

Picture taken by John Sikora. Hammond Ditch at Hurd Creek Ranch near Winter Park. September 7, 2005

## DIVISION 5 WATER RESOURCES

## 2005

## ANNUAL REPORT

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## ANNUAL REPORT <br> WATER DIVISION 5 2005 IRRIGATION YEAR

Water Division 5 is the Colorado River mainstem. 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 3.6 M AF/YR. The two primary uses of this water for average year conditions are approximately 540,000AF/YR consumed for irrigation on 270,000 acres (note recent trends are well below these long term averages), and approximately $560,000 \mathrm{AF} / \mathrm{YR}$ 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 $2.5 \mathrm{M} \mathrm{AF} / \mathrm{YR}$.

The 2005 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 was 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. 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 2005 for conversion of agricultural lands to municipal land. The total irrigated lands for 2005 was 217,737 acres. Irrigation diversions were up from 1,704,845AF in 2004 to 1,917,301AF due to increased supply. The resulting irrigation depletions are approximately 450,000AF. 2005 irrigation year hydroelectric power generation was $1,517,618 \mathrm{AF}$ compared to $839,523 \mathrm{AF}$ in 2004. This is the result of more runoff and completion of improvements at the Shoshone Power Plant, allowing for more days of operation. Transmountain diversions were 481,761 AF in 2005--virtually unchanged from the previous year. Municipal diversions continue to increase in the Colorado River Basin and were 50,889AF (excludes domestic and household use only rights).

## I. 2005 WATER YEAR ACCOMPLISHMENTS AND EVENTS

## A. WATER ADMINISTRATION AND RUNOFF CONDITIONS

- Runoff Conditions

The 2005 irrigation season began following a wet Fall basin-wide. December 2004, however, changed an initially optimistic outlook with basin-wide dry conditions. The precipitation for December was $75 \%$ of average for the entire basin. This changed the runoff forecasts to the $80-95 \%$ range with one exception, where several significant storms on the Grand Mesa forecasted a 130\%-of-normal runoff for Plateau Creek.

This trend persisted throughout the remainder of the 2004-05 winter. The basin experienced well above average precipitation in the west and below average precipitation in the east. The line of demarcation was along the northern and eastern tributaries of the Roaring Fork River where precipitation was near average. On February 1, 2005 the snow water equivalent for the entire basin was $105 \%$ and runoff forecast was $93 \%$ at the Colorado River
near Cameo gage. During the month of February the trend continued with belowaverage precipitation in the headwaters and average to above average precipitation along the lower mainstem. On March 1, the snow water equivalent remained at $105 \%$ of normal, yet runoff forecasts varied from $75 \%$ to $165 \%$ of normal. March brought little change for the headwaters with slightly below to average precipitation, and the western half of the basin again had above average moisture, though runoff optimism for the Roaring Fork slightly decreased. April 1 runoff forecasts now ranged from $70 \%$ to $174 \%$ of average. The two critical gages on this important date had forecasts of $76 \%$ for the Colorado River at Dotsero, and $84 \%$ for the Colorado River near Cameo. Plateau Creek, which flows into the Colorado River below the Colorado River near Cameo gage, had a forecasted runoff of $174 \%$ at $200,000 \mathrm{AF}$ for the April-July period. Flooding was of particular concern to the locals of the Plateau Valley, and with normal summer rainfall would provide a full supply for most water users in the drainage. Plateau Creek has only a minor role in the water supply of the Colorado River (outside of the Plateau Valley), where a tremendous runoff of $200,000 \mathrm{AF}$ added slightly less than $10 \%$ to the flow of the Colorado River above Grand Junction. The month of April was generally warm and brought some early runoff, but the month ended with several wet storms with most gages recovering to end the month with forecasts near where they started the month. May was hot and dry, and by June 1 only $20 \%$ of the snowpack remained. Precipitation through June 1 was $93 \%$ of average and $121 \%$ of last year's. The June 1, 2005 runoff condition of the basin was the best seen since 1999.

Reservoir storage on January 1, 2005 was $9 \%$ less than January 1, 2004 and $81 \%$ of normal storage. See Appendix D. On February $1^{\text {st }}$ conditions dropped to $78 \%$ of normal and $90 \%$ of last year. The conditions continued a slow decline through February and March. Before the start of fill for the major reservoirs in the basin on April 1, storage was $77 \%$ of average and $89 \%$ of April 1, 2004. The storage conditions improved through April and May primarily due to early runoff increased inflows and reduced demands downstream. May 1 was
$81 \%$ of average, while June 1 was $106 \%$ of last year and $91 \%$ of average.

By early July all reservoirs in the basin had filled with the exception of Granby, Homestake, and Wolford Reservoirs. This was a major improvement over 2004 when, of the major structures in the basin, only Vega Reservoir had filled. Both Granby and Homestake continued to increase storage into August, when Homestake reached $39,000 \mathrm{AF}$, approximately $4,000 \mathrm{AF}$ short of filling, and Granby was $102,000 \mathrm{AF}$ below the spillway. Storage in the basin was the most seen since 2001.

Green Mountain Reservoir did reach a paper fill on June 5, 2005. Storage on that date was $39,640 \mathrm{AF}$ short of a physical fill; however, Green Mountain attained a physical fill on June 27, 2005. Storage in Green Mountain Reservoir between June 5 and June 27 occurred pursuant to the SEO Interim Fill Policy. See Appendix A.

As usual, the 2004-05 winter river operations were controlled 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 the two units, one at a time. Low elevation runoff removed the Shoshone call on April 11, 2005. River flows at the Colorado River near Dotsero dropped below the Power Plant capacity on July 21, 2005. Natural flow at the Colorado River near Cameo and management of storage for the endangered fish resulted in a Cameo call never being placed in 2005.

The U S Fish and Wildlife Service set the target flows for the Colorado River at Palisade gage at 1240 cfs on June 29, the target for average years. The target was briefly increased on August 24 to 1420 cfs , indicating above average conditions. Flow at this gage generally stayed above the target levels except during a two-week period at the end of August and beginning of September.

Releases at Green Mountain were on pace to completely deplete the West Slope Historic Users Pool (HUP) by the end of the irrigation season, even though demands on Green Mountain were somewhat reduced by
the Grand Valley Management Project. September and early October rains increased river flows and Green Mountain Reservoir releases were reduced. See Appendix B.

## - Water Administration

The Shoshone Hydro Power Plant had their senior call on for 1250 cfs for approximately $70 \%$ of the irrigation water year and about $50 \%$ of the irrigation season, May through October. (Their junior right for 158cfs was on for a total of nine days throughout the year.) There was a free river throughout the basin from April 11 through July 20, July $25-$ 27 and August 3-17. Automation on the plant started in spring of 2004 with operations remotely run from their Cabin Creek site and less staff at the Shoshone plant in the autumn. Generation lost during the first year of automation recovered in 2005. In 2004, the plant ran for 256 days and used 350,453 SFD for power generation, while in 2005 the plant ran for 331 days and generated 651,334 SFD of power.

The Grand Valley irrigators (and the power plant) did not place a call during 2005. 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.

Green Mountain Reservoir declared April 17 as start of fill and achieved a 1935 paper fill on June 5. For the second consecutive year, Green Mountain was administered pursuant to an Interim Policy. See Appendix A. By allowing Green Mountain to store under a 1955 right after a paper fill, Green Mountain was able to store that amount previously stored and owed to Green Mountain at Dillon and Upper Blue Reservoirs so that by June 27 there was adequate water available in Green Mountain, thus eliminating the need for substitution administration. A free river was declared on the Blue River on June 27, which lasted for an extended length of time, 42 days, not experienced in many years.

The Colorado Water Conservation Board (CWCB) put on a Division-wide call for their minimum stream flows in 2005. Three specific areas were administered this past
year: (1) the Roaring Fork River below Difficult Creek to Maroon Creek for 32cfs; (2) the Crystal River below Avalanche Creek to the Roaring Fork for 100 cfs ; and (3) the Eagle River below Brush Creek to the mouth for 130cfs. Records for the Crystal River stretch indicate that six ditches were curtailed and the Roaring Fork reach had 13 structures that were curtailed from September 20-29. The Eagle River instream flow required several augmentation plans to switch from out-of-basin replacement to upstream replacement and curtailed a few junior rights. An enormous rain event occurred September 29 that took the instream flow call off. In 2004 this call ran for three weeks while in 2005 the instream flow call ran for one week.

Transmountain diversions increased in 2005 for the Roaring Fork basin while diversions from the Upper Colorado River basin (District 51) decreased. Diversions from the Roaring Fork basin using the Boustead and Twin Lakes Tunnels increased approximately $60 \%$ due to higher snow pack for this basin. Diversions through Adams Tunnel via Grand Lake were reduced $30 \%$ because East Slope project water was in priority for a greater amount of time and the East Slope reservoirs servicing the northern irrigators were fuller for a longer period of time.

Releases for the endangered fish in the 15 Mile Reach increased substantially this year. The endangered fish include the Colorado pike minnow, humpback chub, bony tail chub, and razorback sucker. The 15 Mile Reach is on the mainstem and extends from Palisade to the confluence with the Gunnison. The Managing Entities declared a surplus to the Green Mountain HUP on August 16. This declaration allows surplus water from Green Mountain's 66,000AF HUP to be made available to the municipal/recreational contract, which indirectly benefits the flows in the 15 Mile Reach. Water is also available from contracts from Williams Fork, Wolford and Ruedi Reservoirs. All reservoirs except Wolford filled, which helped guarantee the maximum amount in each fish pool. Target flows were set at 1240cfs and were maintained throughout most of the summer. The target went to 1420 cfs for a few days in late August. This year 53,177AF was
released from the reservoirs for the benefit of these fish. See Appendix B for details on the release and delivery schedule.

- Green Mountain Ring Seal Project

Work on the outlet ring seals at Green Mountain Reservoir commenced after three years of delays due to drought. The outlet tower was plugged and the second ring seal was removed and sent to Grand Coulee, Washington to be reconditioned. This second ring seal was replaced with the first reconditioned ring seal. The bulkhead placed in front of the second outlet tunnel limited releases to one tunnel plus flows through the spillway radial gates for the top 42,000AF in the reservoir. The project will be completed in 2006.

- Coordinated Reservoir Operations (CROS) Called Off
2005 marked the ninth year of Coordinated Reservoir Operations under the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River. The objective of the program is to coordinate operations of 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 after
the Cameo gage peaks. The minimum projected 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 25,600cfs at Palisade.

A committee of several governmental agencies and water user groups oversees the Coordinated Reservoir Operations. Division 5 staff serve on the committee along with representatives of the United States Fish and Wildlife Service (USFWS), National Weather Service (NWS), United States Bureau of Reclamation (USBR), Colorado River Water Conservation District (CRWCD), Denver Water, Grand Valley Water Users Association (GVWUA), City of Colorado Springs, Orchard Mesa Irrigation District (OMID), and Grand Valley Irrigation Company (GVIC). Division 5 staff is charged with the responsibility to determine in consultation with the USFWS when it is appropriate to begin and end the releases, and to maintain accounting records of the operation.

Discussion of reservoir re-operation for endangered fish habitat enhancement was tabled for the sixth consecutive year. The 2004 carryover storage was below normal and 2005 snowpack and inflow were not expected to bring favorable conditions required for the Spring program.

## B. DAM SAFETY

The year 2005 brought a very high snowpack in the southwest part of the Division and a rapid melt in all of the Division due to a very warm period in late May. Also, significant rainfall occurred in January west of Glenwood Springs and in June in the northeast part of the Division. As such, several problems and one failure occurred, keeping the dam safety staff very busy.

One significant item, which can be considered the most significant dam safety highlight, was to fly over areas of high snowpack with runoff related problems to see if any dam safety problems were occurring. The cooperation of the Division of Wildlife to use their planes and
one pilot for this was greatly appreciated. It is estimated that about 40 dams were viewed from the air in areas not readily accessible due to the high snowpack. Of these 40 dams, potential problems were identified for about five dams (three of which are Class 1). Prompt ground inspections were then accomplished for all five dams by water commissioners and dam safety engineers, which confirmed that two Class 1 dams had significant problems related to snow blockage in the spillways. The owners of these dams were instructed to remove the snow and they complied. Without the flight and the followup, it is conceivable that overtopping failures could have occurred due to the snow blockage and rapid runoff that was occurring.

Due to the drought conditions of past years and with rapid growth, there continues to be a growing desire by dam owners to rehabilitate and enlarge existing dams. Nine significant projects were reviewed by the dam safety staff: two by the Glenwood Springs (GWS) dam safety engineer, five by the Grand Junction (GJ) dam safety engineer, one joint review GWS and GJ, and one by the Division 6 dam safety engineer. Three dams were rehabilitated and two new dams were constructed. With the heavy runoff and reservoirs being more full throughout the year, many projects were put on hold until next year.

There is also an increasing desire to construct new non-jurisdictional sized dams. The nonjurisdictional sized dams kept the Division 5 dam safety engineer busy with several miscellaneous public safety issues related to these dams.

The dam safety engineers in Grand Junction and in Division 6 are fully established to assist with the inspection workload problems; however, due to workload and priority issues and incidents in Division 6, several of the dams in Water Districts 50 and 51 had to be inspected late in the year by both GWS and GJ dam safety engineers.

The total number of inspections performed in Division 5 in 2005 was 153. The breakdown of the inspections performed is as follows:

86 Inspections performed by John G. Blair, Division 5 (GWS) dam safety engineer:

27 High Hazard regular
24 Significant Hazard regular
1 Significant Hazard interim
14 Low Hazard regular
0 No Public Hazard regular
13 Follow-up
6 Construction
1 Outlet
38 Inspections performed by Garrett Jackson, Division 5 GJ dam safety engineer:

10 High Hazard regular
7 Significant Hazard regular
2 Significant Hazard interim
0 Low Hazard regular
0 No Public Hazard regular
10 Follow-up
5 Construction
4 Outlet

17 Inspections performed by John R. Blair, Division 6 dam safety engineer:

2 High Hazard regular
7 Significant Hazard regular
0 Significant Hazard Interim
2 Low Hazard regular
0 No Public Hazard regular
6 Follow-up
0 Construction
0 Outlet

2 Inspections performed by federal entities and DOW;

2 High Hazard regular
0 Significant Hazard regular
0 Low Hazard regular

10 water commissioner observations:
2 Significant Hazard interim
8 Follow-up
A Division 2 dam safety engineer performed 1 High Hazard regular inspection of a Colorado Springs-owned dam in District 36.

The GWS and GJ dam safety engineers also completed 10 hazard evaluations, 8 hydrology studies, and 11 other technical evaluations. This is an increase in technical studies over previous years

- Dam Safety Incidents and Restrictions Imposed - 4 incidents and 4 restrictions

1. Sierra Pinyon Augmentation Pond - a low hazard non-jurisdictional dam located in District 45 . Due to an unusual heavy rainfall event in January in combination with a poorly constructed dam, the dam suffered an upper level piping failure at its maximum section, which was monitored and witnessed by the Division 5 dam safety engineer in coordination with Garfield County. No damage occurred and no State Engineer Orders were issued due to the low hazard and non-jurisdictional status; however, a report was written with recommendations to the owner regarding future work. The volume lost due to this failure was about 7AF.
2. Harvey Gap - a high hazard dam located in District 39. Vandalism to the outlet operator caused the outlet to be opened to full
capacity in January causing flood damage at the downstream end of the ditches that feed off of this reservoir since the laterals were closed for the winter. The dam owner quickly responded and closed the headgate. Followup investigations were performed with the Garfield County sheriff's office. The owners have since installed an alarm system at the outlet tower to try to prevent or warn of future incidents.
3. Ragle Reservoir No. 1-a low hazard dam located in District 45. No incident occurred. This dam was poorly and illegally built greater than the non-jurisdictional height of 10 ft . A zero storage restriction was imposed, which results in a loss of volume of 1AF.
4. Polaris Reservoir - a high hazard dam located in District 38. No incident occurred; however, several deficiencies, mostly with the spillway, were found at this recently discovered old dam in which a new owner wishes to store water in this reservoir that has not stored water in many years. The reservoir was restricted to 3 ft . below the spillway crest, which results in loss of storage of 271AF. Upon further evaluations in future years, a stricter storage restriction may be necessary.
5. Newton Gulch Reservoir - a significant hazard dam located in District 53. Due to rapid runoff and changes in operational practices by a new owner, this reservoir filled to gage 26 or 9 ft . above the restricted level. This caused excessive seepage to occur out of the right abutment and sinkholes to form in the upstream right abutment at gage 14. The storage restriction was increased to a wide-open outlet from April 1 through the peak of the spring runoff and then allowing storage to gage 13.5 after that. This results in a loss of 537AF during the runoff and 471AF the rest of the year.
6. Lewis Reservoir - a low hazard dam located in District 50. This old but unknown (until this year) jurisdictional dam overtopped due to heavy spring runoff. With the quick response from the Pinto Valley Ranch manager, the spillway was lowered about 8 ft . Further inspections by the Division 6 dam safety engineer revealed several other deficiencies
besides an inadequate spillway. The spillway was then lowered to the bottom of the reservoir assuring zero storage. Plans and specifications are to be submitted for the rehabilitation of this dam. The estimated storage lost due to this activity is 60AF.
7. Bull Creek No. 4 Reservoir - a high hazard dam located in District 72. This dam has been gradually deteriorating over the past several years. With this year's above normal runoff and higher storage, the seepage increased and the phreatic level in the dam increased showing slope stability problems. As such, a storage restriction of 3 ft . below the spillway crest was imposed with the likelihood of further restrictions with further analysis or further deterioration. This results in a loss of 71AF due to the restriction.

- Rehabilitations and Restrictions Lifted

1. Jones Dam - a low hazard dam in District 36. This breached dam was rehabilitated, which included a new outlet pipe, new spillway, and rehabilitated upstream and downstream slopes with a chimney drain. This allowed for the use of 15AF of storage not usable in the recent past.
2. Long Slough - a low hazard dam located in District 72. A new outlet was installed, which allowed for the removal of the zero storage restriction and a gain of 201AF of storage.
3. Big Creek \#3 (aka Atkinson) - A high hazard dam in District 72. Rehabilitation of the downstream slope and crest was completed this year.

- Enlargements and New Dams:

1. The Barton Porter - a high hazard dam in District 45. Work that was started in 2002 was completed this year, which allows for an increase in storage of about $\pm 800 \mathrm{AF}$.
2. Cow Camp - a low hazard dam in District 38. This is a new augmentation pond under construction. It is not yet completed, but should be in 2006. It will store about 13AF.

## C. GROUNDWATER AND WELL PERMITTING

Colorado's strong economic conditions could be seen during the year 2005 which kept the Division5 staff 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 2005 a total of 817 permits were approved for Division 5 a decrease of $13 \%$ from 2004. 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 | 571 |
| :--- | :--- |
| Non-exempt permits | 177 |
| Geothermal permits <br> (excluded from total count) | 8 |
| Exempt replacements | 64 |
| Non-exempt replacements | 5 |
| Late registrations (included <br> in exempt count) | 16 |

With the decentralized well permitting process in place, a total of 287 permits (237 exempt and 50 non-exempt) or $35 \%$ were issued at the Division level -- a decrease of $11 \%$ from 2004. 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 19932005:


No major water well related bills were approved during the 2005 legislative session affecting ground water in Division 5. State Engineer's Guideline 2005-1 was implemented addressing issues related to Senate Bill 04-185 (SB 04-185). Senate Bill 04-185 eliminated the requirement for Statement of Beneficial Use (SBU) or Notice of Well Completion (NWC) be submitted to prevent non-exempt wells from expiring, for wells located outside the Designated Ground Water Basins. Instead, SB 04-185 created a new statutory requirement stating that a non-exempt well permit would expire unless the applicant or the well construction contractor submits "evidence that the well was constructed and that the pump was installed" before the permit's expiration date. Funding of the well permitting program will be a key budgeting issue for FY 2006, with the current well permit filing fee(s) to sunset on July 1, 2006.

## D. WELL INSPECTION PROGRAM

There have been some changes in the Well Inspection Program in 2005. On March 31, Joe Bender resigned as the chief of the inspection program to start his own business in the private sector. Mr. Nolan Lloyd was named his replacement in November. Nolan comes to DWR with extensive experience in the well drilling industry.

Over 2200 inspections were performed in the seven Divisions in the state in 2005 with the majority of the activity in the southern Divisions in the state. 160 site inspections were performed in Division 5 in 2005. Only 5 rules violations were observed during these inspections in Division 5 . Alleged violations range from improper grouting, greater than 200 ft . from the permitted location, no permit for construction, and
unlicensed contractors. With the implementation of the inspection program, fewer unlicensed contractors are operating in the state. More inspection equipment has been purchased and we are now able to test drilling water for chlorine content. Most of the allegations are resolved with stipulated settlements and no further action is taken. Nine consumer complaints were received in the Division 5 office. All were beyond the scope of enforcement for the inspection program.

In 2005 an informal GPS workshop was presented by Lori Torikai of the Denver office in the seven Division offices for all of the interested water well and pump installation contractors and related personnel. Scope of the workshop was to educate the contractors on mapping, new well forms with UTM coordinates, and using GPS units to locate well sites. The workshop was very educational and informative for the contractors. The 200 ft . from the permitted location requirement for construction of new wells is still an issue but fewer violations were observed this year.

Senate Bill 03-045 established continuing education requirements for license renewal for contractors licensed by the Board of Examiners (BOE) for 2006. Eight hours of continuing education credits per year are required for renewal. Classes reflect the many changes in the industry over the past 10 years. Fifty-two contractors have not met the requirement and are either in the process of acquiring the needed hours or are retiring their license. Class opportunities are listed on the BOE website as they are approved by the Continuing Education Credit Committee.

After two years of the new inspection program we are pleased with the progress that has been made. Violations are down and acceptance of the inspection program is growing among the contractors. Protecting our most important natural resource, water, is the goal of the program.

## E. HYDROGRAPHIC PROGRAM

The following hydrographic duties and projects were completed in Division 5 in WY2005:

- Measuring, recording and publishing streamflows for 8 bypass flow gaging stations associated with transmountain diversions of the Frying Pan-Arkansas Project, all located at or above Ruedi Reservoir.
- Measuring, recording and publishing streamflows for the Blue River below Breckenridge station for minimum streamflow compliance; five cooperators pay for operation of this station.
- Measuring, recording and publishing streamflows for the Roaring Fork River below Maroon Creek station for the Aspen Consolidated District for permit compliance.
- Measuring and recording winter streamflows for the Snake River at the Keystone Ski Area for minimum streamflow compliance; Vail Associates

Inc. pays for seasonal operation of this station.

- Recording streamflows for Snowmass Creek below the Snowmass Water \& Sanitation District diversion for the CWCB for minimum streamflow compliance.
- Measuring, recording and completing the diversion records for the Government Highline Canal and the Grand Valley Canal, near Palisade.
- Measuring and recording streamflow records for Bull Creek and Big Creek in District 72 for reservoir release/water administration purposes.
- Recording and completing records for four transdistrict/transbasin diversions into District 45.
- Measuring diversions and/or bypass flows for water commissioners for administration and flume shifts.
- Responding to data requests from Division 5 staff and the general public.
- Operating and maintaining 25 DWR satellite stations used for administrative and hydrographic record purposes.
- Monitoring 43 stations that are operated by other entities in Division 5 .
- Maintaining 3 satellite monitoring streamflow stations for the CWCB.

In the 2005 hydrographic Water Year, the Division 5 hydrographer made 92 discharge measurements associated with stream gaging stations (including 60 measurements for the Fry-Ark Project) and another 11 stream or ditch discharge measurements for water administration purposes.

The backlog of Division 5 gaging station discharge records was nearly completed in 2005, and will be wrapped up in the following year. Temporary employee Ed Wilson, Water Commissioner Steve Pope, and Chief Hydrographer Tom Ley deserve much of the credit for completing this project.

Transit loss analysis for several transdistrict and transbasin diversions into District 45 was conducted in 2005 . This imported water has to travel many miles in sometimes dry natural channels before reaching the final diversion points on Divide Creek. Streamflow measurements were made in order to estimate transit losses for these imports.

Several new satellite monitoring contracts with water users were signed in 2005, including contracts for the City of Golden (Vidler Tunnel) and the Multa-Trina Ditch Company (several stations in District 45).

Two more cooperators have promised to contribute to the operation of the Snake River at Keystone station for 2006.

High data rate (HDR) transmission upgrades were made to several satellite monitoring stations in 2005, including Vidler Tunnel and the West Divide Creek near Raven station. Senior Satellite Monitoring Technician David Hutchens was the lead on these projects.

Other stream gage improvements in WY2005 include:

1. Adding a new satellite monitoring station at the Multa-Trina Ditch in District 45.
2. Adding a new staff gage station on the Crystal River at the DOW Hatchery for in-stream flow monitoring.
3. Installed a stage-discharge recorder at Chapman Gulch near Norrie as a backup logging device when a winter-long power outage compromised the USBR data logger.
4. A new low-flow control for the Snake River at Keystone station was designed by Tom Ley, and this rock w-weir was constructed by Vail Associates, Inc. in September.

## F. WATER RECORDS AND INFORMATION

Diversion records for 2005 were signed by mid-February. The records show that many uses, such as domestic, stock, snowmaking and recharge, increased from the previous year as well as the number of structures getting record. The number of site visits and augmentation use decreased, most likely due to the fact there was no mainstem call from the Grand Valley. In addition, major spreadsheets were reworked which showed
user-supplied data rather than water commissioner observations. Recordkeeping from the municipalities in District 72 was updated this past year and reworked to better show the proper coding; as a result, the municipal totals are decreased but reflect better data. The miscellaneous "other" use decreased noticeably due to improved record keeping from the water commissioners.

## G. INFORMATION TECHNOLOGIES

PC Status - We received 5 new machines this year which replaced 4 office machines. The office machines and one of the new machines went out to replace out-of-date water commissioner machines. We are still looking to upgrade a commissioner's machine and get District 51 Neal Misbach a laptop for satellite monitoring. We also need to upgrade Brian Romig's machine to a GIS machine to handle the software and space issues. For some of our office staff, we want to get a laptop for mobility.

Most of our machines are Office 2000 and we want to upgrade them to XP. Other than replacing the older machines when money allows, we are in pretty good shape.

Hardware/Software - We hope to replace our scanner/color copier with an HP 9120. We need a machine that can handle automatic feed and at the same time give us speed. We replaced our HP4Si with the HP8000 that we received from Division 6; this machine has been great for us. We are still looking to improve our mapping analysis with the purchase of Spatial Analyst. All of our water commissioners now have either
the Garmin GPSXL or Garmin Map76S. Our goal is to have all of our structures, or at least most of our structures, marked. All the commissioners also have a digital camera to take pictures of structures or for field inspections. These pictures will eventually be tied into our GIS program.

Training - This year our main focus of training has been on understanding the computer with topics such as "Understanding the Directory Structures Like A Farm" and "Getting The Most Out Of Organizing the Computer." We had training on GPS and HydroBase.. We hope to have the IT staff give us more up-to-date training on the new functionality of HydroBase.

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 has the same feel to it. Contained within our website are phone numbers for all Division employees, river calls, organizational chart, frequently asked questions (FAQs), news, important meetings and functions, and calendar of events.

## H. GIS PROJECTS

The A/B boundary had a little tweaking done around the Aspen area but other than that the boundary remains the same as last year. The only thing still left to do on the A/B line is to make sure all of our structures are located by GPS standard methods. Currently, 29\% of our A/B structures are GPS located.

More GIS projects are in the works, including "booklets" for water commissioners that will contain all their streams with 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.

We've acquired 1-meter resolution imagery and this is helping us solve the irrigated acres problem, see Figure 1 below. Our goal is to redo field boundaries and crop type for the Division. The plan is to have our GIS person sit down with each water commissioner to go over the boundaries. We are working towards having all data digitally entered. We also want to print out a complete set of quad maps in the upcoming year.

We have 13,317 structures currently that we want to GPS. Of these, 1263 or roughly $9.5 \%$ have been located. Our commissioners are doing a great job of getting these structures located and GPS'ed, see Chart A below. We also have received GIS parcel data from every county in our Division now. This data will be extremely beneficial for well enforcement, particularly in Summit County.

Figure 1. 1-meter resolution imagery for irrigated acres project


The irrigated fields depicted on the left of the image shows the previously tracted fields. You can see that these fields include roads, buildings, ponds, and just about anything else. On the right side of the image are the updated fields, where the roads, buildings and ponds are not included in the field. Plus, the field closely follows the actual boundary of the irrigated lands. Although a time consuming yet not difficult project with the help of field commissioners, when it's completed it will be the most accurate boundaries and crop type of our fields to date. When completed, the actual acreage will be calculated in GIS giving us a more accurate and quicker way to determine how many acres are irrigated.

Chart A. Structures GPS'ed by Water District
Chart A shows the total number of structures in each district and does not account for whether they were abandoned, historical, duplicates, or non-existent. October 2005.

| District | \# Structures | \# GPS'd | GPS'ed this year | \% of District done |
| :---: | :---: | :---: | :---: | :---: |
| 36 | 1417 | 113 | 0 | 7.97\% |
| 37 | 2292 | 60 | 59 | 2.62\% |
| 38 | 4446 | 175 | 24 | 3.94\% |
| 39 | 1778 | 58 | 0 | 3.26\% |
| 45 | 1556 | 49 | 21 | 3.15\% |
| 50 | 443 | 52 | 0 | 11.74\% |
| 51 | 2255 | 30 | 0 | 1.33\% |
| 52 | 569 | 65 | 0 | 11.42\% |
| 53 | 1207 | 119 | 0 | 9.86\% |
| 70 | 494 | 2 | 0 | 0.40\% |
| 72 | 2344 | 420 | 138 | 17.92\% |
|  |  |  |  |  |
| Hummer S |  | 102 | 0 |  |
| McEwen B |  | 60 | 59 |  |
| Blakeslee B |  | 135 | 0 |  |
| Craig M |  | 24 | 24 |  |
| Lemon J |  | 60 | 0 |  |
| Trexel S |  | 12 | 0 (30 unusable) |  |
| Mello M |  | 21 | 21 |  |
| Thompson B |  | 95 | 0 |  |
| Misbach N |  | 0 | 0 |  |
| Schaffner F |  | 182 | 0 |  |
| Mackey D |  | 0 | 0 |  |
| Brigham T |  | 352 | 70 |  |
| Comerer A |  | 0 | 0 |  |
| Cox T |  | 68 | 68 |  |
| Greene R |  | 0 | 0 |  |

## I. SUBSTITUTE SUPPLY PLANS

Division 5 had nine applications for Substitute Water Supply Plans. Seven plans were approved under C.R.S.§37-92-308(4). These plans were filed in conjunction with water court applications. One plan was
approved under C.R.S.§37-92-308(5) which allows for out-of-priority depletions that will be less than 5 years in duration. One plan was approved for a gravel pit under C.R.S.§37-90-137(11).

## J. SPECIAL PROJECTS AND ISSUES

## - Green Mountain Reservoir Fill

 CommitteeGreen Mountain Reservoir was constructed by the United States Bureau of Reclamation (Reclamation) as part of the Colorado-Big Thompson Project as a compensatory reservoir for the West Slope to offset depletions caused by East Slope diversions. Green Mountain Reservoir is located on the Blue River downstream from the City of Denver's Dillon Reservoir/Roberts Tunnel and the City of Colorado Spring's Continental Hoosier Diversion. Green Mountain Reservoir 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 belowaverage 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 Reservoir 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 Reservoir storage right satisfied with upstream out-of-priority junior storage in Dillon and Upper Blue Reservoirs? Green Mountain Reservoir (GMR) 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 GMR to the extent that water is on hand for the lesser of replacing diversions or filling GMR.

The Blue River Decree was originally adjudicated in federal court and affirmed in state court prior to the upstream storage statute but operate in a similar manner. The issue arises when a call downstream of GMR causes administration of these rights.

From 2000 through 2002 the fill accounting at GMR was debated each year at the very moment we were attempting to make the decision. To avoid continued disagreement and prior to the mainstem river call in July 2003, Division 5 convened a meeting of 40 to 50 attorneys, engineers, and water managers. The meeting resulted in a onetime agreement to get through that year that was not binding on the future with a commitment to work on a permanent resolution of the issue. Division 5 staff began a series of meetings in the Fall of 2003 through the Spring of 2004. At that time the State Engineer and the Attorney General's offices were brought into the discussion. In a race to resolve the dispute before the end of fill, we held a series of meetings individually with each of the major interests, several twice. Denver Water, the Colorado River Water Conservation District, and the Grand Valley Entities each submitted position papers. The culmination of this effort was a meeting on July 7, 2004 where all the interested parties were brought together to review our proposed policy, which became the SEO Interim Policy 2004-4 of July 8, 2004 "Administration of Green Mountain Reservoir."

Through the fall and winter of 2004-05 Reclamation proposed its Active Management Plan for the filling of Green Mountain Reservoir 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 Reservoir not fill. However, any water Reclamation has allocated to powerat the time of each forecast-intercepted by the Cities may be kept by the Cities. Should Green Mountain Reservoir not fill, Reclamation is at risk and this water does not need to be released. The Blue River Decree states the Secretary of Interior shall offer a plan and that plan can change from time to time. After several meetings to outline the list of issues, Reclamation was to incorporate input from everyone. This document is to be the starting point for negotiating a stipulation to be offered to the court.

In the short term, another interim policy was necessary to get through the looming storage season. A draft Interim Policy was presented by the State Engineer at an April 14, 2005 meeting; attendees submitted written responses that were evaluated and modified the draft 2005 policy into a final "Administration of Green Mountain Reservoir for 2005 Interim Policy" See Appendix A for a copy of the policy.

There remains a general consensus that permanent resolution would only be reached through moving the federal court to recognize a stipulation in the Blue River Decree that provides resolution to the fill accounting and any outstanding issues whereby the group can reach agreement.

- GM HUP Limits and the 1977-1984 "Slot Group"
In 2005 Division 5 staff worked with the Colorado River Water Conservation District to refine the list of water rights and the volume of water associated with the group of water users. As previously reported, a draft policy to be signed by the State Engineer has been proposed. This proposal will define the upper limits of the beneficiaries of the Green Mountain HUP. By defining this upper limit, those that fit in the "slot" perfected between 1977 and 1984 can be determined. The Division of Water Resources had taken the lead in these critical discussions but discussion of this issue is unproductive in the middle of this drought. The majority of users represented in previous discussions endorse the policy as drafted. 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 status as beneficiaries of Green Mountain Reservoir. Finding replacement for these uses may prevent simple resolution. Until permanent resolution, we will continue to use 200AF set aside annually in Wolford Mountain Reservoir by the Board of the Colorado River Water Conservation District as adequate to augment this group of water users, as defined by Division of Water Resources, without curtailment.


## K. WATER COURT

## - Referee Leoniak Appointed

In the fall of 2004 Referee Dan Petre was appointed District Court Judge. Judge Petre continued to perform the duties of the referee until a replacement was appointed. Effective January 18, 2005, Lain Leoniak was appointed as Water Court Referee in Water Division 5. The Referee position is 0.75 FTE . The position also performs as District Court Magistrate for the remaining 0.25 FTE. Referee Leoniak was selected from a group of applicants who were screened by a local committee of water lawyers, family law practitioners, the Division

Engineer, and the director of the Garfield County Department of Social Services. Russell George, the executive director of the Department of Natural Resources, approved her by recommendation of State Engineer Hal Simpson. Ms. Leoniak is a graduate of the University of Colorado Law School. She had been working for Judge Roger Klein in Water Division 1 as a law clerk assisting in water matters and complex civil litigation. She is the author of "The Last GASP: The Conflict Over Management of Replacement Water in the South Platte River Basin."

## - Water Court Statistics.

Litigation continues to dominate the workload of the Division's personnel. A total of 301 new water right applications were filed in Division 5 Water Court during calendar year 2005-282 for the Colorado River administered by Div. 5 Water Resources and 19 for the White River administered by Div. 6 Water Resources. Of the 282 applications, 48 were applications involving new augmentation plans and 7 were to amend existing aug plans. The State and Division Engineers formally objected in 6 cases and entered 5 protests to referee rulings via Motion to Intervene. 60 amended applications were also published in the résumé. The number of water right applications is higher than 2004 but this year the number of amended applications dropped; however, the workload has not fallen off. The court is catching up on the backlog of pending cases, and new cases continue to be more complex than in the past.

## - Water Division 5 Bench Bar Meeting

The Water Division Bench Bar did not meet in 2005. Judge Craven has started planning for a Bench Bar Meeting in 2006.

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

1. Eagle Park Reservoir Company, $03 C W 211$ (decreed)
A decree was issued in this case in 2005. Tied to this case was a Water Division 1 decision known as "the Central City case," which did not recognize the existence of an exchange and found that an augmentation plan only needed to augment the downstream senior calling right and not consider injury to intervening junior rights. The Eagle Park Reservoir Company had made it clear they expected the Division 5 court to recognize the Central City decision and grant a similar decision to Eagle Park, though Eagle Park's application was for an exchange plan. The Central City issue is the primary issue of this case; however there are several other issues that are of statewide concern and very important to Water Resources. The applicant claimed a 1997 appropriation date, which will be
unimportant if applicant prevails on the Central City issue, and claims that, though the exchange is claimed as conditional and admits has not operated, the exchange is an "existing" exchange and entitled to relate back to the 1997 date (or much earlier if the Central City issue prevails). The applicant proposed decree language that the applicant is not responsible for augmenting the CWCB's instream flows if the CWCB does not augment stream losses caused by the instream flows. This proposed decree also attempts to place additional measurement criteria on the CWCB, though their rights are not the subject of the application. The proposed decree also inserts an unenforceable selective subordination. Note this selective subordination is unnecessary if the applicant does not prevail on the Central City and relation-back issues. Meaningful retained jurisdiction was also an issue in this case. The applicant insists on a date tied to the date of the decree, while we argue it should be 5 years after sufficient build-out. Finally, the applicant is taking a stand on the insertion of the exact statutorily required CRS §37-92-305(8) language as insisted upon by the State and Division Engineers. Many of the issues were determined as a matter of law by Judge Craven. Water Resources prevailed in nearly all issues settled by the decisions on questions of law and the decree that resulted following trial. A 3-year period of retained jurisdiction versus 5 years is the only issue in which we did not completely prevail; however, even this decision was not entirely in the applicant's favor for it was tied to significant build-out and not the decree date.

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

The case is detailed in last year's 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 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 and August 13, changing the amount of claimed injury each time, Golden filed a complaint on August 13, 2003 for 5.2AF 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 5.2AF. Golden then asked the Court to rule on all its other arguments, though the issue was rightly before the Court.

An October 21, 2004 order by Judge Ossola denied Golden's Motion for Summary Judgment but granted Northern Colorado Water Conservancy District's Cross Motion for Summary Judgment, where Golden is denied to divert under its stipulation against Green Mountain Reservoir.

Trial dates have been vacated, while Golden attempts to resolve the dispute with the State and Division Engineers, and attempts to resolve the controversy with Denver Water over the interpretation of the stipulation with Denver Water. Trial is currently set for January 2007.
3. Flattops Land Company and Eagle River Water and Sanitation District, 03CW159. (settled)
The application changes the use of water historically imported from the Yampa River basin for irrigation by the Stillwater Ditch in the Egeria Creek drainage near Toponas. Both the return flows from lands irrigated by the water rights and water first used for the new uses are considered in the change. The changed water may be used directly, by direct augmentation, or stored in several local ponds for later use. The issues of concern in Water Division 5 include control, identification including transit losses, delivery of this water to the new uses, an attempt to prevent the Division Engineer from administration of the water, status as a Green Mountain Reservoir HUP beneficiary, an insufficient statement of the plan for augmentation, and several issues disputed in other cases including the Div. 1 Central City ruling on augmentation by exchange, retained jurisdiction, 305(8), and speculation. The issues of concern in Water

Division 6 include enlargement of historic use, seepage returns to the Yampa, change in irrigation practice to emphasize use in Division 5, separation of Upper Yampa Water Conservancy District water, and use of storage rights delivered through the Stillwater Ditch. In 95CW133, Upper Yampa decreed a similar change of water rights but limited its water available for augmentation to the return flows of water first used for the previously decreed purposes within the Conservancy District. The Upper Yampa case took six years to be resolved. The Flattops case is more complicated but does have the Upper Yampa decree as a template.

After many settlement meetings, the case appeared to be on track for trial; however, settlement was reached on June 29, 2005. In the final decree objectors, including the State. compromised on the historic use and measurement and control; Flattops compromised on a 10 -year rolling average; and the objectors prevailed on all other issues.

## 4. Blue River Consolidated Decrees, Heeney Slide. (settled by mediation)

The dispute arose over the allocation of water stranded in Green Mountain Reservoir as a result of limiting the reservoir level to an elevation of 7850 in 2002, stranding 20,000 on top of the $7,000 \mathrm{AF}$ dead pool. Because Reclamation allocated all the stranded water to the 100,000AF West Slope Pool, the Colorado River Water Conservation District filed suit in federal district court to reopen the Blue River Decree for consideration of the loss of storage in Green Mountain Reservoir. The State of Colorado filed a motion to intervene, which was granted on August 5, 2004. The parties include the State, the Colorado River Water Conservation District, the United States, and Northern Colorado Water Conservancy District. Denver Water and Colorado Springs Utilities participated, but were not full parties.

In the event an operational limit occurred in 2005, an Interim Policy was implemented. This policy is found at Appendix A.

The final documents were circulated and signed between November 28, 2005 and

December 8, 2005. Seven documents are encompassed in the settlement. The first document is the Main Agreement. Its purpose is to establish a means of notifying the parties of any operating limitations, and an agreement on how parties may share the impacts of the operating limitations. Exhibit A to Agreement on Operating Procedures explains the formula for shortage sharing due to an operating limitation in three specific scenarios. Northern and the River District may take certain mitigating steps instead of reducing water available to each of them. These mitigations include using water from other reservoirs, reducing their own diversions, and having other water users reduce their demand, with the exception that Northern may not ask the Shoshone power plant to reduce its demand. Exhibit B to the Agreement on Operating Procedures explains the procedure to operate exchanges between Wolford Mountain Reservoir and Green Mountain Reservoir under certain factual conditions. An exchange is expected to occur during an operating limitation to mitigate shortages imposed under Exhibit A. These exchanges are structured to operate so that water is deemed stored under the right of the original place of storage and then physically moved to be released from or reside in another reservoir. Exhibits $C$ and $D$ are the motion to dismiss and a proposed order for Judge Nottingham to use. The parties crafted these documents to avoid implication that this settlement modifies the Blue River Decree or that the court makes any determination whether the settlement is consistent with the Blue River Decree. Because the parties differ on whether the settlement is actually in accord with the terms of the Blue River Decrees, it was important to have the court not rule on this subject. The parties even omitted having the court enter or approve the settlement. Instead, the parties simply want the court to dismiss the 2003 action. Exhibit E is a letter from former Bureau Regional Manager Bach describing the operation of Northern's noncharge program. It is used as a condition of operation for the non-suit provisions in paragraph 13 of the main agreement. And finally, the side agreement is between the West Slope parties and Northern. The State is not a participant in this agreement.
5. Upper Eagle Regional Water Authority three cases;02CW376 (Donovan Parcel) (settled in 2006), 02CW403 (Miller Ranch) (pending), and 03CW078 Village at Avon (decreed in 2006).
Among many legal and engineering issues disputed in these cases, the primary theme in all of them is the claim that a table referenced in a previous decree that estimates the use and depletions within each member district is the controlling document for administration of all past, present, and future rights incorporated into the districts. The decree that referenced the table clearly stated the original decrees are controlling and not the table. In Donovan, the Water Authority agreed to remove the table. The court has not issued the final decree in Village at Avon but it appears the court will find the table to not be controlling. Miller Ranch is likely to go to trial on schedule in May 2006. Each of the three cases had unique issues: in Miller Ranch the applicant is relying on use clearly not allowed in a previous case.
6. Archie and Linda Dunham, change of rights and plan for augmentation. 03CW162 (pending)
Many contemporary engineering and legal disputes for changes of water rights and augmentation plans are contained in this application; however, the primary dispute is over the change of a water right that was changed 34 years ago from irrigation to municipal and has not been used since that change. The initial change converted the right from a seasonal irrigation right to a year-round municipal right by abandonment of the majority of the irrigation right; therefore, the character of the right has been completely changed without a volumetric quantification. Two weeks prior to trial the applicant and State agreed to vacate the trial dates and, as of this writing, appear close to settlement. Should the case settle, the applicant will likely concede nearly every issue and the State will discount full incorporation of the 30 years of non-use; therefore, the applicant will agree that the right is no longer a seasonal right and is limited to a volumetric amount based on use considered in an engineering report from the original change to municipal and required to spread the use evenly over 12 months.

Unfortunately, this will require the applicant to construct storage, fill in a portion of a gravel pit and reduce augmented irrigation from 1.9 acres to 0.5 acres.

## 7. Pitkin County change of water rights

 01CW334 (decreed)The court determined changed water rights are subject to future changed conditions, if they are subsequently changed again. Pitkin County sought to "bank" surplus
historic consumptive use credits not needed in the current litigation for immediate use. Our position is the quantification of the historic use of any water right is res judicata; however, that quantification will be requantified in a future subsequent change. For example, if the right has not been used since the initial quantification, then the nonuse may be considered in the future change.
L. TABULATION

Division 5 Tabulation

| Water <br> District | Backlog on <br> $\mathbf{3 / 1 / 2 0 0 5}$ | New Decrees <br> in 2005 | Total <br> Untabulated <br> Decrees | Decrees <br> Tabulated <br> as of 3/1/06 | Remaining <br> Untabulated <br> Decrees |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 36 | 97 | 24 | 121 | 76 | 45 |
| 37 | 87 | 34 | 121 | 97 | 24 |
| 38 | 271 | 88 | 359 | 329 | 30 |
| 39 | 32 | 26 | 58 | 58 | 0 |
| 45 | 0 | 17 | 17 | 17 | 0 |
| 50 | 0 | 3 | 3 | 3 | 0 |
| 51 | 0 | 32 | 32 | 32 | 0 |
| 52 | 0 | 2 | 2 | 2 | 0 |
| 53 | 0 | 22 | 22 | 22 | 0 |
| 70 | 0 | 4 | 4 | 4 | 0 |
| 72 | 0 | 33 | 33 | 33 | 0 |
| Total | $\mathbf{4 8 7}$ | $\mathbf{2 8 5}$ | $\mathbf{7 7 2}$ | $\mathbf{6 7 3}$ | $\mathbf{9 9}$ |

The Division 5 tabulation continues to be a priority. The backlog has been decreased considerably. We continue to receive $\pm 350$
decrees each year to be incorporated into the tabulation. With the help of water commissioners, the tabulation backlog continues to decrease.

## M. 2001 REVISED ABANDONMENT LIST - 01CW337

- 2001 Revised Abandonment List Case 01CW337
There were 158 water rights placed on the Revised Abandonment List that was published in December resume in 2001. Protests to the abandonment list were to be filed by June 30, 2002. There were 40 water rights that were protested during 2002. On May 26, 2005, Judge Craven granted Pitkin

Exchange Holdings a Motion to intervene in Case 01CW337 in order to protest the inclusion of the Syphon Ditch on the Revised Abandonment List. To date we have agreed in principal on a stipulation to remove the Syphon Ditch from the abandonment but have not executed a final stipulation.

- 1984 Abandonment List 84CW218
The Homestake Ditch Nos. 1, 2 and 3 in Water District 37, decreed for 0.6 cfs , 0.3 cfs , and 0.3 cfs , respectively, for irrigation, were put on the 1980 Abandonment List and were abandoned by the court. The applicant filed a Motion for Summary Judgment with the court to remove these water rights from the abandonment list because of inadequate notice. Judge Craven stated from the bench



## N. PERSONNEL AND BUDGET ISSUES

Division 5 was not fully staffed in 2005 due to vacancies in Districts 45, 51 and 70. Jim Daxton, Water Commissioner in Water District 51, which encompasses the Upper Colorado and Fraser Rivers, retired on March 25, 2005. Jim began working for the Division of Water Resources on July 5, 1983.

Neal Misbach (no photo available at this time) was hired on June 8 as a full-time water commissioner to replace Jim Daxton in the upper half of Water District 51.

Mike Mello (no photo available at this time) joined Division 5 on May 2 as a part time water commissioner in Water Districts 39 and 45 . Mike was hired to fill the vacancy created when Jim Lemon was promoted to the supervisory water commissioner position in WD 39 and 45.

Don Mackey resigned his position on December 15. To date that position has not been filled. Filling positions has been very difficult due to the backlog in Dept. of Natural Resources' (DNR) Human Resources. The delay in filling positions has caused additional demands on the existing staff to perform the duties of the vacant position(s).

Kasi Rishel, Admin Asst I, resigned July 22. Her position was vacant 3.5 months until we hired Kathleen Albritton in November.
in a hearing he was leaning towards ruling there was inadequate notice but the issue of abandonment would be heard at trial. This prompted both sides to settle to remove the rights from the abandonment list for the historical uses. The historical uses were significantly less than the decreed uses.


Kathleen Albritton joined the Division 5 team on November 10 as a temporary Admin Asst I. As of this writing, she has been hired as a permanent part-time Admin Asst II. She is a few credits from completion of her course work as a paralegel--so brings some unique training to the job.

Division 5 received extra personnel budget this year to reduce the backlog of untabulated decrees. The personnel budget was primarily for Tom Cox and Tom Brigham. The tabulation should be completely reduced by Spring 2006.

## - Impact of the Budgets on Operations

## Division 5 Operating Budget

The time that DNR's Human Resources takes to fill vacancies has resulted in some positions remaining unfilled for up to 6 months. In critical administration areas this is unacceptable. It places a greater workload for the existing staff and the backlog of work for the new hire is often very large. The mileage budget is impacted because the existing staff drives more miles to cover vacant positions. See Appendix G.

## Overtime Budget

Division 5 is experiencing a transformation from rural to urban areas. This transformation has resulted in approximately 300 to 400 new water rights each year and the duties of the water commissioners have increased from the traditional irrigation months of May through October to yearround administration.

Division 5 has only one part-time water commissioner for Water Districts 52 and 53 ( 9 months), one part time water commissioner in Water District 37 (11months) and one part time water commissioner in WD 70 ( 9 months). These positions need to have full-time water commissioners because they are quickly changing from agricultural to urban areas or, as in the case of the Eagle Valley (Water District 37), is already mainly urban.

## Mileage

The current rate of 28 cents per mile reimbursement for 2 -wheel drive mileage and 32 cents per mile reimbursement for 4 -wheel drive mileage is significantly below the cost of operating on-road vehicles. Water commissioners often will use their own ATV's or snowmobiles to perform their duties more efficiently. These off-road vehicles are more expensive to operate, yet water commissioners are reimbursed at the 32 cents per mile rate. Water commissioners use these vehicles to perform their jobs more efficiently thereby saving the Department of Natural Resources (DNR) money through reduced overtime. However, DNR does not recognize the increased cost for operating off-road vehicles.


- Alan Martellaro, Division of Water Resources Leadership of the Year Award
Alan was awarded the Leadership Award for 2005. This award was long overdue. Alan, through his leadership in the last five years since he became Division Engineer, has grown a very new staff into a very effective
team. When Alan started as Division Engineer, there was a new Assistant Division Engineer, Augmentation Plan Coordinator, River Administrator and Hydrographer. Under his leadership a new position has been added to Division 5 as a combination Augmentation Plan Coordinator and Hydrographer.

Division 5 experienced a severe drought in 2002 and 2003. Through Alan's leadership in administering the river basin, the basin as a whole survived the drought through good water management. Reservoir administration in the Colorado Basin because of the abundance of water in previous years was not well defined. The drought years as well as the major water users in the basin growing into their water rights led to a lengthy discussion on proper administration of reservoirs. Alan through his leadership tackled one of the most controversial issues in Green Mountain Reservoir administration. Alan led a group
of over 30 major water users in the Colorado River Basin to a consensus on interpreting and administering the complex Federal Court water decrees.

Litigation has been a major component of his job. Division 5 is experiencing a rapid shift from agriculture to urbanization. This
has changed water administration from a 7month job to a complex 12-month job. The complexity of water right changes, augmentation plans and exchanges has led to a variety of precedent-setting court cases. Alan has been a major player in developing the future of water law in Colorado through his knowledge and leadership in water law.


- Kyle Whitaker, Division of Water Resources Professional of the Year Kyle's approach to his job is true professionalism. He is courteous to everyone and gives full attention to each person's ideas/issues, before making his decision. Kyle has a diligent work ethic, constantly moving projects forward to completion. All comments from external and internal customers regarding their contact with Kyle are positive. For example, Kyle
has been involved with the HydroBase committee; several members of that committee have stated they were impressed and thankful he is a part of that committee. Similar comments come from anyone from the Glenwood/Denver/Attorney General's office staff who have worked with him on litigation would second this nomination. There is one project that he leads that highlights his work. It is one that he must squeeze into an overly busy schedule with other tasks that appear more urgent and more important. When Kyle took over the Tabulation Project in 2000, Division 5 had a backlog of 1900 decrees, and we have added 300-400 new decrees each year since. By mid-May of this year (2006) Division 5 will no longer have a backlog of untabulated decrees. This has not occurred since 1988. As leader of this project he has trained and managed his tabulation team, assigned tasks, kept them focused, provided goals, provided support and quality control, and, of course, encouraged them to keep moving forward when there was no light at the end of the tunnel.

- Tom Cox, Div 5 Water Commissioner of the Year
Tom Cox administers Big, Grove, Salt, Leon, and Buzzard Creeks. These streams include transmountain and transbasin diversions, reservoir storage and deliveries, the Collbran and Vega Projects, and complex exchanges on overappropriated streams. Tom has performed this complex administration with the complete trust of his water users. This trust allows Tom to
administer streams that would otherwise take two people. In an area where many of our administrative decisions are questioned, Tom's never are. The value of Tom's work
to the Division of Water Resources and water users of this state cannot be overstated

- Tom Brigham, Div 5 Tarnished Shovel Award

The Tarnished Shovel is a traveling award. It is a shovel that was found near the dam of Clinton Gulch Reservoir, rusted and corroded by exposure and acidic mine waste. It has come to represent a shovel worn from excessive use, and recognizes the efforts of an individual digging up previously unknown information, or outstanding effort in normal everyday duties. Tom Brigham has for many years produced the most comprehensive field inspection reports. These reports include digital maps and photos that are on point and are an excellent substitute for the Division Engineer making the field trip. More obviously in need of recognition than his field inspections is Tom's effort on our GPS Project, where he has also provided the majority of our GPS'ed locations.

## II. 2006 WATER YEAR

On January 1, snowpack measurements indicated the basin was $133 \%$ of average but this was a reversal of fortunes from the previous winter. The Plateau Creek basin maintained a very high snowpack the previous winter while the headwaters were below average. Now Plateau Creek has $82 \%$ of average and the Blue River basin is at $168 \%$ of average. Reservoir storage for the entire drainage on January 1, 2006 is near normal at $105 \%$ of average, which is $35 \%$ higher than storage last year at this time.

March 1 snow surveys, the latest reports for this writing, show the basin snowpack is currently at $115 \%$ of average, $17 \%$ higher than the snowpack measured a year ago. This is also the first March $1^{\text {st }}$ snowpack to be above average since 1997. Snowpack for the watersheds within the basin ranged from 73\% of average in the Plateau Creek basin to $142 \%$ of average in the Blue River basin. March $1^{\text {st }}$ reservoir storage was $105 \%$ of average, which is $34 \%$ higher than it was last March $1^{\text {st }}$. Storage and snowpack conditions have combined into a very optimistic outlook for the basin, with few exceptions. Plateau Creek will have local
shortages for some irrigators, and there is potential for local flooding above Dillon Reservoir on the Blue River and the headwaters of the Eagle River.

For 2006, all reservoirs are expected to physically fill with the exception of Granby Reservoir. The paper fill accounting for

Green Mountain Reservoir will be kept but should not have an administrative consequence. With Dillon Reservoir physically full and spilling, and the power plant at Green Mountain Reservoir also off-line for 6 to 8 weeks this summer, there will be free river conditions on the upper Blue River for the first time since 1999.

## 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 and other use information,
Maintenance of gaging stations and satellite monitoring equipment,
Other hydrographic duties including rating of measuring devices associated with diversion
structures,
Tabulation of 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.

## B. GOALS FOR 2006

1. Old conditional rights without diligence on track to make absolute or be cancelled
2. Successful Bench Bar and Bench Bar subcommittee meetings
3. GPS all structures we visit
4. Summit County well enforcement
5. Improved augmentation plan enforcement
6. Support Interbasin Compact Committees (IBCC) roundtable
7. Tabulation--100\% up-to-date for publication July 1, 2006
8. Finalize a policy for the administration of the Blue River Decrees
9. Resolve Homestake Exchange (settled as of this writing)
10. Finalize 2000 Abandonment List (two unresolved cases)
11. Purge closed court case files and other preparation for move to new office
12. Keep co-location building project moving forward, must have target dates by April
13. Negotiate lease extension in current office
14. Fill vacancies for Admin Assist (completed as of this writing), Dist 70 Water Commissioner, and PE I Augmentation Engr/Hydro
15. Seek Decision Item for 2 Fleet vehicles (hydro/aug engineer, and water commissioner)
16. Seek Decision Item to increase part-time admin assist to full time ( 5 months), and likewise two part-time water commissioners to full-time (1 month +4 months)

## C. SPECIAL PROJECTS AND WORK ITEMS FOR 2006

## - 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 through the Interim Policy for fill accounting of Green Mountain and Dillon Reservoirs. The immediacy of a resolution or modification of the previous policy has abated due to the impressive snowpack on the Blue River. The 2005 Policy will likely be adopted without change for the upcoming fill season. Then Green Mountain Fill Committee meetings will proceed with long-term focus, and hopefully final resolution. No meetings are scheduled as of this writing.

## - Hydrographic Program

The operation of the Snake River at Keystone station will be upgraded in 2006 from a winter-administration-only station to a winter-published-record station. This change will facilitate better year-round gaging record for the Snake River, and is being done in conjunction with USGS reduction in operation of their upper station ("near Montezuma") to summer-only. A new lowflow control was installed in 2005 so low flow accuracy should be improved. Two new cooperators have promised to contribute to the increased annual operations and maintenance for the Keystone station.

The West Divide Creek near Raven station, formerly operated by the USGS, will be operated and maintained by Division 5 starting in 2006. The satellite monitoring was upgraded to high data rate (HDR) transmission capability last year. Division 5 will begin seasonal publication (i.e., no winter estimating) of this station for the 2006 Water Year.

Three new satellite monitoring stations planned for the Leon Lake tunnel system on Grand Mesa may be installed in 2006 if cooperator funding can be secured.

As part of a multiple station upgrade in conjunction with the Multa-Trina Ditch Company in District 45, a new satellite monitoring station will be installed at the West Divide Ditch bypass and the existing station at the Thompson Creek Feeder Ditch will be upgraded to HDR.

Division 5 has been granted a new part-time hydrographer position and this PE1 position should be filled in 2006.

## - Summit County Well Enforcement

There are an estimated 1500 wells in Summit County that are not in compliance with their well permits and/or the conditions of their decree. Of these, 1200 are estimated to be exempt household use only wells, while 300 are augmented household use only wells. With the Summit County and Vidler Water Company Umbrella Plans, contracting and review procedures are in place, in November ' 05 notices were sent to the first 50 well owners. The initial plan was to focus on wells tributary to the Blue River above Dillon Reservoir. The Colorado Water Conservation Board has protested the issuance of well permits to applicants who are tied to central sewer. With this development additional notices will be delayed until the issue is resolved. A meeting between Vidler, Summit County, the CWCB, and the Division and State Engineers is planned for April 2006. Until the issue is resolved we are preparing to begin issuing notices below Dillon Reservoir in areas where wells are not tied to central sewer.

## - Old Conditional Rights without Diligence

Division 5 had prepared a list in 2005 of conditional rights that were decreed without a specific diligence period and therefore either never had a diligence filing nor had a specific diligence period, but failed to file and the court failed to provide a precancellation notice. The former are pre1969 water rights - many 50 to 100 years old, and the latter are generally post-1969 rights. In the early 1990's a similar list was prepared but the court determined it could not finance the cost of the notices. The initial list was provided to the water commissioners for field inspection, comment, and to provide a contact for public notice. In November 2005 the list was submitted to the court. To prevent the court from becoming overwhelmed with responses, the court sent out cancellation notices in January 2006 of the water rights only in Districts 45 and 72. In February 2006 notices were sent out for Districts 52 and 53. The court is giving the owner(s)

60 days to respond with an application to make absolute or filing for reasonable diligence. Since the January notices were mailed, Division staff has spent 20 hours per week with the court and the owners of these rights.

## - Interbasin Compact Committees (IBCC)

HB1177 created nine basin roundtables delineated by the major basins in the state plus one roundtable for the Denver Metro area. The Division of Water Resources is to serve as technical support of these roundtables. The purpose of the IBCC is to seek collaboration to basin-wide solutions and to facilitate discussion between basins in the resolution of statewide issues and inter-basin transfers. The Colorado River Roundtable has held six meetings and to date have selected roundtable members and IBCC representatives, and developed bylaws. The roundtables are to be permanent, and the IBCC is to submit to the legislature by July 1, 2006 the Interbasin Compact Charter that governs the negotiations between the basin roundtables. The second through fifth meetings were procedural and required little support from DWR.

## - GPS Diversion Structures

Division 5 has nearly 19,000 structures. Of these nearly 5000 are exempt wells, small springs or other small surface structures for domestic, stock or wildlife uses. Currently there are 13,317 structures we plan to GPS. To date 1263 have been GPS'ed or 9.5\%. We intend to GPS all decreed structures visited, and all structures field inspected for water court applications in 2006.

## - Reconciliation of Irrigated Acres

Minor progress was made on this project in 2005 yet it remains important to litigation of future change cases and the administration of water rights in this Division. The problem involves two projects. The first is the GPS'ing of irrigated acreage under ditches with numerous change cases where dry-up is used for consumptive use credits in plans for augmentation. Many of the older change cases do not include maps of the dry-up, and we have found some cases where new dry-up claims are overlapping with old claims. This effort is very labor-intensive and only a few can be done each year. The second project involves the reconciliation of the CRDSS irrigated acreage project with acreage claimed in the annual diversion records.

## D. PERSONNEL, BUDGET, AND OPERATIONS

## - Personnel

In 2005 Division 5 received budget for an additional FTE for assistance with augmentation plans and hydrographic duties. To date the position has not been filled, therefore did not help reduce our backlog in 2005. The position has been advertised and we received 5 applications from outside DWR and 2 internal DWR candidates.

We have not been able to advertise filling the Water District 70 position due to a backlog with DNR Human Resources. Typically, administration begins in Water District 70 in April. We do not anticipate we will have a new hire prior to administration in 2006. This will result in additional staff time
requirements to cover water administration duties for this position.

## - Operations

## HydroBase

There are several improvements to HydroBase that would significantly reduce our workload producing records. There is still no way to print directly from HydroBase. There are several steps to transfer the data to DBase and print from DBase. This has led to several database file errors as well as our water commissioners cannot print their own records and check the data. We were told by the IT Department that the print function would be fixed prior to records in 2005 but to date this has not been fixed.

HydroBase should also be programmed to accept river calls and automatically assign diversion records to Green Mountain protection. Our water commissioners spend a significant amount of time entering diversion records with Green Mountain protection. With some simple programming, the water commissioners could simply enter Total Water Through Structure and thus eliminate creating multiple records.

The Division Engineer is responsible for releasing water from Green Mountain Reservoir to protect out-of-priority diversion from Historic Users Pool (HUP) beneficiaries. The HUP beneficiaries group
was defined by the Bureau of Reclamation in January 1984 as the water rights that were perfected by use prior to October 15, 1977. No one has produced guidance on how the water is to be released from Green Mountain. Past Green Mountain administration has relied on Rule Curves that were developed based on practice on the River being "on call" in mid-July. Recent droughts have made these Rule Curves obsolete. We need to develop a consumptive use model to estimate the amount of depletions from HUP beneficiaries to better represent the depletions to downstream senior rights and to better manage the releases from Green Mountain.

## E. DAM SAFETY ISSUES FOR THE FUTURE

The Division 6 dam safety engineer has recently been assigned total responsibility for the dams in Districts 50 and 51 and a preliminary screening of non-jurisdictional dams has been delegated to the Division 5 engineering staff. This should help offset some workload problems caused by non-jurisdictional and dam rehabilitation activities that occurred this year. it appears now that there will be runoff-related dam safety problems in 2006 with the potential for more incidents. This is due to the heavy snowpack in the eastern part of the Division in Districts 36, 37, and 38. Presently the snowpack in Summit, and Eagle Counties is about $140 \%$ of average. This could present numerous dam safety problems with the smaller and non-jurisdictional dams that have been encroached upon by heavy development. Also, due to many construction projects being postponed last year, several major rehabilitation projects will occur this year. As of this date it is almost certain that at least six major projects, some of which were supposed to start last year, will be occurring in 2006 at the same time. This will really stress the workload for the dam safety engineers.

In general, aside from the potential problems in 2006, the future workload will still be very full for the following reasons:

- 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 for design review which will cause the Grand Junctionbased dam safety engineer to be needed for design review in other Divisions. This in turn will leave more design review to be performed by the main Division 5 dam safety engineer stationed in Glenwood Springs.
- Another dam safety issue that will have an effect on the future workload on all Division 5 staff is the proliferation of nonjurisdictional dams being built in the Division. As more people move into the area, more want to build a small recreational pond. Also with more development there is an increasing need for augmentation plans,
which usually require augmentation ponds. Reviewing the "Notice of Intent to Construct," these non-jurisdictional dams will have some impact on the workload but the big concern is the public safety risks and potential incidents that will occur as the population grows. With this in mind, the review of plans and specifications for the construction of significant hazard nonjurisdictional sized dams will be required with the proposed new rules and regulations, which will require additional design review time.
- Even though the dam safety engineers were able to accomplish 10 hazard evaluations in 2005, there is still a large backlog of 42 hazard evaluations that need to be done and this number grows faster than the ability to accomplish them. As the risk assessment approach becomes more of a reality,
accomplishing the hazard evaluations will become a higher priority. It is estimated that it will take over 40 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 is near completion. When the methodology is finally completed, it will mean approximately 55 Class 1 and 2 dams will have to have a hydrology study performed. This will take another $40(+)$ weeks to accomplish.

TEXT ENDS HERE.

## SEE PAGES FOLLOWING FOR APPENDICES.

## 2005 ANNUAL REPORT APPENDIX <br> (click on links below to get electronic file)

A. INTERIM POLICY: ADMINISTRATION OF GREEN MTN RES FOR 2005
B. RIPRAP

TABLE: RESERVOIR RELEASES \& 15-MILE REACH FLOWS
GRAPH: IMPACT OF LATE IRRIGATION SEASON RESERVOIR RELEASES IN THE 15-MILE REACH
C. TABLE: MAINSTEM RIVER CALLS
D. DIV 5 HISTORIC \& PROJECTED RESERVOIR LEVELS
E. WATER COURT ACTIVITIES
F. DIVISION 5 ORGANIZATIONAL CHART
G. OFFICE ADMINISTRATION AND WORKLOAD MEASURES
H. TRANSMOUNTAIN DIVERSIONS - INFLOWS AND OUTFLOWS
I. RESERVOIR STORAGE WATER SUMMARIES BY DISTRICT
J. WATER DIVERSION SUMMARIES

April 28, 2005

## Administration of Green Mountain Reservoir for 2005

## 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 purpose of this Policy is to address three potential accounting scenarios to administer the first fill of Green Mountain Reservoir with respect to administration of the call on the mainstem of the Colorado River. 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, or when the first fill storage water right is curtailed to satisfy a legal river call by a downstream senior water right prior to completion of a physical or paper fill.

## 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 the demand of a downstream call from a water right senior to August 1, 1935 + out-of-priority depletions of West Slope beneficiaries of Senate Document No. 80, including contractors, that are upstream of Green Mountain Reservoir and junior to the August 1, 1935 priority + upstream Denver and Colorado Springs owed to Green Mountain Reservoir accounts equals 154,645 acre feet ("paper fill").

Following the paper fill and using an October 5, 1955 priority date, Green Mountain may continue to store tributary inflow when in priority until it physically fills. 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.

## No Paper Fill

If a paper fill of Green Mountain Reservoir has not occurred prior to a Colorado River mainstem call senior to the Green Mountain Reservoir 1935 storage right, the upstream out-of-priority depletions of West Slope beneficiaries of Senate Document No. 80, including contractors, and other rights junior to the 1935 Green Mountain first fill right will be counted against the fill of the 1935 Green Mountain Storage right. The out of priority depletions will be computed for the period from the start of the fill declaration by the Secretary of Interior until receipt of the senior water right call.

## 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 2005 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 2005 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 2005 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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*The Palisade Bypass Pumpline is not a reservoir release; however, the pipeline flows are considered to be reservoir deliveries
for the purposes of computing the "without reservoir deliveries" in the 15 Mile Reach.
IMPACT OF LATE IRRIGATION SEASON RESERVOIR RELEASES IN THE 15 MILE REACH (As Measured at the Colorado River at Palisade Gage) 2005 LATE SUMMER/FALL

-15 Mile Reach Flow WITH Reservoir Releases

-     - 15 Mile Reach Flow WITHOUT Reservoir Releases
-     - = USFWS Recommended Mean Monthly Flow August-October 2005

SUMMARY OF COLORADO RIVER MAINSTEM CALLS 2005 IRRIGATION YEAR
$\frac{\text { STATUS OF CALL AT THE SHOSHONE POWER PLANT }}{\text { (As determined using the Colorado River near Dotsero gage) }}$

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


## Comments <br> Swing Priority

DIVISION 5 HISTORIC \& PROJECTED RESERVOIR LEVELS


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## APPENDIX E: WATER COURT ACTIVITIES

## CALENDAR YEAR 2005

Applications Made to Water Court...(05CW...) ..... 301
Div 5 DWR - Colorado River ..... 282
(Div 6 DWR) - White River ..... 19
Amended Applications - Div 5 Colorado River. ..... 60
No. of Cases Consulted On With Referee ..... 334
No. of Written Consultations ..... 319
No. of Complaints ..... 1
No. of Withdrawn and/or Dismissed Cases ..... 18
No. of Denials ..... 0

NO. OF CASES DECREED BY WATER COURT FOR DIVISION $5=285$

| Type of Decree | \# Cases | \# Structures |
| :---: | :---: | :---: |
| Findings of Diligence on Conditional Rights | 72 | 195 |
| Cancellations of Conditional Rights | 20 | 45 |
| Conditional Rights Made Absolute | 28 | 52 |
| Surface Water Rights Adjudicated | 55 | 111 |
| Underground Water Rights Adjudicated | 28 | 65 |
| Water Storage Rights Adjudicated | 40 | 101 |
| Plans for Augmentation Adjudicated <br> Structures Augmented in Combination Cases | 28 | $\pm 89$ |
| Change of Water Rights (includes location, use, amount, alt pts dvr, chg pts dvr) | 43 | 142 |
| Instream Flow Rights Adjudicated | 1 | n/a |
| Amend Augmentation Plans | 5 | 9 |
| Exchanges | 11 | n/a |
| Combination Cases of Due Diligence \& Conditional To Absolute in the same application (all other combination cases itemized above) | 37 | 100 |

Division Five Organization Chart


APPENDIX G: OFFICE ADMINISTRATION \& WORKLOAD MEASURES
PERSONNEL:

| NAME | WORKING TITLE FY 2005 | OFFICE OR WD | $\begin{aligned} & \hline \text { FY 05 } \\ & 7 / 1 / 04-6 / 30 / 05 \end{aligned}$ |  | $\begin{aligned} & \hline \text { FISCAL YR 05 } \\ & \text { 7/1/04-6/30/05 } \\ & \text { REIMBURSABLE } \\ & \text { MILES } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { IRRIG YR 05 } \\ & \text { 11/1/04-10/31/05 } \\ & \text { REIMBURSABLE } \\ & \text { MILES } \\ & \hline \end{aligned}$ |  | CALENDAR YR <br> 1/1-12/31/05 <br> REIMBURSABLE <br> MILES |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FULL TIME OFFICE STAFF |  |  | BUDGETED | WORKED | 2 W | 4 W | 2 W | 4 W | 2 W | 4 W |
|  |  |  |  |  |  |  |  |  |  |  |
| ALAN MARTELLARO | PEIV DIVISION ENGINEER | OFFICE | 12 | 12 | 377 |  | 377 |  | 377 |  |
| JOHN SIKORA | PEII ASST DIVISION ENGINEER | OFFICE | 12 | 12 | 2625 |  | 3267 |  | 2832 |  |
| JUDY SAPPINGTON | PE II COLO RIVER ADMINISTRATOR | OFFICE | 12 | 12 | 358 |  | 636 |  | 760 |  |
| JOHNG BLAIR | PEII DAM SAFETY ENGINEER | OFFICE | 12 | 12 | 105 |  |  |  |  |  |
| GARRETT JACKSON | PEII DAM SAFETY ENGINEER | GJ OFC | 12 | 12 |  | 20 |  | 25 |  | 25 |
| GEORGE WEAR | PEI HYDROGRAPHER | OFFICE | 12 | 12 |  |  |  |  |  |  |
| KYLE WHITAKER | PE I AUG PLAN/TABULATION COORDINATOR \& LITIGATION | OFFICE | 12 | 12 | 2655 |  | 4875 | 240 | 5760 | 240 |
| BRIANROMIG | EPST II: GIS AND IT SUPPORT | OFFICE | 12 | 12 | 185 |  | 365 |  | 365 |  |
| DWIGHT WHITEHEAD | EPST II WELLS/WTR COMMISSIONER | OFFICE | 12 | 12 |  |  |  |  |  |  |
| DOUG STEPHENSON | EPST II WELL INSPECTOR FOR DIVISIONS 4,5,6 | OFFICE | 12 | 12 |  |  |  |  |  |  |
| NANCY HITCHCOCK | PAI PROGRAM ASSISTANT | OFFICE | 12 | 12 |  |  |  |  |  |  |
| KASI RISHEL | AA I ADMIN ASSISTANT (RESIGNED 7/22/05) | OFFICE | 7.2 | 7.2 |  |  |  |  |  |  |
| FULL TIME FIELD STAFF |  |  |  |  |  |  |  |  |  |  |
| SCOTT HUMMER | EPST II WATER COMMISSIONER | 36 | 12 | 12 | 188 |  |  |  |  |  |
| BILL BLAKESLEE | EPST II WATER COMMISSIONER | 38 | 12 | 12 | 14646 | 715 | 15901 | 341 | 14359 | 223 |
| MICHAEL CRAIG | EPST II WATER COMMISSIONER | 38 | 12 | 12 | 5575 | 122 | 6355 | 312 | 6234 | 312 |
| JIMLEMON | EPST II WATER COMMISSI ONER (PROMOTED: FT \& EPST II 5/3/04) | 39/45 | 12 | 12 | 12813 | 2018 | 8656 | 270 | 7201 | 80 |
| STEVE TREXEL | EPST II WATER COMMISSIONER (TRANSFERRED IN 6/1/04) | 45 | 12 | 12 | 6029 | 8712 | 10323 | 6111 | 11968 | 4220 |
| BILL THOMPSON | EPST II WATER COMMISSIONER | 50 | 12 | 12 | 3265 | 2352 | 6644 | 3614 | 6405 | 3327 |
| NEAL MISBACH | EPST I WATER COMMISSIONER (HIRED 6/8/05) | 51 | 3 | 0.5 | 1319 | 94 | 4810 | 512 | 6337 | 897 |
| STEVE POPE | EPST III WATER COMMISSIONER | 72 | 12 | 12 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| BILL MCEWEN | EPST II WATER COMMISSIONER | 37 | 11 | 11 |  | 233 |  | 698 |  | 698 |
| MIKE MELLO | EPST I WATER COMMISSIONER (HIRED 5/1/05) | 45 | 9 | 2 | 2284 |  | 5590 | 12 | 6802 | 216 |
| JIM DAXTON | EPST I WATER COMMI SSI ONER (RETIRED 3/25/05), TEMP BELOW | 51 | 5 | 5 | 8755 | 780 | 3565 | 440 | 2150 | 130 |
| FRANK SCHAFFNER | EPST I WATER COMMISSIONER | 52/53 | 8 | 8 |  | 5778 |  | 6639 |  | 6639 |
| DON MACKEY | EPST I WATER COMMISSIONER (RESIGNED 12/15/05) | 70 | 9 | 9 |  | 8151 |  | 9535 |  | 10934 |
| TOM BRIGHAM | EPSTI WATER COMMISSIONER | 72 | 10 | 10 |  | 13511 |  | 13909 |  | 13614 |
| TOMCOX | EPSA III WATER COMMISSIONER | 72 | 9 | 9 | 2382 | 5979 | 2865 | 5084 | 2865 | 4524 |
| ALAN COMERER | EPSA II WATER COMMISSIONER | 72 | 6 | 6 | 22 | 3056 | 22 | 129 | 22 | 129 |
| RON GREENE | EPSA II WATER COMMISSIONER | 72 | 6 | 6 | 2394 | 1013 | 2691 | 821 | 2691 | 821 |
|  |  |  |  |  |  |  |  |  |  |  |
| TEMPORARY PART-TIME STAFF |  |  |  |  |  |  |  |  |  |  |
| JIM DAXTON | EPST 1 5/19/05-6/30/05 | 51 | 1.5 | 1.5 |  |  |  |  |  |  |
| EDDIE WILSON | EPST II 11/04-6/05, (12/19/05-5/06) | HYDRO RECORD S | 6 (6) | 5, (1) |  |  |  |  |  |  |
| MICHAEL O'LOUGHLIN | EPSTI (SUMMIT CO WENF AUG PLAN PROGRAM 6/2/04-8/15/04) | WD36 | 6 | 1.5 | 622 |  |  |  |  |  |
| KATHLEEN ALBRITTON | $\begin{aligned} & \text { AAI ( } 11 / 19 / 05-2 / 19 / 06) \\ & \text { AA II - HIRED PERM PT 2/20/06 } \end{aligned}$ |  |  |  |  |  |  |  |  |  |
|  | TOTAL WORKER MONTHS (INCLUDING TEMPORARY EMPLOYEES): |  |  | 297.9 |  |  |  |  |  |  |
|  |  |  | TOTAL FTE: | 24.8 |  |  |  |  |  |  |
|  | TOTAL REIMBURSABLE MILES DRIVEN: |  |  |  | 66599 | 52534 | 76942 | 48827 | 77128 | 47029 |
|  | SUBTOTAL \$ ${ }^{\text {F FOR REIMBURSABLE MILES } 2 W=.28, ~ 4 W=.32 ~}$ |  |  |  | \$18648 | \$16811 | \$21544 | \$15625 | \$21596 | \$15049 |
|  | TOTAL \$\$ FOR REIMBURSABLE MILES DRIVEN PERIOD |  |  |  | \$35,459 |  | \$37,169 |  | \$36,645 |  |

APPENDIX G: OFFICE ADMINISTRATION AND WORKLOAD MEASURES (continued) ACTIVITY SUMMARY

CALENDAR YEAR 2005

| ACTIVITY | TOTALS |
| :---: | :---: |
| Professional and Technical Staff (FTE) | 9.0 |
| Program/Administrative Support Staff (FTE) | 1.58 |
| Water Commissioner FTE (Full/Part Time) | 8.5(FT) / 5.79 (PT) |
| Decreed Surface Water Structures (cumulative) | 10,878 |
| Surface Rights Administered (Site Visits) (WATER COMMISSIONERS) | 11,112 |
| Number of Decreed Wells (cumulative) | 5,893 |
| Consultations With Referee | 334 |
| Water Court Appearances (WATER COMMISSIONERS) | 2 |
| Meetings With Water Users (Public Meetings) (WATER COMMISSIONERS) | 151 |
| Meetings To Resolve Water Related Disputes | Not reported |
| Contacts to Give Public Assistance on Water Matters (WATER COMMISSIONERS) | $\begin{gathered} \text { TOTAL CONTACTS }=9,974 \\ \text { FIELD }=3,098 \\ \text { OFFICE }=1,283 \\ \text { PHONE }=5,593 \\ \hline \end{gathered}$ |
| Dams Visited <br> (WATER COMMISSIONERS) | 1,691 |
| Wells Visited (WATER COMMISSIONERS) | 581 |
| Surface Structures Administered by Phone (WATER COMMISSIONERS) | 682 |

2005 TRANSMOUNTAIN DIVERSION - INFLOWS

2005 TRANSMOUNTAIN DIVERSIONS - OUTFLOWS

RESERVOIR STORAGE SUMMARIES BY DISTRICT

| 200 |  |  |  | AMOUNT IN STORAGE (AF) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 10 | RESERVOIR NAME | SOURCE STREAM | ${ }_{\text {M }}$ Minimum |  | Maximum |  | End Of Year |
|  |  |  |  |  |  | AF | Date |  |
|  |  |  |  |  |  |  |  |  |
| 36 |  |  |  | 273,223.40 |  | 419,622.20 |  | 352,485.50 |
| 37 |  |  |  | 16,203.10 |  | 45,285.60 |  | 44,614.60 |
| 38 |  |  |  | 80,000.50 |  | 111,307.00 |  | 89,041.80 |
| 39 |  |  |  | 2,618.60 |  | 12,667.70 |  | 4,570.00 |
| 45 |  |  |  | 442.00 |  | 1,758.50 |  | 903.70 |
| 50 |  |  |  | 29,088.00 |  | 68,131.00 |  | 57,057.00 |
| 51 |  |  |  | 182,497.00 |  | $567,065.00$ |  | 531,459.00 |
| 52 |  |  |  | 129.00 |  | 232.00 |  | 158.70 |
| 53 |  |  |  | 4,163.30 |  | 6,542.20 |  | 4,814.00 |
| 70 |  |  |  | 0.00 |  | 0.00 |  | 48.40 |
| 72 |  |  |  | 23,160.10 |  | 61,180.30 |  | 37,857,30 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  | GRAND TOTAL FOR DIVIIIION 5 |  | 611,525.00 |  | 1,293,791.50 |  | 1,123,010,00 |

RESERVOIR STORAGE SUMMARIES BY DISTRICT

| 2005 |  |  |  | AMOUNT IN STORAGE (AF) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ID | RESERVOIR NAME | SOURCE STREAM | Minimum |  | Maximum |  | End Of Year |
|  |  |  |  | AF | Date | AF | Date |  |
| 36 | 3533 | BLACK LAKE | BLACK CREEK | 1,997.2 | 11/01/04 | 1,997.2 | 10/31/05 | 1,997.2 |
|  | 3535 | BUFFEHR ENLG RESERVOIR | TENMILE CREEK | na |  | na |  | na |
|  | 3538 | CATARACT LAKE | CATARACT CREEK | 1,652.8 | 11/01/04 | 1,652.8 | 10/31/05 | 1,652.8 |
|  | 3575 | CLINTON GULCH RESERVOIR | TENMILE CREEK | 3,973.0 | 05/31/05 | 4,421.0 | 06/30/05 | 4,212.0 |
|  | 4512 | DILLON RESERVOIR BRDP | BLUE RIVER | 194,869.0 | 04/07/05 | 258,613.0 | 06/25/05 | 237,606.0 |
|  | 3542 | GOOSE PASTURE TARN | BLUE RIVER | 375.7 | 01/06/05 | 796.0 | 11/01/04 | 795.7 |
|  | 3543 | GREEN MOUNTAIN RES | BLUE RIVER | 69,642.0 | 04/07/05 | 153,576.0 | 06/30/05 | 105,508.0 |
|  | 3548 | HOAGLAND RESERVOIR NO 1 | ELLIOTT CREEK | 50.0 | 10/31/05 | 110.0 | 06/05/05 | 50.0 |
|  | 3643 | KEYSTONE POND | SNAKE RIVER | 100.0 | 11/01/04 | 100.0 | 10/31/05 | 100.0 |
|  | 3606 | OFFICER GULCH POND | TENMILE CREEK | na |  | na |  | na |
|  | 3565 | REYNOLDS RESERVOIR | SODA CREEK | na |  | na |  | na |
|  | 3569 | UPPER BLACK CREEK RES | BLACK CREEK | 273.0 | 11/01/04 | 273.0 | 10/31/05 | 273.0 |
|  | 3570 | UPPER BLUE LAKE RES | BLUE RIVER | 0.0 | 11/18/04 | 2,124.0 | 07/11/05 | 0.0 |
|  | 3571 | WAY RESERVOIR | BEAVER CREEK | 64.0 | 11/01/04 | 80.0 | 06/02/05 | 64.0 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 36 |  | Total of All Others < 50 AF |  | 217.8 |  | 260.2 |  | 226.8 |
| 36 |  | Total For District 36 |  | 273,223.4 |  | 419,622.2 |  | 352,485.5 |

RESERVOIR STORAGE SUMMARIES BY DISTRICT

| 2005 |  |  |  | AMOUNT IN STORAGE (AF) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WD | ID | RESERVOIR NAME | SOURCE STREAM | Minimum |  | Maximum |  | End Of Year |
|  |  |  |  | AF | Date | AF | Date |  |
| 37 | 3600 | BENCHMARK LAKE | EAGLE RIVER | 125.0 | 11/01/04 | 125.0 | 10/31/05 | 125.0 |
|  | 3608 | BLACK LAKE | GORE CREEK | 145.5 | 04/01/05 | 361.9 | 10/31/05 | 361.9 |
|  | 3510 | BLACK LAKE NO 2 | GORE CREEK | 53.5 | 04/01/05 | 113.6 | 10/31/05 | 113.6 |
|  | 3698 | BOLTS LAKE | CROSS CREEK | - | - |  | - |  |
|  | 3513 | CHALK MOUNTAIN RESERVOIR | EAGLE RIVER | 199.6 | 11/01/04 | 237.2 | 06/01/05 | 229.2 |
|  | 3699 | CLIMAX MOLY NO 4 RES | EAGLE RIVER | 2,698.8 | 03/01/05 | 3,148.4 | 09/01/05 | 3,041.4 |
|  | 4516 | HOMESTAKE RESERVOIR | HOMESTAKE CREEK | 12,336.7 | 04/30/05 | 39,589.3 | 10/31/05 | 39,589.3 |
|  | 3520 | L E D E RESERVOIR | GYPSUM CREEK | 50.0 | 11/01/04 | 464.0 | 07/07/05 | 350.0 |
|  | 3522 | NOECKER RESERVOIR | EBY CREEK | 0.0 | 10/31/05 | 159.0 | 06/01/05 | 0.0 |
|  | 3524 | O Z LAKE (aka Sylvan Lake) | BRUSH CREEK | 452.0 | 10/31/05 | 452.0 | 10/31/05 | 452.0 |
|  | 3527 | ROBINSON RESERVOIR | EAGLE RIVER | 137.0 | 11/01/04 | 408.0 | 06/01/05 | 140.0 |
|  | 3530 | WELSH RESERVOIR | ALKALI CREEK | 5.0 | 11/01/04 | 105.0 | 10/31/05 | 105.0 |
|  |  |  |  |  |  |  |  |  |
| 37 |  | Total of All Others < 50 AF |  | 63.7 |  | 122.2 |  | 107.2 |
| 37 |  | Total for District 37 |  | 16,203.1 |  | 45,285.6 |  | 44,614.6 |

RESERVOIR STORAGE SUMMARIES BY DISTRICT

| 2005 |  |  |  | AMOUNT IN STORAGE (AF) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WD | ID | RESERVOIR NAME | SOURCE STREAM | Minimum |  | Maximum |  | End Of Year |
|  |  |  |  | AF | Date | AF | Date |  |
| 38 | 3711 | ALICIA LAKE RESERVOIR | LIME CREEK | 673.0 | 11/01/04 | 673.0 | 06/05/05 | 673.0 |
|  | 4000 | BEAVER LAKE | CRYSTAL RIVER | 72.5 | 11/01/04 | 72.5 | 06/01/05 | 72.5 |
|  | 3722 | CONSOLIDATED RESERVOIR | WEST COULTER CREEK | 0.0 | 11/04/04 | 712.0 | 05/05/05 | 0.0 |
|  | 3774 | CRAWFORD DAM NO 1 | BLUE CREEK | 10.0 | 11/01/04 | 10.0 | 05/05/05 | 10.0 |
|  | 3773 | CRAWFORD DAM NO 2 | BLUE CREEK | 15.0 | 11/01/04 | 15.0 | 05/05/05 | 15.0 |
|  | 3721 | CROOKED CREEK RES | LIME CREEK | 38.0 | 11/01/04 | 38.0 | 05/05/05 | 38.0 |
|  | 4087 | CRYSTAL SPRING LAKE | CRYSTAL SPRING | 72.0 | 11/01/04 | 72.0 | 06/01/05 | 72.0 |
|  | 4095 | FLANNERY RESERVOIR | THREE MILE CREEK | 60.0 | 11/01/04 | 70.0 | 06/01/05 | 60.0 |
|  | 3779 | GRIZZLY RESERVOIR | LINCOLN CREEK | 65.0 | 11/01/04 | 65.0 | 06/01/05 | 65.0 |
|  | 3727 | HIMMELAND LAKE | FRYING PAN RIVER | 90.0 | 11/04/04 | 90.0 | 06/05/05 | 90.0 |
|  | 3729 | HUGHES RESERVOIR | THREE MILE CREEK | 30.0 | 11/01/04 | 89.5 | 07/01/05 | 67.0 |
|  | 3732 | IVANHOE RESERVOIR | FRYING PAN RIVER | 200.0 | 11/01/04 | 350.0 | 07/01/05 | 200.0 |
|  | 3832 | JACOBSON LAKES \& PONDS | ROARING FORK RIVER | 225.0 | 11/01/04 | 225.0 | 07/01/05 | 225.0 |
|  | 4154 | KODIAK LAKE \& WETLANDS | ROARING FORK | 50.0 | 11/01/04 | 60.0 | 07/01/05 | 50.0 |
|  | 3736 | LAKE ANN RESERVOIR | SOPRIS CREEK | 60.0 | 11/01/04 | 350.0 | 07/01/05 | 95.0 |
|  | 3955 | MCNULTY RESERVOIR \#2 | SHIPPEE RUN CREEK | 0.0 | 04/01/04 | 5.0 | 04/30/05 | 0.5 |
|  | 3740 | RALSTON RESERVOIR | COULTER CREEK | 0.0 |  | 0.0 |  | 0.0 |
|  | 3713 | RUEDI RESERVOIR | FRYING PAN RIVER | 75,260.0 | 11/01/04 | 102,363.0 | 06/05/05 | 83,720.0 |
|  | 3744 | SPRING PARK RESERVOIR | CATTLE CREEK | 104.0 | 11/01/04 | 1,655.0 | 06/01/05 | 73.0 |
|  | 3742 | SMITH PARK RESERVOIR | SHIPPEE RUN | 0.0 | 11/01/04 | 95.0 | 06/01/05 | 23.8 |
|  | 3747 | THOMAS RESERVOIR | THOMAS CREEK | 160.0 | 11/01/04 | 160.0 | 06/01/05 | 160.0 |
|  | 3753 | UPPER CHAPMAN RES | FRYINGPAN RIVER | 50.0 | 11/01/04 | 50.0 | 06/01/05 | 50.0 |
|  | 3750 | VAN-CLEVE FISHER RES | MESA CREEK | 0.0 | 11/01/04 | 125.0 | 06/01/05 | 0.0 |
|  | 3759 | WILDCAT RESERVOIR | SNOWMASS CREEK | 1,140.0 | 11/01/04 | 1,140.0 | 06/01/05 | 1,140.0 |
|  | 3760 | WOODS LAKE RESERVOIR | LIME CREEK | 300.0 | 11/01/04 | 300.0 | 06/01/05 | 300.0 |
| 38 |  | Total of All Others < 50 AF |  | 1,326.0 |  | 2,522.0 |  | 1,842.0 |
| 38 |  | Total for District 38 |  | 80,000.5 |  | 111,307.0 |  | 89,041.8 |

RESERVOIR STORAGE SUMMARIES BY DISTRICT

|  |  |  | O-m | $\bigcirc$ | - | - | $3 \begin{gathered} n \\ \vdots \\ \vdots \\ \hdashline \end{gathered}$ |  |  |  |  | ¢ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\left\|\begin{array}{\|c\|c} \underline{4} \\ \underline{u} \end{array}\right\|$ |  |  |  |  |  |  | $\begin{array}{l\|l} n \\ \\ \\ \hline \end{array}$ |  |  |  |  |  |
|  |  | $\stackrel{\rightharpoonup}{4} \underset{\sim}{\underset{\sim}{N}}$ |  | $\stackrel{\rightharpoonup}{\circ} \stackrel{\rightharpoonup}{\circ}$ | $\begin{aligned} & 0 \\ & \hline 8 \\ & 8 \end{aligned}$ |  |  | $\begin{gathered} 0 \\ \stackrel{c}{6} \\ \stackrel{0}{6} \\ 0_{2} \end{gathered}$ |  |  |  | N |
|  |  |  | $2 \begin{aligned} & \frac{y}{2} \\ & \frac{2}{2} \\ & \frac{1}{2} \end{aligned}$ |  | $\begin{aligned} & \frac{8}{9} \\ & \stackrel{y}{9} \end{aligned}$ |  |  | $\stackrel{8}{8}$ |  |  |  |  |
|  |  |  | $\sim$ | - | $\infty$ | $\bigcirc$ |  |  |  |  |  | - |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 으응 | $\left\|\begin{array}{l} n \\ 0 \\ 0 \\ 0 \end{array}\right\|$ |  | Bion |  | $\underset{\sim}{\underset{\sim}{c}} \underset{\substack{0 \\ \hline 0 \\ \hline}}{ }$ |  |  |  |  |  |  |
| 侖 | 3 | ¢ | \% | ¢® | \% | ¢ | ®® |  |  |  |  | ®® |

RESERVOIR STORAGE SUMMARIES BY DISTRICT

RESERVOIR STORAGE SUMMARIES BY DISTRICT

|  |  | $0$ | - |  | $\bigcirc$ | $\underset{\sim}{0}$ | - | $\underset{\sim}{0}$ | $\stackrel{\rightharpoonup}{\mathrm{B}} \mathrm{O}$ | Oin | \% | - |  | $\stackrel{-}{\circ}$ | - | $9$ | - | -1 | (iol | $\xrightarrow[\sim]{\sim}$ | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\left\|\frac{\stackrel{u}{4}}{\frac{u}{u}}\right\|$ |  | $\stackrel{y}{\circ}$ | $\begin{aligned} & n \\ & \\ & \hline 0 \\ & 0 \\ & 0 \\ & \hline 8 \end{aligned}$ | $\begin{array}{\|c} \stackrel{\sim}{2} \\ \\ \end{array}$ |  | $S_{S}^{3}$ |  | $\left\|\begin{array}{l} n \\ \stackrel{n}{5} \\ \stackrel{N}{\circ} \\ \hline \end{array}\right\|$ |  |  | $\left\|\begin{array}{c} N \\ \\ \mathbf{0} \end{array}\right\|$ |  |  |  |  | $\begin{aligned} & 3 \\ & \substack{n \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ \hline} \end{aligned}$ | $\left\lvert\, \begin{gathered} n \\ \stackrel{n}{n} \\ \\ \end{gathered}\right.$ | $0$ |  |  |  |
|  | $\left\lvert\, \begin{aligned} & \text { x } \\ & \text { a } \\ & \hline \end{aligned}\right.$ |  | $\left\|\begin{array}{l} 0 \\ 0 \\ 0 \end{array}\right\|$ | - |  |  | $\stackrel{-}{\square}$ | $\begin{aligned} & 0 \\ & \stackrel{0}{0} \\ & \cdots \end{aligned}$ |  | $\stackrel{\substack{\mathrm{c}}}{\mathbf{c}}$ |  | $\begin{aligned} & 0 \\ & \text { O} \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & 0 \\ & i n \\ & \hline \end{aligned}$ | $\underset{\sim}{2}$ | $0$ | $3$ |  | on | $\begin{array}{\|l\|} \hline \stackrel{\rightharpoonup}{i} \\ \underset{N}{2} \end{array}$ |  | - |
| $\left\|\frac{\sum}{4}\right\|$ | ( |  | $\mathfrak{c}$ | $\mathfrak{l}$ | $\begin{aligned} & \stackrel{y}{9} \\ & \stackrel{9}{9} \\ & \hline \end{aligned}$ |  | Son |  |  |  |  | $\left\lvert\, \frac{\text { S}}{\stackrel{\rightharpoonup}{\mathrm{o}}}\right.$ | $\begin{aligned} & \frac{9}{9} \\ & \frac{9}{9} \\ & \frac{1}{7} \end{aligned}$ |  | $\stackrel{s}{3}$ | $\left\lvert\, \begin{aligned} & \frac{9}{2} \\ & \frac{9}{9} \\ & \frac{1}{2} \end{aligned}\right.$ | $\begin{aligned} & n \\ & \\ & \\ & \\ & \hline \end{aligned}$ | $8$ | $2$ |  |  |
|  |  |  | - | $\sim$ | - | $0$ | Sop | $\underset{\sim}{\underset{\sim}{3}}$ |  |  | W |  | $0$ | $\stackrel{-}{1-}$ |  |  | $\left\|\begin{array}{c} 0 \\ \dot{N} \\ 0 \\ \infty \\ \infty \\ \underset{\sim}{2} \end{array}\right\|$ | N | $\left.\frac{\stackrel{n}{N}}{\stackrel{0}{2}} \right\rvert\,$ |  | - |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 으응 |  | $\left\|\begin{array}{\|c} \substack{0 \\ 0 \\ 0} \end{array}\right\|$ | $\left.3 \begin{aligned} & \dot{n} \\ & \vdots \\ & 0 \\ & 0 \end{aligned} \right\rvert\,$ | $\begin{aligned} & \text { 心 } \\ & \mathbf{N} \\ & \hline \end{aligned}$ | $\stackrel{\substack{\mathrm{N} \\ \hline \\ \hline}}{\substack{\infty \\ \hline}}$ | $\stackrel{\infty}{\circ} \mathrm{n}$ | $\underset{\sim}{2}$ | $\stackrel{\rightharpoonup}{0} \stackrel{\rightharpoonup}{0} \mid \underset{\sim}{\sim}$ | $\stackrel{c}{c}$ | $\left\lvert\, \begin{gathered} 9 \\ \underset{e}{e} \\ \hline \end{gathered}\right.$ | $\underset{\substack{9 \\ \hline \\ \hline \\ \hline}}{\substack{\sim \\ \hline \\ \hline}}$ | $\begin{aligned} & 3 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ | $3 \left\lvert\, \begin{aligned} & 3 \\ & \vdots \\ & \\ & \hline 1 \end{aligned}\right.$ | $\overline{5}$ | $\begin{aligned} & 1 \\ & \vdots \\ & \vdots \\ & \substack{2 \\ \hline \\ \hline} \end{aligned}$ | $\begin{aligned} & \hat{n} \\ & \substack{e \\ \hline} \end{aligned}$ | $\mathfrak{m}$ | - |  |  |
|  | $\bigcirc$ | 응 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 응 | 웅 |

RESERVOIR STORAGE SUMMARIES BY DISTRICT

| 2005 |  |  |  | AMOUNT IN STORAGE (AF) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WD | ID | RESERVOIR NAME | SOURCE STREAM | Minimum |  | Maximum |  | End Of Year |
|  |  |  |  | AF | Date | AF | Date |  |
| 51 | 4006 | BULL RUN CREEK RESERVOIR | BULL RUN CREEK | 102.0 | 11/01/04 | 120.0 | 05/01/05 | 110.0 |
|  | 4055 | CBT GRANBY RESERVOIR | COLORADO RIVER | 105,715.0 | 03/31/05 | 436,342.0 | 08/31/05 | 423,802.0 |
|  | 3695 | CBT SHADOW MOUNTAIN GRAND LAKE | NO. FORK OF COLO RIVER | 17,324.0 | 05/31/05 | 17,785.0 | 02/28/05 | 17,666.0 |
|  | 3710 | CBT WILLOW CREEK RESERVOIR | WILLOW CREEK | 8,025.0 | 03/31/05 | 10,098.0 | 08/31/05 | 9,219.0 |
|  | 4012 | COTTONWOOD RESERVOIR | GARDINER CREEK | 60.0 | 11/01/04 | 90.0 | 07/10/05 | 80.0 |
|  | 3715 | EAST BRANCH RESERVOIR | UTE CREEK | - | - | - | - | - |
|  | 3660 | F W LINKE NO 2 RESERVOIR | TEN MILE CREEK | 12.0 | 11/01/04 | 61.0 | 05/20/05 | 12.0 |
|  | 3665 | HANKINSON RESERVOIR | FRASER RIVER | 90.0 | 11/01/04 | 105.0 | 05/15/05 | 90.0 |
|  | 3752 | KINGS RESERVOIR | BUFFALO CREEK | 231.0 | 11/01/04 | 331.0 | 06/15/05 | 231.0 |
|  | 3679 | LANGHOLEN RESERVOIR | BATTLE CREEK | 4.0 | 07/20/05 | 65.0 | 06/08/05 | 7.0 |
|  | 3686 | MEADOW CREEK RESERVOIR | MEADOW CREEK | 0.0 | 10/31/05 | 4,306.0 | 06/30/05 | 0.0 |
|  | 3687 | MOORE RESERVOIR | WILLIAMS FORK RIVER | 34.0 | 11/01/04 | 65.0 | 06/09/05 | 34.0 |
|  | 3688 | MUSGRAVE RESERVOIR | ROCK CREEK | 0.0 | 11/01/04 | 310.0 | 06/08/05 | 0.0 |
|  | 3693 | ROCK CREEK RESERVOIR | ROCK CREEK | - | - | - | - | - |
|  | 3694 | SCHOLL RESERVOIR | CORRAL CREEK | 0.0 | 11/01/04 | 250.0 | 06/08/05 | 0.0 |
|  | 3732 | GAYLORD RESERVOIR | POLE CREEK | 139.0 | 11/01/04 | 170.0 | 07/20/05 | 145.0 |
|  | 4051 | SUN VALLEY RESERVOIR | NO. FORK OF COLO RIVER | - | - | - | - | - |
|  | 3701 | SYLVAN RESERVOIR | LITTLE MUDDY CREEK | 24.0 | 11/01/04 | 875.0 | 06/14/05 | 55.0 |
|  | 3738 | UTE CREEK RESERVOIR | UTE CREEK | - | - | - | - | - |
|  | 3709 | WILLIAMS FORK RES | WILLIAMS FORK RIVER | 50,737.0 | 03/31/05 | 96,092.0 | 06/30/05 | 79,416.0 |
| 51 |  | Total of All Other Reservoirs Less Than 50 |  |  |  |  |  | 592.0 |
| 51 |  | TOTAL FOR DISTRICT 51 |  | 182,497.0 |  | 567,065.0 |  | 531,459.0 |

RESERVOIR STORAGE SUMMARIES BY DISTRICT

RESERVOIR STORAGE SUMMARIES BY DISTRICT

| 2005 |  |  |  | AMOUNT IN STORAGE (AF) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WD | ID | RESERVOIR NAME | SOURCE STREAM | Minimum |  | Maximum |  | End Of Year |
|  |  |  |  | AF | Date | AF | Date |  |
| 53 | 3959 | CLYDE RESERVOIR | EGERIA CREEK | 10.0 | 11/01/04 | 66.0 | 07/05/05 | 30.0 |
|  | 3960 | CRESENT LAKE RESERVOIR | DERBY CREEK | 0.0 | 11/01/04 | 237.0 | 07/05/05 | 0.0 |
|  | 3961 | ED W HARPER RESERVOIR | EGERIA CREEK | 0.0 | 11/01/04 | 194.0 | 06/05/05 | 31.0 |
|  | 3962 | EGERIA RESERVOIR | EGERIA CREEK | 0.0 | 11/01/04 | 107.0 | 05/05/05 | 0.0 |
|  | 3966 | GRIMES BROOKS RESERVOIR | RED DIRT CREEK | 35.0 | 11/01/04 | 408.0 | 06/05/05 | 279.0 |
|  | 3971 | HEART LAKE RESERVOIR | DEEP CREEK | 2,945.0 | 11/01/04 | 2,945.0 | 07/05/05 | 2,945.0 |
|  | 3972 | HIDDEN SPRINGS RESERVOIR | HORSE CREEK | - | - | - | - | - |
|  | 3974 | JONES NO 1 RESERVOIR | SHEEP CREEK NO 2 | 50.0 | 11/01/04 | 165.0 | 06/05/05 | 145.0 |
|  | 3975 | JONES NO 2 RESERVOIR | SHEEP CREEK NO 2 | 250.0 | 04/05/05 | 578.0 | 05/05/05 | 450.0 |
|  | 3978 | KELLY RESERVOIR | EGERIA CREEK | 226.0 | 11/01/04 | 226.0 | 07/05/05 | 226.0 |
|  | 3982 | LUARK RESERVOIR | SPRING CREEK | 0.0 | 11/01/04 | 60.0 | 06/05/05 | 15.0 |
|  | 4020 | MACKINAW LAKE RES NO 2 | DERBY CREEK | 26.3 | 11/01/04 | 79.0 | 07/05/05 | 23.0 |
|  | 3986 | MORRIS RESERVOIR | TOPONAS CREEK | 0.0 | 11/01/04 | 51.2 | 05/05/05 | 0.0 |
|  | 3988 | NEWTON GULCH RES | KING CREEK | 0.0 | 11/01/04 | 344.0 | 05/05/05 | 48.0 |
|  | 3992 | REID NO 3 RESERVOIR | EGERIA CREEK | 80.0 | 11/01/04 | 86.0 | 06/05/05 | 86.0 |
|  | 3995 | STERNER RESERVOIR | EGERIA CREEK | 0.0 | 11/01/04 | 195.0 | 05/05/05 | 0.0 |
|  | 3997 | SWEETWATER RESERVOIR | SWEETWATER CREEK | 490.0 | 11/01/04 | 490.0 | 04/13/05 | 490.0 |
|  | 3999 | TONIER GULCH RES | TOPONAS CREEK | 0.0 | 11/01/04 | 64.0 | 04/22/05 | 0.0 |
|  | 4001 | TOPONAS ROCK NO 2 RES | TOPONAS CREEK | 5.0 | 11/01/04 | 197.0 | 04/22/05 | 0.0 |
|  | 4004 | WOHLER RESERVOIR | ELK CREEK | 46.0 | 10/31/05 | 50.0 | 06/02/05 | 46.0 |
| 53 |  | Total of All Others < 50 AF |  |  |  |  |  |  |
| 53 |  | TOTAL FOR DISTRICT 53 |  | 4,163.3 |  | 6,542.2 |  | 4,814.0 |

RESERVOIR STORAGE SUMMARIES BY DISTRICT

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RESERVOIR STORAGE SUMMARIES BY DISTRICT

| 2005 |  |  |  | AMOUNT IN STORAGE (AF) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WD | ID | RESERVOIR NAME | SOURCE STREAM | Minimum |  | Maximum |  | End Of Year |
|  |  |  |  | AF | Date | AF | Date |  |
| 72 | 3833 | ANDERSON BROS RES NO 1 | LEON CREEK |  | NO INFO |  | NO INFO |  |
|  | 3887 | BIG BEAVER RESERVOIR | BULL CREEK | 2.6 | 11/01/04 | 122.3 | 04/26/05 | 5.0 |
|  | 3904 | BIG CREEK NO 1 RESERVOIR | BIG CREEK | 469.0 | 12/06/04 | 763.6 | 11/01/04 | 763.6 |
|  | 3905 | BIG CREEK NO 3 RESERVOIR | BIG CREEK | 850.8 | 05/16/05 | 1,549.6 | 05/31/05 | 1,272.1 |
|  | 3906 | BIG CREEK NO 4 RESERVOIR | BIG CREEK | 101.7 | 11/05/04 | 188.4 | 05/23/05 | 140.7 |
|  | 3907 | BIG CREEK NO 5 RESERVOIR | BIG CREEK | 0.0 | 11/15/04 | 104.6 | 05/31/05 | 104.6 |
|  | 3909 | BIG CREEK NO 7 RESERVOIR | BIG CREEK | 454.5 | 11/29/04 | 1,222.6 | 05/23/05 | 1,112.4 |
|  | 3841 | BOB MC KELVIE RESERVOIR | PLATEAU CREEK |  | NO INFO |  | NO INFO |  |
|  | 3888 | BULL BASIN NO 1 RES | BULL CREEK | 4.7 | 11/01/04 | 124.4 | 05/22/05 | 124.4 |
|  | 3889 | BULL BASIN NO 2 RES | BULL CREEK | 0.0 | 11/01/04 | 92.3 | 06/23/05 | 75.4 |
|  | 3890 | BULL CREEK NO 1 RES | BULL CREEK | 28.3 | 11/01/04 | 79.3 | 03/09/05 | 79.3 |
|  | 3891 | BULL CREEK NO 2 RES | BULL CREEK | 15.4 | 11/01/04 | 68.0 | 03/22/05 | 68.0 |
|  | 3892 | BULL CREEK NO 3 RES | BULL CREEK | 2.8 | 11/01/04 | 59.2 | 03/22/05 | 0.0 |
|  | 3893 | BULL CREEK NO 4 RES | BULL CREEK | 7.3 | 11/01/04 | 186.9 | 03/22/05 | 0.0 |
|  | 3894 | BULL CREEK NO 5 RES | BULL CREEK | 118.1 | 11/01/04 | 248.2 | 03/22/05 | 248.2 |
|  | 3834 | COLBY HORSE PARK RES | LEON CREEK | 0.0 | 11/01/04 | 565.1 | 05/01/05 | 0.0 |
|  | 3883 | COON CREEK NO 1 RES | COON CREEK | 260.0 | 11/01/04 | 396.0 | 05/23/05 | 330.0 |
|  | 3884 | COON CREEK NO 2 RES | COON CREEK | 0.0 | 11/01/04 | 195.0 | 06/02/05 | 13.1 |
|  | 3885 | COON CREEK NO 3 RES | COON CREEK | 0.0 | 11/01/04 | 158.3 | 05/31/05 | 50.0 |
|  | 3923 | COTTONWOOD LAKES RES NO 1 | COTTONWOOD CREEK | 1,193.4 | 12/06/04 | 1,939.6 | 03/24/05 | 1,833.7 |
|  | 3924 | COTTONWOOD LAKES RES NO 2 | COTTONWOOD CREEK | 96.1 | 11/16/04 | 206.1 | 03/26/05 | 204.5 |
|  | 3925 | COTTONWOOD LAKES RES NO 4 | COTTONWOOD CREEK | 292.1 | 03/15/05 | 303.7 | 11/15/04 | 303.7 |
|  | 3926 | COTTONWOOD LAKES RES NO 5 | COTTONWOOD CREEK | 168.6 | 11/24/04 | 342.3 | 05/26/05 | 342.3 |
|  | 4065 | CURRIER RESERVOIR NO 2 | BUZZARD CREEK |  | NO INFO |  | NO INFO |  |
|  | 3910 | DAWSON RESERVOIR | BIG CREEK | 94.6 | 11/15/04 | 213.4 | 05/23/05 | 134.3 |
|  | 3920 | ECHO LAKE RESERVOIR | BIG SALT WASH | 0.0 | 12/01/04 | 95.5 | 04/14/05 | 0.0 |
|  | 3914 | GROVE CREEK RESERVOIR NO 1 | GROVE CREEK |  | NO INFO |  | NO INFO |  |
|  | 3915 | GROVE CREEK RESERVOIR NO 2 | GROVE CREEK |  | NO INFO |  | NO INFO |  |
| 72 |  | Subtotal This Page |  | 4,160.0 |  | 9,224.4 |  | 7,205.3 |

RESERVOIR STORAGE SUMMARIES BY DISTRICT

| 2005 |  |  |  | AMOUNT IN STORAGE (AF) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WD | ID | RESERVOIR NAME | SOURCE STREAM | Minimum |  | Maximum |  | End Of Year |
|  |  |  |  | AF | Date | AF | Date |  |
| 72 | 3849 | HAWXHURST RESERVOIR | HAWXHURST CREEK |  | NO INFO |  | NO INFO |  |
|  | 3957 | HIGHLINE RESERVOIR | COLORADO RIVER | 2,930.0 | 04/01/05 | 3,280.0 | 11/01/04 | 3,280.0 |
|  | 3929 | JENSEN RESERVOIR | COTTONWOOD CREEK | 0.0 | 11/01/04 | 86.2 | 06/02/05 | 66.0 |
|  | 3961 | JERRY CREEK RESERVOIR NO 1 | PLATEAU CREEK | 1,082.3 | 02/28/05 | 1,128.2 | 11/01/04 | 1,102.0 |
|  | 3962 | JERRY CREEK RESERVOIR NO 2 | PLATEAU CREEK | 5,148.0 | 03/31/05 | 6,569.0 | 12/31/04 | 6,515.4 |
|  | 3837 | KENDALL RESERVOIR | LEON CREEK |  | NO INFO |  | NO INFO |  |
|  | 3838 | KIRKENDALL RESERVOIR | LEON CREEK |  | NO INFO |  | NO INFO |  |
|  | 3839 | LEON LAKE RESERVOIR | LEON CREEK | 406.7 | 11/01/04 | 2,328.7 | 07/11/05 | 677.8 |
|  | 3895 | LOST LAKE RESERVOIR | BULL CREEK | 0.0 | 11/02/04 | 91.4 | 05/23/05 | 70.9 |
|  | 3871 | MESA CREEK NO 1 RESERVOIR | MESA CREEK | 280.2 | 11/03/04 | 280.2 | 11/01/04 | 280.2 |
|  | 3872 | MESA CREEK NO 2 RESERVOIR | MESA CREEK | 42.2 | 11/04/04 | 42.2 | 11/01/04 | 42.2 |
|  | 3873 | MESA CREEK NO 3 RESERVOIR | MESA CREEK | 0.0 | 03/22/05 | 238.9 | 07/06/05 | 118.8 |
|  | 3874 | MESA CREEK NO 4 RESERVOIR | MESA CREEK | 0.0 | 04/26/05 | 428.4 | 06/15/05 | 39.9 |
|  | 3842 | MONUMENT NO 1 RESERVOIR | LEON CREEK |  | NO INFO |  | NO INFO |  |
|  | 3843 | MONUMENT NO 2 RESERVOIR | LEON CREEK |  | NO INFO |  | NO INFO |  |
|  | 3854 | PALISADE CABIN RESERVOIR | RAPID CREEK | 814.0 | 04/18/05 | 1,018.1 | 06/29/05 | 1,009.1 |
|  | 3932 | PARKER BASIN RESERVOIR NO 1 | COTTONWOOD CREEK | 141.3 | 11/15/04 | 271.6 | 05/23/05 | 271.6 |
|  | 3933 | PARKER BASIN RESERVOIR NO 2 | COTTONWOOD CREEK | 60.7 | 11/15/04 | 60.7 | 11/15/04 | 60.7 |
|  | 3934 | PARKER BASIN RESERVOIR NO 3 | COTTONWOOD CREEK | 99.3 | 03/01/05 | 410.6 | 06/08/05 | 152.2 |
|  | 3858 | RAPID CREEK NO 1 RESERVOIR | RAPID CREEK | 211.1 | 11/01/04 | 691.4 | 05/31/05 | 233.2 |
|  | 3859 | RAPID CREEK NO 2 RESERVOIR | RAPID CREEK | 0.0 | 11/01/04 | 508.4 | 05/23/05 | 0.0 |
|  | 3901 | STUBB McKINNEY CLARK RESERVOIR | SPRING CREEK | 184.3 | 11/15/04 | 184.3 | 11/15/04 | 184.3 |
|  | 3931 | T E KITSON RESERVOIR | COTTONWOOD CREEK |  | NO INFO |  | NO INFO |  |
|  | 3902 | TWIN BASIN RESERVOIR | BULL CREEK | 0.0 | 11/01/04 | 115.8 | 06/02/05 | 0.0 |
|  | 3844 | VEGA RESERVOIR | PLATEAU CREEK | 7,465.0 | 11/01/04 | 33,930.0 | 06/30/05 | 16,372.0 |
|  | 3919 | Y T RESERVOIR | GROVE CREEK |  | NO INFO |  | NO INFO |  |
| 72 |  | Subtotal This Page |  | 18,865.1 |  | 51,664.1 |  | 30,476.3 |
| 72 |  | Subtotal Previous Page(s) |  | 4,160.0 |  | 9,224.4 |  | 7,205.3 |
| 72 |  | Total of All Other Reservoirs Less Than 50 |  | 135.0 |  | 291.8 |  | 175.7 |
| 72 |  | TOTAL FOR DISTRICT 72 |  | 23,160.1 |  | 61,180.3 |  | 37,857.3 |

DIVISION 5－－2005

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TOTAL
$2,071,759$
DIVISION 5-2005
WATER DIVERSION SUMMARIES TO VA

| WD | TRANSMOUNTAIN OUTFLOW | TRANSBASIN OUTFLOW | MUNICIPAL | COMMERCIAL | INDUSTRIAL | RECREATION | FISHERY | DOMESTIC \& HOUSEHOLD | stock |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 36 | 73,196 | 0 | 7,061 | 35 | 177 | 296 | 726 | 56 | 1,115 |
| 37 | 51,013 | 0 | 9,892 | 8 | 274 | 0 | 674 | 12 | 811 |
| 38 | 111,664 | 1,145 | 10,451 | 138 | 18 | 0 | 41,055 | 2,041 | 3,492 |
| 39 | 0 | 0 | 2,911 | 27 | 54 | 0 | 12,336 | 2,021 | 1,459 |
| 45 | 0 | 0 | 268 | 21 | 407 | 0 |  | 1,039 | 16,370 |
| 50 | 0 | 0 | 393 | 0 | 0 | 0 | 0 | 8 | 8 |
| 51 | 249,134* | 3,346 | 2,045 | 48 | 1,553 | 0 | 1,136 | 27 | 73 |
| 52 | 0 | 405 | 0 | 6 | 0 | 0 | 0 | 17 | 0 |
| 53 | 0 | O | 7,978 | 0 | 0 | 3,484 | 113 | 0 | 82 |
| 70 | 0 | 0 | 0 | 0 | 93 |  | 0 | 16 | 774 |
| 72 | 100 | 1,747 | 9,890 | 17 | 2 | 0 | 48,307 | 106 | 24,321 |
| TOTAL | 235,973 | 6,643 | 50,889 | 300 | 2,578 | 3,780 | 104,347 | 5,343 | 48,505 |


NOTES: "Other"=fire use (Q water not included in any totals)
WATER DIVERSION SUMMARIES TO VARIOUS USES (AF)


[^0]:    Notes: $\quad$ Green Mountain Reservoir dead storage includes 20,000 AF of "stranded" storage. April 1st Projected Storage is based on obtaining data from March 1st to March 8 and extrapolating.

