Colorado Division of Water Resources

2008

ANNUAL REPORT

WATER DIVISION VI

Yampa, White and North Platte River Basins

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Introduction

This report summarizes the activities of the Division 6 office of the Colorado Division of Water Resources in 2008. An overview of the administration activities that took place during both the calendar and irrigation year 2008 are presented along with statistical data for both the water and irrigation year 2008. Please direct any questions regarding the information in this report to the Division 6 office in Steamboat Springs.

Water Year 2008

Basin Hydrology

Snow Pack

In water year 2008 the snow pack or snow water equivalent (SWE) started well below average, but gradually grew to near average by January as shown in Table 1. The SWE for the North Platte and Yampa River basins was well above average by the end of April, whereas the SWE for the White River basin was well below average.

TABLE 1

End of Month Snow Water Equivalent as Percent of Average
Water Year 2008

Drainage	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
North Platte River	100	57	91	103	109	107	107	121
White River	78	43	83	102	97	96	90	82
Yampa River	54	44	92	101	115	113	117	93

Cooler weather in the months of April and May resulted in a prolonged and slower runoff, which was fortunate given the high snow pack in the North Platte River and Yampa River basins. Even with the prolonged runoff, many stream basins still experienced flooding as discussed later in the report. Table 2 shows January 1st, March 1st and May 1st runoff forecasts developed by the Natural Resources Conservation Service (NRCS) for selected sites, and the actual runoff as measured at the respective USGS gauging stations.

TABLE 2

2008 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)	235	87	325	120	260	113	355	136
White River nr Meeker (Apr-Jul)	265	91	310	107	255	98	335	119
Little Snake River nr Lily (Apr-Jul)	360	99	460	126	440	142	560	144
Yampa River nr Maybell (Apr-Jul)	940	95	1100	111	1000	120	1351	143

Precipitation

Table 3 shows the monthly precipitation data for the towns of Walden, Meeker and Steamboat Springs. Precipitation for these selected weather stations was well above average for the month of October, well below average for the month of November and then well above average through February. 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, October precipitation was 138% of average for all three basins, however the precipitation at these sites dropped to 40% of average in November. The highest precipitation as recorded at the NRCS Snotel sites occurred in October 2007 at 138% of average and the lowest occurred in July at 36% of average as shown in Table 4. At the end of the water year, the total annual precipitation was 103% of average. A weak correlation between the observed weather station precipitation and NRCS Snotel site precipitation may exist as a result of the potential for variability of precipitation in mountainous regions.

Table 3

Monthly Precipitation Data for Selected Sites
Water Year 2008

Site	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Walden (inches)	1.08	0.18	1.16	0.62	1.18	0.93	0.74	1.94	0.84	0.37	0.96	1.59	11.59
% Avg	121	22	197	100	193	113	69	128	79	29	91	131	100
Meeker (inches)	2.23	0.23	3.12	2.08	0.97	1.08	1.63	*	0.89	0.46	1.44	2.18	16.31
% Avg	135	21	347	260	129	80	116	*	89	35	115	182	128
Steamboat (inches)	2.67	0.52	4.10	2.74	2.53	1.41	1.46	3.12	1.16	0.94	0.79	2.00	23.44
% Avg	139	22	173	106	118	69	63	135	81	64	54	116	97

* - Data Unavailable

Monthly Precipitation Data for Selected Sites
Calendar Year 2008

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Walden (inches)	0.62	1.18	0.93	0.74	1.94	0.84	0.37	0.96	1.59	0.50	0.42	0.76	10.85
% Avg	100	193	113	69	128	79	29	91	131	56	51	129	94
Meeker (inches)	2.08	0.97	1.08	1.63	*	0.89	0.46	1.44	2.18	0.56	1.35	1.07	13.71
% Avg	260	129	80	116	*	89	35	115	182	34	123	119	115
Steamboat (inches)	2.74	2.53	1.41	1.46	3.12	1.16	0.94	0.79	2.00	1.20	1.91	2.21	21.47
% Avg	106	118	69	63	135	81	64	54	116	62	81	93	89

Table 4

Basin-Wide Monthly

Precipitation Data from NRCS SNOTEL Sites
Water Year 2008

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Inches	93.6	37.3	142	138	128	88	102	94.9	39.6	14.3	40.0	46.7	965
% Avg	138	40	133	132	134	81	101	112	89	36	98	105	103

Stream Flows

Stream flows on the North Platte River near Northgate were as low as 83% of average for the months of March and September and were as high as 172% of average in May. The total runoff for the water year at this site was 129% of average. As shown in Table 5, the peak discharge occurred on June 6, 2008 at a value of 3,630 cfs. Historically, the peak has occurred on May 25 with an average peak discharge of 3,088 cfs. The highest peak of record (1904 through 2008) occurred on June 11, 1923 at 6,720 cfs.

Stream flows on the White River below Boise Creek (the most downstream gaging station on the White River) dropped as low as 71% of average in December 2007 and were as high as 141% of average in June. The total runoff for the water year was 103% of average. As shown in Table 5, the peak discharge occurred on May 22, 2008 at a value of 3,720 cfs. Historically, the peak has occurred on May 28 with an average peak discharge of 3,251 cfs. The highest peak of record (1983 through 2008) occurred on June 7, 1984 at 6,440 cfs.

Stream flows on the Little Snake River near Lily dropped to as low as 63% of average in April and were as high as 209% of average in September. The total runoff for the water year was 137% of average. As shown in Table 5, the peak discharge occurred on May 24, 2008 at a value of 8,160 cfs. Historically, the peak has occurred on May 24 with an average peak discharge of 5,287 cfs. The historic peak of record (1922 through 2008) occurred on May 18, 1984 at 16,700 cfs.

Stream flows on the Yampa River near Maybell dropped to as low as 72% of average in December 2007 and were as high as 161% of average in June. The total runoff for the water year was 135% of average. As shown in Table 5, the peak discharge occurred on May 25, 2008 at a discharge of 17,400 cfs. Historically, the peak has occurred on May 25 with an average peak discharge of 10,376 cfs. The historic peak of record (1916 through 2008) occurred on May 17, 1984 at 25,100 cfs.

A peak of record (1905 through 2008) did occur in water year 2008 on the Elk River near Milner. The peak occurred on May 22, 2008 at 6,290 cfs. The previous peak of record occurred on May 24, 2005 at 6,060 cfs. Following is an aerial picture of the river and a ranch property at the Elk River near Milner gage station taken on May 22, 2008.

Elk River at County Road 42 near Milner on May 22, 2008

Table 5

Total Runoff for Water Year 2008

Station Name	Total Flow (AF)	Average (AF)	% of Average
North Platte River near Northgate	398,200	307,800	129
White River below Boise Creek	543,800	527,400	103
Little Snake River at Lily	559,600	407,900	137
Yampa River near Maybell	1,519,100	1,123,900	135

Peak Flow Rate and Date of Occurrence

Station Name	Peak Flow (cfs)	Date	Avg. Peak Flow (cfs)	Avg. Date
North Platte River near Northgate	3,630	June 6	3,088	May 25
White River below Boise Creek	3,720	May 22	3,251	May 28
Little Snake River at Lily	8,160	May 24	5,287	May 24
Yampa River near Maybell	17,400	May 25	10,376	May 25

Water Administration

As a result of the higher snowpack and runoff, the Michigan and Illinois Rivers in the North Platte River basin were not subject to administration this year. Likewise, as a result of both the higher snowpack and oil and gas activities, which resulted in many acres of land not being irrigated, Piceance Creek was also not subject to administration. All other systems typically subject to administration however were not in 2008. Additionally, releases were made to the Yampa River from Elkhead Creek Reservoir for the endangered fish recovery program that Division 6 is responsible for protecting down the river.

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 2008, water administration occurred within the Upper Yampa River Basin (Water District 58) on Bear River, Middle and South Hunt Creeks, Willow Creek of Elk River (minimum in-stream flow) and Soda Creek. In the middle region of the Yampa River Basin (Water Districts 44 and 57), water administration occurred on West Fish Creek of Fish Creek of Trout Creek and Little Bear Creek

of Fortification Creek. In District 56, administration occurred on Pot Creek of the Green River and Talamantes Creek of Vermillion Creek of the Green River.

Report from District 57 and 58

Irrigation year 2008 began with a very dry November (2007), after which winter set in with a vengeance. There were record snowfalls in December and January in most of Routt County accompanied by plenty of wind.

The Steamboat Springs Ski Area recorded over 100 inches of snow per month during December, January and February; the first time three consecutive months reached 100 inches. The total record snowfall was just below 500 inches by the end of the ski season.

The spring of 2008 was two to three weeks later than average. Weather stations across the Districts showed snow and heavy frost on June 10 and 11. A new peak of record, as previously mentioned, occurred on the lower Elk River on May 22 and the Yampa River at Steamboat Springs peaked on June 4 at 3,850 cfs. Although there is no gage station on Trout Creek, it also experienced substantial flows. Following are two pictures of the Elk River two days prior to the peak flow, and a picture of the high flows in Trout Creek.

Elk River above Milner Gage on May 20, 2008

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Elk River below Milner Gage on May 20, 2008

Lower Trout Creek on Saddleback Ranch on April 23, 2008

Water Districts 57 and 58 had ample water available through most of the short irrigation season. The call on Willow Creek, placed by CWCB on July 14, was prompted when Colorado State Parks inadvertently adjusted the releases from Steamboat Lake to less than 5.0 cfs. After notification of the call, Colorado State Parks adjusted the releases from Steamboat Lake to approximately 6.5 cfs. This release rate was voluntarily continued until October 29 when the outlet was shut for the winter. There were no other diversions curtailed since the release was above the decreed minimum instream flow amount of 5.0 cfs.

Flows at the Elk River near Milner gage station on Friday, August 29 had been reading below 65 cfs since mid-day on August 27. The CWCB placed a call for their 65 cfs minimum instream flow water right and requested that the Division of Water Resources begin administering the stream over the Labor Day weekend. Since rain was predicted, administration initially consisted of contacting numerous water users to explain the situation and impending active administration if the river flows didn't increase. With rain occurring on both Sunday and Monday, the stream flows increased to 67 cfs and no structures were regulated. Additionally, on September 3, the USGS made a stream flow measurement at the Elk River near Milner gaging station and discovered a substantial error in their shift due to scouring during the heavy spring flows and retroactively changed the records to show that the river had never dropped below 90 cfs.

The increase in the required number of Water Court field inspections continued this year with several cases having an unusually large number of structures. One of the cases requested the Court recognize 135 ponds as Livestock Water Tanks as defined in Section 35-49-103 of the Colorado Revised Statutes. Additionally, there were two other cases filed by the same applicant which requested water storage rights for a total of 31 reservoirs (some of which are conditional), and four cases filed by a separate applicant requesting new water rights for 10 ponds, 8 wells, and 6 springs (some of which are conditional). The Water Commissioner devoted a significant amount of time inspecting and preparing reports for as many structures as possible for the Division Engineer to prepare Summaries of Consultation. Many of the structures claimed as livestock water tanks were found to not qualify as such. Additionally, twenty-seven illegal, jurisdictional dams were discovered primarily during these field inspections.

The diversion of water by all of these structures could prompt local calls. Local land owners are alarmed at the major changes planned with the reservoirs. The numerous livestock water tanks may not have an evident effect since most of them have been in place for a number of years; however, collectively the sheer number may result in injury or a stream call.

The development around Hayden slowed considerably in 2008 when three proposed subdivisions neared bankruptcy before their infrastructure projects were completed. The expected pressure on Dry Creek and the

Yampa River near Hayden was correspondingly reduced, and there were no significant changes in water use. The lower end of Trout Creek continues to experience development, although there was enough water during the summer to satisfy most appropriations. Twentymile Coal owns a substantial number of water rights on lower Trout Creek. These water rights are being leased to and used by the landowners. Development continues on the Elk River. The Marabou Ranch development, on lower Elk River completed most of its ponds and augmentation plan, but very few homes have yet to be constructed. The same is true for the D & S Development located on Fly Gulch (aka Dry Gulch) located further up the Elk River.

Report from District 44

Irrigation year 2008 was good for water flows on the lower Yampa River and its tributaries. Substantial runoff washed out headgates on some of the tributaries as well as the large diversion structure and headgate of the Maybell Canal located on the Yampa River. This particular diversion structure and headgate were restored and the canal was back in operation by early June. In some locations along the lower Yampa River the river bottoms were completely flooded by the spring runoff and land owners opted not to irrigate at all as they had sufficient water from the flooding.

Tributaries of the Yampa River also saw significantly more water than in the past several years. As such, only one tributary, Little Bear Creek of Fortification Creek of the Yampa River, went on call in July, which historically has a call placed in late May. Fortification Creek, Morapos Creek, and Milk Creek, which typically go on call, were not subject to administration this year.

Lower flows on the Yampa River in the late summer months through the critical habitat reach (Yampa River from Craig to the Green River at Echo Park) resulted in the request for water to be released from Elkhead Creek Reservoir for in-river fish habitat and enhancement uses, and use in furtherance of the Upper Colorado River Basin Fishes Recovery Program (Recovery Program). The Recovery Program submitted a research flow request to facilitate studies ongoing since 2003 by Colorado State University's Larval Fish Laboratory on spawning and young-of-the-year dynamics of nonnative smallmouth bass and the response of native fishes to nonnative fish management efforts in the Yampa River. The objective of the request was to augment Yampa River flows with releases from Elkhead Creek Reservoir to help maintain a daily mean target greater than or equal to 300 cfs at the Yampa River near Maybell gage station. 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 young-of-year smallmouth bass were captured and were found to be of relatively small size. The intent of the releases made in 2008 were 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. Releases were made from Elkhead Creek Reservoir starting August 22 at a rate of 25 cfs and releases gradually increased to a peak discharge of 75 cfs before being ramped back down. The release ceased on October 9 at which time the discharge was approximately 43 cfs. Approximately 5,000 acre-feet, between August 22 and October 9, were released and protected through the critical habitat reach by regulating all diversions.

Elkhead Creek Reservoir

Report from District 54, 55, and 56

Water was released from High Savory Reservoir located in Wyoming on Savory Creek of the Little Snake River to meet contract demands of downstream water users for irrigation purposes. Water was released from the reservoir from late July through late September. High Savory Dam was constructed to address the water needs of the Little Snake River Valley and to mitigate impacts on water users in the valley from the development of the Cheyenne Stage I & II transbasin projects. Since the construction of High Savory Reservoir the Little Snake River has not been subject to administration. Users short of water in the past have contracted with the Little Snake River Conservation District for water stored in High Savory Reservoir.

In 2008, two of the three major reservoirs in Utah, Matt Warner and Calder filled; however, Crouse Reservoir did not. Neither Dry Lake Reservoir nor Offield Reservoir in Colorado filled by the end of the storage season (April 30). Presently, neither Dry Lake Reservoir nor Offield Reservoir have a rated staff gage installed. As such, there was no release of water stored out-of-priority in the winter months (November 1 through April 30) from the Utah reservoirs to satisfy Colorado water users. A call was placed on Pot Creek by a Colorado water user for their direct flow water right in May and was honored and administered from May 15 through May 28.

However, the releases made from the Utah reservoirs to satisfy the call did not reach the calling structure until May 21. Pot Creek at the stateline gage ran for a couple of days in March, April 12 through May 16, and May 21 through May 31. The flow at the gage from late April to May 16 was very minimal (0.01 to 0.18 cfs). The flow at this site peaked on April 14 at a discharge of 10.6 cfs. The annual total flow past the gage for water year 2008 was 145 acre-feet.

Talamantes Creek was under administration from June 13 to September 1. The call was taken off on September 1, Labor Day, for a period of three days so the water user placing the call could fill a junior reservoir. Unfortunately, because the call was released on Labor Day and then put back on call three days later on September 4, the upstream water users did not have much opportunity to take advantage of the no call time period. This latter call ran until October 15.

White River Drainage

There was no administration in Water District 43 this year. As mentioned earlier, Piceance Creek was not subject to administration in 2008 as a result of the construction activities by oil and gas companies which took many irrigable lands out of production for the year, and slightly higher flows than usual. Energy exploration continues to grow in the Piceance Creek, Yellow Creek, and lower White River basins at an ever-increasing pace. Ranchers continue to sell their land and water rights to energy companies and these water rights are being changed to include industrial and augmentation uses, among others. The lands are then leased back to the ranchers whereby they can continue their ranching operations and irrigation practices until such time that the energy companies need the water for other uses.

North Platte River Drainage

Water District 47 was limited to a single call on Lone Pine Creek of the North Fork of the North Platte River. The fact that no administration took place on the Michigan or Illinois Rivers or any of their tributaries was rare but very welcomed.

Toward the end of April all of the main streams in the North Platte River basin were ice free. Also during this time, the feeder ditch serving Walden Reservoir was shut off to ensure that the reservoir would not overfill as the surrounding snow melted. In mid-May, the majority of the ditches in the basin were still off as a result of the ditches still having snow in them or the ranchers were not prepared to begin irrigation. Walden Reservoir was also ice free by mid-May. By the end of May, the majority of the ditches were running - though as a result of high waters and flooding, there were several ditches inadvertently diverting water even though their headgates were closed. Snow fell in the basin as late as early June and the stream flows at this time were still high. The Michigan River near Meadow Creek Reservoir peaked on June 5 at 541 cfs and at Walden on June

7 at 648 cfs. The Illinois River near Rand peaked on May 22 at 472 cfs with a second peak occurring on June 3 at 354 cfs.

Despite the wet spring, ranchers chose to turn off their ditches to hay at their normal time in early July. Because the ground was so saturated from the wet spring and spring runoff, the fields took longer to dry out before actual haying began. Very little water was released from any of the reservoirs for irrigation purposes.

Compacts and Inter-State Agreements

Following is a summary of the interstate compacts and agreements administered by Division 6, with updates based on water year 2008 numbers.

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 2008 at this gage was 1,519,000 acre-feet and the ten year (1999 to 2008) aggregate flow was 9,501,600 acre-feet.

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 list is finalized and approved. There were no calls placed on the Little Snake River in 2008.

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 2008, a total of 117,148 acres were irrigated and 10,128 acre-feet were stored for irrigation use. The amount of irrigated acreage was up from 2007 by approximately 5,300 acres and the amount of water stored for irrigation purposes was down from 2007 by approximately 3,600 acre-feet. Transmountain diversions out of the basin totaled 6,905 acre-feet. The ten-year total transmountain diversions out of the basin were 44,261 acre-feet. None of the limitations of the Supreme Court Decree were exceeded in 2008. A Division 6 representative attended the semi-annual meetings of the North Platte Decree Committee in April and October.

Pot Creek

Pot Creek is a small tributary of the Green River; the headwaters of which are in Utah entering 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 season. To date, a measuring devise has been installed on the calling structure in Colorado (Miles Ditch), but no measuring device has been installed on the other three structures in Colorado (Dry Lake Reservoir, Offield Reservoir or Offield Ditch). Per the MOU, a measuring device is to be installed in Pot Creek above Calder Reservoir in Utah but to date; this device has not been installed. Additionally, the MOU requires the State of Utah to operate and maintain a gaging station on Pot Creek upstream of Matt Warner Reservoir and the State of Colorado to operate and maintain a gaging station on Pot Creek at the stateline. A ramp flume has been installed on Pot Creek upstream of Matt Warner Reservoir but is not operating properly, and there is no gaging equipment in place to record flows. A gage station located at the stateline has been operating for many years and is maintained by the State of Colorado.

Dam Safety

A full summer of inspections was completed in 2008 for Division 6 and the upper portion of Division 5. The Division 6 Dam Safety Engineer attended several training courses during 2008 on topics such as GIS and EPAT – Extreme Precipitation Analysis Tool, Internal Erosion and Piping, plus HEC-RAS and HEC-HMS computer modeling.

Design reviews and construction in Division 6 were slow during 2008. The dam rehabilitation and outlet repair project was mostly completed for Lester Creek Dam that holds Pearl Lake with final design review in the spring and numerous construction inspections through the summer; a sand filter chimney drain was constructed at a low hazard dam that was experiencing increased seepage through an abutment; preliminary plans were provided for a repair to Elk Lake Dam/OVO Reservoir north of Craig; and continued planning work was completed by the Upper Yampa Water Conservancy District (UYWCD) 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 Federal Energy Regulatory Commission (FERC) permit. In Division 5, construction was accepted on two repair projects for low hazard dams; repair work was completed for the outlet at Ritschard Dam that holds Wolford Mountain Reservoir; preliminary studies and recommendations were completed for repairs at the Jones #2 Dam that is a major water supply for the Town of

Kremmling; plus two other significant hazard dams need repairs, but the owners have been slow to initiate the projects.

During 2008, the Dam Safety Engineer inspected eleven of twenty high hazard dams, fourteen of twenty-five significant hazard dams, and thirty of over 124 low hazard dams in accordance with a long range inspection schedule. In addition, FERC engineers completed inspections on all three high hazard power generating dams; two high hazard dams were not scheduled for typical safety inspections since construction inspections for repairs occurred; and three high hazard dams belonging to the Bureau of Reclamation were inspected in-house by that agency.

Several safety issues were again noted at some of the significant and low hazard dams. A restricted significant hazard dam was found to be full again after repeated warnings to the owner. Immediate action was taken by the Division Engineer and the Water Commissioner to lower the water level and a certified letter was sent to the owner. Another significant hazard dam has shown increased seepage and the new owner's engineer has completed preliminary engineering work for a repair. Fourteen low hazard dams 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 five dams but no designs have been submitted for review; no further action has been initiated by the owners of the final eight dams and follow-ups will be needed. Of the 25 low hazard dams inspected in Division 6, eleven 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 only one was rated Satisfactory. Only one owner completed repairs in 2008 to bring his dam up to a satisfactory rating.

The dam safety engineer attended a tabletop exercise of the EAPs for both Stagecoach Reservoir and Lake Catamount which are located on the Yampa River just upstream of the City of Steamboat Springs. FERC requires the EAP for Stagecoach Reservoir to be periodically exercised and with Lake Catamount just downstream, doing the two together works well for all involved. Numerous years of seepage monitoring data have been collected and submitted for one large low hazard dam in North Park but no comprehensive review of the data had ever been completed. The dam safety engineer created a spreadsheet of the data with accompanying graphs so that future data can be better tracked.

There were no erosion control dams constructed in Division 6 during 2008, but applications for 10 non-jurisdictional dams were approved along with one livestock water tank (LSWT). Seneca Mine south of Hayden is reclaiming several large areas and submitted multiple applications to convert their erosion control dams to LSWTs or non-jurisdictional dams as the land above them is reclaimed and reverted over to local owners.

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 paying 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 four measurements were taken at the gage sites in water year 2008 and approximately 20 additional measurements were taken on ditches, reservoir releases, and other streams. Water year 2008 hydrographic records will be published for eight 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, and Willow Creek below Steamboat Lake.

Division 6 currently has twelve gage stations equipped with high data rate (HDR) equipment. HDR Sutron SatLink2 data loggers were installed in 2008 at the Pearl Lake, Walton Creak near Steamboat Springs, Lake Catamount Spillway and Outlet, and the new Morrison Creek below Silver Creek sites. The Bear River below Bear Lake and Yamcolo sites are scheduled for upgrade to HDR in 2009/2010.

During 2008, Division 6 conducted inspection, maintenance, and refurbishment activities at several sites. Improvements initiated in 2007 at Steamboat Lake, with the DCP upgrade to HDR, were continued in 2008 with the replacement of the existing bubbler to a constant flow bubbler.

Steamboat Lake

In August 2008, the DCP at Pearl Lake was upgraded to a HDR DCP and the solar panel and satellite telemetry system were replaced. In addition, the Accubar bubbler was replaced with a constant flow bubbler, completing the planned upgrades for the Pearl Lake gage.

Gage Station 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. Results to date have been very positive and the recorded and transmitted gage height values have stabilized.

Bridge Measurement on the Williams Fork River in Spring 2008

Several improvements were made to the Walton Creek near Steamboat Springs gage station in late summer and early fall 2008. A solar panel/satellite telemetry system was installed and the DCP was upgraded to HDR. In addition, the condemned cableway, which was considered to be a safety hazard, was removed.

Installation of Solar Panel/Telemetry System at the Walton Creek Gage Station

Condemned Cableway at Walton Creek

Disassembled Cableway

The Lake Catamount Spillway and Outlet gage station was also upgraded in August 2008. The existing DCP was upgraded to HDR and the solar panel/telemetry system was replaced. In addition, the cable between the DCP and stilling well, which had been destroyed by resident rodents, was replaced.

Lake Catamount Spillway/Outlet Gage Station Improvements

One new gauging station was added to the satellite monitoring system in 2008. 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 will be prepared for this station in water year 2009.

New Gage Station on Morrison Creek

During the summer and fall of 2008, 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 has been initiated by the CWCB.

Ongoing and planned gage station projects for 2009/2010 include the following:

- Bear River below Bear Lake: reinstate the satellite telemetry system/solar panel; upgrade to HDR DCP
- Pot Creek: replace HDR DCP with new generation HDR DCP.
- Yamcolo: upgrade to 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 not occur until 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 approximately 155 exempt well permits in 2008 versus 197 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 Upper Yampa Water Conservancy District. This plan was developed to provide a replacement source of water so that water users in the Yampa River Basin upstream of the City of Steamboat Springs can obtain well permits that will not be limited to in-house use only, or for other out-of-priority uses.

Water Records and Information

Summaries of diversion records for irrigation year 2008 are shown in Appendix A. These numbers show that the total diversions for all uses were 1,667,768 acre-feet, up 1,293 acre-feet from 2007 and up 78,016 acre-feet from 2006. Water Districts 47, 55, 56, and 57 experienced decreases in total diversions, while the other four water districts experienced increases from the previous year. Diversion increases, though minor compared to the previous year, were primarily attributed to increased use for irrigation and power generation. The number of visits to structures by the Water Commissioners was up by approximately 13 percent. As water administration and other demands on the Water Commissioners increase, the reliance of user-supplied data also increases.

The water rights database 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 Well View are used extensively when responding to inquiries from the public.

This office has maintained a lysimeter site on the Colorado Yampa Coal Company 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. The 2008 lysimeter report is available from the Division 6 office upon request.

Water Court Activities

The amount of time invested in Water Court activities continues to increase for Division 6 and most particularly the Division Engineer. Though there were fewer cases filed in 2008, the Court activity remains high as a result of working with the Water Court to get 2007 water right applications decreed, the number of structures in the applications increasing, the complexity of the cases increasing and trial preparation. In Division 6 Water Court, there were 94 new cases filed in 2008, 16 cases filed in 2007 but not published until 2008 and 16 amended cases filed in 2008, as shown in Table 6. One of the cases filed in December 2007 yet published in 2008 had over 90 structures in a single application. Only 82 of the 94 new cases filed in 2008 were actually published in 2008. The remaining 12 have either been published in 2009 or have been cancelled by the Water Court. In total, 114 cases were published in 2008. In Division 5 Water Court, there were 22 new cases and 2 amended cases filed and published in 2008. For every case published (original or amended) a Recommendation of the Division Engineer/Summary of Consultation (RODE/SOC) is submitted to the Water Court.

In comparison, in Division 6 there were 133 and 110 new and amended cases combined filed in 2007 and 2008, respectively, and in Division 5 Water Court there were 19 and 24 new and amended cases combined filed in 2007 and 2008, respectively. In 2008, the Division Engineer prepared 138 RODEs/SOCs - 123 for the Division 6 Water Court and 15 for the Division 5 Water Court. In comparison, a total of 100 RODEs/SOCs were filed in 2007 in the Division 5 and 6 Water Courts combined. Eight statements of opposition were filed in Division 5 and 6 cases combined. There were no protests to any of the Rulings of the Referee. One case went to trial in July and was continued until January 2009. In the fall of 2008, the State and Division Engineers filed a motion to intervene in this case which was granted by the Water Judge. Another case in which the State and Division Engineers were opposers, was set for trial in October 2008, but all opposers stipulated just days before.

In December of 2008, Shell Frontier Oil and Gas filed for a new surface water right in the amount of 375 cfs and a 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) and the Water Referee has re-referred the case to the Water Judge due to conflict of interest.

Table 6

Water Court Cases Filed in 2008

Month	New Cases Filed	Cases filed in 2007, but Published in 2008	Amended Cases Filed
January	3	11	3
February	6	2	2
March	4	2	0
April	9		1
May	3	1	
June	5		3
July	9		
August	8		1
September	6		2
October	10		4
November	4		1
December	14		1
TOTAL	**82**	**16**	**16**

This office continues to have a good working relationship with both 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 prior to publication in the resume to assure that applicants have provided all the required information. This activity helps save republication costs for the applicants. All Rulings of the Referee are also reviewed to assure no mistakes have been made and that all of the Division Engineer's concerns raised in the RODE/SOC have satisfactorily been addressed. A telephone conferencing meeting is also conducted with the Water Referee for Division 5 on a monthly basis to discuss all applications prior to submitting RODEs/SOCs. This procedure works very well and allows the comments of this Water Referee to be incorporated into the RODEs/SOCs.

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 and most likely assists as many walk-ins as the Steamboat office.

Following is a list of meetings attended by Division staff in 2008.

- 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 all of the HB1177 Roundtable meetings for the North Platte River
- One employee attended the CWOA annual conference 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 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 2008, water was delivered to and through the critical habitat reach from August 22 through October 9. Upon notice of such release, this office visited all structures located downstream of Elkhead Creek Reservoir on Elkhead Creek and the Yampa River, and contacted many water users. When visiting the structures, the Water Commissioners adjusted all headgates so that they were at the current 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.

In order to protect the water released from Elkhead Creek Reservoir, in August of 2006, over sixty letters requesting the installation of suitable and proper headgates and measuring devices were sent to water users on Elkhead Creek below Elkhead Creek Reservoir and on the Yampa River from its confluence with Elkhead Creek to the Green River. Prior to sending these letters this office determined that over ninety diversions

structures did not have suitable and proper headgates and/or measuring devices. Thirty-three orders were issued in July 2007 to those water users who had not installed these devices. In November 2007 twenty-four extensions of time were granted to those water users that had still not installed these devices. The extension of time gave the water users until June 30, 2008 to install the headgates and/or measuring devices. As of the end of August 2008, there were twelve structures still not in compliance with this order. Cease and Desist Orders were issued to seven of these structures and for the remaining five structures this office has agreed to continue to work with the water users since they have made substantial effort to comply with the order or they have informed us that they have no intention to divert water now or in the near future.

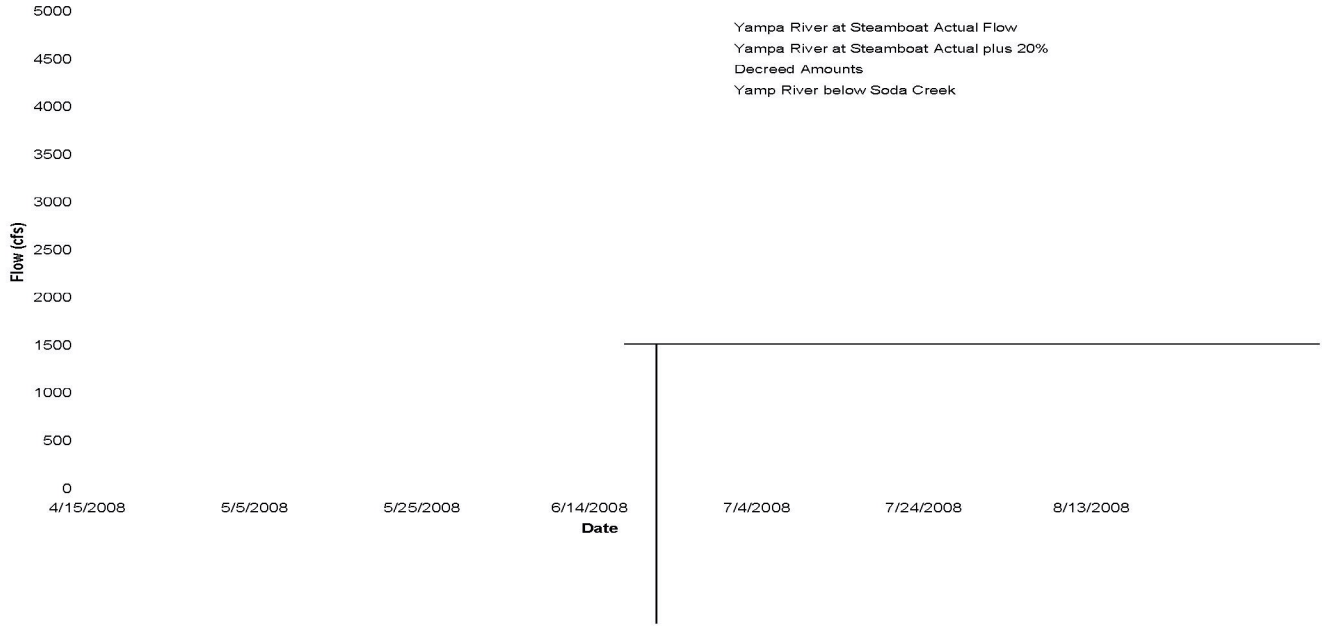
Administrative procedures were developed in 2007 to deliver water released from Elkhead Creek Reservoir past numerous structures and through the critical habitat reach. In 2008, the CWCB contracted with the USGS to perform a transit loss study on Elkhead Creek. Only the initial phase of this study began in 2008 with the installation of a new gaging station located on Elkhead Creek at the Highway 40 Bridge just upstream of its confluence with the Yampa River. The bulk of the transit loss study will be performed in 2009 and 2010. At this time, a transit loss value to be assessed for releases has not been determined or agreed upon.

Energy development in the Piceance Creek basin of the White River will continue to present water administration challenges for years to come. Piceance Creek is heavily over-appropriated and water short. 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 more being applied for 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 and water administration.

The Water Court decreed the City of Steamboat Springs Recreational In-Channel Diverson (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 constantly tracks the flows in the event they drop below the decreed amounts. In 2008, the Yampa River fell below the decreed amounts for one day (April 15). 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 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, and between the two RICD structures. 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 as being those flows contributing from Soda and Butcherknife Creeks between the Steamboat gage and the RICD structures, flows at the Yampa River below Soda Creek gage station and the decreed amounts.

Figure 1
Actual Flows vs. RICD Flows



The Upper Yampa Water Conservancy District continues to work with FERC 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. Presently, FERC has not approved the amendment to the license though UYWCD is optimistic that their proposed raise will be approved and they will be able to begin construction before the end of the 2009 water year. In addition, UYWCD continues their attempts to obtain numerous different water rights on Morrison Creek which will serve the primary purpose of firming the yield of Stagecoach Reservoir. The intent is to divert water from Morrison Creek and convey it to Stagecoach Reservoir for storage and later use.

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

- Operated within our budget.
- Issued seven Cease and Desist Orders for the installation of operable headgates and measuring devices on Elkhead Creek below Elkhead Creek Reservoir and from the confluence of Elkhead Creek and the Yampa River downstream to the Green River.
- 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 138 Recommendations of the Division Engineer/Summaries of Consultation.
- Developed detailed reservoir accounting spreadsheets for Stagecoach, Fish Creek and Elkhead Creek Reservoirs.
- 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 increased considerably. 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 and/or the applicant's attorney; and write all Recommendations of the Division Engineer/Summaries of Consultation. Unlike previous years, an additional workload for the Division Engineer this year was the preparation for trial including being deposed for the first time. 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, assuring no injury to other water users, and assuring consistency with statutes and this agency's policies.

As the workload continues to increase, additional staff becomes more necessary. In 2008 this office submitted two decision items requesting additional staff/FTE. One of these decision items was to add more hours to the Water Commissioner position which covers the Piceance Creek and lower White River basins. In this particular area, energy development continues to grow requiring an ever-increasing presence in the area. The Water Commissioner for this area is currently part-time at 0.54 FTE. The second decision item was to add a new position at 0.75 FTE. This position would be a part-time hydrographer and part-time Water Commissioner for Water District 58. This new position would allow the lead hydrographer to shift responsibilities from almost full-time hydrographic duties to part-time hydrographer and part-time Assistant Division Engineer – as the position was originally. As a result of the State of Colorado budget shortfall, no decision item was considered by the State; however this office will continue to submit these same two decision items in the future.

Personnel

In August of 2008, one of our best Water Commissioners, Sue Petersmann, moved out of the State. Though this was a big loss, we were able to fill the position just days before the State's hiring freeze. Shanna Schalnus, a young competent, energetic individual was hired in late September to replace Sue Petersmann as the Water Commissioner in Water District 47. Shanna was born and raised in Yampa, Colorado. After obtaining her degree in recreation from Western State College of Colorado, Shanna returned to Yampa where she worked for the UYWCD. For UYWCD, Shanna operated several reservoirs and was the ditch rider for the Stillwater Ditch, which is a very complex system with many water users and transbasin diversions. Aside from her work with UYWCD, Shanna has worked and lived on a ranch her entire life performing all duties associated with ranching including irrigation. Shanna has a sincere passion for ranching and water, and Division 6 is very excited to have her as a part of our team.

The Division 6 Water Commissioner of the Year was Andrea Schaffner. Ms. Schaffner is responsible for water administration on the Yampa River and its tributaries downstream of the City of Steamboat Springs to the confluence of the Yampa River and Elkhead Creek (Water District 57 and part of Water District 58). The main tributaries that she covers are Oak Creek, Soda Creek, Elk River, and Trout Creek. The majority of all water right applications filed in Division 6 involve structures located in her area. This was also true of the fifty plus applications filed in late 2007, many containing numerous structures. One of the applications, in particular, contained 135 livestock water tanks, as previously mentioned. Andrea visited a considerable number of these structures, which required an immense amount of time on top of her normal water administration/Water Commissioner duties. Ms. Schaffner is a tremendous asset to Division 6 with a significant amount of knowledge about water administration and water law.

Appendix C shows the organization chart of Division 6.

Training

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

- Elvis Iacovetto 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 2009

Key Objectives for 2009

Listed below are some of the key objectives for 2009:

- Comply with the new Water Court Rules concerning submittal time frames for all Summaries of Consultation.
- Continue to evaluate the need for additional staffing and develop necessary background information to support decision items for future budget consideration.
- Continue working 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.
- 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.
- Assure that all headgate and measuring device orders issued in 2008 on Elkhead Creek below Elkhead Creek Reservoir and the Yampa River downstream of Elkhead Creek are complied with and assure that all structures that did comply with the orders remain in compliance.
- 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 2008

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	750	14	129	12	5,073	705,933	1,214	707,147	1,044	239,656
44	273	4	98	21	1,298	159,930	412	160,342	0	119,471
47	578	5	37	9	5,313	421,033	1,282	422,315	10,099	389,346
54	109	3	7	10	931	90,617	0	90,617	193	58,220
55	20	0	6	0	210	13,686	0	13,686	0	13,655
56	63	3	9	18	501	9,897	15	9,912	275	8,351
57	134	1	83	23	822	47,666	139	47,806	190	38,545
58	520	3	156	99	3,492	215,334	609	215,943	1,090	122,516
Total	2,447	33	525	192	17,640	1,664,096	3,671	1,667,768	12,891	989,760

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 2008
(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	6781	0	0	0	0	0	6,781
TRANSBASIN OUT	0	0	0	0	0	0	0	3,103	3,103
MUNICIPAL	2,684	2,042	225	0	0	0	306	3,922	9,179
COMMERCIAL	232	0	1	0	0	95	0	40	368
INDUSTRIAL	3,367	15,663	1,188	0	0	0	2874	0	23,092
RECREATION	8,856	0	0	0	0	0	0	5,886	14,742
FISHERY	42,286	4,581	818	12,441	0	655	348	12,527	73,656
DOMESTIC & HOUSEHOLD	1,544	70	0	27	0	53	135	897	2,726
LIVESTOCK	8,554	6,108	7,564	1,332	30	327	4,434	6,619	34,968
AUGMENTATION	110	0	0	0	0	0	0	0	110
EVAPORATION	1750	0	0	0	0	0	10	0	1,760
GEOTHERMAL	0	0	0	0	0	0	0	0	0
SNOWMAKING	0	0	0	0	0	0	0	355	355
MINIMUM STREAMFLOW	0	0	0	0	0	0	0	0	0
POWER GENERATION	397,174	2,023	0	0	0	0	0	55,867	455,064
WILDLIFE	0	0	6	0	0	156	32	0	194
RECHARGE	0	0	0	0	0	0	0	630	630
ALL BENEFICIAL USES	0	0	0	0	0	0	0	0	0
TOTALS	466,557	30,487	16,583	13,800	30	1,286	8,139	89,846	626,728

TRANSMOUNTAIN DIVERSION SUMMARY - OUTFLOWS
IRRIGATION YEAR 2008

SOURCE								RECIPIENT		
				10-YR AVG		2008				
WD	ID	NAME	STREAM	AF	DAYS	AF	DAYS	WD	ID	STREAM
47	4602	Cameron Pass Ditch	Michigan River	32	118	194	40	3		Poudre River
47	4603	Michigan Ditch	Michigan River	4,497	330	6,587	366	3		Poudre River
58	4630	Dome Creek Ditch	Dome Creek	114	66	66	43	50		Egeria Creek
58	4684	Sarvis Ditch	Sarvis Creek	474	93	1,194	78	53		Muddy Creek
58	4685	Stillwater Ditch	Bear River	1,937	104	1,190	44	53		Egeria Creek

* - Water Year Records reported for North Platte Decree were 194 AF and 6710 AF for Cameron Pass Ditch and Michigan Ditch, respectively, for a total of 6905 AF.

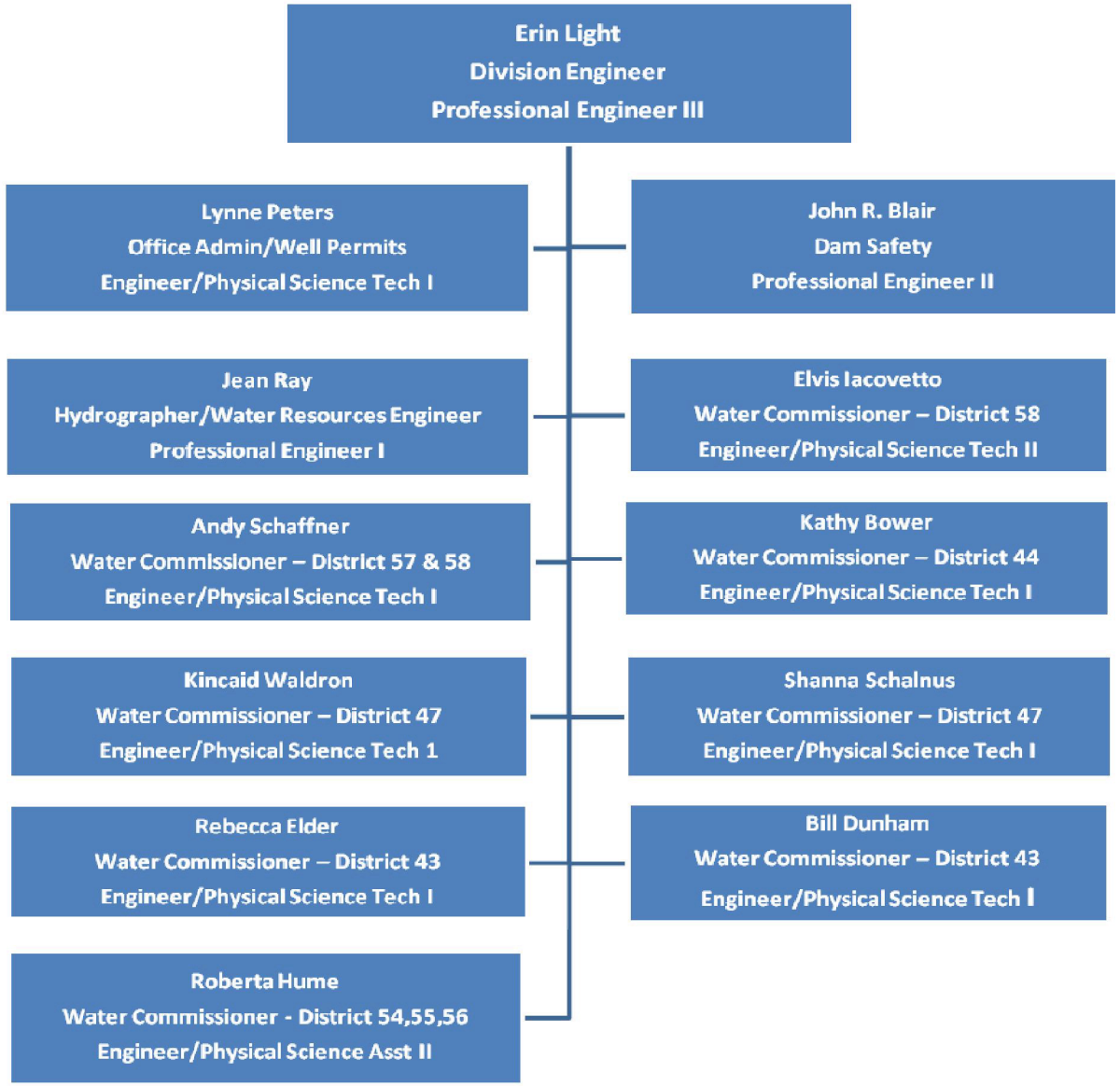
NO TRANSMOUNTAIN DIVERSION INFLOWS

Appendix B

RIVER CALLS – IRRIGATION YEAR 2008

WDID	STREAM	CALLING STRUCTURE	START	END	ADMIN NO
4400688	LITTLE BEAR CK	LITTLE BEAR DITCH	07/07/2008	09/16/2008	13797.00000
4700528	LONE PINE CK	BRIGGS DITCH	07/13/2008	07/20/2008	14776.00000
5600564	POT CK	MILES DITCH	05/15/2008	05/28/2008	31579.23259
5600570	TALAMANTES CK	PRESTOPITZ DITCH	06/13/2008	09/01/2008	11779.00000
5600570	TALAMANTES CK	PRESTOPITZ DITCH	09/04/2008	10/15/2008	11779.00000
5700544	WEST FISH CK	HIGHLAND DITCH	06/20/2008	10/31/2008	14501.00000
5800541	BEAR RIVER	BIRD DITCH	07/25/2008	08/01/2008	12232.00000
5800722	SOUTH HUNT CK	LAFON DITCH	07/09/2008	08/19/2008	18529.13985
5800798	BEAR RIVER	NICKELL DITCH	06/02/2008	07/25/2008	12232.00000
5800863	MIDDLE HUNT CK	SIMON DITCH	05/29/2008	08/07/2008	14032.00000
5800945	BEAR RIVER	WOOLEY DITCH	08/01/2008	08/09/2008	12198.00000
5801461	WILLOW CK	WILLOW CK MSF-M2	07/14/2008	07/15/2008	46649.00000
5804685	BEAR RIVER	STILLWATER DITCH	08/09/2008	10/01/2008	22071.19623

Appendix C
ORGANIZATIONAL CHART



Appendix D

2008 OFFICE ADMINISTRATION and WORKLOAD MEASURES

Professional and Technical Staff (FTE)	4.0
Water Commissioners Assigned (FTE)	6.75
Wells Permitted	155
Water Court Appearances	1
Division Engineer Contacts with Water Referee	50
Division Engineer Contacts with Attorneys	150
Meetings with Water Users	250
Meetings to Resolve Water Related Disputes	20
Contacts to Give Public Assistance	8500