reservoir (located in Water District 47). In developing the Fish Creek Reservoir accounting, in particular, he worked closely with the water rights owners and met with them multiple times to develop a spreadsheet that not only conformed with the State Engineer's guideline on reservoir accounting but also conformed with the owners understanding of their water rights. Above all this, Mr. Iacovetto is a

great asset to Division 6 with a significant amount of knowledge about water administration and now reservoir accounting.

Appendix C shows the organization chart of Division 6.

Training

Listed below are specific training opportunities attended by the staff of Division 6.

- Two of the Division 6 staff attended the annual CWOA meeting in Denver.
- Jean Ray attended the annual Hydrographic Branch training.
- John R. Blair attended all Dam Safety training meetings.

In addition to these specific training sessions, time is set aside at both the spring and fall Division meetings to provide training to all staff in various areas, such as new computer programs, diversion record entry and water administration issues.

Water Year 2010

Key Objectives for 2010

Listed below are some of the key objectives for 2010:

- Stay in compliance with the new Water Court Rules concerning submittal time frames for all Reports of the Division Engineer.
- Continue to evaluate the need for additional staffing and develop necessary background information to support decision items for future budget consideration.
- Work with State of Wyoming to finalize the revised combined administration list for the Little Snake River and submit it to the Upper Colorado River Compact Commission.
- Work with the State of Utah to assure that the measuring devices and gauging stations required in the revised MOU are installed.
- Cooperate with the Colorado Water Conservation Board, Fish and Wildlife Service, and the Colorado River Water Conservation District with the delivery and protection of water released from Elkhead Creek Reservoir including assessing and determining transit losses.
- Prepare and complete the 2010 abandonment list.
- Work with North Platte River water users to determine whether reservoir data used by this office to determine the annual storage for irrigation purposes is accurate and if determined not to be accurate assist in developing cost efficient ways to obtain accurate data.
- Prepare an evaluation of water supply on the Elk River to determine whether the entire basin should be designated over-appropriated.

- Prepare an evaluation of water supply on the Trout Creek to determine whether a portion of the basin should be designated over-appropriated.
- Assist in obtaining a grant from the Yampa/White Roundtable for the installation of new lysimeters on the Carpenter Ranch.
- Insure compliance with the provisions of the U.S. Supreme Court decision in Nebraska v. Wyoming.
- Complete all scheduled dam inspections.
- Submit all diversion and hydrographic records on time.
- Operate within our allocated budget.
- Provide resources, training (where budget allows) and support to allow our office and field staff to perform their required duties in an efficient and professional manner.
- Provide technical assistance to the Yampa/White and North Platte Basin roundtables.

APPENDIX A

WATER DIVERSION SUMMARIES
IRRIGATION YEAR 2009

WD	STRUCTURES REPORTING				Est. No. of Visits to Diversion Structures	Total Surface Diversions	Total Ground Water Diversions	Total Diversions	Total Diversions to Storage	Total Diversions to Irrigation
	With Record (1)	No Water Available (2)	No Water Taken (3)	No Info Available (4)		AF	AF	AF	AF	AF
43	731	16	74	54	6,997	661,458	1,356	662,814	956	284,098
44	291	11	109	20	2,790	144,621	525	145,146	386	114,820
47	614	3	53	22	3,978	444,997	149	445,146	9,745	405,862
54	126	0	11	8	825	113,663	0	113,663	319	65,015
55	18	1	6	0	135	13,134	0	13,134	0	13,120
56	67	6	10	15	586	10,557	81	10,638	21	8,433
57	167	1	106	29	614	56,997	35	57,032	1,983	44,166
58	556	6	197	85	3,552	232,303	1,094	233,396	5,629	130,279
Total	2,570	44	566	233	19,477	1,677,730	3,240	1,680,970	19,040	1,065,793

Definitions:
(1) Count of structures with daily or infrequent diversion records
(2) Count of structures with NUC = B
(3) Count of Structures with NUC = A, C, D
(4) Count of structures with NUC = E, F

WATER DIVERSIONS TO VARIOUS USES
IRRIGATION YEAR 2009
(in acre-feet)

USES	WD 43	WD 44	WD 47	WD 54	WD 55	WD 56	WD 57	WD 58	TOTALS
TRANSMOUNTAIN OUT	0	0	5,999	0	0	0	0	0	5,999
TRANSBASIN OUT	0	0	0	0	0	0	861	3,370	4,231
MUNICIPAL	3,800	1,861	202	0	0	13	246	3,869	9,991
COMMERCIAL	362	0	1	0	0	97	0	38	498
INDUSTRIAL	2,888	15,186	1,449	0	0	65	3,048	0	22,648
RECREATION	13,775	0	0	0	0	0	24	9,584	23,383
FISHERY	45,701	4,524	950	30,184	0	1,421	485	12,300	95,565
DOMESTIC & HOUSEHOLD	2,373	66	0	59	0	43	34	716	3,291
LIVESTOCK	6,858	2,466	8,770	1,879	14	185	3,325	7,548	31,045
AUGMENTATION	779	0	0	0	0	0	0	0	779
EVAPORATION	1,568	0	0	0	0	0	7	8	1,583
GEOTHERMAL	0	0	0	0	0	0	0	0	0
SNOWMAKING	0	0	0	0	0	0	0	280	280
MINIMUM STREAMFLOW	0	0	0	0	0	0	0	0	0
POWER GENERATION	300,412	2,124	0	0	0	0	0	55,068	357,604
WILDLIFE	0	0	7	0	0	357	72	0	436
RECHARGE	0	0	0	0	0	0	0	738	738
ALL BENEFICIAL USES	0	0	0	0	0	0	0	0	0
TOTALS	378,516	26,227	17,378	32,134	14	2,181	8,102	93,519	558,071

TRANSMOUNTAIN DIVERSION SUMMARY - OUTFLOWS
IRRIGATION YEAR 2009

SOURCE								RECIPIENT		
				10-YR AVG		2009				
WD	ID	NAME	STREAM	AF	DAYS	AF	DAYS	WD	ID	STREAM
47	4602	Cameron Pass Ditch	Michigan River	137	36	200	43	3		Poudre River
47	4603	Michigan Ditch	Michigan River	4,520	331	5,799	365	3		Poudre River
58	4630	Dome Creek Ditch	Dome Creek	95	60	50	54	50		Egeria Creek
58	4684	Sarvis Ditch	Sarvis Creek	503	99	735	145	53		Muddy Creek
58	4685	Stillwater Ditch	Bear River	2080	108	2,583	122	53		Egeria Creek

Note - Water Year Records reported for North Platte Decree were 200 AF and 5,912 AF for Cameron Pass Ditch and Michigan Ditch, respectively, for a total of 6,112 AF.

NO TRANSMOUNTAIN DIVERSION INFLOWS

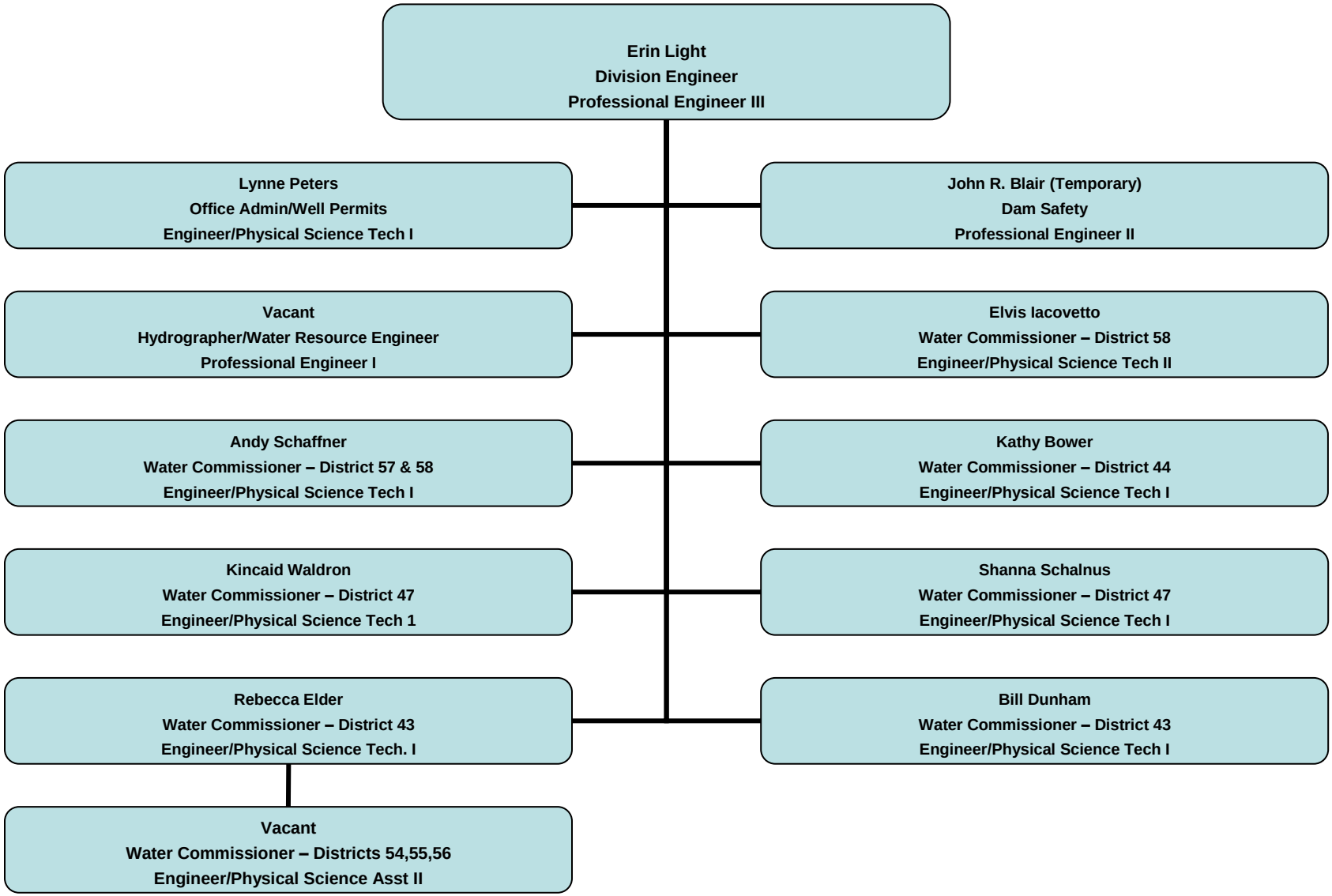
Appendix B

RIVER CALLS – IRRIGATION YEAR 2009

WDID	STREAM	CALLING STRUCTURE	START	END	ADMIN NO
4300815	PICEANCE CK	METZ & REIGAN DITCH	5/21/2009	8/3/2009	12930.00000
4300816	PICEANCE CK	METZ DITCH	5/21/2009	8/3/2009	12755.00000
4300948	PICEANCE CK	SQUARE S CONS D SYS	6/1/2009	8/3/2009	12756.00000
4300948	PICEANCE CK	SQUARE S CONS D SYS	6/1/2009	8/3/2009	13270.00000
4300948	PICEANCE CK	SQUARE S CONS D SYS	6/1/2009	8/3/2009	13509.00000
4300948	PICEANCE CK	SQUARE S CONS D SYS	6/1/2009	8/3/2009	13274.00000
4400688	LITTLE BEAR CK	LITTLE BEAR DITCH	7/17/2009	9/28/2009	13797.00000
4700711	MICHIGAN RIVER	KIWA DITCH	5/13/2009	5/19/2009	13240.00000
4700711	MICHIGAN RIVER	KIWA DITCH	5/13/2009	5/19/2009	13985.00000
4700711	MICHIGAN RIVER	KIWA DITCH	5/13/2009	5/19/2009	14031.00000
4700711	MICHIGAN RIVER	KIWA DITCH	5/13/2009	5/19/2009	14052.00000
4700711	MICHIGAN RIVER	KIWA DITCH	5/13/2009	5/19/2009	14170.00000
4700711	MICHIGAN RIVER	KIWA DITCH	5/13/2009	5/19/2009	14390.00000
4700711	MICHIGAN RIVER	KIWA DITCH	5/13/2009	5/19/2009	14720.00000
4700788	SPRING CK	NELLIE E DITCH	7/28/2009	9/23/2009	23016.19722
4700896	NEWCOMB CK	STAPLES DITCH NO 2	7/21/2009	10/10/2009	14762.00000
5600570	TALAMANTES CK	PRESTOPITZ DITCH	3/26/2009	4/20/2009	44925.22035
5600570	TALAMANTES CK	PRESTOPITZ DITCH	4/23/2009	10/15/2009	11779.00000
5600573	TALAMANTES CK	SPARKS DITCH	5/29/2009	10/15/2009	15806.00000
5600573	TALAMANTES CK	SPARKS DITCH	5/29/2009	10/15/2009	44925.22035
5600603	TALAMANTES CK	DICKINSON DITCH NO 1	3/26/2009	4/20/2009	55395.00000
5600603	TALAMANTES CK	DICKINSON DITCH NO 1	5/29/2009	10/15/2009	55395.00000
5601180	VERMILLION CK	VERMILLION DITCH	7/2/2009	9/2/2009	50038.45594
5800564	BEAR RIVER	BUCKINGHAM MANDALL D	8/7/2009	10/1/2009	14155.00000
5800722	SOUTH HUNT CK	LAFON DITCH	6/23/2009	8/4/2009	18529.13985
5800798	BEAR RIVER	NICKELL DITCH	5/24/2009	8/4/2009	12232.00000
5800863	MIDDLE HUNT CK	SIMON DITCH	5/20/2009	8/5/2009	14032.00000
5800868	SODA CK	SODA CREEK DITCH	8/26/2009	10/5/2009	13675.00000
5804685	BEAR RIVER	STILLWATER DITCH	8/4/2009	8/7/2009	22071.19623

Appendix C

DIVISION 6
ORGANIZATIONAL CHART



Appendix D

2009 OFFICE ADMINISTRATION and WORKLOAD MEASURES

Professional and Technical Staff (FTE).....4.0

Water Commissioners Assigned (FTE) 6.75

Wells Permitted 121

Water Court Appearances..... 2

Division Engineer Contacts with Water Referee.....30

Division Engineer Contacts with Attorneys.....150

Meetings with Water Users 250

Meetings to Resolve Water Related Disputes 10

Contacts to Give Public Assistance 7800