

# DIVISION FIVE



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## Rub a dub dub, there's no water for the hot tub in Summit County

*A crackdown on those who have indoor-use-only wells brings out the creativity in homeowners.*

By Steve Lipsher *The Denver Post*

**BRECKENRIDGE**» Sandy Kucharczyk had no problem getting a county permit to install a hot tub outside her ski-town home.

Filling it was another story. Kucharczyk, like hundreds of other Summit County residents, had waded

into a full-blown water war. She was told her well water was for indoor use only — no car washing, no lawn sprinklers and no hot tub.

"We decided to go to Wal-Mart and just buy the water," Kucharczyk said. She and her husband lugged almost 200 one-gallon jugs home.

The increasing demand for a limited amount of water in the state has prompted crackdowns on illegal use by everyone from second-home owners in resort areas to ranchers on the Eastern Plains.

"If you're using water outside the

**WATER** » 26A



# DIVISION 5 WATER RESOURCES

## 2007 ANNUAL REPORT

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## **ANNUAL REPORT WATER DIVISION 5 2007 IRRIGATION YEAR**

Water Division 5 is the Colorado River main stem. The Division covers an area of approximately 9,930 square miles and is comprised of all tributaries to the Colorado River in the state of Colorado, excluding the Gunnison River Basin. The average annual precipitation in Water Division 5 varies from less than 9 inches in the Grand Valley to over 50 inches in a few remote areas of the Elk Mountains, Gore Range, and Northern Sawatch Range. The average annual natural flow of the Colorado River above Grand Junction is approximately 3.6M AF/YR. The two primary uses of this water for average year conditions are approximately 540,000 AF/YR consumed for irrigation on 270,000 acres (recent trends are well below these long-term averages), and approximately 560,000 AF/YR of Transmountain diversions to Eastern Colorado. Other major uses in order of consumption include evaporation, municipal and domestic, and stock watering. The greatest diversion of water is for hydroelectric power generation with an average year yield of 2.5M AF/YR.

The 2007 irrigation year continued a 25-year trend with the basin-wide reduction in irrigated acres. This trend is the result of continued urbanization of agricultural land. The peak of irrigated acres in Water Division 5 occurred in the mid-1970's. The 1980's began slightly off the peak with 360,000 acres irrigated, which

declined to 295,000 acres by the end of the 1990's. For 2002 and 2003 dramatic drought-related declines occurred with only 250,000 and 254,000 acres irrigated. However, irrigated land temporarily taken out of production due to drought shortages appears to have been much less significant than irrigated acreage permanently taken out of production from 2001 through 2006 for conversion of agricultural lands to municipal land. For Irrigation Year 2007, there were 5,327,082 AF of total diversions. Of that, 380,604 AF went to storage and 1,689,927 went to irrigation. (District 36 statistics are not included at the time of this report). Except for Granby and Wolford Reservoirs, all the major reservoirs had more minimal storage in 2007 than in 2006. IY 2007 minimum storage content was 815,625 AF while IY 2006 minimum storage content was 797,897 AF. As of April 1, 2008, the actual storage content of the major reservoirs was 803,707 AF (major reservoirs include Granby, Dillon, Green Mountain, Ruedi, Williams Fork, Wolford, Homestake and Vega). There were 224,534 acres reported as irrigated and the Division statistic was 7.53 average acre foot per irrigated acre. Division 5 has historically shown well over 200,000 acres of irrigated lands. Irrigation diversions were down in 2007 to 1,689,927 AF from 1,759,199 AF in 2006 due to reduced demands and reduced supplies.

### **I. 2007 WATER YEAR ACCOMPLISHMENTS AND EVENTS**

#### **A. WATER ADMINISTRATION AND RUNOFF CONDITIONS**

##### **• Runoff Conditions**

The 2007 irrigation season began with brief periods of heavy snow accumulations with lengthy periods of inactivity. The result by the end of December 2006 was near average snow pack. November and December produced on average 32% of the annual snow pack accumulation, and on January 1, 2007, measurements show

the basin was 102% of average overall. With reservoir storage at 101% of normal, runoff was forecast to range from 100% to 107% of average for all sub-basins, except Muddy Creek, which had a runoff forecast of 83% largely due to low reservoir storage in Wolford Mountain Reservoir. This slightly positive beginning deteriorated with an exceedingly dry January, slightly above average February, and a very dry

March. An average April and below average May left runoff conditions. With the majority of the snowmelt runoff done by June 1, 2007, April through July runoff was expected to be slightly below average on the Blue River and well below average to below average elsewhere. Dillon Reservoir inflow for the April-July period was expected to be 99% of normal, which was the healthiest basin on the Colorado River. However, the rest fared much worse with 74% for the Colorado River at Cameo and 50% for Wolford Mountain Reservoir inflow.

At the end of the 2007 reservoir storage season all the major reservoirs in Water Division 5 had filled with the exception of Granby Reservoir. See [Appendix D](#). Storage at Granby Reservoir peaked at 434,832 AF, which is 108,974 AF below the spillway and nearly identical to the maximum storage in 2006.

As usual, the 2006-2007 winter river flows were influenced by the normal Shoshone and Green Mountain power operations. As has been customary, Shoshone reduced the winter call to 700 CFS to perform maintenance on one of the two units. Both units were back on line on January 17<sup>th</sup> demanding a full 1250 CFS, however, on February 9<sup>th</sup> the power plant returned to a 700 CFS demand, and river flows exceeded this demand. Without a Shoshone call from early February through spring run-off, replacement releases by reservoirs was unnecessary, improving the storage supplies in the basin above Glenwood Canyon. Water supply in the basin from the excellent snow melt runoff was unfortunately aided on June 20, 2007, when one of two penstocks at the Shoshone Power Plant blew out, damaging the entire facility (see more discussion on mitigating the impacts below). As a result a call from the power plant would not be exercised for the remainder of the irrigation year and well into the next. This extended to the storage season and allowed diversions that normally would be curtailed or replaced to remain in priority—further improving basin wide storage. An indication of the healthy water supply is

that the Cameo Call was not needed until August 13, 2007, even though the Shoshone Power Plant was off-line.

- **Water Administration**

The 2007 Irrigation Year began on November 1, 2006 with the Shoshone call, which continued through January 5, 2008. Winter maintenance at Shoshone reduced the call to 700 CFS on January 2<sup>nd</sup>; however the reduced call was a very brief 3 days. Then from January 5<sup>th</sup> through January 16<sup>th</sup> the call was removed entirely. On January 17, 2007 the power plant put both units back on line and placed a call for the 1250 CFS senior right. However, on February 9<sup>th</sup> the Shoshone Power Plant returned to operating one unit. With flows at the Colorado River at Dotsero in excess of the 700 CFS needed to satisfy one unit, the call was removed. The power plant did not return to full operation until spring runoff was in full swing. With the one unit down for maintenance and river flow sufficient for the other unit, the call was removed January 5<sup>th</sup>, but re-implemented on January 17<sup>th</sup>. Administration of the full power call continued only through February 9<sup>th</sup>. However, flows did not exceed the power plant capacity until March 18<sup>th</sup>. The call was removed during this period for various maintenance items. River flows at Dotsero remained above the power plant capacity for the remainder of the spring and early summer. On June 20<sup>th</sup> the power plant experienced a major failure (discussed below), and a call by the Shoshone Power Plant would not be implemented for the remainder of 2007.

The Grand Valley irrigators (and the Cameo power plant) did not place a call until August 13, 2007. The call was removed for 7 days at the end of August and 17 days at the end of September through early October, and then permanently removed for the year on October 17, 2007. Operations were normal and a full supply of water was available to the Grand Valley Water Users Association, the Grand Valley Irrigation Canal, and the Orchard Mesa

Irrigation Company. [See Appendix C](#) for summary of main stem calls.

Green Mountain Reservoir declared start of fill on April 27, 2007 with 69,485 acre-feet in storage. Accounting pursuant to the State Engineers Interim Policy for 2007, [See Appendix A](#), attained a paper fill on May 28, 2007. With a storage deficit of 11,343 acre-feet, Green Mountain continued storing under the policy and on June 5, 2007 eliminated any need to provide a substitution for this deficit, and then on June 18<sup>th</sup> achieved a physical fill. Conservative releases at Green Mountain were made through August. On August 31<sup>st</sup> a surplus in the HUP was declared. Surplus releases continued through October 28<sup>th</sup>. The 2007 irrigation season ended with over 27,000 acre-feet in the HUP. [See Appendix B](#).

The Green Mountain Reservoir Power Plant was on line and operational the entire 2006-2007 irrigation year. A call from the power plant was administered November 1, 2006 through April 26, 2007. With the declaration of start of fill the power call at Green Mountain was dropped for the storage call. A free river was declared on the Blue River through the storage season. The power on the Blue returned from June 5 through the 9<sup>th</sup>, but was dropped for the junior refill right in the reservoir. From June 19<sup>th</sup> through July 1<sup>st</sup> the Blue River had free river conditions with neither a storage nor a power call. On July 2<sup>nd</sup> the power call was re-implemented for the remainder of the irrigation year.

Releases during 2007 for the endangered fish in the 15 Mile Reach were near normal, though less than deliveries for 2006. The endangered fish include the Colorado Pike Minnow, Humpback Chub, Bonytail Chub, and Razorback Sucker. The 15 Mile Reach is on the main stem and extends from Palisade below the diversion dam for the Grand Valley Canal to the confluence with the Gunnison. The Managing Entities declared a surplus to the Green Mountain HUP on

August 31<sup>st</sup>. This declaration allows surplus water from Green Mountain's 66,000 AF HUP to be made available to 15 Mile Reach either through the Palisade Power plant tailrace or via a municipal/recreational contract. Water is also available via contracts from Williams Fork, Wolford, and Ruedi Reservoirs. All reservoirs with endangered fish pools filled, as did Green Mountain, which assured flexibility in managing the accounts and the likelihood that target flows would reflect at least average year conditions.

The U. S. Fish and Wildlife Service set the target flows for the Colorado River at Palisade gage at 1050 CFS on June 27<sup>th</sup>. This is a compromise mid-way between the dry year flow recommendation of 810 CFS and the average year flow of 1240 CFS. By August 1<sup>st</sup> the target flows were revised down to the dry years flow target of 810 CFS, and slightly increased to 860 CFS on September 5<sup>th</sup>. By early October increased precipitation contributed to above average natural flow and a growing surplus in Green Mountain's Historic Users Pool ("HUP"). Together, with sufficient storage in various Fish and Wildlife pools reset the target flow for the Palisade gage upward to 1240 CFS for the remainder of the irrigation season. Flow at this gage generally ran above targets except for 6 days in early August, 5 days in late August, and one day in early September. The worst day was August 24<sup>th</sup> when 640 CFS was recorded and target was 810 CFS. This year, 56,251 AF was released from the reservoirs for the benefit of these fish, and of that amount, 50,983 AF was delivered to the 15 Mile Reach for flow enhancement. The reservoir releases were supplemented with water from the Grand Valley Management Operations of the Palisade Pipeline. Total deliveries from the Palisade Pipeline totaled 8,944 AF [See Appendix B](#) for details on the release and delivery schedule.

- **Shoshone Penstock Failure**



On June 20, 2007 one of two penstocks at the Shoshone Power Plant ruptured, inundating the facility with water and tons of rock and debris. Without a call at Shoshone, concerns immediately focused on impact to irrigation, the rafting industry in the Kremmling, and Glenwood Springs areas, and other recreation. Additionally, low flows in the Colorado River raised concerns of water quality for the towns of Silt, Rifle, and Clifton, as well as the Orchard and Vineyards in the Grand Valley. The Grand Valley Entities declared the Orchard Mesa Check Case settlement inoperable. With the Check Case inoperable, a surplus in the HUP could not be declared. Proposals were offered to mitigate the potential reduced flows at above the power plant due to the windfall junior users would receive from the removal of this senior call. The Grand Valley Entities were willing to consider withdrawal of their declaration of an inoperable Check Case should the mitigation efforts be fruitful. In mid-July, while solutions were being developed and debated, the USBR committed to make discretionary power releases with 10K AF of Green Mountain Reservoir water in the contract pool that is not under contract, and an additional 2K AF of water in storage that is not a part of the reservoir's firm yield. The issues centered on re-coloring water stored in a previous year, making releases for a decreed power use that could not be shepherded to the 15 mile reach without benefiting a water user that was not

participating in the mitigation, and making a delivery to an unadjudicated use that would not impact the storable inflow in 2008 or future years. The solution was to book into an unadjudicated storage account each acre-foot stored or spilled after each reservoir paper filled, displacing the decreed storage in the reservoir. The unadjudicated storage would be for the purposes of the endangered fish. Once stored, releases could be shepherded past the critical rafting areas and the municipal intakes with water quality concerns to the 15-mile reach below Palisade. Further, conditions on the accounting of the storage for fish was limited to storage that occurred only after the first meeting to discuss the mitigation. To round out the mitigation supply, water diverted by Windy Gap, which could be used by a west slope entity, was delivered to the Grand Valley Water Users Association via a one year lease contract. Because Williams Fork Reservoir did not spill after the start date, the plan would leave Denver Water with a risk that they would need to replace storage in 2008, committed to this plan in 2007, with an unadjudicated water right. Ultimately due to a good water supply in late summer, Denver would need to make operational releases for maintenance. Those releases were timed for the purposes of this agreement and the risk was abated. The plan committed a total of 20,500 AF with 12,000 AF from Green Mountain, 5,000 AF from Williams Fork, 2,500 AF from Wolford and 1,000 AF from Windy Gap. The final agreement targeted flow rates of 1,200 CFS in Glenwood Canyon through Labor Day for the rafting and recreation industries, and 810 CFS in the 15-Mile Endangered Fish Critical Reach in the Grand Valley through October. By late August 2007, Xcel Energy, operator of the plant, announced its plan to repair the plant and bring it on line in the spring of 2008.

- **Grand County Concerns of Low Flows in Colorado River**

To avoid a recurrence of the events of September 2006, the committee established in the fall of 2006 began meeting in May 2007 to develop a plan to supplement flows through storage, forgone diversions, pre-positioning of storage, and management or retiming of diversions through the use of alternate supplies. At issue is prevention of a precipitous drop in flows on the Colorado River between Kremmling and Windy Gap on or around September 1<sup>st</sup>. The concern not only includes the difficulty irrigators have getting water out of the river at these reduced flows, but also the impact increases in water temperatures have on the fishery and fishing leases. The causes include: the reduction of Granby Reservoir bypass requirements from 75 CFS to 20 CFS on September 1<sup>st</sup>, following hay operations farmers turn on ditches to irrigate fields for fall pasture (historically this practice did not occur), natural base flow reductions, new uses, golf course irrigation (tends to continue later in year than historic irrigation), operation of exchanges in the Fraser River, and the use of Dillon Reservoir in lieu of Williams Fork Reservoir for Moffat Tunnel replacement. In 2007, the solution included pre-releases of 5,000 AF from Green Mountain Reservoir for Williams Fork Reservoir, accounting for an owed to Green Mountain pool in Williams Fork that would be used for late irrigation season HUP beneficiaries. The 1000 AF in Windy Gap that was planned for mitigation of the Shoshone Penstock failure and the Middle Park contract pool were both released from Granby Reservoir in September. Also, 10,825 releases from Woford and Williams Fork were scheduled to maximize their benefit to this reach of river. Grand County is currently working on the "Grand County Water Management Plan." The plan will study and propose solutions to this problem, as well as many others in the County.

- **Coordinated Reservoir Operations ("CROS")**

Coordinated Reservoir Operations (CROS) is under the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River. The objective of the program is to coordinate operations of bypasses and releases from various reservoirs to enhance habitat in the 15 Mile Reach of the Colorado River below the Grand Valley Irrigation Canal for the benefit of endangered fish species. The plan bypasses storable inflow to increase the maximum peak at the Colorado River near Palisade gage. Cooperators limit such bypasses to amounts that would spill in the current fill season after the Cameo gage peaks. Peak flows are considered essential to many life stages of the fish, and a key element to the recovery program. The minimum projected peak flow to trigger operation is 12,900 CFS in the 15 Mile Reach, determined to be the minimum needed to provide habitat maintenance and enhancement without exceeding flows above 25,600 CFS at Palisade, which is considered to be a stage where flood damage begins to occur in the Grand Valley.

A committee of several governmental agencies and water user groups oversees the Coordinated Reservoir Operations. Division 5 staff serves on the committee along with representatives of the U. S. Fish and Wildlife Service , National Weather Service, Reclamation, Colorado River Water Conservation District, Denver Water, Grand Valley Water Users Association , City of Colorado Springs, Orchard Mesa Irrigation District, and Grand Valley Irrigation Company. Division 5 staff is charged with the responsibility to determine in consultation with Fish and Wildlife when it is appropriate to begin and end the releases, and to maintain accounting records of the operation.

For 2007, the eleventh anniversary year of the program, planning was kicked-off on April 19<sup>th</sup>. Storage, snow pack, and run-off forecasts led to optimism that CROS would be implemented. On June 7<sup>th</sup> the operations were officially cancelled. The participating reservoirs all filled and spilled, but flows at Cameo were projected to be below the 12,900 CFS threshold required to provide any benefit to the fish habitat.

- **Coordinated Facilities Operations (“CFOPS”)**

CFOPS is Similar to CROS. The differences are CFOPS is not voluntary and considers re-operation that does not impact the long term yield of the reservoirs as opposed to the current storage season yield. The CFOPS program was not implemented in 2007.

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## **B. DAM SAFETY**

The total number of inspections performed in Division 5 in 2007 was 155. The breakdown of the inspections performed is as follows:

88 inspections performed by John G. Blair, Division 5 (Glenwood Springs) Dam Safety Engineer:

- 21 High hazard regular
- 24 Significant hazard regular
- 17 Low hazard regular
- 1 No public hazard regular
- 12 Follow-up
- 12 Construction
- 1 Outlet

44 Inspections performed by Garrett Jackson, Division 5 (Grand Junction) Dam Safety Engineer:

- 9 High hazard regular
- 2 Significant hazard regular
- 0 Significant hazard interim
- 0 Low hazard regular
- 0 No public hazard regular
- 7 Follow-up
- 26 Construction
- 0 Outlet

20 Inspections performed by John R. Blair, Division 6 Dam Safety Engineer:

- 2 High hazard regular
- 8 Significant hazard regular
- 0 Significant hazard interim
- 5 Low hazard regular
- 0 No public hazard regular
- 0 Follow-up
- 1 Construction
- 0 Outlet

A Division 2 dam safety engineer performed 1 high hazard regular inspection of a Colorado Springs-owned dam in District 36 and the Denver Water Department inspected its usual 2 dams in Districts 36 and 51.

The Glenwood Springs dam safety engineer also completed 9 hazard evaluations, 15 hydrology studies (which included a detailed QAQC of the new EPAT version), and 6 other technical evaluations.

- **Dam Safety Incidents and Restrictions Imposed – 3 Restrictions**

1. **PDC POND** – *a potential significant hazard dam located in District 39.* This dam was illegally and poorly built by a gas well company for fresh water. A zero storage restriction was imposed resulting in a lost volume of about 12 AF.
2. **TRAIL RIDGE POND (AKA WILLIAMS FRESH WATER POND)** – *a low hazard dam located in District 39.* This dam was illegally and poorly built by a gas well company for fresh water. A zero storage restriction was imposed resulting in a lost volume of about 6 AF.
3. **POLARIS RESERVOIR** – *District 38.* The restriction was increased to a gage height of 4 due to a continued deterioration in the dam.



This resulted in a restriction of about 700 AF.

- **Rehabilitations and Restrictions Lifted or Avoided**

1. **RAGEL POND** – a NPH dam in District 45. The restriction placed on this dam was lifted because of its low public safety treat.
2. **FORIER #3** – a NPH dam in District 37. The restriction placed on this dam was lifted because of its low public safety treat.
3. **CURRIER #2** – a low hazard dam in District 72. Restriction was lifted because of improvements made to the dam alleviating the spillway and drainage problems.
4. **NEWTON GULCH RESERVOIR** – a significant hazard dam located in District 53. A sinkhole contributing to historic seepage problems was repaired. As a result, the storage restriction was relaxed to allow for partial storage during the irrigation season and to allow for monitoring the adequacy of the repair work.
5. **SCHOLL RESERVOIR** – a significant hazard dam in District 51. The repair of several sinkholes was performed this year, which may alleviate the past seepage problems. It appears that the restriction to gage 18 will be lifted, but this has not occurred yet.
6. **SAWMILL RESERVOIR** – a significant hazard dam in District 36. Completion of the downstream slope and outlet occurred for the long term safety of the dam. Some seepage issues developed with the 1<sup>st</sup> fill but these were adequately monitored and it is believed that they were only a result of first fill issues.

7. **LAKE CHRISTINE** – a significant hazard dam in District 38. This dam was completely rehabilitated this year making it like a new dam.
8. **RCC DAM** – a low hazard dam in District 39. A sinkhole was repaired and the reservoir basin lined.
9. **BARTON PORTER** – a high hazard dam in District 45. Seepage developed from the right abutment area. This was repaired.
10. **MCELROY DAM** – a low hazard dam in District 50 that suffered an outlet failure in 2006. it was partially finished in 2007.
11. **LEWIS DAM** – a low hazard dam in District 50. It was rehabilitated.
12. **CRAVEN DAM** – a low hazard dam in District 50. It was partially repaired and lowered to a non-jurisdictional size.
13. **PALISADE CABIN** – a significant hazard dam in District 72. A rehabilitation of the embankment along the outlet pipe was partially rehabilitated.

- **Enlargements and New Dams:**

1. **VAIL SNOWMAKING POND** – a low hazard dam in District 37. This is a new snowmaking pond, which was completed this year.
2. **GRAND COUNTY WATER & SANITATION DISTRICT DAMS** – District 51. This project is being built to convert three old wastewater treatment lagoons into two augmentation ponds along the Fraser River. It was substantially completed in 2007.
3. **JERRY CREEK #1** – A high hazard dam in District 72. It is being enlarged to incorporate the reservoir of Jerry Creek #2. It is partially completed.

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**C. GROUNDWATER AND WELL PERMITTING**

Colorado's slowing economy could be seen during the year 2007 in regards to the total number of permit applications received and the total number of permits issued by the Division of Water Resources. However, Division 5 staff kept busy in the areas of ground water and well permitting along with general research regarding water well ownership for real estate transactions and general well permitting issues.

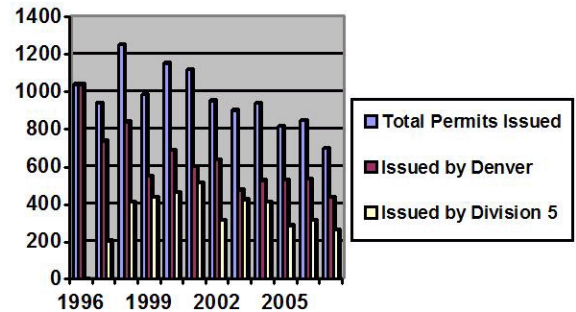
During calendar year 2007, a total of **698 permits were approved** for Division 5, a decrease of **17.6% from 2006**. Additionally, ground water forms, such as Change in Ownership and certain types of permits not reviewed by the Division office, were preprocessed and forwarded to Denver for review.

A breakdown of permits processed includes:

Exempt permits	400
Non-exempt permits	223
Geothermal permits (excluded from total count)	1
Exempt replacements	66
Non-exempt replacements	9
Late registrations (included in exempt count)	9

With the decentralized well permitting process in place, a total of **262 permits** (208 exempt and 54 non-exempt) **or 37.5% were issued at the Division level**. Also, certain types of non-exempt well permit applications, change in ownership applications, and well location amendment requests are still preprocessed and forwarded to the Denver office.

The following graph demonstrates Water Division 5 well permitting activity 1996-2007.



No major water well related bills were approved during the 2007 legislative session affecting ground water in Division 5.

**D. WELL INSPECTION PROGRAM**

The Well Inspection Program has seen a significant decrease in Well Permits for the 2007 calendar year. As a result of the reduction in Well Permit Applications, 30 % from 2006, funding for the program has been reduced (since it is a cash funded program). Doug Stephenson, the Well Inspector for Division 5 of Water Resources,

accepted the vacant well inspection position and transferred to the Denver office in January 2008. His position in Glenwood Springs will remain vacant until permit applications increase. Doug is now covering Divisions 1, 2, and any complaints from Divisions 5 & 6 while working out of the Denver office.

## **E. HYDROGRAPHIC PROGRAM**

### **• Hydrographic Staff**

The lead hydrographer in Division 5 is James Kellogg, who also serves as augmentation plan coordinator. The augmentation plan coordinator /hydrographer position is currently at the PE 1 level. Craig Bruner was hired in June 2007 to serve as the Division's full-time hydrographer. This position was recently elevated to the EIT 2 level. Ultimately, this position will return to the PE 1 level.

Both hydrographers operate and maintain gaging stations, perform measurements, and develop streamflow records. Water Commissioners help with various satellite monitoring and gaging station maintenance duties. Commissioners and other staff members occasionally assisted with winter and high water stream flow measurements.

### **• Gaging Stations Operated and Maintained**

Division 5 operated and maintained 38 satellite monitoring stations in Water Year 2007. Streamflow records were published for 14 of the stations. Twenty-four gages were used for water administration and to develop diversion records. Four stations measure transdistrict/transbasin diversions into District 45. Two of the stations are reservoir gages. In addition, there was active monitoring of many of the 102 satellite monitoring stations in Division 5 that are operated by other entities.

### **• Streamflow Gages with Published Records**

In Water Year 2007, Division 5 published streamflow records for 14 of the gaging stations maintained by the hydrographic staff. The records encompassed a full 12-month period, except where otherwise noted.

Eight stations are on the Fryingpan-Arkansas Project. Four of the Fry-Ark

stations (Fryingpan River near Ivanhoe Lake, South Fork of the Fryingpan River, Chapman Gulch, and Ivanhoe Creek) are minimum flow index stations to monitor bypass flow below diversions on the south side of the collection system. A gage on the Fryingpan River near Thomasville is the minimum flow index for the Fryingpan basin, which must be satisfied prior to transmountain diversions. One station on Rocky Fork Creek below Ruedi Dam is used in the determination of released amounts from Ruedi Reservoir. Division 5 cooperates with the National Weather Service to operate the seventh and eighth Fry-Ark stations, which are on the Fryingpan River near Meredith and the North Fork of the Fryingpan River.

Division 5 is paid by the Aspen Consolidated Sanitation District to maintain and operate a gage on the Roaring Fork River below Maroon Creek. The gage is critical for discharge of effluent in compliance with Sanitation District's permit.

Two gaging stations in Summit County, the Blue River at Highway 9 near Breckenridge and the Snake River at Keystone, are minimum flow indexes for the Colorado Water Conservation Board. The Snake River gage operation was October through March. Five cooperators provide funding for the Blue River gage. Vail Associates, Inc. pays for the Snake River gage.

Division 5 took over operation and maintenance of a gaging station on West Divide Creek near Raven prior to Water Year 2006. This gage is important for water administration in District 45. The gage operation and period of record was April through September.

A gage on the Crystal River at the DOW fish hatchery and a station on the Roaring Fork River above the Fryingpan River were installed in WY 2006. The Colorado Water Conservation Board is a cooperator at these sites. The gages were operated April through September

in 2007 and stage-discharge relationships were developed. Streamflow records were published for the first time in WY 2007. Operating agreements are being developed with potential cooperators to fund continued operation and maintenance of the gages.

• **Additional Key Gaging Stations**

Streamflows are measured and recorded on Snowmass Creek below the Snowmass Water & Sanitation District diversion to monitor compliance with the CWCB minimum requirements. Operation of the gage included measurements to assist the CWCB with development of its instream winter water right.

Gages were operated to measure and record flows on the Government Highline Canal, Grand Valley Canal, and Orchard Mesa power canal and develop diversion records. Additional emphasis was placed on discharge measurements at these stations to address problems with ratings and variable shifts.

Additional attention was given to gaging stations on the Colorado River below Granby Reservoir and Willow Creek below Willow Creek Reservoir. Discharge measurements were made to rate these stations.

• **Measurements Made**

In hydrographic Water Year 2007, Division 5 hydrographers made 112 discharge measurements at gaging stations with published streamflow records. Sixty-four of these measurements were at stations that are associated with the Fryingpan-Arkansas Project. An additional 35 measurements were made in canals, ditches, and streams to rate measuring structures/devices and assist with water administration. Two of these were to rate discharge flumes for Leon Lake and

Colby-Horse Park Reservoir on Grand Mesa.

• **Special Projects**

Division 5 came to an agreement with the USBR regarding operation and upgrades of seven gages on the Colorado-Big Thompson System. In WY 2008, DWR will install high data-rate DCP/satellite transmitters at gages on the Colorado River below Granby Reservoir, the Colorado River near Granby, and Willow Creek below Willow Creek Reservoir.

An agreement was made with the National Weather Service to allow DWR to install upgraded measuring equipment and high data-rate DCP/satellite transmitters at gage on the Fryingpan River near Meredith and the North Fork of the Fryingpan River.

An outside cantilever chain weight gage was constructed at the gaging station on West Divide Creek near Raven.

Levels were run to check gage height reference points at 12 stations. Photos and maps were updated for all 14 streamflow gages.

• **Special Projects**

An outside cantilever chain gage will be constructed at the gage on the Roaring Fork River above the Fryingpan near Basalt. Emphasis will be placed on developing the upper end of the rating table.

A weighted-wire gage will be installed on the county road bridge adjacent to the station on the Crystal River at the DOW fish hatchery. Efforts will be made to improve the quality of the streamflow record.

In WY 2008, DWR will install high data-rate DCP/satellite transmitters in five gages in Division 5. The USBR will upgrade four gages on the Colorado-Big Thompson system.



**F. DIVERSION RECORDS**

Paperless diversion records and on-line signing are now the norm. Water commissioners are getting used to critiquing their data on HydroBase rather than reviewing a hard copy of the data. In addition, signing the records is done in five minutes by the “cut and paste” method, also found on line in the HydroBase program. Once a District has signed their records, that District can be published and is available to the public rather than waiting until the entire Division is complete in order to publish.

New entries for 2007 include the Aspen Whitewater course in District 38 which showed a recreation record of almost 49,000 AF. In addition, the Hot Springs Pool in District 52 sent user supplied data for 320 AF of commercial use. Although the gas and oil industry is well established in the lower end of the basin, no significant industrial increases were recorded for those areas.

Records for the CWCB’s minimum stream flow rights are increasing. For 2007, there were three records: 1) on the upper Colorado River between Windy Gap Reservoir and the Williams Fork River, the right for 90 CFS totaled 59,816 AF; 2) the middle reach of the Frying Pan River, which right varies throughout the year, totaled 49,571 AF; and 3) on the Roaring Fork River from Difficult Creek to Maroon Creek for 32 CFS which totaled 21,467 AF.

On a yearly average, the power generated at the Shoshone Hydro

Power Plant in District 53 can be over 750,000 AF. With the outage of the plant in February 2007 due to the failure of the west penstock, the plant generated 385,953 AF. The plant is scheduled to be back on line with both turbines running on April 18, 2008. Other power plants include the Orchard Mesa Power Plant (351,491 AF), the Redlands Power Plant (550,065 AF) and reservoir outflows at Williams Fork (63,998 AF), Dillon, Green Mountain (87,719 AF) and Ruedi (75,232 AF).

Municipal diversions held steady - 67,934 AF in 2007 and 67,773 AF in 2006 while snowmaking has decreased in the past few years from 3,165 AF in 2005 to 1,671 AF in 2007. Transmountain diversions totaled 484,486 AF for the 2007 irrigation year, less than the ten year average of 510,911 AF. Roberts, Homestake, and Alva Adams Tunnels took 50%, 68% and 80% of their 10 year average while Boustead Tunnel, Twin Lakes Tunnel, and the Grand River Ditch took 15%, 25% and 25% respectively, more than their 10 year average.

The amounts for “Other” and “All Beneficial Use” types are consistently decreasing. Through the years the commissioners have defined a clearer picture of detailing the uses to better represent that which is actually occurring in the field.



**G. INFORMATION TECHNOLOGIES**

**PC Status** – This year Alan Martellaro, Brian Epstein, Brian Romig, and Dave Berry were upgraded with new laptop computers. In the future 9 desktop and 4 laptop computers will be replaced (everything greater than 3 years old). All machines are now Windows XP

machines. This year all laptops will be updated to the new encryption software. Division 5 now has two public machines and 3 water commissioner machines (including our Grand Junction satellite office) in order to offer better access and facilitate the move toward digital data

rather than paper. The new HP800PS plotter will allow quality maps to be printed. To that end, worn maps will be replaced. The printer will also be used to move forward on the irrigated acres

project. Presently, all Water Commissioners are equipped with cameras, GPS's, and cell phones.

Owner/Description	PC Type	Type	GPS Make	Camera Make	PDA Make	Cell Phone
Alan Comerer	COMPAQ EVO D510 CMT	Desktop	GPSMAP 76S	KODAK DX3700	N/A	N/A
Alan Martellaro	GATEWAY M465-E	Laptop	N/A	N/A	N/A	VERIZON
Bill Blakeslee	HP D325	Desktop	GPSMAP 76S	DC3800	N/A	CINGULAR
Bill McEwen	GATEWAY E-4610	Desktop	BOTH	KODAK DX4900	N/A	CINGULAR
Bill Thompson	GATEWAY E-4610	Desktop	GPS 12XL	KODAK DX3700	N/A	N/A
Bill Thompson	DELL INSPIRON 3800	Laptop	N/A	N/A	N/A	N/A
Brian Epstein	GATEWAY M465-E	Laptop	GPSMAP 76S	KODAK DC3800	N/A	CINGULAR
Brian Romig	GATEWAY M465-E	Laptop	GPSMAP 76S	KODAK C340	DELL AXIM5	N/A
Craig Bruner	COMPAQ NC6000	Laptop	GPSMAP 76S	OLYMPUS FE-210	N/A	CINGULAR
Dave Berry	GATEWAY M465-E	Laptop	GPS 12XL	N/A	DELL AXIM5	N/A
Diane Butler	GATEWAY E6610	Desktop	GPS 12XL	N/A	N/A	N/A
Dwight Whitehead	GATEWAY E-4610D	Desktop	N/A	N/A	N/A	N/A
Frank Schaffner	COMPAQ EVO N180	Laptop	GPSMAP 76S	KODAK DX3700	N/A	N/A
Garrett Jackson	COMPAQ NC8230	Laptop	GPSMAP 76S	KODAK DX7440	IPAQ 4700	VERIZON
James Kellogg	GATEWAY M465-E	Laptop	GPSMAP 76S	OLYMPUS FE-30	HP IPAQ	CINGULAR
Jim Lemon	HP D325	Desktop	GPSMAP 76S	KODAK DX3600	N/A	N/A
John Blair	GATEWAY E475M	Laptop	GPSMAP 76S	KODAK C340	N/A	N/A
John Blair - Laptop	DELL INSPIRON 3800	Laptop	N/A	N/A	N/A	N/A
Judy Sappington	GATEWAY E4610	Desktop	N/A	N/A	N/A	N/A
Kyle Whitaker	GATEWAY M460	Laptop	GPSMAP 76S	KODAK CX7430	PALMONE ZIRE 31	N/A
Melissa Dutton	HP D325	Desktop	N/A	N/A	N/A	N/A
Mike Mello	GATEWAY E-4610D	Desktop	GPSMAP 76S	KODAK DX4900	N/A	CINGULAR
Neal Misbach	COMPAQ NC6000	Laptop	GPSMAP 76S	KODAK CX7430	DELL AXIM5	VERIZON
Public Machine 1	COMPAQ EVO D500	Desktop	N/A	N/A	N/A	N/A
Ron Greene	COMPAQ EVO D500	Desktop	GPS 12XL	KODAK DX3700	N/A	N/A
Scott Hummer	GATEWAY M465-E	Laptop	GPS 12XL	KODAK DC3800	N/A	N/A
Steve Pope	GATEWAY M460	Laptop	GPSMAP 76S	KODAK DX4900	COMPQ IPAQ	VERIZON
Steve Trexel	COMPAQ DESKPRO EN DSDT	Desktop	GPS 12XL	KODAK DX4900	N/A	CINGULAR
Tom Brigham	HP D325	Desktop	GPS 12XL	KODAK DX4900	N/A	CINGULAR
Tom Cox	GATEWAY E-4610	Desktop	GPS 12XL	KODAK DX3600	N/A	CINGULAR
Water Commissioner 1	COMPAQ EVO D500	Desktop	N/A	N/A	N/A	N/A
Water Commissioner 2	HP D325	Desktop	N/A	N/A	N/A	N/A
WC Grand Junction 1	GATEWAY GP7-550	Desktop	N/A	N/A	N/A	N/A

**Hardware/Software** – Adobe Professional was purchased to assist in processing court case documents. The ability to improve mapping analysis will be possible with the purchase of Spatial Analyst and the potential purchase of 3D Analyst. The dam safety branch has purchased ESRI's Spatial Analyst for their EPAT software. The purchase of Topo 4 Pro is also on the possible list of tools needed to increase the efficient use for Water Commissioners on the irrigated acres study. All but one Water Commissioner now has access to high speed internet services. This tool allows them to better access the current Admin Orders program and the Court Case program that was recently created. Furthermore, 9 Canon MP530 printers were purchased for Water Commissioners as the IT

department no longer wants HP printers to be used.

GPS data continues to be a very valuable tool as we strive to have a complete database of GPS locations for the major structures that are currently in use.

**Training** - Our training this year has focused on diversion record completions, safety, court workings, well drilling, water quality, as well as some off site training. To that end, many Water Commissioners were able to attend the Gunnison Water Workshop and/or the CWOA conference in Durango.

**Web Page** – The Division 5 website continues to be a very useful tool. It

has gone through a few changes this year, but overall it operates the same. Contained within our website are phone numbers for all division employees, river calls, a staff organizational chart, frequently asked questions, news,

important meetings and functions, a calendar of events, and photos of Division 5 employees.

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## H. GIS PROJECTS

More GIS projects are in the works, including "booklets" for Water Commissioners that will contain the streams they are responsible for, irrigated acres, and structures in 3-ring binders. Updating our USGS quads, using GPS to locate all structures, map indexes, and updating field inspection reports are all on the agenda. Also, we are working on a process of visual basic tools for various projects to have all of our data in digital format. Along with that we have created a new program to keep record and track of our administrative orders, as well as our court cases.

Our goal is to reestablish field boundaries and crop type for the division. In order to accomplish this our GIS person will meet with each

Water Commissioner and go over boundaries. Other goals include having all data digitally entered and printing out a complete set of quad maps in the upcoming year.

Currently, there are 10,600 structures that need to be GPS'ed. Of these, 2,564 (roughly 24.2%) have currently been GPS located. Water Commissioners are doing a great job getting these structures located and GPS'ed. Furthermore, GIS parcel data has been received from every county in our division. This data will be extremely beneficial for well enforcement (particularly in Summit County) as well as for the IT department in Denver to include in the AquaMap program.

Name	Approx. # of Structures	GPS'd Since	Total GPS	Total To GPS	% Complete	Bad Locations with CIU = A
Hummer	669	12	223	446	33.3%	
Thompson 36	109	0	13	96	11.9%	11
McEwen	1057	26	121	936	11.4%	28
Blakeslee	1449	12	290	1159	20.0%	53
Brian Epstein	1343	0	133	1210	9.9%	
Lemon	955	0	68	887	7.1%	22
Mello	184	19	116	68	63.0%	
Trexel	434	0	74	360	17.1%	35
<b>Berry 45</b>	217	<b>57</b>	82	135	<b>37.8%</b>	
Thompson 50	289	0	105	184	36.3%	6
Thompson 51	217	0	64	153	29.5%	14
Misbach	868	34	221	647	25.5%	
Schaffner 52	305	0	82	223	26.9%	11
Schaffner 53	571	1	194	377	34.0%	
Thompson 53	43	0	2	41	4.7%	31
<b>Berry 70</b>	350	<b>51</b>	98	252	<b>28.0%</b>	3
Brigham	508	25	451	57	<b>88.8%</b>	
Comerer	116	0	47	69	40.5%	
Cox	439	37	140	299	31.9%	39
Greene	169	0	40	129	23.7%	
Pope	308	0	0	308	0.0%	
<b>10600</b>		<b>274</b>	<b>2564</b>	<b>8036</b>	<b>24.2%</b>	<b>253</b>

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**I. AUGMENTATION PLANS**

**• Augmentation Plan Staff**

Steve Pope was promoted to full-time Augmentation Plan Coordinator in February 2007. This position is currently at the PSRS II level. James Kellogg holds the position of Augmentation Plan Coordinator/Hydrographer, which is at the PE I level.

Both Augmentation Plan coordinators are working to develop a comprehensive database of augmentation plans and exchanges in all Water Districts in Division 5. Additional duties include

working with Water Commissioners to prioritize evaluation of augmentation plan compliance with decrees, evaluation compliance of plans and exchanges with decrees, as well as design and review accounting spreadsheets.

**• Number of Augmentation Plans and Exchanges**

Currently there are 906 decreed plans of augmentation and exchanges in Division 5. The distribution among the Water Districts is below:

District	Number of Plans and Exchanges
36	124
37	125
38	277
39	67
45	46
50	7
51	195
52	11
53	33
70	2
71	19

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**J. SUBSTITUTE SUPPLY PLANS**

There were 16 substitute water supply plans approved for 2007. By district, there was one for D36 (Tiger Run), one for D37 (Town of Gypsum), five for D38 (BWCD, WDWCD, Bierne, Braun and Morningstar), five for D39 (Encana, WDWCD/Silt, WDWCD/Area A, WDWCD/Alsburly and Una Gravel Pit), one for D45 (DeBeque Gravel Pit), one for D51 (Shorefox), and

two for D70 (#10 Enterprises and Latham Burkett Gravel Pit).

Of these plans, three were new approvals (Tiger Run, Shorefox and Latham Burkett) and the remaining 13 were renewals. Uses for all plans included irrigation, municipal, domestic, pond storage and evaporation, industrial and commercial.

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## **K. SPECIAL PROJECTS AND ISSUES**

- **Green Mountain Reservoir Fill Committee and SEO Interim Fill Policy**

For the fill of Green Mountain Reservoir an SEO 2007 Interim Fill Policy was issued with minor revisions of the previous policy. A few comments were returned, noting acceptance of the document as an interim policy, and as with previous years, registered continued disagreements in the interpretation of the Blue River Decree. See [Appendix A](#) for a copy of the policy.

Green Mountain Reservoir (“Green Mountain”) was constructed by Reclamation as part of the Colorado-Big Thompson Project. It is a compensatory reservoir for the West Slope to offset depletions caused by East Slope diversions. Green Mountain is located on the Blue River downstream from the City of Denver’s Dillon Reservoir/Roberts Tunnel and the City of Colorado Springs’ Continental Hoosier Diversion. Green Mountain has a storage right and a power right that is senior to Denver’s and Colorado Springs’ transmountain diversions on the Blue River. The water rights are extremely important to both the West Slope and to the East Slope because of the location of Green Mountain and the impact of these water rights on many water users in the State of Colorado.

The years 2000-2005 produced below-average runoff in the Colorado River Basin and included the driest year on record. The drought, combined with increased demand from both the East and West Slopes, has made each administrative decision and interpretation of state and federal court decrees more critical. The drought years have focused the various opposing parties on the interaction of the Green Mountain storage and power right. The separate rights have equal priorities and how Reclamation “calls” for their water as either storage in the reservoir or to

generate power can impact both upstream and downstream water users.

The central issue involves the determination of a reservoir paper fill. Is the Green Mountain storage right satisfied with upstream out-of-priority junior storage in Dillon and Upper Blue Reservoirs? Green Mountain has a 1935 storage and power right, while upstream is the Continental Hoosier System with a 1948 right and Dillon Reservoir with a 1946 right. Both upstream junior rights are allowed to store and divert prior to the filling of Green Mountain to the extent that water is on hand for the lesser of replacing diversions or filling Green Mountain. The Blue River Decree was originally adjudicated in federal court and affirmed in state court prior to the upstream storage statute but operates in a similar manner. The issue arises when a call downstream of Green Mountain causes administration of these rights.

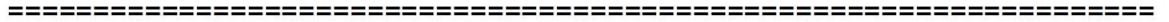
The United States Bureau of Reclamation continued to push its Active Management Plan for the filling of Green Mountain and power production as resolution of the problem. Under the Active Management Plan, Reclamation assesses the runoff forecast and determines the amount of that forecast needed for storage and the amount needed for power. As the runoff forecast changes and storage targets change, the amounts of Blue River runoff allocated to storage and power changes. Any water intercepted by Denver and Colorado Springs that is part of Reclamation’s storage allocation (or any other storage the Cities have on hand) must be available for later release should Green Mountain not fill. However, any water Reclamation has allocated to power—at the time of each forecast—intercepted by the Cities may be kept by the Cities. Should Green Mountain not fill, Reclamation is at risk and this water does not need to be released. The Blue River Decree states that the Secretary of Interior shall offer a

plan and that the plan can change from time to time.

- **Green Mountain HUP Limits and the 1977- 1984 “Slot Group”**

As with other basin wide negotiation in the division, resolution of the Slot Group was on hold, as many East and West Slope water users in the basin continue to work on the “Global Settlement.” Recent discussion of a joint use reservoir for both East and West Slope users has considered providing a pool for the Slot Group. A recap of where the project rests is as follows. After considerable effort in 2005 by the Division to refine the list of potential water users and associated volume of water, in 2006 said refinement was concluded. A final list of these users rests on the upper limit of the pre-1977 preferred beneficiaries of the Green

Mountain Historic Users Pool (“HUP”). By defining this upper limit, those that fit in the “slot” perfected between 1977 and 1984 can be determined. A draft policy has been offered and is supported by the majority of the beneficiaries of the pre-’77 users and the slot group. A major hurdle to resolution comes from water users with very large demands within the parameters of the slot group. Another hurdle is the large number of conditional rights that pre-date 1977 whose holders are not inclined to give up their perceived status as beneficiaries of Green Mountain. Pending resolution, the Board of the Colorado River Water Conservation District continues to offer 200 AF in Wolford Mountain Reservoir to prevent curtailment of the smaller users in this group.



## **L. WATER COURT**

- **Water Court Statistics**

The number of new applications continues to decrease in Division 5, but as competition for water supplies increase, applications become more complex. Thus, litigation continues to dominate the workload of the Division’s personnel. A total of 301 applications and amended applications were filed in Division 5 Water Court during the calendar year 2007 with 259 new applications, 42 amended applications, and a total of 21 applications filed for the White River (to be administered by DWR Water Division 6). Therefore, DWR Water Division 5 litigated 280 total applications, where 238 were new and 42 were amended. In 2006 DWR Water Division 5 litigated 310 total applications, where 259 were new and 51 were amended. Of the 259 new applications 18 were applications involving augmentation plans and 2 applications to amend existing augmentation plans, which compares to the 2005 statistics of 30 and 1. The State and Division Engineers formally

objected in 8 cases, filed 8 Motions to Intervene (where cases were re-referred), and entered 7 protests to referee rulings. These statistics do not reflect the many conditional rights cancelled for lack of diligence under the original case number or changes in water rights.

- **Supreme Court Water Court Committee**

Chief Justice Mullarkey appointed a committee to look for reforms in Colorado’s water courts. Specifically, The Water Court Committee is charged with reviewing the water court process; identifying possible ways through rule and/or statutory change to achieve efficiencies in water court cases while still protecting quality outcomes; and ensuring the highest level of competence in water court participants. Under the Chief Justice’s order, the committee cannot alter or impair existing water use rights of any public agency or private person. The committee is lead by Justice Hobbs and includes Justice

Bender, a sitting and a retired water court judge, a water court referee, the State Engineer, the Division Engineer for Division 2, representatives of the AGO, CWCB, and EDO. Others on the committee are water attorneys, engineers, and water users. The committee sought input from the Division Engineers through a questionnaire offered by Justice Bender.

- **The following Water Court cases or issues are of special note:**

1. **City of Golden v. Hal Simpson, State Engineer, and Alan Martellaro, Division Engineer for Division 5 (pending).**

The case is detailed in the 2004 Annual Report; in summary, it is a complaint by the City of Golden regarding the administration of its rights at Vidler Tunnel. Issues include seniors first; a stipulation with Denver that allows injury to the Green Mountain Reservoir and selective subordination by Denver Water; whether a stipulation not incorporated into a decree must be enforced by DWR or just a contract among two parties; whether a power interference agreement with Vidler Water Tunnel could be assigned to Golden without Reclamation's approval; terms and conditions of a decreed change of water right; and after-the-fact accounting to reallocate diversions to make best use of each water right.

After advancing numerous arguments between July 28<sup>th</sup> and August 13<sup>th</sup> of 2003, changing the amount of claimed injury each time, Golden filed a complaint on August 13, 2003 for 5.2 AF due to the State's senior first policy. The State's response noted that the Plaintiff had no claim of injury for even the Plaintiff admitted to diverting the 5.2 AF. Golden then asked the Court to rule on all its other arguments, though the complaint is that Golden was

injured by the Division Engineer's administration of its rights and they admit no injury occurred.

A partial stipulation regarding the seniors first issue was entered, where Golden must give prior notice should they desire to divert the junior right before the senior is satisfied. Golden has given up its claim that the Rice Ranch rights, which were decreed to be diverted in May through July, could be diverted in any other month.

The case was turned over for Alternate Dispute Resolution (ADR) with Senior Judge Thomas Ossola as mediator. During mediation the trial set for May 2007 was subsequently vacated.

Claiming the issues remaining for trial in this case pertain to paragraph 3 of the Stipulation and Agreement ("1994 Stipulation") in 91CW252 between Denver Water, the River District, and Vidler Water Company, Inc. Golden is the successor in interest to the Vidler Tunnel Water Co, a Delivery agreement between Golden and the Denver was executed. Golden and Denver believed the agreement terminated paragraph 3 of the 1994 Stipulation. In the agreement, Denver Water agreed to deliver to Golden at the east portal of the Jones Pass Tunnel 180 acre feet of water annually on a 10 year rolling average with a maximum delivery of 360 acre feet in any one year, subject to some conditions that protect the yield of Denver Water. Golden then sought to dismiss the case.

In response to Golden's motion to dismiss, we replied; 1) the Court must first decide whether or not the 1994 Stipulation was incorporated into the decree in 91CW252, or is the Stipulation merely a contract among the parties that can be freely amended without notice to the court; 2) Golden has not

included in its motion to dismiss its claim that Golden has a right to divert out-of-priority against the Green Mountain Power Plant Pursuant to a power interference agreement; 3) Counsel for Golden was aware or should have been aware that Reclamation refused to approve a power interference agreement in 2003, and without such an agreement none of this litigation would have occurred. On this last issue, we have asked for sanctions on Golden and its counsel, and will eventually seek fees.

The court has yet to rule on a number of motions filed by the State and Division Engineer in 2006 and early 2007, and appeared to hope the mediation would resolve the dispute and set aside all pending motions.

**2. Upper Eagle Regional Water Authority, 02CW403 Miller Ranch (pending), and 03CW078 Village at Avon (appealed 2006, Supreme Court decision 2007, and invoked retained jurisdiction 2007), 98CW205 Eagle Park and 98CW270 Homestake (invoke retained jurisdiction 2007), and 06CW097 Flattops (pending).**

The primary theme in all of these Upper Eagle Regional Water Authority cases involves a table of monthly depletion factors. The table was approved by the Court in 03CW078, which the Supreme Court confirmed, apparently because the case only involved 10.4 AF of the 4000 AF in the Authorities portfolio. In 02CW376, we were successful in removing the table. The table first appeared as a result of a stipulation with the Public Service Company in 98CW205, and in 98CW270 it was included in the Authority's engineering report but was not mentioned in the decree. Though decreed reference to the table states the table does not modify

the nine decrees it claims to represent, but is merely a summation of those decrees, the Authority believes the table is controlling and that it is "stuck" with it. The Authority claims it must also use the table for all of the plans approved before and after the Authority formed in 1984.

The Authority did assess actual depletions in 1994 and again in 2005 but not only did they fail to produce the results, they attempted to conceal that the later assessment had occurred. Therefore, the Court has not been presented with evidence of its actual ongoing depletions for comparison to the monthly depletion rates in the disputed table, and the accuracy or lack of accuracy has never been demonstrated to the Water Court. DWR subpoenaed the Authority's customer water meter data for all of the relevant service areas for 2001 through 2005. Using a methodology similar to the Authority's, Division 5 then completed a comparison of the winter in-building water demands with the summer in-building and irrigation water demands to obtain a reasonable estimate of the Authority's summer irrigation water demand for each year for each service area. Both Division 5 and the Water Authority assessments have similar results. The table is not accurate, and underestimates the Authority's true replacement obligations.

Because use of the table results in injury, we invoked the retained jurisdiction of 03CW078, 98CW270 and 98CW270, and continue to seek to consolidate these actions with the pending cases in 02CW403, and 06CW97, because of the common factual and legal issues. The court has yet to rule on this motion.

We continue to be willing to settle the controversy with use of a table of depletion factors similar to the disputed table, where the depletion factors are the result of assessment of actual depletions completed every 5 or 10 years. Unfortunately, the Authority has been unwilling to agree to such periodic assessments. It appears the Authority is concerned that irrigation use has greatly exceeded their past expectations and is likely to increase their replacement obligations going forward.

**3. Copper Mountain, Change of Rights and Amended Plan for Augmentation 01CW304 (decreed)**

The dispute on whether augmentation is a beneficial use has been resolved in this case and other courts in recent months have also confirmed that augmentation is a beneficial use. The remaining issue was the use of a storage right not decreed for augmentation, and whether using water rights not decreed for such uses requires a change of water right decree. Copper Mountain stipulated that the senior Clinton Reservoir right will not be used for augmentation, and in January 2008 01CW304 was decreed.

**4. Upper Eagle Regional Water Authority, 04CW236, Cordillera (pending).**

The application seeks to make absolute a junior water right, where a considerable amount of water with senior rights is already absolute at the same locations. The "senior's first" rule when

previously at issue was settled through stipulation. This case may ultimately be settled by stipulation, but such cases will continue to be opposed until we have direction from the court.

**5. Denver Water diligence application for Eagle-Piney Project—02CW125 (decreed).**

Denver Water filed for a finding of reasonable diligence for the Piney River Unit and the Straight Creek Conduit of the Roberts Tunnel Collection System, and the Eagle-Colorado Collections System. The Division of Water Resources was not an objector in the case. The objectors included the River District, the Upper Eagle Regional Water Authority, the Eagle River Water and Sanitation District, and Climax Molybdenum Company. After a 6 day trial in June 2007, many of the water rights in the application were conveyed to objectors the River District, the Upper Eagle Regional Water Authority, and the Eagle River Water and Sanitation District, who were then substituted as co-applicants. The final decree granted diligence to reduced water rights in the Eagle-Colorado Collection System and the Straight Creek Conduit that remained in Denver ownership. Diligence was granted to reduce a right to the Piney River Unit as conveyed to the River District, the Upper Eagle Regional Water Authority, and the Eagle River Water and Sanitation District. The remaining 7 water rights in the Piney River Unit were abandoned.

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**M. TABULATION**

Division 5 continues to receive 300-350 new decrees each year that need to be incorporated into the tabulation. With the

help of Water Commissioners, Division 5 is currently up to date with tabulating new decrees each year. The backlog of

decrees that had not been incorporated into the tabulation has been eliminated in 10 of the 11 Districts. There remains a small backlog in District 36 due to the complexity of the decrees. Due to the tabulation backlog being eliminated in the

past few years, Division 5 was able to take on a number of projects to clean up the water rights, structure information and contact information in the *Hydrobase* database.

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**N. ABANDONMENT LISTS**

• **2001 Revised Abandonment List – Case No. 01CW337**

There were 158 water rights placed on the Revised Abandonment List that was published in the December resume in 2001. Protests to the abandonment list were to be filed by June 30, 2002. There were 28 protests filed with the court during 2002 that protested the inclusion of 40 water rights on the Revised Abandonment List. In May 2005, Judge Craven granted Pitkin Exchange Holdings a Motion to Intervene in Case 01CW337 in order to protest the inclusion of one additional water right on the Revised Abandonment List. In June 2007, Grand Creek Ranch and John and Sharna Coors filed a Petition for Leave to File Untimely Protest of Abandonment regarding the Bohm Ditch's inclusion in the Revised Abandonment List. To

date, the court has not ruled on the petition. Stipulations have been entered in all 29 of the protests including a stipulation that removed a portion of the Bull Creek Reservoir Company's water rights pursuant to certain performance requirements. The performance requirements were not met in a timely manner by the reservoir company and a revised stipulation was entered which extended the timeline the reservoir company had to meet the performance requirements. After a number of extensions to the timeline, the majority of the Bull Creek Reservoir Company's water rights have been removed from the "mother" abandonment case and are being handled in a separate case. A draft ruling in Case No. 01CW337 (the mother case) has been prepared and should be filed with the water court in the Spring of 2008.

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**O. PERSONNEL AND BUDGET ISSUES**

• **Personnel**

Retirements and internal promotions continue the vacancy trend in Water Division 5 that has become the norm for several years. The turnover of employees in 2007 will spill over into 2008 and hopefully begin to trend toward being fully staffed.

After 12 years of outstanding service to the Division of Water Resources, George Wear retired on February 1, 2007. George started his career with DWR as a Water Commissioner in Division 4, moved to Division 5 to become the Augmentation Plan Coordinator where he later became the

Lead Hydrographer. After George's retirement, the hydrographer position remained vacant until Craig Bruner was hired in June 2007.

With the appointment of Kyle Whitaker to fill the Assistant Division Engineer position in July 2006, a vacancy was created for the Augmentation Plan Coordinator position. This position was reclassified from a PE I level to a PSRS II classification. Steve Pope was appointed to the Augmentation Plan Coordinator position in March 2007. The promotion of Steve Pope to the Augmentation Plan Coordinator position

created a vacancy in Steve Pope's old position as the District 72 Lead Water Commissioner. The District 72 Lead Water Commissioner position was filled with Scott Hummer in May 2007. Due to personal reasons, Scott Hummer asked to be voluntarily demoted back to his previous position as the District 36 Water Commissioner. The District 72 position remained vacant for the remainder of 2007.

With the retirement of Nancy Hitchcock in November 2006, the Program Assistant position started out 2007 vacant. Diane Butler was hired in February 2007 to fill the position and was a welcome addition to all of the office and field staff that had been asked to try and maintain the many tasks assigned to the Program Assistant.

The Administrative Assistant II position continues to have significant turnover. The position was vacated in June 2007. The position was filled in November 2007 with Melissa Dutton. With the addition of Diane and Melissa, we are all hopeful that the frequency of turnover in our administrative positions has ended.

Michael Craig, District 38 Water Commissioner, resigned in July 2006.

The position remained vacant through the end of the 2006 season and early 2007. Brian Epstein was hired in April 2007 to fill this position. Again, duties of administration of several very critical streams along with the many other demands of this position were split between office staff and Bill Blakeslee, District 38 Water Commissioner for the Upper Roaring Fork while the position was vacant.

Doug Stephenson transferred from his Well Inspector position in Division 5 to the Well Inspector position out of the Denver Office in December 2007. The Well Inspector position in Division 5 vacated by Doug remains vacant.

Additional temporary man-months were again allocated to Division 5 to work on the Water Rights Tabulation and cleaning up and updating other portions of Hydrobase. The additional time was given to two part-time Water Commissioners, who have worked on this project with this temporary allocation for several years. Six years of focus on the elimination of the backlog of untabulated water rights decrees has paid off.

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**P. 2007 PERSONNEL AWARDS**

- **Bill Blakeslee, Division 5 Water Commissioner of the Year**



Bill Blakeslee administers the upper half of Water District 38, on the Roaring Fork River. The basin includes transmountain diversions such as the Twin Lakes Tunnel, Fryingpan-Arkansas Project, and Ivanhoe Tunnel. Major storage in the area includes Ruedi and Grizzly Reservoirs. The administration of the water district is a mixture of all uses. This Water District has over 30% of all Division 5 water court applications annually. These applications include small augmentation plans to augment

depletions of private ponds to the very large umbrella plans of the Basalt and West Divide Water Conservancy Districts. The proliferation of augmentation plans requires a considerable amount of investigation not only at the time of water court application, but continuously for assurance of compliance with their court decrees. The change of use of historic irrigation often has Bill below the headgate of ditches, checking that the ditch is used for decreed uses. With

continued workload additions, the traditional water administration of over-appropriated streams, generally for irrigation season calls must be managed. Obviously, the administration in Water District 38 must be accomplished with efficiency and a style that not only satisfies the needs of the agricultural and municipal water users, but also a new generation of recreation and "water feature" users. Bill has done an outstanding job managing these demands.

• **Neal Misbach, Division 5 Tarnished Shovel Award**



The Tarnished Shovel is a traveling award. A shovel found near the dam of Clinton Gulch Reservoir, rusted and corroded by exposure and acidic mine

waste, has come to represent a shovel worn from excessive use to recognize the efforts of an individual digging up previously unknown information, or outstanding effort in normal everyday duties. Though Neal has been a water commissioner in Water District 51 for only a few years, he has used his technical skills to improve record keeping and data collection, and develop detailed and informative field inspections for complaints, water court applications, late registrations, etc... Neal's style has resulted in a much needed fresh look at the issues and problems of the Water District.

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## II. 2008 WATER YEAR

- **Very High Runoff Expected with Potential for Flooding**

January 1<sup>st</sup> snow pack measurements were slightly above normal at 105%. It was the third consecutive year that January 1<sup>st</sup> snow pack was above normal. However, reservoir storage began the calendar year slightly below average and below last year on this date.

January and February 2008 precipitation were both well above average, with snow pack on March 1<sup>st</sup> at 128% of average for the entire basin, with the Roaring Fork sub-basin attaining the highest sub-basin average at 154% of normal. March 1<sup>st</sup> reservoir storage was a slight improvement over January 1<sup>st</sup> at 102% of average. With the tremendous snow pack and runoff projections varying from 102% of normal at Granby to 141% in the Roaring Fork Reservoir operators have begun to make space for some flood mitigation.

Basin wide precipitation for March 2008 was 85% of normal with the Roaring Fork and Eagle River Basins near normal and the western areas at 50% of normal. As a result the snow water equivalent dropped 5% to 123% of normal, and stream flow forecasts for April through July vary from a near normal 102% for the Lake Granby inflow

to 148% of normal in the Roaring Fork. The April 1, 2008 forecast for April through July runoff for the Colorado River at Cameo is 129% of normal, [See Appendix K](#). However, Basin wide snow pack has increased considerably since the last runoff forecast from 123% on April 1<sup>st</sup> to 135% on April 11, 2008.

Early April has increased the snow water equivalent basin wide. Several SNOTEL sites in the Roaring Fork Basin, at the time of this writing, have set new records for maximum snow water equivalent. Renewing concerns of flooding that were abated during March. The short term forecast is for warm dry weather, and the 90-day weather forecast is calling for near to below average precipitation, which could reduce the flooding potential. However, the 90-day forecast also predicts above average temperatures, which could shorten the major snow melt runoff period, increasing the likelihood of flooding.

For 2008 all reservoirs are expected to physically fill with the exception of Granby Reservoir. The paper fill accounting for Green Mountain will be kept but should not have an administrative consequence as the physical fill should occur prior to a main stem river call, and thus 2008 is not expected to be a substitution year.

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### A. BASE OBJECTIVES

**The everyday operations of Division 5 Water Resources will continue to include:**

- Administration of water rights and augmentation plans,
- Collecting and recording diversion data,
- Collecting data regarding irrigated acres, structure locations, and augmentation plan compliance,
- Maintenance of gaging stations and satellite monitoring equipment,
- Other hydrographic duties including rating of administrative measuring devices,
- Tabulating water rights,
- Permitting wells,
- Performing well inspections,

- Inspecting dams and reservoirs,
- Reviewing water rights applications and litigating cases to ensure statutory compliance and no injury in changes of water rights,
- Informing the public,
- Attending Water Conservancy District meetings and other water user meetings,
- Contacting water users.

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**B. GOALS FOR 2008**

- Implement and improve “paperless” water court case filing system;
- GPS all structures we visit that have yet to be GPS’ed;
- Summit County well enforcement—inspect a similar number of wells as done in 2007, issue orders where appropriate, and follow-up;
- Improved augmentation plan enforcement;
- Support Inter-basin Compact Committees (IBCC) roundtable;
- Tabulation—prepare for publication on July 1, 2008, with no backlog;
- Issue 2008 Interim or final policy for the administration of the Blue River Decrees;
- Finalize 2000 Abandonment List;
- Continue purging closed court case files;
- Remove diversion records, decrees, well permits, maps, and any other information from public library, where information is online;
- Keep co-location building project moving forward;
- Negotiate lease extension for Silverthorne and Glenwood offices;
- Fill vacancies for lead Water Commissioner in District 72, deputy and lead Water Commissioners in Districts 39 and 45, and Augmentation Plan Coordinator in Glenwood office;
- Seek Decision Item for 2 fleet vehicles (Hydro/Aug Plan Engineer, and Water Commissioner), and 3 man-months to add to the 9 month position in District 45
- Efforts are ongoing to develop and maintain the augmentation plan database to ensure that appropriate tracking and administration takes place. Emphasis will be placed on working with Water Commissioners and water users to develop and implement accurate accounting practices under complex administrative scenarios. The goal is to ensure that timelines and conditions are met in accordance with court decrees. Inoperable plans will be addressed, using orders from the State Engineer, or through retained jurisdiction.

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**C. SPECIAL PROJECTS AND WORK ITEMS FOR 2008**

**• Paperless Water Court Case Filing**

In 2007 Division 5 began planning and preparation to reduce the paper generated in our office by eliminating paper copies of digital documents. This includes all documents on LexisNexis,

Water Commissioner field inspections, emails, and any email attachment for a water court application, including engineering reports, maps, and correspondence.

The plan will be implemented on a trial basis with the January 2008 applications. Resume review, the Consultation meeting with the referee, and inquiries by phone or in person will be accomplished by reviewing digital versions of each document, and not by making paper copies. Because the court does not require digital filing by pro se applicants, and most engineering reports are paper, a paper file folder will be opened for each case. Some will be empty. We anticipate off-site meetings will present some problems, and may require making a paper copy for such events, but that remains a minority of our case load.

- **Green Mountain Fill Committee**

Resolution of accounting of the senior storage right and the power right at Green Mountain Reservoir continues to be the most significant issue in Water Division 5. The strategy for moving forward continues to rely on collaboration through the Green Mountain Fill Committee meetings and until final resolution, the State and Division Engineers will exercise their administration authority in the fill accounting of Green Mountain and Dillon Reservoirs. This will take place through an Interim Policy for fill accounting of Green Mountain and Dillon Reservoirs that will expire before the beginning of the next fill season. Concerns with the 2007 policy were raised by Colorado Springs Utilities and Denver Water and remain the same concerns raised in 2006. With the considerable runoff expected, 2008 will not be a substitution year. Therefore, the adoption of a 2008 fill policy will have no practical impact on the fill of Green Mountain and Dillon Reservoir, or on any junior rights in the basin. However, a policy will be issued in May and will likely have only minor modifications, if any, to the 2007 policy.

The committee has not met since 2006, and no meetings are scheduled as of this writing. Many entities impacted by the Green Mountain Fill accounting are attempting to settle a number of mostly east-west slope issues, commonly referred to as the Global settlement. Though the Bureau of Reclamation and Division of Water Resources are not involved in the Global settlement, Blue River issues are among issues considered. This process and consecutive good water years have put final resolution on hold.

- **Summit County Well Enforcement**

There are an estimated 2000 wells in Summit County that are not in compliance with their well permits and/or the conditions of their decree. Of these, 1500 are estimated to be exempt household use only wells, while 500 are augmented household use only wells. With the Summit County and Vidler Water Company Umbrella Plans, contracting and review procedures are in place, notices were sent in 2005 to the first 50 well owners. In 2007, approximately 600 individual on lot wells were field inspected and Orders were issued to all wells not in compliance with their well permit. The inspection of the 600 wells was accomplished by pulling in Water Commissioners from other areas of Division 5 and Office Staff from the Glenwood Springs office. Another 600 – 800 wells will be inspected in 2008 as well as follow-up inspections on the wells that were tagged in 2007. The inspection process and documentation of out-of-compliance uses will continue to be time consuming and at times difficult and confrontational.

- **Colorado River Basin Roundtable**

The Division of Water Resources serves as technical support of the HB1177

roundtables. Through the Inter-Basin Compact Committee (IBCC) and the 9 basin roundtables, HB1177 seeks collaboration and solution to state-wide issues and particularly to inter-basin transfers of water. The Colorado River Basin Roundtable holds meetings the fourth Monday of every month. The Division Engineer continues to support the Colorado River Basin Roundtable through input at monthly meetings.

- **GPS Diversion Structures**

Division 5 has 19,450 total structures. Of these nearly 8,850 are exempt wells, small springs or other insignificant structures for domestic, stock or wildlife uses, leaving a goal of 10,600 significant structures which we intend to acquire GPS locations. Through 2007 24% of our significant structures have been GPS'ed. We plan to acquire locations for 10% of our active significant structures each year.

- **Reconciliation of Irrigated Acres**

Minor progress continues to be made on this project. It remains important to litigation of future change cases and the administration of water rights and changes of water rights within this Division. GPS'ing of irrigated acreage under ditches where dry-up is used for consumptive use credits continues to ensure augmentation plans have been properly implemented, and to ensure the historic lands are not claimed in subsequent cases. However, reconciliation of the Colorado River Decision Support System ("CRDSS") irrigated acreage project with acreage claimed in the annual diversion records for the eventual use of the CRDSS acreage in the official diversion records is on hold as DWR considers a new platform for this data.

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## **D. PERSONNEL, BUDGET AND OPERATIONS**

- **Impact of the Budgets on Operations**

1. **Division 5 Operating Budget, Including Mileage**

Division 5 continues to spend approximately 70 - 80% of primary and secondary operating budgets on mileage. The spending on mileage is currently about 70% fleet charges and 30% private vehicle reimbursement. The last two years we have seen a shift from about a 50/50 split to the current 70/30 split due to the increase in number of fleet vehicles due to hold-over and temporary assignments. This shift towards fleet mileage charges has helped Division 5 offset the

increased reimbursement rates for private vehicle mileage. This trend will more than likely reverse in the next couple of years as the number of replacement vehicles will decrease as the Division 5 fleet becomes newer.

2. **Overtime Budget**

The Division 5 overtime budget was slightly under spent in 2007, largely due to an adequate snowpack and water supply but also due to a change in the level of service on several streams, and the construction of automatic diversion structures on another stream. Another change is that on many streams water users are no longer making a living with agriculture and

do not place the same demands on the water commissioner because either the water use is not as critical, or it has become more critical and they have built infrastructure to buffer stream fluctuations. However, field staff is experiencing new demands to oversee augmentation plan administration that will require overtime.

### 3. Division 5 Personnel Budget

Division 5 was successful in obtaining 10 additional man-months starting in FY07-08. The man-months were obtained to increase staffing in both the field and the Glenwood Springs office. Five man-months were added to the Administrative Assistant II position

in the Glenwood Springs office to make that position a full time position to help out with increased administrative and general office workload. One man-month was added to the District 37 Water Commissioner position to make it a full time position. This was long overdue as District 37 has seen tremendous development which has been met primarily with complex augmentation plans and other creative water supply projects. Lastly, four man-months were added to the District 52/53 Water Commissioner position. This area has seen an increase in winter administration that could not be met by bringing Water Commissioners in from other Districts during the winter period.

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## **E. DAM SAFETY ISSUES FOR THE FUTURE**

The Grand Junction Dam Safety Engineer and the Division 6 Dam Safety Engineer being fully responsible for Dam Safety activity has recently been assigned total responsibility for the dams in District 50, 51, and the west areas of District 72. This should help offset some workload problems. Also, implementing a new risk based procedure for determining inspection frequency as opposed to hazard rating may alleviate workload problems. However, the future workload will still be very full for the following reasons:

- With increases in population, gas well development, and increases in recreation, there has been an increase of about 30 significant and high hazard dams in Division 5 since 2000, which offsets the workload decreases by having more Division 5 dam safety FTE's in Grand Junction and Division 6.

- Except for during drought years, the trend of reservoirs in Division 5 to remain full for longer periods of time continues as less water is used for irrigation and more for recreation. Many of these dams are old and were designed and built for irrigation. As a result, the trend for an increase in Dam Safety problems will continue to increase the dam safety workload.
- With past drought years comes the increased desire to enlarge or rehabilitate existing dams. This will increase the amount of time to review the designs, plans and specifications submitted for these enlargements or rehabilitations. The Dam Safety Branch statewide is understaffed, which will cause the Grand Junction-based Dam Safety Engineer to be needed for design

- review in other Divisions. This in turn will leave more design review for the main Division 5 Dam Safety Engineer stationed in Glenwood Springs.
- There is still a large backlog of about 40 hazard evaluations that need to be done and this number grows faster than the ability to accomplish them. With the risk assessment to inspection frequency, accomplishing the hazard evaluations will become a higher priority. It is estimated that it will take over 40 man-weeks to accomplish these. This does not include training time if other personnel are to be used.
  - An extreme precipitation analysis tool (EPAT) for designing regional and local rainfall amounts in the mountains and on the Western slope has been completed and the basin response study is near completion. When the methodology is finally completed, it will mean approximately fifty-five class 1 and two class 2 dams will have to have a hydrology study performed. This will take another 40(+) man-weeks to accomplish.

# 2007 ANNUAL REPORT APPENDIX

(click on links below to get electronic file)

- A. [ADMINISTRATION OF GREEN MOUNTAIN RESERVOIR FOR 2007 – INTERIM POLICY](#)
- B. [GRAPH: 2007 GREEN MOUNTAIN RESERVOIR HUP OPERATIONS](#)
- C. [TABLE: MAINSTREAM RIVER CALLS FOR 2007](#)
- D. **RIPRAP**
  - [TABLE: RESERVOIR RELEASES & 15-MILE REACH FLOWS](#)
  - [GRAPH: IMPACT OF LATE IRRIGATION SEASON RESERVOIR RELEASES IN THE 15-MILE REACH](#)
- E. [DIVISION 5 HISTORIC & PROJECTED RESERVOIR LEVELS](#)
- F. [WATER COURT ACTIVITIES](#)
- G. [DIVISION 5 ORGANIZATIONAL CHART](#)
- H. **OFFICE ADMINISTRATION AND WORKLOAD MEASURES**
  - [PERSONNEL / REIMBURSABLE MILEAGE](#)
  - [WATER COMMISSIONER ACTIVITY SUMMARY](#)
- I. **TRANSMOUNTAIN DIVERSIONS - [INFLOWS](#) AND [OUTFLOWS](#)**
- J. [RESERVOIR STORAGE WATER SUMMARIES BY DISTRICT](#)
- K. [WATER DIVERSION SUMMARIES](#)
- L. **SNOW WATER EQUIVALENT AND RUNOFF FORECASTS**
  - [GRAPH: COLORADO RIVER BASIN SWE COMPARISONS](#)
  - [GRAPH: NORTH LOST TRAIL SWE COMPARISONS](#)
  - [GRAPH: INDEPENDENCE PASS SWE COMPARISONS](#)
  - [GRAPH: SCOFIELD PASS SWE COMPARISONS](#)
  - [MAP: COLORADO STREAMFLOW FORECAST MAP](#)

# STATE OF COLORADO

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Bill Ritter, Jr.  
Governor

Harris D. Sherman  
Executive Director

Hal D. Simpson, P.E.  
State Engineer

May 31, 2007

## **ADMINISTRATION OF GREEN MOUNTAIN RESERVOIR FOR 2007**

### **Interim Policy**

The fill season for the Green Mountain Reservoir first fill storage right (priority date August 1, 1935) is initiated by declaration by the Secretary of the Interior between April 1 and May 15 (para. 3, 1964 Blue River Decree). The start of fill for 2007 was declared on April 27. Green Mountain Reservoir is projected to paper fill in early June 2007 and is projected to physically fill by late June or early July 2007. The purpose of the 2007 Policy is for accounting of the paper fill for the first fill right of Green Mountain Reservoir and the initiation of the power call. The fill season for the senior Green Mountain Reservoir storage right ends upon completion of fill (first fill right deemed satisfied), either by a physical fill or a paper fill as defined below.

### **Physical Fill**

The 1935 Green Mountain Reservoir first fill right is deemed satisfied when the total amount of water retained is equal to the total physical storage capacity in Green Mountain Reservoir.

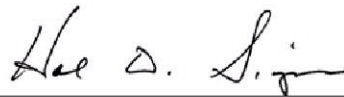
### **Paper Fill**

The Green Mountain Reservoir 1935 first fill storage right is deemed satisfied with respect to Colorado River administration when the sum of storage at the initiation of the fill season at Green Mountain + physical storage in Green Mountain Reservoir since the initiation of the start of fill + all outflow in excess of 60cfs or the demand of a downstream call from a water right senior to August 1, 1935 + upstream Denver and Colorado Springs owed to Green Mountain Reservoir accounts + upstream depletions junior to Green Mountain Reservoir that are not curtailed due to bypass of storable inflow equals 154,645 acre feet ("paper fill"). Following the paper fill and using an October 5, 1955 priority date, Green Mountain shall continue to store tributary inflow when in priority until upstream Denver and Colorado Springs owed to Green Mountain Reservoir accounts are zero. The amount of water stored in Green Mountain Reservoir pursuant to the October 5, 1955 priority date shall reduce amounts Denver and Colorado Springs owe to Green Mountain Reservoir for upstream out-of-priority diversions under the terms of the Blue River Decree.



### **Limited Applicability of this Policy**

The State Engineer adopted this policy in order to give water users certainty about administrative and accounting principles concerning Green Mountain Reservoir during the 2007 fill season. The State Engineer does not intend that this interim policy create any precedent binding on the Division of Water Resources, the U.S. Bureau of Reclamation, or any other water user in a future year (whether or not the factual situation in the future is the same or similar to the 2007 fill season). The State Engineer has consulted with numerous water users prior to adopting this policy and understands that there is not basin-wide consensus about the administrative and accounting principles included in the interim policy. The State Engineer does not intend that this policy change, limit, or in any way affect the future positions of the Division of Water Resources, U.S. Bureau of Reclamation, or any other water user. The State Engineer will not construe acquiescence to the 2007 interim policy to be an admission, estoppel, or waiver nor will he argue that the failure to challenge this interim policy is a failure to exhaust administrative remedies. The parties interested in Green Mountain Reservoir administration and accounting will continue to meet with Division of Water Resources staff and discuss a permanent resolution to these issues in order to suggest a final policy to the State Engineer.



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Hal D. Simpson, State Engineer

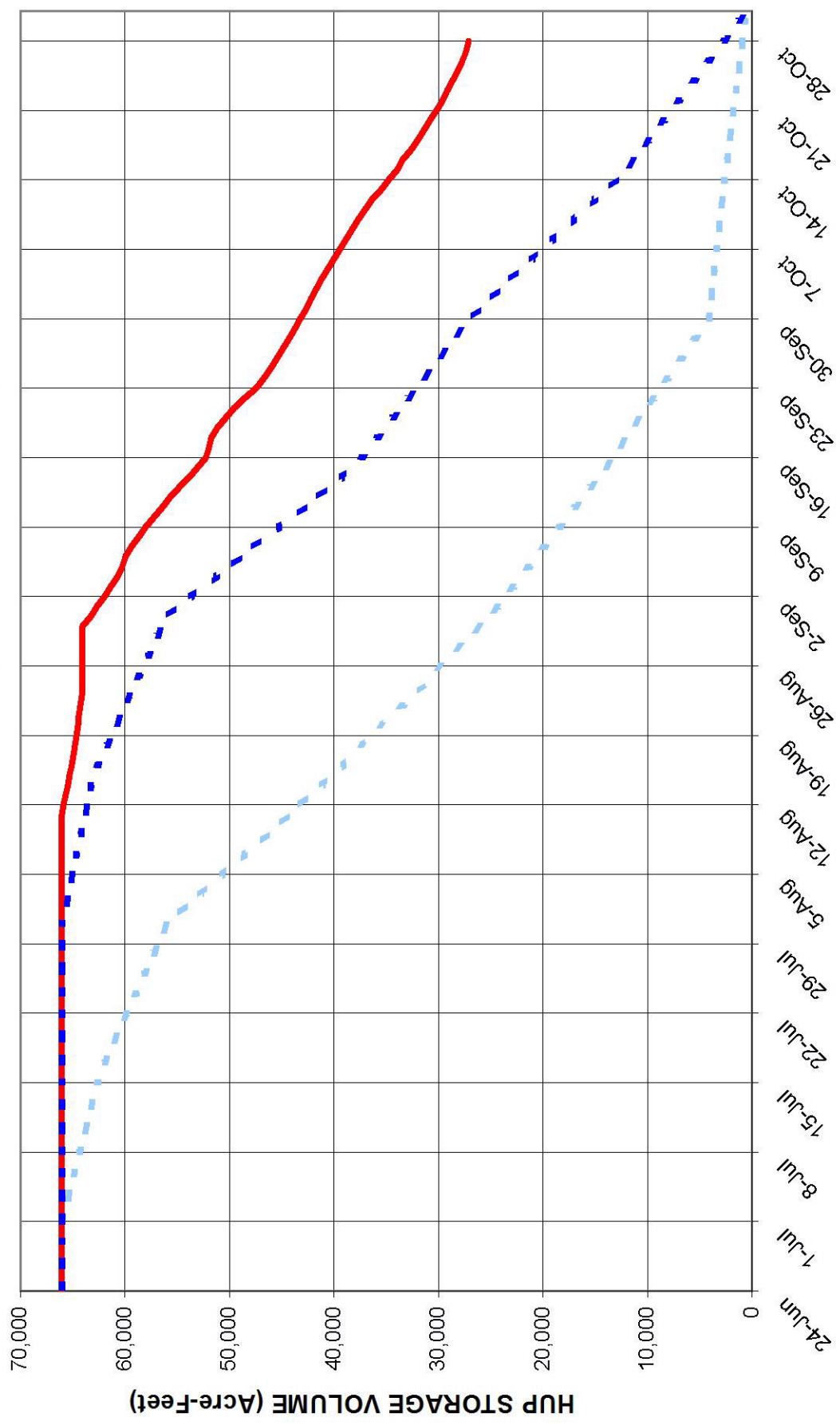
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Date

Appendix B

2007 GREEN MOUNTAIN RESERVOIR HUP OPERATIONS



## Appendix C

### SUMMARY OF COLORADO RIVER MAIN STEM CALLS 2007 IRRIGATION YEAR

STATUS OF CALL AT THE SHOSHONE POWER PLANT  
(As determined using the Colorado River near Dotsero gage)

DATE ON	THRU	NO. DAYS CALL ON/OFF	CALLING STRUCTURE	DEGREE AMT.	SWING PRIORITY	SWING PRIORITY ADMIN. NO.	COMMENTS
11-01-06	01-01-07	62	Shoshone Power Plant	1,250 CFS	Shoshone	20427.18999	
01-02-07	01-04-07	3	Shoshone Power Plant	1,250 CFS	Shoshone	20427.18999	Administered at 700 CFS
01-05-07	01-16-07	12	Free River	---	---	---	
01-17-07	01-22-07	6	Shoshone Power Plant	1,250 CFS	Shoshone	20427.18999	
01-23-07	02-01-07	10	Shoshone Power Plant	1,250 CFS	Dillon/Roberts	35238.00000	
02-02-07	02-08-07	7	Shoshone Power Plant	1,250 CFS	Shoshone	20427.18999	
02-09-07	06-19-07	132	Free River	---	---	---	
06-20-07	10-31-07	133	Free River	---	---	---	Plant down for maintenance

STATUS OF CALL IN THE GRAND VALLEY  
(As determined using the Colorado River near Cameo gage)

DATE ON	THRU	NO. DAYS CALL ON/OFF	CALLING STRUCTURE	DEGREE AMT.	SWING PRIORITY	SWING PRIORITY ADMIN. NO.	COMMENTS
11-01-06	08-12-07	285	Free River	---	---	---	
08-13-07	08-16-07	4	GVIC	119 CFS	C-BT	31258.00000	
08-17-07	08-23-07	7	GVIC	119 CFS	Roberts Tunnel	35238.00000	
08-24-07	08-30-07	7	Free River	---	---	---	
08-31-07	09-03-07	4	GVIC	119 CFS	C-BT	31258.00000	
09-04-07	09-18-07	15	GVIC	119 CFS	GVIC	30895.23491	
09-19-07	09-24-07	6	GVIC	119 CFS	C-BT	31258.00000	
09-25-07	10-11-07	17	Free River	---	---	---	
10-12-07	10-16-07	5	GVIC	119 CFS	C-BT	31258.00000	
10-17-07	10-31-07	15	Free River	---	---	---	

Appendix D

RESERVOIR RELEASES 15 MILE REACH FLOWS

2007	RELEASES TO 15 MILE REACH (CFS)			DELIVERIES AT 15 MILE REACH AFTER TRANSPORT LAGS AND LOSSES (CFS)			Pallside			15-Mile Reach Flow WITH/ WITHOUT		Target Flows Met?		Target line for graph
	Green Mtn	Ruedi	Wolford	Green Mtn	Ruedi	Wolford	Bypass Pipeline (CFS)	Williams Fk (CFS)	Willow Ck (CFS)	WITH Deliveries (CFS)	WITHOUT Deliveries (CFS)	1 = yes, 0 = no	day count w/deliveries	
2007 only constant	166,000 AF	20,825 AF	11,412 AF	5,412 AF										
7/30/2007														
7/31/2007														
8/1/2007		100							20	813	793	1	1	1
8/2/2007		100			0				0	564	564	1	1	2
8/3/2007		100			93				0	505	413	1	1	3
8/4/2007		100			93				20	672	560	1	1	4
8/5/2007		100			93				33	822	697	1	1	5
8/6/2007		100			93				50	864	722	1	1	6
8/7/2007		100			93				50	1216	1074	1	1	7
8/8/2007		150			93				50	1223	1081	1	1	8
8/9/2007		150			93				50	1083	941	1	1	9
8/10/2007		174			138				50	929	741	1	1	10
8/11/2007		190			139				50	781	592	1	1	11
8/12/2007		189			161				60	799	578	1	1	12
8/13/2007		155			175				60	777	542	1	1	13
8/14/2007		150			175				60	731	496	1	1	14
8/15/2007		145			144				30	726	552	1	1	15
8/16/2007		120			139	0			20	796	637	1	1	16
8/17/2007		101			134	0			20	920	766	1	1	17
8/18/2007		129			111	45			30	1095	909	1	1	18
8/19/2007		154			93	80			30	1023	810	1	1	19
8/20/2007		149			120	90			10	886	666	1	1	20
8/21/2007		163			142	90			0	813	581	1	1	21
8/22/2007		163			138	90			30	742	484	1	1	22
8/23/2007		162			151	90			40	674	393	1	1	23
8/24/2007		183			150	90			40	640	359	0	0	24
8/25/2007		177			169	90			40	687	407	0	0	25
8/26/2007		177			169	90			40	747	448	0	0	26
8/27/2007		176			164	90			40	870	576	1	0	27
8/28/2007		176			164	90			60	939	625	1	0	28
8/29/2007		172			163	90			60	936	623	1	0	29
8/30/2007		135			163	90			60	915	602	1	0	30
8/31/2007	309	130			159	90			75	896	572	1	0	31
9/1/2007	232	135			125	90			75	878	588	1	0	32
9/2/2007	276	135			120	90			75	873	588	1	0	33
9/3/2007	211	134			125	90			75	859	291	1	0	34
9/4/2007	260	134			208	124			25	876	428	1	0	35
9/5/2007	135	134			248	124			25	814	326	0	0	36
9/6/2007	93	117			190	124			30	894	460	1	0	37
9/7/2007	224	134			234	124			30	999	521	1	0	38
9/8/2007	266	134			121	108			30	1113	764	1	0	39
9/9/2007	257	135			84	124			30	1104	777	1	0	40
9/10/2007	325	134			201	124			30	1095	650	1	0	41
9/11/2007	316	134			240	125			55	1057	547	1	0	42
9/12/2007	332	133			231	124			75	1009	411	1	0	43
9/13/2007	363	131			293	123			75	985	326	1	0	44
9/14/2007	367	131			285	123			75	937	260	1	0	45
9/15/2007	282	131			299	121			75	898	236	1	0	46
9/16/2007	203	130			326	121			75	933	237	1	0	47
9/17/2007	0	13			331	121			75	1560	847	1	0	48
9/18/2007	45	68			254	121			75	2346	1770	1	1	49
9/19/2007	219	109			183	12			75	2400	1979	1	1	50
9/20/2007	344	104			0	63			75	1834	1568	1	1	51
9/21/2007	384	59			40	101			75	1503	1199	1	1	52
9/22/2007	451	52			197	96			75	1333	920	1	1	53
9/23/2007	506	52			310	55			75	2247	1745	1	1	54
9/24/2007	328	51			346	48		3	75	2309	1837	1	1	55

Appendix D

RESERVOIR RELEASES 15 MILE REACH FLOWS

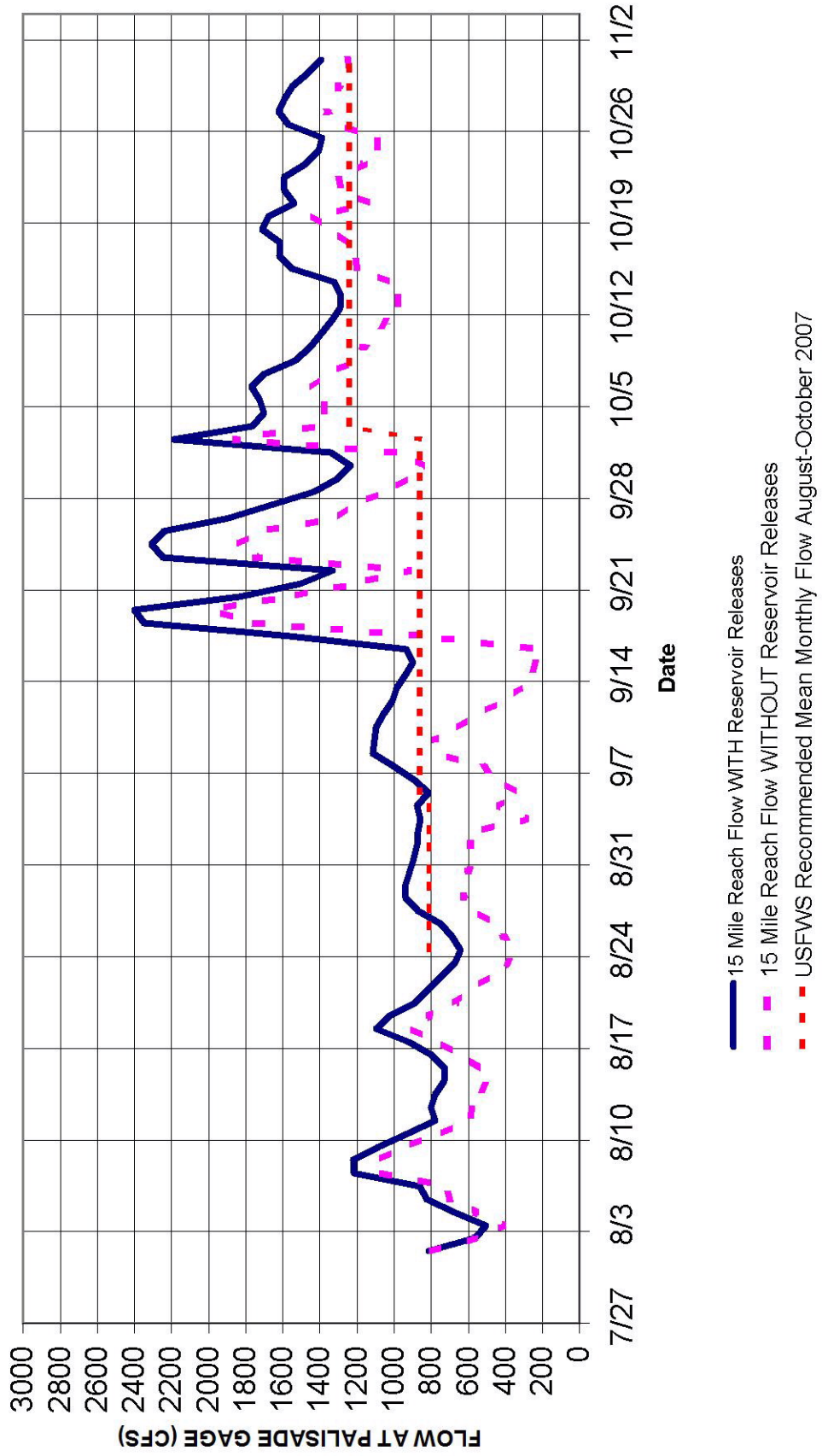
2007	RELEASES TO 15 MILE REACH (CFS)				DELIVERIES AT 15 MILE REACH AFTER TRANSPORT LAGS AND LOSSES (CFS)				Palsade Bypass Pipeline (CFS)				15-Mile Reach Flow WITH/ WITHOUT Deliveries (CFS)		Target Flows Met?		Target line for graph			
	Green Mtn	Ruedi	Wolford	Williams Fk	Willow Ck	Granby	Williams Fk	Wolford	Williams Fk	Green Mtn	Ruedi	Wolford	Williams Fk	Granby	Willow Ck	TOTAL (CFS)		w/deliveries	w/o deliveries	
constant	66,000 AF	20,825 AF	11,412 AF	5,412 AF	--	--	--	--	3-day, 10%	2-day, 7.5%	3-day, 10%	3-day, 10%	3-day, 10%	3-day, 10%	TOTAL (CFS)					
9/25/2007	288	51		8					406	48		9			483	1705	1	1	56	860
9/26/2007	295	51		38					456	47		12			515	1891	1	1	57	860
9/27/2007	300	0		44					296	47		18			361	1662	1	1	58	860
9/28/2007	293			15					259	47		7			314	1434	1	1	59	860
9/29/2007	265			22					266	0		34			300	1304	1	1	60	860
9/30/2007	271			22					270			40			310	1234	1	0	61	860
10/1/2007	244			0					263			14			277	1342	1	1	62	860
10/2/2007	244			60					239			20			258	2188	1	1	63	860
10/3/2007	251			37					244			20			264	1765	1	1	64	1,240
10/4/2007	276			15					244			0			244	1701	1	1	65	1,240
10/5/2007	283			7					220			54			274	1723	1	1	66	1,240
10/6/2007	281			7					226			33			259	1769	1	1	67	1,240
10/7/2007	289			15					249			14			282	1700	1	1	68	1,240
10/8/2007	304			0					255			6			261	1536	1	0	69	1,240
10/9/2007	302			15					253			6			259	1453	1	0	70	1,240
10/10/2007	310			7					260			14			274	1399	1	0	71	1,240
10/11/2007	299								274			0			274	1339	1	0	72	1,240
10/12/2007	360			0					272			14			285	1290	1	0	73	1,240
10/13/2007	422								279			6			285	1289	1	0	74	1,240
10/14/2007	363								269			6			276	1322	1	0	75	1,240
10/15/2007	391								324			0			324	1546	1	0	76	1,240
10/16/2007	245								380						380	1618	1	0	77	1,240
10/17/2007	425								327						327	1616	1	1	78	1,240
10/18/2007	317								352						352	1711	1	1	79	1,240
10/19/2007	291								220						220	1677	1	1	80	1,240
10/20/2007	298								382						382	1540	1	0	81	1,240
10/21/2007	304								285						285	1591	1	1	82	1,240
10/22/2007	260								262						262	1590	1	1	83	1,240
10/23/2007	249								268						268	1478	1	0	84	1,240
10/24/2007	232								273						273	1407	1	0	85	1,240
10/25/2007	254								252						252	1388	1	0	86	1,240
10/26/2007	224								224						224	1571	1	1	87	1,240
10/27/2007	200								208						208	1622	1	1	88	1,240
10/28/2007	104								228						228	1591	1	1	89	1,240
10/29/2007	0								201						201	1547	1	1	90	1,240
10/30/2007									180						180	1463	1	0	91	1,240
10/31/2007									93						93	1392	1	1	92	1,240
11/1/2007									0											
11/2/2007																				
11/3/2007																				
TOTAL CFS	16,509	7,196	3,448	1,207	0	0	0	0	14853	6656	3103	1086	0	0	25704	4459	114,872	84,709	88	52
TOTAL AF	32,745	14,273	6,839	2,394	0	0	0	0	29,470	13,203	6,155	2,155	0	0	50,983	8,844	227,849	168,021		

The Palsade Bypass Pipeline is not a reservoir release; however, its flows are considered for computing the "without reservoir deliveries" flow in the 15 Mile Reach. It is assumed that the entire flow of the Pipeline is contributing to the flow in the 15 Mile Reach as long as the flow passing the GVIC diversion dam is equal to or exceeds the Pipeline flow.

The shaded area in the Wolford column represents supplemental and protected releases to help meet the recovery goals for the 15 Mile Reach of the Colorado River, due to the outage at the Shoshone Power Plant. In addition to the Wolford releases, unprotected yet supplementary releases were made from Green Mountain (11,869 AF) and Williams Fork (4,959 AF).

Appendix D

IMPACT OF LATE IRRIGATION SEASON RESERVOIR RELEASES IN THE 15 MILE REACH  
(As Measured at the Colorado River at Palisade Gage)  
2007 LATE SUMMER/FALL



## Appendix E

### DIVISION 5 HISTORIC & PROJECTED RESERVOIR LEVELS

	Decreed Capacity	Dead Storage	IY 2003 Minimum Storage	IY 2004 Minimum Storage	IY 2005 Minimum Storage	IY 2006 Minimum Storage	IY 2007 Minimum Storage	Actual IY 2008 April 1st Storage
Reservoir								
Granby	543,758	74,190	90,251	237,651	288,522	312,007	288,308	279,470
Dillon	252,678	3,269	120,377	209,595	218,205	218,205	226,470	233,113
Green Mountain	154,645	26,860	35,941	66,258	89,219	63,383	72,371	63,916
Ruedi	102,369	61	47,344	61,599	75,251	63,201	68,835	62,837
Williams Fork	93,637	0	7,533	56,155	56,155	68,013	70,885	81,502
Wolford	65,993	0	16,849	16,836	40,524	51,216	48,527	51,000
Homestake	43,504	0	17,055	13,549	34,928	11,765	29,737	14,909
Vega	33,500	823	3,203	7,465	11,470	10,107	10,492	16,960

Notes: Green Mountain Reservoir dead storage includes 20,000 AF of "stranded" storage.

## APPENDIX F: WATER COURT ACTIVITIES

### CALENDAR YEAR 2007

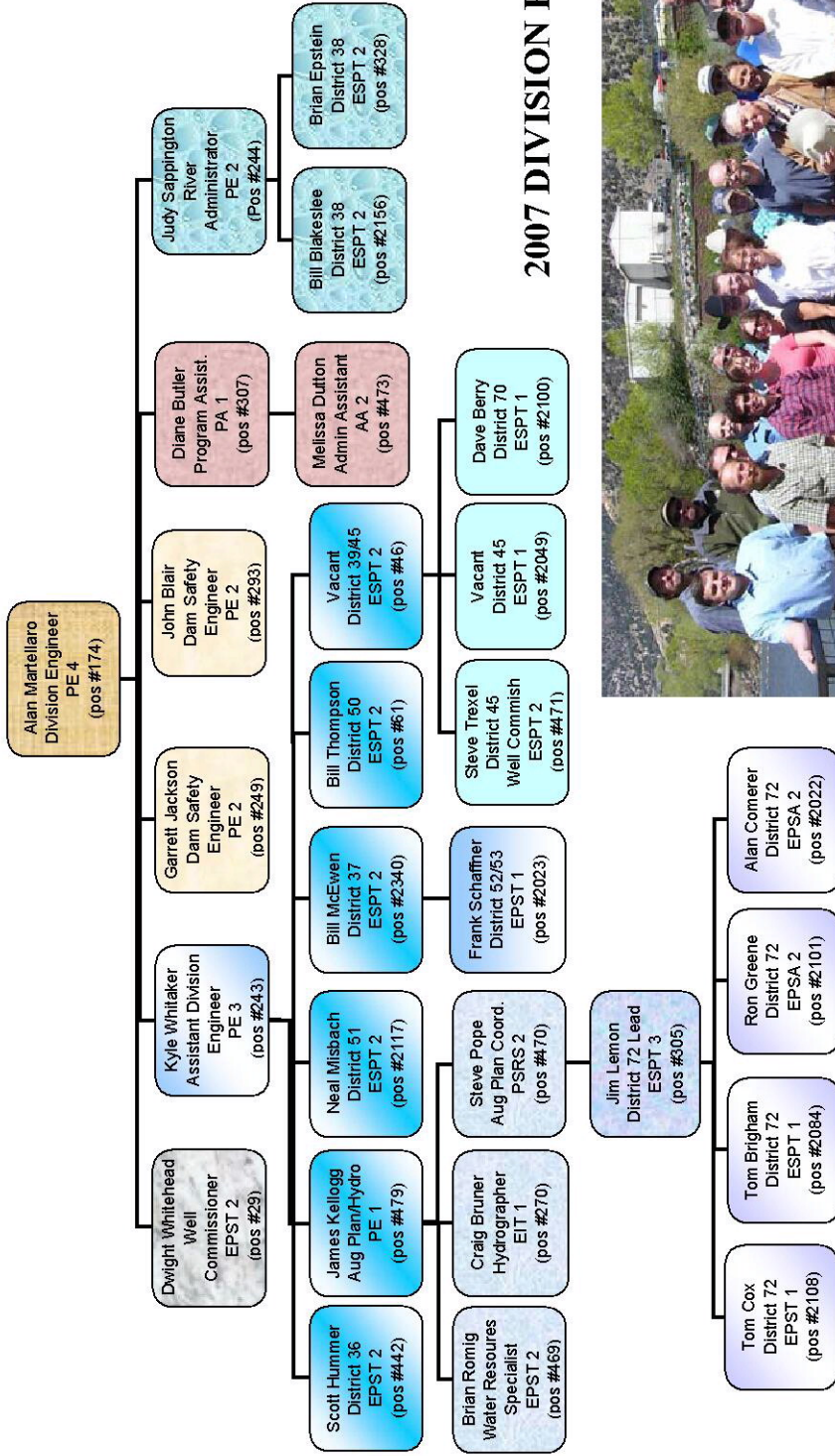
Applications Made to Water Court...(07CW...)	258
Div 5 DWR – Colorado River	238
(Div 6 DWR) – White River	19
Amended Applications – Div 5 Colorado River	42
No. of Consultations With Referee	264
No. of Complaints	1
No. of Withdrawn Cases or Dismissed Cases	22
No. of Denials	N/A

NO. OF CASES DECREED BY WATER COURT FOR DIVISION 5 = 345

Type of Decree	# Cases	# Structures
Findings of Diligence on Conditional Rights	74	103
Cancellations of Conditional Rights (includes "Orphan" Cases)	18	59
Conditional Rights Made Absolute	56	59
Surface Water Rights Adjudicated	53	67
Underground Water Rights Adjudicated	24	29
Water Storage Rights Adjudicated	37	63
Plans for Augmentation Adjudicated	41	51
Structures Augmented in Combination Cases	N/A	N/A
Change of Water Rights (includes location, use, amount, alt pts dvr, chg pts dvr)	31	45
Instream Flow Rights Adjudicated	0	0
Amend Augmentation Plans	N/A	N/A
Exchanges	29	40
Combination Cases of Diligence & Conditional To Absolute in the same application (all other combination cases itemized above)	N/A	N/A



DIVISION FIVE ORGANIZATIONAL CHART



2007 DIVISION FIVE



**APPENDIX H: OFFICE ADMINISTRATION & WORKLOAD MEASURES**

PERSONNEL/REIMBURSABLE MILEAGE										
Name	Working Title Fiscal Year 2007	Office or WD	Fiscal Year 7/1/06 - 06/30/07		Fiscal Year 7/1/06 - 6/30/07 Reimbursable Miles		Irrigation Year 11/1/06 - 10/31/07 Reimbursable Miles		Calendar Year 1/1/07 - 12/31/07 Reimbursable Miles	
			Budgeted	Worked	2 W	4 W	2 W	4 W	2 W	4 W
<b>OFFICE STAFF</b>										
John G. Blair	PE II Dam Safety Engineer	Office	12	12	0	0	0	0	0	0
Craig Bruner	Engineer-In-Training Hydrographer (hired 5-13-07)	Office	12	7.5	0	0	0	0	0	0
Diane Butler	PA I Program Assistant (hired 2-5-07)	Office	12	11	0	0	0	0	0	0
Karen Crider	Temp. Administrative Asst. II (10-1-07-11/23/07)	Office	6	2	0	0	0	0	0	0
Melissa Dutton	AA II Administrative Assistant (hired 11/26/07)	Office	12	1	0	0	0	0	0	0
Michelle Fite	AA II Administrative Assistant (resigned 9/10/07)	Office	12	8	0	0	0	0	0	0
Garrett Jackson	PE II Dam Safety Engineer	GJ Ofc			0	0	0	0	0	0
James Kellogg	PE I Hydrographer /Augmentation Coordinator	Office	12	12	0	110	0	110	0	110
Alan Martellaro	PE IV Division Engineer	Office	12	12	0	0	0	0	0	0
Steve Pope	PSRS II Augmentation Plan Coord. (promoted 4-1-07)	GJ Ofc	12	9	0	0	0	0	0	0
Brian Romig	EPST II	Office	12	12	764	97	0	0	0	0
Judy Sappington	PE II Colorado River Administrator	Office	12	12	76	0	0	0	0	0
Doug Stephenson	EPST II Well Inspector Div 4, 5, 6 (transferred 1-4-08 to Denver)	Office	12	12	0	0	0	0	0	0
Kyle Whitaker	PE III Asst. Division Engineer	Office	12	12	2,025	200	570	200	570	200
Dwight Whitehead	EPST II Well and Water Commissioner	Office	12	12	0	0	0	0	0	0
<b>Subtotal Budgeted Worker Months (Office Staff):</b>			<b>162</b>							
<b>Subtotal Total Months Worked (Office Staff):</b>			<b>135</b>							

**FULL TIME FIELD STAFF**

Bill Blakeslee	EPST II Water Commissioner	38	12	12	1,222	5,528	0	2,521	0	693
Brian Epstein	EPSTII Water Commissioner (hired 4-4-07)	38	12	9	1,702	40	3,392	81	3,912	81
Scott Hummer	EPST II Water Commissioner	36	12	12	528	0	0	0	0	0
Jim Lemon	EPST II Water Commissioner	39/45	12	12	0	0	0	0	0	0
Bill McEwen	EPST II Water Commissioner	37	12	12	0	3,817	0	7,881	0	8,506
Neal Misbach	EPST II Water Commissioner	51	12	12	0	1,636	0	998	0	857
Steve Pope	EPST III Water Commissioner	GJ Ofc	12	3	0	0	0	0	0	0
Frank Schaffner	EPST I Water Commissioner	52/53	12	12	0	1,224	0	622	0	622
Bill Thompson	EPST III Water Commissioner	36/50/51/53	12	12	220	800	0	0	0	0
Steve Trexel	EPST II Water Commissioner	45	12	12	0	7,482	0	4,970	0	4,661
<b>Subtotal Budgeted Worker Months (FT Field Staff):</b>			<b>120</b>							
<b>Subtotal Total Months Worked (FT Field Staff):</b>			<b>108</b>							

**PERMANENT PART TIME FIELD STAFF**

David Berry	EPST I Water Commissioner	70	8	9	0	6,830	0	7,401	0	7,153
Tom Brigham	EPST I Water Commissioner	72	10	12	917	11,124	917	5,015	677	5,604
Tom Cox	EPST III Water Commissioner	72	9	11	3,061	7,950	3,109	6,399	2,798	6,399
Alan Comerer	EPST II Water Commissioner	72	6	6	4,353	5,948	7,425	2,318	7,425	2,318
Ron Greene	EPST III Water Commissioner	72	6	6	756	2,454	140	2,905	140	2,905
Mike Mello	EPST I Water Commissioner (retired 12-31-07)	45	9	8	0	9,170	0	8,295	0	8,699
<b>Subtotal Budgeted Worker Months (Perm. PT Field Staff):</b>			<b>48</b>							
<b>Subtotal Total Months Worked (Perm. PT Field Staff):</b>			<b>52</b>							

**TEMPORARY PART TIME FIELD STAFF**

Eddie Wilson	EPST II		2	2	0	0	0	0	0	0
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<b>Subtotal Budgeted Worker Months (Temp. PT Field Staff):</b>	<b>2</b>
<b>Subtotal Total Months Worked (Temp. PT Field Staff):</b>	<b>2</b>

<b>2007 Total FY Budgeted Worker Months:</b>	<b>332</b>	<b>332 Months = 27.66 FTE</b>
<b>2007 Total FY Months Worked:</b>	<b>297</b>	<b>297 Months = 24.75 FTE</b>

<b>Subtotal Reimbursable Miles Driven:</b>	<b>15,624</b>	<b>64,410</b>	<b>15,553</b>	<b>49,716</b>	<b>15,522</b>	<b>48,808</b>
<b>Total Reimbursable Miles Driven per Period:</b>	<b>80,034</b>	<b>65,269</b>	<b>64,330</b>			

**Computed Miles/Rate:**

(July-Dec 06': 2W = .33 per mile, 4W = .36 per mile)	\$2,019.27	\$13,900.04	\$191.73	\$1,714.68		
(Jan-Dec 07': 2W = .39 per mile, 4W = .41 per mile)	\$3,707.14	\$10,577.30	\$15,326.51	\$47,763.63	\$6,053.62	\$20,011.47

<b>Subtotal Money per Specified Period:</b>	<b>\$5,726.41</b>	<b>\$24,477.34</b>	<b>\$15,518.24</b>	<b>\$49,478.31</b>	<b>\$6,053.62</b>	<b>\$20,011.47</b>
<b>Total Money per Specified Period:</b>	<b>\$30,203.75</b>	<b>\$95,200.30</b>	<b>\$121,265.39</b>			

# APPENDIX H: OFFICE ADMINISTRATION AND WORKLOAD MEASURES

## WATER COMMISSIONER ACTIVITY SUMMARY: CALENDAR YEAR 2007

ACTIVITY	TOTALS
Professional and Technical Staff (FTE)	11
Clerical Staff (FTE)	2
Water Commissioner (FTE)	Part Time = 4 Full Time = 10
Decreed Surface Water Structures (cumulative)	11,516
Surface Rights Administered (Site Visits) (water commissioners)	14,778
Number of Decreed Wells (cumulative)	3,741
Consultations With Referee	264
Water Court Appearances (water commissioners)	0
Meetings With Water Users (Public Meetings) (water commissioners)	182
Meetings To Resolve Water Related Disputes	Not on activity summary
Contacts to Give Public Assistance on Water Matters (water commissioners)	Total Contacts = 15,895 Field = 4,386 Office = 1,496 Phone = 10,013
Dams Visited (water commissioners)	1,637
Wells Visited (water commissioners)	997
Surface Structures Administered by Phone (water commissioners)	1,079

\*\*All "(water commissioners)" figures taken from Water Commissioner Activity Summary reports

**2007 TRANSMOUNTAIN DIVERSIONS - INFLOWS**

**Appendix I**

RECIPIENT				SOURCE					
WD ID	Name	Stream	10-Year Average		Current Year		WD ID	Stream	
			AF	Days	AF	Days			
36	4677 ARKANSAS WELL	TENMILE CREEK	222.2	365	173.0	365.0	11	ARKANSAS RIVER	
38	4682 ROARING FORK BYPASS FLOW	ROARING FORK RIVER	2,137.1	299	751.0	122.0	11	TWIN LAKES	
45	4657 DIVIDE-HIGHLINE FEEDER	DIVIDE CREEK	991.6	43	991.0	45.0	40	CLEAR FORK MUDDY CREEK	
50	4600 SARVIS CREEK DITCH	RED DIRT CREEK	505.9	79	*	*	58	SARVIS CREEK	
53	4716 DOME CREEK DITCH	EGERIA CREEK	147.1	76	45.0	43.0	58	BEAR CREEK	
53	4715 STILLWATER DITCH	EGERIA CREEK	1,817.9	97	1,283.0	118.0	58	BEAR CREEK	
72	4713 REDLANDS POWER CANAL	COLORADO RIVER	489,791.5	324	573,659.0	363.0	42	GUNNISON RIVER	
72	4711 GRAND JUNCTION MUNICIPAL	COLORADO RIVER	2,936.5	231	0.0	0.0	42	KANNAH CREEK	
<b>TOTAL:</b>							<b>576,902.0</b>		

\*Water Taken but no information available for this year, therefore running on a 9 year average for Sarvis Creek Ditch

Appendix I

2007 TRANSMOUNTAIN DIVERSIONS - OUTFLOWS

RECIPIENT			SOURCE				
WD ID	Name	Stream	10-Year Average AF	Current Year Days	Current Year AF	WD ID	Stream
7	4658 STRAIGHT CREEK TUNNEL	CLEAR CREEK	204.5	365	134.0	36	STRAIGHT CREEK
7	4626 VIDLER TUNNEL	CLEAR CREEK	479.3	71	715.0	51	SNAKE RIVER
23	4686 BOREAS PASS DITCH	TARRYALL CREEK	153.8	64	187.0	56	BLUE RIVER
23	4699 HOOSIER TUNNEL	MAIN FORK OF SO. PLATTE RIVER	7,958.4	148	6,023.0	183	BLUE RIVER
80	4684 ROBERTS TUNNEL	MAIN FORK OF SO. PLATTE RIVER	77,533.4	307	37,847.0	364	BLUE RIVER
11	4641 COLUMBINE DITCH	TENNESSEE CREEK	1,537.5	91	1,830.0	87	SO. FORK OF EAGLE RIVER
11	4642 EWING DITCH	TENNESSEE CREEK	784.5	118	1,042.0	99	SO. FORK OF EAGLE RIVER
11	4614 HOMESTAKE TUNNEL	SO. PLATTE VIA ARKANSAS RIVER	30,490.0	80	20,793.0	39	HOMESTAKE CREEK
11	4648 WURTZ DITCH	TENNESSEE CREEK	2,034.0	108	2,338.0	99	SO. FORK OF EAGLE RIVER
11	4629 BOUSTEAD TUNNEL	LAKE FORK CREEK	47,296.4	364	55,285.0	365	FRYING PAN RIVER
11	4613 BUSK-IVANHOE TUNNEL	LAKE FORK CREEK	4,632.3	263	4,238.0	365	FRYING PAN RIVER
11	4617 TWIN LAKES TUNNEL	LAKE FORK CREEK	41,266.8	362	52,565.0	351	ROARING FORK RIVER
3	4601 GRAND RIVER DITCH	CACHE LA POUVRE RIVER	16,619.1	153	20,673.0	181	NO. FORK COLORADO RIVER
4	4602 EUREKA DITCH	CACHE LA POUVRE RIVER	0.0	0	0.0	0	NO. FORK COLORADO RIVER
4	4634 ALVA B ADAMS TUNNEL	BIG THOMPSON RIVER	222,459.7	337	234,255.0	322	NO. FORK COLORADO RIVER
6	4659 MOFFAT TUNNEL	BOULDER CREEK	55,117.9	365	44,770.0	364	FRASER RIVER
7	4625 BERTHOUD PASS DITCH	CLEAR CREEK	570.6	67	719.0	95	FRASER RIVER
6	505 AUGUST P GUMLUCK TUNNEL	BOULDER CREEK VIA FRASER RIVER	INCLUSIVE IN MOFFAT TUNNEL			51	WILLIAMS FORK RIVER
6	4603 VASQUEZ PIPELINE	BOULDER CREEK VIA FRASER RIVER	INCLUSIVE IN MOFFAT TUNNEL			51	WILLIAMS FORK RIVER
40	758 LEON TUNNEL CANAL	SURFACE CREEK	908.5	92	1072	92	LEON CREEK
			TOTAL:		484,486.0		

Appendix J

RESERVOIR STORAGE SUMMARIES - DISTRICT 37

WD	ID	RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)					
				Minimum AF	Date	Maximum AF	Date	End Of Year	
37	3600	BENCHMARK LAKE	EAGLE RIVER	125.0	10/31/07	125.0	05/24/07	125.0	
	3608	BLACK LAKE	GORE CREEK	135.1	03/01/07	361.9	10/31/07	361.9	
	3510	BLACK LAKE NO 2	GORE CREEK	28.5	04/01/07	114.8	11/01/06	113.6	
	3698	BOLTS LAKE	CROSS CREEK	0.0	10/31/07	0.0	10/31/07	0.0	
	3513	CHALK MOUNTAIN RESERVOIR	EAGLE RIVER	230.9	11/01/06	232.0	06/01/07	231.1	
	3699	CLIMAX MOLY NO 4 RES	EAGLE RIVER	2,362.4	03/01/07	3,148.3	06/01/07	2,852.6	
	4516	HOMESTAKE RESERVOIR	HOMESTAKE CREEK	29,737.0	04/30/07	42,847.0	07/31/07	42,747.0	
	3520	L E D E RESERVOIR	GYPSUM CREEK	100.0	06/13/07	350.0	11/01/06	280.0	
	3522	NOECKER RESERVOIR	EBY CREEK	0.0	10/31/07	130.9	05/25/07	0.0	
	3524	O Z LAKE (aka Sylvan Lake)	BRUSH CREEK	452.0	10/31/07	452.0	08/22/07	452.0	
	3527	ROBINSON RESERVOIR	EAGLE RIVER	139.1	10/01/07	410.6	06/01/07	145.3	
	3530	WELSH RESERVOIR	ALKALI CREEK	0.0	10/31/07	0.0	10/31/07	0.0	
37		Total of All Others < 50 AF		0.0	10/31/07	15.0	10/31/07	0.0	
37		Total for District 37		33,310.0		48,187.5		47,288.5	

Appendix J

RESERVOIR STORAGE SUMMARIES - DISTRICT 38

WD	ID	RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End Of Year
				AF	Date	AF	Date	
38	3711	ALICIA LAKE RESERVOIR	LIME CREEK	650.0	11/01/06	673.0	06/05/07	650.0
	4000	BEAVER LAKE	CRYSTAL RIVER		No Information Available			
	3722	CONSOLIDATED RESERVOIR	WEST COULTER CREEK	34.0	08/10/07	815.0	05/22/07	6.0
	3774	CRAWFORD DAM NO 1	BLUE CREEK		No Information Available			
	3773	CRAWFORD DAM NO 2	BLUE CREEK		No Information Available			
	3721	CROOKED CREEK RES	LIME CREEK	8.0	05/01/07	12.0	07/10/07	10.0
	4087	CRYSTAL SPRING LAKE	CRYSTAL SPRING		No Information Available			
	4095	FLANNERY RESERVOIR	THREE MILE CREEK		No Information Available			
	3779	GRIZZLY RESERVOIR	LINCOLN CREEK		No Information Available			
	3727	HIMMELAND LAKE	FRYING PAN RIVER		No Information Available			
	3729	HUGHES RESERVOIR	THREE MILE CREEK		No Information Available			
	3732	IVANHOE RESERVOIR	FRYING PAN RIVER		No Information Available			
	3832	JACOBSON LAKES & PONDS	ROARING FORK RIVER		No Information Available			
	4154	KODIAK LAKE & WETLANDS	ROARING FORK		No Information Available			
	3736	LAKE ANN RESERVOIR	SOPRIS CREEK	37.0	09/28/07	338.0	06/20/07	67.0
	3955	MCNULTY RESERVOIR #2	SHIPPEE RUN CREEK		No Information Available			
	3740	RALSTON RESERVOIR	COULTER CREEK		No Information Available			
	3713	RUEDI RESERVOIR	FRYING PAN RIVER	68,835.0	03/31/07	102,313.0	06/30/07	85,253.0
	3744	SPRING PARK RESERVOIR	CATTLE CREEK		No Information Available			
	3747	THOMAS RESERVOIR	THOMAS CREEK		No Information Available			
	3753	UPPER CHAPMAN RES	FRYINGPAN RIVER		No Information Available			
	3750	VAN-CLEVE FISHER RES	MESA CREEK		No Information Available			
	3759	WILDCAT RESERVOIR	SNOWMASS CREEK	1,100.0	11/01/06	1,140.0	06/10/07	1,100.0
	3760	WOODS LAKE RESERVOIR	LIME CREEK	270.0	11/01/06	300.0	06/20/07	270.0
38		Total of All Others < 50 AF		90.0	11/01/06	103.0	06/01/07	90.0
38		Total for District 38		71,024.0		105,694.0		87,446.0

Appendix J

RESERVOIR STORAGE SUMMARIES - DISTRICT 39

2007		AMOUNT IN STORAGE (AF)									
WD	ID	RESERVOIR NAME	SOURCE STREAM	Minimum		Maximum		End Of Year			
				AF	Date	AF	Date	AF	Date		
39	3505	GRASS VALLEY RESERVOIR	RIFLE CREEK	1,976.0	11/01/06	5,300.0	04/09/07	1,976.0	1,976.0		
39	3940	MEADOW CREEK RESERVOIR	ELK CREEK	885.6	11/01/06	984.0	06/01/07	885.6	885.6		
39	3941	MIDDLE FORK RESERVOIR	PARACHUTE CREEK	90.0	11/01/06	100.0	06/01/07	90.0	90.0		
39	3507	PARK RESERVOIR	WEST ELK CREEK	0.0	11/01/06	130.0	05/01/07	19.0	19.0		
39	3508	RIFLE GAP RESERVOIR	RIFLE CREEK	1,906.0	11/01/06	12,413.0	04/23/07	4,097.0	4,097.0		
39		Total of All Others < 50 AF		13.0		73.1		13.0	13.0		
39		TOTAL FOR DISTRICT 39		4,870.6		19,000.1		7,080.6	7,080.6		



Appendix J

RESERVOIR STORAGE SUMMARIES - DISTRICT 45

2007		AMOUNT IN STORAGE (AF)						
WD	ID	RESERVOIR NAME	SOURCE STREAM	Minimum		Maximum		End Of Year
				AF	Date	AF	Date	
45	3603	PORTER RESERVOIR	EAST AKALI CREEK	160.0	10/31/07	835.0	05/20/07	160.0
45	3695	ALSBURY RESERVOIR	EAST DIVIDE CREEK	42.3	11/01/06	185.0	05/01/07	42.3
45		Total of All Others < 50 AF				114.7		
45		TOTAL FOR DISTRICT 45		202.3		1,134.7		202.3

Appendix J

RESERVOIR STORAGE SUMMARIES - DISTRICT 50

WD	ID	RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)							
				Minimum		Maximum		End Of Year			
				AF	Date	AF	Date	AF	Date		
	50	3644	ALBERT RESERVOIR	ALBERT CREEK	0.0	11/01/06	45.0	05/15/07	0.0	05/15/07	0.0
		3606	ANTELOPE RESERVOIR	ANTELOPE CREEK	20.0	07/02/07	290.0	05/04/07	45.0	05/04/07	45.0
		3651	BASIN RESERVOIR	MUDDY CREEK	35.0	06/08/07	98.0	05/14/07	40.0	05/14/07	40.0
		3645	BINCO RESERVOIR	ALBERT CREEK	0.0	11/01/06	450.0	05/15/07	0.0	05/15/07	0.0
		3618	HINMAN RESERVOIR	PASS CREEK	200.0	07/02/07	611.0	05/10/07	400.0	05/10/07	400.0
		3623	LAKE AGNES	MUDDY CREEK	330.0	11/01/06	380.0	05/14/07	348.0	05/14/07	348.0
		3646	MARTIN RESERVOIR	COLBURN CREEK	40.0	11/01/06	160.0	05/10/07	60.0	05/10/07	60.0
		3625	MATHESON RESERVOIR	TROUBLESOME CREEK	50.0	11/01/06	1,073.0	05/14/07	300.0	05/14/07	300.0
		3627	MC ELROY RESERVOIR	PASS CREEK	0.0		0.0		0.0		0.0
		3629	MC MAHON RESERVOIR NO 2	RED DIRT CREEK	348.0	11/01/06	3,500.0	05/13/07	525.0	05/13/07	525.0
		3655	MILK CREEK RESERVOIR	MILK CREEK	22.0	07/02/07	125.0	05/22/07	23.0	05/22/07	23.0
		3656	NORTH MEADOW RESERVOIR	MUDDY CREEK							
		3631	OAKS RESERVOIR	MILK CREEK	35.0	07/02/07	56.0	05/10/07	38.0	05/10/07	38.0
		3632	PARSONS RESERVOIR	CARTER CREEK	30.0	09/20/07	107.0	04/03/07	32.0	04/03/07	32.0
		3642	WHITELEY PEAK RESERVOIR	DIAMOND CREEK	148.0	10/31/07	700.0	06/08/07	148.0	06/08/07	148.0
		3668	WOLFORD MOUNTAIN RESERVOIR	MUDDY CREEK	48,527.8	02/28/07	66,539.9	05/31/07	53,848.5	05/31/07	53,848.5
		3643	WOODS RESERVOIR	DUNNING CREEK	20.0	07/01/07	60.0	05/14/07	27.0	05/14/07	27.0
	50		Total of All Others < 50 AF				250.5				
	50		TOTAL FOR DISTRICT 50		49,805.8		74,445.4				55,834.5

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RESERVOIR STORAGE SUMMARIES - DISTRICT 51

WD	ID	RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)									
				Minimum		Maximum		End Of Year					
				AF	Date	AF	Date	AF	Date				
2007													
	51	4006	BULL RUN CREEK RESERVOIR	BULL RUN CREEK	110.0	10/31/07	120.0	05/16/07	110.0				
		4055	CBT GRANBY RESERVOIR	COLORADO RIVER	288,308.0	04/30/07	433,924.0	06/30/07	374,340.0				
		3695	CBT SHADOW MOUNTAIN GRAND LAKE	NO. FORK OF COLO RIVER	1,505.0	11/30/06	17,929.0	04/30/07	17,745.0				
		3710	CBT WILLOW CREEK RESERVOIR	WILLOW CREEK	7,418.0	03/31/07	9,879.0	07/31/07	9,123.0				
		4012	COTTONWOOD RESERVOIR	GARDINER CREEK	90.0	10/31/07	125.0	06/27/07	90.0				
		3715	EAST BRANCH RESERVOIR	UTE CREEK			no info available						
		3660	F W LINKE NO 2 RESERVOIR	TEN MILE CREEK	10.0	10/31/07	60.0	05/01/07	10.0				
		3665	HANKINSON RESERVOIR	FRASER RIVER	70.0	07/19/07	100.0	05/20/07	90.0				
		4009	JACK ORR RESERVOIR	COLORADO RIVER			structure not built						
		3752	KINGS RESERVOIR	BUFFALO CREEK	350.0	10/31/07	550.0	05/31/07	350.0				
		3679	LANGHOLEN RESERVOIR	BATTLE CREEK	7.0	07/18/07	65.0	05/24/07	10.0				
		3686	MEADOW CREEK RESERVOIR	MEADOW CREEK	0.0	11/01/06	4,909.0	06/30/07	2,312.0				
		3687	MOORE RESERVOIR	WILLIAMS FORK RIVER	50.0	09/11/07	90.0	05/15/07	50.0				
		3688	MUSGRAVE RESERVOIR	ROCK CREEK	0.0	11/01/06	340.0	05/08/07	0.0				
		3693	ROCK CREEK RESERVOIR	ROCK CREEK			no data						
		3694	SCHOLL RESERVOIR	CORRAL CREEK	0.0	11/01/06	220.0	06/07/07	0.0				
		3732	GAYLORD RESERVOIR	POLE CREEK	159.0	11/01/06	170.0	06/22/07	159.0				
		4051	SUN VALLEY RESERVOIR	NO. FORK OF COLO RIVER	70.0	11/01/06	70.0	07/01/07	70.0				
		3701	SYLVAN RESERVOIR	LITTLE MUDDY CREEK	80.0	11/01/06	1,133.0	06/07/07	100.0				
		3738	UTE CREEK RESERVOIR	UTE CREEK	no data								
		3709	WILLIAMS FORK RES	WILLIAMS FORK RIVER	70,885.0	02/02/07	96,659.0	06/30/07	87,826.0				
51			Total of All Other Reservoirs Less Than 50 AF				360.0						
51			TOTAL FOR DISTRICT 51		369,112.0		566,703.0		492,385.0				

Appendix J

RESERVOIR STORAGE SUMMARIES - DISTRICT 52

2007		RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)						
WD	ID			Minimum			Maximum			End Of Year
				AF	Date		AF	Date		
52	3940	JONES RESERVOIR	HENRY CREEK	42.5	10/31/07		69.2	05/03/07	42.5	
	3982	MARMA LAKE	PINEY RIVER	63.0	11/01/06		63.0	06/01/07	63.0	
	3946	OXFORD RESERVOIR	COLORADO RIVER	20.0	11/01/06		60.0	06/14/07	25.0	
	3949	ROCK GAP DAM	HARTMAN GULCH	44.8	10/31/07		51.7	05/03/07	44.8	
52		Total of All Others < 50 AF		93.5			139.5		94.5	
52		TOTAL FOR DISTRICT 52		263.8			383.4		269.8	

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RESERVOIR STORAGE SUMMARIES - DISTRICT 53

WD	ID	RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)					
				Minimum		Maximum		End Of Year	
				AF	Date	AF	Date		
53	3959	CLYDE RESERVOIR	EGERIA CREEK	0.0	10/31/07	50.0	05/25/07	0.0	
	3960	CRESENT LAKE RESERVOIR	DERBY CREEK	0.0	11/01/06	237.0	07/16/07	0.0	
	3961	ED W HARPER RESERVOIR	EGERIA CREEK	0.0	11/01/06	194.0	05/25/07	42.4	
	3962	EGERIA RESERVOIR	EGERIA CREEK	0.0	07/16/07	65.7	05/25/07	0.0	
	3966	GRIMES BROOKS RESERVOIR	RED DIRT CREEK	0.0	11/01/06	322.0	05/30/07	137.0	
	3971	HEART LAKE RESERVOIR	DEEP CREEK	2,945.0	11/01/06	2,945.0	06/01/07	2,945.0	
	3972	HIDDEN SPRINGS RESERVOIR	HORSE CREEK	50.0	11/01/06	50.0	06/01/07	50.0	
	3974	JONES NO 1 RESERVOIR	SHEEP CREEK NO 2	88.0	09/01/07	240.0	05/15/07	90.0	
	3975	JONES NO 2 RESERVOIR	SHEEP CREEK NO 2	268.0	06/25/07	578.0	11/01/06	430.0	
	3978	KELLY RESERVOIR	EGERIA CREEK	113.0	10/31/07	149.0	05/20/65	113.0	
	3982	LUARK RESERVOIR	SPRING CREEK	30.0	11/01/06	75.0	06/11/07	30.0	
	4020	MACKINAW LAKE RES NO 2	DERBY CREEK	23.0	11/01/06	79.0	07/16/07	23.0	
	3986	MORRIS RESERVOIR	TOPONAS CREEK	0.0	11/01/06	35.0	06/11/07	0.0	
	3988	NEWTON GULCH RES	KING CREEK	0.0	11/01/06	57.0	06/15/07	0.0	
	3992	REID NO 3 RESERVOIR	EGERIA CREEK	86.0	11/01/06	86.0	06/14/07	86.0	
	3995	STERNER RESERVOIR	EGERIA CREEK	0.0	11/01/06	195.0	05/25/07	2.0	
	3997	SWEETWATER RESERVOIR	SWEETWATER CREEK	490.0	11/01/06	490.0	06/01/07	490.0	
	3999	TONIER GULCH RES	TOPONAS CREEK	0.0	11/01/06	64.0	06/08/07	0.0	
	4001	TOPONAS ROCK NO 2 RES	TOPONAS CREEK	0.0	11/01/06	196.0	05/25/07	0.0	
	4004	WOHLER RESERVOIR	ELK CREEK	79.8	10/31/07	82.0	06/18/07	79.8	
	3991	REID NO 1 RESERVOIR	EGERIA CREEK	120.0	10/31/07	130.0	06/14/07	120.0	
53		Total of All Others < 50 AF		475.0	11/01/06	475.0	06/01/07	475.0	
53		TOTAL FOR DISTRICT 53		4,767.8		6,794.7		5,113.2	

Appendix J

RESERVOIR STORAGE SUMMARIES - DISTRICT 70

2007		RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)					
WD	ID			Minimum		Maximum		End Of Year	
				AF	Date	AF	Date		
70		Total of All Others < 50 AF		112.8	11/01/06	112.8	10/30/07	112.8	
70		TOTAL FOR DISTRICT 70		112.8		112.8		112.8	

Appendix J

RESERVOIR STORAGE SUMMARIES - DISTRICT 72

2007		RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)					
ID	Minimum			Maximum		End Of Year			
	AF			Date	AF		Date		
72	3833	ANDERSON BROS RES NO 1	LEON CREEK	0.0	10/01/07	216.0	08/28/07	0.0	
	3887	BIG BEAVER RESERVOIR	BULL CREEK	0.0	10/01/07	122.3	07/15/07	0.0	
	3904	BIG CREEK NO 1 RESERVOIR	BIG CREEK	580.4	04/30/07	968.3	04/16/07	763.6	
	3905	BIG CREEK NO 3 RESERVOIR	BIG CREEK	1,001.3	04/26/07	1,549.6	05/17/07	1,447.8	
	3906	BIG CREEK NO 4 RESERVOIR	BIG CREEK	61.0	11/13/06	183.2	06/18/07	88.8	
	3907	BIG CREEK NO 5 RESERVOIR	BIG CREEK	0.0	12/27/06	104.6	06/04/07	91.5	
	3909	BIG CREEK NO 7 RESERVOIR	BIG CREEK	NO	INFO				
	3841	BOB MC KELVIE RESERVOIR	PLATEAU CREEK	86.0	11/01/06	270.0	05/01/07	86.0	
	3888	BULL BASIN NO 1 RES	BULL CREEK	0.0	09/01/07	116.3	06/04/07	0.0	
	3889	BULL BASIN NO 2 RES	BULL CREEK	0.0	08/15/07	70.6	06/16/07	0.0	
	3890	BULL CREEK NO 1 RES	BULL CREEK	0.0	09/01/07	79.3	06/16/07	0.0	
	3891	BULL CREEK NO 2 RES	BULL CREEK	0.0	09/01/07	68.0	06/16/07	0.0	
	3892	BULL CREEK NO 3 RES	BULL CREEK	0.0	09/01/07	59.2	06/16/07	0.0	
	3893	BULL CREEK NO 4 RES	BULL CREEK	ZERO	STORAGE				
	3894	BULL CREEK NO 5 RES	BULL CREEK	109.2	10/06/07	248.2	06/16/07	109.2	
	3834	COLBY HORSE PARK RES	LEON CREEK	0.0	09/11/07	470.0	06/29/07	0.0	
	3883	COON CREEK NO 1 RES	COON CREEK	0.0	07/20/07	396.0	06/08/07	0.0	
	3884	COON CREEK NO 2 RES	COON CREEK	0.0	09/18/07	193.2	06/15/07	0.0	
	3885	COON CREEK NO 3 RES	COON CREEK	0.0	11/01/06	151.5	06/26/07	76.4	
	3923	COTTONWOOD LAKES RES NO 1	COTTONWOOD CREEK	1,450.7	04/30/07	1,939.6	06/11/07	1,635.9	
	3924	COTTONWOOD LAKES RES NO 2	COTTONWOOD CREEK	18.7	10/29/07	206.1	05/21/07	18.7	
	3925	COTTONWOOD LAKES RES NO 4	COTTONWOOD CREEK	197.9	10/15/07	303.7	05/14/07	276.5	
	3926	COTTONWOOD LAKES RES NO 5	COTTONWOOD CREEK	216.7	12/18/06	342.3	05/17/07	334.9	
	4065	CURRIER RESERVOIR NO 2	BUZZARD CREEK	90.0	11/01/06	190.0	06/01/07	120.0	
	3910	DAWSON RESERVOIR	BIG CREEK	28.8	11/13/06	218.0	05/21/07	147.9	
	3920	ECHO LAKE RESERVOIR	BIG SALT WASH	0.0	11/01/06	95.5	05/09/07	0.0	
	3914	GROVE CREEK RESERVOIR NO 1	GROVE CREEK	0.0	11/01/06	251.0	05/01/06	0.0	
	3915	GROVE CREEK RESERVOIR NO 2	GROVE CREEK	0.0	11/01/06	75.0	05/01/07	0.0	
72		Subtotal This Page		3,840.7		8,887.6		5,197.2	

Appendix J

RESERVOIR STORAGE SUMMARIES - DISTRICT 72

2007 WD	ID	RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)						End Of Year
				Minimum			Maximum			
				AF	Date	AF	AF	Date	Date	
72	3849	HAWXHURST RESERVOIR	HAWXHURST CREEK	ZERO	STORAGE					
	3957	HIGHLINE RESERVOIR	COLORADO RIVER	3,280.0	11/01/06	3,280.0	11/01/06	3,280.0	11/01/06	3,280.0
	3929	JENSEN RESERVOIR	COTTONWOOD CREEK	NO	INFO					
	3961	JERRY CREEK RESERVOIR TOTALIZER	PLATEAU CREEK	6,160.0	02/28/07	7,550.8	11/30/06	7,550.8	11/30/06	6,221.8
	3837	KENDALL RESERVOIR	LEON CREEK	NO	INFO					
	3838	KIRKENDALL RESERVOIR	LEON CREEK	NO	INFO					
	3839	LEON LAKE RESERVOIR	LEON CREEK	320.6	09/20/07	1,276.2	07/05/07	1,276.2	07/05/07	320.6
	3895	LOST LAKE RESERVOIR	BULL CREEK	0.0	11/01/06	82.1	07/15/07	82.1	07/15/07	0.0
	4077	MACK MESA RESERVOIR	MACK WASH	NO	INFO					
	3871	MESA CREEK NO 1 RESERVOIR	MESA CREEK	280.2	11/01/06	280.2	11/01/06	280.2	11/01/06	280.2
	3872	MESA CREEK NO 2 RESERVOIR	MESA CREEK	42.2	11/01/06	42.2	11/01/06	42.2	11/01/06	42.2
	3873	MESA CREEK NO 3 RESERVOIR	MESA CREEK	18.0	09/28/07	181.2	06/15/07	181.2	06/15/07	60.1
	3874	MESA CREEK NO 4 RESERVOIR	MESA CREEK	29.5	03/27/07	216.3	06/04/07	216.3	06/04/07	71.8
	3842	MONUMENT NO 1 RESERVOIR	LEON CREEK	50.0	11/01/06	575.0	06/01/07	575.0	06/01/07	50.0
	3843	MONUMENT NO 2 RESERVOIR	LEON CREEK	0.0	11/01/07	182.0	06/30/07	182.0	06/30/07	0.0
	3854	PALISADE CABIN RESERVOIR	RAPID CREEK	757.5	10/25/07	996.2	05/05/07	996.2	05/05/07	764.0
	3932	PARKER BASIN RESERVOIR NO 1	COTTONWOOD CREEK	84.7	11/27/06	271.6	06/07/07	271.6	06/07/07	186.4
	3933	PARKER BASIN RESERVOIR NO 2	COTTONWOOD CREEK	57.1	09/17/07	60.7	11/01/06	60.7	11/01/06	60.7
	3934	PARKER BASIN RESERVOIR NO 3	COTTONWOOD CREEK	103.3	09/20/07	265.3	06/14/07	265.3	06/14/07	105.0
	3858	RAPID CREEK NO 1 RESERVOIR	RAPID CREEK	341.3	11/01/06	671.6	06/12/07	671.6	06/12/07	345.5
	3859	RAPID CREEK NO 2 RESERVOIR	RAPID CREEK	0.0	11/01/06	486.1	06/12/07	486.1	06/12/07	0.0
	4019	ROOTS RESERVOIR	MACK WASH	NO	INFO					
	3921	RUBY LEE RESERVOIR	BIG SALT WASH	NO	INFO					
	3901	STUBB MCKINNEY CLARK RESERVOIR	SPRING CREEK	0.0	11/01/06	149.4	06/15/07	149.4	06/15/07	115.8
	3931	T E KITSON RESERVOIR	COTTONWOOD CREEK	184.3	11/01/06	184.3	11/01/06	184.3	11/01/06	184.3
	3902	TWIN BASIN RESERVOIR	BULL CREEK	0.0	07/15/07	39.5	06/29/07	39.5	06/29/07	0.0
	3844	VEGA RESERVOIR	PLATEAU CREEK	13,921.0	10/31/07	33,386.0	05/31/07	33,386.0	05/31/07	13,921.0
	3919	Y T RESERVOIR	GROVE CREEK	NO	INFO					
72		Subtotal This Page		25,629.7		50,176.7		50,176.7		26,009.4
72		Subtotal Previous Page(s)		3,840.7		8,887.6		8,887.6		5,197.2
72		Total of All Other Reservoirs Less Than 50 AF		103.2		277.7		277.7		135.1
72		TOTAL FOR DISTRICT 72		29,573.6		59,342.0		59,342.0		31,341.7



**2007 WATER DIVERSION SUMMARIES TO VARIOUS USES**

WD	TRANS MOUNTAIN OUTFLOW	TRANS-BASIN OUTFLOW	EXPORT FROM STATE	MUNICIPAL	COMMERCIAL	INDUSTRIAL	RECREATION	FISHERY	FIRE	DOMESTIC	HOUSEHOLD USE ONLY	STOCK
37	26003	0	0	10098	44	244	0	0	0	10	0	499
38	112087	941	0	15511	144	22	42219	48929	0	1394	0	4339
39	0	0	0	2798	255	114	0	12544	0	321	0	3335
45	0	95	0	1982	19	283	0	0	0	313	0	13398
50	0	0	0	0	0	0	0	6839	0	2	0	1
51	300416	4958	0	2192	42	2537	14	8521	0	27	0	95
52	0	434	0	0	328	0	0	0	0	18	0	0
53	0	0	0	790	3188	0	0	0	0	7435	0	0
70	0	0	0	103	0	0	0	0	0	3	0	1400
72	1072	1141	0	34461	17	936	0	51000	377	154	0	19237
TOTAL	439579	7569	0	67934	4037	4136	42233	127833	377	9678	0	42304

WD	AUGMENTATION	EVAPORATION	FEDERAL RESERVE	GEOTHERMAL	SNOWMAKING	MIN STREAMFLOW	POWER GENERATION	WILDLIFE	RECHARGES	OTHER	ALL BENEFICIAL USE
37	1	913	0	0	1067	0	0	0	0	811	0
38	1252	2494	0	0	341	3026	107323	0	0	0	0
39	1142	1330	0	0	0	0	0	0	0	0	0
45	250	175	0	0	0	0	90	0	0	0	0
50	1011	4633	0	0	0	2985	0	0	0	379	0
51	276	24375	0	0	231	0	63998	0	0	3	0
52	0	41	0	0	0	0	0	0	0	0	0
53	41	263	0	0	0	0	365953	0	0	0	0
70	19	49	0	0	0	0	0	0	0	0	0
72	724	1311	0	0	32	0	914800	0	308	0	0
TOTAL	4716	35584	0	0	1671	6012	1472164	0	308	1193	0

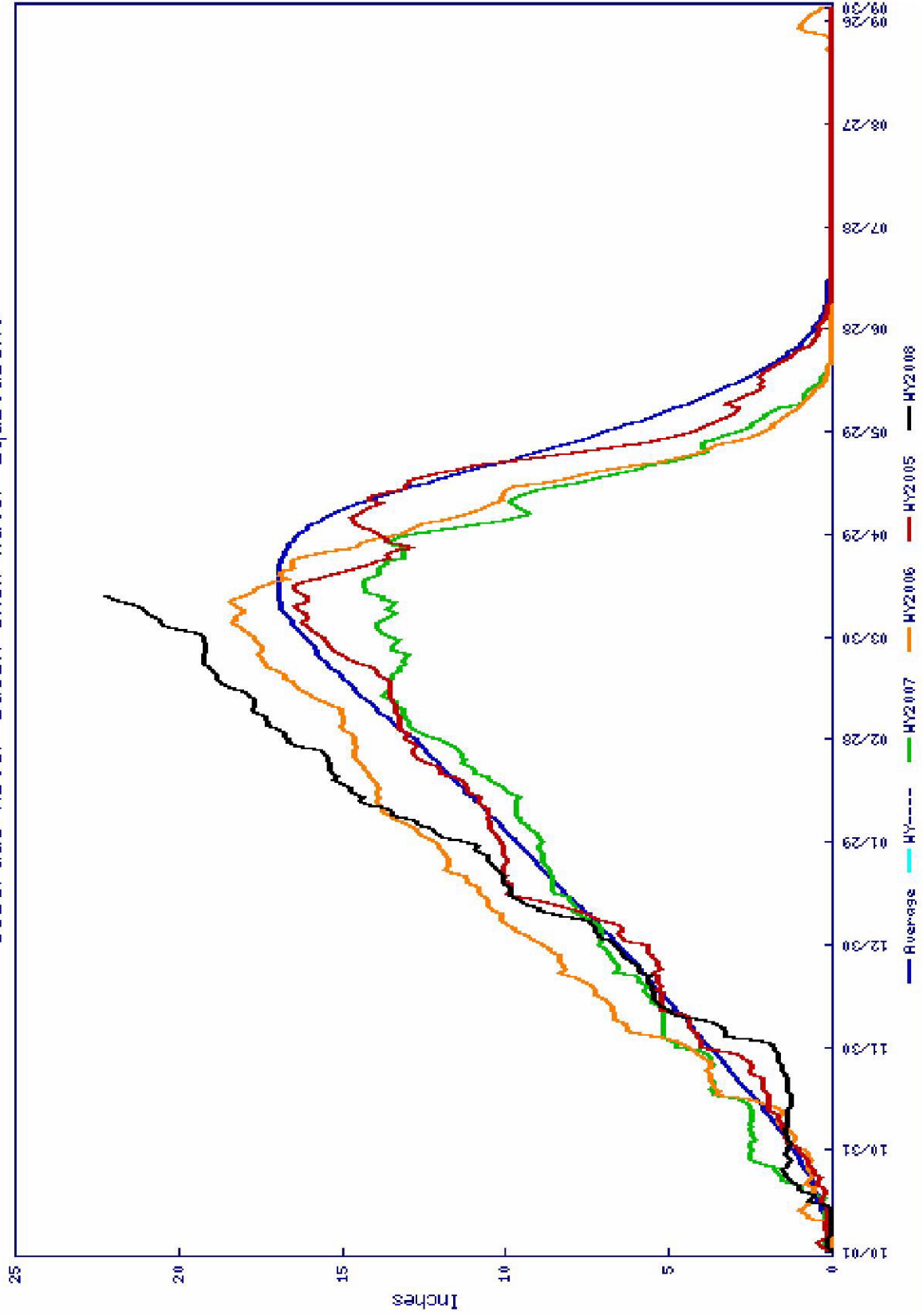
## 2007 WATER DIVERSION SUMMARIES

WD	STRUCTURES REPORTING					ALL STRUCTURES				TO IRRIGATION		
	With Record (1)	No Water Avail. (2)	No Water Taken (3)	No Info Avail. (4)	No Record (5)	Estimated # of recorded readings at Structure	Total Diversions, (AF)	Total Diversions to Storage, (AF)	Total Diversions, (AF)	Number of Acres Irrigated	Average AF Per Acre	
37	195	1	304	710		4302	150388	19431	85163	8293	10.27	
38	258	3	111	2667		4501	628190	35522	248990	16811	14.81	
39	184	45	184	558		255	139809	9786	104988	16377	6.41	
45	328	43	170	372		1307	116851	501	98424	21266	4.63	
50	202	1	23	84		1139	110458	26468	77308	18180	4.25	
51	512	12	195	652		5409	1086229	244427	130514	24235	5.39	
52	111	10	78	113		297	12829	131	11633	3046	3.82	
53	358	7	71	254		1631	465003	2224	52800	16009	3.30	
70	95	22	74	163		152	38076	113	34978	3094	11.31	
72	787	40	313	734		10338	2579249	42001	845128	97223	8.69	
TOTAL	3030	184	1523	6307		29331	5327082	380604	1689927	224534	7.53	

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)

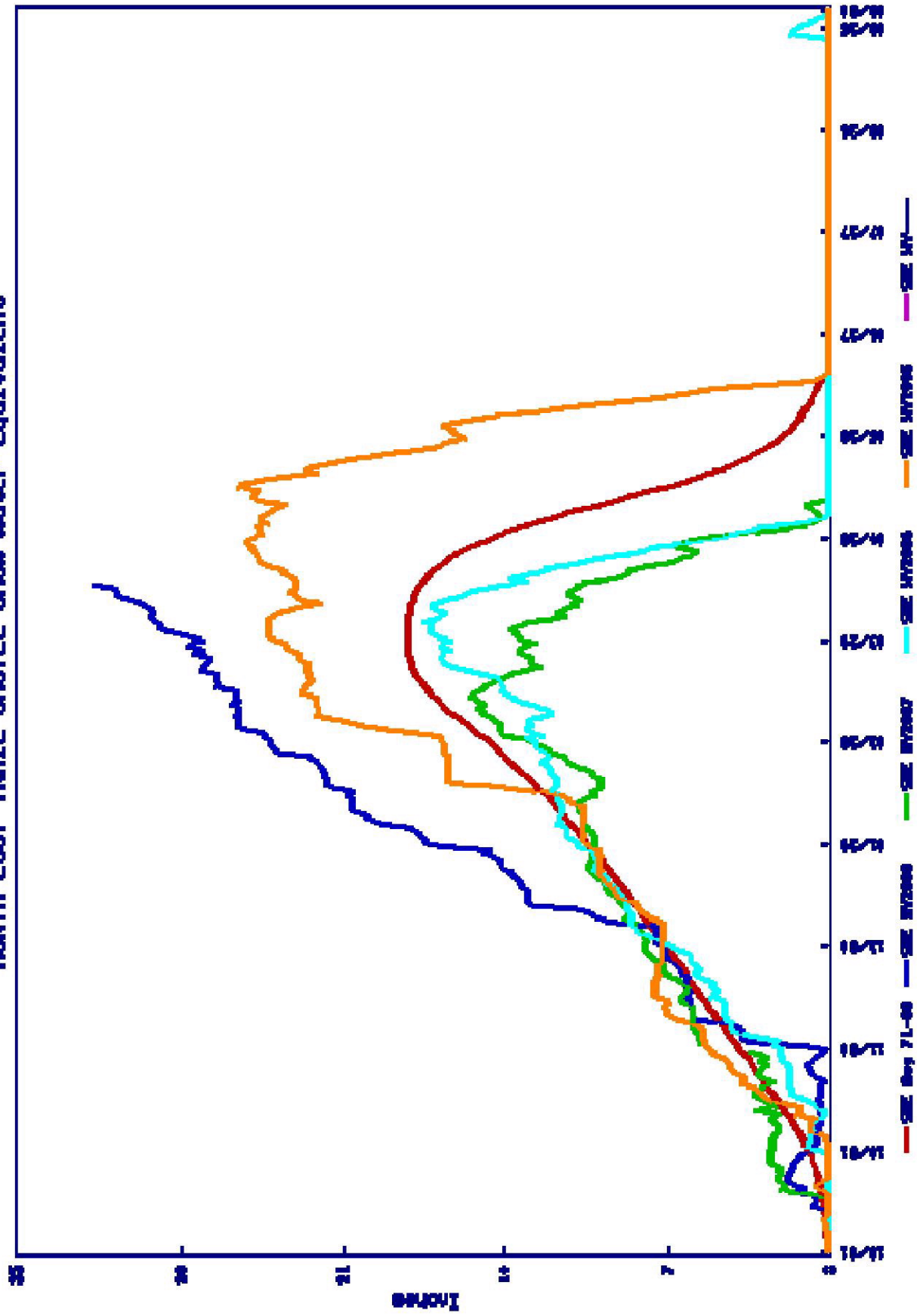
Appendix L

Colorado River Basin Snow Water Equivalent

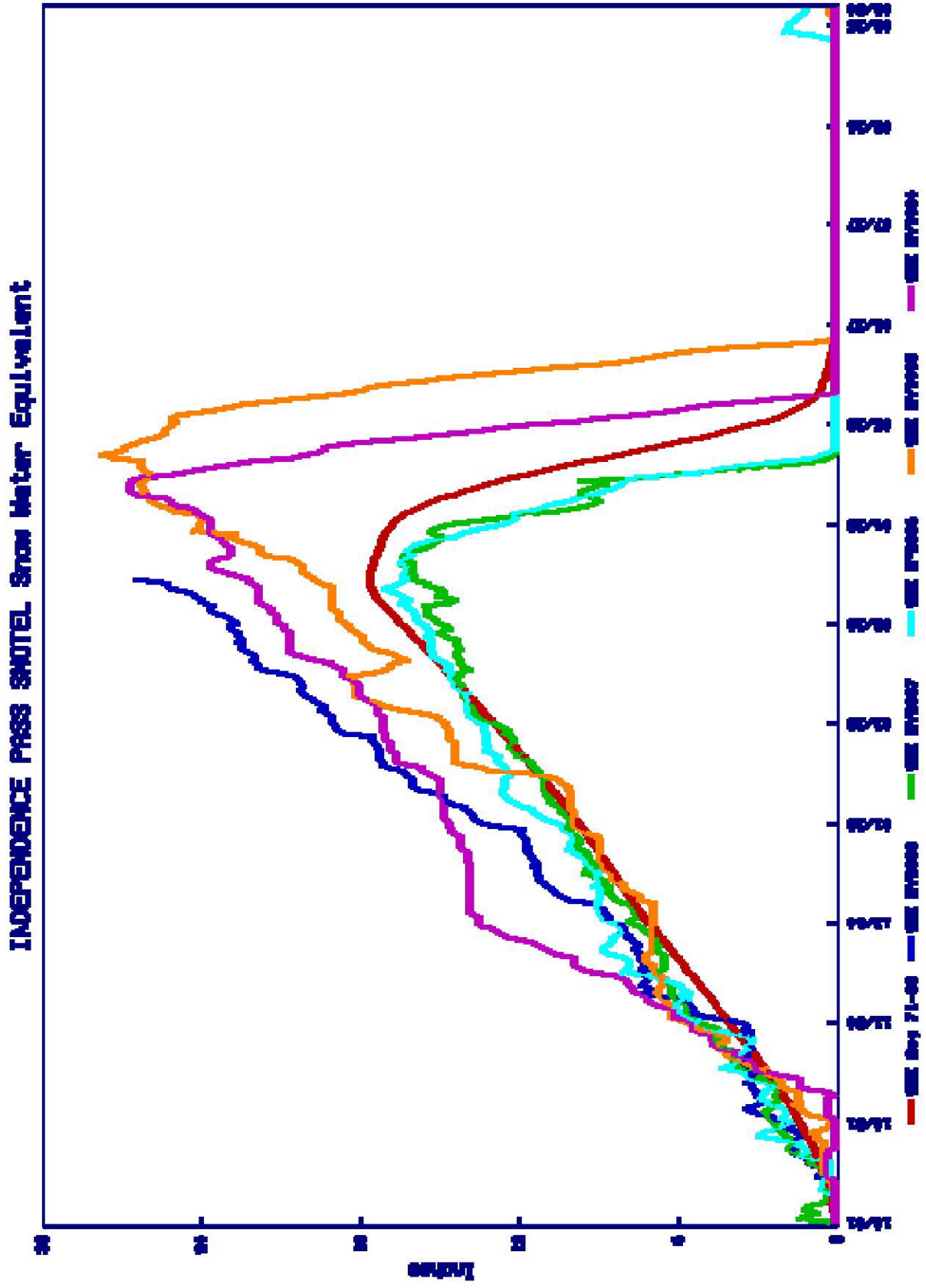


Appendix L

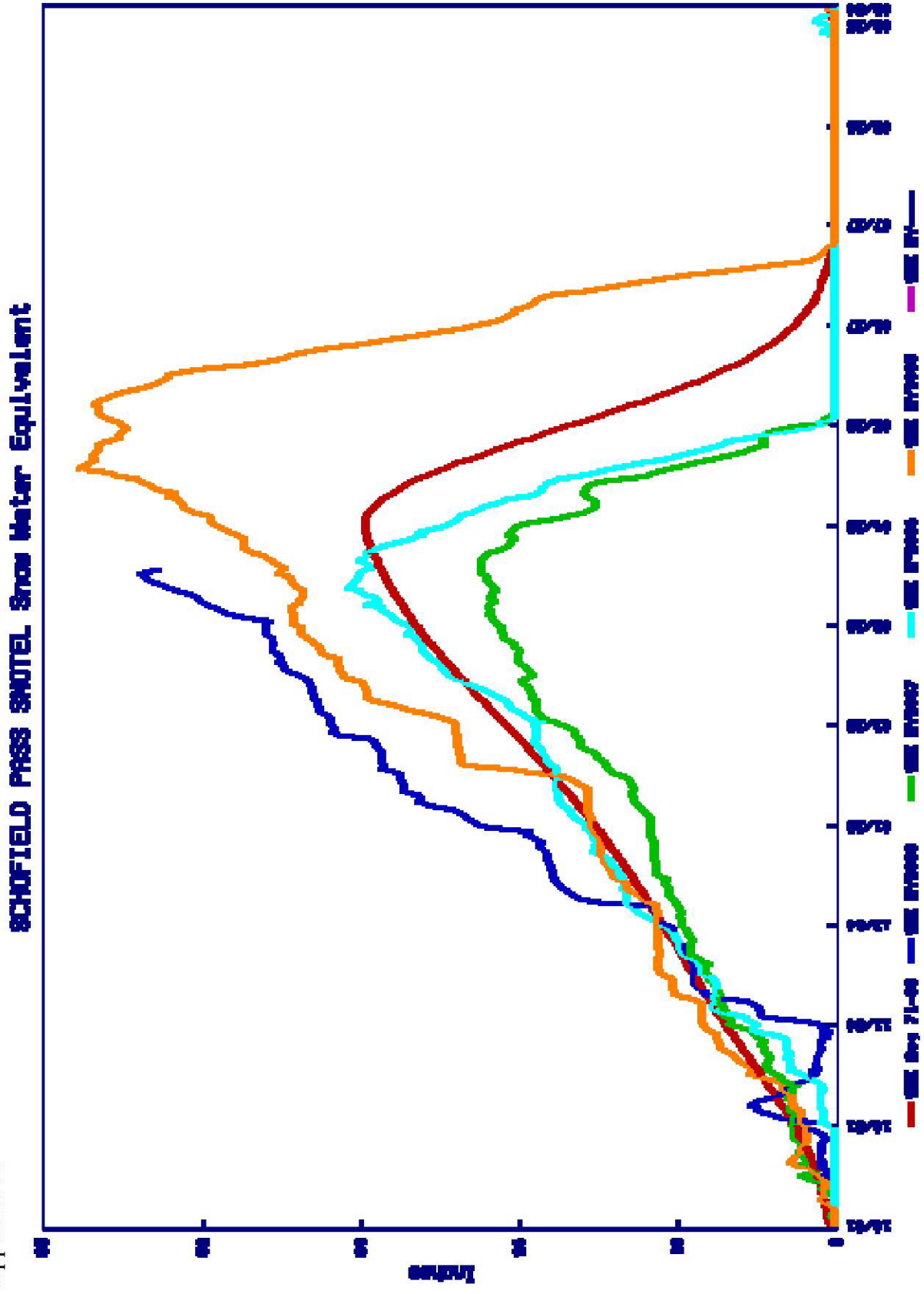
NORTH LOST TRAIL SNOTEL Snow Water Equivalent



Appendix L

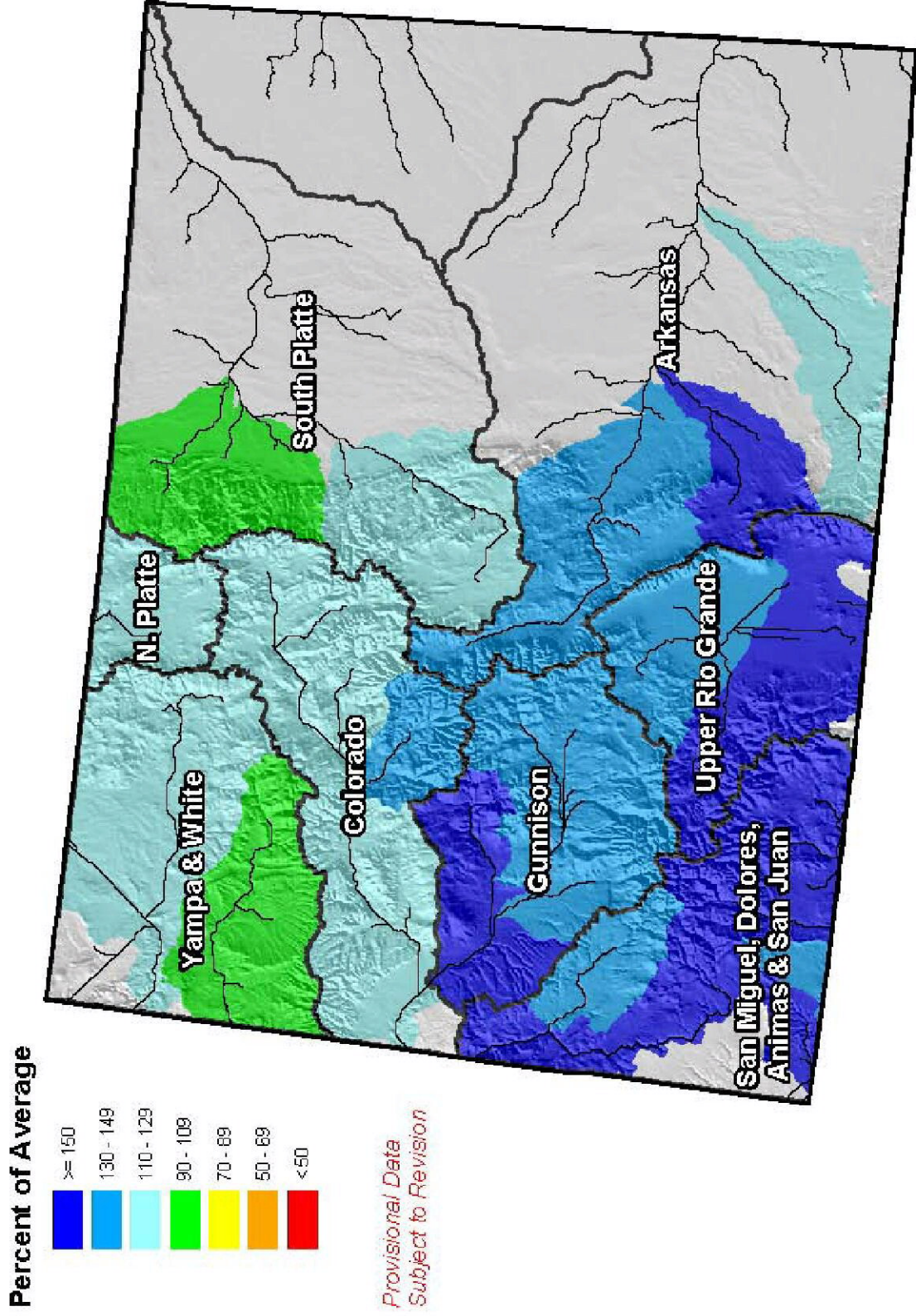


Appendix L:



APPENDIX L

# Colorado Streamflow Forecast Map



Current as of March 1, 2008