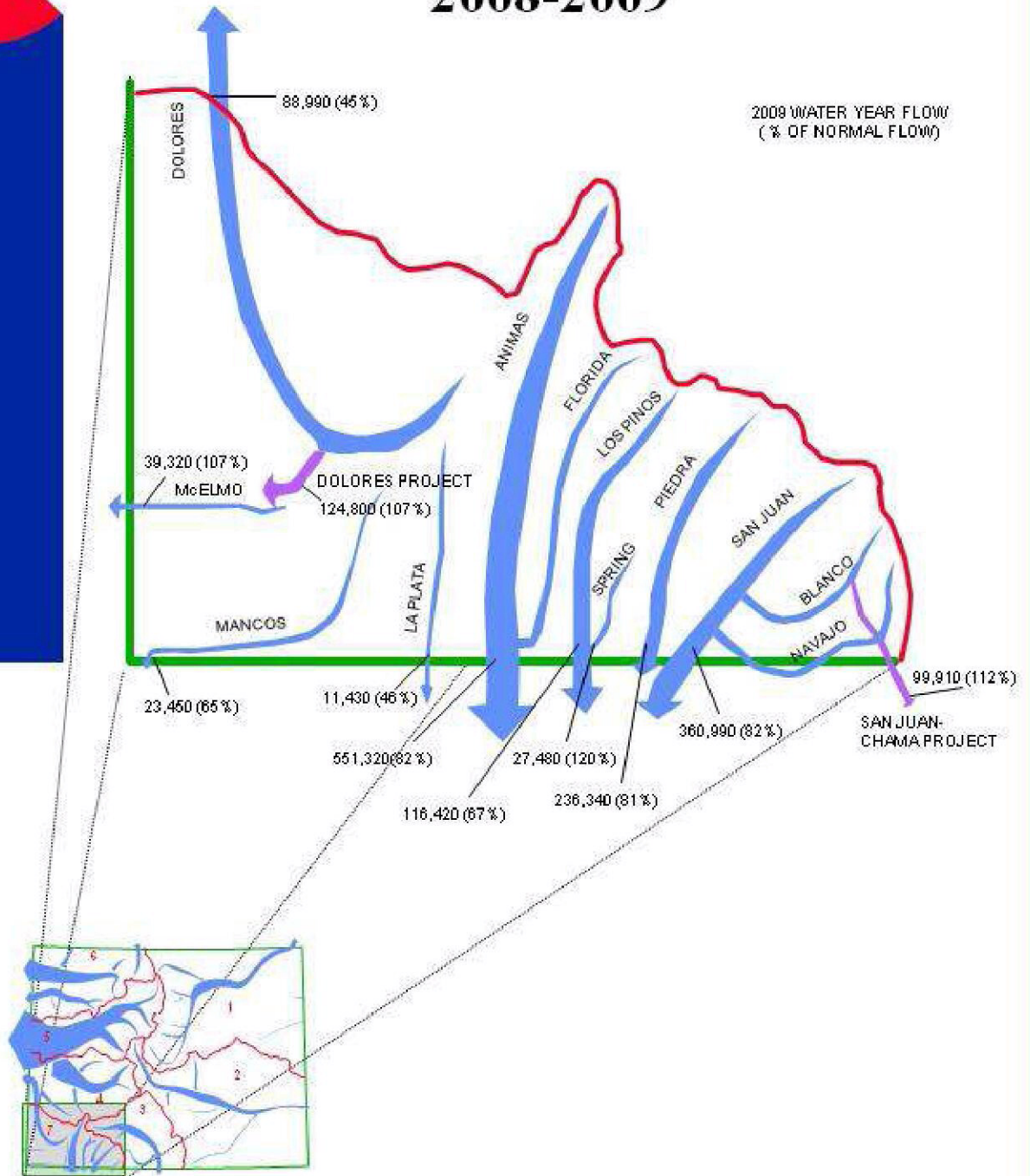


# DIVISION OF WATER RESOURCES

## DIVISION VII ANNUAL REPORT

### 2008-2009



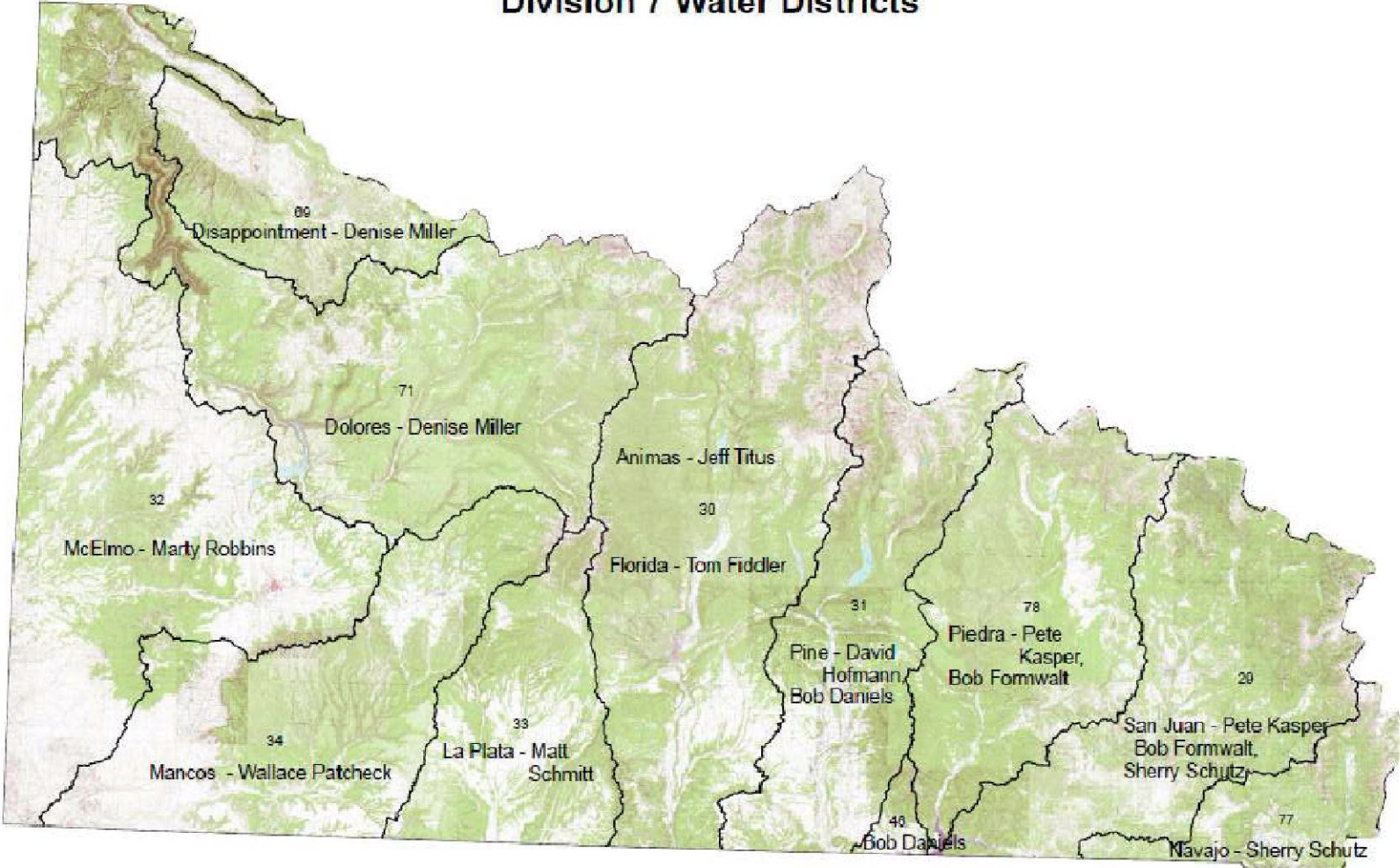
Rege W. Leach  
Division Engineer

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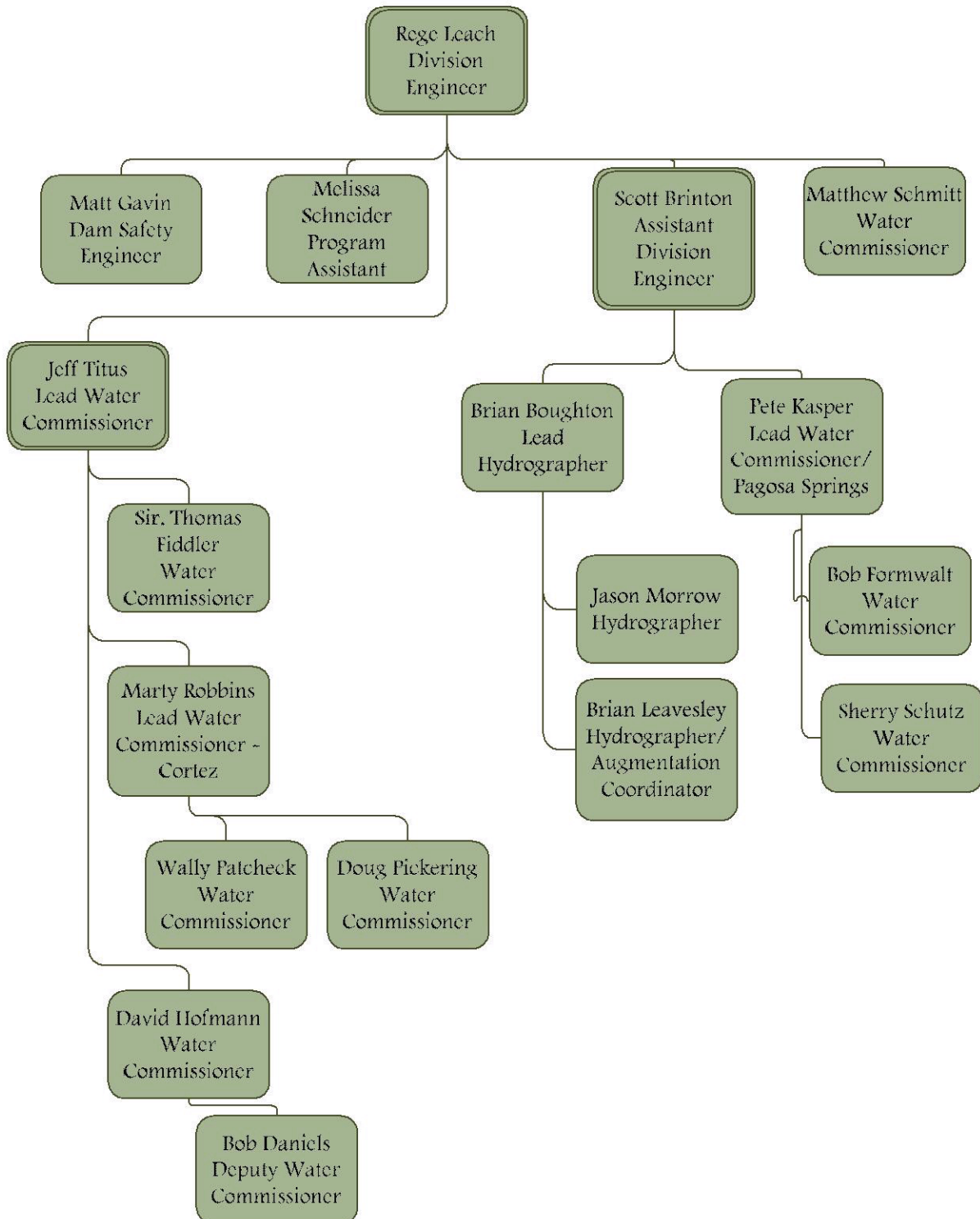
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# Division 7 Water Districts



# Division 7 – Water Resources



## **2008-2009 WATER YEAR**

The 2009 Water Year was a year of 'feast or famine' as far as precipitation is concerned. The water year started out with below average flows carrying forward from the dry summer of 2008. Precipitation was scarce across the Division with just 0.85 inches in Durango from October 5, 2008 to November 25, 2008. As happened last year, a change in the weather pattern provided southwestern Colorado with one of the snowiest Decembers in many years. Over the next 30 days, from November 26, 2008 to December 26, 2008, Durango received 46 inches of snow containing 5.55 inches of moisture. Just as quickly as the precipitation started it ended. It took another 166 days, to June 10, 2009, to match the 5.55 inches of precipitation received in those 30 days. The hope was that the weather pattern would return to a more normal summer pattern with monsoon moisture providing the late summer moisture we have come to expect. But that was not to be. During the monsoon season in July and August Durango only received 0.93 inches of precipitation, well below our normal of 4.27 inches. Overall for the Water Year, Durango received 16.38 inches of precipitation, sixteen percent below its normal of 19.58 inches.

Areas in Division 7 that do not have a large reservoir to rely on for irrigation water rely on snowpack. Snowpack was off to a poor start until the last week of November. SNOTEL data indicated that on Thanksgiving Day, November 27, 2008, the snowpack was at 28 percent of normal. By December 27, 2008 the basin snowpack was up to 142 percent of the average snow water equivalent. On January 1, 2009 the snow pack was 135% of average. This was the highest January 1 snowpack percentage since 1997 which was 156 percent of average. This marked the second year in a row of a much higher than average snowpack on January 1. December precipitation at the SNOTEL sites was an excellent 236 percent of average. By February 1, 2009 the snowpack dropped down to 116 percent of average. While this was a large drop the February 1 snowpack was still the third highest percentage since 1997. The dismal precipitation pattern continued on into March. On March 1 the basin wide snowpack dropped



another 10 percent to 106 percent of normal. Unfortunately things turned from bad to worse for the snowpack during the month of March. By April 1 the snowpack had dropped to 86 percent of average. Not only did March not produce much precipitation, only 48 percent of average, it also had warmer than normal temperatures that started the snowpack melting a month earlier than normal. The water content of the snowpack on April 1 remained essentially unchanged from the March 1 values in spite of the near normal precipitation. Basinwide, the snowpack readings dropped below average to 86 percent of average. A sunny, warm, windy and dry last two weeks of April further served to devastate the snowpack in the basin. Numerous dust storm events throughout the winter deposited dust layers in the snowpack that greatly accelerated the melt rate of the snowpack when exposed to the bright sunshine. Chris Landry of the Center for Snow and Avalanche Studies in Silverton, Colorado has been monitoring dust on snow events for the past few years and photographs of the impact on the snowpack albedo are shown on page 53. The average high and low temperatures in April were only slightly above normal and were not enough to account for the much earlier snowmelt. Snow water content dropped all the way down to 63% of average by May 1. May continued the warm and windy pattern that April had started. Even with above average precipitation in May, by June 1, snow water content dropped all the way down to only 15 percent of normal. The Natural Resources and Conservation Service, operators of most of the state's SNOTEL sites, reported that the basin lost 41 percent of its peak snowpack during the last part of April and 54 percent during May leaving only 5 percent remaining on the ground on June 1. The earlier than normal runoff is clearly indicated on the Animas River at Durango 2009 Water Year graph on page 71. Many irrigators were not ready to take the early season runoff in late April and early May and as a result, crop suffered. A cool spell and an area-wide rain event at the end of June provided the last irrigation water many farmers in the area would receive, unless you had reservoir storage as a backup. What was needed for a good crop was a return of the summer monsoon rains. Unfortunately, they were few and far between.

Due to the early runoff, major reservoirs in the Division were able to fill to higher than average storage levels throughout the Water Year. Of major importance to the rafting community are the releases available out of McPhee Reservoir. Rafting in the

Dolores River Canyon below McPhee Reservoir is a highly prized adventure available only in years with above normal snowpack in the Dolores River basin. The Bureau of Reclamation, in conjunction with the Dolores Water Conservancy District, was able to provide 15 days of above 800 cubic feet per second (cfs) flow, of which 12 days were above 1200 cfs flow. 800 cfs is considered the minimum raftable flow and 1200 cfs allows for larger rafts and wilder rafting. Large increases in storage in McPhee began on March 13, 2009. Due to the earlier snowmelt the releases that aided in providing raftable flows McPhee Reservoir started on May 12 and continued until May 26, a much earlier than normal period that fortunately did include the Memorial Day weekend. The Dolores Water Conservation District managed the reservoir releases during this time period to match inflows and topped off the reservoir on May 22, twenty-four days earlier than last year, with 382,880 acre feet (AF).

Lemon Reservoir filled to capacity, 37,710 acre feet, on May 18, over a month earlier than last year's fill date of June 21. Releases from storage in Lemon began on May 26 and with the exception of a four day period at the end of June continued until irrigation releases ceased on September 24, 2010. Lemon ended March with the third highest amount in storage since its construction in 1964.

Vallecito Reservoir filled to capacity, 125,376 acre feet, on May 16, forty-seven days earlier than last year's maximum date of July 2. Sustained releases from storage in Vallecito fared somewhat better than Lemon and began on July 2 and continued without exception until irrigation releases ceased on October 19, 2010. Vallecito ended March with the third highest, May with its second highest and June with the highest amount in storage since its construction in 1941.

Many of the critical smaller reservoirs in the Division, which are used for supplemental irrigation and/or domestic or municipal supplies, had fair carry over storage to begin the year. Johnson Reservoir which has a decreed capacity of 1000 AF, and is filled with trans-basin water from the La Plata River, had carry-over storage of 774 AF to begin the season. It filled early in the season on May 12, 2009. The reservoir is a critical domestic supply for the Lake Durango Water Company. Red Mesa Ward Reservoir, the only major storage vessel in the La Plata River basin, filled to near capacity on March 5, 2009 with 1,185 acre feet, holding near that amount until it topped



off at 1,206 acre feet on May 11, 2009. As a result of the dry monsoon season the reservoir was drained down to its dead pool capacity of 52 acre feet on September 14, 2009. In the western part of the Division, Jackson Gulch Reservoir, in the Mancos River basin, filled to capacity on May 11, 2009 and remained full until June 13, 2009 before needing to make storage releases for the irrigators. This was over two weeks earlier than last year. Totten and Narraguinnep Reservoirs in the McElmo drainage filled, and Groundhog and the Summit Reservoir system in the Dolores River drainage also filled to capacity to begin the irrigation season. On the eastern side of the division, almost all of the reservoirs stored to capacity. Stevens Reservoir began the year drained to facilitate work on the enlargement of the dam and reservoir. It started filling on April 1, 2009 and peaked out on July 31, 2009 with 410 acre feet, below its capacity of 635 acre feet.

The average monthly high temperatures recorded in Durango were cooler than the 30 year averages for six months of the water year, December, April and June to September. June averaged 7.4° below the average high temperature. Only two days in June were above the average high temperature for the day. Eight months during the year had below normal precipitation. The average monthly low temperatures were above the 30 year average lows for seven months of the water year. The string of 17 consecutive above normal high temperatures from May 4 to May 19 combined with the increased melting rate from dust on snow effects to produce much earlier and higher peaks than would have been expected given the snowpack conditions. Snow water equivalent (SWE) peaked in the San Miguel, Dolores Animas and San Juan River Basins at 93% of the average on April 18 and by May 1 the SWE was down to 63% and this with April precipitation at 100% of average. On May 17 the SWE was down to 24% of average. All of the Snotel sites SWE went to zero, with one exception at Wolf Creek Summit, by May 28, a full 27 days earlier than the median melt out date of June 24. A cool and cloudy pattern developed on May 20 and reduced the snowmelt rate back down. In the 27 days from April 29 to May 25 over half of the La Plata River at Hesperus annual flow came out. By June 6 the flow at Hesperus had dropped to less than 50 cfs from its peak average daily flow of 345 cfs on May 12. The upper index for the La Plata River compact at Hesperus remained above 100 cubic feet per second



(cfs) from April 23 to May 26 this compared to last year's April 20 to June 26. June was sunny and for the most part dry; two days of precipitation in Durango provided 1.30 inches of the 1.46 inches of precipitation received. The two rainy days in June cooled off the high country and increased streamflows modestly for just a few days. Scattered monsoon rains never returned to the higher elevations in July and August. The rains were widely scattered and provided little to no moisture relief in dry areas or increased streamflows. The flow at the Animas River at Durango was near normal from February to April and jumped to 147% in May, the 14<sup>th</sup> highest in 99 years of record keeping. It was downhill from there. June was 63% (rank 75 of 99), July was also 63% (rank 62 of 98), August was 41% (rank 93 of 98) and September was 46% (rank 93 of 99). The water year total of 521,130 AF was 88% of the long term average and that ranked the 2009 water year as the 62<sup>th</sup> best out of the last 98 years. The snowmelt peak of 5,510 cfs for the Animas River at Durango occurred on May 12, 27 days prior to the historic peak flow date of June 8.

The warm spell and the earlier than normal snowmelt in May was evidenced all across the division. The runoff peak at the La Plata River at Hesperus gage, 382 cfs, occurred on May 12, 10 days earlier than the historic peak snowmelt runoff date of May 22. On the Dolores River, the daily peak runoff flow at the town of Dolores was 3,390 cfs on May 8, 14 days earlier than its historic peak snowmelt runoff date of May 22. The San Juan River at Pagosa Springs recorded an average daily peak flow of 2,560 cfs on May 12, 17 days earlier than its historic peak snowmelt runoff date of May 29.

On the eastern side of the division, the Pagosa Springs area received above normal precipitation for the second year in a row. The months of December and June, July and August produced well above normal precipitation that helped offset the below normal months. For the year, Pagosa Springs received 22.07 inches of precipitation compared to its normal precipitation of 19.97 inches. The lowest months precipitation was March when only 0.27 inches of precipitation was received, just 17% of normal.

On the western side of the division, the Cortez area received above normal precipitation for the months of December, April and June. These were the only months of the water year to have above normal precipitation. March had just 0.17 inches of precipitation, 12% of normal for the month. For the year, Cortez received 9.21 inches of

precipitation compared to its normal precipitation of 13.21 inches, just 70% of normal. The summer season only received 3.11 inches, 58% of normal.

All across the Division many of the irrigators on rivers and tributaries were forced to make calls much earlier than normal and due to the lack of monsoon rains, many calls continued until the end of the irrigation season. As is the norm, the La Plata Compact was not without challenges this year and included a period from July 16 to 30 and August 5 to 11 when the number one water right in Colorado was totally shut off to meet New Mexico's Compact call.

## **SAN JUAN RIVER & TRIBUTARIES (NAVAJO, BLANCO & PIEDRA RIVERS)**

### **Water Districts 29, 77, 78**

The eastern portion of the division began the season with slightly above normal precipitation and little to no snowpack. Snowfall for the season did not start in earnest until mid-December and the skies opened up. From December 1 to December 31 snowpack at the Upper San Juan Snotel site, located at 10,200 foot elevation, went from 6.0 inches of SWE to 26.0 inches. Precipitation conditions then followed a slightly below normal pattern for the remainder of the winter season but, possibly because of the dust on snow events, snowpack accumulation started to drop and melt began in the first week of March. The snowpack came out quickly and any irrigators not ready early missed the early runoff. A call was placed on Four Mile Creek on July 13 and was not released until October 4. A call was also placed this year, as they first did three years ago, by the Colorado Division of Wildlife for their water right in the Ford Ditch No. 1 on Devil Creek on June 24 until August 12. The call required administration of decreed augmentation plans and substitute water supply plans upstream of the diversion. A call was also placed on Stollsteimer Creek on May 1, as compared to last year's August 18<sup>th</sup>, but it was determined that any water shut off above the calling structure would not reach the heading so a determination of a futile call was made. A call was also placed on Oil Well Creek off of the Navajo River on August 10 and continued until irrigation ceased on October 28. There were no calls in Water District 78, the Piedra River basin. The San Juan-Chama project was able to divert 99,910 af to the Rio Grande basin in



New Mexico during the 2009 water year, which is more than the long term average of 88,390 af and was the fifteenth highest in thirty-nine years of diversion. A malfunction in the controller at the Navajo River diversion into the Azotea Tunnel resulted in a short term release of water that carried with it a tremendous amount of silt. The water flow was quickly shut down but that resulted in the dropping of the silt load in the river channel and into any headgates and ditches that were unfortunate to be open at that time.

## **ANIMAS RIVER AND FLORIDA RIVER**

### **Water District 30**

The precipitation/snowfall pattern followed a more normal pattern than in the eastern part of the division but the early snowmelt pattern also occurred in the Animas River drainage. The early snowmelt did allow the Pine Ridge Ditch Company to divert starting on March 17 to store water in Lake Durango by diversions from the La Plata River. The reservoir did fill on May 12. The snow pack in the Animas River basin and its tributaries was below normal by the time the irrigation season started and the lack of monsoon rains caused irrigators to draw heavily on the rivers and reservoirs. The low flow levels in the Animas River below Durango were further reduced due to the startup of the pumps for the Ridges Basin Reservoir (aka Lake Nighthorse). Pump testing began on April 17 and continued until May 27 when full diversion of their water right began. They continued diverting until July 24 when flows in the Animas River dropped to an average daily flow below 380 cfs. This was above their required minimum bypass of 225 cfs. They did manage to divert 65,370 acre feet and pumping will resume when flows increase in 2010. In spite of the low flows late in the summer, many of the ditches on tributaries that normally require administration did not place a call this year. These tributaries included Junction Creek, Little Cascade Creek and Upper Elbert Creek. The Conley Ditch did place a call on Elbert Creek this year as there was not adequate flow for all of their decreed uses. That call went on August 6 and was not removed until the first snowfall on October 27. A call was also placed on Lightner Creek on August 20 by the Taggart Ditch but it was determined that any water shut off above the calling structure would not reach the heading so a determination of a futile call was made.



The Florida River basin began the irrigation season with fair carryover storage in Lemon Reservoir. Lemon started the irrigation year with 18,240 AF in storage. The early snowpack melt was stored in the reservoir and releases of flow above the irrigation demand from May 18 to May 27. The call went on the Florida River on May 27. Normally, the river is not on call until the first part of July, so administration of water rights began several weeks early due to the early snowmelt and lack of substantial rainfall. The call dropped all of the way down to the F-15 water right on August 21. Storage in Lemon Reservoir dropped to an irrigation season low of 9,076 AF on September 25, 7,800 acre feet less than last year's low storage volume. The previous day the irrigation call went off. The 2008 and 2009 irrigation years were excellent examples of the value of a storage project high in a basin for the management of limited, and sometimes unpredictable, water supplies.

## **PINE RIVER AND SIEMBRITOS ARROYO**

### **Water Districts 31, 46**

The precipitation most of the division received in December did not extend into the mountains above Vallecito Reservoir. The Vallecito snotel reached slightly above normal near Christmas and was only able to remain above normal until Valentine's Day. Only 2.0 inches more of SWE was collected in the snowpack by the time SWE peaked on April 5. Snowmelt then began in earnest and the snotel site was dry by May 8. The normal date for zero snowpack is June 19. In preparation for the anticipated lower than normal inflow the reservoir minimized releases out of the reservoir until they were sure of filling. The March 1 forecasted inflow for Vallecito reservoir was 210,000 AF (reservoir capacity of 125,400 AF). By the April 1 forecast it was down to 170,000 AF. Releases above the irrigation demand went from May 12 to June 7. The excess water released from Vallecito Reservoir was captured in Navajo Reservoir, which contributed to it being only 10.5% short of filling to its capacity of 1,701,300 AF during May 2009. The 1,522,759 AF in storage in Navajo Reservoir on May 28 was to maximum for the year. Vallecito Reservoir was able to maintain near full storage conditions from May 12 until July 3. The demand for reservoir storage remained high for the rest of the irrigation year due to a lack of widespread monsoon rains. The call placed by the reservoir was

not removed this year until October 19. The reservoir reached a low storage of 42,808 AF on October 19. The reservoir passed through all inflow from July 3 on as well as releasing 81,535 AF of storage water.

## **LA PLATA RIVER**

### **Water District 33**

The snowpack as reported at the Columbus Basin snowtel site peaked at 27.2 inches of water on April 18. This was 98% of the average of 27.7 inches. With this good snowpack all that was needed was an extended runoff period that would allow Colorado to apply the maximum amount of water to beneficial use while still meeting its compact obligation to New Mexico. That did not occur. The dust on snow effects resulted in a rapid melt off of the snowpack. In the month from the peak on April 18 to May 18 the snow pack lost 24.9 inches of SWE. Colorado users who failed to turn on their irrigation ditches earlier than normal missed out on any chance to irrigate as the La Plata River basin does not have storage facilities of any major size. The average date that all of the snow is gone from the snowtel site is July 2 and this year it was all gone by May 26, two weeks earlier than last year's June 12. As is always the case, administration of the La Plata River was again a challenge this year. The lack of significant storage in this drainage, and the existence of an interstate compact that requires changing daily deliveries, makes managing water deliveries even with an above normal snowpack difficult. New Mexico placed a call for up to 60 cfs or one-half of the upper index flow, whichever is less, for their compact deliveries on April 13, 2009 and increased the call to 100 cfs on May 15. The call was reduced to 85 cfs on May 18 and held at that level for the remainder of the year. The river dropped and Colorado ended up shutting off all Colorado diversions on July 18 in an attempt to deliver to New Mexico their compact entitlement. This resulted in over 90% losses down the river channel. Attempted deliveries ceased on July 30 after dry reaches in the river were noted. The total flow at the upper index gages was all of the way down to 11.4 cfs on the day the river dried out. Colorado bypassed over 380 AF in this time period and New Mexico received 189 AF, of which 60 AF came from Long Hollow.



## **MANCOS RIVER**

### **Water District 34**

The snow pack in the Mancos drainage was slightly below normal at the beginning of the irrigation season. Unfortunately, the snowmelt occurred in such a pattern that irrigators were not able to take advantage of the higher runoff that occurred so early in the season. Fortunately, most of the reservoirs on the Mancos River and its tributaries were able to fill. Jackson Gulch Reservoir, an offstream reservoir, first filled to its capacity of 9,977 AF on May 12 and was kept at that level until June 13. A call was made on June 8 and remained active on the Mancos River until September 15. Stricter accounting and administration of the E B Dude Ranch Augmentation Plan decreed in Case No. 00CW10 was again required this year. Problems were again reported with the augmentation delivery pipeline. The owner was ordered to complete delivery pipe repairs by May 1, 2009 but did not complete them. The accounting for the augmentation plan continues to be a problem. Receiving the spreadsheet data in a timely manner is the major accounting issue the water commissioner is dealing with. The Division of Water Resources requested the accounting spreadsheet as per the conditions of the decree and received them from the consultant on May 6.

The Natural Resources Conservation Service (NRCS) Salinity Reduction Program continued to progress this year in the Mancos drainage with one additional on-farm irrigation ditch being placed in pipe to reduce leaching of salts into the river and to provide pressure for sprinkler irrigation.

## **McELMO CREEK**

### **Water District 32**

A full water supply was enjoyed by the MVIC users with sufficient return flows to McElmo Creek to keep the Creek from going on call. A court application, 99CW69, filed by the DWCD which will provide exchange water in the McElmo Creek drainage supplied from Totten Reservoir was finalized last year and Water Resources is engaged in discussions on the implementation of the plan with the District.



The NRCS was actively involved in several small ditch lining projects as part of the salinity reduction program in the McElmo Creek drainage that may have the potential to alter the return flow patterns.

## **DISAPPOINTMENT CREEK, DOLORES RIVER**

### **Water Districts 69, 71**

Disappointment Creek provided near normal water supply and there was no call needed this year. Most of the small irrigation and stock reservoirs were able to fill and supply supplemental water as the natural stream flows dropped.

The Dolores River drainage did receive slightly below normal precipitation as did the other drainages to the west with the higher elevations faring better than the lower ones. With fair carryover storage and near normal snowpack, McPhee Reservoir was able to release raftable flows starting on March 27. The reservoir filled on June 15. A call for the in-stream flow water right of 78 cfs below McPhee Reservoir was made in 2007 for the first time in history by the Colorado Water Conservation Board (CWCB) but no call was placed for the 2008-2009 water year. A call would have resulted in many mining and exploration companies being required to obtain an augmentation agreement with the DWCD to continue their non-decreed pumping of water for exploration purposes. Storage releases and a by-pass of river flow were made for the downstream water rights below McPhee, and for the Paradox augmentation plan and salinity control project on the lower Dolores River in Division 4.

## **STAFF SUMMARIES** **IN THEIR OWN WORDS**

**DISTRICTS 29, 77 and 78 - SUMMARY – PETE KASPER – WATER COMMISSIONER**

Although the winter of 2008-2009 started with a good snowpack, the later part of the snow season turned dry and we were left with a slightly below average snowpack. The run-off came early, but so did the monsoon season, so there was adequate water in the streams and rivers until the rains dissipated at the end of June. The June rains had the effect of melting the last of the snow, so when the rains stopped, flows dropped quickly.

On May 1 a call was placed on Stollsteimer Creek (District 78) by the Vic Johnson Ditch, which lasted until late October. The DOW placed a call on Devil Creek on June 23. The call lasted until August 12th. Four Mile Creek in District 29 went on call on July 13th and lasted until the first week in October. There was also administration on the Blanco Rito with the Echo Ditch and downstream users.

Some of the ditches and pumps on the Lower San Juan River that did not divert in 2008 did divert in 2009. This occurred for a variety of reasons: drier conditions in late summer, lower fuel prices, and the fear of abandonment if diversions were not made in 2009. The flows in the Lower San Juan dropped so low in late summer that many ditches had difficulties diverting their decreed amounts.

Pagosa Area water and Sanitation District (PAWSD) and the San Juan Water Conservancy District continued with their efforts to provide additional water storage. There has been a second Colorado Supreme Court ruling. The Court upheld the request for a 50 year planning period and a one year supply as a safety margin, but ruled in favor of TU, saying that sufficient evidence was not presented to support direct flows for hypothetical environmental flows, direct flows for use anywhere in the Districts' service area, or the request for 25,300 acre feet for storage in Dry Gulch Reservoir. The case was sent back to the District Court, but TU has petitioned for a rehearing with the Supreme Court. PAWSD completed their enlargement of Steven's Reservoir, adding 1000 acre feet, bringing its capacity to 1775 Acre Feet. There was limited storage this year, to 410 Acre Feet, and then the Reservoir was drained to just over 100 Acre Feet to repair a valve on the outlet works.

Progress has been made in resolving some of the geothermal issues in the Town of Pagosa Springs. The Hot Springs Resort completed an expansion of their facility and in doing so also upgraded their geothermal plumbing. I am now able to record their



usage much more accurately. They have also completed an engineering report to justify their need for more geothermal water. The Town worked with DWR to update their geothermal well permits to be more in line with their water rights and their actual uses.

#### DISTRICT 30F – SUMMARY – TOM FIDDLER - WATER COMMISSIONER

Relatively average snow pack at Stump Lakes above Lemon Reservoir made for a relatively normal start for the water users on the Florida for the 2009 water year, despite a dry February and March. The 2009 water year started with Lemon Reservoir carrying over 18,249 AF, which is about 45% full. The stock run started on November 16th and ran water through November 22nd and released about 887 AF. Spring snow pack peaked in the Stump Lakes drainage area on April 18, 2009 with 19.0" of snow water equivalent and was 86% of normal. Low snow pack levels caused water to be stored early in the reservoir and the Florida Water Conservation District placed a call to fill the reservoir. The call to fill the reservoir was honored from May 11th to May 14th then Lemon Reservoir was full and the reservoir began to release water for flood control and USBR operational standards for reservoir management. On May 10, 2009 dam operations began releasing water from Lemon Reservoir for flood control and early irrigators. At this time the reservoir was holding 33,244 AF of water. Spring runoff filled Lemon Reservoir to a peak of 40,053 AF on May 18th 2009. The major irrigation ditches began diverting the releases from Lemon Reservoir on May 11th and the Florida River was placed on-call May 27th by the Florida Farmers Ditch. The call lasted until September 24th. A rainy June added 2.96" of rain to the basin took the Florida off-call for a total of 4 days during the call period. July and August were abnormally dry as the monsoons did not develop and rainfall only added 3.16" to the basin. The total period of time that the Florida was on-call was 121 days. Lemon reached a low after irrigation of 9,417 AF on September 25th and by October 31st Lemon Reservoir was at a level of 9,968 AF. Carry over storage for next year looks poor, as the reservoir was approximately 25% full.

Most of the summer saw a low priority level of F-17 decreed to the Florida Farmers Ditch. F-15 was the lowest priority reached this summer and is decreed to the Harris Patterson Ditch.

Ten structure orders were issued for the installation of measuring devices mainly for augmented wells, in the Florida drainage area that required attention in 2009. One order required assistance from the A.G.'s office.

The Salt Creek drainage seemed to explode in water wars this year probably due to lack of moisture but more than likely it probably is something in the groundwater, the Florida drainage stayed relatively calm as usual. The diversion structure GPS program is going well and will continue until completed.

#### DISTRICT 30A – SUMMARY – JEFF TITUS - WATER COMMISSIONER

We started the winter with an average snow pack. The snow survey in January had to be done in conjunction with the NRCS due to lack of funds and the Mancos snow course was not measured at the end of January. Strong winds in the spring resulted in a large amount of dust on the snowpack and sublimation which resulted in a quick and below normal runoff season. Numerous rain storms in June helped the overall situation, but lack of monsoons resulted in below average flows in all streams in District 30. The Ridges Basin Pumping Plant began diverting water to Ridges Basin Reservoir in 2009. Pumping started on April 17th but due to low flows and an environmental bypass requirement pumping ceased on July 24th and didn't resume the remainder of the water year. Ridges Basin Reservoir ended the water year with 25,243 acre feet in storage. A call was placed by the Waterfall Ditch Pipeline on Waterfall Creek for the first time in history. Calls were also placed on Elbert Creek and Lightner Creek. Johnson Reservoir and the Lake Durango Water Company were sold to the Lake Durango Water Authority and several infrastructure improvements were completed on the Pine Ridge Ditch. A storm in late October resulted in significant snow in the mountains but due to warm weather we are going to start water 2010 with no significant snow and little ground moisture.



DISTRICT 31 & 46 – SUMMARY– DAVID HOFMANN - WATER  
COMMISSIONER

The irrigation year of 2008-2009 started with a modest winter snow-pack. This was enhanced with some good rains in late May and late June. Administration started in mid June for 4 days and then rains eliminated shortages until July 3rd. Vallecito Reservoir topped off twice, once on June 12th and again on July 2nd. The Pine River Irrigation District (PRID) water users had approximately a 99% supply of storage water. There was very little rain during the summer, and by the end of the irrigation season the capacity of Vallecito was around 46,000 acre feet. The inflows into Vallecito Reservoir dropped to around 80 cfs in September which was close to the 2002 and 2003 inflow numbers. Administration lasted 113 days through October 19th. The natural river did not generate an average supply of water this year; however the reservoir provided an adequate water supply. Four ditches had to be shut off late in the irrigation season because they exhausted their storage water. The trans-mountain diversions diverted 1,175 acre-feet of water into the Rio Grande Basin. The Pine River Weminuche ditch shut off for repairs for fourteen days in early June and did not carry as much water as possible. As for Water District 46, Siembritas Arroyo, the return flows from the Pine River Canal made for a decent water supply year.

Vallecito Reservoir's junior fill and in-stream-flow filing were again an issue on the Pine. Several meetings took place over the year trying to resolve several of the larger issues concerning these applications. Currently the cases are still in the analysis stage and little overall progress has been made. Winter time stock flows cases progressed to a clarification by the water judge that the CA1248 case did include stock use. This decision was appealed to the Colorado Supreme Court by the Southern Ute Indian Tribe on procedural matters. Finally Coal Bed Methane production and the beneficial use of water from the production wells became an issue on the Pine and will continue to be so for the foreseeable future.

## DISTRICT 32 – SUMMARY – MARTY ROBBINS - WATER COMMISSIONER

Cortez Field Office - Due to the retirement of Bob Becker, the Mancos District 34 on 08/01/08 the Cortez Office was supervised directly by the DE until 08/07/09. The EPST III position was moved from the Mancos District 34 to the Durango Office in the restructuring of Division 7.

The restructuring left the McElmo District 32, Marty Robbins as the Lead Water Commissioner as of 08/07/09. This position includes the oversight of Water Districts 34 a part time EPST II and one full time EPST II, Denise Miller in Water Districts 69 & 71, as well as the Cortez Office operations.

Water District 34, the Mancos River was being covered by Wally Patcheck and Marty Robbins until Wally's promotion to permanently fill the position on 11/23/09. Wally will be a good asset to the Mancos position and our team.

Denise Miller in Water District 69 & 71 has announced her intent to retire. Denise's knowledge, dedication and personality will be greatly missed. This will create another hole in our team that will take time to mend as any departure from an established position does.

District 32 Summary - The McElmo Drainage had a reasonably good irrigation season resulting in no stream calls. Due to the lack of moisture from our monsoon season it appears that individuals irrigated for a longer period of time at higher flows. This was most noticeable in the MVIC system which imports water from the Dolores River Basin.

Our main water importers from the Dolores River Basin went to litigation over contractual issues causing some turmoil within the system. This litigation may change the accounting spreadsheets of imported waters as early as next irrigation season as well as clarify contractual issues that have been in contention for several years.

Water District 32, Water Commissioner had field inspections of 13 water court case actions and 11 draft consultations of the Division Engineer.



Due to the change in administration on August 7th to the lead water commission position, it includes the oversight of Water Districts 34, 69, 71, one full time EPST II and one part time EPST II, as well as the Cortez Office operations.

DISTRICT 33 – SUMMARY – MATTHEW SCHMITT – WATER COMMISSIONER

Water year 2009 on the La Plata River started as a normal year. The fall was not dry and early snow perked our hopes. Mid-winter snows were not encouraging and the spring snows did not make up the short fall of moisture.

The spring weather was about normal with some good later rains. The spring runoff was very good for the ditches as the water was utilized very efficiently.

New Mexico placed a call on April 13th and the river was “off call” only 9 days in the first half of May. The call continued to Dec. 1st. The river went dry above Cherry Creek confluence on Aug. 11th and a Futile Call went into effect for the remainder of the year.

We had very little rain in the summer months and the monsoon weather didn't show up at all.

Hay crops were generally below average with a few exceptions. Pasture was marginal to poor due to no summer or fall rain.

The year 2009 turned out better than expected considering the very dry year.

DISTRICT 34 – SUMMARY – WALLY PATCHECK – WATER COMMISSIONER

With snow pack below average in the spring, it turned into a relatively good water year. We had good rains in June which were unusual. July and August were below normal – September was better but still not exciting.

The most senior water right to be curtailed was priority No 1893-6 in the Weber,- Root-Ratliff- Smith-Sheek-Beaver-Viets and Henry Bolen ditches. Due to September rains we were able to shut Jackson Lake releases on September 18, 2009. The Mancos River was taken off call on September 21, 2009.

Jackson Gulch Reservoir diverted a maximum of 139 CFS on April 25, 2009. Jackson Lake filled to capacity of 10107AF on May 20, 2009. Total releases were approximately 6911AF leaving a content of 3932AF on November 1. All other reservoirs in the Mancos area were full by May 1, 2009.

There were not any major water issues on the Mancos River this year. Echo Basin Dude Ranch water issues have not been settled as well as some of the pipeline problems but administration was relatively good. The Mancos Conservation District is in the process of putting diversion dams on many of the ditches on the Mancos River. Only preliminary work has done so far.

With the help of Marty Robbins, administration of the Mancos River was good this year. Pasture and hay crops were excellent.

#### DISTRICT 69 & 71 – SUMMARY – DENISE MILLER – WATER COMMISSIONER

District 69 Summary - Disappointment Creek and drainages were quiet this water year. Spring runoff was short and rain was sparse. Belmear reservoir, storage restricted in 2008, was drained for the upstream slope repairs that commenced in October and will continue next summer.

District 71 Summary - In March, the 100% of average snow pack for the Dolores River yielded 357,747 acre feet of inflow to McPhee Reservoir. McPhee's managed spill was 51,160 acre feet to the delight of rafters and boaters. There was a full supply for all project users and McPhee ended the season with 107,343 acre feet of active capacity.

The Dolores River below McPhee has its own array of projects and dilemmas. The Dolores Water Conservancy District (DWCD) continues ongoing discussions with



the Colorado Water Conservation Board (CWCB) and the Attorney General office to protect storage releases of more than 78 cfs.

The Bureau of Land Management (BLM) completed a Wild and Scenic River Eligibility study which includes segments of the Lower Dolores River. The Dolores River Dialog (DRD) a group of stakeholders from farmers to federal agencies was formed in 2004 with the primary goal to implement ideas to balance the sensitive water concerns and issues of the Lower Dolores River. In the spring of 2009 the DRD was approached by the San Juan Public Lands Center to assist in the update the 1990 Lower Dolores River Management Plan. The DRD formed a working group to prepare the recommendations to this revision called the "Lower Dolores Management Plan working Group.

Another group called the "Greater Dolores Action group" removed car bodies, cable, concrete and rebar as part of phase one of the Dolores River cleanup project. They hired equipment to remove the junk that has been posing a hazard for boater for years.

The NRCS snotel sites measured 91% of snow average to begin the 2010 water year and the snow continues to fall through December increasing the snowpack.

#### DISTRICT 77 & 29, SAN JUAN CHAMA PROJECT - SUMMARY – SHERRY SCHUTZ WATER COMMISSIONER

District 77 Summary - This water year of 2009 started out with pretty good snow and runoff, and then an unusual wet May and June gave us lots of hope, as it is usually dry in May and June. The feeling at that time was that we would have a really good summer since July and August usually also have good rains. However, then July and August came with no moisture and things dried out rather fast and became a very dry fall. The monsoons never did come our way!

A call was placed on Oil Well Creek in August and ran thru October.

In August the San Juan Chama Project had a huge malfunction with the automatic gates. The gates opened downstream and closed tunnel gates which

released huge amounts of silt and gravel downstream. Bureau of Reclamation is still evaluating the damage and injury to the stream, fish and headgates.

District 29 Summary - The Upper Blanco River had more water throughout summer than most areas. There were rains in late July and August that helped water users and they had water longer than usual.

DISTRICT 78 & 29 – SUMMARY – BOB FORMWALT - WATER  
COMMISSIONER

Districts 29 and 78 experienced good water conditions with an unusually wet May and June which reduced the demand on rivers and creeks until late July and by that time haying had started so no calls were ever placed in my administrative areas of either District.

The Upper Piedra of District 78 had enough rain during the summer that some ditches never turned on to irrigate but rather ran just enough water to sustain livestock grazing. Hay yields were good and the crop was cut early.

Even though there were lots of rain and some heavy showers, very little damage was experienced. The mud slide on highway 160 did cause concerns for the Park Ditch Company and CDOT but they made it through the spring wet times without interruptions. The Park Ditch applied for and was awarded enough monies through NRCS and Southwest Round Table to place 1,100 feet of 5 foot diameter plastic pipe across the most dangerous portions of the mountain called Mistake Hill. This brings the total footage around that dangerous mountain to over 3800 feet. This project is now complete and signed off on by the NRCS and Forest Service.

East Fork of the San Juan did not experience any movement in the large slide area that the Division, and others, monitor on a regular basis. The Forest Service rebuilt the road and opened it to the public in August.

Two large Court cases were advanced in the courts in my district this year. The East Fork of the San Juan case, 85CW120 and others was field reviewed for Due

Diligence and recommended for continuance by this writer. The proponents are seeking a conservation easement in order to preserve the upper valley in its present state. The proponent still desires to extend the river restoration through the remaining braided portions of the valley floor. If the conservation easement is obtained, most of the claims in the case will be withdrawn.

The second case is the Bootjack Ranch, 04CW0097 and others, which was finally concluded by the courts this fall. Much time has been spent on this case by this writer and new administrative responsibilities have been created by its approval.

With our economy being in recession, few new water rights and well applications were requested in my districts; however, I did experience more Intent to Impound inquiries than in the past. This may be the results of the Division communicating the need for the applications and contractors working with the Division more closely.

Opening Hydro Base and Well View to public access has really reduced the number of calls and visits we experience in the office. The realty industry has had a lot of positive comments in regards to these sites being available to them. We still need to spend time with realtors educating them in the uses of the Division's web site.

All in all, 2009 has been a good water year and I am looking forward to 2010-2011 water year.

### **Division 7 Hydrographic Program**

Lead Hydrographer, Brian Boughton, PE II, provided overall program leadership of the Division 7 Hydrographic Program during 2009. He was supported by Water Commissioner Sherry Schutz (EPST II), Water commissioner Pete Kasper (EPST II) and part-time hydrographer (EIT II) Jason Morrow. Brian Leavesley (EIT I, half time hydro/half time augmentation plan coordinator) joined the Division 7 staff in November, 2009 to replace the vacancy left when Cheston Hart moved to Division 2.

Each Division 7 hydrographers and water commissioner were assigned work with specific stream gage stations and geographic areas. Each Division 7 hydrographers and water commissioners provided support for the other, outside of the assigned geographic area when needed. Sherry Schutz (Water Commissioner District 77)



provided measurements for the LITOSOCO stream gage as well as gage support for the other gages within District 77. Pete Kasper (Water Commissioner District 29) provided measurements for the RIOMOUCO stream gage as well as gage support for the other gages within District 29. Brian Boughton was assigned to 29, 31, 33, 77 and the lower end of District 30. Jason Morrow was assigned to the upper end of district 30, District 32, 34 and 71. Hydrographer routine work includes responsibility for regular streamflow measurements, gaging station operation and maintenance, satellite monitoring equipment operation and maintenance, support water commissioners with flow measurements on ditches and the complete development and computation of streamflow records. Water commissioner routine work includes responsibility for regular streamflow measurements and gage station operation and maintenance.

### **Streamflow Records and Measurements**

Division 7 hydrographic staff will complete 23 streamflow records for WY2009 for publication in the DWR Annual Streamflow report. Two of these streamflow records are also published by the US Geological Survey in their Annual Water Resources for Colorado Data Report.

During 2009, Division 7 hydrographers made a total of 200 discharge measurements at stream gages, 21 miscellaneous measurements (transit loss studies) and 50 discharge measurements on canals and diversion structures. Water commissioners in Division 7 made 14 river measurements. An Acoustic Doppler Current Profiler (ADCP – StreamPro) was obtained in May 2009 and of the total discharge measurements made this water year, 32 were made with an ADCP.

### **Stream Gage Improvements**

During the water year, Division 7 hydrographers completed the following stream gage projects:

- Installation of new lock sets for the La Plata River and Mancos River gage houses

#### Stream Gage Refurbishment:

- La Plata River at Hesperus: Bonds Construction placed rip-rap below the concrete ramp flume to keep river flows from eroding the banks.

#### New steam gages:

- 3 new gages were added this water year Freed Ditch (FREDITCO), Revival Ditch (REVDITCO) and Vosburg Ditch, (VOSDITCO). Satellite telemetry was added to these gages to enable Division 7 staff monitor compact compliance on the La Plata River.

#### High Data Rate DCPs:

- Division 7 operates 56 active gage location which amounts to 44 active satellite gages, 38 of which are high data rate radios that transmit on an hourly basis.

#### Other activities conducted by Div. 7 hydrographic staff during WY2009 includes:

- A transit loss study was performed on Hay Gulch and the La Plata River below Red Mesa Ward Reservoir in District 33 this year.
- A transit loss study was performed on the Myers and Asher Ditch in District 31.
- Levels were run at 5 of the published stream gage sites.
- Utilized the GRSAT training (rating table development software) and updated and/or developed new rating for 6 gages.
- Made 32 ADCP measurements within the division.
- Installed SDR's and 8200's at several gages to help water commissioners maintain a continuous record (Turkey Creek Ditch, Lost Canyon Ditch and below Summit Reservoir).

- Provided oversight responsibilities (along with Tom Ley) for hydrographic streamflow record preparation (scheduling, checking, final reviews) in these Divisions during the water year.



LAPHESCO before the gage was stabilized.





LAPHESCO gage stabilization project Mar. 2009



LAPHESCO control stabilization completed



### SUBDIVISION REVIEW – SUMMARY – DOUG PICKERING

This irrigation year there were 34 Projects reviewed by this office including all minor exempt subdivisions, boundary adjustments, and adding of additional dwellings. Comments were also provided to our Denver office Team 237 for all subdivision proposals in Div 7.

### WELL INSPECTION – SUMMARY – DOUG PICKERING

The well inspection program was instituted for the protection of groundwater resources and public health through enforcement of the Rules and Regulations for Well Construction and Pump Installation. Specific duties include inspection of well construction and pump installation; complaint investigation; education and outreach; monitoring/observation hole/well construction; well and hole plugging and abandonment; and support to the State Engineer and Board of Examiners.

During the 2008 – 2009 water year, the inspection program in southwest Colorado performed 228 well construction and pump installation inspections; 39 spot checks of contractors and well permits; 5 investigations of licensed contractors or problem investigations for contractors; 25 investigations of owner installations or problem investigations for well owners; 9 miscellaneous contacts with owners and contractors; and 5 investigations of unlicensed contractors. The well inspector has also provided education through meetings with contractors, plumbers and plumbing regulators, and electrical inspectors. The well inspector also answers questions from Division employees and property owners regarding well construction and assists at the Division office.

One of the key roles of the inspection program is to locate unlicensed contractors working in the state and ensure that they are stopped. No unlicensed well construction contractors were discovered during water year 2008 - 2009. However, we continue to encounter plumbing contractors and water treatment system contractors working on well pumping equipment. These unlicensed pump installation contractors were informed of the rules and ordered to discontinue such work.

## **DAM SAFETY ACTIVITY – MATT GAVIN – DAM SAFETY ENGINEER**

You'll laugh, you'll cry, and you will discover something about your inner-self as you embark on a magical journey entitled

### **"2009 DIVISION 7 DAM SAFETY ACTIVITY SUMMARY"**

The 2009 inspection season reflected a typical workload in Division 7. With the retirement of Mike Graber, the Pueblo Dam Safety Engineer position remained vacant during the spring and summer of 2009. The vacancy dictated that the Division 7 Dam Safety Engineer make some additional trips to the San Luis Valley to respond to dam safety issues. Dam Safety activities and highlights from the 2009 inspection season are detailed below.

### **2009 Dam Safety Inspections**

Inspection frequencies are determined by Hazard Classification and the Risk Based Profiling System (RBPS), a tool that assesses the risk of failure of a particular structure based on the characteristics of the dam. The RBPS scores are applied only to High and Significant Hazard Dams. Low Hazard Dams are inspected every six years. Table 1 below summarizes the 2009 dam safety inspections according to Hazard Classification. Table 1 reflects only those dams that are routinely inspected by the Division 7 Dam Safety Engineer. There are four additional High Hazard structures in Division 7, which are routinely inspected by the Bureau of Reclamation.

**Table 1: Number of Inspections by Hazard Classification for 2009 Season**

<b>Hazard Classification</b>	<b>Number of Dams in Water Division 7</b>	<b>Number of Inspections Conducted in 2009</b>
High	18	18
Significant	21	13
Low	55	13



## **High Hazard Dams**

All eighteen of the High Hazard Dams were inspected during the 2009 season. Table 2 below lists all the High Hazard Dams in Division 7 and the storage levels recommended by the 2009 Engineer's Inspection Report for each facility. The most significant discovery occurred at Totten Dam where exploratory excavations revealed significant cracking in the embankment. This incident is discussed in the summary of construction activities below. The discovery at Totten accounts for the lone storage restriction imposed on a Division 7 High Hazard Dam in 2009. The restriction limits storage to a maximum of five feet below the spillway crest. The other High Hazard Dams are generally performing as expected.

**Table 2: Safe Storage Levels for High Hazard Dams**

<b>Dam Name</b>	<b>Recommended Safe Storage Level</b>
DURANGO TERMINAL	Conditional Full Storage
GROUNDHOG	Conditional Full Storage
HATCHER	Full Storage
HAVILAND LAKE	Full Storage
JOHNSON	Conditional Full Storage
MOUNTAIN VIEW	Full Storage
NARRAGUINNEP - DAM 2	Conditional Full Storage
NARRAGUINNEP - DAM 3	Conditional Full Storage
NARRAGUINNEP - MAIN DAM	Conditional Full Storage
RED MESA WARD	Conditional Full Storage
STEVENS	Awaiting final construction acceptance
SUMMIT - MAIN DAM	Restricted - <3 Weeks above Gage Height 23.6
SUMMIT - SOUTH DAM	Restricted - <3 Weeks above Gage Height 23.6
TERMINAL	Full Storage
TOTTEN	Restricted - 5 Feet Below Spill
TURNER	Full Storage
WILLIAMS CREEK	Full Storage
WOMMER #1	Full Storage

### **Significant Hazard Dams**

Thirteen of the twenty-one Significant Hazard Dams located in Division 7 were inspected in 2009. Notable discoveries included a problematic leak in the terminal structures at Bauer #2 and the confirmation of a badly deteriorated outlet conduit at Town Center Dam. Outlet rehabilitation projects are planned for both of these structures in 2010.

### **Low Hazard Dams**

Thirteen of the fifty-five Low Hazard Dams in Division 7 were inspected in 2009. The inspections conducted in 2009 revealed mostly maintenance issues associated with these structures with two notable exceptions. During the inspection of Warner #4, it was noted that Warner #8, which is situated immediately upstream, was in the process of failure. Survey shots indicated that the structure is of jurisdictional height; consequently the previously non-roster structure was added to the database. It was also determined that hazard classification is No Public Hazard. The second noteworthy discovery was related to the condition of Johnson #2. The inspection revealed an obstructed spillway condition and generally poor maintenance. Similar to the Warner situation, there is a jurisdictional size, No Public Hazard Dam immediately upstream, which is in the process of failure. These conditions led to a storage restriction, which calls for the outlet to be left in the open position (11 feet below the dam crest).

## **Construction Activities and Planning**

### **Barrett #2 Spillway Channel Rehabilitation**

Barrett #2 dam has had a history of problematic head-cutting in the spillway channel. The Owners of the dam have retained Harris Engineering of Durango, Colorado to design improvements that will arrest the erosion. It is anticipated that plans will be submitted in the spring of 2010 and the improvements will be constructed some time after spring run-off.

### **Belmeare Lake Dam Upstream Slope Rehabilitation**

Damage to the upstream slope of Belmeare Lake Dam resulted in a storage restriction imposed in 2008. The Owners of the dam have retained Mr. Ken Beegles, P.E. of Headwaters Engineering in Durango, CO to design repairs to the slope. Mr. Beegles submitted a general plan for repairs in the spring of 2009. Based on the scope of proposed repairs, it was determined that the project could be considered an ordinary repair not requiring a formal approval of plans and specifications. It is anticipated that repairs will be constructed after spring run-off in 2010.

### **Bauer #2 Outlet Rehabilitation**

The owners of the Bauer #2 Dam have retained Harris Engineering of Durango to assist with the outlet rehabilitation project. The project involves slip-lining the 30-inch CMP outlet conduit with the intent of pressurizing the outlet conduit under full reservoir head. Presently, no plans or specifications have been submitted to the State Engineer's Office for review. It is anticipated that plans will be submitted in the spring of 2010.

### **Totten Reservoir Dam Exploratory Excavations**

In 2007 a transverse crack was noted in the earthen embankment at Totten Reservoir Dam. In 2009, additional cracking was noted that indicated the problem was not isolated to one location on the embankment. Exploratory excavations were conducted to determine the extent of the cracking. The excavations revealed that in one location the cracking extended into the core material well below the freeboard zone. The excavation was abandoned prior to locating the full extent of the cracking. Based on the observations, a storage restriction was imposed that limits storage to a maximum of 5 feet below the spillway crest. The Owners are planning to engage geotechnical specialists in 2010 to determine the underlying cause of the problem.

### **Town Center Dam Outlet Rehabilitation**

The Owners of Town Center Dam have retained the URS Corp. to design repairs to the deteriorated outlet conduit. The engineers are considering both slip-liner and



cured in place plastic pipe solutions at this time. It is anticipated that plans will be submitted in the spring of 2009 with improvements constructed in the late summer or fall of 2009.

## **Reports and Studies**

### **Red Mesa Ward Dam**

The Owners of Red Mesa Ward Reservoir Dam have retained the URS Corp. to prepare a hydrology study and Incremental Damage Analysis. The Inflow Design Flood will be based on rainfall generated using the Extreme Precipitation Analysis Tool (EPAT), which will likely result in substantial reductions as compared to previous studies, which were based on the probable maximum precipitation derived from Hydrometeorologic Report No. 49. It is anticipated that the study will be submitted to the State Engineer's Office in the spring of 2009.

### **Long Hollow Dam**

The Colorado Water Resources and Power Development Authority and the La Plata Water Resources Conservancy District selected GEI Consultants to provide engineering services for the planning and design of Long Hollow Dam. The initial work to be performed by GEI Consultants will be to further assess project feasibility. It is anticipated that this work will be completed in the spring of 2010.

### **Dam Safety Committees and Training**

In 2009, Branch members formed two committees with the goal of establishing guidelines for performing Hazard Classification and Dam Breach Analysis. As of the end of 2009, both documents are still undergoing revisions with adoption of the guidelines anticipated in the spring of 2010. The Division 7 Dam Safety Engineer served on the Dam Breach Analysis Guidelines committee. Finally, in the May of 2009, the Division 7 Dam Safety Engineer attended the ASDSO conference in Coeur d Alene Idaho to present a paper detailing hazard potential analysis related to the formation of a

landslide dam on the East Fork of the San Juan in southwest Colorado. The paper was published in the conference proceedings and the presentation was well received by those in attendance.

## EVENTS OF 2008-2009 WATER YEAR

### COALBED METHANE WELL ADMINISTRATION

There was a significant order issued by Judge Lyman last year regarding water as the by-product of Coal Bed Methane (CBM) production. The Vance's and Fitzgerald's (plaintiffs) asked the Court, in Case No. 05CW63, to "ascertain the statutory obligation of the State Engineer to require well permits and augmentation plans when ground water, which is hydraulically connected or tributary to the surface streams in which Plaintiffs hold water rights, is diverted in the course of coalbed methane ("CBM") production." The State Engineer (Defendant) and BP America Production Company (Defendant-Intervener) asserted that "water extracted in the process of oil and gas drilling is "produced water" over which the State Engineer has no jurisdiction". The judge found that the Motion for Summary Judgment filed by the plaintiffs should be granted and that the Motions for Summary Judgment filed by the Defendants are denied. The State requested a stay in the implementation of the Judge's decision pending appeal and that stay was granted. The State Engineers Office then appealed the decision to the Colorado Supreme Court. Oral arguments were held before the Court on September 10, 2008 and a decision was released on April 20, 2009 that affirmed the decision of the court. The Supreme Court stated "The 1969 Act defines "beneficial use" as "the use of that amount of water that is reasonable and appropriate under reasonably efficient practices to accomplish without waste the purpose for which the appropriation is lawfully made." § 37-92-103(4), C.R.S. (2008). Under the language of the 1969 Act, the CBM process "uses" water -- by extracting it from the ground and storing it in tanks -- to "accomplish" a particular "purpose" -- the release of methane gas. The extraction of water to facilitate CBM production is therefore a "beneficial use" as defined in the 1969 Act. We reject the Engineers' and BP's argument that water used in CBM production is merely a nuisance rather than a "beneficial use." On the contrary, the use of water in CBM production is an integral part of the CBM process itself. The presence and subsequent controlled extraction of the water makes the capture of methane gas possible. As our precedent in the gravel cases makes clear, the fact that the water used during the CBM process may become a nuisance after it has been



extracted from the ground and stored in above-ground tanks (that is, after it has been beneficially used) does not prevent a finding that the water is put to a beneficial use. See Three Bells Ranch Assocs. v. Cache La Poudre Water Users Ass'n, 758 P.2d 164 (Colo. 1988), and Zigan Sand & Gravel, Inc. v. Cache La Poudre Water Users Ass'n, 758 P.2d 175 (Colo. 1988) . Accordingly, we affirm the order of the District Court for Water Division 7 and remand for further proceedings consistent with this opinion". This decision is having major impacts across the state. In response to the affirmation that the water produced in the operation of coalbed methane wells is a beneficial use and as such, needs be brought into the water rights administration system the Colorado General Assembly enacted House Bill 1303 to address issues raised in the Vance decision. House Bill 1303 postponed the requirement for well permits and water rights administration of oil and gas wells until March 31, 2010, authorized the State Engineer to conduct rulemaking to establish criteria for determining the tributary or nontributary status of the water produced by the wells and allowed those CBM wells determined to be tributary until April 1, 2010 to be permitted as water wells. The wells will be allowed to operate pursuant to an approved substitute water supply plans until 2013, by which time a court approved augmentation plan must be in place.

#### ANIMAS-LA PLATA PROJECT

It was a busy year for construction for the Animas-La Plata Project (ALP).

A significant amount of construction progress was made on the Animas-La Plata Project in 2009-2010. The total project, including the Navajo Nation Municipal Pipeline, was approximately 72% complete by January 1, 2010. Ridges Basin Dam, which will store water in Lake Nighthorse, was 'topped out' in November 2007. The completed height of the dam is 275 feet. The total cost of the project is now estimated to be over \$500 million. The pumping plant was completed and started diverting on April 17, 2009.

At the end of the irrigation year the reservoir held 25,243 AF.

#### SAN JUAN NATIONAL FOREST MANAGEMENT PLAN REVISION

The combined offices of the Forest Service and Bureau of Land Management released the Draft Land Management Plan (DLMP) and Draft Environmental Impact

Statement (DEIS) for public review on December 14, 2007 after several years of work. The San Juan Public Lands Center hosted a series of meetings around the region in February and March to assist the public with understanding the documents and submitting comments. The San Juan Public Lands Center received more than 18,000 public comments during the comment period, which closed on April 11, 2008. During the comment period significant, new information surfaced regarding the potential for oil and gas development. After reviewing the information, the San Juan Public Lands Center determined that it was necessary to publish a Supplement to the DEIS. The Supplement will include and analyze the consequences of the new development projections for oil and gas leasing and include a more rigorous air-quality modeling study, as requested by the Environmental Protection Agency. The supplement to the DEIS is scheduled to be released in May 2010. A 90 day public comment period will follow. The Forest Service will then review the comments received and hope to publish the Final EIS and the Proposed Land Management Plan in Summer 2011.

The Government to Government water round table meetings ramped down in 2008 to just one meeting and none were held in 2009. Due to efforts of the San Juan Citizen's Alliance and the Southwestern Water Conservation District (SWCD), a spin off committee has been formed to look at alternative protection measures to Wild and Scenic designation for a number of rivers in the southwestern part of the state. This "River Protection Workgroup" includes representatives on the steering committee from: the SWCD, San Juan Citizen's Alliance and environmental representatives, CWCB, CDWR, San Juan National Forest, Southern Ute Indian Tribe, representatives from Senator Salazar's office and representatives from Representative Salazar's office. The group elected to start the process with Hermosa Creek. Monthly public meetings and Board meetings have been held since April 2008. This office participated in the Hermosa Creek process. After 22 months a final report was issued in February 2010. The final report contains the recommendations of the workgroup for the protections needed for Hermosa Creek. The following is a summary of the report:

#### **"Executive Summary**

As part of a regional initiative called the River Protection Workgroup, the Hermosa Creek Workgroup formed in April of 2008. This collaborative, community process -



which operates on consensus - involves many citizens and organizations in discussions about the human and natural values in the Hermosa Creek watershed. This report outlines the Hermosa Creek Workgroup's processes, milestones and recommended actions. The Hermosa Creek Workgroup is one public workgroup convened as part of a broader multi-year process to achieve consensus about management of river basins across the San Juan National Forest by involving the public in protecting the natural values of selected streams while allowing water development to continue. The primary issue that brought this group together was the San Juan National Forest Draft Land Management Plan's preliminary decision that a number of river segments are suitable for designation under the Wild and Scenic Rivers Act. After 22 months of work, the Hermosa Creek Workgroup arrived at a set of recommendations. Central to their work is recommending that special federal legislation be developed, introduced, and hopefully passed. The principal elements of the proposed special legislation are as follows:

- A Special Management Area (SMA, or similar designation) of roughly 150,000 acres, the boundary for which would follow the exact boundary of the Hermosa Creek Watershed.
- A Hermosa Creek Wilderness of roughly 50,000 acres within the SMA, encompassing qualifying lands on the west side of Hermosa Creek. The eastern boundary of this wilderness would be set back from Hermosa Creek ¼ mile to avoid the effective prevention of most water development on the Creek with a boundary at or near the water's edge.
- The inventoried roadless area within the SMA, but outside of the wilderness area, would be managed to remain un-roaded, although some motorized use would be allowed. The intention of the Hermosa Creek Workgroup is that this area does not have new roads constructed in it that would allow travel by passenger-sized cars.
- The San Juan National Forest would be directed to prepare a management plan for the SMA, including a comprehensive travel management plan for motorized and mechanized use would be permitted only on roads and trails that are designated in the area's management plan.
- The entire SMA would be withdrawn from the mineral entry and leasing, with two exceptions. This would allow for limited infill claim filing and development, subject to



standards and restrictions of federal and state laws and regulations, as well as the SMA's management plan. The two exceptions are:

- An area totaling approximately 300-400 acres at the extreme northern boundary of the SMA where current mining activity is being conducted.
- An area of approximately 1,000 acres on the southwestern boundary of the SMA, surrounding a number of patented claims.
- The management of the portion of the SMA that lies outside both the wilderness and roadless area would be determined by the area's management plan, with fewer statutory restrictions than the other two areas. This zone would still be subject to the designated roads and trails provision described above, and to the mineral withdrawal (with the exceptions described above).
  - Logging may be allowed in previously logged areas, though with restrictions based on impacts to water quality, the State of Colorado's Outstanding Waters designation, and other SMA resources.
  - Potential water protections on Hermosa Creek, including a possible Wild and Scenic River designation, will be discussed at a later time once four additional basin Public Workgroups are concluded for the Animas River, San Juan River -- East and West Forks, Vallecito Creek /Pine River, and the Piedra River. A number of issues that were identified during the Hermosa Creek Workgroup process will be incorporated into these discussions.

Two additional recommendations were agreed to but do not require legislation:

- Standards for roads and/or trails need to be bolstered to reduce sedimentation caused by human activity. The appropriate entity to work on this is the United States Forest Service.
- There should be an active community-based Advisory Council established, modeled upon best practices, that involves the many stakeholders in continued action and stewardship for the watershed.

The next steps include asking U.S. Representative John Salazar to initiate the special

legislation; continuing to involve the Hermosa Creek Workgroup as this legislation proceeds; and educating the communities involved through outreach. “

The group has selected the East and West Fork of the San Juan River to work on in spring 2010 and will move on the Pine and Vallecito rivers in summer 2010.

#### LONG HOLLOW RESERVOIR (LA PLATA RIVER)

The capacity of the proposed reservoir is 5,400 AF, with the first 300 AF being dedicated to a Compact pool to assist with deliveries during periods of “split river” administration. The remaining pool in the reservoir will be used for irrigation purposes in Colorado ditches by exchange.

A Corps of Engineers 404 Permit was signed on January 15, 2009. A grant from the Colorado Water Resources and Power Development Authority to the La Plata Water Conservancy District for feasibility and construction work has been secured. The planning and environmental reports were updated in April 2009.

#### DIVISION OFFICE ISSUES AND ACTIVITIES

Water Division 7 saw quite a change in staff in water year 2008-2009. Bob Becker, Lead Water Commissioner for the Cortez area, which includes Districts 32, 34, 69 and 71, retired on July 31, 2008 with over 20 years of service to the state. Bob's leaving left a big hole to fill in the Cortez area. Additional time was obtained and a part-time water commissioner in Districts 30 and 33, Wally Patcheck, filled in to help cover the duties that Bob had in District 34, the Mancos River. Marty Robbins stepped up and ran the Cortez office and trained Wally in the operation of the Mancos River. The water commissioner position on the Mancos River was permanently filled in November 2009 by Wally Patcheck. This leaves Wally's position on the Animas/La Plata to be filled.

For Fiscal Year 08-09, the Division 7 budget was once again managed closely based on projected monthly expenditures throughout the fiscal year. The total spending authority including both primary and secondary funds was over spent by \$1,164. The costs in both personal vehicle mileage reimbursement and State Fleet mileage charges continued to be a concern this year. Being able to retain and operate Fleet



vehicles which were replaced and scheduled for return was a big help in offsetting the increased mileage costs for personal vehicles.

During the 2009 Calendar Year, 97 new applications were filed with the water court. This is a decrease of 3 applications from 2008. There were 141 consultations with the court, an increase of 68 from the previous year, 68 decrees were entered by the Court, a decrease of 164 from last year. A total of 89 water rights were addressed by the court, an increase of 61 from 2008. 393 Statements of Opposition were filed with the court for the new 2009 cases. The Division Engineer continued to work closely with the water court and with water rights applicants, in trying to settle cases without going to hearing.

The number of well permits issued showed a surprising increase of 84 permits over the previous year. A total of 244 were issued in calendar year 2008 and 328 were issued in 2009. Of the 328 issued, 166 permits were issued by the Division 7 staff and 162 were issued from the Denver office.

The well inspection program has been successful in insuring compliance with the Rules and Regulations for Well Construction and Pump Installation Rules. The well inspector for the division, Doug Pickering, has done an excellent job of building a level of trust with the well contractors and pump installers that work in this area of the state. About 228 well construction and pump installation inspections were performed during 2009, including 39 spot checks of contractors and well permits and 30 inspections or investigations to address well owners concerns or allegations. The division staff continues to work closely with representatives from county planning, particularly La Plata County, to assist in addressing water supply questions and issues for land use decisions.

Recognition of the employees of Division 7 and the San Juan/Dolores River Basin water user community is a gratifying but a difficult task. Both groups are very progressive in their thinking, and it is a struggle to identify one or two individuals that are to be recognized as the best of the best for a particular year. After a considerable amount of deliberation the honors were awarded to Pete Kasper (San Juan River and tributaries) as Water Commissioner of the Year and Leonard Chestnut (Red Mesa Ward Reservoir ditch rider) as the Water Manager of the Year.



## UPCOMING WATER YEAR

### PRIMARY ISSUES OF INTEREST IN THE BASIN

As of April 1, 2010, the snow pack for the basin was 101% of normal, down from the March 1 reading of 106% of normal. This is 16% higher than the snowpack last year at the same time. The snow course values obtained for the La Plata and Mancos snow courses maintained by our office were at 112% of normal the first part of April. Vallecito, McPhee and Navajo Reservoirs are planning on storing water as soon as the runoff starts to replace water utilized last year during the dry summer. Unless we have an unusually wet spring, below normal runoff is likely and several river basins without reservoir storage can look forward to an early call and strict water administration. Hopefully SW Colorado will have a monsoon weather pattern this summer similar to what was experienced in 2006 to supplement the meager snowpack.

Other issues that will continue to be priority topics for involvement by Division 7 staff in 2010 are as follows:

1. Recreational In Channel Diversion (RICD)  
The decree for a RICD water right on the Animas River filed by City of Durango has now been granted, now implementation of the provisions of the decree will have to be dealt with. The other big question is the administration of the Animas River above the RICD. It is going to be a difficult transition to move from a basin that has never had a call to one that will have to be administered.
2. Revision of Forest Management Plan  
The San Juan Forest and BLM Management Plan was originally available for public comment until mid-April 2008. New information derived during that comment period concerning oil and gas development led the Forest Service to delay publication of the Plan while a supplement was

developed to address the oil and gas development concerns. A final land management plan is not anticipated until summer 2012. Although the government to government water roundtable group has raised a number of concerns and issues, it is still not clear at this point how many of the concerns will be addressed in the final plan.

3. Interbasin Compact Committee Roundtable Discussions (HB 1177, SB 179)

Basin roundtable discussions for the San Juan, Dolores and San Miguel basins will continue into 2010. Two projects from Southwestern Colorado were given preliminary approval for funding designated for water projects in SB 179. Dry Gulch Reservoir in the Pagosa Springs area was conditionally approved for the use of a grant from the funds designated for statewide projects, and the Goodman Point Water System in Montezuma County was conditionally approved for the use of "basin" funds. Both of these projects will require additional work by the Southwestern Basin Roundtable group, and other projects from this area are being proposed for consideration by the roundtable. John Porter (Dolores River) and Steve Harris (La Plata) are the IBCC representatives designated from the Southwestern Roundtable.

4. Animas-La Plata Project

Construction of the Animas-La Plata Project is nearing completion. Filling of the reservoir has begun and operating criteria is now moving to the forefront. Water Resources will be involved in developing clear and well defined guidelines for the administration of the projects water rights. The complexity of the project is underlined by the number of participating parties which include: States of New Mexico and Colorado; Ute Mountain Ute, Southern Ute Indian Tribes; US Bureau of Reclamation; municipalities of Durango, Colorado and Farmington, New Mexico; Navajo Nation; San Juan Water Commission of New Mexico; Animas-La Plata Conservancy District; and Southwestern Water Conservation District.

5. La Plata River Compact

Administration of the Interstate Compact with New Mexico will provide challenges as always, and will require daily monitoring and administration during the compact period (February 15<sup>th</sup> through November 30<sup>th</sup>). With near normal snowpack this winter water users will be expecting to utilize the maximum amount available to Colorado users under the compact. By the end of March, at this writing, several irrigators in Colorado had already begun diversions. New Mexico has yet to place a call for deliveries of water pursuant to the Interstate Compact.

6. Long Hollow Reservoir Pre-Construction Work

Through the request for proposal process, a design and construction firm has been selected and pre-construction work is progressing. The La Plata Water Conservancy is studying options for water administration and operation, maintenance and replacement payments by project beneficiaries.

7. Dolores Project Operations

Division staff will continue to take part in discussions and negotiations on operations of the Dolores Project. There are a number of pending court applications filed by the DWCD, and the Dolores River Dialogue Group continues to meet to discuss releases and downstream fisheries in the Dolores River below McPhee Reservoir. Contentious issues developed as a result of reservoir operations in late 2009 that led to a federal lawsuit between the Montezuma Valley Irrigation Company and the Dolores Water Conservancy District and the Bureau of Reclamation.

8. CWCB In-Stream-Flow Program

A filing was made by the Pine River Irrigation District for a storage allocation that could be used as a quasi-in-stream flow right on the Pine River below Vallecito Reservoir to just below the Town of Bayfield. Numerous statements of opposition were submitted in that case. Water Resources will continue to participate in negotiations regarding the filing. Other parties involved in the filing are the CWCB, Pine River Irrigation District, and the Southern Ute Indian Tribe. The Dolores Water



Conservancy District is expected to continue discussions for a greater level of protection for flows below McPhee Reservoir on the Dolores River.

In addition to the water issues listed above relevant to the basin, numerous interstate and intrastate issues will also have a potential impact on water use and administration in Water Division 7 in the future. These include:

INTERSTATE ISSUES:

1. Colorado River Compact and shortages
2. Upper Colorado River Compact
3. La Plata River Compact, storage project development
4. Water quality issues regarding trans-mountain and trans-basin diversions
5. Endangered Species Act and possible revisions
6. Hydrologic Determination, Navajo-Gallup Project
7. Navajo Reservoir Operations and Procedures
8. Navajo Tribal Water Rights Settlement (New Mexico)
9. Animas-La Plata Compact and future administration/allocations
10. Produced water from Oil and Gas Development administration

INTRASTATE ISSUES:

1. Interbasin Compact Committee, HB 1177
2. RICD water rights, Compact development impairment
3. Dam design and reservoir spillway design criteria
4. USFS Ditch Bill and Special Use Permitting, By-pass flows
5. Objections/challenges to Indian Water Rights Settlement
6. Forest Management Plan and Wild & Scenic Eligibility/Suitability
7. San Juan River Depletion Modeling, CDSS
8. Evaluation and administration of Substitute Water Supply Plans
9. Rapid population growth, changing water demands

AGENCY AND COMMUNITY INVOLVEMENT

The Division 7 staff works cooperatively with many other groups and agencies, and remains active in the local community to assist in increasing the understanding of water issues relevant to Southwestern Colorado. Among those groups are:

- Southwestern Water Conservation District
- San Juan Conservancy District
- Rio Blanco River Restoration Group
- Pine River Irrigation District
- Southern Ute Indian Tribe
- Animas – La Plata Water Conservancy District
- Florida Water Conservancy District
- Durango City Water Board
- Durango City Council
- Children's Water Festival – Montezuma County
- Children's Water Festival – La Plata County
- SWCD Water Seminar
- La Plata Water Conservancy District
- Dolores Water Conservancy District
- Mancos Water Conservancy District
- Mancos (Soil) Conservation District
- Colorado Oil and Gas Conservation Commission
- WIP (Water Information Program)
- Water 101 Groups
- Southwest Basins Roundtable
- State Water Supply Initiative (SWSI)
- Navajo Reservoir Operating Committee
- McPhee Reservoir Operating Committee
- DNR Leadership Team
- DNR IT Liaison's Group
- DNR Hydrobase Committee
- La Plata County Advisory Committee
- La Plata County Planning Department

Archuleta County Planning Department  
Montezuma County Planning Department  
Dolores County Planning Department  
San Juan Basin Health  
River Protection Workgroup  
Colorado Water Quality Control Commission  
San Juan National Forest & BLM  
Colorado Water Officials Association  
Colorado Division of Wildlife  
Bureau of Reclamation  
Center for Snow and Avalanche Studies  
San Juan Citizens Alliance

## **SUMMARY**

It is with great pride that the 2008-2009 Annual Report for Water Division 7 is submitted on behalf of the entire staff. The report is a compilation of narrative and data



which was relevant to the entire year. Everyone in the division has played a crucial role in the publication of this report which begins with the recording of diversions and stream flow information in Southwestern Colorado. The employees of Division 7 are to be commended for their dedication to the water users in this part of the state.

Respectfully Submitted on behalf of the Division 7 staff,

Rege W. Leach  
Division Engineer, Division 7  
April 21, 2010

## The Year in Pictures



Water flowing into Lake Nighthorse (aka Ridges Basin Reservoir) from the Animas-La Plata Pumping Plant - April 23, 2009





Lake Nighthorse (aka Ridges Basin Reservoir) with Durango in the foreground

August 2009

Hal Lott - Photographer



## Dust Accelerates Snow Melt in San Juan Mountains



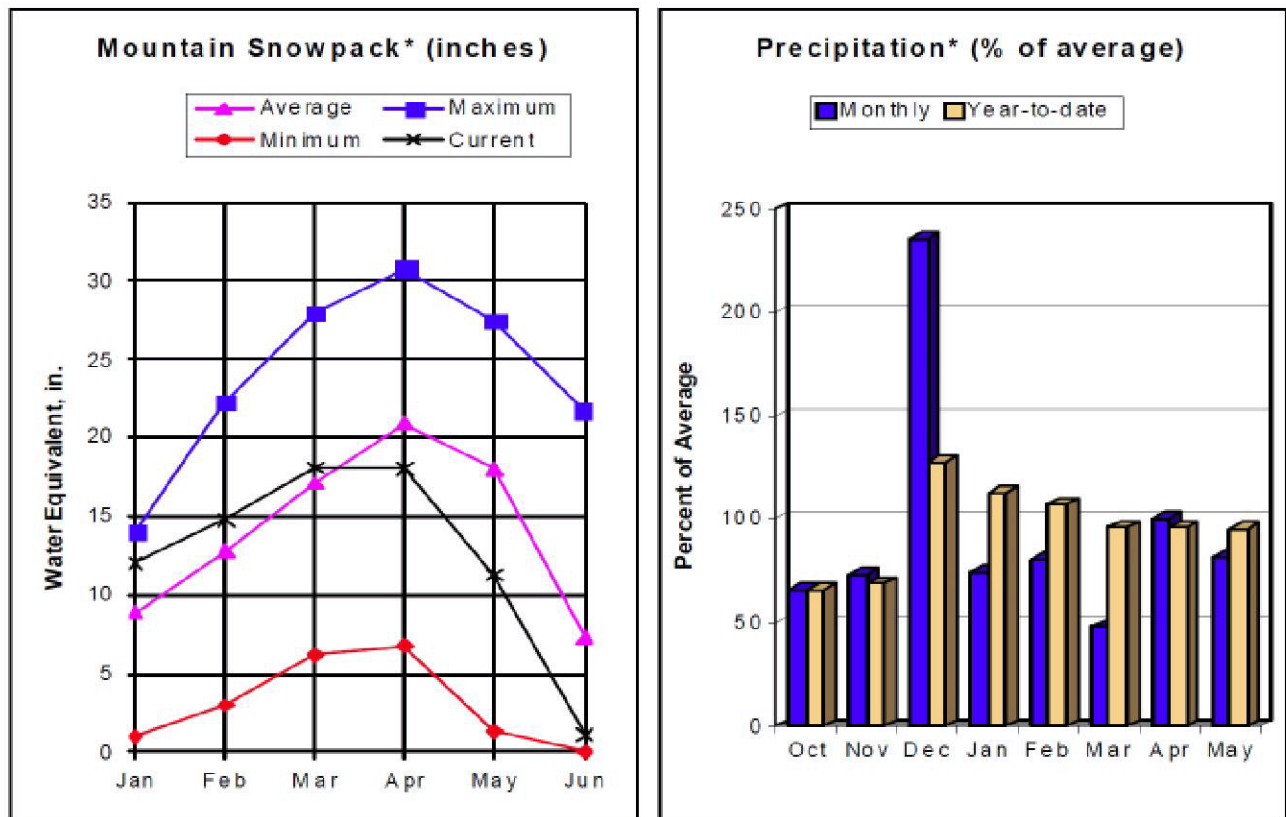
acquired May 18, 2009



acquired May 31, 2008



## SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS as of June 1, 2009



\*Based on selected stations

Favorable weather during the last part of May finally slowed down the melting that had been in free fall since the combined San Miguel, Dolores, Animas and San Juan Rive basin reached its peak snowpack on April 18. June 1 snowpack measurements show the basin at 15 percent of average, down substantially from the 63 percent of average conditions of one month ago. SNOTEL data shows the basin lost 41 percent of its peak snowpack during the last part of April and 54 percent during May leaving only about 5 percent remaining on the ground. Snowpack projections suggest that, given median future conditions, snow at the measuring sites should be melted out by June 9, significantly sooner than the median melt out date of June 24. The only sub-basin with measureable snow is the San Juan which reported 39 percent of average snowpacks. May precipitation in the mountains was 82 percent of average. As a result, total precipitation for the water year dropped slightly to 95 percent of average. In response to the accelerated melt, reservoir levels rose to 120 percent of average and are currently at 99 percent of capacity. This year's storage is 13 percent higher than the amount of stored water available last year at this time. The rapid snowmelt has affected the timing of the runoff and water users should expect well below average streamflow conditions over the next two months. Forecasts call for June-July runoff to range from 10 percent of average for the Mancos River near Mancos to 72 percent of average for the San Juan near Carracas.

\*\*\*Information retrieved from the USDA Colorado Basin Outlook Report June 1, 2009.

**TRANSMOUNTAIN DIVERSION SUMMARY ----- 2009**

**OUTFLOWS**

SOURCE								RECIPIENT		
WD	ID	NAME	STREAM	10-YEAR AVG.		CURRENT YEAR		WD	ID	STREAM
				AF	DAYS	AF	DAYS			
29	4669	TREASURE PASS DITCH	SAN JUAN RIVER	143.7	31.5	259.7	62	20	921	RIO GRANDE RIVER
30	4660	CARBON LAKE DITCH	ANIMAS RIVER	91.1	20.6	0	0	68	692	UNCOMPAHGRE RIVER
30	4661	MINERAL POINT DITCH	ANIMAS RIVER	24.9	13.2	0	0	68	609	UNCOMPAHGRE RIVER
30	4662	RED MOUNTAIN DITCH	ANIMAS RIVER	92.0	32.1	0	0	68,41	604,549	UNCOMPAHGRE RIVER
31	4638	PINE RIVER-WEMINUCHE PASS D.	PINE RIVER	390.8	54.5	328.8	35	20	919	RIO GRANDE RIVER
31	4637	WEMINUCHE PASS DITCH	PINE RIVER	877.1	26.7	847.4	41	20	922	RIO GRANDE RIVER
78	4672	WILLIAMS CREEK-SQUAW PASS D.	PIEDRA RIVER	386.3	94.9	256.7	122	20	923	RIO GRANDE RIVER
78	4670	DON LA FONT #1 (S RIVER PEAK)	PIEDRA RIVER	3.7	4.7	33.6	27	20	917	RIO GRANDE RIVER
78	4671	DON LA FONT #2 (PIEDRA PASS D.) *	PIEDRA RIVER	51.2	18.5	120.2	27	20	918	RIO GRANDE RIVER

\* Combined flow from Don la Font #1 (ID 7804670) and Don La Font #2 (ID 7804671)



## 2009 RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of Year
				AF	Date	AF	Date	
29	3507	Harris Bros Boone Res 2	Blanco River	67.6	09/18/09	261.7	05/27/09	67.6
29	3644	Borns Lake Reservoir	West Fk. San Juan R.	67.9	11/01/08	67.9	10/31/09	67.9
29	3654	Echo Canyon Reservoir	Echo Creek	2,039.0	10/31/09	2,148.8	11/01/08	2,039.0
29	3682	Thomas Reservoir	San Juan R.	58.0	11/01/08	58.0	10/31/09	58.0
29	3848	Mountain View Reservoir	Four Mile Creek	925.0	11/01/08	925.0	10/31/09	925.0
		Total of all < 50 AF		140.2		189.8		152.3
Total for District 29				3,297.7		3,651.2		3,309.8

## 2009 RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of Year
				AF	Date	AF	Date	
30	3534	Andrews Lake	Lime Creek	131.0	11/01/08	131.0	10/31/09	131.0
30	3536	Cascade	Elbert Creek	15,316.0	04/17/09	22,319.0	06/11/09	21,328.0
30	3540	Haviland Lake	Elbert Creek	526.0	11/01/08	526.0	10/27/09	526.0
30	3546	Ice Lake	Elbert Creek	392.0	06/16/09	416.0	11/01/08	416.0
30	3547	Keeler Lake	Elbert Creek	488.0	11/01/08	488.0	10/27/09	488.0
30	3548	Lake of the Pines*	Little Cascade Creek	57.2	09/18/09	65.0	11/01/08	57.2
30	3560	Turner Ponds	Animas River	62.0	11/01/08	84.0	06/01/09	67.0
30	3561	Turner Reservoir	Waterfall Creek	393.0	04/06/09	472.0	04/27/09	428.0
30	3576	Florida Canal and Res	Florida River	327.5	05/07/09	447.8	06/11/09	391.0
30	3581	Lemon Reservoir	Florida River	9,468.0	09/24/09	40,053.0	05/18/09	9,968.0
30	3622	Henderson Lake	Animas River	57.8	11/01/08	57.8	09/18/09	57.8
30	3623	Ridges Basin Resv.	Animas River	864.0	04/13/09	26,330.0	07/24/09	25,243.0
30	3625	Naegelin Lake	Junction Creek	234.0	02/26/09	366.0	05/18/09	265.0
30	3630	Twilight Lake	Purgatory Creek	60.0	11/01/08	60.0	10/31/09	60.0
30	3707	Johnson Reservoir	Coal Creek	774.0	03/23/09	1,023.0	05/12/09	858.0
30	3724	Johnson Lake #2	Wildcat Canyon	21.3	11/01/08	52.0	05/04/09	45.6
30	3817	Dry Lake	Animas River	51.0	11/17/08	55.0	05/11/09	55.0
		Total of all < 50 AF		248.3		330.7		254.2
Total for District 30				29,471.1		93,276.3		60,638.8

## 2009 RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of Year
				AF	Date	AF	Date	
31	3517	Wommer Reservoir	Little Bear Creek	179.8	10/31/09	208.5	04/15/09	179.8
31	3518	Vallecito Reservoir	Pine River	43,623.9	10/19/09	126,142.8	06/26/09	45,278.1
		*Total of all < 50 AF		0.0		0.0		0.0
Total for District 31				43,803.7		126,351.3		45,457.9

\*No Reservoir Observation records kept for reservoirs <50 af in WD 31



## 2009 RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of Year
				AF	Date	AF	Date	
32	3601	Totten Reservoir	Transbasin Water	1,496.1	09/18/09	2,583.2	11/10/08	1,754.7
32	3602	Narraguinnep Reservoir	Transbasin Water	3,452.9	10/10/09	18,844.6	04/06/09	3,906.8
32	3603	A M Puett Reservoir	Transbasin Water	875.0	04/20/09	1,748.4	05/21/09	977.5
		Total of all < 50 AF		58.6		66.3		60.6
Total for District 32				5,882.6		23,242.5		6,699.6

## 2009 RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of Year
				AF	Date	AF	Date	
33	3522	Red Mesa Ward Reservoir	Hay Gulch	0.0	09/15/09	1,206.0	05/11/09	6.0
33	3523	Taylor Reservoir	La Plata River	85.6	11/01/08	85.6	10/31/09	85.6
		*Total of all < 50 AF		0.0		0.0		0.0
Total for District 33				85.6		1,291.6		91.6

\*No Reservoir Observation records kept for reservoirs <50 af in WD 33

## 2009 RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of Year
				AF	Date	AF	Date	
34	3585	Bauer Reservoir No 1	Crystal Creek	76.0	09/25/209	357.0	04/22/09	90.0
34	3586	Bauer Reservoir No 2	Chicken Creek	352.0	03/04/09	1,533.0	04/28/09	798.0
34	3589	Jackson Gulch Reservoir	West Fork Mancos R	3,521.0	02/01/09	10,100.0	06/01/09	3,932.0
34	3590	L A Bar Reservoir	Chicken Creek	21.0	11/01/08	58.0	06/16/09	43.0
34	3592	Sellers & McClane Res	Mud Creek	7.3	09/25/09	32.0	06/01/09	9.1
34	3594	Weber Reservoir	Middle Fork Mancos R	74.4	09/25/09	459.0	05/13/09	96.0
		Total of all < 50 AF		10.0		69.2		13.0
Total for District 34				4,061.7		12,608.2		4,981.1



## 2009 RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of Year
				AF	Date	AF	Date	
69	3529	Belmar Lake Reservoir	Rincon Creek	95.0	10/15/09	326.0	05/20/09	95.0
69	3530	Dunham Reservoir	Disappointment Creek	41.0	10/30/09	79.0	05/05/09	41.0
69	3532	Morrison Reservoir	Morrison Creek	85.0	11/01/08	116.0	05/25/09	95.0
		Total of all < 50 AF		30.0		50.0		30.0
Total for District 69				251.0		571.0		261.0

## 2009 RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of Year
				AF	Date	AF	Date	
71	3606	Big Pine Reservoir	Lost Canyon	43.0	11/01/08	259.0	04/14/09	70.0
71	3607	Buck Pasture Reservoir	Beaver Creek	13.2	10/30/09	53.0	05/19/09	13.2
71	3610	Ethel Belmear Reservoir	Beaver Creek	73.8	11/01/08	87.0	05/19/09	9.5
71	3612	Groundhog Reservoir	Groundhog Creek	14,156.0	11/01/08	21,710.0	05/20/09	14,280.0
71	3613	Lost Canyon Lake	Lost Canyon	106.0	11/01/08	106.0	11/01/08	106.0
71	3614	McPhee Reservoir	Dolores River	259,343.0	10/31/09	382,880.0	05/22/09	259,343.0
71	3619	Summit Reservoir	Lost Canyon	414.0	10/31/09	4,013.0	06/01/09	414.0
		Total of all < 50 AF		13.0		16.0		13.0
Total for District 71				274,162.0		409,124.0		274,248.7

## 2009 RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of Year
				AF	Date	AF	Date	
77	3512	Spence Reservoir	Coyote Creek	200.6	08/19/09	370.8	04/27/09	200.6
77	3696	Sappington Reservoir	Coyote Creek	138.6	09/18/09	272.7	07/07/09	138.6
77	3699	Gomez Reservoir	Coyote Creek	49.9	11/01/08	67.8	05/05/09	67.8
		Total of all < 50 AF		15.4		15.4		15.4
Total for District 77				404.5		726.7		422.4



## 2009 RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of Year
				AF	Date	AF	Date	
78	3624	Dunagan Reservoir	Stollsteimer Creek	6.5	10/26/09	93.4	03/31/09	6.5
78	3626	G S Hatcher	Stollsteimer Creek	1,413.0	03/01/09	1,735.0	04/01/09	1,459.0
78	3629	Linn and Clark Reservoir	Dutton Creek	1,193.0	12/01/08	1,230.0	02/02/09	1,230.0
78	3633	Pargin Reservoir	Stollsteimer Creek	328.0	10/31/09	380.0	03/01/09	328.0
78	3636	Pinõn Lake	Dutton Creek	104.0	10/31/09	194.5	04/01/09	104.0
78	3642	Williams Creek Reservoir	Williams Creek	10,084.0	11/01/08	10,084.0	11/01/08	10,084.0
78	3644	Lake Forest	Dutton Creek	413.0	12/01/08	465.0	02/27/09	456.0
78	3645	Stevens Reservoir*	Dutton Creek	0.0	12/01/08	410.0	07/31/09	111.0
78	3646	Town Center Lake	Dutton Creek	492.5	09/30/09	600.0	02/02/09	552.0
78	3650	Palisade Lake	Middle Fork Piedra R	50.0	11/12/08	50.0	11/12/08	50.0
		Total of all < 50 AF		71.1		151.0		75.9
Total for District 78				14,155.1		15,392.9		14,456.4

## 2009 IRRIGATION YEAR WATER DIVERSION SUMMARIES

WD	STRUCTURES REPORTING				ALL STRUCTURES						TO IRRIGATION	
	WITH RECORD (1)	NO WATER AVAILABLE (2)	NO WATER TAKEN (3)	NO INFORMATION AVAILABLE (4)	ESTIMATED # OF RECORDED READINGS AT STRUCTURE	TOTAL DIVERSIONS (ACRE- FEET)	TOTAL SURFACE DIVERSIONS (ACRE- FEET)	TOTAL GROUNDWATER DIVERSIONS (ACRE- FEET)	TOTAL DIVERSIONS TO STORAGE (ACRE- FEET)	TOTAL DIVERSIONS TO IRRIGATION (ACRE- FEET)	NUMBER OF ACRES IRRIGATED *	AVERAGE ACRE- FEET PER ACRE *
29	461	0	283	14	3,071	103,625	101,440	2,185	202	41,737	10,126	4.12
30	1,156	34	728	1	8,433	273,627	272,535	1,093	57,324	154,206	31,318	4.92
31	581	8	319	0	4,851	498,538	498,259	279	65,682	215,174	49,325	4.36
32	397	6	317	16	6,550	372,382	372,355	27	20,839	271,158	58,794	4.61
33	139	4	209	0	5,719	26,888	26,868	20	346	21,840	5,706	3.83
34	316	18	158	20	3,253	42,538	42,530	8	11,128	27,252	11,184	2.44
46	51	3	41	0	787	5,555	5,541	14	0	3,417	782	4.37
69	32	4	11	4	99	2,047	2,047	0	236	1,808	431	4.19
71	125	3	75	58	3,170	323,410	323,253	157	43,758	11,071	1,516	7.30
77	132	0	50	0	1,729	79,109	78,962	148	145	22,873	2,989	7.65
78	224	3	144	15	1,866	27,312	27,269	44	2,292	19,223	4,054	4.74
<b>TOTAL</b>	<b>3,614</b>	<b>83</b>	<b>2,335</b>	<b>128</b>	<b>39,528</b>	<b>1,755,031</b>	<b>1,751,059</b>	<b>3,975</b>	<b>201,952</b>	<b>789,759</b>	<b>176,225</b>	<b>4.48</b>

Definitions:

(1) Count of structures with Daily or Infrequent Records

(2) Count of structures with NUC=B

(3) Count of structures with NUC=(A,C,D)

(4) Count of structures with NUC=(E,F)

\* ACRES IRRIGATED BASED ON 2007 IYR DATA

## 2009 IRRIGATION YEAR WATER DIVERSION SUMMARIES TO VARIOUS USES

WD	TRANS-MOUNTAIN OUTFLOW	TRANS-BASIN OUTFLOW	EXPORT FROM STATE	MUNICIPAL	COMMERCIAL	INDUSTRIAL	RECREATION	FISHERY	FIRE	DOMESTIC	HOUSEHOLD USE ONLY	STOCK
29	260	4,712	47,737	1,022	1,789	0	0	5,427	0	79	0	575
30	0	0	8,444	5,567	1,353	355	234	9,575	0	222	0	15,759
31	1,176	0	0	1,515	153	0	0	147	0	63	0	7,245
32 *	0	0	0	5,664	0	24	0	0	0	6	0	1,472
33	0	531	1,052	2	6	0	0	0	0	36	0	2,918
34	0	0	0	695	4	0	0	0	0	2	0	2,833
46	0	0	2,114	0	0	0	0	0	0	0	0	22
69	0	0	0	0	0	0	0	0	0	0	0	0
71 **	242,714	0	0	233	5	0	66	4,126	0	7	0	803
77	0	0	52,164	0	0	0	0	2,938	0	31	0	146
78	411	0	0	2,635	21	0	0	594	0	29	0	467
<b>TOTAL</b>	<b>244,561</b>	<b>5,243</b>	<b>111,511</b>	<b>17,333</b>	<b>3,331</b>	<b>379</b>	<b>300</b>	<b>22,807</b>	<b>0</b>	<b>475</b>	<b>0</b>	<b>32,240</b>

\* Municipal Use in Dist. 32 delivered from Transbasin - Dist. 71

\*\* Transbasin outflow in Dist. 71 diverted to Dist. 32 and Dist. 34.

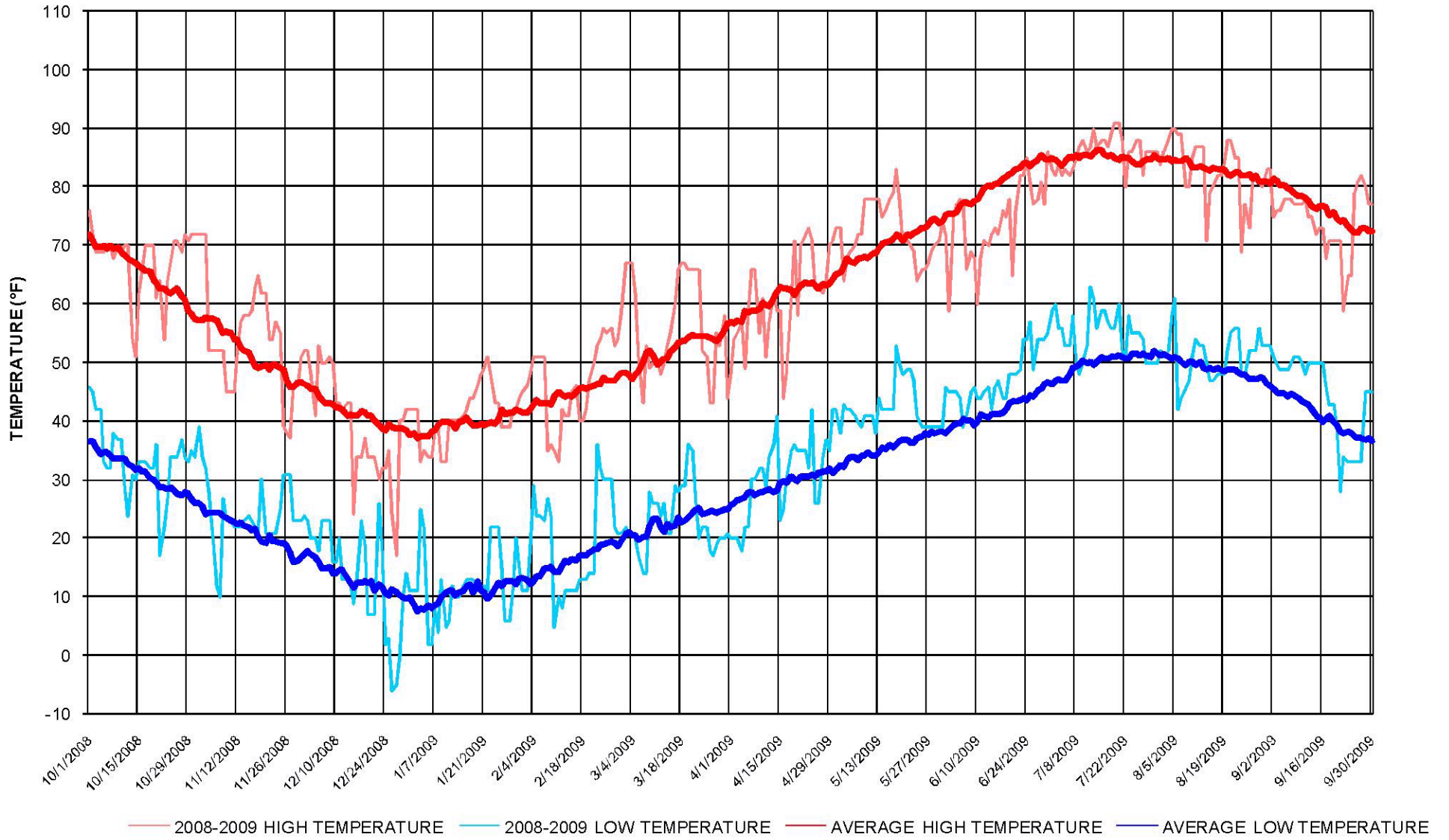


**2009 IRRIGATION YEAR WATER DIVERSION SUMMARIES TO VARIOUS USES (CONTINUED)**

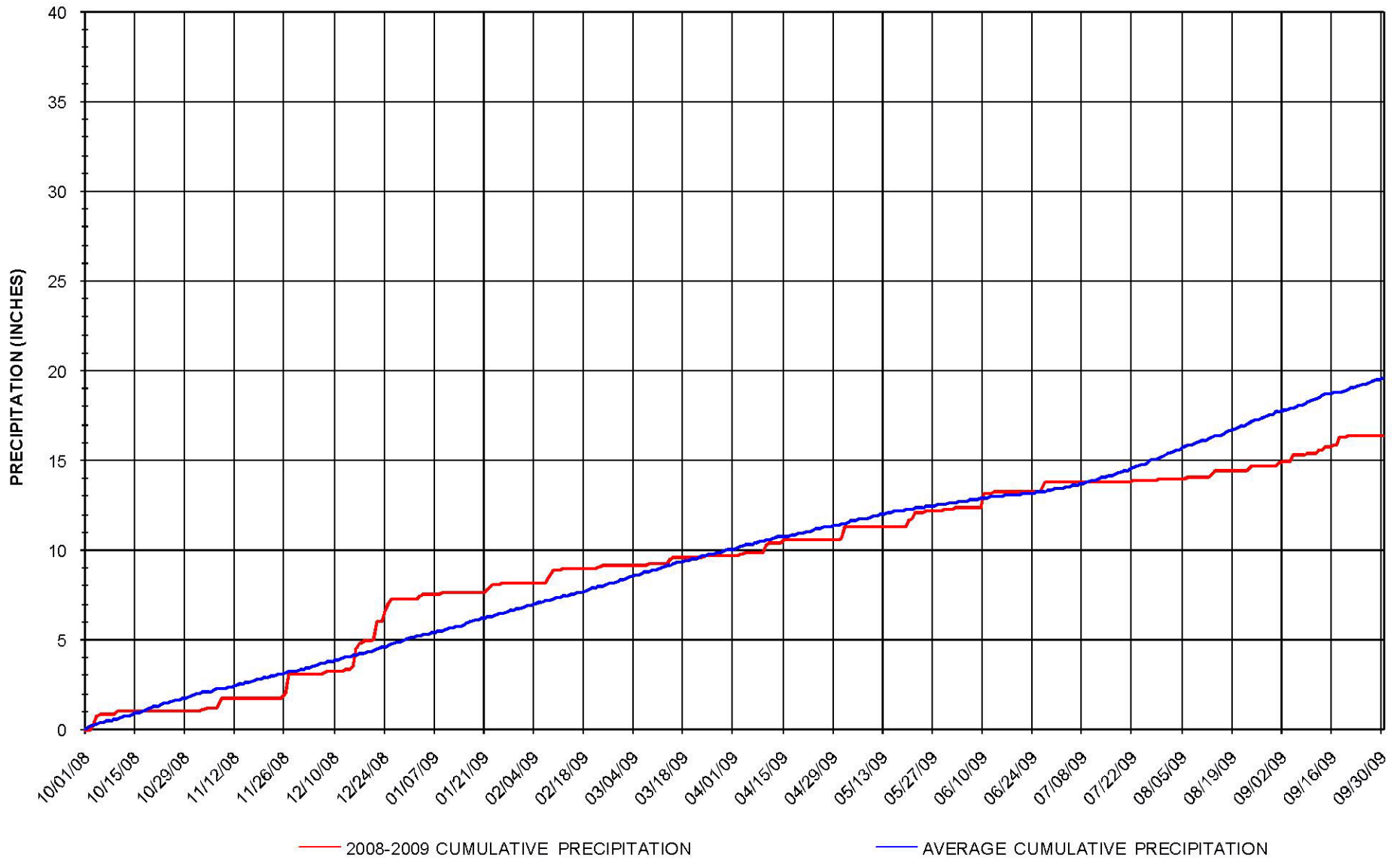
WD	AUGMENTATION	EVAPORATION	FEDERAL RESERVE	GEOTHERMAL *	SNOWMAKING	MINIMUM STREAMFLOW	POWER GENERATION	WILDLIFE	RECHARGE	OTHER	ALL BENEFICIAL USES
29	10	85	0	0	0	0	0	0	0	0	0
30	163	1,135	0	0	120	0	28,084	150	0	0	0
31	515	5,758	0	0	0	0	201,625	0	0	0	0
32	4	38	12	0	0	0	30,367	0	0	0	0
33	9	0	0	0	0	0	0	0	1	156	0
34	9	30	161	0	0	0	20,486	0	77	0	0
46	0	2	0	0	0	0	0	0	0	0	0
69	0	2	0	0	0	0	0	0	0	0	0
71	3,603	39	0	0	0	0	31,229	0	0	0	0
77	0	0	0	0	0	0	0	0	0	0	0
78	2	37	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>4,315</b>	<b>7,126</b>	<b>173</b>	<b>0</b>	<b>120</b>	<b>0</b>	<b>311,791</b>	<b>150</b>	<b>78</b>	<b>156</b>	<b>0</b>

\* Geothermal water included in Commercial, Municipal, and Recreation categories.

# DURANGO TEMPERATURES

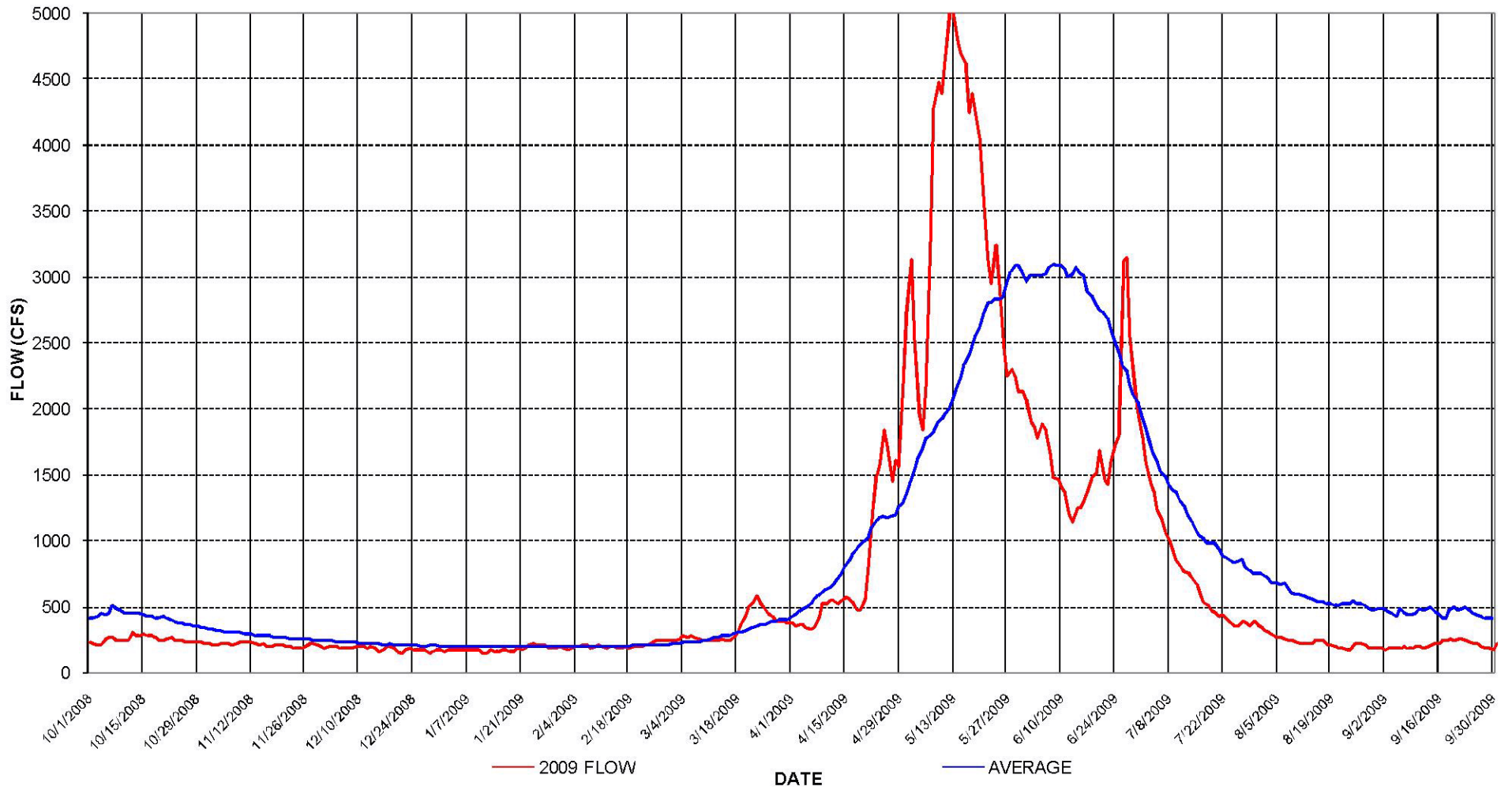


### DURANGO CUMULATIVE PRECIPITATION

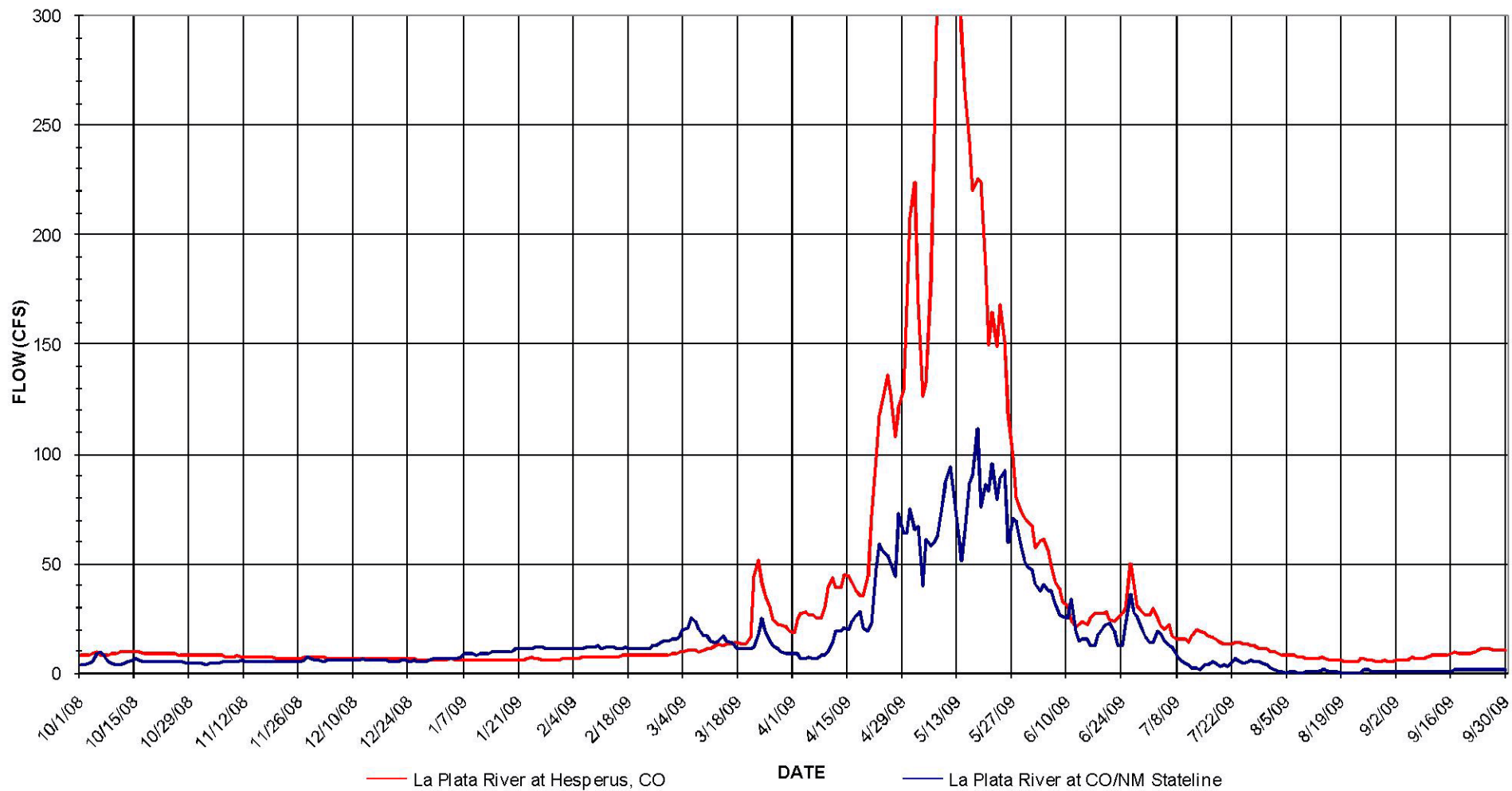




### ANIMAS RIVER AT DURANGO, CO - 2009 WATER YEAR



# LA PLATA RIVER COMPACT - 2009 WATER YEAR



**LA PLATA RIVER COMPACT MONTHLY ADMINISTRATIVE SUMMARY (ACRE-FEET)  
2009 COMPACT YEAR**

MONTH	HESPERUS STATION	LA PLATA	PINE	30% OF	HESPERUS TOTAL*	STATE	ENTERPRISE	PIONEER DITCH	DELIVERED	REQUIRED
		& CHERRY CR. DITCH	RIDGE DITCH	KELLER DITCH		LINE STATION	DITCH (NM)		STATE LINE TOTAL*	TOTAL (1/2 HESP TOTAL)*
DECEMBER	389.4	0.0	0.0	0.0	0.0	364.8	0.0	0.0	--	--
JANUARY	373.5	0.0	0.0	0.0	0.0	592.1	0.0	0.0	--	--
FEBRUARY	408.8	0.0	0.0	0.0	0.0	658.5	0.0	0.0	--	--
MARCH	1,089.7	0.0	245.6	0.0	0.0	955.3	0.0	0.0	--	--
APRIL	3,709.1	0.0	112.9	0.0	2,673.0	1,636.8	45.0	16.5	1,213.6	1,193.9
MAY	11,911.3	1,076.4	313.6	3.2	13,304.5	4,378.6	159.5	238.2	4,776.3	4,292.3
JUNE	1,961.9	1,356.9	144.4	10.1	3,473.3	1,503.1	142.0	179.2	1,824.3	1,789.0
JULY	1,012.8	268.4	0.0	0.0	1,281.2	435.5	89.1	123.6	648.1	673.7
AUGUST	413.3	0.0	0.0	0.0	413.3	54.5	15.4	19.2	89.1	212.8
SEPTEMBER	496.2	0.0	0.0	0.0	496.2	77.7	0.1	2.9	80.8	242.9
OCTOBER	456.1	0.0	0.0	0.0	456.1	178.3	10.4	9.1	197.8	232.0
NOVEMBER	346.9	0.0	0.0	0.0	346.9	229.8	0.0	0.0	229.8	174.5
TOTALS *	22,569.0	2,701.7	816.5	13.3	22,444.5	8,009.1	462.1	588.7	8,830.1	8,811.1

Comments:

\* On April 13, 2009 @ 1536, New Mexico placed a call for one half of Hesperus up to 60 cfs to be delivered the following day

\* On May 15, 2009 @ 0948, New Mexico placed a call for one half of Hesperus up to 100 cfs to be delivered the following day

\* On May 18, 2009 @ 1549, New Mexico placed a call for one half of Hesperus up to 85 cfs to be delivered the following day

\* All Colorado ditches were off starting on 07/18/2009 @ 10:00 until 07/30/2009 @ 10:15.

**\* TOTALS ARE FOR PERIOD OF COMPACT CALL.**



**UPPER BASIN COMPACT -- SAN JUAN-CHAMA DIVERSIONS**

<u>WATER</u>	<u>RIO BLANCO</u>	<u>LITTLE OSO</u>	<u>OSO</u>	<u>TOTAL COLO.</u>	<u>AZOTEA</u>	<u>TEN-YEAR</u>	<u>% DIFF CO VS.</u>
<u>YEAR</u>	<u>DIVERSION</u>	<u>DIVERSION</u>	<u>DIVERSION</u>	<u>DIVERSION</u>	<u>TUNNEL</u>	<u>TOTALS</u>	<u>AZOTEA</u>
					<u>(USGS)</u>	<u>(USGS)</u>	<u>VALUES</u>
							<u>% DIFF</u>
1971	23,510	1,340	24,980	49,830	59,980		-20.4%
1972	28,290	1,120	24,310	53,720	58,070		-8.1%
1973	70,900	9,720	79,810	160,430	153,300		4.4%
1974	25,290	1,070	18,700	45,060	47,230		-4.8%
1975	58,780	8,120	69,200	136,100	145,100		-6.6%
1976	41,000	2,420	36,950	80,370	85,230		-6.0%
1977	13,450	37	3,930	17,417	19,390		-11.3%
1978	44,010	2,820	50,310	97,140	104,200		-7.3%
1979	60,150	8,980	87,730	156,860	164,200		-4.7%
1980	57,760	6,970	72,460	137,190	143,600	980,300	-4.7%
1981	25,690	1,640	22,260	49,590	53,960	974,280	-8.8%
1982	48,340	6,860	63,810	119,010	127,100	1,043,310	-6.8%
1983	46,960	8,110	69,680	124,750	134,300	1,024,310	-7.7%
1984	45,180	6,070	55,220	106,470	113,600	1,090,680	-6.7%
1985	32,700	9,630	44,630	86,960	91,800	1,037,380	-5.6%
1986	35,520	4,720	43,620	83,860	89,180	1,041,330	-6.3%
1987	32,120	4,380	42,360	78,860	83,050	1,104,990	-5.3%
1988	29,200	972	29,780	59,952	63,530	1,064,320	-6.0%
1989	20,400	672	26,630	47,702	48,570	948,690	-1.8%
1990	37,630	1,480	32,510	71,620	71,700	876,790	-0.1%
1991	51,730	3,930	59,780	115,440	119,400	942,230	-3.4%
1992	32,910	6,340	43,990	83,240	87,080	902,210	-4.6%
1993	34,960	6,210	52,740	93,910	98,810	866,720	-5.2%
1994	28,080	5,020	44,260	77,360	82,200	835,320	-6.3%
1995	34,980	5,220	44,840	85,040	86,270	829,790	-1.4%
1996	26,780	950	27,640	55,370	57,240	797,850	-3.4%
1997	62,320	4,450	71,470	138,240	141,200	856,000	-2.1%
1998	47,910	2,110	45,370	95,390	97,280	889,750	-2.0%
1999	58,690	2,040	55,980	116,710	120,500	961,680	-3.2%
2000	20,230	1,150	19,130	40,510	42,740	932,720	-5.5%
2001	47,710	3,900	53,740	105,350	110,600	923,920	-5.0%
2002	3,967	36	1,740	5,743	6,310	843,150	-9.9%
2003	29,850	1,130	28,040	59,020	62,460	806,800	-5.8%
2004	39,940	2,100	35,130	77,170	82,070	806,670	-6.3%
2005	63,180	6,490	75,610	145,280	152,700	873,100	-5.1%
2006	38,220	1,090	29,140	68,450	71,720	887,580	-4.8%
2007	50,370	3,160	46,490	100,020	105,080	851,460	-5.1%
2008	61,050	5,000	67,620	133,670	140,000	894,180	-4.7%
<u>2009</u>	<u>47,740</u>	<u>3,080</u>	<u>49,090</u>	<u>99,910</u>			
<b>AVG.</b>	<b>40,169</b>	<b>3,949</b>	<b>45,314</b>	<b>89,432</b>	<b>93,534</b>	<b>927,156</b>	<b>-4.6%</b>

LIMITS: 1,350,000 ACRE-FEET IN ANY TEN CONSECUTIVE YEARS, 270,000 ACRE-FEET IN ANY YEAR

**WATER DIVISION SEVEN**

**ACTIVITY SUMMARY**

**FISCAL YEAR 2009  
JULY 2008 TO JUNE 2009**

<b><u>ACTIVITY</u></b>	<b><u>TOTAL</u></b>
NUMBER OF PROFESSIONAL & TECHNICAL STAFF * Includes Well Inspector	6
NUMBER OF CLERICAL STAFF	1
NUMBER OF WATER COMMISSIONER FTE ASSIGNED	11.25
NUMBER OF DECREED "SURFACE" RIGHTS (CALENDER YEAR)	89
NUMBER OF SURFACE RIGHTS ADMINISTERED	*
NUMBER OF WELLS ADMINISTERED	*
NUMBER OF DAMS & PONDS VISITED	*
NUMBER OF PLANS FOR AUGMENTATION (CALENDER YEAR)	10
NUMBER OF CONSULTATIONS WITH REFEREE (CALENDER YEAR)	141
NUMBER OF WATER COURT APPEARANCES (CALENDER YEAR)	86
NUMBER OF MEETINGS WITH WATER USERS	*
NUMBER OF MEETINGS TO RESOLVE WATER RELATED DISPUTES	*
NUMBER OF PUBLIC ASSISTANCE CONTACTS ON WATER MATTERS	*

\*In the process of being tabulated, revision to come.

**WATER COURT ACTIVITIES**  
**CALENDAR YEAR 2009**

NUMBER OF APPLICATIONS FOR DECREES	97
NUMBER OF CONSULTATIONS WITH REFEREE	141
NUMBER OF DECREES ISSUED BY WATER COURT	68

TYPE OF DECREE:

SURFACE WATER	39
GROUND WATER	16
RESERVOIRS	23
TRANSFER	2
ALTERNATE POINT	5
CHANGE IN USE	2
PLANS FOR AUGMENTATION	10
IN-STREAM FLOW	0
OTHER	0
PROTEST TO 2009 WATER CASES	393

NUMBER OF WATER RIGHTS IN DECREES: 89

TYPE OF NEW STRUCTURES:

DITCHES	21
RESERVOIRS, PONDS	9
WELLS	14
SPRINGS	4
OTHER (PIPELINES, PUMPS, ETC.)	21

TOTAL NEW STRUCTURES: 69



**OFFICE ADMINISTRATION FY 2008-2009**

<b><u>NAME</u></b>	<b><u>POSITION</u></b>	<b><u>FY MONTHS</u></b>		<b><u>FLEET</u></b>	<b><u>PERSONAL</u></b>
		<b><u>BUDGETED</u></b>	<b><u>WORKED</u></b>	<b><u>MILEAGE</u></b>	<b><u>MILEAGE</u></b>
Rege W. Leach	Division Engineer	12	12	0	1,117
Scott D. Brinton	Asst. Div. Engineer	12	12	0	137
Matt Gavin	Dam Safety Engineer	12	12	13,825	0
Brian Boughton	Hydrographer	12	12	6,980	0
Cheston Hart	EIT I	12	3	0	0
Melissa Schneider	Program Asst. I	12	12	0	0
Jason Morrow	EIT II	6	6	10,787	0

**FULL-TIME EMPLOYEES IN THE FIELD**

<b><u>NAME</u></b>	<b><u>POSITION</u></b>	<b><u>DISTRICT</u></b>				
Pete Kasper	Eng Tech II	29,77,78	12.0	12.0	11,780	699
Tom Fiddler	Eng Tech II	30/Florida	12.0	12.0	0	10,366
Jeff Titus	Eng Tech II	30/ Animas	12.0	12.0	0	8,434
Matthew Schmitt	Eng Tech II	33	12.0	12.0	0	9,891
Robert Becker	Eng Tech III	32,34,69,71	12.0	2.0	0	1,080
Denise Miller	Eng Tech II	69,71	12.0	12.0	15,355	540
Doug Pickering	Eng Tech II	Well Insp.	12.0	12.0	20,440	0
David Hofmann	Eng Tech II	31,46	12.0	12.0	12,900	743

**PERMANENT PART-TIME EMPLOYEES IN THE FIELD**

Marty Robbins	Eng Tech II	32	11.0	12.0	13,463	524
Wallace Patcheck	Eng Tech I	33, 30A	8.0	10.2	2,055	15,674
Sherry Schutz	Eng Tech I	77	9.1	9.5	0	9,249
Bob Formwalt	Eng Tech I	78	6.5	7.3	0	5,908
Robert Daniels	Eng Tech I	31,46	4.4	5.2	0	3,136

**TOTAL MAN-MONTHS:** 213.0 199.2

**TOTAL MILES DRIVEN:** 107,585 67,498

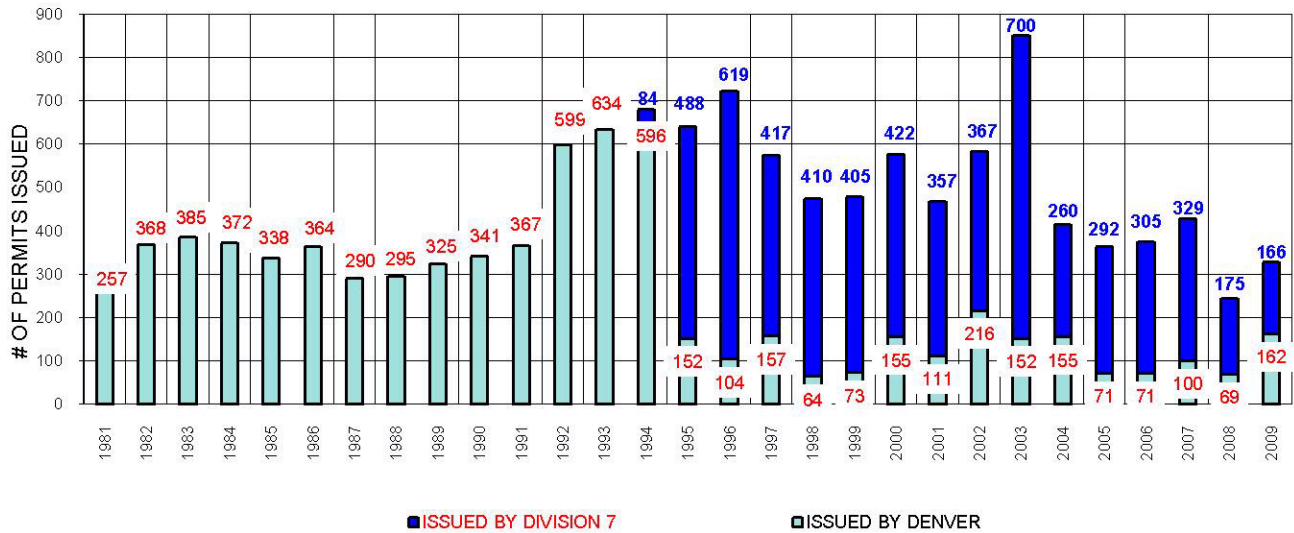
\* Vacancy savings 9.0 months for EIT I

\* Vacancy savings 9.0 months for District 34 Tech III

**DIVISION 7  
IYR 2009 RIVER CALLS**

WD	RIVER	INITIAL CALLING STRUCTURE	PRIORITY No.	DATE ON CALL	MOST SENIOR CURTAILED STRUCTURE	PRIORITY No.	DATE OFF CALL	DAYS
29	COAL CREEK	No Call						
29	RITO BLANCO	No Call						
29	FOUR MILE CREEK	Mesa Ditch	148	07/13/09	Dutton Ditch	173	10/04/09	83
30	FLORIDA RIVER	Lemon Reservoir	RESV 65-4	05/11/09	Abling and Cash Ditch	F-15	09/25/09	137
30	ELBERT CREEK (Upper)	No Call						
30	ELBERT CREEK (Lower)	Conley Ditch	E-1	08/06/09	Elbert Creek Divr Point	E-2	10/31/09	86
30	LITTLE CASCADE CREEK	No Call						
30	LIGHTNER CREEK	Taggart Ditch	L-4	08/20/09	Futile Call			
31	PINE RIVER	Pine River Canal	P-26	06/12/09	Bear Creek Ditch	P-6	10/19/09	129
32	McELMO CREEK	No Call						
33	LA PLATA RIVER (Hesperus to State Line)	Interstate Compact	Compact	04/13/09	La Plata Irrigating Ditch	1	12/01/09	232
34	MANCOS RIVER	Beaver Ditch	M-35	06/8/09	Viets Ditch	M-5	9/21/09	105
71	DOLORES RIVER	No Call						
77	SPRING GULCH	No Call						
77	OIL WELL CREEK	McMullen Ditch	68-50	08/10/09	Non-Decreed Uses		10/29/09	80
78	STOLLSTEIMER CREEK	Vic Johnson Ditch	178	05/01/09	Futile Call			
78	DEVIL CREEK	Ford Ditch	154	06/24/09	Keyah Grande Well	12/31/2002	08/12/09	49

### DIVISION 7 WELL PERMIT ACTIVITY



### SUMMARY OF WELL PERMITS ISSUED IN DIVISION 7

CALENDAR YEAR	ISSUED BY DENVER	ISSUED BY DIVISION 7
1981	257	
1982	368	
1983	385	
1984	372	
1985	338	
1986	364	
1987	290	
1988	295	
1989	325	
1990	341	
1991	367	
1992	599	
1993	634	
1994	596	84
1995	152	488
1996	104	619
1997	157	417
1998	64	410
1999	73	405
2000	155	422
2001	111	357
2002	216	367
2003	152	700
2004	155	260
2005	71	292
2006	71	305
2007	100	329
2008	69	175
2009	162	166