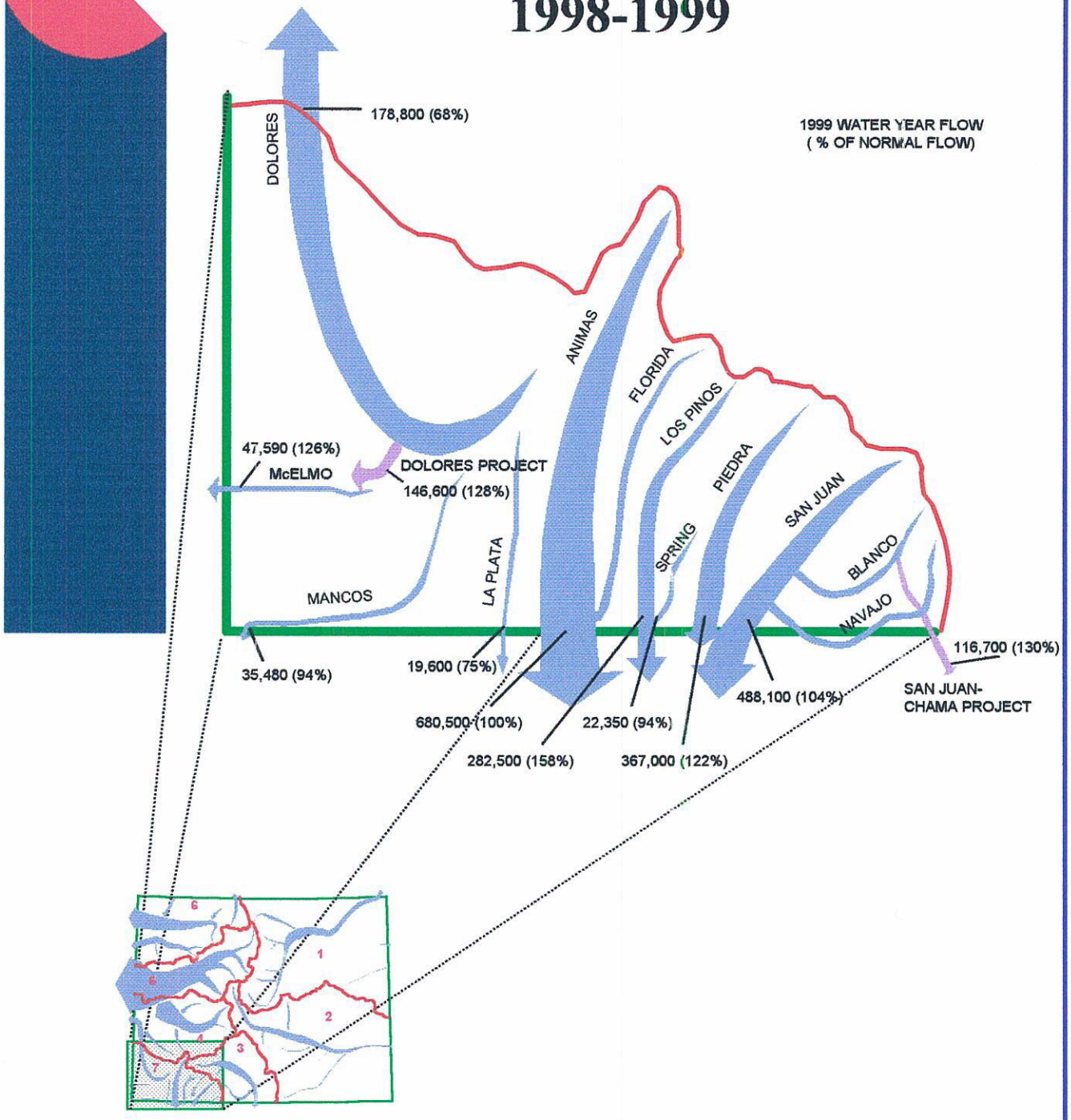
DIVISION OF WATER RESOURCES
DIVISION VII ANNUAL REPORT
1998-1999



Ken Beegles
Division Engineer

copy for
Denver Office
Records Section

INDEX

A. CURRENT WATER YEAR

Southwestern Colorado experienced a continuation of the weather inconsistencies experienced in the last several years to close out the century. The decade of the 80's appears to have cycled high on the list of historic stream flows. The current conditions experienced may be closer to average. However, the totals belie the actual distribution of the weather pattern. Heavy snow in November opened ski areas early and left a snow covering on the wet soils through out the division. Warm temperatures ensued and little snow accumulation occurred until March 31, 1999. Runoff predictions were at about 48% of normal and the outlook was not bright. However, in April a series of storms raised the predictions to 75% of normal runoff as of May 11. Although windy days all through the period seemed to be depleting the winter snow, it later became apparent that snow had drifted into the sheltered areas and mountain valleys. This increased and extended the spring runoff. Forecasts were not modified in May, but it became more likely that area reservoirs would fill. As summer arrived additional rainfall was received and reservoirs filled quickly.

After a few weeks of dry weather in late June, it began to rain frequently and heavily. During July the Animas River in Durango averaged 3400 cfs, 500 cfs above normal. The July 28th flow of 4650 cfs surpassed the earlier runoff peak of 4200 cfs, experienced on May 24th. In August, 7.51 inches of rain fell in Durango, a record for the month. The volume of flow broke records for August on many of the streams in the area. Surrounding communities experienced similar conditions. No one storm actually caused flood much damage. The storms would center in separate drainages of the mountain valleys. Since different geological formations were being eroded, the silted runoff followed the characteristics of the major drainage impacted. The Animas was observed at various shades of red, yellow, gray and green. Hay farmers remarked that hay was harvested in many shades of color, too. A fortunate few were able to put up large amounts of dry hay, while others lost one or both of the first two cuttings. Significant time was spent in turning cut hay or spreading it out on the fields to dry.

Reservoirs were able to be refilled although many had not experienced significant drawdown by early August. A spill concern occurred at Lemon Reservoir when inflows threatened to cause an

uncontrolled spill. A release of 910 cfs was made as water levels were lowered to prevent the spill. Other large reservoirs in the area also released water to keep from over-filling or spilling. September ended with three dry weeks and the high water quickly receded. Ditches needed less water during the irrigation period and diversion records show a decline in not only the amount diverted but the application rate in most areas.

The ski areas began their season with good snow conditions, but ended with marginal conditions. The rafting season was ideal for high water enthusiasts. However, the silty water proved to be detrimental to the aesthetics and weather stayed cool during the summer. Fishing was interrupted by the rain and high, murky flows. More activity in this sport was observed toward the end of the season.

Administration of Water

The following are areas or events where division personnel made specific efforts to carry out their duties during the 1999 summer. Previous work projects from past years reports or incidents were monitored but may not have had a significant impact this year.

Water Administration Calls

Very few long term river calls due to water shortages were experienced within the division. Because the shortages occurred for approximately two weeks, augmentation releases were not all made by the time the rain started. With the ensuing high water, augmentation would not have benefited the stream system and the augmenting ponds could have immediately refilled. Thus no administration was enforced in most areas except during the initial two week dry period. Elbert Creek did not have a call. The Florida River was short of water for about one day. The Mancos and La Plata Rivers experienced longer call periods. However, many junior priorities were able to divert for most of the season. No call was experienced on Stollsteimer Creek due to inaction at the ranch which holds the senior water rights. Because Dutton Ditch was being repaired, the early diversions for this ditch had already been reduced. Four-Mile Creek was dry, but only for a brief, two week period.

Spencer Reservoir was finally drained just prior to an order being sent to cause that action. The outlet valve needs to be repaired. Responsibility for the repair this structure is still in dispute.

Water Commissioners worked with the National Park Service and two Ute Indian Tribes to provide water use records for their substantial number of structures. This was the first year that the NPS has responded and provided this information.

The storage level in Red Mesa Reservoir at the end of the irrigation season was so high that a release was required to address safety concerns with the tower as it is now constructed. With the substantial carryover, the reservoir company will be in a position to refrain from placing a call until the spring season begins.

Work In Progress

1. The San Juan-Chama Project remains a struggle as the Rio Grande Valley endangered species controversies heat up. Plans to increase bypass flow to the Colorado streams through management of supplies to more closely match CWCB instream flow rights, did not work out because of the efforts by the USBR to maximize and extend the diversion season. Water Conservation Board managers decided not to enforce the instream flow rights this year.

2. After the promotion and transfer of our Dam Safety Inspector, our office was frustrated by the results of efforts made to refill the position. A number of dams went without safety inspections by an engineer this year and some computer/training support was lost. All Division staff took on additional duties and due to the extensive precipitation and reduced water administration pressure, some accommodation was made. Unfortunately, some division projects failed to progress as quickly as desired.

3. The Geothermal Case, 89CW19, remains unresolved and may yet be tried in court.

4. US Forest Service reserved rights remain unsettled. Negotiations to resolve the nature and extent of the claims progress very slowly.

5. Resolution of historic easements and access to ditch headings on federal property (Ditch Bill) is another frustration because the status of the structures for many water rights is continually in doubt.

6. The realization that we may not have the ability to download and decode satellite monitoring data, or use the associated programs for the year 2000 is a concern. The office and field staff has come to rely heavily on this data for stream flow information and administrative decisions.

We are currently addressing these listed items. Overall, operations have been greatly successful during this year. Activities have led to progress in many areas across Division Seven.

Activities

1. U.S. Forest Service Reserved Rights: A meeting held late in 1998 led to more constructive work as the technical group carried on with fewer scheduled meetings. Forest officials spent the summer accomplishing most of the first year goals in the Work Plan. On the larger scale however, discussion of the "certainty" issue led to a combined effort by parties from Division 2, 3, and 7 to resolve the matter in Washington, D.C. Attorney General Ken Salazar represented this group in meetings with Federal officials and obtained a verbal commitment for language to ensure that future administrations would not press for additional reserved rights.

2. Rio Blanco River Restoration Project: This project was in doubt earlier in the water year because of vocal, local opposition. The Division Engineer and the CWCB Instream Flow Coordinator with facilitation from the department office (Kathy Kanda) held an information gathering meeting where concerns could be heard again. This allowed participants in the project to answer the criticisms and complaints and compile the answers in a public document. As a result the San Juan Conservancy District decided that the work would move forward. As this

was done, more support was evident. The chief opponent eventually approved work to be done on his property. The channelization has caused the river channel to appear centered and provided pools while slowing the velocity. The future impact will remain to be seen. Negotiations are still pending to increase the by-pass flow to the CWCB minimums.

3. San Juan RIP: Work was done by the various committees to complete the final report concerning the recommendation to support recovery of the Colorado Pikeminnow (Squawfish). The flow recommendations were approved and the operation of Navajo Reservoir remained to be subject to a supplemental EIS for the coming year. Federal actions were to require information from the division office concerning the baseline status of water diversions . No formal program was established by the end of the year. A surprise occurred when the Navajo Indian Nations request for 122,000 acre feet of depletion for further NIIP project expansion was approved without a jeopardy opinion. ALP supporters questioned the consistency of the Federal Fish and Wildlife Service in allowing this after charging the ALP for the depletion seven years ago.

The potential release of 6000 cfs from Navajo Reservoir appeared to be an option with many problems. However, hearings conducted by the Bureau will discover whether this is really a public concern which will have to be addressed. The monetary fix for the problem may prove more beneficial then the release of the assumed hydrographic pattern.

Habitat improvements were being contemplated and are also a part of the proposed $120 million appropriation for endangered species enhancements on the entire Pikeminnow habitat area.

An additional 3,000 acre feet of minor depletions were approved for future development. Questions raised about the validity of the previous 3,000 acre feet charges were bypassed. However, no project to date has been refused outright.

The operations subcommittee voted, over public opposition, to operate Navajo according to the recommendations of the modeling team and biology committee of the RIP program. This occurred before the changes in water supply were known. It resulted in storage of extra supplies of water and filling Navajo Lake so that late summer releases of 2,010 cfs or greater were

required to draw down to safe levels. That was the last act of the committee, which may be re-formed under a new Recovery Program plan.

Florida River: A grant was obtained by the Florida Conservancy District to establish five stream/ditch gages on the Florida River system. The goal is to set up real time satellite monitoring at several key sites. Satellite monitoring equipment at the gage station for the Durango City Pipeline allows for much more accurate administration and flow records. Prior to this installation, the water commissioner needed to collect weekly chart records throughout the season in this rodent infested gage site. He can now "RAS" in to find the real-time flow for five of the top 15 priorities on the Florida river.

La Plata Compact: The rain storms which soaked other areas provided only a bit of relief from Compact obligations. The State Engineers of Colorado and New Mexico met in early April to discuss several issues which have caused many heated interactions over the past several years between officials administering the Compact. One of the key agreements which came out of this meeting was to include the Keller Ditch as part of the upper index amount. Only 30%, of the diversion amount, the consumptive use, are to be accounted for. This may result in a greater delivery requirement but probably will have little overall effect on the Compact. The river was often administrated on a split system between the states due to segments of the stream channel being dry. However, return flows generally met the delivery requirement and excess water was bypassed many times. At times of over delivery, the reservoir (Red Mesa) was able to store some refill, the first time this has been allowed for many years.

Animas – La Plata Compact: As a result of the impasse between parties after the Romer-Schoettler Process, federal officials in Washington examined the recommendations and decided to support one more study, one which considered eighteen structural (with reservoir) or non-structural alternatives. The final report was due at the end of the year. Administration officials and especially Secretary Babbitt seemed eager to conclude the term with some finality. The Project would have no irrigation feature but yet provide a solution to meet Tribal Water Rights obligations as well as supply some municipal water and recreation in a storage vessel. The

Animas-La Plata Board contracted to investigate small diversion ideas on the La Plata drainage which would aid the irrigation use and perhaps be eligible for funding from Colorado sources.

Pine River Domestic Supply: This project was given a developmental loan. However, obstacles caused by federal resistance to use of facilities and a massive public campaign by residents in the Vallecito area stymied plans to proceed this year.

WETPACK: **W**ater for **E**veryone **T**omorrow **PACK**age was a new package of concepts to use water in Montezuma County put forward by John Porter and the Dolores Water Conservancy District. Division 7 assisted with whatever help the Division 7 hydrographer could supply to investigate reservoir inflow from Plateau & Beaver Creek. This project envisions new storage reservoirs and uses for irrigation, fish and municipal/domestic supplies. More will be known when the feasibility study is completed.

Watershed Groups: The Dolores River (DRIP) and Pine River groups continued meeting. Dissension threatened to interrupt progress at times but there still seems to be a unified push to collect water quality data and manage reservoir supplies for stream habitat enhancement. Our office attends these meetings to stay informed and to provide technical assistance and advice when ideas may have an impact on water users with rights.

Water Court: Judge Greg Lyman, like his predecessor, encouraged water actions to continue progressing. Seventy-one cases were received this year and 98 consultations were provided. One case on the Bear Creek Ditch in Water District 30, 96CW21, was opposed by about 10 parties without representation. Since an agreement could not be reached, the Judge ordered a mediation session to be chaired by former Judge Al Haas. The session established separate meetings between the Division Engineer and applicants as well as the applicants and objectors. This effort at mediation served as an alternative to a court hearing. The results were somewhat mixed but, in the end, recommendations may be accepted by all parties.

The District Court in La Plata County undertook a project to image water court evidence and testimony from original cases in the early 1900's. Personnel from our division office

coordinated with the water clerk and the SWWCD to organize these files into a useful tool maximizing the application capabilities. An indexing sheet was prepared showing data from water files (rights). This was incorporated into the files so that testimony or a map might be located easily. The project was progressing slowly at the end of the year.

Seventy one applications were filed with the water court. The reduction in case load allowed the opportunity to finish some of the past pending cases.

Enforcement Actions: No formal actions were filed this year although the orders had been prepared to send in the Spencer Reservoir case. Twenty to thirty orders were sent in Water Districts 30 & 31 to install or replace meters on water diversion structures. Actions were begun on 2 ponds in district 34 and one emergency action was taken on a pond in the Beaver Creek Drainage, east of Bayfield. Failure of this hastily constructed pond would have had a direct route through a new house constructed on the drainage. Nearly all of these actions, except the Mancos ponds, were resolved satisfactorily with no further action necessary. After the call went off, it was decided that orders on the Mancos area ponds should wait until the next shortage period. Due to the extensive pond construction activities in every part of the division, a notice letter was developed for commissioners to hand deliver to people discovered building ponds. They were then given 10 days to respond by filing a notice of intent, a stock tank, or a well permit. Before the season started, over 450 notices were logged into the data bases with 5 to 10 new ones coming in weekly during the summer.

Due to a previous enforcement action against Sierra Verde Estates in the Florida River Drainage, diversions were allowed this year pursuant to a new substitute supply plan. The E.B. Dude Guest Ranch on the Mancos River was discovered to be in a state of major expansion. Quick action led to a substitute supply plan for a resort which had been in existence for many years. A new well was drilled to 1085 feet deep, but the ability to use it was not determined by the end of the year.

CRDSS: Data was used for a comparison with the USBR Modeling efforts. Irrigated acreage discrepancies were checked by Division 7 personnel and several questionable acres were

clarified. New maps were created to assist the demonstration booths for the CWOA conference in Durango.

Public Relations: The office continued participation in the Montezuma County (DWCD Sponsored) and La Plata County (SWCD Board sponsored) water fairs during the spring. This year, the office helped with educational sessions and worked closely with sponsors of the Teachers Conservation Workshop, July 19-23, 1999, which was held for the first time in Durango. It has been an annual event in other western slope towns, but periodically changes in location. Speeches were made for classroom sessions and attended by office personnel at various times. The office staff provided a resource for news groups and other public associations.

CWOA Annual Conference: Division 7 was honored to host the Colorado Water Official Association's Annual Conference this year. A seven person committee consisting of Ken Beegles, Robert Daniels, Glen Humiston, Dave Nelson , John Taylor, Shari Titus ,and Val Valentine was formed to coordinate the major details for this prestigious meeting titled "Changing Faces of Water in the New Millennium". Throughout the year, many long hours were spent preparing for and coordinating the conference activities. All of our division staff and numerous spouses lent a hand in sending out mailings, organizing activities, collecting door prizes, setting up displays at the conference and cleaning up after the two day gathering. There was good attendance both by DWR employees and local water users. Responses from those in attendance were positive. Overall, we feel it was a very successful conference.

Water Commissioner Summaries

Following are individual area comments from commissioners regarding their respective districts:

District 29, San Juan River / Val Valentine

On the eastern front of Division 7, relief came in the nick of time; twice. First with late winter snow, and then in the form of drought quenching rain.

Early to mid-winter was dry. February snow water content was at 72%, but by mid-April was up to normal.

The early irrigation season was normal, and river calls were addressed in early July. Then monsoon rains made the shortest period of administration call in the present Water Commissioner's tenure; fourteen days on Fourmile Creek, 45 days on the Rito Blanco.

In October, the Lower Blanco River Restoration Project was completed. In all, 1.1 miles of river were restored. This *demonstration* project was the result of a grass-root effort of local citizens, conservancy districts, state and federal government agencies.

District 30, Animas River / David Nelson

Late spring snows provided early spring moisture and delayed the beginning of the irrigation season. The irrigation season began around May 1, 1999. Heavy rains began about 3 weeks later and continued for the remainder of the summer and into the fall. No augmentation releases were made this year because no streams went on call due to the heavy rain. Reservoirs did not release water to compensate the stream system for evaporative losses due to the excessive moisture. The winter months were spent assisting Scott Brinton, Division 7 Hydrographer, by both working records and making winter measurements at several gauging stations. This allowed Scott to review the streamflow records for Division 2. Additionally, work was done reviewing old ditch plats during a project to assist the Water Court Clerk for Division 7 in an effort to upgrade the Water Court records. During the spring, summer and fall, public contacts and assistance were exceptionally numerous. Well permits were again a high priority.

A new assistant started work during the last week of May and beginning training was provided during May and June. Steve Barrett learned quickly and provided considerable assistance that continued until the end of September. His help allowed me to keep up with a steady flow of well permits, customers, hydrographic measurements and office duties.

Records were completed by the end of December. The spreadsheet for Johnson Reservoir and the Pine Ridge Ditch that had been developed previously were fine-tuned with considerable expertise from Bob Daniels. A significant amount of time was spent on BLM Water Rights

filings for multiple uses at spring sources with no diversion structures. A tentative agreement was reached between owners on the Bear Creek Ditch regarding a ditch company and operating procedures. This was mediated by Division Engineer Ken Beegles and retired Judge Al Haas.

District 30, Florida River / Harold Baxstrom

The 1999 water year started with a Lemon Reservoir carry-over storage of 14,700 AF. Irrigators chose to curtail irrigation early in the 1998 irrigation season to retain this carry-over level. A minimum release of 9 CFS is required to satisfy Durango City Pipeline through the winter months and an additional 2 to 3 CFS was released continually to maintain adequate flow for power generation.

The 1999 irrigation season started April 1 with a Lemon Reservoir storage level of 17,900 AF. Winter snow pack was minimal but temperature and precipitation were such that the seasonal Spring flows exceeded irrigation demands until the first week of July. By that time the reservoir had reached near full level of 40,000 AF. At this time instead of a normally decreasing reservoir level, as irrigation demands exceeded inflow, unusually heavy summer rains allowed the storage level to remain high. The level was dropped only enough to minimize the threat of downstream flooding. The remainder of the irrigation season resulted in the Florida River System not being placed on administrative "call". At the end of the 1999 water year Lemon Reservoir storage was at a level of 31,172 AF.

Districts 31, 46, Pine River & Siembritas Arroyo/ Hal Pierce & Robert Daniels

Water District 31 had a very different but good water year. The season started off short of snow pack and then the rains started. The Vallecito Weather Station recorded 26.92 inches of moisture from April 1, 1999 through September 30, 1999, while the Vallecito Snotel recorded about 33 inches of precipitation during the same period. The river went on call on July 10, 1999 and the call was released on July 19, 1999. Due to lake level management and the amount of precipitation the call remained off for the remainder of the year. The Vallecito Water Company continues to pursue their plans for the development of a rural water system and they might be close to the minimum 920 water taps required by a federal funding agency before building distribution lines can start.

District 32, McElmo Creek / Marty Robbins

Water District 32 started out slowly. We started into the new water year dry and in desperate need for rain. Due to the extreme dryness, recipients did not use their allotted shares from the Dolores Project in late May and early June. This resulted in a short water supply to most of the decreed water rights. Most of our decreed water right holders used the short water supply most responsibly. It started to rain in late June and we were relieved of all the pressures of the shortage. Through out the rest of the water year we had a good water season. Many notices of intents for new ponds were signed and many new water applications were filed. All in all, we had a great year.

District 33, La Plata River / Matthew Schmitt & Wallace Patcheck

My first year as full time water commissioner was interesting. We had good fall moisture, a very dry early winter and a cold wet spring. Larger river diurnals made for difficult compact deliveries to New Mexico. La Plata River and Cherry Creek, #10, was the most senior ditch curtailed. Mid-summer rains made this drier than normal year bearable for the users. The lower part of the river went off call because of the rains and the Red Mesa Reservoir filled and spilled during this time. Late fall was drier than normal. It was another strange year on the La Plata River system.

District 34, Mancos River / Glen Humiston

The Cortez Office has stayed pretty busy this 1999 water year.

We have had several requests for water wells, notice of intent impoundment structures and help with filling out the appropriate forms. Also we have had considerable interest in surface filings, what does adjudication mean, and what individual water rights consisted of.

We spent quite a bit of time helping to plan the Annual CWOA meeting. All in all I believe that it went well and was a real success.

I believe that the Cortez office has been very beneficial in providing service to the people who live in the western reaches of Water Division 7.

Water District No. 34 enjoyed a very good water year. The winter of 1998/1999 started out very dry and a little scary. Then spring and the snows came, reservoirs filled and the temperatures were conducive to an extended snow melt and runoff. Around the 4th of July the Mancos River began a rapid drop-off. Priority No. 17 of the 1893 decree was established on the 6th day of July as the priority call by a call for water from the Frank Ditch. The rain began a few days later and the River call was removed to a free river on the 20th day of July. It rained until sometime in September. There was lots of pretty green pastures and hay fields but an awful lot of rain damaged hay went into the barns and haystacks. The 1999 water year closed out with a higher than average carry over storage in storage reservoirs. Thus should be very beneficial in case we do not get an adequate snow pack this winter.

District 69, Disappointment Creek / Robert Becker

Due to the late spring snowfall and early summer rains the Disappointment Creek water users delayed turning on their diversions and in some instances curtailed water use entirely. Contributing to the decreasing use was the subdivision development of 2500 acres, under the Evans No. 1 & 2 ditch's, into 35-acre parcels. Many others delayed bringing cattle to their summer range due to the abundance of Larkspur.

District 71, Dolores River / Robert Becker

The district began the irrigation year with fall rains and then encountered an abnormally dry period, until late April and early May. Heavy snows then increased the snow pack to near average. Scattered intermittent rain showers continued through most of the summer, resulting in decreased diversion for irrigation.

Well permits showed a 33% increase over 1998 and other public assistance contacts regarding water filings, pond applications and ground water uses also increased over the prior year.

District 77, Navajo River / Sherry Schutz

District 77 and the Chromo Valley is an ever popular spot and vastly changing. With all the moisture we had this last Late Spring and Summer, there was not a need for disagreements over a shortage of water, just disagreements over how more than one person can use water on the same ditch.

San Juan Chama Project diverted:
58,690 AF out of Blanco
2,040 AF out of Little Navajo
55,980 AF out of Navajo

With a Total diverted of 116,710 AF. The average diverted since the beginning of the diversion in 1971 is 89,377 AF. This year is 131% of average with it being the 8th highest year of diversions. Harris Bros. And Boone #2 Reservoir is still restricted to no storage until repairs are done. However, Bruce and I went up to inspect Buckles and Harris by horses and have since found out the Forest Service is classifying the "Moss Island" in Harris Lake as a fen and wants it protected.

District 78 & 29, Upper Piedra & Upper San Juan / John Taylor

The summer irrigation season of 1999 was very different from my perspective. Lack of snow pack during the winter seemed to indicate a critical water shortage for mid to late summer. Then a major snowstorm in late April brought the snow-pack to a near normal level. More precipitation followed with some strong isolated rainfalls causing local flooding problems. Some ditches were turned on once or twice, or in some cases, not at all and left off for the rest of the year. I experienced no conflicts between water users in my areas due to water shortages. The Upper Piedra area was especially quiet, but ongoing construction on West Fork, and new activity from new owners on East Fork of the San Juan took a considerable amount of my time. Following a very wet summer, we experienced a long dry fall and have gone into winter with a shortage of ground moisture and poor prospects for next summer's water supplies. It was definitely a different kind of water year.

Well applications became a major part of my office work, and I made more onsite checks of well drilling rigs this year. Pond applications and inspections also took more time than in the past. Paper work associated with my water commissioner activities also seemed to take up considerably more of my time. I spent more time on year-end records but feel confident that they are more accurate and complete than in the past. Planning for the Annual CWOA meeting in our division also took up a significant amount of time. Although that work was fun and the resulting meeting was very successful in my opinion, I am glad that someone else has the program for the coming year.

Hydrographic Report / Scott Brinton

Streamflow was slightly below normal for the year. Streamflow records for the 1998 Water Year were completed and delivered to the chief hydrographer for publication. Four records were published by the USGS. Twenty-three records were published in the Colorado Division of Water Resources yearly publication.

The Division 7 hydrographer made 138 river measurements and 32 ditch measurements this year. Water commissioners in Division 7 made 93 river measurements and 30 ditch measurements.

No new construction projects were undertaken this year in Division Seven. The hydrographer assisted in record preparation and review in Division 2 after the retirement of the lead hydrographer.

Dam Safety Report

No Dam Safety report was available. However, new construction was monitored at the Mountain View Dam and Gomez Reservoir in Archuleta County. Spencer Reservoir was breached pending repairs to the outlet structure. Summit Reservoir was completed. Much effort was required to monitor this structure as it filled. An emergency breach of a stock dam was supervised by the Division Engineer and Water Commissioners north of Cortez. A potential dam safety problem was eliminated in La Plata County on Beaver Creek when water commissioners found a new dam being constructed improperly on a draw obstructed by a home. Reductions in height and rerouting of water served to create a more secure situation. Barrett Pond No. 1 (Four-Mile Drainage in district 78) was drained per order when spillway repairs had not been completed. The staff did excellent work by filling in for the vacancy and were assisted, at least verbally, by the former inspector, Mr. Kugel, from his new location.

CURRENT YEAR OFFICE REPORT

The major event for the office was caused by the boom in building in the Durango Area. With the federal agencies relocating to their new buildings, the old Federal Building was left open at the coincidental time that the Division Seven office lease was up for renewal. The opportunity to

move allowed staff to work together in planning a layout more suitable to the office functions. The increased space was very welcome and the office staff was generally happy to make the change, taking the opportunity to clean and fix up their surroundings. A much more professional presentation was enabled.

A new COFRS procedure was installed and maintained to keep payments processed timely. The budget was finalized and held to within 99% of the operating expense allowed. Mileage was saved by using state-owned vehicles effectively and also because administrative conditions did not require constant monitoring of diversions in many areas.

The reorganization of the hydro branch caused a loss in flexibility to use the Satellite Monitoring budget to enable the hydrographer to perform statewide duties. Nevertheless, he and the Assistant Division Engineer were instrumental in providing review work for hydrographic records in other parts of the state so the program could meet its deadlines in 1999.

Personnel Changes The retirement of a 35 year veteran, J. Russell Kennedy and transfer of Dam Safety Engineer, Frank Kugel, kept the managers busy filling not only their positions, but also the vacancy in the deputy water commissioner position which followed. The former deputy in District 33, Matthew Schmitt, was appointed lead Water Commissioner and Wallace Patcheck gained the deputy position in that district. Steve Barrett qualified to take the Animas River deputy position as it was opened up to be filled permanently. The office Administrative Assistant was promoted to Program Assistant I after a considerable delay. Shari Titus has accepted more responsibility partly because of the growth in business and partly from decentralization. The total FTE has not increased, except for the 4 man-months gained from Groundwater Permitting Decentralization, since 1985 when the dam safety inspector was moved from Denver.

Technical Equipment Computers were maintained well. Some failures of hard drives were experienced and a few of the obsolete machines (486 and P-60's) were taken out of service. A new server was installed in Durango, and the reuse of some computers allowed the field offices to have more than one machine. Computer use and reliance has continued to increase. The field

staff has generally significantly enlarged their capabilities to create and transfer files. Real time data access has become an integral part of the operation. The loss of the GPS coordinator and Training Officer left our office without needed support, but other personnel filled in where possible.

B. UPCOMING YEAR

In the upcoming year, many of the same issues will be facing the Division. Some of them will require a new approach to reflect changing circumstances;

Interstate, Interdivisional, Tribal Issues:

1. SJRIP The recovery program is re-forming for a new period of effort, The research teams need to make way for recovery alternatives. The hydrology committee, once formed, will need to carefully consider and participate in the Navajo operation plan.

2. San Juan Chama Events on the Rio Grande are having significant impacts on the San Juan-Chama diversion. A vocal element continues to press for more releases on the western side to fishery habitat improvements. River channel work may also be proposed on the Navajo River.

This office will be attempting to convince the USBR that meeting the instream flows and maximizing diversions may be mutually achievable. This will be a challenge as the New Mexico Interstate Stream Commission will be involved more actively.

3. Transport of Water Continued pressure will be exerted to take water from basins of surplus to basins with financial or economic need. This conflict could cause violations of the Tribal Settlement agreement and interstate compact as well as the state law.

4. La Plata Compact The La Plata Compact continues to be a challenge to operate. If a new meeting to seek agreements with New Mexico occurs, there may be a chance for a firmer Memorandum of Understanding and trust issues may be improved significantly.

5. CRDSS Model State officials will need to continue scrutinizing the basin model for the Colorado River to determine if the Riverware software is succeeding in predicting river use or yield.

6. Endangered Species Efforts made to improve habitat for the endangered species will need to be supported. As more is learned and tested, it will be come apparent which fate is available to these species and how much it will cost to restore their populations.

Intrastate Issues:

1. BLM Wilderness creation threatens further development of water rights as it could create a reason for reserved rights downstream of other diversions.

2. A pilot program to enforce instream flow rights held by the CWCB may be tried in Division Seven. This may have interesting consequences. However, the collection of data will be helpful. More personnel time is needed to add this duty but it could be a good way to work cooperatively with the Board and the Division of Wildlife.

3. More progress is likely in development of Rural Domestic Supply lines in La Plata County. This is a long-term improvement, but will cause changes in economic life in this part of the state. The number of well permits may be reduced eventually.

4. Water Shed Groups These groups are on the threshold of decisions regarding their mission. Although the Animas group has been very successful and accomplished some important water quality goals, the future of these groups may be varied.

5. Pond Construction As more ponds are dug and water use is changed, it appears likely that a future clash may occur when some of these are shorted by priority deliveries or by supply. Litigation may be required.

6. Changing Use Patterns The subdivision of the large tracts of land has led to or revealed a fundamental shift in interest by residents. There is some speculation that the effects of disuse of land are just now beginning to be realized. The smaller tracts will not be suitable for professional farming, but may be somewhat productive depending on the location. Wealthier landowners may do more work on improving the land. In other areas, the lack of strict controls will lead to multiple uses which will take some land out of production. There are only a few areas on the lower streams where there currently appears to be an opportunity for irrigation enlargement.

Water Administration Impact

Following are issues, cases and statutes that we see as having had a significant impact on division operation in 1999.

A. San Juan Basin Recovery Implementing Program
B. Indian Water Rights Settlement of 1986
C. Animas-La Plata Project
D. Endangered Species Act
E. Clean Water Act
F. Groundwater Case Law
G. FLSA & Pay for Performance
H. Groundwater Regulations & Policies
I. Changing growth trends in the State
J. Colorado River Storage Act
K. La Plata River Compact
L. Animas-La Plata Compact
M. Thorton Case Decision of 1998
N. Development of 2000 Abandonment List

Involvement with Water User Community

Last year our office participated in program efforts to provide children's water programs in both Montezuma and La Plata Counties. Negotiation meetings were organized or supported for organizing the Forest Service reserved rights negotiations. A tabletop three dimensional water display built by Marty Robbins was used effectively. Other educational programs were supported and individual talks were made before several organizations or classes.

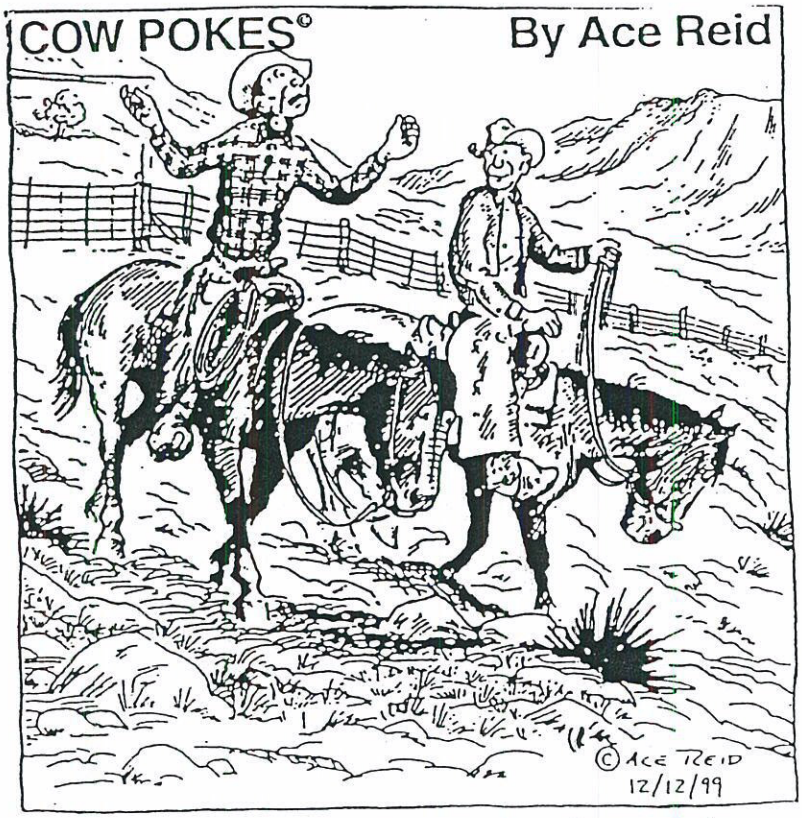
Groups and Agencies the division office was involved with were:

Dolores Watershed Group, DRIP
Pine River Watershed Group
Durango City Water Board
Southwestern Water Conservation District
Animas-La Plata River Conservancy District
La Plata River Conservancy District
Dolores Water Conservancy District
Mancos Water Conservancy District
San Juan RIP-Hydrology Committee
SJRIP Water Users Group
Pine River Irrigation District
San Juan Water Conservancy District
Water Information Program – SWWCD
Rio Blanco Advisory Group
San Juan – Upper Animas Watershed Group
Teacher Water Workshop Committee
Florida Water Conservancy District
US Forest Service – Water Rights Negotiating team

State Organizations:

CAPE
Colorado Water Officials Association
DWR Employees Council
Leadership Council, DWR
Training Steering Committee
Long Range Plan Development Group

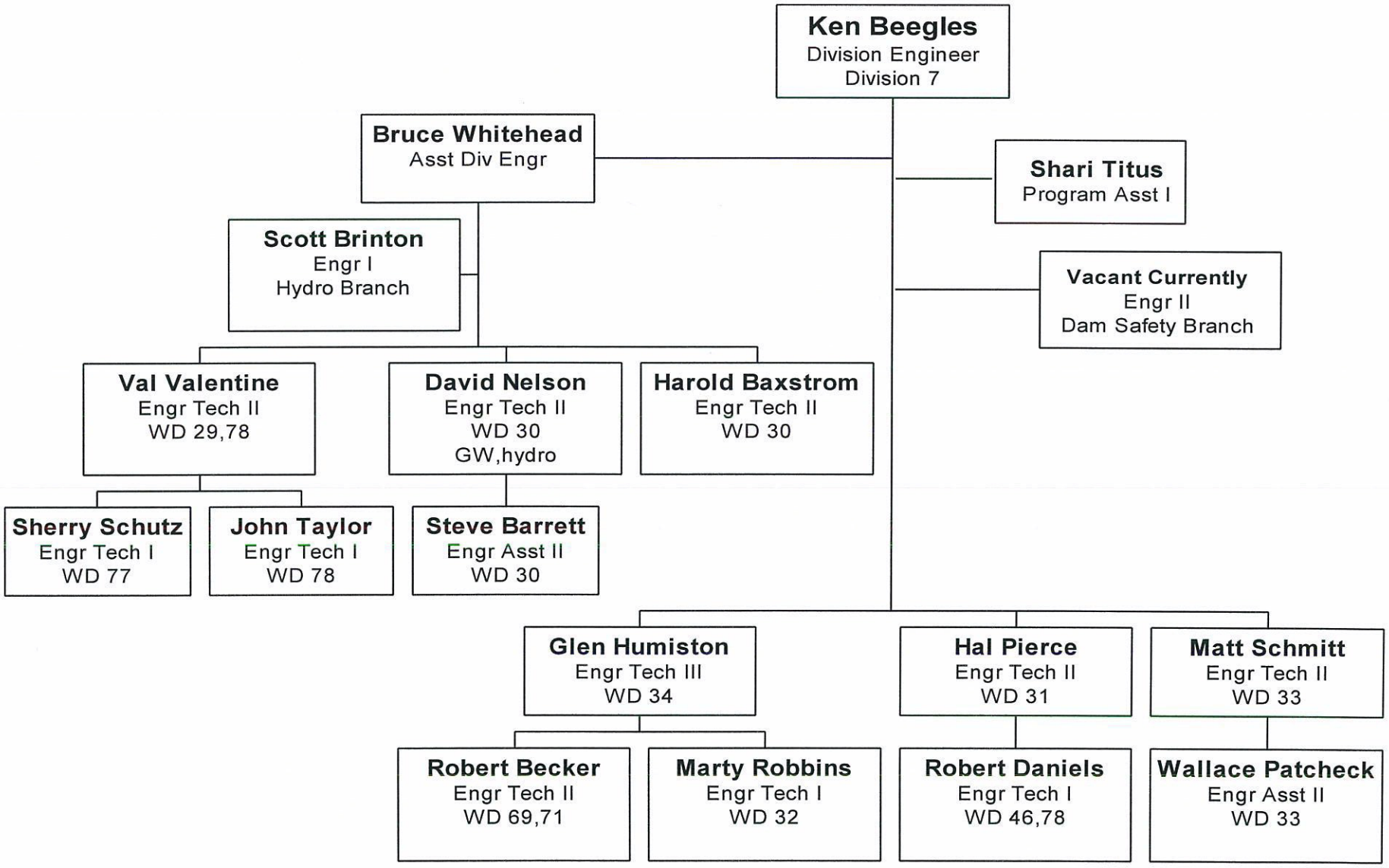
Division Seven has appreciated the advice and assistance it has received from neighboring divisions and the State Engineers office. The staff has been instrumental through dedication and hard work in maintaining a positive and constructive impact on citizens and water users in this part of the State. The foresight which they have shown has allowed us to stay close to the changing growth patterns and adapt to new public pressures on an ever-short commodity which everyone needs. The teamwork and support for the Water Resources Mission are qualities which should be commended to all those in the staff in Division 7.

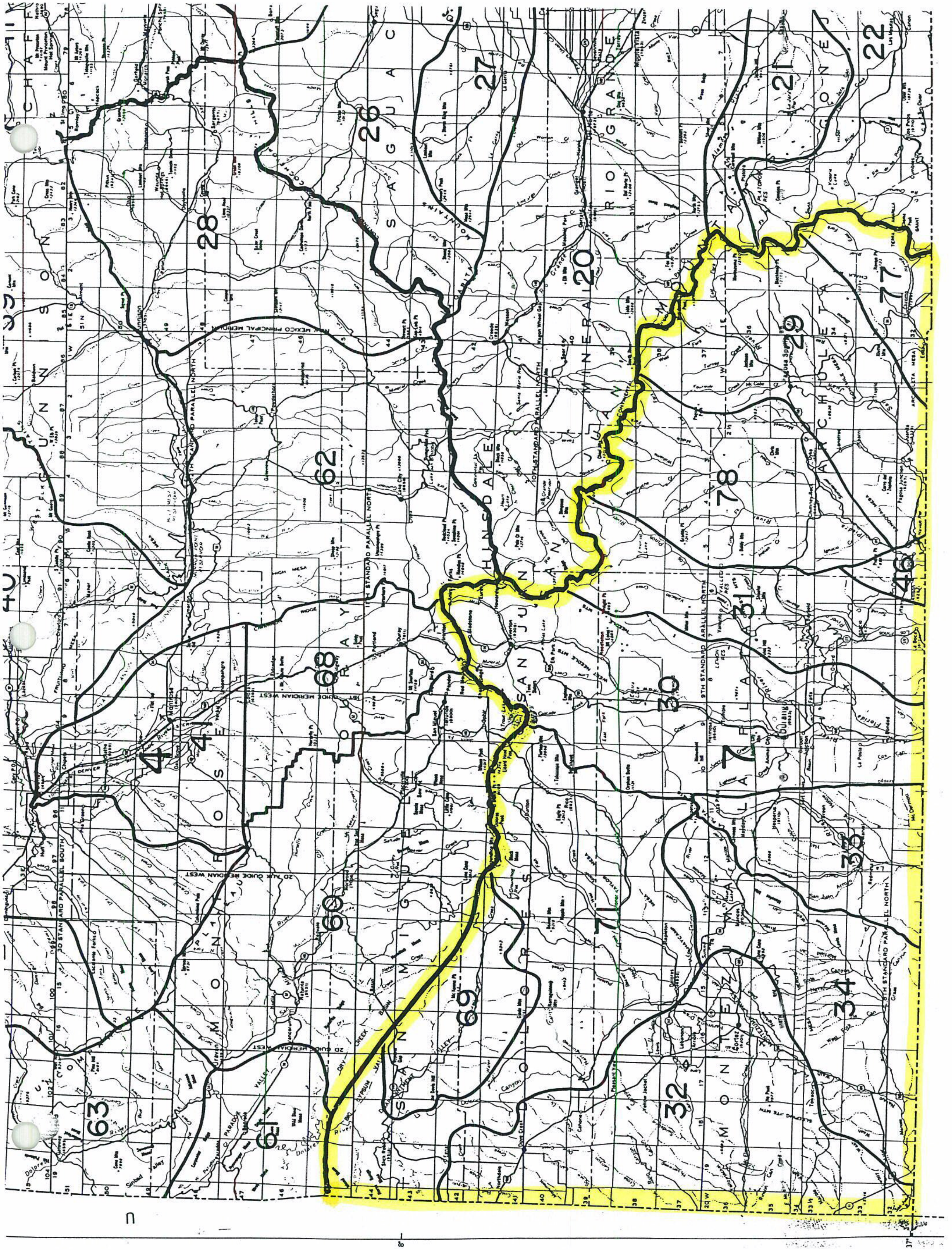


"Yep, this is God's country shore-nuf: low humidity, mild winters and rain pert near every five years."

Dolores Star
January 13, 2000

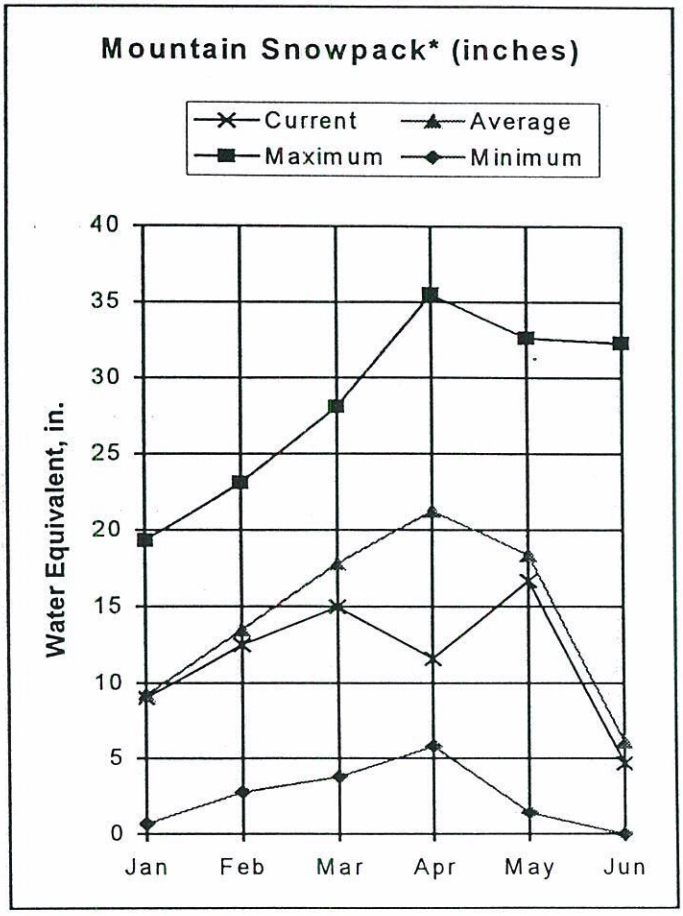
Division 7
Organizational Chart

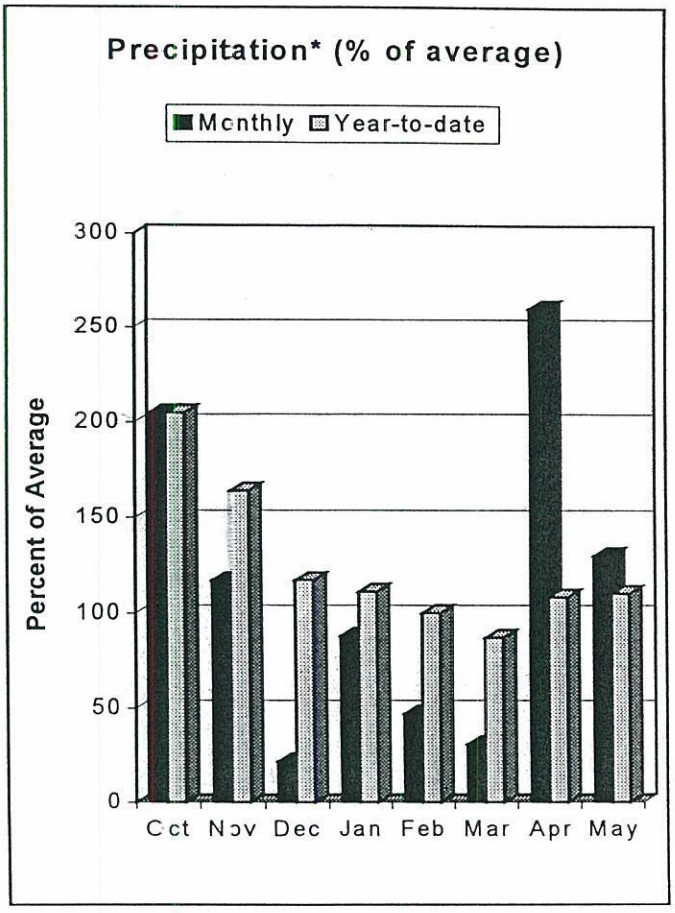




SAN JUAN
HINSDALE
MINERAL
RIO GRANDE
ARCHULETA
LA PLATA
MONTEZUMA
DOLORES
SAN MIGUEL
OURAY
MONTROSE
SAGUACHE
GUNNISON
NEW MEXICO PRINCIPAL MERIDIAN
10TH STANDARD PARALLEL NORTH
9TH STANDARD PARALLEL NORTH
8TH STANDARD PARALLEL NORTH
1ST GUIDE MERIDIAN WEST
2D GUIDE MERIDIAN WEST
3D STANDARD PARALLEL SOUTH
HIGH MESA
20
21
22
26
27
28
29
30
31
32
33
34
41
46
60
61
62
63
68
69
71
77
78

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS as of June 1, 1999





*Based on selected stations

Unseasonable snowfall that began in April continued to bring large amounts of snow to these basins during early May. The snowpack went from well below average conditions, to well above average conditions in only a few days. At one point the amount of snowpack was near the average seasonal maximum (April 1). Warmer temperatures during the second half of May have melted the snowpack back to below average conditions. The snowpack is only 85% of average on June 1. Reservoir storage in the basin is 108% of average, which is about the same as last year at this time. All of the streamflow forecasts for this runoff season have remained below average and are similar to last months forecast. They range from only 47% of average at the Gurley Reservoir Intake, to 92% of average at the inflow to Vallecito Reservoir.

TRANSMOUNTAIN DIVERSION SUMMARY ----- OUTFLOWS

SOURCE								RECIPIENT		
				10-YEAR AVG.		CURRENT YEAR				
WD	ID	NAME	STREAM	AF	DAYS	AF	DAYS	WD	ID	STREAM
29	4669	TREASURE PASS DITCH	SAN JUAN RIVER	98.74	29	367	85	20	921	RIO GRANDE RIVER
30	4660	CARBON LAKE DITCH	ANIMAS RIVER	248.9	91.5	779	123	68	692	UNCOMPAHGRE RIVER
30	4661	MINERAL POINT DITCH	ANIMAS RIVER	104.84	50.3	151	75	68	609	UNCOMPAHGRE RIVER
30	4662	RED MOUNTAIN DITCH	ANIMAS RIVER	68.67	60.6	24	67	68,41	604,549	UNCOMPAHGRE RIVER
31	4638	PINE RIVER-WEMINUCHE PASS D.	PINE RIVER	426.69	64.6	1105	74	20	919	RIO GRANDE RIVER
31	4637	WEMINUCHE PASS DITCH	PINE RIVER	652.2	37.4	3404	66	20	922	RIO GRANDE RIVER
78	4672	WILLIAMS CREEK-SQUAW PASS D.	PIEDRA RIVER	308.08	72.6	746	102	20	923	RIO GRANDE RIVER
78	4670	DON LA FONT #1 (S RIVER PEAK)	PIEDRA RIVER	23.44	22.9	0	0	20	917	RIO GRANDE RIVER
78	4671	DON LA FONT #2 (PIEDRA PASS D.)	PIEDRA RIVER	174.83	62.1	0	0	20	918	RIO GRANDE RIVER

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of
				AF	Date	AF	Date	Year
29	3654	Echo Canyon Reservoir	Echo Creek	2,148.8	11/01/98	2,148.8	10/29/99	2,148.8
29	3644	Borns Lake Reservoir	West Fk. San Juan R.	67.9	11/01/98	67.9	10/31/99	67.9
29	3682	Thomas Reservoir	San Juan R.	20.0	05/25/99	58.0	11/01/98	20.0
		Total of all < 50 AF		111.0		139.4		115.9
Total for District 29				2,347.7		2,414.1		2,352.6

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of
				AF	Date	AF	Date	Year
30	3534	Andrews Lake	Lime Creek	131.0	11/01/98	131.0	10/15/99	131.0
30	3536	Cascade	Elbert Creek	10,850.0	03/25/99	23,218.0	06/21/99	19,526.0
30	3540	Haviland Lake	Elbert Creek	526.0	11/01/98	526.0	10/31/99	526.0
30	3546	Ice Lake	Elbert Creek	416.0	11/01/98	416.0	10/31/99	416.0
30	3547	Keeler Lake	Elbert Creek	488.0	11/01/98	488.0	10/31/99	488.0
30	3548	Lake of the Pines	Little Cascade Creek	114.0	11/01/98	114.0	10/31/99	114.0
30	3560	Turner Ponds	Animas River	84.0	11/01/98	84.0	10/31/99	84.0
30	3561	Turner Reservoir	Waterfall Creek	356.0	11/01/98	472.0	05/17/99	432.0
30	3576	Florida Canal and Res	Florida River	0.0	11/04/98	422.0	09/09/99	385.0
30	3581	Lemon Reservoir	Florida River	14,790.0	11/02/98	39,439.0	08/02/99	31,172.0
30	3622	Henderson Lake	Animas River	58.0	11/01/98	58.0	10/31/99	58.0
30	3625	Naegelin Lake	Junction Creek	225.0	11/01/98	300.0	09/09/99	270.0
30	3630	Twilight Lake	Purgatory Creek	60.0	11/01/98	60.0	10/31/99	60.0
30	3707	Johnson Reservoir	Coal Creek	838.0	11/01/98	942.0	05/13/99	889.0
30	3724	Johnson Lake #2	Wildcat Canyon	130.0	11/01/99	150.0	05/13/99	130.0
		Total of all < 50 AF		313.8		367.8		359.3
		Total for District 30		29,379.8		67,187.8		55,040.3

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of
				AF	Date	AF	Date	Year
31	3518	Vallecito Reservoir	Pine River	65,264.7	10/25/99	125,301.8	06/10/99	65,393.1
31	3617	Wommer Reservoir	Little Bear Creek	208.5	11/01/98	208.5	10/30/99	208.5
		Total of all < 50 AF		0.0		0.0		0.0
Total for District 31				65,473.2		125,510.3		65,601.6

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of
				AF	Date	AF	Date	Year
32	3601	Totten Reservoir	Transbasin Water	1,959.0	10/18/99	2,605.0	06/15/99	1,959.0
32	3602	Narraguinnep Reservoir	Transbasin Water	14,219.4	10/07/99	18,671.6	10/19/99	18,440.9
32	3603	A M Puett Reservoir	Transbasin Water	469.0	11/01/98	2,402.0	05/01/99	469.0
		Total of all < 50 AF		90.7		90.7		90.7
Total for District 32				16,738.1		23,769.3		20,959.6

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of
				AF	Date	AF	Date	Year
33	3522	Red Mesa Ward Reservoi	Hay Gulch	345.0	11/01/98	1,209.0	09/02/99	1,009.0
33	3523	Taylor Reservoir	La Plata River	85.6	04/01/99	85.6	10/31/98	85.6
		Total of all < 50 AF		0.0		0.0		0.0
Total for District 33				430.6		1,294.6		1,094.6

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of
				AF	Date	AF	Date	Year
34	3585	Bauer Reservoir No 1	Crystal Creek	74.8	03/17/99	353.0	04/20/99	107.0
34	3586	Bauer Reservoir No 2	Chicken Creek	978.0	10/31/99	1,532.9	05/03/99	978.0
34	3589	Jackson Gulch Reservoir	West Fork Mancos R	4,151.0	11/01/98	9,996.0	06/01/99	6,954.0
34	3590	L A Bar Reservoir	Chicken Creek	8.6	11/01/98	73.3	05/07/99	34.7
34	3592	Sellers & McClane Res	Mud Creek	7.3	09/01/99	52.1	05/05/99	7.3
34	3594	Weber	Middle Fork Mancos R	154.0	10/31/99	458.9	04/20/99	154.0
		Total of all < 50 AF		34.3		56.4		40.5
Total for District 34				5,408.0		12,522.6		8,275.5

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of
				AF	Date	AF	Date	Year
69	3529	Belmar Lake Reservoir	Rincone Creek	266.2	10/12/99	405.8	05/12/99	266.2
69	3530	Dunham Reservoir	Disappointment Creek	78.8	11/01/98	78.8	10/31/99	78.8
69	3532	Morrison Reservoir	Morrison Creek	100.2	07/23/99	116.3	11/01/98	100.2
		Total of all < 50 AF		15.3		50.6		50.6
Total for District 69				460.5		651.5		495.8

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of
				AF	Date	AF	Date	Year
71	3606	Big Pine Reservoir	Lost Canyon	12.3	08/06/99	259.0	04/12/99	52.8
71	3607	Buck Pasture Reservoir	Beaver Creek	20.1	11/01/98	53.0	04/01/99	20.1
71	3610	Ethel Belmear Reservoir	Beaver Creek	87.3	11/01/98	87.3	10/31/99	87.3
71	3612	Groundhog Reservoir	Groundhog Creek	16,288.0	10/06/99	21,710.0	05/20/99	16,288.0
71	3613	Lost Canyon Lake	Lost Canyon	106.2	11/01/98	106.2	10/31/99	106.2
71	3614	McPhee Reservoir	Dolores River	258,226.0	11/01/98	380,937.0	06/30/99	329,680.0
71	3619	Summit Reservoir	Lost Canyon	194.0	11/01/98	4,578.0	05/12/99	571.0
		Total of all < 50 AF		11.7		16.2		16.2
Total for District 71				274,945.6		407,746.7		346,821.6

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of
				AF	Date	AF	Date	Year
77	3512	Spence Reservoir	Coyote Creek	297.0	07/01/99	365.0	05/27/99	309.0
77	3696	Sappington Reservoir	Coyote Creek	234.0	11/01/98	302.0	05/27/99	236.0
		Total of all < 50 AF		15.4		15.4		15.4
Total for District 77				546.4		682.4		560.4

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR	SOURCE STREAM	AMOUNT IN STORAGE (AF)				
				Minimum		Maximum		End of
				AF	Date	AF	Date	Year
78	3624	Dunagan Reservoir	Stollsteimer Creek	6.3	11/01/98	93.4	04/16/99	88.7
78	3626	G S Hatcher	Stollsteimer Creek	1,250.0	11/01/98	1,735.0	05/03/99	1,604.9
78	3629	Linn and Clark Reservoir	Dutton Creek	1,109.0	11/01/98	1,230.0	03/05/99	1,230.0
78	3633	Pargin Reservoir	Stollsteimer Creek	0.0	11/01/98	0.0	10/29/99	0.0
78	3636	Pinõn Lake	Dutton Creek	89.2	11/01/98	162.0	03/29/99	151.0
78	3642	Williams Creek Reservoir	Williams Creek	10,084.0	11/01/98	10,084.0	10/31/99	10,084.0
78	3644	Lake Forest	Dutton Creek	401.7	11/01/98	465.0	02/25/99	465.0
78	3645	Stevens Reservoir	Dutton Creek	470.3	11/01/98	635.0	03/29/99	635.0
78	3646	Town Center Lake	Dutton Creek	347.5	11/01/98	630.0	02/28/99	583.0
78	3650	Palisade Lake	Middle Fork Piedra R	50.0	11/01/98	50.0	10/31/99	50.0
		Total of all < 50 AF		109.1		151.0		148.4
Total for District 78				13,917.1		15,235.4		15,040.0

1999 WATER DIVERSION SUMMARIES

WD	STRUCTURES REPORTING			ALL OTHER STRUCTURES		ESTIMATED NUMBER OF VISITS TO STRUCTURE	TOTAL DIVERSIONS (ACRE-FEET)	TOTAL DIVERSIONS TO STORAGE (ACRE-FEET)	TO IRRIGATION		
	WITH RECORD (1)	NO WATER AVAILABLE (2)	NO WATER TAKEN (3)	NO INFORMATION AVAILABLE (4)	NO RECORD (5)				TOTAL DIVERSIONS (ACRE-FEET)	NUMBER OF ACRES IRRIGATED	AVERAGE ACRE-FEET PER ACRE
29	310	6	191	9	0	3,113	104,053	74	30,877	11,002	2.81
30	866	29	476	0	0	10,259	294,940	43,596	133,561	31,209	4.28
31	297	19	186	5	0	8,543	504,297	73,784	179,225	48,125	3.72
32 *	287	2	196	24	0	3,327	305,583	10,262	231,533	70,334	3.29
33	163	33	60	2	0	5,809	43,287	1,549	35,687	10,816	3.30
34 **	249	5	43	20	0	2,539	50,694	7,746	36,076	11,180	3.23
46	49	7	6	0	0	793	5,282	0	2,759	970	2.84
69	26	0	18	0	0	191	5,347	141	4,841	1,080	4.48
71	137	0	83	0	0	4,389	367,262	156,251	10,474	2,037	5.14
77***	111	0	52	1	0	1,582	69,734	189	9,380	1,801	5.21
78	169	2	75	3	0	1,710	24,194	2,461	16,201	5,708	2.84
TOTAL	2,664	103	1,386	64	0	42,255	1,774,673	296,053	690,614	194,262	3.56

Definitions:

(1) Count of structures with CIU=A and NUC=blank
(2) Count of structures with CIU=A and NUC=B
(3) Count of structures with CIU=A and NUC={A,C,D} + CIU=I
(4) Count of structures with CIU=A and NUC={E,F}
(5) Count of structures with CIU=U

* Total Deliveries from Dolores River Basin, Dist. 71, 232,888 A.F. of which 172,941 were for irrigation.
** Total Deliveries from Dolores River Basin, Dist. 71, 418 A.F. of which 399 were for irrigation.
*** Total Deliveries from Dist. 29, 160 A.F.

1999 WATER DIVERSION SUMMARIES TO VARIOUS USES

WD	TRANSMOUNTAIN OUTFLOW	TRANSBASIN OUTFLOW	MUNICIPAL	COMMERCIAL	INDUSTRIAL	RECREATION	FISHERY	DOMESTIC & HOUSEHOLD	STOCK
29***	367	5,080	867	748	0	0	4,187	91	1,593
30	954	0	4,755	1,003	441	406	13,679	237	25,599
31	4,509	0	896	141	4	0	1,248	74	620
32 *	0	0	5,440	1	0	0	0	7	389
33	0	609	0	4	0	0	0	33	3,560
34	0	0	1,056	1	0	0	1,101	13	4,682
46	0	0	0	0	0	587	0	0	31
69	0	0	0	0	0	0	362	1	2
71 **	189,495	0	418	1	15	8	6,465	13	484
77	0	0	0	0	0	0	1,415	55	78
78	746	0	1,294	38	0	0	1,486	71	1,150
TOTAL	196,071	5,689	14,726	1,937	460	1,001	29,943	595	38,188

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

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

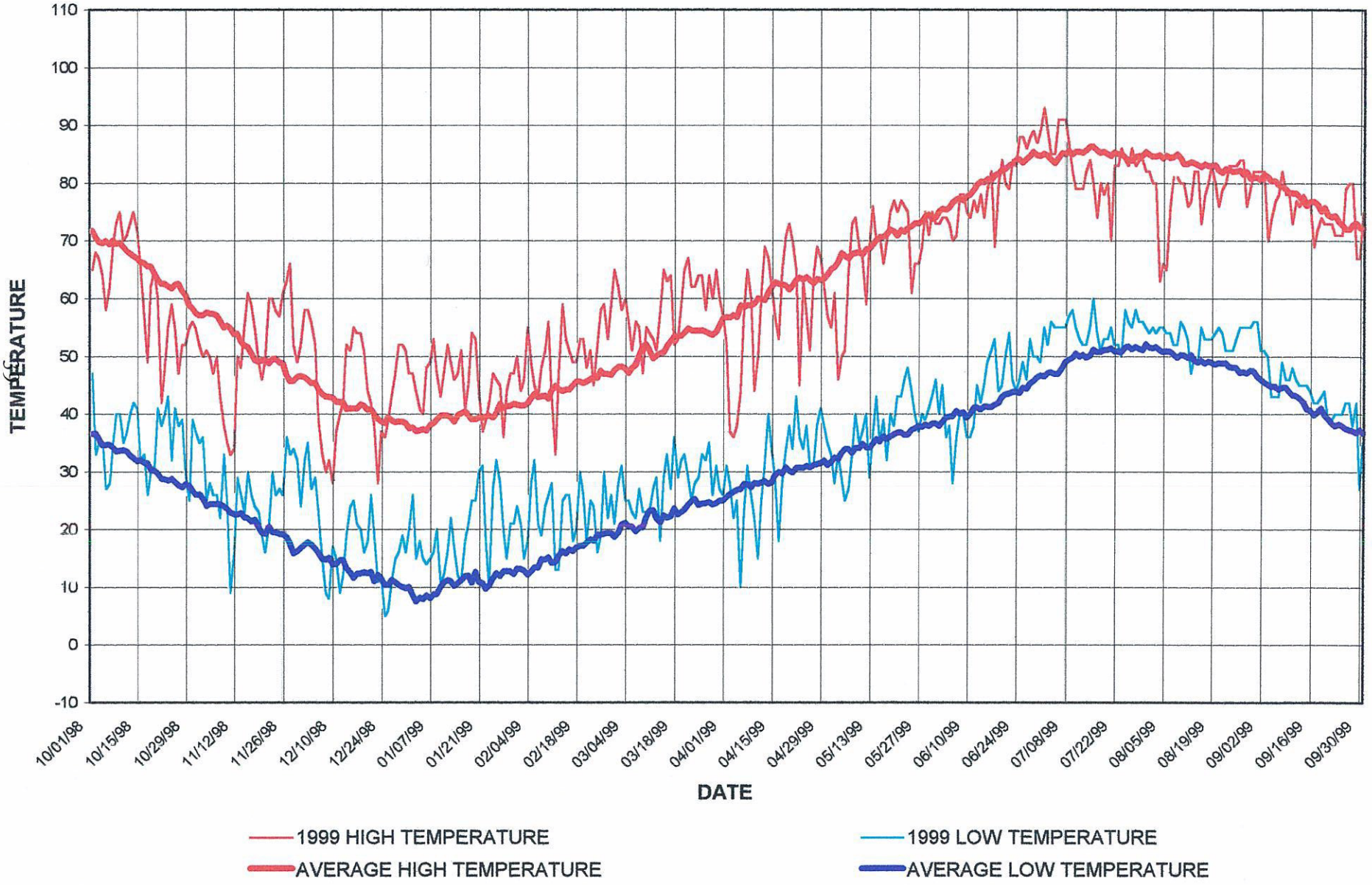
*** Transbasin outflow in Dist 29 includes 160 af to Dist. 77. Remainder is Trans Sub-basin diversion in Snowball Ditch System.

1999 WATER DIVERSION SUMMARIES TO VARIOUS USES (CONTINUED)

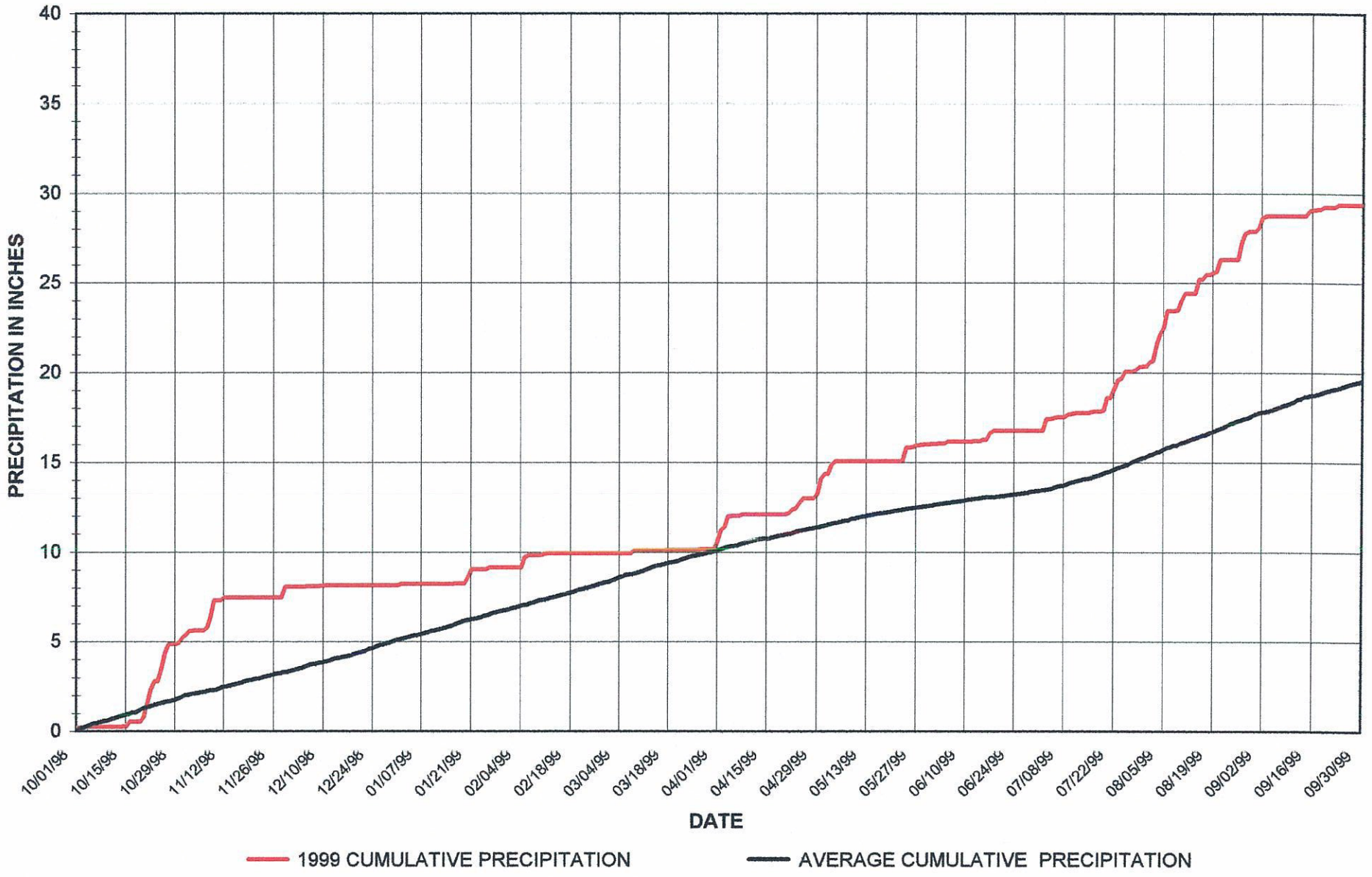
WD	AUGMENTATION	EVAPORATION	GEOTHERMAL *	SNOWMAKING	MINIMUM STREAMFLOW	POWER GENERATION	WILDLIFE	RECHARGES	OTHER
29	0	0	0	0	0	0	0	0	0
30	17	807	0	68	0	52,973	0	67	0
31	149	2,997	0	0	0	240,801	0	0	0
32	45	0	0	0	0	44,081	1	0	0
33	1	0	0	0	0	0	0	1	145
34	0	1	0	0	0	14,281	0	20	0
46	0	0	0	0	0	0	0	0	0
69	0	0	0	0	0	0	0	0	0
71	47	0	0	0	0	22,990	0	0	0
77	0	0	0	0	0	0	0	0	0
78	0	0	0	0	0	0	0	0	0
TOTAL	259	3,805	0	68	0	375,126	1	88	145

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

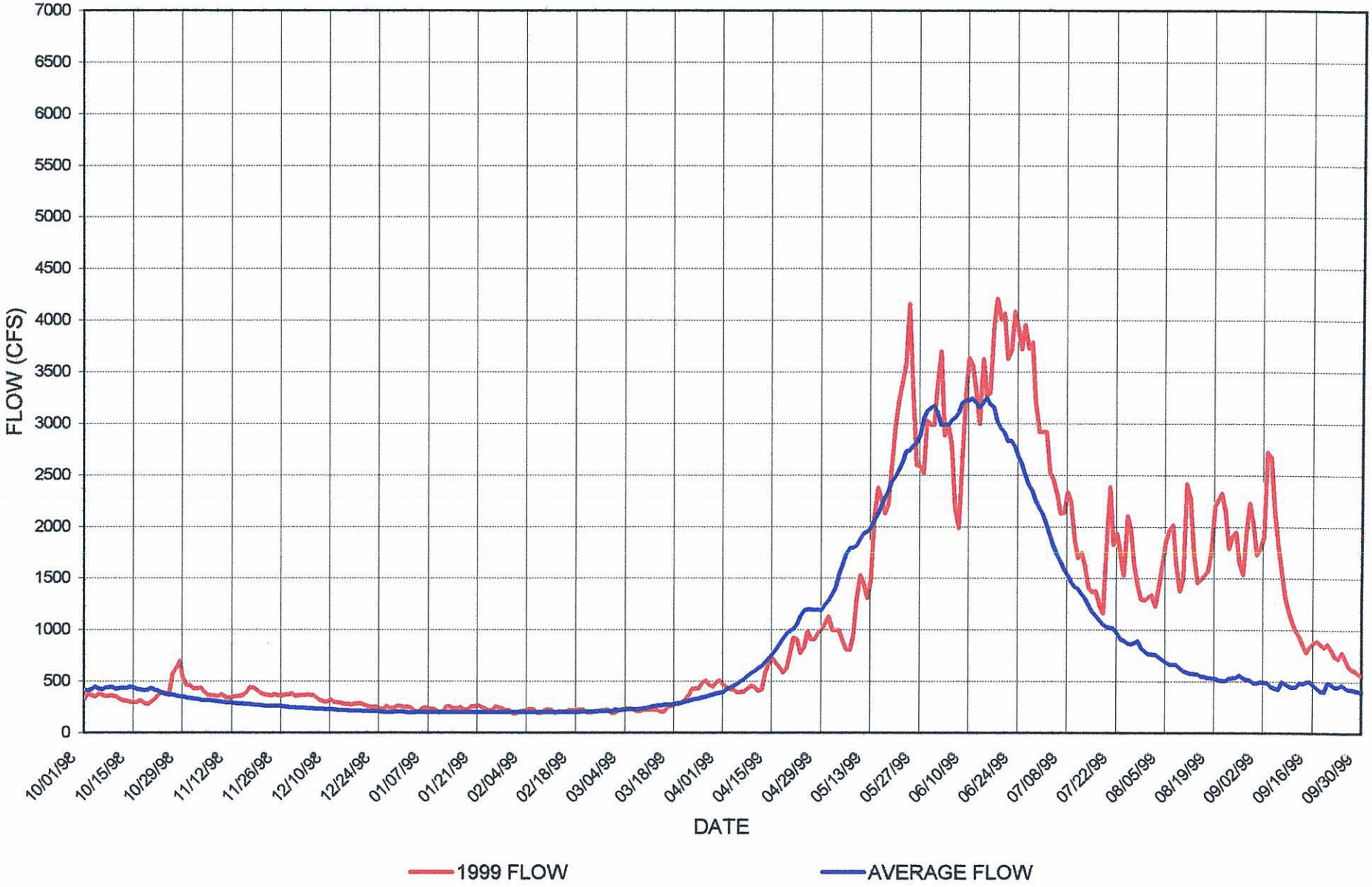
DURANGO TEMPERATURES



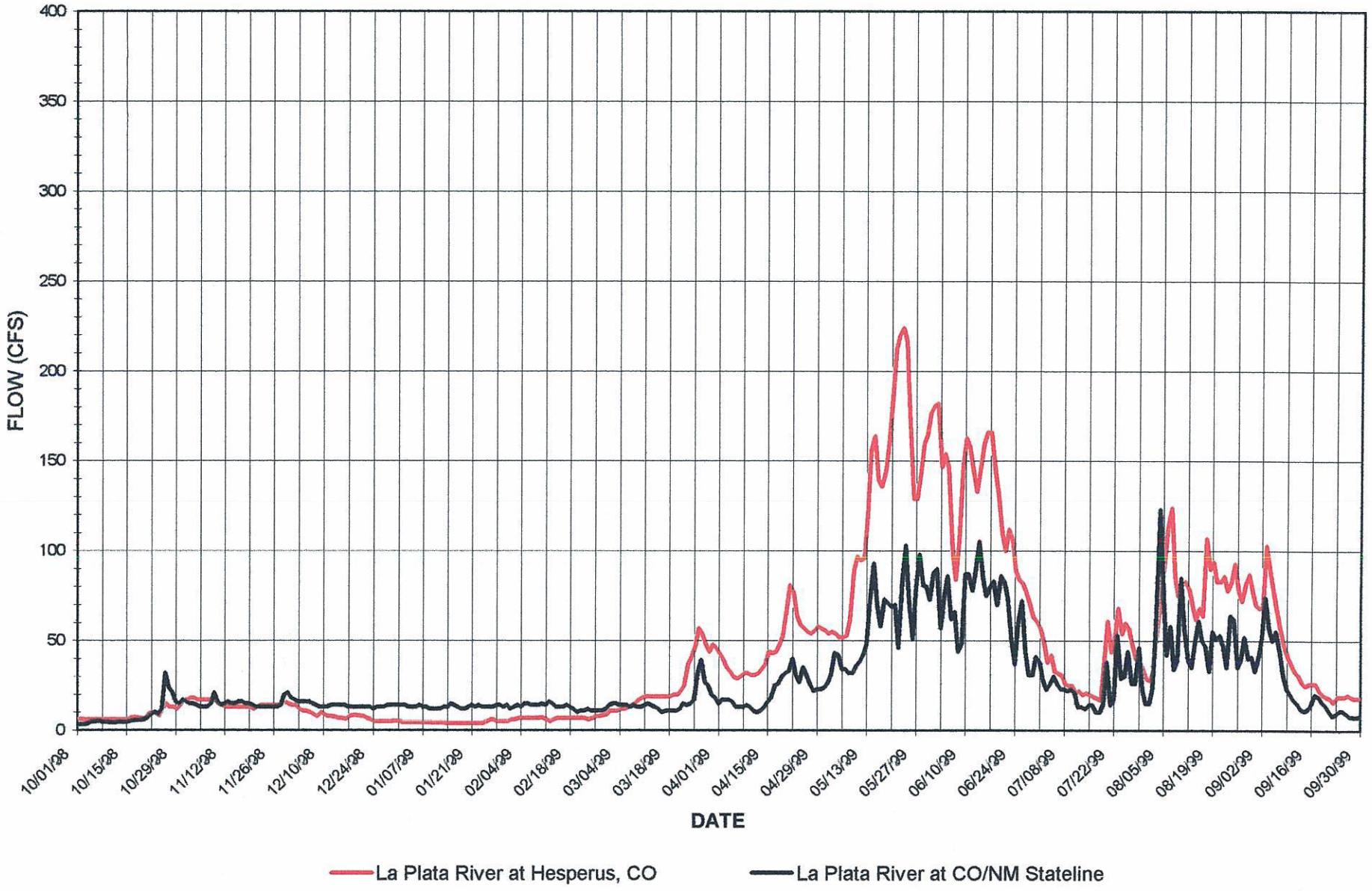
DURANGO CUMULATIVE PRECIPITATION



ANIMAS RIVER AT DURANGO, CO



LA PLATA RIVER COMPACT



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

MONTH	HESPERUS STATION	LA PLATA & CHERRY CR. DITCH	PINE RIDGE DITCH	30% OF KELLER DITCH	HESPERUS TOTAL	STATE LINE STATION	ENTERPRISE DITCH (NM)	PIONEER DITCH	DELIVERED STATE LINE TOTAL	REQUIRED TOTAL (1/2 HESP TOTAL)
DECEMBER	489.0	0.0	0.0	0.0	489.0	863.0	0.0	0.0	863.0	---
JANUARY	275.0	0.0	0.0	0.0	275.0	809.0	0.0	0.0	809.0	---
FEBRUARY	387.0	0.0	0.0	0.0	387.0	718.0	0.0	39.3	757.3	---
MARCH	1465.8	0.0	0.0	14.9	1480.7	967.9	0.0	41.7	1009.6	686.3
APRIL	2742.0	0.0	6.3	3.2	2751.5	1228.0	79.7	158.5	1466.2	1366.0
MAY	7755.7	459.6	99.6	16.1	8331.0	3596.3	132.9	219.2	3948.4	3709.0
JUNE	7276.1	1687.2	186.8	29.0	9179.1	4177.8	117.8	215.8	4511.4	4435.8
JULY	2220.3	978.8	17.5	0.0	3216.6	1481.7	121.4	208.9	1812.0	1653.8
AUGUST	4922.1	285.4	114.6	0.0	5322.1	3111.5	4.6	143.4	3259.5	2506.9
SEPTEMBER	2157.8	91.2	168.4	0.0	2417.4	1385.9	6.9	107.5	1500.3	1174.7
OCTOBER	750.4	12.5	0.0	0.0	762.9	559.1	0.0	106.1	665.2	390.7
NOVEMBER	437.8	10.5	0.0	0.0	448.3	490.1	6.9	88.9	585.9	226.0
TOTALS *	29255.9	3525.2	593.2	63.2	33374.3	16534.2	470.2	1290.0	18294.4	13870.9

On March 19, 1999 New Mexico requested 50 CFS

Dry channel existed during many days before May 17 above Cherry Creek

30% of Keller Ditch diversion added per agreement April 1, 1999

Aug. 24-29 archives record corrected for incorrect shift data

Aug. 24 New Mexico modified delivery requirement to 35 cfs

August overdeliveries resulted from repetitive runoff caused by frequent rainstorms

* TOTALS ARE FOR PERIOD OF COMPACT CALL.

UPPER BASIN COMPACT -- SAN JUAN-CHAMA DIVERSIONS

WATER YEAR	RIO BLANCO DIVERSION	LITTLE OSO DIVERSION	OSO DIVERSION	TOTAL COLO. DIVERSION	AZOTEA TUNNEL (USGS)	TEN-YEAR TOTALS (USGS)	% DIFF
1971	25,190	1,340	24,980	51,510	59,980		-16.4%
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			
AVG.	39,223	4,334	46,035	89,591	93,677	942,450	-4.6%

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

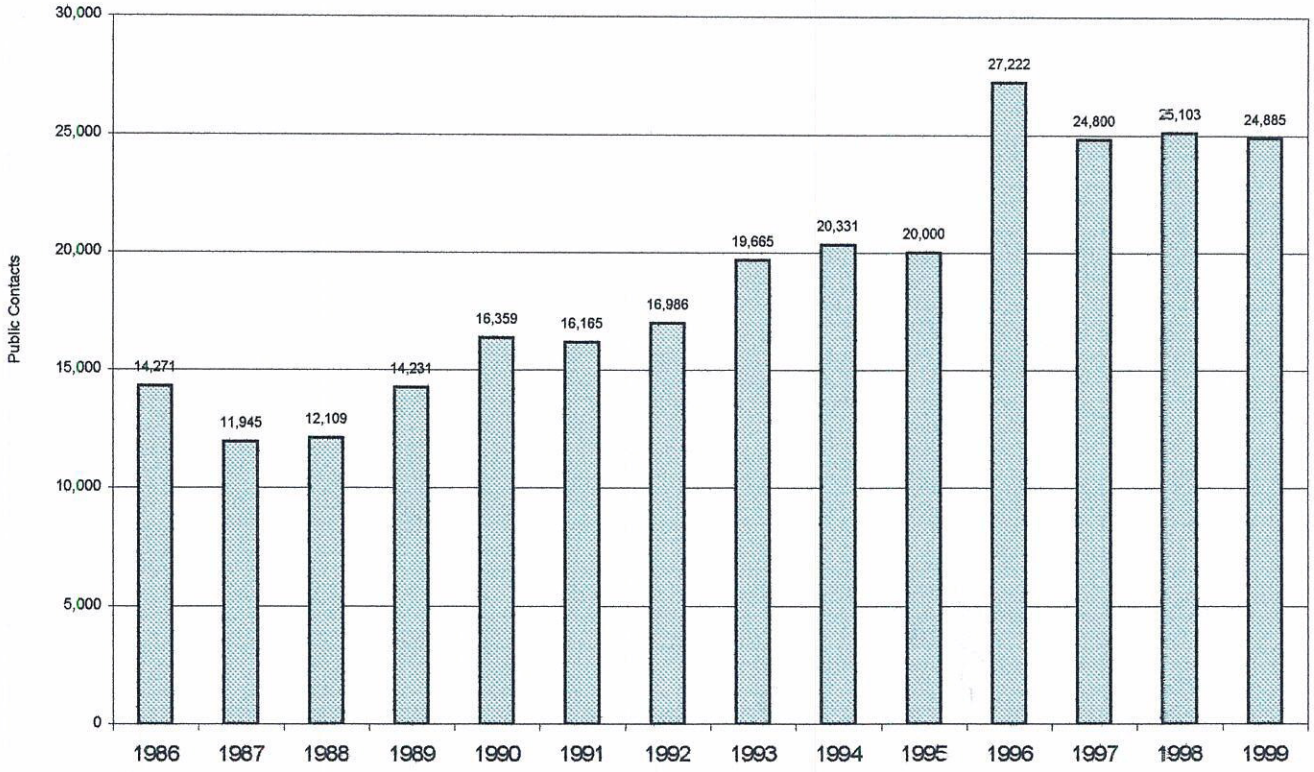
WATER DIVISION SEVEN

ACTIVITY SUMMARY

FISCAL YEAR 1999

ACTIVITY	TOTAL
NUMBER OF PROFESSIONAL & TECHNICAL STAFF	4
NUMBER OF CLERICAL STAFF	1
NUMBER OF WATER COMMISSIONER FTE ASSIGNED	15.49
NUMBER OF DECREED SURFACE RIGHTS (FOR THE CURRENT YEAR)	34
NUMBER OF SURFACE RIGHTS ADMINISTERED	24,404
NUMBER OF WELLS ADMINISTERED	772
NUMBER OF PLANS FOR AUGMENTATION (FOR THE CURRENT YEAR)	1
NUMBER OF CONSULTATIONS WITH REFEREE	98
NUMBER OF WATER COURT APPEARANCES	20
NUMBER OF MEETINGS W/ WATER USERS	100
NUMBER OF MEETINGS TO RESOLVE WATER RELATED DISPUTES	101
NUMBER OF PUBLIC ASSISTANCE CONTACTS ON WATER MATTERS	24,885

DIVISION 7 PUBLIC CONTACTS



Annual Number of Public Contacts

1986	14,271
1987	11,945
1988	12,109
1989	14,231
1990	16,359
1991	16,165
1992	16,986
1993	19,665
1994	20,331
1995	20,000
1996	27,222
1997	24,800
1998	25,103
1999	24,885

WATER COURT ACTIVITIES

CALENDAR YEAR 1999

NUMBER OF APPLICATIONS FOR DECREES	71
NUMBER OF CONSULTATIONS WITH REFEREE	98
NUMBER OF DECREES ISSUED BY WATER COURT	59
TYPE OF DECREE:	
SURFACE WATER	34
GROUND WATER	1
RESERVOIRS	0
TRANSFER	0
ALTERNATE POINT	1
CHANGE IN USE	5
PLANS FOR AUGMENTATION	1
IN-STREAM FLOW	0
OTHER	17
NUMBER OF STRUCTURES IN DECREES:	
TYPE OF STRUCTURES:	
DITCHES	16
RESERVOIRS, PONDS	9
WELLS	6
OTHER (SPRINGS, PIPELINES, PUMPS, ETC.)	44
TOTAL STRUCTURES:	75

OFFICE ADMINISTRATION FY 1999

NAME	POSITION	FY MONTHS BUDGETED	WORKED	FY MILEAGE
Kenneth A. Beegles	Division Engineer	12	12	2,309
Bruce T. Whitehead	Asst. Div. Engineer	12	12	1,532
Scott D. Brinton	Hydrographer	12	12	14,232
Frank J. Kugel	Dam Safety Engineer	12	11*	13,195
			*1 Month of Vacany Savings	
Shari Titus	Admin. Asst. III	12	12	0

FULL-TIME EMPLOYEES IN THE FIELD

NAME	POSITION	DISTRICT			
Harold Baxstrom	Eng Tech II	30/Florida	12	12	10,721
Robert Becker	Eng Tech II	69, 71	12	12	11,000
Glen Humiston	Eng Tech III	32,34,69,71	12	12	15,406
J. Russell Kennedy	Eng Tech II	33	6	6*	11,490
			*Russell Retired in December		
Matthew Schmitt	Eng Tech II	33	6	4*	5437
			*2 Months of Vacany Savings		
David Nelson	Eng Tech II	30/Animas	12	12	6,711
Hal Pierce	Eng Tech II	31, 46	12	12	16,505
John (Val) Valentine	Eng Tech II	29,77,78	12	12	12,625

PERMANENT PART-TIME EMPLOYEES IN THE FIELD

Robert Daniels	Eng Tech I	31,46	10	10	11,700
Marty Robbins	Eng Tech I	32	9.5	9.5	10,213
Matthew Schmitt	EPS Asst II	33	3.35	3.35*	1,991
				*Matthew Promoted to Eng Tech II in March	
Wallace Patcheck	EPS Asst II	33	1.15	1.15	1807
Sherry Schutz	Eng Tech I	77	8	8	10,789
John Taylor	Eng Tech I	78	5	5	5,289
Steven Barrett	ESPA II	30/Animas	1	1	478

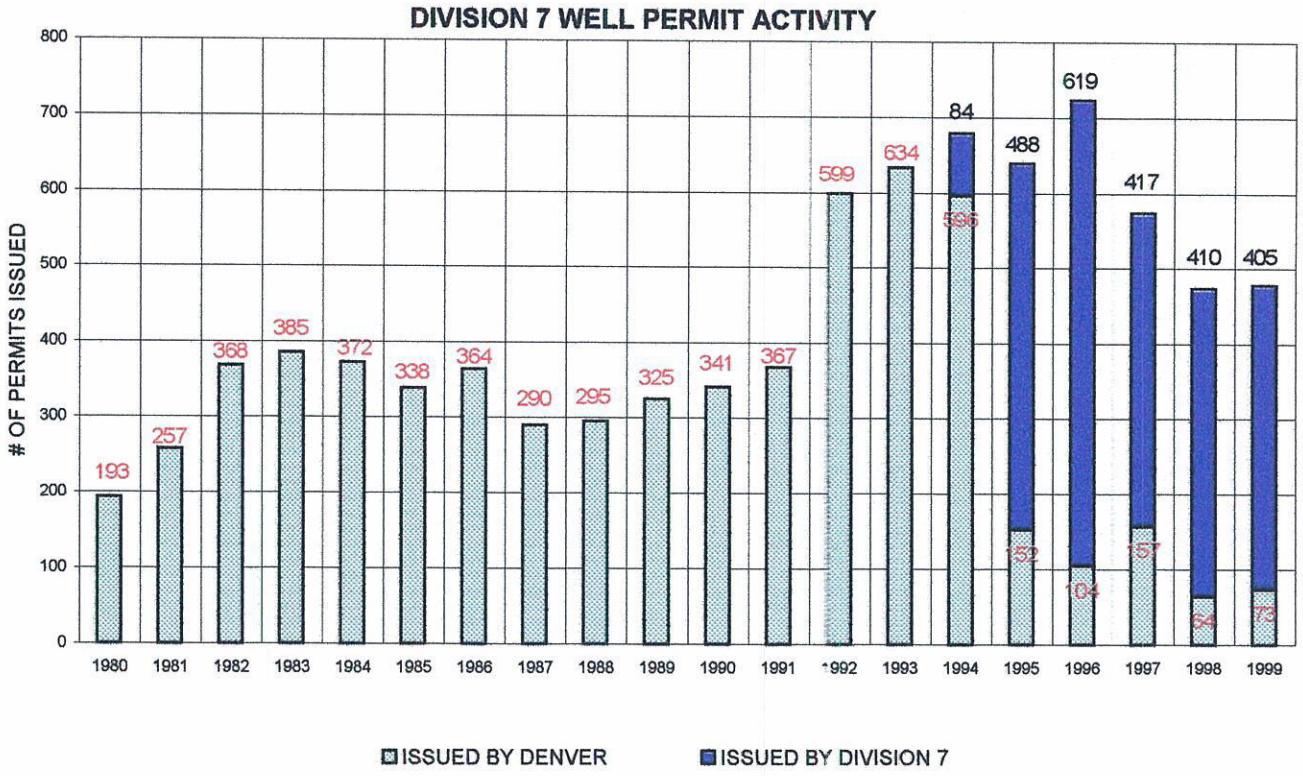
TEMPORARY PART-TIME EMPLOYEES IN THE OFFICE

Agnes Suazo	ESPA II	Hydro/G.W.	3.9	3.9	895

SPECIAL NOTE:
2 Months of A. Suazo's time came from Groundwater Decentalization

DIVISION 7
1999 RIVER CALLS

WD	RIVER	INITIAL CALLING STRUCTURE	PRIORITY No.	DATE ON CALL	MOST SENIOR CURTAILED STRUCTURE	PRIORITY No.	DATE OFF CALL	DAYS
29	FOUR MILE CREEK	Mesa Ditch	8	07/06/99	Mesa Ditch	3	07/19/99	14
29	RITO BLANCO	M. O. Brown Ditch	4	07/01/99	Echo Ditch	9	08/16/99	45
31	PINE RIVER	King Ditch	65-32	07/10/99	Dr. Morrison Ditch,Spring Creek Ditch, Robert Morrison Ditch,King Ditch, Thompson Epperson Ditch	P-26	07/19/99	9
33	LA PLATA RIVER (Hesperus to Cherry Creek)	Big Stick Ditch	68	07/12/99	H H Ditch	42	11/01/99	44
33	LA PLATA RIVER (Hesperus to Stateline)	Joseph Freed Ditch	56	03/21/99	La Plata River & Cherry Creek Ditch, Big Stick Ditch	10	10/02/99	141
33	LA PLATA RIVER (Hesperus to Joseph Freed Ditch)	Townsite Ditch	60	04/07/99	Slade Ditch	50	05/10/99	33
33	LA PLATA RIVER (Joseph Freed Ditch to Stateline)	GH Ditch	1992	04/07/99	Enterprise Ditch	46	05/10/99	27
33	LA PLATA RIVER (Cherry Creek to Stateline)	Dave's Ditch	1997	03/21/99	Sooner Valley Ditch	41	10/02/99	38
34	MANCOS RIVER	Frank Ditch	M-18	07/06/99	Frank Ditch	M-18	07/20/99	9



SUMMARY OF WELL PERMITS ISSUED FOR DIVISION 7
1980 - 1998

CALENDAR YEAR	ISSUED BY DENVER	ISSUED BY DIVISION 7
1980	193	
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

1999 IRRIGATION YEAR SUMMARY
DISTRICT 29

	ACRE-FEET
DIRECT DIVERSIONS	
IRRIGATION	29,158
STORAGE	74
STOCKWATER	1,593
MUNICIPAL	867
DOMESTIC	91
INDUSTRIAL	0
RECREATION	0
FISH	4,187
OTHER:COMMERCIAL,AUGMENTATION	748
TRANSMOUNTAIN-TRANSBASIN	5,360
INTERSTATE	58,490
TOTAL DIVERSIONS.....	100,568
DELIVERIES FROM STORAGE	
IRRIGATION	7
DOMESTIC	0
MUNICIPAL	0
STOCK	0
INDUSTRIAL	0
RECREATION	0
TRANSBASIN-TRANSMOUNTAIN	87
OTHER:AUGMENTATION,ETC.	0
TOTAL DIVERSIONS.....	94
DELIVERIES FROM TRANS SUB-BASIN	
IRRIGATION	1,712
STORAGE	0
MUNICIPAL	0
STOCK	0
TOTAL FROM TRANSBASIN.....	1,712
DUTY OF WATER:	
TOTAL TO IRRIGATION	30,877
ACRES IRRIGATED	11,002
ACRE-FEET DIVERTED PER ACRE	2.81
NUMBER OF STRUCTURES OBSERVED	528
WATER RUN-NO INFORMATION AVAILABLE (E CODE)	5
ACTIVE DIVERSIONS-DAILY	167
-INFREQUENT STRUCTURES	151
INACTIVE DIVERSIONS-NO WATER AVAILABLE (B CODE)	6
-NOT USED (A,C,D, CODES)	191
-NO INFORMATION AVAILABLE (F CODE)	8
NUMBER OF DITCHES, SURFACE RIGHTS	345
NUMBER OF RESERVOIRS	96
NUMBER OF WELLS	79
NUMBER OF OBSERVATIONS	3,113

1999 IRRIGATION YEAR SUMMARY
DISTRICT 30

	ACRE-FEET
DIRECT DIVERSIONS	
IRRIGATION	133,368
STORAGE	43,251
STOCKWATER	25,599
MUNICIPAL	4,755
DOMESTIC	236
INDUSTRIAL,POWER	29,870
RECREATION	406
FISH	13,672
OTHER:COMMERCIAL,RECHARGE,AUGMENTATION,etc..	851
SNOWMAKING	1
TRANSMOUNTAIN-TRANSBASIN	954
INTERSTATE	9,056
TOTAL DIVERSIONS.....	262,019
DELIVERIES FROM STORAGE	
IRRIGATION	0
DOMESTIC	1
MUNICIPAL	0
STOCK	0
INDUSTRIAL	23,544
RECREATION	0
TRANSBASIN-TRANSMOUNTAIN	0
OTHER:COMMERCIAL,RECHARGE,EVAP,AUGMENTATION	971
SNOWMAKING	67
TOTAL DIVERSIONS.....	24,583
DELIVERIES FROM TRANSBASIN	
IRRIGATION	193
STORAGE	345
MUNICIPAL	0
STOCK	0
OTHER:COMMERCIAL,etc.	72
TOTAL FROM TRANSBASIN.....	610
DUTY OF WATER:	
TOTAL TO IRRIGATION	133,561
ACRES IRRIGATED	31,209
ACRE-FEET DIVERTED PER ACRE	4.28
NUMBER OF STRUCTURES OBSERVED	1,374
WATER RUN-NO INFORMATION AVAILABLE (E CODE)	0
ACTIVE DIVERSIONS-DAILY	273
-INFREQUENT STRUCTURES*	592
INACTIVE DIVERSIONS-NO WATER AVAILABLE (B CODE)	32
-NOT USED (A,C,D, CODES)	476
-NO INFORMATION AVAILABLE (F CODE)	1
NUMBER OF DITCHES	771
NUMBER OF RESERVOIRS	180
NUMBER OF WELLS	461
NUMBER OF OBSERVATIONS	10,259

1999 IRRIGATION YEAR SUMMARY
DISTRICT 31

	ACRE-FEET
DIRECT DIVERSIONS	
IRRIGATION	176,868
STORAGE	73,784
STOCKWATER	620
MUNICIPAL	877
DOMESTIC	74
POWER,INDUSTRIAL	240,805
RECREATION	0
FISH	1,248
OTHER:COMMERCIAL	141
TRANSMOUNTAIN-TRANSBASIN	4,509
TOTAL DIVERSIONS.....	498,926
DELIVERIES FROM STORAGE	
IRRIGATION	2,357
DOMESTIC	0
MUNICIPAL	19
STOCK	0
INDUSTRIAL	0
RECREATION	0
TRANSBASIN-TRANSMOUNTAIN	0
OTHER:EVAPORATION,AUGMENTATION	3,146
TOTAL DIVERSIONS.....	5,522
DELIVERIES FROM TRANSBASIN	
IRRIGATION	0
STORAGE	0
MUNICIPAL	0
STOCK	0
TOTAL FROM TRANSBASIN.....	0
DUTY OF WATER:	
TOTAL TO IRRIGATION	179,225
ACRES IRRIGATED	48,125
ACRE-FEET DIVERTED PER ACRE	3.72
NUMBER OF STRUCTURES OBSERVED	761
WATER RUN-NO INFORMATION AVAILABLE (E CODE)	1
ACTIVE DIVERSIONS-DAILY	124
-INFREQUENT STRUCTURES	427
INACTIVE DIVERSIONS-NO WATER AVAILABLE (B CODE)	19
-NOT USED (A,C,D, CODES)	186
-NO INFORMATION AVAILABLE (F CODE)	4
NUMBER OF DITCHES, OTHER SURFACE RIGHTS	436
NUMBER OF RESERVOIRS	41
NUMBER OF WELLS	333
NUMBER OF OBSERVATIONS	8,543

1999 IRRIGATION YEAR SUMMARY
DISTRICT 32

	ACRE-FEET
DIRECT DIVERSIONS	
IRRIGATION	47,540
STORAGE	64
STOCKWATER	30
MUNICIPAL	72
DOMESTIC	7
INDUSTRIAL	0
RECREATION	0
FISH	0
OTHER:COMMERCIAL	1
TRANSMOUNTAIN-TRANSBASIN	0
TOTAL DIVERSIONS.....	47,714
DELIVERIES FROM STORAGE	
IRRIGATION	11,052
DOMESTIC	0
MUNICIPAL	0
STOCK	104
INDUSTRIAL	0
RECREATION	0
TRANSBASIN-TRANSMOUNTAIN	0
OTHER:COMMERCIAL,AUGMENTATION	0
TOTAL DIVERSIONS.....	11,156
DELIVERIES FROM TRANSBASIN	
IRRIGATION	172,941
STORAGE	10,198
MUNICIPAL	5,368
STOCK	255
POWER	44,081
OTHER:AUGMENTATION	45
TOTAL FROM TRANSBASIN.....	232,888
DUTY OF WATER:	
TOTAL TO IRRIGATION	231,533
ACRES IRRIGATED	70,344
ACRE-FEET DIVERTED PER ACRE	3.29
NUMBER OF STRUCTURES OBSERVED	640
WATER RUN-NO INFORMATION AVAILABLE (E CODE)	0
ACTIVE DIVERSIONS-DAILY	212
-INFREQUENT STRUCTURES	206
INACTIVE DIVERSIONS-NO WATER AVAILABLE (B CODE)	2
-NOT USED (A,C,D, CODES)	196
-NO INFORMATION AVAILABLE (F CODE)	24
NUMBER OF DITCHES, SURFACE RIGHTS	505
NUMBER OF RESERVOIRS	20
NUMBER OF WELLS	43
NUMBER OF OBSERVATIONS	3,327

1999 IRRIGATION YEAR SUMMARY
DISTRICT 33

	ACRE-FEET
DIRECT DIVERSIONS	
IRRIGATION	34,714
STORAGE	1,549
STOCKWATER	3,553
MUNICIPAL	0
DOMESTIC	33
INDUSTRIAL	0
RECREATION	0
FISH	0
OTHER:COMMERCIAL	4
TRANSMOUNTAIN-TRANSBASIN	609
INTERSTATE	1,701
TOTAL DIVERSIONS.....	40,462
DELIVERIES FROM STORAGE	
IRRIGATION	973
DOMESTIC	0
MUNICIPAL	0
STOCK	7
INDUSTRIAL	0
RECREATION	0
TRANSBASIN-TRANSMOUNTAIN	0
OTHER:RECHARGE,AUGMENTATION	2
TOTAL DIVERSIONS.....	982
DELIVERIES FROM TRANSBASIN	
IRRIGATION	0
STORAGE	0
MUNICIPAL	0
STOCK	0
TOTAL FROM TRANSBASIN.....	0
DUTY OF WATER:	
TOTAL TO IRRIGATION	35,687
ACRES IRRIGATED	10,816
ACRE-FEET DIVERTED PER ACRE	3.30
NUMBER OF STRUCTURES OBSERVED	291
WATER RUN-NO INFORMATION AVAILABLE (E CODE)	2
ACTIVE DIVERSIONS-DAILY	46
-INFREQUENT STRUCTURES	150
INACTIVE DIVERSIONS-NO WATER AVAILABLE (B CODE)	33
-NOT USED (A,C,D, CODES)	60
-NO INFORMATION AVAILABLE (F CODE)	0
NUMBER OF DITCHES, SURFACE RIGHTS	245
NUMBER OF RESERVOIRS	21
NUMBER OF WELLS	51
NUMBER OF OBSERVATIONS	5,809

1999 IRRIGATION YEAR SUMMARY
DISTRICT 34

	ACRE-FEET
DIRECT DIVERSIONS	
IRRIGATION	33,779
STORAGE	7,731
STOCKWATER	4,619
MUNICIPAL	834
DOMESTIC	13
RECREATION	0
FISH	1,095
POWER	10,425
OTHER:	0
TOTAL DIVERSIONS.....	58,496
DELIVERIES FROM STORAGE	
IRRIGATION	1,898
DOMESTIC	0
MUNICIPAL	222
STOCK	59
INDUSTRIAL	0
RECREATION	0
POWER	3,856
OTHER:FISHERY,COMMERCIAL,EVAPORATION	8
TOTAL DIVERSIONS.....	6,043
DELIVERIES FROM TRANSBASIN	
IRRIGATION	399
STORAGE	15
MUNICIPAL	0
STOCK	4
TOTAL FROM TRANSBASIN.....	418
DUTY OF WATER:	
TOTAL TO IRRIGATION	36,076
ACRES IRRIGATED	11,180
ACRE-FEET DIVERTED PER ACRE	3.23
NUMBER OF STRUCTURES OBSERVED	470
WATER RUN-NO INFORMATION AVAILABLE (E CODE)	7
ACTIVE DIVERSIONS-DAILY	71
-INFREQUENT STRUCTURES	331
INACTIVE DIVERSIONS-NO WATER AVAILABLE (B CODE)	5
-NOT USED (A,C,D, CODES)	43
-NO INFORMATION AVAILABLE (F CODE)	13
NUMBER OF DITCHES, SURFACE RIGHTS	414
NUMBER OF RESERVOIRS	27
NUMBER OF WELLS	35
NUMBER OF OBSERVATIONS	2,539

1999 IRRIGATION YEAR SUMMARY
DISTRICT 46

	ACRE-FEET
DIRECT DIVERSIONS	
IRRIGATION	2,759
STORAGE	0
STOCKWATER	31
MUNICIPAL	0
DOMESTIC	0
INDUSTRIAL	0
RECREATION	587
FISH	0
OTHER:	0
INTERSTATE	1,905
TOTAL DIVERSIONS.....	5,282
DELIVERIES FROM STORAGE	
IRRIGATION	0
DOMESTIC	0
MUNICIPAL	0
STOCK	0
OTHER:FISH	0
TOTAL DIVERSIONS.....	0
DELIVERIES FROM TRANSBASIN	
IRRIGATION	0
STORAGE	0
MUNICIPAL	0
STOCK	0
TOTAL FROM TRANSBASIN.....	0
DUTY OF WATER:	
TOTAL TO IRRIGATION	2,759
ACRES IRRIGATED	970
ACRE-FEET DIVERTED PER ACRE	2.84
NUMBER OF STRUCTURES OBSERVED	70
WATER RUN-NO INFORMATION AVAILABLE (E CODE)	0
ACTIVE DIVERSIONS-DAILY	39
-INFREQUENT STRUCTURES	18
INACTIVE DIVERSIONS-NO WATER AVAILABLE (B CODE)	7
-NOT USED (A,C,D, CODES)	6
-NO INFORMATION AVAILABLE (F CODE)	0
NUMBER OF DITCHES, SURFACE RIGHTS	57
NUMBER OF RESERVOIRS	9
NUMBER OF WELLS	0
NUMBER OF OBSERVATIONS	793

1999 IRRIGATION YEAR SUMMARY
DISTRICT 69

	ACRE-FEET
DIRECT DIVERSIONS	
IRRIGATION	4,685
STORAGE	141
STOCKWATER	0
MUNICIPAL	0
DOMESTIC	1
INDUSTRIAL	0
RECREATION	0
FISH	0
OTHER:	0
TOTAL DIVERSIONS.....	4,827
DELIVERIES FROM STORAGE	
IRRIGATION	156
DOMESTIC	0
MUNICIPAL	0
STOCK	2
OTHER:	0
TOTAL DIVERSIONS.....	158
DELIVERIES FROM TRANSBASIN	
IRRIGATION	0
STORAGE	0
MUNICIPAL	0
STOCK	0
TOTAL FROM TRANSBASIN.....	0
DUTY OF WATER:	
TOTAL TO IRRIGATION	4,841
ACRES IRRIGATED	1,080
ACRE-FEET DIVERTED PER ACRE	4.48
NUMBER OF STRUCTURES OBSERVED	53
WATER RUN-NO INFORMATION AVAILABLE (E CODE)	0
ACTIVE DIVERSIONS-DAILY	21
-INFREQUENT STRUCTURES	14
INACTIVE DIVERSIONS-NO WATER AVAILABLE (B CODE)	0
-NOT USED (A,C,D, CODES)	18
-NO INFORMATION AVAILABLE (F CODE)	0
NUMBER OF DITCHES, SURFACE RIGHTS	35
NUMBER OF RESERVOIRS	8
NUMBER OF WELLS	1
NUMBER OF OBSERVATIONS	191

1999 IRRIGATION YEAR SUMMARY
DISTRICT 71

	ACRE-FEET
DIRECT DIVERSIONS	
IRRIGATION	10,445
STORAGE	156,251
STOCKWATER	484
MUNICIPAL	418
DOMESTIC	13
INDUSTRIAL	15
RECREATION	8
FISH	6,465
POWER	15,322
OTHER:COMMERCIAL	1
TRANSMOUNTAIN-TRANSBASIN	146,645
TOTAL DIVERSIONS.....	336,067
DELIVERIES FROM STORAGE	
IRRIGATION	29
DOMESTIC	0
MUNICIPAL	0
STOCK	0
INDUSTRIAL	0
RECREATION	0
TRANSBASIN-TRANSMOUNTAIN	42,850
POWER	7,668
OTHER:AUGMENTATION	47
TOTAL DIVERSIONS.....	50,594
DELIVERIES FROM TRANSBASIN	
IRRIGATION	0
STORAGE	0
MUNICIPAL	0
STOCK	0
TOTAL FROM TRANSBASIN.....	0
DUTY OF WATER:	
TOTAL TO IRRIGATION	10,474
ACRES IRRIGATED	2,037
ACRE-FEET DIVERTED PER ACRE	5.14
NUMBER OF STRUCTURES OBSERVED	235
WATER RUN-NO INFORMATION AVAILABLE (E CODE)	0
ACTIVE DIVERSIONS-DAILY	66
-INFREQUENT STRUCTURES	86
INACTIVE DIVERSIONS-NO WATER AVAILABLE (B CODE)	0
-NOT USED (A,C,D, CODES)	83
-NO INFORMATION AVAILABLE (F CODE)	0
NUMBER OF DITCHES, SURFACE RIGHTS	161
NUMBER OF RESERVOIRS	20
NUMBER OF WELLS	47
NUMBER OF OBSERVATIONS	4,389

1999 IRRIGATION YEAR SUMMARY
DISTRICT 77

	ACRE-FEET
DIRECT DIVERSIONS	
IRRIGATION	9,349
STORAGE	189
STOCKWATER	78
MUNICIPAL	0
DOMESTIC	55
INDUSTRIAL	0
RECREATION	0
FISH	1,415
OTHER:COMMERCIAL	0
INTERSTATE	58,457
TOTAL DIVERSIONS.....	69,543
DELIVERIES FROM STORAGE	
IRRIGATION	31
DOMESTIC	0
STOCK	0
INDUSTRIAL	0
RECREATION	0
OTHER:FISH	0
TOTAL DIVERSIONS.....	31
DELIVERIES FROM TRANSBASIN	
IRRIGATION	0
STORAGE	0
MUNICIPAL	0
STOCK	0
OTHER:MULTIPLE	160
TOTAL FROM TRANSBASIN.....	160
DUTY OF WATER:	
TOTAL TO IRRIGATION	9,380
ACRES IRRIGATED	1,801
ACRE-FEET DIVERTED PER ACRE	5.21
NUMBER OF STRUCTURES OBSERVED	153
WATER RUN-NO INFORMATION AVAILABLE (E CODE)	0
ACTIVE DIVERSIONS-DAILY	77
-INFREQUENT STRUCTURES	23
INACTIVE DIVERSIONS-NO WATER AVAILABLE (B CODE)	0
-NOT USED (A,C,D, CODES)	52
-NO INFORMATION AVAILABLE (F CODE)	1
NUMBER OF DITCHES, SURFACE RIGHTS	117
NUMBER OF RESERVOIRS	21
NUMBER OF WELLS	29
NUMBER OF OBSERVATIONS	1,582

1999 IRRIGATION YEAR SUMMARY
DISTRICT 78

	ACRE-FEET
DIRECT DIVERSIONS	
IRRIGATION	15,518
STORAGE	1,127
STOCKWATER	1,150
MUNICIPAL	0
DOMESTIC	71
INDUSTRIAL	0
RECREATION	0
FISH	0
OTHER:COMMERCIAL	37
TRANSMOUNTAIN-TRANSBASIN	746
TOTAL DIVERSIONS.....	18,649
DELIVERIES FROM STORAGE	
IRRIGATION	288
DOMESTIC	0
MUNICIPAL	1,294
STOCK	0
INDUSTRIAL	0
RECREATION	0
TRANSBASIN-TRANSMOUNTAIN	0
OTHER:COMMERCIAL	1
TOTAL DIVERSIONS.....	1,583
DELIVERIES FROM TRANSBASIN	
IRRIGATION	395
STORAGE	1,334
MUNICIPAL	0
STOCK	0
TOTAL FROM TRANSBASIN.....	1,729
DUTY OF WATER:	
TOTAL TO IRRIGATION	16,201
ACRES IRRIGATED	5,708
ACRE-FEET DIVERTED PER ACRE	2.84
NUMBER OF STRUCTURES OBSERVED	253
WATER RUN-NO INFORMATION AVAILABLE (E CODE)	1
ACTIVE DIVERSIONS-DAILY	87
-INFREQUENT STRUCTURES	86
INACTIVE DIVERSIONS-NO WATER AVAILABLE (B CODE)	2
-NOT USED (A,C,D, CODES)	75
-NO INFORMATION AVAILABLE (F CODE)	2
NUMBER OF DITCHES, SURFACE RIGHTS	167
NUMBER OF RESERVOIRS	58
NUMBER OF WELLS	27
NUMBER OF OBSERVATIONS	1,710