

Colorado Division of Water Resources





Elkhead Creek Reservoir Spillway

2007

2007 Annual Report
Water Division 6

Yampa, White and North Platte River Basins

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TABLE OF CONTENTS

Water Year 2007

Introduction	1
Basin Hydrology	1
Water Administration	4
Compacts and Inter-State Agreements	9
Dam Safety	10
Hydrographic Program	12
Ground Water and Well Permitting	17
Water Records and Information	17
Water Court Activities	18
Involvement in Water User Community	18
Issues and Achievements	19
Workload	23
Personnel	24
Training	24
Water Year 2008	
Key Objectives	25
Water Administration Data Summaries	
Reservoir Storage Summaries	Appendix A
Water Diversion Summaries	
Water Diversions to Various Uses	
Transmountain Diversions	
River Calls	Appendix B
Organizational Chart	Appendix C
Office Administration and Workload Measures	Appendix D

Introduction

This report summarizes the activities of the Division 6 office of the Colorado Division of Water Resources in 2007. It presents an overview of the administration activities that took place during both the calendar and irrigation year 2007 and statistical data for both the water and irrigation year 2007. Please direct any questions regarding the information in this report to the Division 6 office in Steamboat Springs.

Water Year 2007

Basin Hydrology

Snow Pack

In water year 2007 the snow pack or snow water equivalent (SWE) was initially above average, but quickly changed by the end of December. As shown in Table 1 the October SWE values were well above average but by December they had dropped to well below average and remained below average for the rest of the season. Warm weather in April and May resulted in early snowmelt runoff, and thus low SWE by the end of May.

TABLE 1

Snow Water Equivalent as Percent of Average
Water Year 2007

Drainage	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
North Platte River	182	93	89	72	84	78	64	32
White River	166	104	81	71	82	70	55	36
Yampa River	195	107	94	76	95	80	52	16

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 USGS gauging stations.

TABLE 2

2007 Total Runoff Forecast in 1000's of Acre-Feet

Station Name	<u>1-</u>	<u>Jan</u>	<u>1-N</u>	<u>lar</u>	<u>1-N</u>	<u>May</u>	Ac	<u>tual</u>
	Runoff	% Avg	Runoff	% Avg	Runoff	% Avg	Runoff	% Avg
North Platte nr Northgate (Apr-Sept)	245	91	240	89	155	67	150	43.5
White River nr Meeker (Apr-Jul)	245	84	225	78	135	52	182	66
Little Snake River nr Lily (Apr-Jul)	290	79	250	68	125	40	170	51
Yampa River nr Maybell (Apr-Jul)	860	87	760	77	*	*	566	61

Precipitation

Water year 2007 was relatively dry even though it started and ended well. May and June experienced slightly below average temperatures with significantly below average precipitation. The rest of the summer however had significantly above normal precipitation. Based on the precipitation recorded at the NRCS Snotel sites, October precipitation was 166% of average for all three basins combined (North Platte, White and Yampa Rivers). However, by December the cumulative precipitation was 94%, with December alone being 65% of average. By June the cumulative precipitation for all three basins was 79% of average. At the end of the water year, the total annual precipitation was 88% of average. Table 3 shows the monthly precipitation data for the towns of Walden, Meeker and Steamboat Springs and Table 4 shows the NRCS Snotel site precipitation for all three basins combined. As shown, the precipitation observed at Walden, Meeker and Steamboat Springs does not correlate with the precipitation observed at the Snotel sites. Because of the potential variability in precipitation in mountainous regions, this is not alarming.

Table 3

Monthly Precipitation Data for Selected Sites
Water Year 2007

Site	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Walden													
(in)	1.86	0.65	0.66	0.81	0.49	0.68	0.93	0.95	0.29	2.01	1.78	2.24	13.33
% avg	209	78	112	131	80	83	87	63	27	157	170	185	116
Meeker													17
(in)	4.02	1.16	0.94	1.35	*	0.98	0.84	1.23	0.11	0.88	2.67	3.86	13.44
% avg	244	105	104	169		73	60	82	11	68	214	322	134
Steamboat													
(in)	*	2.03	1.94	1.24	3.14	1.63	1.69	1.37	1.46	2.47	2.37	4.34	22.21
% avg		86	82	48	146	80	73	59	102	169	162	252	107

^{* -} Data Unavailable

Monthly Precipitation Data for Selected Sites Calendar Year 2007

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Walden													
(in)	0.81	0.49	0.68	0.93	0.95	0.29	2.01	1.78	2.24	1.08	0.18	1.16	14.56
% avg		-,,-								A STATE OF THE STA		2012	16.05/50/50/50
A STATE OF THE PARTY OF THE PAR	131	80	83	87	63	27	157	170	185	121	22	197	123
Meeker	4.05	*	0.00	0.04	4 00	0.44	0.00	0.07	2.00	2 22	0.00	2.42	45.54
(in)	1.35		0.98	0.84	1.23	0.11	0.88	2.67	3.86	2.23	0.23	3.12	15.54
% avg	169		73	60	82	11	68	214	322	135	21	347	118
Steamboat													
(in)	1.24	3.14	1.63	1.69	1.37	1.46	2.47	2.37	4.34	2.67	0.52	4.10	24.14
% avg	48	146	80	73	59	102	169	162	252	139	22	173	112

Table 4

Basin-Wide Precipitation Data from NRCS SNOTEL Sites Water Year 2007 (Percent of Average)

<u>Oct</u>	Nov	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	% of Avg
166	74	65	53	109	68	66	56	65	87	113	207	88

Stream Flows

The stream flows on the North Platte River near Northgate dropped to as low as 32% of average for the month of May and was highest in August at 226% of average. The total runoff for the water year at this site was 74% of average and the peak gage height occurred on March 21, 2007 but was affected by ice-jams and no discharge was determined. Historically, the peak has occurred on May 25 with an average peak discharge of 3,082 cfs.

Stream flows on the White River below Boise Creek dropped as low as 40% of average in July and were highest in April at 112% of average. The total runoff for the water year was 72% of average. As shown in Table 5, the peak discharge occurred on May 16, 2007 at a value of 2,040 cfs. Historically, the peak has occurred on May 28 with an average peak discharge of 3,232 cfs.

Stream flows on the Little Snake River near Lily dropped to as low as 5% of average in July and were highest in March at 194% of average. The total runoff for the water year was 63% of average. As shown in Table 5, the peak discharge occurred May 16, 2006 at a value of 2,410 cfs. Historically, the peak discharge has occurred on May 24 with an average peak discharge of 5,253 cfs.

Stream flows on the Yampa River near Maybell dropped to as low as 21% of average in July and were highest in March at 232% of average. The total runoff for the water year was 73% of average. As shown in Table 5, the peak discharge occurred on May 16, 2006 at a discharge of 6,640 cfs. Historically, the peak has occurred on May 25 with an average peak discharge of 10,301 cfs.

<u>Table 5</u>

Total Runoff for Water Year 2007

Station Name	Total Flow (AF)	Average (AF)	% of Average
North Platte River near Northgate	226,380	307,290	74
White River below Boise Creek	381,180	526,210	72
Little Snake River at Lily	255,210	405,940	63
Yampa River near Maybell	814,870	1,118,430	73

Peak Flow Rate and Date of Occurrence

Station Name	Peak Flow (cfs)	Date
North Platte River near Northgate	Ice Jam	March 21, 2007
White River below Boise Creek	2,040	May 16, 2007
Little Snake River at Lily	2,410	May 16, 2007
Yampa River near Maybell	6,640	May 16, 2007

Water Administration

Despite the low snow pack, the three water basins did not experience an increase in water administration resulting from calls being placed. However, there was an increase in administration as a result of water being released from the new enlargement of Elkhead Creek Reservoir. Our office was responsible for protecting these releases as they passed downstream. Appendix B lists the calls that occurred in the various water districts.

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 2007, water administration occurred within the Upper Yampa River Basin (Water District 58) on Bear River, Middle and South Hunt Creeks, Willow Creek (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 Trout Creek, Fortification Creek, Little Bear Creek of Fortification Creek, Morapas Creek and Deer Creek. In Water District 56, a call was placed on Pot Creek of the Green River, but was never administered.

Oak Creek

There were no calls on Oak Creek in 2007. The Rich Ditch, which imports water from Trout Creek to Oak Creek, was regulated because of a call on upper Trout Creek. Oak Creek is usually water short after the runoff is gone unless it can import water from Trout Creek. Developers along lower Oak Creek have filed for water rights and a plan for augmentation for several new subdivisions. The augmentation water will consist of historic consumptive use credits from irrigated lands and the enlargement of an existing reservoir.

Yampa River from its Confluence with Oak Creek to Milner

The Yampa River from Oak Creek to Milner did not experience enough shortages to result in a call, but the City of Steamboat Springs discouraged tubers from floating through town when flows were low in July and August. Amounts were below the 2003 recreation in-channel diversion (RICD) water right for part of that time. However, appropriate measuring devices have yet to be installed by the City that would enable them to place a call.

Soda Creek, Gunn Creek, Spring Creek and Butcherknife Creek

A call was made on Soda Creek by the Soda Creek Ditch from September 10th through 30th. Administration for this call only affects two structures; however stream flows varied significantly with occasional heavy rains making administration more difficult.

<u>Tributaries of the Elk River (Farnsworth, Trull, Hot Springs, Salt, Mad, Big and Deep Creeks,</u> and Cottonwood Gulch)

Aside from the minimum instream flow call placed by the Colorado Water Conservation Board on Willow Creek of the Elk River, there were no calls on any tributaries of the Elk River in 2007. However, all of the tributaries were water short in late July and August. There have been no significant changes in water use on these tributaries in recent years. Cottonwood Gulch has a new development planned and will rely on a lined storage pond which must fill early in the year. Deep Creek, though considered over-appropriated, has not been under administration since 2002.

Hayden area: Dry Creek, Grassy Creek & Sage Creek

There have not historically been calls on Dry Creek, Grassy Creek, Sage Creek or other tributaries in the Hayden area, but they are always water short after the run-off is gone. Water shortages continued in 2007. Recent changes that will impact water use in the area are a shift in location of Seneca's coal mining operation and heavy residential growth in the Hayden area.

Seneca completed strip mining on their Grassy Creek and Sage Creek areas in 2006 and shifted their activity to lands tributary to Dry Creek. Because of this shift, almost no water is being used from

Grassy Creek or Sage Creek. Seneca has also moved their headquarters to the old Hayden Gulch terminal on Dry Creek. The current mining operations do not have a significant impact on water use, but Seneca does own four irrigation reservoirs (J C Temple, Emrich, Cottonwood and Greasewood Flat) that control water supplies on the lower end of Dry Creek. Dry Creek flows above these reservoirs were 0.02 cfs in July and 0.00 in August and September. No imminent changes are expected in the way these reservoirs are operated.

The residential growth around Hayden is just starting to impact Dry Creek. Three large subdivisions have begun construction on tributaries of Dry Creek. The primary source will be wells on Dill Gulch. The developers have also filed on numerous springs and small ponds, but their yield will be minimal. Extensive plans have been made for piping the well water to storage and use on several tributaries. The subdivisions could serve over 3,000 residences at build out.

Smuin Gulch & Buchanan Gulch

Neither Smuin Gulch nor Buchanan Gulch had any water available except stock water as early as April.

Yampa River - Milner to Elkhead Creek

There were no shortages of water or curtailments on the main stem of the Yampa River in Water District 57. Most structures push up temporary dams to back water up to their headgates or switch to pumps when the river drops by July.

Fish Creek of Trout Creek

The annual summer-long call on West Fish Creek by Highland Ditch was not placed this year. Yoast Feeder Ditch, which diverts water above Highland Ditch, filled its respective reservoir by late May and thus late summer diversions were not made. There was little water available after the spring run-off, but it prompted no calls this summer. Twentymile Coal owns most of the rights on the lower half of Fish Creek and has not used water in recent years.

Trout Creek

There was a call on upper Trout Creek for the second time in 5 years that lasted from the first week of July into August. This call was partially prompted by a neighbor dispute. Water supplies were not unusually short, but the call did impact transdistrict diversions into Oak Creek in Water District 58 by the Rich Ditch. The USFS also placed two Cease and Desist orders on the Last Chance Ditch during the summer – one for cleaning or enlarging the ditch on USFS property without permission and one for installing a diversion structure on USFS property without permission. Neither order had an impact on administration of upper Trout Creek.

Most of the water rights on the middle portion of Trout Creek were owned by P&M Coal Company. These surface land and water rights have been divided and sold, which will probably lead to more aggressive diversions than in the past.

Twentymile Coal owns most of the water rights on the lower end of Trout Creek. They have sold much of the land but kept the water rights and are leasing them back to the new landowners. A number of these ditches were cleaned and repaired by the new owners in 2007. Substantially more water is expected to be used next year. Any increased use could prompt a call on the lower end of the creek resulting in the administration of Twentymile Coal's plan for augmentation, which has never been implemented. Such a call would also include regulation of the water rights owned by Deerwood Ranches and Creek Ranch. These developments presently have a plan for augmentation pending in court.

Elkhead Creek and the Yampa River Downstream of its Confluence

As a result of low flows on the Yampa River through the critical habitat reach (Yampa River from Craig to the Green River at Echo Park), water was 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. Releases were made from Elkhead Creek Reservoir starting August 1 at a rate of 40 cfs and ran until August 9 and then resumed on August 13 at the rate of 46 cfs. Varying releases were made until September 20 when rain events resulted in increased flows in the Yampa River and the flows no longer needed to be supplemented. Approximately 5000 acre-feet were released and protected through the critical habitat reach by regulating all diversions. Below is a picture of the Maybell Canal which diverts water from the Yampa River within the critical habitat reach and flumes it back across the river before being put to beneficial use.



White River Drainage

Administration in Water District 43 was confined to the Piceance Creek drainage that ran from the end of May through the end of the irrigation season. As usual, this basin experienced a very dry year and given the oil and gas activity occurring within the basin, many difficulties were encountered with administering the call. One big continuing problem in the basin is water hauling trucks pumping out-of-priority from Piceance Creek or one of its tributaries. Energy exploration continues to grow in the Piceance and Yellow Creek basins at an ever-increasing pace. Many ranchers have sold their land and water rights to energy companies and these water rights have been changed to include industrial and augmentation uses, among others. The lands are then leased back to the ranchers whereby they can continue ranching operations and irrigation practices until such time that the energy companies need the water for other uses.

Sufficient water on the main stem of the White River and on the major tributaries upstream of Meeker satisfied the needs of the water users throughout the year.

North Platte Drainage

Warm temperatures in North Park from March 1 through April 8 melted much of the low snow and Walden Reservoir filled on April 2. However, cold temperatures from April 9 through April 14 slowed the run-off. The three gauging stations operated by our office were opened by April 1, about one week earlier then normal. Temperatures varied from mid-April to June with snow falling as late as June 8 when a daily high temperature of 39 degrees occurred.

The North Platte River drainage experienced some water administration but not as much as in recent years. Grizzly Creek ran low most of the summer but as usual, the water users on the creek were able to work together and avoid a call on the system. The Michigan River faired relatively well with administration occurring only from April 25 to April 29. Throughout the summer, water was low on the Michigan River; however, a call was never placed as a result of Walden Reservoir having to be nearly completely drained in order to replace the outlet vent pipe. This water was available for the senior ditches, which typically place a call. The main stem of the Illinois River was on call from June 23 to August 6. Rock Creek and Spring Creek, tributaries of the Illinois River, had their usual calls on the system. Outside of the Michigan and Illinois River basins, the only tributary that was subject to administration this year was Newcomb Creek of Chedsey Creek of Little Grizzly Creek of the North Platte River, which was on call from June 21 to July 15.

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 2007 was 815,200 acre-feet and for the period 1998 to 2007, the aggregate flow at the Maybell gage was 9,533,600 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. There were no calls placed on the Little Snake River in 2007.

Our office continues to work with the State of Wyoming on updating 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.

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 2007, a total of 111,879 acres were irrigated and 13,738 acre-feet were stored for irrigation use. The amount of irrigated acreage and the amount of water stored for irrigation purposes was up from 2006 by approximately 10,500 acres and 5,800 acre-feet, respectively. Transmountain diversions out of the basin totaled 5,736 acre-feet - up significantly from the previous year. The ten-year total transmountain diversion out of the basin was 42,709 acre-feet. None of the limitations of the Supreme Court Decree were exceeded in 2007.

A Division 6 representative attended the spring meeting of the North Platte Decree Committee held in April 2007, but was unable to attend the meeting held in October 2007.

Pot Creek

Pot Creek is a small tributary to the Green River; the headwaters of which are in Utah and enters 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. For many of the past several years, little if any water was available for Colorado users. In 2007 none of the three major reservoirs in Utah filled. Offield Reservoir located in Colorado had filled prior to May 1 and Dry Lake Reservoir also located in Colorado was storing water but did not fill. No releases were made this year from the Utah reservoirs to satisfy Colorado water users. A call was placed on Pot Creek by a Colorado water user in early May but was never honored



since the water user entered into an agreement with Utah Division of Wildlife Resources whereby they could store his water rather then release it. Pot Creek at the state line gage ran from March 7 to March 17 and March 27 until March 31. The flow at this site peaked on March 12 at a discharge of 8.5 cfs. The annual total flow past the gage for water year 2007 was 59 acre-feet.

The provisions of the MOU dated March 1, 2005

concerning the installation of headgates and/or measuring devices were waived for the 2005 and 2006 irrigation seasons and again in 2007 to allow for further engineering and development of cost estimates of measuring devices to be installed above Calder Reservoir, as required by the MOU.

Dam Safety

In Division 6, final construction inspections were completed on four projects with three receiving final acceptance and one receiving conditional acceptance. The fate of another dam constructed without approved plans is still to be decided. Elkhead Creek Dam near Craig received the conditional acceptance and subsequently filled and spilled. This enlarged reservoir provides an additional 12,000 acre-feet of storage to the lower reaches of the Yampa River drainage. 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; however, the Federal Energy Regulatory Commission (FERC) has denied the permit for construction placing the project on hold. The Colorado Division of Parks began final design for repairs to the high hazard Lester Creek Dam that holds Pearl Lake in the Elk River drainage with construction scheduled for 2008. The new boom in energy development in the Piceance Creek Basin in the White

River drainage continues to spawn proposals for new dams associated with energy development needs.

In Water Districts 50 and 51 (Division 5), construction was accepted on two repair projects; one low hazard and one significant hazard dam. Unfortunately, the significant hazard dam developed new sinkholes after the first fill following the repairs. Another problem low hazard dam was repaired and lowered to non-jurisdictional size, and the majority of the rebuild was completed for a breached low hazard dam. Construction was also substantially completed by the Grand County Water and Sanitation District to convert their decommissioned wastewater treatment lagoons to augmentation reservoirs along the Fraser River. Preliminary plans were reviewed for another breached dam waiting to be repaired by the owner.

Safety inspections of existing dams in the State take place at periodic intervals based on the hazard class of each dam and overall "health" of a dam, determined through a risked based evaluation. During 2007, the Division 6 Dam Safety Engineer inspected ten of thirteen high hazard dams (including one FERC regulated dam), seven of fourteen significant hazard dams, and twenty-three of over one hundred low hazard dams in accordance with a long range inspection schedule. In addition, FERC engineers completed inspections on both of the high hazard, power generating dams in Division 6. Due to their "health" rating, the remaining two high hazard dams were not scheduled for inspections until 2008. In support of Division 5, two of seven high hazard dams, eight of eleven significant hazard dams, and five of twenty-four 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 by that Federal agency, one was inspected by FERC, and the last was postponed due to the "health" of the dam.

Several safety problems were found at some of the significant and low hazard dams in Division 6 during inspections in 2007. A restricted significant hazard dam was found to be full and immediate action was taken by the Division Engineer and the Water Commissioner to lower the water level. Another significant hazard dam showed increased seepage and the new owner was asked to have his engineers investigate repairs. A zero storage restriction was issued for one low hazard dam due to a missing gate, a slide on the downstream slope, and a lack of maintenance by the owner. Another owner repaired a non-jurisdictional dam without notice possibly creating a jurisdictional structure and was issued a breach order until the repaired structure could be surveyed. Of the 23 low hazard dams inspected, eight were rated Unsatisfactory, twelve were rated Conditionally Satisfactory, and three were rated Satisfactory. Three owners completed repairs in 2007 to bring their dams up to a satisfactory rating and one owner completed repairs only to find new seepage areas along the stream

banks below the dam. Most owners lack the necessary resources to hire an engineer and do the repairs.

During 2007 there were 22 applications for non-jurisdictional dams, and six livestock water tanks permits were processed. 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. All non-jurisdictional dams are required to have adequate outlet pipes capable of passing inflow.

Hydrographic Program

Thirty-seven active stream gage sites are currently operated in the Yampa, White, and North Platte River basins by Division 6 and the USGS. Division 6 operates thirteen of these gage stations, eleven of which are equipped with satellite monitoring. Of these, three transmit reservoir water surface elevations, seven transmit stream flow gage heights, and one transmits both parameters. The remaining two gages are equipped with a chart recorder and/or a data collection platform (DCP) to record gage heights.

In 2001, the USGS operated 33 stations in the Yampa, White, and North Platte basins, as compared with the 24 stations they are currently operating. Many 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. Ninety-one measurements were taken at the gage sites in water year 2007 and approximately 25 measurements were taken on ditches, reservoir releases, and other streams. Water year 2007 hydrographic records will be published for seven sites: 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 Mouth near Hamilton, and Pot Creek at Stateline.



Yampa River above Lake Catamount Gage Station in winter

Division 6 currently has eight gage stations equipped with high data rate (HDR) equipment. HDR Sutron SatLink2 data loggers were installed in 2007 at the Illinois River near Rand, Steamboat Lake, and Willow Creek below Steamboat Lake sites. The Pearl Lake and Walton Creak near Steamboat Springs sites are scheduled for upgrade to HDR in 2008.



Steamboat Lake

During 2007, Division 6 conducted inspection, maintenance, and refurbishment activities at several sites. In July 2007, a muffler was installed on the Accubar bubbler at the Williams Fork gage station to protect the bubbler orifice from sediment build-up. The bubbler had been plagued with ice and sediment issues throughout much of water year 2007. Because of the sediment laden nature of the river and unusually muddy conditions this year, the bubbler muffler continued to experience problems in late July and early August. The bubbler muffler was subsequently removed from the sediment; filled with pea gravel; re-aligned to the center of the channel, below the wire weight gage mounted on the bridge; and set at an angle to the flow path.



Muffler Installation at the Williams Fork Gage Station

The existing 12-inch stilling well on Willow Creek below Steamboat Lake was replaced and a new doghouse shelter installed in September 2007. The new well and shelter better accommodate the shaft encoder and other gage equipment. Two intake pipes were installed, extending from the well to the channel. In addition, new HDR DCPs were installed at the Willow Creek and Steamboat Lake stations and the existing radio connection between the sites was removed, establishing Willow Creek below Steamboat Lake as an independent gage station.



Gage Station Construction at Willow Creek below Steamboat Lake



Improved Gage Station at Willow Creek below Steamboat Lake

In September 2007, a new stilling well, doghouse shelter, and intake pipes were installed at the Michigan River near Meadow Creek Reservoir gage station, completing the station upgrades initiated in 2006. In addition, the Illinois River near Rand gage station was totally refurbished and upgraded. A new HDR DCP, encoder, stilling well, enclosure, and intake pipes were installed.



Upgrades to the Michigan River near Meadow Creek Gage Station



HDR DCP Installed at the Illinois River near Rand Gage Station

During the summer of 2007, the Division 6 hydrographer worked closely with the District 44 Water Commissioners on the Elkhead Creek Reservoir release for the Upper Colorado River Basin Fishes Recovery Program. Data collected during the release is still being compiled and reviewed by participating agencies and a transit loss study has been initiated.

Ongoing and planned gage station projects for 2008 include the following: continued upgrading to HDR DCPs (Pearl Lake, Walton Creek near Steamboat Springs, and Lake Catamount Spillway/Outlet); replacing the existing HDR DCP at Pot Creek with a new generation HDR DCP; installing solar panels/satellite telemetry at Walton Creek near Steamboat Springs and removing the condemned cableway at this station; replacing existing bubblers with constant flow bubblers at Steamboat Lake, Pearl Lake, and Williams Fork gage stations; and miscellaneous minor station upgrades and refurbishments.



Condemned Cableway at the Walton Creek Gage Station

In addition, 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 2009, depending upon CDOT's schedule.

Potential additional projects for 2009 include: reinstating the satellite telemetry system/solar panel at the Bear River below Bear Lake site and upgrading this site and the Yamcolo Reservoir gage station to HDR DCPs.

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 197 exempt well permits in 2007 versus 209 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.

This year Willow Creek of the Elk River of the Yampa River upstream of its confluence with Beaver Creek was designated as over-appropriated, thus changing well permitting requirements. All future non-exempt well permits will now require a Court approved Plan for Augmentation and exempt wells permitted on less than 35 acres are limited to in-house use only within one single family dwelling.

Water Records and Information

Summaries of diversion records for irrigation year 2007 are shown in Appendix A. These numbers show that the total diversions for all uses were 1,665,301 acre-feet, which is up 97,427 acre-feet from 2006 and up by 85,203 acre-feet from 2005. Water Districts 44 and 58 experienced decreased in total diversions while the other six water districts experienced increases from the previous year. The most significant increase occurred in Water District 47 of 91,185 acre-feet. This increase was primarily for irrigation use for the Division as a whole. Both diversions for irrigation and the number of acres irrigated were up from the previous year with diversions up by 37,673 acre-feet. The number of visits to structures by the Water Commissioners was up by approximately 5 percent. As water administration and other demands on the Water Commissioners increases, the reliance of user-supplied data 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. Access to information through 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 a site on the North Park Wildlife Refuge since 2000. Consumptive use data is calculated using data collected at the two lysimeter sites for the various drainage basins. This data is sometimes used when reviewing water court applications for changes of water rights, as well as for many other purposes. The 2007 lysimeter report is available from the Division 6 office upon request.

Water Court Activities

Water Court activity increased in Division 6 Water Court in 2007. There were 122 new cases and 11 amended cases filed in Division 6 Water Court in 2007, compared to 86 new and amended applications combined filed in 2006. Nineteen new cases and 0 amended cases were filed in Division 5 Water Court compared to 19 new and amended applications combined filed in 2006. The Division Engineer prepared 112 Recommendations of the Division Engineer/Summaries of Consultation: 88 for the Division 6 Water Court and 24 for the Division 5 Water Court. Division 6 filed 3 statements of opposition in 2007 and protested one Ruling of the Referee. No cases went to trial in 2007. All correspondence with the water court, attorneys and applicants is electronically filed through Lexis Nexis.

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 how things are operating between the Court and the Division of Water Resources and status of particular cases. We continue 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. We also review the majority of the Rulings of the Referee for accuracy before they are finalized to assure that they incorporate or taken into account the concerns raised in the Recommendation of the Engineer/Summary of Consultation. We continue to meet with the Water Referee in Division 5 on a monthly basis via telephone conferencing to discuss all applications prior to submitting Recommendations of the Division Engineer/Summary of Consultations. This procedure works very well and allows the comments of the Water Referee to be included in our Recommendations of the Division Engineer/Summary of Consultations.

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 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 2007.

- Annual meeting of the Pot Creek Distribution System
- All meetings held by the Upper Yampa Water Conservancy District
- Spring meeting of the North Platte Decree Committee
- Bear River Irrigators annual meeting
- Stillwater Ditch Company annual meeting
- Spoke at water rights education class held at Colorado Mountain College
- All of the HB1177 Roundtable meetings for both the Yampa/White and North Platte
- Two employees attended the CWOA annual meeting in Durango
- Spoke at Deep Cut Irrigation Ditch Company and Soda Creek Ditch Company meetings

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

Issues and Achievements

The construction of the enlargement of Elkhead Creek Reservoir has been completed and the reservoir was filled in April 2007 as shown in the following picture. The total enlargement pool is approximately 12,000 acre-feet. Five thousand acre-feet of this enlargement is designated for in-river fish habitat and enhancement uses and use in furtherance of the Upper Colorado River Basin Fishes 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 Fishes Recovery Program is available for contract through the River District. Water was delivered to and through the critical habitat reach in August and September of 2007.



In order for this office 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 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 suitable and proper headgates and/or measuring devices. In November twenty-four extensions of time were granted to those water users that had still not installed these devices. The extension of time gives the water users until June 30, 2008 to install the headgates and/or measuring devices. After this time, if devices have not been installed further enforcement action will be taken.

Administrative procedures were developed in 2007 to deliver water released from Elkhead Creek Reservoir past numerous structures and through the critical habitat reach. Many measurements were taken by this office on Elkhead Creek and the Yampa River to assist with determining transit losses during the release of reservoir water in August and September. At this time, a standard transit loss value to be assessed for each release has not been determined or agreed upon. As previously mentioned, 5000 acre-feet were released for in-river fish habitat and enhancement uses, and use in furtherance of the Upper Colorado River Basin Fishes Recovery Program and the River District is likely to apply to make this amount absolute in Water Court in 2008.

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 have purchased 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 court that can be 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. A common occurrence that causes considerable problems with water administration is water hauling companies pumping water from Piceance Creek while under administration without a water right and whenever they want, including throughout the night and under our radar.

High Savory Reservoir in Wyoming was completed in 2004 for the purpose of providing additional water for irrigation purposes during times of the year when the natural flow in the Little Snake River is

insufficient. Reservoir water was released to those water users holding contracts for such water for the first time in 2007.

In the spring of 2006, the Yampa River upstream of the City of Steamboat Springs recreational-in-channel-diversion (RICD) structures was designated as over-appropriated. This designation significantly changed well permitting in this area. As a result of this designation, the Upper Yampa Water Conservation District (UYWCD) filed an "umbrella" plan for augmentation and exchange. The plan is to establish a framework whereby water users can be included directly into a decreed plan for augmentation that uses UYWCD water rights decreed for augmentation use to replace out-of-priority depletions. In addition to the Steamboat Springs and South Routt County areas, the plan is designed to provide augmentation water downstream beyond the RICD structures to the confluence of Elkhead Creek and the Yampa River. This case is scheduled for trial in October 2008.

The Water Court decreed the City of Steamboat Springs RICD in December 2005 and amended it in March 2006. Though there was no call for this water right in 2007, flows in the Yampa River were below the decreed amounts from June 1 through July 15. Specifically, this water right is decreed for 400 cfs from April 15 to April 30, 650 cfs from May 1 to May 15, 1000 cfs from May 16 to May 31, 1400 cfs from June 1 to June 15, 650 cfs from June 16 to June 30, 250 cfs from July 1 to July 15, 100 cfs from July 16 to July 31 and 95 cfs from August 1 to August 15.

Figure 1 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 this gage and the RICD structures, and the decreed flows. Before the City of Steamboat Springs can place a call for their water right, they must first install an additional gage station on the Yampa River at the 13th Street Bridge, or on the two tributaries entering the Yampa River between the Yampa River at Steamboat Springs gage station and the RICD structures. This office declined to submit a bid for the installation, operation and maintenance of a gage on the Yampa River at the 13th Street Bridge. It is our understanding that the City of Steamboat Springs has contracted with the USGS to do this work.

The UYWCD is in the process of amending their existing FERC license to raise the storage level of Stagecoach Reservoir by four feet which would increase its capacity by 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. In December 2006, the UYWCD submitted an application for Non-Capacity Related Amendment of Minor Hydropower Project License to FERC. Presently, FERC has not approved the project due to a lack of completeness of the UYWCD study. UYWCD is optimistic that their proposed raise will be approved by FERC and they will be able to begin construction before the end of the 2008 water year.

6/12/2006

Date

7/2/2006

7/22/2006

8/11/2006

8/31/2006

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

Operated within our budget.

3/24/2006

4/13/2006

5/3/2006

5/23/2006

- Issued 33 orders and 24 extensions of time 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.
- Completed project to enter decreed structure locations into Hydrobase.

- Completed the tabulation of the Federal Reserved water rights (both appropriative and reserved).
- 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 over-whelming. 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, water law and water administration. As for the office staff, the scenario is the same. The hydrographic branch continues to add more gages 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. The Division Engineer continues to review proposed rulings and decrees prior to their signing; provide assistance to the Water Court when needed; review all applications for errors and provide the Water Court with requests for additional information when needed before an application is published; review all engineering reports and provide comments to Denver or applicant's attorney; and write all Recommendations of the Division Engineer/Summaries of Consultation. While a tremendous amount of effort is put into the review of proposed rulings and decrees 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 the agency's policies.

As the workload continues to increase, additional staff becomes more necessary. In 2006 this office submitted a decision item to increase the hours for the Water Commissioner covering Districts 54, 55, and 56 and assisting in District 44 with protecting releases made from Elkhead Creek Reservoir. This decision item was passed and included in the 2007 Long Bill. This decision item increased the position from six to nine months. On the Yampa River, growth in the Steamboat Springs area and possible administration of the Steamboat RICD will increase the workload of the office and field staff. In the White River drainage, energy development on Piceance Creek and Yellow Creek will require an ever-increasing presence in the area. The Water Commissioner for this area is currently part-time (0.54 FTE). This office will continue to submit decision items to increase the FTE in these areas.

This office goes to great lengths to maintain an accurate record of the ownership of water rights. Such efforts are on going year round. In addition, office staff has been working very diligently to cleanup the new contact and ownership rolodex in Hydrobase.

The Water Rights Tabulation Committee met in April 2007 with two members of the Division 6 staff attending. Structure and water right modifications have already been recommended and the structure modifications incorporated into Hydrobase. The Committee intends to develop a list of diversion record modifications in 2008. The Committee will continue to meet on a yearly basis to assure that the manner in which water rights and diversion records are being tabulated are consistent throughout the state.

Personnel

In the fall of 2006, Kathy Bower, part-time Water Commissioner for Water Districts 54, 55, and 56, became a full time Water Commissioner for Water District 44 leaving her previous position vacant. Roberta Hume was hired as a temporary employee in May 2007 as Water Commissioner for this area. Because of her obvious passion to learn more about water administration and her enjoyment of the work, she was hired as a permanent employee in October. Roberta is a native of Craig, Colorado. She and her twin brother were the first set of twins born in the Craig Memorial Hospital. She was raised on a 2,000 acre ranch east of Craig where her family raised chickens, cattle, and sheep. Her love for water started with helping her father irrigate. Roberta and her husband purchased the property that her grandparents lost during the depression. On this property they raise mostly cattle, but also Jersey milk cows, chickens, pigs, sheep, and goats.

The Division 6 Water Commissioner of the Year for 2007 was Kathy Bower. Ms. Bower is responsible for water administration on the lower Yampa River, Water District 44. In water year 2007, Ms. Bower completed all of the diversion records for Water Districts 44, 54, 55, and 56; trained the new Water Commissioner and managed the protection of releases made from Elkhead Creek Reservoir. Jerry Oldland, a water user on Piceance Creek of the White River, was recognized as the Division 6 Water User of the Year.

Appendix C shows the organization chart of Division 6.

Training

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

- Lynne Peters attended the Program Assistants training meeting in Greeley.
- Two of the Division 6 staff attended the annual CWOA meeting in Durango.
- Jean Ray and Kathy Bower obtained Swiftwater First Responder training and certification.
- · Jean Ray attended the annual Hydrographic Branch training.
- Erin Light and Jean Ray attended the first session of Leadership training.
- Lynne Peters started and is presently taking an introductory on-line ESRI ArcMap class.

John Blair received training on the new Extreme Precipitation Analysis Tool (EPAT).

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 computer programs and water administration issues.

Water Year 2008

Key Objectives for 2008

Listed below are some of the key objectives for 2008:

- Complete cleanup of owners/contacts in the Hydrobase Rolodex.
- 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 Wyoming on identifying and implementing strategies for the delivery of reservoir water from High Savory Dam to users on the Little Snake River.
- Cooperate with the Colorado Water Conservation Board, Fish and Wildlife Service, and the Colorado Water River Conservation District with the delivery and protection of water released from Elkhead Creek Reservoir.
- Assure that all headgate and measuring device orders issued in 2007 on Elkhead Creek below Elkhead Creek Reservoir and the Yampa River downstream of Elkhead Creek are 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 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

RESERVOIR STORAGE SUMMARY BY DISTRICT IRRIGATION YEAR 2007

AMOUNT IN STORAGE (AF)

				AIMC	AMOUNT IN STORAGE (AF)	ie (AF)
Š	₽	RESERVOIR	SOURCE STREAM	MINIMOM	MAXIMUM	END-OF-YEAR
43	3500	WINDY BILL SPRING POND	EAST BEAVER CK	7	7	7
43	3501	LAKE GLORIA	PAPOOSE CK	5	5	5
43	3529	LARSON RES NO 2	TRIBUTARIES-PICEANCE CK	3	10	10
43	3630	BAILEY LAKE RETAIN POND	SWEDE CK	23	23	23
43	3631	BARBOUR POND	MARVINE CK	15	15	15
43	3632	BEAVER LAKE RESERVOIR	VAUGHN CK	99	99	99
43	3633	BIG BEAVER CK RESERVOIR	BIG BEAVER CK	7,237	7,658	7,316
43	3634	BLACK GULCH RES	BLACKS GULCH	41	41	41
43	3636	CABIN LAKE RESERVOIR	VAUGHN CK	16	16	16
43	3638	GOOSMAN RESERVOIR	ELK CK	0	9	*
43	3639	GREGOR RESERVOIR	VAUGHN CK	47	47	47
43	3640	HERRELL FISHPOND	TRIBUTARIES-NORTH FK	3	က	3
43	3642	JOHNNIE JOHNSON RESERVOIR	WHITE RIVER	430	747	430
43	3643	KEYSTONE RES 2	PRICE CK	0	0	0
43	3644	KEYSTONE BEN PRICE RES	PRICE CK	0	100	0
43	3645	KEYSTONE RES 3	DEEP CHANNEL CK	0	31	0
43	3646	LADY LAKE	VAUGHN CK	4	4	4
43	3647	LARSON RES	TRIBUTARIES-PICEANCE CK	_	က	က
43	3649	LUNNEY RESERVOIR	NINE MILE DRAW	82	82	82
43	3651	MCGINNIS MEADOW RES	SOUTH SKINNY FISH CK	87	87	87
43	3652	MCHATTEN RESERVOIR	COALCK	0	64	0
43	3656	PROCTER RESERVOIR	CURTIS CK	0	7	0
43	3657	SEVENTH LAKE RESERVOIR	VAUGHN CK	32	32	32
8	3658	SHADOW LAKE RESERVOIR	VAUGHN CK	က	က	က
43	3659	SKINNY FISH RESERVOIR	SKINNY FISH CK	301	301	301
43	3660	STUMP LAKE RESERVOIR	VAUGHN CK	10	10	10
43	3662	TRAPPERS LAKE RETAIN PD	NORTH FORK	_	τ-	~

9	30	0	2	*	9	_	0	10	*	0		12	2	2	9	0	*	*	3	2	_	0	_	0	8	2	3	0	20	2	0	30	25	*	0
8	78	3	57	13	9	_	τ-	10	5	0	x	12	2	2	9	_	4	6	3	2	~	2	~	4	3	2	3	4	74	2	2	30	25	15	85
9	22	0	က	13	9	•	0	3	2	0	_	12	2	2	9	0	4	0	3	2	_	0	_	0	က	2	3	0	10	2	0	22	9	15	0
COALCK	WEST MILLER CK	UTE CK	EAST FLAG CK	WEST STEWART GULCH	FAWN CK	TRIBUTARIES-PICEANCE CK	TRIBUTARIES-PICEANCE CK	PICEANCE CK	PICEANCE CK	STRAWBERRY CK	STRAWBERRY CK	STRAWBERRY CK	MARVINE CK	MARVINE CK	MARVINE CK	MARVINE CK	YELLOW CK	YELLOW CK	PICEANCE CK	PICEANCE CK	PICEANCE CK	PICEANCE CK	PICEANCE CK	PICEANCE CK	PICEANCE CK	PICEANCE CK	PICEANCE CK	PICEANCE CK	BIG BEAVER CK	PICEANCE CK	PICEANCE CK	PICEANCE CK	PICEANCE CK	WEST CK	MARVINE CK
WATKIN RESERVOIR	WEST MILLER RESERVOIR	WHITNER FISH POND	WILSON RES	WEST STEWART GULCH RES	JOY JOY & WATSON RES	PARSONS POND NO. 1	PARSONS POND NO. 2	JESSUP RESERVOIR	JONES RESERVOIR	STRAWBERRY L&C POND 2	STRAWBERRY L&C POND 3	STRAWBERRY L&C POND 4	WEST MARVINE POND 1	WEST MARVINE POND 2	WEST MARVINE POND 3	DIAMOND M REARING PONDS	VIOLETT SPRINGS POND #1	VIOLETT SPRINGS POND #2	BUBBA'S POND	BRUCE'S POND	CHASE'S POND	COOKIE'S POND	DIANE'S POND	JODY'S POND	JODY'S POND NO. 2	MOMO'S POND	RUDY'S POND	RYAN'S POND	BIG LICK RES	TODD AND TRACY'S POND	TURGOOSE POND	EXXON LOVE RANCH RES	EXXON B&M RESERVOIR	MARK RES NO 1	BALL LAKE RESERVOIR
3668	3669	3670	3671	3672	3716	3718	3719	3722	3723	3731	3732	3733	3736	3737	3738	3739	3751	3752	3754	3755	3756	3757	3759	3761	3762	3763	3766	3767	3769	3770	3771	3772	3774	3893	3904
43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43

10,356 11,690 8889**	10 10 *	* 20 20	15 20 *	25 25 25	7 7 7	ю С	1,535 1,535 *	5	12 12 12	-	-	19 19 19	19	51 19	1 7 51 19	37 1 7 51 19	41 37 1 7 51 19	0 41 37 7 7 7 19	38 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 38 0 1 1 7 7 7 19
TOTAL FOR DISTRICT 43	HUNTER CK	WOLFCK	WOLFCK	TRIBUTARIES-NORTH FK	TRIBUTARIES-NORTH FK	TRIBUTARIES-PICEANCE CK	WHITE RIVER	CURIIS CK	\\\(\frac{1}{1}\)	DRY CK	CURTIS CK DRY CK	CURTIS CK CURTIS CK DRY CK	COAL CK CURTIS CK CURTIS CK DRY CK	FAWN CK COAL CK CURTIS CK CURTIS CK DRY CK	MARVINE CK FAWN CK COAL CK CURTIS CK CURTIS CK DRY CK	NORTH FORK MARVINE CK FAWN CK COAL CK CURTIS CK CURTIS CK DRY CK	CURTIS CK MARVINE CK FAWN CK COAL CK CURTIS CK CURTIS CK DRY CK	TRIBUTARIES-SOUTH FK CURTIS CK NORTH FORK MARVINE CK FAWN CK COAL CK CURTIS CK CURTIS CK DRY CK	STRAWBERRY CK TRIBUTARIES-SOUTH FK CURTIS CK NORTH FORK MARVINE CK FAWN CK COAL CK CURTIS CK CURTIS CK CURTIS CK	TRIBUTARIES-SOUTH FK STRAWBERRY CK TRIBUTARIES-SOUTH FK CURTIS CK NORTH FORK MARVINE CK FAWN CK COAL CK CURTIS CK CURTIS CK CURTIS CK DRY CK
	TAYLOR RES	REEVES RES	BLUE MOUNTAIN RES	VANDIVER POND	KAWCAK POND NO 1	JOHNSON POND 15	TAYLOR DRAW RES	JENSEN RES 2		SADDLE HORSE PARK RES	JENSEN RES 3 SADDLE HORSE PARK RES	JENSEN RES 1 JENSEN RES 3 SADDLE HORSE PARK RES	THEOS RES 1 JENSEN RES 1 JENSEN RES 3 SADDLE HORSE PARK RES	TERLEP POND THEOS RES 1 JENSEN RES 3 SADDLE HORSE PARK RES	TERLEP POND NO 1 TERLEP POND THEOS RES 1 JENSEN RES 1 JENSEN RES 3 SADDLE HORSE PARK RES	RAINBOW LAKE RAT MT POND NO 1 TERLEP POND THEOS RES 1 JENSEN RES 3 SADDLE HORSE PARK RES	NINE MILE RANCH RES 1 RAINBOW LAKE RAT MT POND NO 1 TERLEP POND THEOS RES 1 JENSEN RES 1 JENSEN RES 3 SADDLE HORSE PARK RES	JONES STOCK & FISH POND NINE MILE RANCH RES 1 RAINBOW LAKE RAT MT POND NO 1 TERLEP POND THEOS RES 1 JENSEN RES 1 JENSEN RES 3 SADDLE HORSE PARK RES	JACOBS RESERVOIR JONES STOCK & FISH POND NINE MILE RANCH RES 1 RAINBOW LAKE RAT MT POND NO 1 TERLEP POND THEOS RES 1 JENSEN RES 1 JENSEN RES 3 SADDLE HORSE PARK RES	DORTCH POND NO 2 JACOBS RESERVOIR JONES STOCK & FISH POND NINE MILE RANCH RES 1 RAINBOW LAKE RAT MT POND NO 1 TERLEP POND THEOS RES 1 JENSEN RES 1 JENSEN RES 3 SADDLE HORSE PARK RES
	4504 T	4499 F	4497 E	4463	4461 K	4446 J	4433 T		4351 J	24236 22	210 2000000 210	316 316 3443346 316	28 28 SANTARA 28					20 20 20 20 20 20 20 20 20 20 20 20 20 2		S
								1												24 25 25 25 25 25 25 25 25 25 25 25 25 25

			AMC	AMOUNT IN STORAGE (AF)	iE (AF)
□	RESERVOIR	SOURCE STREAM	MINIMUM	MAXIMUM	END-OF-YEAR
3675	WYMAN RES	LITTLE BEAVER CK	58	58	58
3677	ANDERSON RES	NORTH FK OF ELKHEAD CK	19	95	19
3681	BUNKER LAKE RES	BUNKER CK	39	190	39
3682	COVE LAKE RES	MORAPOS CK	74	74	*
3683	COVE RES	MORAPOS CK	121	121	*
3686	DRESCHER RES	BASIN GULCH	132	132	*
3688	DUNKLEY DEUBEAU RES	WILLOW CK	2	50	2
3689	DD&ERES	MILK CK	430	833	430
3702	ROBY RES	MORAPOS CK	26	26	*
3706	SELLERS CROWELL RES	WILLOW CK	9	9	9
3721	ELLGEN RESERVOIR	BELL ROCK GULCH	33	143	*
3722	3722 ELLGEN RESERVOIR NO 2	MC LERNON DRAW	0	13	*

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4 4

W M

	FREEMAN RESERVOIR	LITTLE COTTONWOOD CK	137	137	*	
BISKUP R	BISKUP RESERVOIR	TWO SPRINGS GULCH	22	135	77	
ELKHEA	ELKHEAD CREEK RESERVOIR	ELKHEAD CK	1,308	25,019	18,261	
FLAT TOP RES	PRES	SECOND CK	95	95	*	
		TOTAL FOR DISTRICT 44	2,557	27,128	18891**	

				AMC	AMOUNT IN STORAGE (AF)	E (AF)
WD	<u></u>	RESERVOIR	SOURCE STREAM	MINIMUM	MAXIMUM	END-OF-YEAR
47	1187	JODY SPRING AND POND	MCKINNON CK		_	_
47	3523	ABRAHAM POND	TRIBUTARIES-ILLINOIS R	က	19	တ
47	3528	ANTELOPE POND	TRIBUTARIES-ILLINOIS R	6	47	31
47	3529	BREWER POND	TRIBUTARIES-ILLINOIS R	0	48	0
47	3530	ELK POND	TRIBUTARIES-ILLINOIS R	3	59	3
47	3531	POTTER CREEK POND	TRIBUTARIES-ILLINOIS R	O	69	თ
47	3532	SEVENTY SIX POND	TRIBUTARIES-ILLINOIS R	25	45	25
47	3533	WILSON'S POND	TRIBUTARIES-ILLINOIS R		1	7
47	3534	ALKALI POND	POTTER CK	3	22	3
47	3535	ALLARD CONTOUR, MID POND	TRIBUTARIES-ILLINOIS R	0	80	0
47	3536	ALLARD CONTOUR N. POND	TRIBUTARIES-ILLINOIS R	0	9	0
47	3537	ALLARD POND, NORTH	TRIBUTARIES-ILLINOIS R	0	39	0
47	3538	ALLARD COUNTOUR S. POND	TRIBUTARIES-ILLINOIS R	0	o	0
47	3539	ALLARD POND, SOUTH	TRIBUTARIES-ILLINOIS R	0	48	0
47	3540	ANDERSON CONTOUR POND	TRIBUTARIES-ILLINOIS R	0	18	0
47	3541	ANDERSON DRAIN	ILLINOIS RIVER	0	7	0
47	3542	AVOCET POND	TRIBUTARIES-ILLINOIS R	0	13	0
47	3543	BIRDIE POND	TRIBUTARIES-ILLINOIS R	0	9	0
47	3544	BLUEBILL POND	TRIBUTARIES-ILLINOIS R	o	19	0
47	3545	BROCKER POND NORTH	TRIBUTARIES-ILLINOIS R	0	12	0
47	3546	BUDDIES POND	TRIBUTARIES-ILLINOIS R	0	1	0
47	3547	BULRUSH POND	TRIBUTARIES-ILLINOIS R	3	8	3
47	3548	CASE RES #2 ANNEX POND	TRIBUTARIES-ILLINOIS R	5	13	5
47	3549	CATTAIL POND	TRIBUTARIES-ILLINOIS R	0	9	0
47	3550	COYOTE POND	TRIBUTARIES-ILLINOIS R	0	က	_
47	3551	DIVERSION POND	TRIBUTARIES-ILLINOIS R	0	13	0
47	3552	EAGLE POND	TRIBUTARIES-ILLINOIS R	7	20	12

9	7	2	0	0	84	28	29	0	0	12	20	56	0	o	0	0	0	0	0	2	5	5	0	5	8	2	0	0	0	0	0	o	0	0	48
10	7	2	_	10	108	28	49	5	_	19	23	56	0	o	9	15	8	27	2	ဇ	17	თ	က	12	8	10	4	9	_	30	27	12	11	2	56
2	7	2	0	0	0	24	29	0	0	8	18	~	0	7	0	0	0	0	0	0	0	3	0	~	2	2	0	0	0	0	0	0	0	0	35
TRIBUTARIES-ILLINOIS R	TRIBUTARIES-ILLINOIS R	POTTER CK	TRIBUTARIES-ILLINOIS R	TRIBUTARIES-ILLINOIS R	SPRING CK	TRIBUTARIES-ILLINOIS R	ANTELOPE CK	TRIBUTARIES-ILLINOIS R	ANTELOPE CK	TRIBUTARIES-ILLINOIS R	TRIBUTARIES-ILLINOIS R	TRIBUTARIES-ILLINOIS R		POTTER CK	TRIBUTARIES-ILLINOIS R	TRIBUTARIES-ILLINOIS R		TRIBUTARIES-ILLINOIS R	TRIBUTARIES-ILLINOIS R	SPRING CK															
EISEMANN POND	FISH HATCHERY POND, EAST	FISH HATCHERY POND WEST	FISHERMAN'S PARKING POND	FOLLETT POND	FOX POND	GERM POND	GOOSE POND	GREASEWOOD POND	HAMPTON NO 1 POND	HAMPTON NO 2 POND	HAMPTON NO 3 POND	HOME POND	HORSESHOE POND	KITCHEN POND	LIVING ROOM POND	MARSH POND	MCCAMMON POND NORTH	MCCAMMON POND SOUTH	N. TOUR ROUTE POND	OLD ROAD POND	ONE TWENTY FIVE POND	PATTEN POND	POTHOLE POND	PRAIRIE DOG POND	RAT DITCH POND	RIZOR POND	ROADSIDE POND NORTH	ROADSIDE POND SOUTH	ROSS POND	SCHOOL POND NORTH	SCHOOL POND SOUTH	SMITH POND	SOLBERG POND	SOUTH TOUR ROUTE POND	SPRING CREEK POND
3553	3554	3555	3556	3557	3558	3559	3560	3561	3562	3563	3564	3565	3566	3567	3568	3569	3570	3571	3572	3573	3574	3575	3576	3577	3578	3579	3580	3581	3582	3583	3584	3585	3586	3587	3588
47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47

4	0	16	*	20	439	910	530	85	58	99	194	0	5	0	237	0	119	*	306	5,351	23	86	28	0	73	2	88	0	0	1,722	178	0	23	O	75
17	50	56	1,434	100	486	910	530	130	98	99	213	0	8	0	255	63	119	0	311	6,466	40	152	28	16	159	16	139	49	8	5,265	597	5	43	თ	75
4	0	15	0	50	437	316	213	81	37	14	117	0	0	0	229	0	119	0	283	4,346	23	63	28	0	36	2	88	0	0	13	178	0	13	O	75
TRIBUTARIES-ILLINOIS R	TRIBUTARIES-ILLINOIS R	SOUTH FK OF BEAVER CK	SOUTH FK OF BIG CK	LAKE CK	BUFFALO CK	TRIBUTARIES	MICHIGAN RIVER	ANTELOPE CK	POTTER CK	POTTER CK	BUFFALO CK	LIL WILLOW AKA ROCK CK	COWCK	BUFFALO CK	ARAPAHOE CK	SOUTH FK OF THREE MI CK	RILEY CK	SOUTH FK OF LONE PINE CK	HOWD CREEK	SOAP CK	MIDDLE FK OF MEXICAN CK	MEXICAN CK	FISCHER DRAW	INDIAN CK OF ILLINOIS R	NINEGAR CK	ARAPAHOE CK	CROSBY CK	THREE MILE CK	ED VAN VALKENBURG DRAW	ILLINOIS RIVER	ARAPAHOE CK	SIX MILE CK	COYOTE CK	LIL WILLOW AKA ROCK CK	LIL WILLOW AKA ROCK CK
VARNEY POND	WILLFORD POND	BENNETT RESERVOIR	BIG CREEK RESERVOIR	BOETTCHER LAKE RES	BUFFALO RES	BUTTE RES	CARLSTROM RES	CASE RES NO 1	CASE RES NO 2	CASE RES NO 3	CLAYTON RESERVOIR	DARCY RES	FULLER RES	HAP RESERVOIR	HECLA RESERVOIR	HUNTER RES	JACKSON RES	LAKE KATHERINE RES	LAKE ROSLYN RES	MACFARLANE RES	MCGOWAN RES	MEXICAN RESERVOIR	P W FISCHER RES	SHAWVER RES	SLACK & WEISS RES	SOUTH ARAPAHOE RES	STAMBAUGHRES	THREE MILE RES	VANVALKENBURG RES	WALDEN RESERVOIR	WEST ARAPAHOE RES	WILLS RES	TWO LEDGE RES	SHEARER SPRINGS RES #1	SHEARER SPRING RES #2
3589	3590	3594	3595	3596	3597	3598	3599	3600	3601	3602	3603	3604	3605	3607	3608	3609	3610	3612	3613	3614	3615	3616	3617	3620	3621	3622	3623	3625	3626	3627	3628	3629	3630	3638	3639
47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47

45	-	0	_	2	7	2	*	0	4	7	21	~	_	0	0	42	13	5	က	_	4	က	_	5	0	0	006	_	က	_	16	0	5	က	9
09	9	0	_	2	7	2	25	15	o	8	24	2	2	_	3	42	13	5	3	_	4	3	4	2	_	0	006	_	4	2	33	_		೮	-
45	0	0	~	0	7	2	18	0	3	9	2	~	~	0	0	42	12	5	3	~	4	2	~	2	0	0	200	~	2	0	16	0	2	2	10
SALES CK	TRIBUTARIES-ILLINOIS R	TRIBUTARIES-ILLINOIS R	BIG WILLOW CK	DEER CK	DEER CK	DEER CK	INDIAN CK OF ILLINOIS R	INDIAN CK OF ILLINOIS R	MCKINNON CK	MCKINNON CK	ANTELOPE CK	POTTER CK	ILLINOIS RIVER	ILLINOIS RIVER	ILLINOIS RIVER	NO NAME CK	ARAPAHOE CK	ARAPAHOE CK	BIG GRIZZLY CK	SOAP CK	DEER CK	LAKE CK	NO NAME CK	GRIZZLY CR	GRIZZLY CR	GRIZZLY CR	GRIZZLY CR	GRIZZLY CR	GRIZZLY CR	GRIZZLY CR					
GOOD MEDICINE RESERVOIR	FOUR ZERO FOUR POND	FOUR ZERO THREE POND	BLACK WOLF LAKE	KIDS POND	ROBBIES POND	MIKES POND	INDIAN CREEK #1	INDIAN CREEK #2	LABRADOR LAKE	TIMBER POND	HEADWATERS POND	BILBEISI POND	NORTH HACKLEY POND	SOUTH HACKLEY POND	RODRIQUEZ POND	HOFMANN POND #1	HOFMANN POND #2	HOFMANN POND #3	HOFMANN POND #4	HOFMANN POND #5	HOFMANN POND #6	EAST TROWNSELL POND	LOWER TROWNSELL POND	MCQUERY POND	SCHROEDER POND	DEER CREEK STOCK POND	LAKE JOHN ANNEX	HOFMANN POND #6A	GYN POND	JO POND	LYN POND	DU DUCK RESERVOIR	BLAINE'S POND	EAST POND	MUSHROOM POND
3640	3652	3653	3664	3669	3670	3671	3672	3673	3678	3679	3683	3684	3685	3686	3687	3688	3689	3690	3691	3692	3693	3694	3695	3696	3697	3698	3699	3700	3702	3703	3704	3705	3706	3707	3708
47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47

24	29	0	5	18	42	42	0	2,476	525	39	1,342	7,092	1,285	45	0	39	0	*	24	58	4,102	52	51	0	15	0	20	284	***
9/	40	0	5	18	45	42	846	2,734	525	39	1,780	7,092	1,350	45	46	39	18	22	24	58	5,264	58	51	0	15	0	50	390	40.074
24	29	0	5	10	42	36	0	1,637	46	32	1,342	6,693	1,264	41	0	0	0	0	0	54	2,525	52	51	O	15	0	33	284	20.400
GRIZZLY CR	GRIZZLY CR	GRIZZLY CR	GRIZZLY CR	GRIZZLY CR	GRIZZLY CR	BUFFALO CK	BEAVER CK OF ROARING FK	TRIBUTARIES	BIG GRIZZLY CK	ARAPAHOE CK	MIDDLE FK OF MEXICAN CK	LAKE CK	NORTH FK OF MICHIGAN R	LOST CK	BUFFALO CK	CHEDSEY CK	NEWCOMB CK	NEWCOMB CK	NINEGAR CK	MICHIGAN RIVER	MEADOW CK	BIG GRIZZLY CK	NINEGAR CK	ALDERDICE DRAW	ALDERDICE DRAW	BOLTON DRAW	SPRING CK	POTTER CK	100000000000000000000000000000000000000
18 ISLAND RESERVOIR	WEST RESERVOIR	SMALL POND	DOUGHNUT POND	MELLON POND	DU GOOSE RESERVOIR	ADDISON RESERVOIR	AQUA FRIA RES	LAUNE RESERVOIR	SEYMOUR RES	COYTE RESERVOIR	POLE MOUNTAIN RES	LAKE JOHN	NORTH MICHIGAN CK RES	HOUSE RES	RIDINGS RES	BURNS RES	ROCK RESERVOIR	KETTLE RESERVOIR	NINEGAR RESERVOIR	FISCHER LAKE	MEADOW CREEK RES	MUDDY PASS RES	WADE LAKE	OVERTON RES NO 2	OVERTON RES NO 3	CANADIAN STRIP POND NO 1	SPRING CK RES	MUSKRAT POND	
3/03	3710	3711	3712	3713	3714	3725	3726	3742	3743	3744	3746	3750	3753	3756	3757	3760	3766	3768	3777	3778	4335	4356	4358	4397	4398	4400	4432	4433	
<u>,</u>	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	

E (AF)	END-OF-YEAR	*	0
AMOUNT IN STORAGE (AF)	MAXIMUM	0	398
AMC	MINIMOM	0	0
	SOURCE STREAM	TRIBUTARIES	WILLOW CK
	RESERVOIR	B2 RESERVOIR	ELK LAKE RES
	<u></u>	3520	3589
	WD	54	54

_	MARTIN CULL RESERVOIR	FOUR MILE CK	115	250	115	
_	MCCARGER RES	INDEPENDENCE CK	64	64	64	
		TOTAL FOR DISTRICT 54	180	713	180**	

				AIM	AIMOUNI IN STORAGE (AF)	SE (AF)
MD MD	₽	RESERVOIR	SOURCE STREAM	MINIMOM	MAXIMUM	END-OF-YEAR
26	3506	DOUGLAS RESERVOIR	COTTONWOOD CK	3	3	8
99	3710	BASSETT RESERVOIR NO 1	MATT SPRING CK	22	33	22
99	3711	TW BLEVINS RES	MATT SPRING CK	369	369	*
56	3713	HAUNTED SPG RES	HAUNTED SPG GULCH	2	2	*
26	3740	BASSETT RESERVOIR NO 2	BULL CANYON	16	98	16
56	3901	MATT WERNER RESERVOIR	POT CK	3,000	3,000	3,000
56	3921	COVE RES	COTTONWOOD CK	100	122	100
26	4452	HOUSE RESERVOIR	ANTONE CANYON	0	20	0
			TOTAL FOR DISTRICT 56	3,511	3,647	3141**

				AMA	(TA) HORACIO NI INDOMIA) = (AL)
WD	₽	RESERVOIR	SOURCE STREAM	MINIMOM	MAXIMUM	END-OF-YEAR
25	3500	SENECA MINE POND 006	HUBBERSON GULCH	14	14	14
22	3501	SEDIMENTATION POND A	FOIDEL CK	210	210	210
22	3516	WOLF MOUNTAIN RES	WOLFCK	81	82	82
22	3523	PEABODY POND Y-1	SAGE CK	14	14	14
27	3537	MINE 3 NORTH POND	MIDDLE CK	2	11	O
57	3538	MINE 3 SOUTH POND	MIDDLE CK	30	41	30
22	3541	HUNTER NO 1 RES	MIDDLE CK	က	10	9
57	3543	CAMPSITE RESERVOIR	SMUIN GULCH	2	2	2
22	3546	WEST RIDGE IMPOUNDMENT	TRIBUTARIES-TROUT CK	30	33	30
22	3547	CENTER RIDGE IMPOUNDMENT	TRIBUTARIES-TROUT CK	20	22	20
57	3549	APPLE RES	DRY FORK	_	T	~
57	3550	BASIN RES	BUCHANAN GULCH	0	0	0
22	3551	BROCK RESERVOIR	BROCK GULCH	_	9	•
22	3555	ECKMAN PARK RES 1	FOIDEL CK	ဇ	4	3
22	3557	ECKMAN PARK RES 2	FOIDEL CK	_	2	~
27	3560	EMRICH RES	TEMPLE GULCH	0	178	0

0	18	7	0	09	20	0	0	286	9	20	12	•	14	7	8	7	•	4	5	26	5	7	40	5	~	~	15	ဇ	~	က	ဇ	O	30	40	796
80	200	454	100	95	29	0	0	987	12	20	14	2	14	-	-	0	_	4	5	40	5	7	40	5	_	က	15	4	_	4	က	o	33	40	832
0	18	8	0	55	50	0	0	987	9	0	12	~	12	7	8	7	•	4	5	20	5	7	40	5	~	~	15	ဇ	0	က	0	တ	28	25	752
DILL GULCH	YOAST GULCH	TEMPLE GULCH	MORGAN CK	SCOTCHMANS GULCH	SCOTCHMANS GULCH	SAGE CK	MIDDLE FISH CK	TROUT CK	WHETSTONE CK	YOAST GULCH	TRIBUTARIES-TROUT CK	TRIBUTARIES-TROUT CK	WOLFCK	TROUT CK	TROUT CK	TROUT CK	TROUT CK	MIDDLE CK	FISH CK	TEMPLE GULCH	MIDDLE CK	MIDDLE CK	FOIDEL CK	GRASSY CK	BROCK GULCH	BROCK GULCH	TRIBUTARIES	DILL GULCH	DRY CK	PURINGTON DRAW	TROUT CK	GRASSY CK	BUCHANAN GULCH	HUTCHINSON DRAW	SAGE CK
GREASEWOOD FLAT RES	JAMES MARION YOAST RES	J C TEMPLE RES 1	MORGAN CREEK RES 1	NOFSTGER RES	NOFSTGER ZEIGLER RES	SAGE CREEK RES	SEATON RES	SHERIFF RES	WHETSTONE RES	WM L YOAST RESERVOIR 1	DEERWOOD POND	HOPES POND	PILOTS POND	HEADQUARTERS LAKE	THAMES LAKE	BAKER LAKE	DUCK POND	HUNTER UPPER RESERVOIR	PEROULIS POND	COTTONWOOD POND	HUNTER MIDDLE RESERVOIR	HUNTER LOWER RESERVOIR	PIT STORAGE POND	PECOCO POND	MIDDLE HSR POND	UPPER HSR POND	THE VILLAGES OF HAYDEN POND NO.	DILL GULCH DAM	RANDALL RESERVOIR	ANDERSON POND	MCCAWLEY POND	EAST OF MINE SHOP IMPND	KOWACH RESERVOIR 1	COZZENS WALROD RESERVOIR	HAYDEN RAW WATER RES
3564	3571	3572	3574	3575	3576	3577	3582	3583	3585	3587	3610	3612	3620	3639	3640	3641	3642	3644	3654	3655	3657	3658	3659	3672	3673	3674	3675	3682	3683	3684	3685	3761	3772	3775	3786
22	22	22	22	22	22	22	22	22	22	25	25	22	22	22	22	25	27	22	27	22	27	22	25	22	22	22	27	22	22	22	22	22	25	22	22

150	~	5	ဇ	*	*	*	2,771**
150	2	5	ဇ	20	260	40	4,175
150	_	2	3	20	260	40	2,980
GRASSY CK	MIDDLE CK	FOIDEL CK	GRASSY CK	SAGE CK	SAGE CK	SAGE CK	TOTAL FOR DISTRICT 57
WADGE PIT RES	3795 FLAATEN RES 1	ENERGY POND 2	GRASSY CR IMPOUNDMENT	HIGH QUALITY POND	INTERMEDIATE QUALITY P	EVAPORATION POND	
3793	3795	3797	3840	4001	4002	4003	
22	22	22	22	22	22	22	

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				AMC	AMOUNT IN STORAGE (AF)	E(AF)
Ø.	₽	RESERVOIR	SOURCE STREAM	MINIMOM	MAXIMUM	END-OF-YEAR
28	1729	POND AT W LINCOLN PARK	TRIBUTARIES	3	ဇ	3
58	3500	ALLEN BASIN RES	MIDDLE HUNT CK	74	1,560	201
58	3501	ALMA M BAER RES	FISH CK	8	8	3
28	3503	BISON PARK RES	LAWSON CK	0	41	0
28	3504	BULL PARK RES 2	WATSON CK	0	33	*
28	3505	BURNT MESA RES	SOUTH HUNT CK	29	52	36
58	3506	CHAPMAN RES	LITTLE OAK CK	51	247	51
58	3508	FISH CREEK RES	MIDDLE FK OF FISH CK	2,994	4,147	3,235
28	3509	FISH LAKE RES 2	WHEELER, LAKE CK	35	35	35
28	3511	GARDNER PARK RESERVOIR	GARDNER PARK CK	417	629	417
28	3512	HAHNS PEAK RES	WILLOW CK	564	009	009
28	3513	HEART LAKE RES	WATSON CK	0	186	0
28	3518	LAKE CREEK RES	WHEELER, LAKE CK	292	292	292
28	3519	LAKE WINDEMERE RES	DE CORA GULCH	30	80	65
28	3520	LEE RESERVOIR	CHIMNEY CK OR S FK	5	20	5
58	3521	LESTER CK RESERVOIR	LESTER CK	5,200	5,780	5,200
58	3522	LONG LAKE RES	SOUTH FK OF FISH CK	32	338	89
28	3525	MCCHIVVIS RES	WATSON CK	0	114	14
28	3528	MOORE PARK RES	MOORE PARK CK	21	21	21
28	3530	OAK CREEK RES	OAK CK	2	2	2
28	3532	RAMS HORN RES	DOMECK	122	122	122
28	3535	SANDELIN RES 2	BIG CK	7	7	7
28	3539	SIMON RES 1	MIDDLE HUNT CK	62	484	97
28	3540	STILLWATER RES 1	BEAR RIVER	1,423	3,827	1,423

3541	STUCKEY DIST RES	SPRING CK	0	0	0
3544	TRULL CR RES	TRULL CK	0	149	5
3545	BEAR LAKE	BEAR RIVER	620	620	620
3546	WHEELER RES	WHEELER, LAKE CK	37	37	37
3547	WHITELEY NELSON RES	WILSON CK	107	314	107
3551	DEER PARK POND 3	WILLEY CK	8	1	თ
3560	MAPHIS POND	MILL CK OF WILLOW CK	10	12	10
3561	CHARLIES POND	TRIBUTARIES-ELK R	8	4	ဧ
3564	OVERMAN RESERVOIR	TRIBUTARIES	0	20	0
3569	FOLLY POND	OAK CK	36	36	36
3571	MYSTIC RESERVOIR 2	TRULL CK	8	8	8
3585	KENYON FISH POND	TRIBUTARIES-ELK R	9	9	9
3586	FAIT RESERVOIR	RENFROCK	4	4	4
3587	UPPER SPRING CK RES	SPRING CK	15	15	15
3596	LODWICK POND	FISH CK	13	13	13
3599	VALENTINE POND	FISH CK	2	2	2
3603	CHAPMAN POND	TRIBUTARIES-ELK R	3	7	က
3609	WILDFLOWER POND	MILL CK OF WILLOW CK	တ	10	10
3629	TARZIAN RES 1	FAWN CK	3	9	က
3631	LAKE CATAMOUNT	YAMPA RIVER	3,258	8,380	7,597
3635	ROSSI RESERVOIR 1	MIDDLE HUNT CK	5	10	10
3644	HOLLINGWORTH FISH POND 2	SODACK	0	0	0
3684	BRENDAN'S POND	FARNESWORTH CK	•	T	•
3685	CINDY'S POND	FARNESWORTH CK	0	0	0
3687	PETER'S POND	FARNESWORTH CK	0	0	0
3689	DURYEA DAM	TRIBUTARIES-ELK R	9	8	9
3708	MCGILL POND	BUTCHERKNIFE CK	0	0	0
3709	STEAMBOAT GC POND 2	YAMPA RIVER	2	2	2
3710	STEAMBOAT GC POND 3	YAMPA RIVER	0	0	0
3716	DITCH CREEK RESERVOIR #1	BIG CK	4	4	4
3717	DITCH CREEK RESERVOIR #2	BIG CK	-	-	*
3724	BRUMBACK POND	OAK CK	20	23	23
3725	SLATE CREEK DAM	SLATE CK	80	တ	တ
3732	COLEMAN POND	FARNESWORTH CK	ဇ	က	က
3735	M&M POND	SMITH CK	3	က	က
3759	SANDELIN RES 3	BIG OK	ഹ	9	9

0	74	9	8	~	23,200	2	22	81	5	0	0	ω	9	31,245	4,128	25	10	*	32	~	0	3	79,322**
58	74	9	ဇ	~	26,000	2	23	81	5	0	0	ω	80	33,130	9,754	31	10	40	32	χ-	0	ဇ	97,626
0	70	9	2	0	23,200	2	21	81	5	0	0	8	5	28,563	3,238	20	10	29	32	•	0	3	70,870
BEAVER CK OF CHIMNEY CK	MARTIN CK	MORRISON CK	DEEP CK	DEEP CK	WILLOW CK	SODACK	DEER CK	BEAVER CK OF MORRISON CK	REED CK	WILLOW CK	WILLOW CK	CHIMNEY CK	TRIBUTARIES-ELK R	YAMPA RIVER	BEAR RIVER	HENDERSON CK	HOT SPRING CK	TRIBUTARIES	WHEELER, LAKE CK	YAMPA RIVER	BUTCHERKNIFE CK	ELK RIVER	TOTAL FOR DISTRICT 58
CROWNER RESERVOIR	MARTIN RESERVOIR	TILLQUIST LAKE RESERVOIR	HARVEY STOCKWATER POND	HARVEY DEEP CREEK POND	STEAMBOAT LAKE	HOLLINGWORTH FISH POND	UPPER ROBINSON RES	BAR BEE LAKE	ROULETTE POND	SNOWY MNT RANCH POND A	SNOWY MNT RANCH POND B	REED RESERVOIR	GOOF UP PONDS	STAGECOACH RESERVOIR	YAMCOLO RES	HENDERSON RES	MAD RANCH POND	STEAMBOAT WW RECL RES	BROOKIE LAKE	STEAMBOAT GC POND 1	EITELJORG POND	GOTT POND #1	
3767	3770	3771	3779	3780	3787	3788	3825	3826	3866	3867	3868	3940	3943	4213	4240	4362	4366	4376	4420	4442	4446	5102	
58	28	28	58	58	58	58	58	58	28	28	28	28	28	58	28	58	28	58	28	28	28	28	

No end-of-year reading taken.

End-of-year total affected by structures with no end-of-year reading

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WATER DIVERSION SUMMARIES IRRIGATION YEAR 2007

	STR	STRUCTURES REPORTING	ES RI	EPORTI	NG						
WD	With Record Available	No Water Available	No Water Taken	No Info Available	Active Struct. w/No Record	EST. NO. OF VISITS TO DIVERSION STRUCTURES	TOTAL	TOTAL DIVERSIONS TO STORAGE	TOTAL DIVERSIONS TO IRRIGATION	NUMBER OF ACRES IRRIGATED	AVERAGE ACRE- FEET PER ACRE
	; ~	2	3	4	5		AF	AF	AF		
43	704	83	113	8	2149	5,341	704,833	1623	251,467	25,198	86'6
4	244	40	94	11	2952	1,337	144,552	0	115,522	28,993	3.98
47	539	0	20	5	603	3,413	461,517	16,384	416,906	111,840	3.73
54	108	n	18	2	647	099	75,111	235	54,970	13,771	3.99
22	18	_	9	0	400	143	13,987	0	13,979	1,820	7.68
26	69	5	22	11	649	345	12,426	386	9,647	2,257	4.27
25	149	е	79	13	673	475	50,861	217	42,836	9,235	4.64
28	491	12	154	67	1839	3,865	202,015	528	121,397	29,003	4.19
Tota	2,312	156	536	122	8956	15,579	1,665,301	19,373	1,026,724	222,117	4.62

Grouped by ID
 Count of Structures with NUC = B
 Count of Structures with NUC = A+C+D
 Count of Structures with NUC = E+F
 Count of Diversion Structures with CIU = U

WATER DIVERSIONS TO VARIOUS USES IRRIGATION YEAR 2007 (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	5,833	0	0	0	0	0	5,833
TRANSBASIN OUT	0	0	0	0	0	0	0	1,773	1,773
MUNICIPAL	6,111	2,103	169	0	0	0	361	4,098	12,842
COMMERCIAL	232	40	1	0	0	188	0	13	473
INDUSTRIAL	3,010	16,216	1,186	0	0	0	3,314	0	23,725
RECREATION	1,991	0	0	0	0	0	0	4,532	6,524
FISHERY	41,720	06	325	10,831	0	841	618	4,975	59,399
DOMESTIC & HOUSEHOLD	1,055	73	0	22	0	70	22	629	1,920
LIVESTOCK	12,128	179	6,487	809	6	121	2,867	8,831	31,228
AUGMENTATION	184	0	0	0	0	0	0	0	184
EVAPORATION	1,644	0	0	0	0	0	127	81	1,852
GEOTHERMAL	0	0	0	0	0	0	0	0	0
SNOWMAKING	0	0	0	0	0	0	0	365	365
MINIMUM STREAMFLOW	0	0	0	0	0	0	0	2,120	2,120
POWER GENERATION	383,988	2,821	0	0	0	0	0	44,000	430,809
WILDLIFE	0	0	9	0	0	1,173	17	0	1,196
RECHARGE	0	0	0	0	0	0	0	683	683
ALL BENEFICIAL USES	0	0	0	0	0	0	0	4,393	4,393
TOTALS	452,063	21,522	14,007	11,461	6	2,393	7,326	76,543	585,324

TRANSMOUNTAIN DIVERSION SUMMARY - OUTFLOWS IRRIGATION YEAR 2007

			SOURCE						~	RECIPIENT
				10-YI	2 AVG	CURRE	10-YR AVG CURRENT YEAR			
WD	ID	NAME	STREAM	AF	DAYS	AF	DAYS WD	WD	₽	STREAM
47		4602 Cameron Pass Ditch	Michigan River	98.8	28	94.7	49	3		Poudre River
47	4603	4603 Michigan Ditch	Michigan River	4355	328	5739	365	8		Poudre River
58	4630	4630 Dome Creek Ditch	Dome Creek	127	29	45.5	43	50		Egeria Creek
58	4684	4684 Sarvis Ditch	Sarvis Creek	535	94		1	53		Muddy Creek
58	4685	4685 Stillwater Ditch	Bear River	2144	109	1728		119 53	, <u> </u>	Egeria Creek

NO TRANSMOUNTAIN DIVERSION INFLOWS

Appendix B

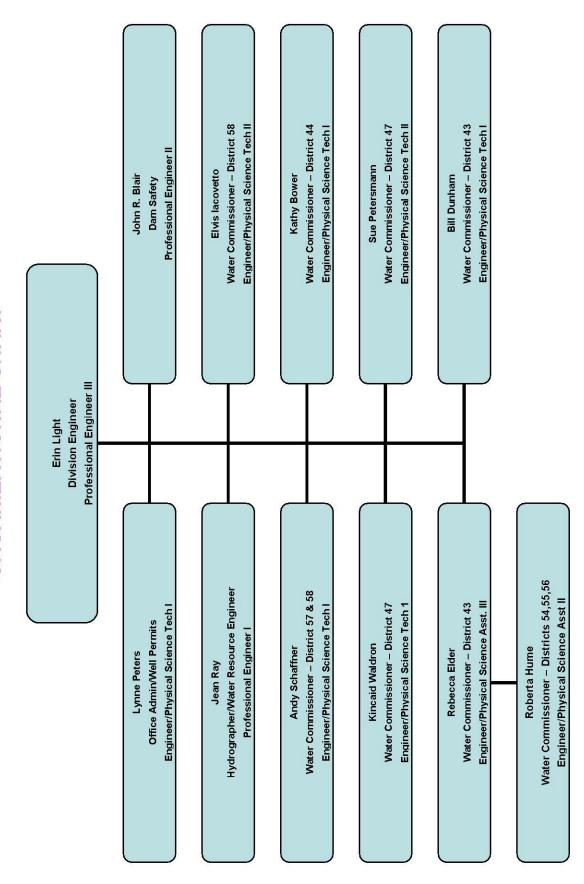
RIVER CALLS - IRRIGATION YEAR 2007

WD 4300701	STREAM PICEANCE CK	CALLING STRUCTURE HOME DITCH	FIRST 2007-05-27 08:00	<u>LAST</u> 2007-11-12 08:00	ADMIN NO 12549.00000
4300815	PICEANCE CK	METZ & REIGAN DITCH	2007-05-27 08:00	2007-08-04 08:00	12930.00000
4300816	PICEANCE CK	METZ DITCH	2007-05-27 12:00	2007-08-04 08:00	12755.00000
4300923	PICEANCE CK	SCHUTTE DITCH	2007-05-27 08:00	2007-11-12 08:00	12875.00000
4300948	PICEANCE CK	SQUARE S CONS D SYS	2007-06-01 12:00	2007-07-11 08:00	13509.00000
4300948	PICEANCE CK	SQUARE S CONS D SYS	2007-06-01 12:00	2007-07-11 08:00	12756.00000
4300948	PICEANCE CK	SQUARE S CONS D SYS	2007-06-01 12:00	2007-07-11 08:00	13270.00000
4300948	PICEANCE CK	SQUARE S CONS D SYS	2007-06-01 12:00	2007-07-11 08:00	13274.00000
4300948	PICEANCE CK	SQUARE S CONS D SYS	2007-07-24 08:00	2007-10-05 08:00	13509.00000
4300948	PICEANCE CK	SQUARE S CONS D SYS	2007-07-24 08:00	2007-10-05 08:00	12756.00000
4300948	PICEANCE CK	SQUARE S CONS D SYS	2007-07-24 08:00	2007-10-05 08:00	13270.00000
4300948	PICEANCE CK	SQUARE S CONS D SYS	2007-05-27 08:00	2007-10-05 08:00	13274.00000
4400511	FORTIFICATION CK	WISCONSIN DITCH	2007-06-24 17:00	2007-07-06 12:00	14019.00000
4400590	MORAPOS CK	DEER CK & MORAPOS D	2007-05-29 12:00	2007-06-25 08:00	19250.17055
4400591	DEER CK	DEER CK DITCH	2007-06-01 12:00	2007-07-15 08:00	14020.00000
4400688	LITTLE BEAR CK	LITTLE BEAR DITCH	2007-05-24 12:00	2007-10-01 08:00	13797.00000
4400814	DEER CK	HIGHLINE DITCH	2007-06-01 12:00	2007-07-15 08:00	19250.17288
4700578	MICHIGAN RIVER	CURTIN DITCH	2007-04-25 09:06	2007-04-29 10:00	16571.00000
4700578	MICHIGAN RIVER	CURTIN DITCH	2007-04-25 09:14	2007-04-29 10:00	17667.00000
4700591	LIL WILLOW AKA ROCK CK	DONELSON DITCH	2007-07-05 12:01	2007-07-17 07:00	12908.00000
4700615	ILLINOIS RIVER	EVERHARD BALDWIN DITCH	2007-06-23 08:00	2007-07-10 07:00	14762.00000
4700670	ILLINOIS RIVER	HOME DITCH NO 2	2007-07-10 07:00	2007-08-06 09:00	12945.00000
4700710	LIL WILLOW AKA ROCK CK	KERR DITCH	2007-06-26 07:00	2007-07-05 12:00	11822.00000
4700710	LIL WILLOW AKA ROCK CK	KERR DITCH	2007-06-26 07:01	2007-07-05 12:00	12908.00000
4700710	LIL WILLOW AKA ROCK CK	KERR DITCH	2007-06-26 07:02	2007-07-05 12:00	13634.00000
4700788	SPRING CK	NELLIE E DITCH	2007-06-28 07:41	2007-09-07 07:30	23016.19722
4700792	NEWCOMB CK	NEWCOMB DITCH	2007-06-21 12:00	2007-07-15 12:00	12174.00000
4700792	NEWCOMB CK	NEWCOMB DITCH	2007-06-21 12:00	2007-07-15 12:00	12773.00000
4700792	NEWCOMB CK	NEWCOMB DITCH	2007-06-21 12:00	2007-07-15 12:00	14031.00000
4700896	NEWCOMB CK	STAPLES DITCH NO 2	2007-07-15 12:00	2007-10-20 08:00	14762.00000

POT CK	MILES DITCH	2007-05-11 16:04	2007-05-30 07:30	31579.23259
	DAVID M CHAPMAN DITCH 2	2007-07-06 11:01	2007-08-01 16:00	22444.22035
	DAVID M CHAPMAN DITCH 2	2007-07-06 11:04	2007-08-01 16:00	39925.30102
	ORNO DITCH	2007-07-06 11:00	2007-08-01 16:00	14011.00000
	ORNO DITCH	2007-07-06 11:02	2007-08-01 16:00	23544.21352
	SLOUGH DITCH	2007-07-06 11:03	2007-08-01 16:00	23544.22039
SOUTH HUNT CK	LAFON DITCH	2007-05-25 12:00	2007-10-01 08:00	18529.13985
	NICKELL DITCH	2007-05-16 12:00	2007-10-01 08:00	12232.00000
MIDDLE HUNT CK	SIMON DITCH	2007-05-11 12:00	2007-10-09 08:00	14032.00000
	SODA CREEK DITCH	2007-09-04 08:00	2007-10-01 08:00	13675.00000
	WILLOW CK MSF-M2	2007-07-06 10:30	2007-09-12 12:00	46649.00000

Appendix C

DIVISION 6 ORGANIZATIONAL CHART



Appendix D

2007 OFFICE ADMINISTRATION and WORKLOAD MEASURES

Professional and Technical Staff (FTE)	4.0
Water Commissioners Assigned (FTE)	6.75
Wells Permitted	197
Water Court Appearances	0
Division Engineer Contacts with Water Referee	40
Division Engineer Contacts with Attorneys	150
Meetings with Water Users	250
Meetings to Resolve Water Related Disputes	2
Contacts to Give Public Assistance	8500