

**COLORADO
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER RESOURCES**

DIVISION III



2001

ANNUAL REPORT

“It seems that when you are convinced you have it figured out, you are most often wrong.”

-----the Division III Compact Operations Team

CURRENT WATER YEAR

Water Administration

The summer and fall of 2001 provided unusually low precipitation and streamflow conditions and a heavy draft on the aquifers of the San Luis Valley. The area involved in the Rio Grande Water Conservation District unconfined aquifer study lost approximately 270,000 af in 2000. These conditions were the exact reverse of the year before and started off the 2001 season in a questionable status. Although the winter provided good snowfall and an above normal forecast, the antecedent conditions provided less than ideal conditions. Streamflow conditions throughout the 2000-2001 winter were much below normal because of the lack of precipitation in the previous fall. By late winter, the situation on the Rio Grande had improved dramatically but much of the rest of the Basin still had below normal snowpack conditions. By the May 1st forecast, the entire Basin had at or above normal snowpack and the inherent predicted runoff. All believed that we were in for a good runoff and a chance to recharge the aquifers and deliver adequate amounts of water to the surface diverters. Because of the abnormally warm spring temperatures, the May runoff at all stations was far above normal and created the sense that we were going to realize the forecasted runoff. The flow at the Rio Grande near Del Norte gage was 170% of normal and the Conejos near Mogote gage was

115% of normal as examples. June flows at Del Norte continued to be above normal and we continued to believe that the updated June forecast would be realized. Administration of both water rights and the Rio Grande Compact continued on the best information available. By late June, the runoff took a dramatic downturn and questions were raised about whether the forecast was correct. After reviewing the situation more carefully and working with the NRCS, a mid-July forecast was issued which lowered the forecasted April-September runoff 50,000 af on both river systems. This caused a radical cut in the curtailment to zero percent because of the amount of water that had been delivered based on the earlier forecasts. This is not how we would like to run the river, but under these extreme circumstances, it was the only prudent thing to do. No curtailment was needed the rest of the irrigation season.

As the runoff began to recede, we hoped that the “summer monsoon” would set up and provide rainfall throughout the summer and early fall that could break the dry summer conditions. This precipitation came to the basin in late July and August but did not provide the water needed to meet demand nor water to get farmers through the end of the season. One of the benefits of the above normal runoff on the Rio Grande mainstem was the recharge provided to the Closed Basin area and the gain in aquifer storage that was experienced. This recharge changed the trend of the year before.

Many streams including the Conejos River had very low flows during the late summer and fall. Call records for all major streams are available in Appendix A, River Calls, Irrigation Year - 2001.

Diversions for irrigation and recharge were allowed after November 1 on the Conejos and the Rio Grande because of our status under the Compact. Approximately 5,821 acre-feet of recharge and 958 acre-feet of

irrigation water were diverted before the end of the calendar year from the Rio Grande.

As a result of the field investigation of active structures on Saguache Creek in 2000 we continued to work with water users to improve or replace structures to insure the administerability of the creek and its tributaries. This effort continues to greatly enhance the ability of the water commissioners to properly administer and monitor diversions in District 26. More work remains to be done and a few water users still resist the efforts to improve the administration of that stream.

The Division III staff took the next steps in the abandonment proceeding by responding to the protests to the proposed list that was filed in the summer of 2000. Those protests were discussed at length and a revised list was filed at the end of 2001. Owners of the water rights that remained on the list will have to decide whether to file a protest with the court or let those rights lapse.

Rio Grande Compact Administration

As was mentioned in the previous section, the administration of the Rio Grande Compact was very frustrating in 2001. While we were very cautious in our administration, the abnormal weather conditions, the poor antecedent conditions, and the lack of summer precipitation created a very difficult year to administer the Compact. The changes made in the curtailments during the year were made to accommodate those issues and created much concern by the water user community. A great deal of time was spent trying to update effected users and explain what caused the situation. Misinformation and a gross misunderstanding of the situation by some water users has created a continuing need to inform them more routinely and uniformly in what causes changes in administration during the year. The Division III staff spent an inordinate

amount of time to constantly analyze and change the curtailment in a manner that provided the maximum amount of water to the water users and still meet the delivery obligations to the downstream states. The history of those changes is detailed in Appendix A, Compact Administration, 2001 Rio Grande Compact Report.

Diversions were allowed to start April 1, 2001 because of the anticipated obligation. The Rio Grande wanted to hit their obligation very close since they only had approximately 1,700 acre-feet of accrued credit. The Conejos wanted to use up much of their credit from previous years. The preliminary numbers for the 2001 accounting indicate that the Rio Grande underdelivered 4,300 af and the Conejos was not able to underdeliver the amount they desired. In fact, they underdelivered only about 9,100 af because of the untimely change in the forecast and the extremely dry conditions in the late summer and fall. Overall, it would appear that Colorado underdelivered 13,400 acre-feet after all the adjustments were made. If that projection holds true and evaporation rates are consistent with past years, Colorado will start January 1, 2002, with a credit of 10,100 acre-feet. 3,500 acre-feet of evaporation from the Colorado credit in Elephant Butte are considered in that calculation.

Colorado began 2001 with a credit of 27,000 acre-feet. New Mexico began the year with 270,800 acre-feet of credit. The lack of rainfall in the Middle and Lower Rio Grande Valleys, and storing a portion of their compact delivery in upstream reservoirs caused New Mexico to underdeliver a large amount and reduce their credit accordingly. The storage and subsequent release of a portion of their Compact deliver allowed them to meet the needs of the Rio Grande Silvery Minnow in a very innovative way that had to be approved by many entities on the river.

The release of water from Rio Grande Project Storage totaled 788,000 acre-feet. This is basically a full supply for the Project even though Project Storage is declining significantly. Total Project Storage at the beginning of 2000 was 1,748,400 acre-feet and ended the year at 1,294,900 acre-feet. Total Project Storage at the end of 2001 was 913,600 acre-feet. These storage amounts are incredible when one realizes that the evaporative losses drafted the Project another 182,000 acre-feet for the year. With the total draft of approximately 956,000 acre-feet from the reservoir system, there will have to be a good inflow from the 2002 monsoon and 2003 runoff to keep Project Storage from being very short in 2003. This past year was the 23rd year in a row that the Rio Grande Project has been allotted a full supply.

The Rio Grande Compact meeting was held on March 22, 2001 in Alamosa, Colorado. At that meeting, a number of resolutions were offered that needed more time to consider. It was agreed that a special meeting would be held on April 22, 2001 in Albuquerque, New Mexico. That meeting was held and the Commission passed six resolutions. The most critical was a resolution that allowed the State of New Mexico to store water in Corps of Engineer reservoirs and reregulate their Compact deliveries later in the year. This allowed there to be water in the river during the late summer and fall to help with flows for the Rio Grande silvery minnow. The idea worked very well and it is anticipated that this concept may eventually be used to as a long term solution to the flows for the minnow.

Costilla Creek Compact Administration

The Costilla Creek Compact Commission met in Santa Fe, New Mexico on May 10, 2001. There was a large turnout because of the controversy over the proposed adoption of the WaterMaster Operating Manual drafted by the Engineer Advisors of the two

compact states. Revisions to the WaterMaster Manual had continued up to the day of the Compact meeting with many of the concerns of the commenting parties (those submitted in written form) being considered in the final draft.

The Compact Commission heard testimony from interested water user groups who were in favor of, or opposed to, the Commission adopting the WaterMaster Operations Manual. Amigos Bravos and the Riviva el Rio Costilla praised the manual, however, called for delivery of only 1.5 to 2 acre-feet/acre to irrigated lands, the rest to remain in the stream. The Rio Costilla Cooperative Livestock Association (RCCLA) and the Water Users Committee were opposed to the use of the manual and threatened to sue the Commission if the manual was adopted.

The Costilla Compact Commission adopted the WaterMaster Manual, for use in the 2001 irrigation season only, in preference to having no guide for the WaterMaster at all. The Commission directed the Engineer Advisors to have a revised manual reviewed by the public and ready for Commission adoption at the 2002 Compact meeting.

New Mexico hired Luis Trujillo as the WaterMaster, replacing the retired Bobby Tribble. Luis had been the Assistant WaterMaster for several years. The engineers also interviewed and hired an Assistant WaterMaster for the 2001 irrigation season.

The Commission determined that there was a full water supply for the year based on the forecast for the Costilla drainage. Use of the Draft Watermaster Operations Manual greatly simplified the operations of the compact during the 2001 irrigation season. The Watermaster also used a spreadsheet developed by New Mexico to track the daily water deliveries and to determine the delivery amounts available to each ditch. Colorado reviewed the spreadsheet and

recommended several changes that made deliveries more in line with the authorized Compact administration. After the first few weeks, administration settled down to fairly routine affair. The Water Master e-mailed a daily diversion sheet (most days) to the Colorado Engineer Advisor.

The year started out in-line with the NRCS forecast, then, as in the Rio Grande drainage, early warm weather caused a quick runoff. By the beginning of July, the Colorado creek ditches were out of priority. These ditches saw no additional water until after the compact irrigation season was completed in October. No Costilla Creek water made it to the Rio Grande during 2001.

During the summer, the New Mexico Hydrologist became concerned that the Canyon Mouth Gage, operated by the USGS, was not correctly determining discharge. Colorado, New Mexico, and the USGS all rated the gage to check the curve developed by the USGS for stage/discharge. Colorado agreed that the USGS operation and rating were within normally accepted standards, but suspects that the meter used by New Mexico may be giving erroneous data.

Due to the press of duties the Division Engineer, who is the Engineer Advisor on this Compact, was unable to spend nearly as much time on this Compact as has been required in the past. Receiving daily diversion reports from the WaterMaster helped relieve the time requirements. The State of Colorado has limited input into the supervision of the Water Master and less in day-to-day activities; so receiving this document allows Colorado to assure that water is being fairly divided. The Division Engineer remains heavily involved in the finalization of the Water Master Manual. The drafting and adoption of the Water Master Manual has also helped to assure that the Compact is fairly operated.

Closed Basin

The Closed Basin Project delivered 16,561 acre-feet to the Rio Grande in calendar year 2001. The entire delivery met water quality standards for the Rio Grande Compact and therefore was creditable to Colorado's delivery to the Stateline. The Project delivered a total of 20,255 acre-feet for all of the various purposes outlined in the enabling legislation and the decree. The total amount delivered from the Project for all purposes was approximately 113% of last year's total.

Despite the small increase in delivered water this year, the Project continues to be plagued by iron bacteria contamination, commonly known as biofouling. This biofouling continues to reduce the output capacity of the wells by a large percentage. Over the last several years, the U.S. Bureau of Reclamation (USBR) has tried various remedies for this problem, but has met with limited success. This deteriorating situation is of serious concern to the USBR, the State of Colorado, the Rio Grande Water Conservation District, and the water users on both rivers. In 2001, the USBR began a well re-drilling program in an attempt to increase the Project's production. As of this writing, the Bureau has completed one re-drilling and is in the process of re-drilling a second well. It is hoped that this program will be the long-awaited solution to the biofouling problem.

The Project was pumped at maximum sustainable capacity for nearly the entire year. Testing and rehabilitation of the contaminated wells reduced pumping levels and therefore the overall output of the Project. Water quality was maintained at adequate levels to meet Compact standards. The Allocation Committee for the Project set the initial allocation at 60/40 early in the year and it remained there for the entire year. Of the 16,561 acre-feet of creditable water delivered to the river, 6,624 acre-feet were credited to the Conejos River and 9,937

acre-feet were credited to the Rio Grande. The 13-year cumulative allocation expressed as a percentage of the total is 61.1% for the Rio Grande and 38.9% for the Conejos.

Project deliveries made during 2001 were as follows:

- ❖ 920 acre-feet to the Blanca Wildlife Habitat Area
800 acre-feet mitigation delivery
120 acre-feet Tabor Division of Wildlife TMD exchange
- ❖ 2,774 acre-feet mitigation delivery to the Alamosa National Wildlife Refuge
- ❖ 16,561 acre-feet (creditable) to the Rio Grande
- ❖ 20,255 acre-feet total volume

Reservoir Operations and Dam Safety

Due to the moderate runoff peak flow and the heavy Compact curtailment, most reservoirs were able to store very little under their priority storage rights during the 2001 runoff. Appendix A, Reservoir Storage Summary, Irrigation Year – 2001, shows the maximum and minimum storage levels for the major irrigation reservoirs in the San Luis Valley. As shown in this table, most of the reservoir storage levels declined throughout the year as they were drafted by heavy demand for irrigation.

Rio Grande Reservoir (Farmers Union), the only mainstem reservoir on the Rio Grande, got through the 2001 runoff season without major incident this year for the first time in four years. Operations went fairly smoothly but the issue still remains about being able to pass water concurrent with the inflow and at the appropriate level. This situation is still not well understood. It remains to be seen what the situation will be when the gates are operated in 2002.

This was a busy season for the relatively new Dam Safety Engineer, Brett Nordby. His second season was spent catching up with several overdue outlet inspections along with the large number of dam inspections, construction inspections and follow-up inspections, and coercing dam owners to update their emergency preparedness plans (EPP's). Dams were inspected according to the normal schedule, with follow-up visits and construction inspections made as necessary. Brett inspected a total of 36 out of 60 jurisdictional and 2 non-jurisdictional dams in Division III this year. Brett inspected 9 Class I dams, 12 Class II dams, and 15 Class III dams. Division III Water Commissioners completed 16 Dam Observation Reports for Class III dams. Nearly all of the EPP's either have their update completed or are in the process of being updated.

Construction and follow-up inspections were conducted on several dams this year. These inspections were performed on Willow Park, Home Lake, Soward #3, Spar City and Sanchez dams. Willow Park dam is located just east of South Fork. During last season, there were several deficiencies found, including low freeboard, an uneven crest, and an obstructed spillway. Since last year's inspection, the owners increased the freeboard by lowering the reservoir's elevation and removing debris immediately downstream of the spillway. The uneven crest became unimportant since the reservoir was lowered relative to the lowest point of the crest.

Last season, Home Lake, located east of Monte Vista, was found to have low freeboard, a non-working low-level outlet, and several large trees along its crest. No one accepted responsibility for maintaining the dam until last fall when the Division of Wildlife stepped up to take full responsibility for the structure. They will begin working on the dam as soon as they can budget funding for the work. A follow-up inspection found that only some of the trees had been cut

down. A storage restriction will be recommended unless work to repair the dam has progressed.

The Soward #3 and Spar City dams were visited during the Water Commissioner's inspections to obtain opinions concerning their situations. Soward #3 had rodent activity around the downstream end of the outlet and should be repaired before serious problems occur. The Spar City dam owner wanted my opinion on several proposed improvements. These improvements included reservoir dredging, downstream slope flattening, and providing a channel to improve seepage collection and conveyance away from the dam. Both dams will be inspected within the next 2 years during their regular schedule.

Last year, Sanchez Dam experienced cloudiness and fines in the seepage along its downstream toe. At that time, divers were sent along the upstream face to determine the cause of the cloudiness. They didn't find any sinkholes or other problems. By the end of this season, the amounts of material in the seepage had reduced. Therefore, it was decided that the material placed a few years ago to provide a filter blanket for the upstream riprap was conveyed along with the normal seepage through the dam and eventually appeared along the downstream toe. The owner decided to continue placing more filter material this year to see if it will eventually reduce or plug the seepage through the dam.

Brett nearly caught up with the entire overdue outlet inspections by conducting 7 conduit inspections with either sliding the camera sled, crawling, or walking through the conduit. However, there were several that couldn't be performed due to inclement weather, dangerous conditions, or the owners couldn't close the valves for a variety of reasons. There are only 8 outlet inspections left to catch up with the normal schedule. Next season, Brett will conduct 5

of the inspections along with the annual outlet inspections on Rio Grande and Terrace dams, while the DOW will complete the remaining inspections. During this process, no damaged outlet conduits were found.

The Extreme Precipitation Committee ongoing proceedings have affected the Dam Safety program. This committee is developing new standards for modeling extreme precipitation for elevations above 7,500 feet. Hydrology studies on existing Class I and II dam spillways are being postponed pending the outcome of this committee. The committee was expected to release its final results during the summer of 2001. However, these results have been delayed another year.

Stream Administration

Stream administration in Division III in 2001 was complex and frustrating because of the abnormal runoff pattern, the difficulty passing water through the system and the dramatic change in the runoff forecast. The above average runoff on the Rio Grande did not provide a particularly good diversion season because of the large Compact curtailments. Most other streams in the valley experienced below normal runoff. The River Call table in Appendix A is very illustrative of the shortage of water supply throughout the basin.

Hydrography

The Hydrographic Program in Division III continues to grow, both in numbers of gaging stations operated as well as in number of hydrographers.

In October of 2001, Lee Conner was hired as the fourth member of the hydrographic staff. Lee was hired in response to the State taking over the operation and maintenance of the Rio Grande Decision Support System

Gaging Stations. Prior to October a contract employee operated these stations, with the yearly flow records being reviewed by the Division III Hydrographic Staff. With the addition of Lee to our hydrographic team, we will be able to more closely monitor these stations, especially in times of unusual streamflow events. This in turn should allow us to improve the quality and accuracy of the streamflow records in the future.

The Division of Water Resources entered into a cooperative agreement with the State Health Department again this year to produce and publish flow records of several streamflow stations downstream from the Summitville Mine Superfund Site. In early fall we learned that the Health Department had temporarily suspended this project. We are currently awaiting news from the Health Department as to the future of the cooperative agreement, and even whether we will be producing the final flow records on these stations for 2001.

The Hydrographic Branch is always searching for ways to improve its data quality and dependability. In 2001 we identified several gaging stations that would benefit from a relatively new type of control structure. This structure, called a ramp flume, will hopefully allow us to collect more accurate flow data, especially at high flows. We are working towards installing several of these ramp flumes at station sites in the near future.

Satellite Monitoring

The Satellite Monitoring System Repair Facility in Division III is responsible for the maintenance, repair, and calibration of all electronic data collection and telemetry equipment in Divisions III, IV, and VII. The facility provides technical support and assistance to field engineers and technicians in these divisions for system installation, field maintenance, and modifications.

Approximately 30 percent of one full-time position is spent operating the facility.

In addition to the everyday repair and maintenance duties, several other functions were performed by the facility. Satellite systems were installed at Carnero Creek near La Garita and Trinchera Creek above Mountain Home Reservoir using existing older Sutron 8004D model DCPs. The satellite systems at Conejos River near Mogote and Rio Grande River near Del Norte were upgraded to Sutron 8210 DCPs with speech modems. These modems allow the water commissioners to retrieve real-time data using a telephone. The satellite system at the new Cottonwood Creek near Crestone gage was relocated to the old gage approximately ½ mile upstream.

The facility provided general satellite system maintenance and repair training to the recently hired Telecommunication Specialist located in Denver. A training presentation on basic electronics with emphasis on lightning and grounding was given to all hydrographic engineers and technicians at the annual hydro training meeting.

Construction Projects

The Hydrographic staff completed several construction projects during 2001. A bank-operated cableway was installed at the San Antonio East of Manassa gage. This was done so that high water measurements can be made more safely and without interfering with traffic on State Highway 142. At the Willow Creek near Crestone, CO. gage we installed a small rock weir to improve and stabilize the control conditions at the site. The old gage house on the administrative gage at San Francisco Creek near Del Norte was replaced with the metal gage house salvaged when we removed the old U.S.G.S. gage from the Rio Grande at Wagon Wheel Gap, CO. A new cable car platform was installed on the right edge of water cableway A-frame at the Conejos River

below Platoro Reservoir gage site. This work was completed to provide easy access to the N.R.C.S. snow course located on the right edge of the river.

Closed Basin

The Hydrographic Branch in Division III is charged with fulfilling the terms and conditions of a cooperative agreement between the State of Colorado and the U.S. Bureau of Reclamation. This agreement provides for streamflow measurement and data collection on the Closed Basin Project. It is the responsibility of the Hydrographic Branch to measure, record, and disseminate flow information to the Bureau of Reclamation and to other public entities. In addition, the Hydrographers are consulted on certain areas of concern regarding streamflow and measurement within the project.

We are now in the third five-year agreement between the State of Colorado and the Bureau of Reclamation regarding the Closed Basin Project. The current agreement went into effect in October of 1999 and will continue until September of 2004.

WATER ISSUES

The incredible conversion of the Great Sand Dunes National Monument to a National Park was accomplished in the closing moments of the congressional session in the fall of 2000. This would not normally be considered a water issue, but it is intimately tied to the Baca Grant and the whole idea of possible acquisition of the ranch and inclusion of it as part of the park. There is currently an agreement between the majority owners and the Nature Conservancy District for the purchase of the Ranch pending an active litigation by the minority interests in the Ranch to prevent the sale. If the sale is finally approved it would end the continuing

saga of water speculation like AWDI and Stockman's water.

The Prairie Ditch change of water right case was concluded in the fall of 2001. This case involved adding recharge to their existing decreed use of irrigation and claiming pumping credits in case of well administration. The case was heavily contested and a complex consent decree was entered by the court that addressed the concerns of all the parties. The companion San Luis Valley Canal case that was stayed pending the conclusion of the Prairie Ditch case is scheduled to proceed in 2002. It is hoped that because of the settlement in the Prairie case that the San Luis Valley Canal case can be settled without similar problems.

The impacts of the drought in 2000 were felt far and wide in the entire Valley in 2001. The depletion of groundwater supplies and the dry antecedent conditions caused much concern and changes to normal administration. River transit losses were higher than normal and but for higher diversion levels well production would have been noticeably lower. Even so, The RGWCD Unconfined Aquifer Storage Study only showed a gain of about 50,000af at the end of 2001 over the storage at the end of 2000. This situation makes all concerned very aware of the importance of managing the aquifer systems to achieve an overall balance in the system. The importance of a coordinated recharge system is being recognized by even the most skeptical.

Battle Mountain Gold Inc., mining operations have been concluded for a couple of years, but the remediation of the mine site and the water produced by the mined area is in full swing. The augmentation plan for this project has had to be administered actively and in fact, a new augmentation plan is near completion to accommodate the new situations that have developed with mine runoff. The water quality of the mine runoff is

a major concern and several agencies are involved in addressing these issues.

Saguache Creek water rights administration went well this year. We are continuing to work with several water right owners to amend their decrees to reflect actual points of diversions for their water. We have received many positive comments about the improvements on the Creek.

The Division of Water Resources staff, along with the Attorney General, went to trial in the David Bradley (99CW25) change of water right case. This was a fairly straightforward alternate point of diversion case in which the applicant was unable to provide any historic use of the original well. The court granted the application, which has been appealed to the Supreme Court.

There were several Temporary Substitute Supply Plans (TSSP) of consequence that were renewed this past year. South Fork Ranches, a large housing and golf course development needed water to start the irrigation of their golf course this summer. They have very senior water rights that they were able to use to obtain a TSSP for the year. They have filed their augmentation plan in court to confirm it officially but it has not proceeded as planned. There are many objectors to the case and it is possible that it will be some time before the plan is completed. The Native Aquatic Species Recovery Facility (NASRF) is a new Division of Wildlife facility that is being used to propagate many different "threatened and endangered" species. Transmountain water was used to recharge the aquifer around the facility in order to pump the wells for the summer. It appears that the need for this plan may go by the way side because of water quality issues with the shallow ground water in this area. The Colorado Whiskey Distillery, also known as Lewis and Clark Expeditions, obtained a plan to begin construction of their new plant as well as bottle a limited supply of water in the next

year. With the recent Supreme Court case ruling which addressed the Substitute Supply Plan issue may dramatically change the number and type of plans that we see in the future.

ON-GOING PROJECTS

RGDSS

The Rio Grande Decision Support System project was a part of Division III activities in 2001. Most of the staff was involved in various aspects of the project, including identification of irrigated acreage, acquiring GPS locations for most active diversion structures, and rectifying water rights and well permit files. The hydrographic staff continued monitoring and building rating tables for the new gages and DCP's installed in 1999. Under RGDSS a new Hydrographic engineer was hired in October 2001 to assist in the operation of the new gages. Other portions of the RGDSS study included the drilling of the confined aquifer monitoring wells, consumptive use modeling, refinement of the ground water model, and the computer enhancement necessary to tie all this data together.

Rio Grande Silvery Minnow

The Rio Grande Silvery Minnow continues to cause everyone on the river to reconsider how and why things are done and where to find enough to keep the river wetted throughout the reach from Albuquerque to Elephant Butte. The State of New Mexico received permission from all involved to reregulate a portion of their compact delivery in Abiquiu and Jemez Reservoirs and deliver a portion of that water to Elephant Butte during the later portion of the summer to try and enhance the streamflow for the Rio Grande Silvery Minnow and the Southwestern Flycatcher. This operation worked quite well and will likely be continued for the next two years. Three court cases in Federal District

Court IN New Mexico have still not been decided at this time but word on those decisions is expected soon. The minnow did better this year than in some recent past years and there is hope that some of the efforts that are being developed to help the fish are actually having a positive effect.

Costilla Creek Compact Watermaster Manual

The Costilla Creek Compact Watermaster Manual was used to administer the Creek this year and no changes appear to be necessary in order to recommend to the Commission that it be approved.

Upper Rio Grande Water Operations Model

The Upper Rio Grande Water Operations Model being constructed by the Federal agencies in New Mexico is nearly complete. The Bureau of Reclamation and Army Corps of Engineers used it for the accounting for 2000 and 2001. It appears that the accounting module is sufficient in the present state to use in the future.

Alamosa River Restoration Project

The Alamosa River Watershed Restoration Committee continues to obtain funding and support to restore the river. Many activities are taking place in this regard.

Rio Grande Headwaters Restoration Project

The Rio Grande Restoration Project is in full swing. The main consultant, Montgomery-Watson, Inc., completed the feasibility study and did a tremendous job in identifying the issues involved in restoring the river to meet the needs of all concerned. The report that was produced will be used to continue the project into the implementation phase and will be a guide for the work to be done. The

advisory team was very pleased with the product and is now pushing hard to start the project.

ON-GOING ISSUES

Water Court Activities

A modest number of 38 cases were filed in the Division III Water Court during 2001. While most cases in Division III are resolved through the Division Engineer's recommendation and negotiation of those terms and conditions placed in the decree, some require a hearing, trial or as in 2001, appeal to the Supreme Court. Only two new cases were formally opposed by the Division, but amendments in case 99CW34, Charles Nearburg, and case 98CW36, Sunshine Potato Flake, LLC, also drew intervention. An unusually large number of "tailwater" claims were posted in 2001. The Division closely examines each of these filings for potential injury to existing water rights and Rio Grande Compact deliveries.

Judge Robert Ogburn continued to serve as Water Judge during 2001. He anticipates retirement from the bench in early 2003. Margaret "Peg" Russell was appointed Water Court Referee in January 2001. She replaced William Martinez who had served in that role for seven years. Court clerk, Carol Redding, managed water court matters.

An adverse decision in case 99CW25, David Bradley, resulted in a formal appeal of that ruling to the Supreme Court. After a July 12 trial, Judge Robert Ogburn issued a judgement granting a change of water right to the pro se applicant. Although the applicant failed to present a historical quantification of the underground water right he intended to change, the Judge saw fit to grant the requested change. The Division felt the precedent set by the Judge's decision was very dangerous and was compelled to appeal. The appeal was filed in September

and the opening brief was filed with the Supreme Court during February 2002.

Case 96CW45, Prairie Ditch Company, was scheduled for an 8-day trial in front of Judge Ogburn beginning November 26, 2001. This very contentious case sought to grant the Prairie Ditch the right to divert water from the Rio Grande under its original priorities for recharge purposes. Further, the case sought to allow the company to quantify the amount of recharge to the unconfined aquifer of the Closed Basin and the right to withdraw all such recharge through the shareholders' existing wells. The first day of trial contained opening remarks and some testimony. The second day of trial was postponed while the parties began serious settlement negotiations. Over the course of three days, a negotiated settlement was crafted and presented to the court at a prima facie hearing on November 30. A similar case, 99CW46, filed by the San Luis Valley Canal Company will be resolved during 2002.

The Division Engineer filed the Revised Abandonment List on December 28, 2001 (Case 2001CW37). A total of 60 structures were placed on the list. The final list had been pared down quite a bit from that originally submitted by the Water Commissioners. The Division III staff expects several formal oppositions to be filed with Water Court.

Water Court casework is currently assigned to Steve Vandiver, Mike Sullivan, Craig Cotten, or Pat McDermott. The Water Commissioners also lend help when needed via field inspections or historical knowledge of the claim.

INVOLVEMENT IN THE WATER USER COMMUNITY

As always, we strive to be as involved as possible in the Water User Community. Our

staff attends the regularly scheduled meetings of the Rio Grande Water Users Association, the San Luis Valley Water Conservancy District, the Conejos Water Conservancy District, the Rio Grande Water Conservation District, the Closed Basin Operating Committee, the Trinchera Irrigation Company, and all other Water User group meetings that we are invited to attend.

Additionally, the staff has given presentations to various elementary and high schools around the Valley. The Water Commissioners make themselves available and attend many of the ditch company meetings held in their districts. It has become apparent that in order to reach higher numbers of people and inform them about water issues in the valley that attendance at ditch company meetings and smaller user group meeting is going to be required.

We have actively participated in the San Luis Valley Wetlands Focus Group, in the Rio Grande Silvery Minnow Recovery Plan Team, the Southwestern Willow Fly Catcher Recovery Technical Advisory Team, the Bureau of Land Management Rio Grande Corridor Plan, the RGDSS Advisory Team, Upper Rio Grande Water Operations Model Advisory and Technical Teams, The Upper Rio Grande Water Operation Plan Review, The Rio Grande Headwater Restoration Project, and many other public forums which require input on water issues.

The staff of Division III participated in a number of public forums relating to water. These include presenting a paper at the University of New Mexico public speaking program and to their Economics Department, on the administration of the Rio Grande Compact, and teaching a session of the Water Leadership Class sponsored by the Rio Grande Water Conservation District.

PERSONNEL/WORKLOAD ISSUES

Well Administration and Permitting Activities

The well permitting workload continued to increase with 596 exempt permits issued from the Division III office. Many water users have been visiting the office for guidance on rectifying their existing water right/permit portfolios. Many users are going to Water Court to have replacement, supplemental, or alternate point of diversion wells adjudicated.

Water Records and Information

The Water Commissioners continue to rely heavily on the computer to perform their duties. The availability of gage information from the computer each morning allows the Commissioners to make and implement decisions regarding diversions early in the day. The new administrative gages in District 20 have greatly assisted in "setting the river" and delivery of water to the users. This information, published daily in the stream administration sheet that is available to the water users, allows for more efficient allocation of this valuable resource. It also keeps the water users more informed about the conditions on the river each day.

Diversion records went smoothly this year. The Water Commissioners have a good handle on the toolkits, which makes developing the diversion records an easier task. This year the Division again copied the final diversion records in the Division Office, resulting in the information being available to the public by the end of January 2002, as well as alleviating some of the workload for the Records branch in the Denver office.

The acquisition of GPS units and the TOPO! Program for the water commissioners and engineers has greatly assisted in the

performance of field inspections. The units are used in all field inspections for well permitting and for water court applications. The accurate locations and maps produced by the use of the GPS make confirmation of locations a snap. The use of the GPS units also promotes confidence in the accurate location of water rights.

The Assistant Division Engineer spent considerable time performing QA/QC on the division databases to help with the implementation of Hydrobase, projected for the 2002-2003 season.

Abandonment 2001

The Division Engineers' Abandonment list was published in July 2000. In July 2001 the period to protest the listing of rights closed. Division III listed 72 water rights on the Division Engineers Abandonment list in 2000. Protests to the abandonment of 37 of the rights on the list were received. One protest included all the rights in District 21 as a matter of principle. The Division reviewed the information received from the protesters and conducted meetings and additional field inspections as needed. At the end of the review period the Division had either altered the proposed abandonment amounts or removed 13 of the listed rights. In December 2001 the Division filed the Abandonment list with the water court. The Division also mailed out letters to the protesters informing them of the final decision reached by the Division and advising them where to file further protests

Personnel Changes

LEE CONNER

Lee Conner came on board in October 2001. He was hired as the RGDSS hydrographer and is responsible for maintenance and operation of the new gages installed as part of the RGDSS study. Lee has experience with measuring water and

also has quite a bit of experience in electronics.

Training Activities

Training in Division III was extensive in 2001. In February, Divisions III and VII held a joint training session in Durango. During this training session, Jack Byers presented a session on changes in the well construction rules and regulations, and discussed the Well Observation Program. Jack also answered well permitting questions. Craig Cotten presented vehicle safety training at this meeting. Craig Cotten attended a gaging station symposium in May. Jerri Baker received KRONOS training. She then trained others on the use of the KRONOS time sheet in Division III. Jerri Baker also attended the Annual Program Assistants Meeting in August where she received updates on COFRS and Records procedures. At the Fall Water Commissioner Meeting, Hal Simpson, Ken Knox and Leah Lewis presented updates on legislature, the abandonment process and IT issues. Throughout the year, various training sessions were held during regular Staff Meetings.

Workload Issues

We continue to try to diversify the experience of our staff by involving them in as many issues and situations outside their primary responsibilities as time allows. Many of the water commissioners have been assisting in the RGDSS efforts by working with the contractors on irrigated acreage, ditch, canal, and drain locations, locating headgates by GPS, and rectifying permit/rights files. With a large number of Senior Water Commissioners planning on retiring in the next few years the Division has been looking into cross-training younger water commissioners to try and keep the knowledge and experience within the Division.

EMPLOYEE RECOGNITION

Water Commissioner of the Year

Rob Phillips was chosen as Water Commissioner of the Year for 2001 because of his efforts in providing consistent and diligent administration of water rights in Districts 25 and 26 have been exemplary. Rob stepped up and made an effort to learn water administration as well as gain the respect of the water users in both Districts. He spent a great deal of time learning Districts 25 and 26 along with getting to know the people during his first two seasons with Division III.

PUBLIC RECOGNITION

Ditch Rider of the Year

John and Zoe Albert keep a close eye on the creek during the runoff season on the Internet. Many times the Commissioner will call and Zoe will have just looked at the creek and tell him what it is doing. John's innovative apparatus for controlling the headgate on the Wales & Travis Ditch has greatly aided in administering diversions on that ditch accurately. His diligent efforts to divide the water equally between himself and the other two users on the Wales & Shellabarger Ditch No. 2 are greatly appreciated by both Commissioners in Water Districts 25. John also knows the fluctuations of the creek well and willingly makes adjustments to the gates as needed, thereby saving the Commissioners many extra trips to keep up with the flows.

Water Manager of the Year

Ernest Moeller was recognized as the Water Manager of the Year for 2001. Mr. Moeller has served the water users of Water District 22 for many years. In fact, he was one of the

first people to acknowledge the benefit of using Platoro Reservoir to store water and use later.

KEY OBJECTIVES AND GOALS

Many of our key objectives and goals are on-going from year to year, but they form the basis for what we do and how we do it. The following are our key objectives for the year 2002.

1. Administer the Rio Grande and Costilla Creek Compacts in a manner that ensures the entitlements of Colorado under each Compact are fully realized and utilized and that Colorado's obligations are met.
2. Operate the Division III office in a manner that allows us to stay within our budget, including the development of a budget process acceptable to the State Engineer for the utilization of Compact funds for Compact related expenses.
3. Implement the provisions of the Long-Range Plan.
4. Continue to develop and implement the quality assurance/quality control program for Division III data, including historic diversion records, water rights information and ownership information.
5. Provide training to our staff in the use of the computer applications available to us - in particular word processing, spreadsheets, communications, databases and the forthcoming Hydrobase and Well Evaluation Tools.
6. Correctly issue well permits on a timely basis under the well permit decentralization program.
7. Constantly improve the quality of our hydrographic and diversion records and meet all deadlines for the completion and submittal of final records.
8. Coordinate with water user groups, individuals and other State and

Federal agencies on issues such as endangered species, instream flows, Compact administration, Interstate litigation and Water Court applications, in order to maximize cooperation and minimize disputes.

9. Work with CWCB, the SEO, and the consultants on the RGDSS project to ensure that the system meets the needs of the users and that it is correctly done.
10. Continue to implement Principal Centered Leadership.
11. Identify any problems with and improve water administration at every level in the organization.
12. Try to help restore the travel, personnel services and the operating budget that has been proposed by the Joint Budget Committee to be cut substantially.
13. To effectively accomplish the Water Court process responsibilities with efficiency to provide terms and conditions that will practically and effectively deal with impact to other vested rights.
14. Insure that all dams in Division III are monitored frequently enough to recognize any deficiencies and promptly work with owners to correct them. All these efforts to insure the integrity of our dams and to provide public safety as it involves those structures.

MAJOR ACTIVITIES IN 2002

Several activities will affect our workload in the coming year. Foremost is the continuation of the RGDSS study and the Rio Grande Headwater Restoration Project. The Division will be continuing to work with the consultants by providing information on the operations and administration of the Division. Additionally, the Division will continue to determine actual locations of headgates and

structures using the available GPS technology.

A major activity in 2002 will be to continue to familiarize us with the new level of technology available to both our Water Commissioners and the Alamosa office staff. With the impending shift to Hydrobase, new user interfaces, RGDSS, a new satellite monitoring program, use of the Internet and the Intranet, and new hardware with which to use it, we anticipate spending considerable time getting staff trained and comfortable with the new systems.

A real concentration on quality water administration and record keeping will be one of the top priorities of 2002.

Dealing with the ESA issues downstream in New Mexico will be a major activity in 2002.

The administration of the two compacts in Division III will be a major interest in our workload. After the past year, we are reminded of how fickle the systems can be and how carefully we must consider the action we take, the effects of those actions and how we set up the river administration as the season goes by.

INNOVATIVE ADMINISTRATION TECHNIQUES

At the request of the State Engineer, we will attempt to describe a few techniques to solve problems that we have or are working on to address problems that do not lend themselves to normal remedies.

1. The outlet gate structure in the dam at Rio Grande Reservoir has suffered damage on several occasions apparently due to unusual turbulence conditions in certain ranges of flow. Through the joint efforts of the San Luis Valley Irrigation District, the users on the Rio Grande, other reservoir

owners, and Division of Water Resources, operating criteria will continue to be reviewed and developed to release flows outside of the damaging range of flow and protect the downstream vested rights. This criterion will have to ensure that no senior users downstream or our ability to deliver Compact water to New Mexico is impacted by this release restriction. We continue to be in contact with the District to find those tools necessary to accomplish the above.

2. During extremely dry winter months there are areas in the San Luis Valley that are prone to domestic wells going dry and stock unable to be watered. After several different scenarios were suggested and failed, we will amend our normal Compact administration in some cases when possible. We will try to let specific ditches divert small amounts of water during the winter and pay the Compact back later in the spring by giving up a part of their irrigation supply. This has been accomplished over the past couple years with great success. We continue to have extremely dry warm winters on the Valley floor and this issue is very persistent.
3. Similar to that, we are working with ditches that want to divert earlier than the majority wants the irrigation season to start. We are allowing the diversion of what, in the past, has been Compact water under terms and conditions that require repayment later in the season to the extent there is a Compact curtailment.
4. We are currently working on an operating plan that would allow the use of a post-Compact reservoir to "pre-store" Compact water that would normally be run to the Stateline to try to minimize the over- or under-delivery of our obligation.

5. The use of private irrigation reservoirs to control flooding. With the agreement of a reservoir company, we are trying to re-regulate the peak of the hydrograph in high years to prevent flooding of vulnerable areas downstream.

MOST IMPORTANT EVENTS OF 2001

The Rio Grande drainage experienced conditions which challenged our staff in their efforts to correctly administer the Rio Grande Compact. The effects of the antecedent condition from the year before were more influential than we imagined they could be. That coupled with dramatic downturn in the forecast midseason made a very difficult year to predict and therefore administer the compact well. Both rivers under-delivered the normal Compact obligation. The Conejos was unable to deliver the amount of their credit because of the decrease in the forecast. We had delivered on the basis of the higher forecast long enough that even though we dried up the river most of the rest of the year we were unable to use up the additional 10,000 acre-feet that we had planned for. The Rio Grande was very close to its obligation.

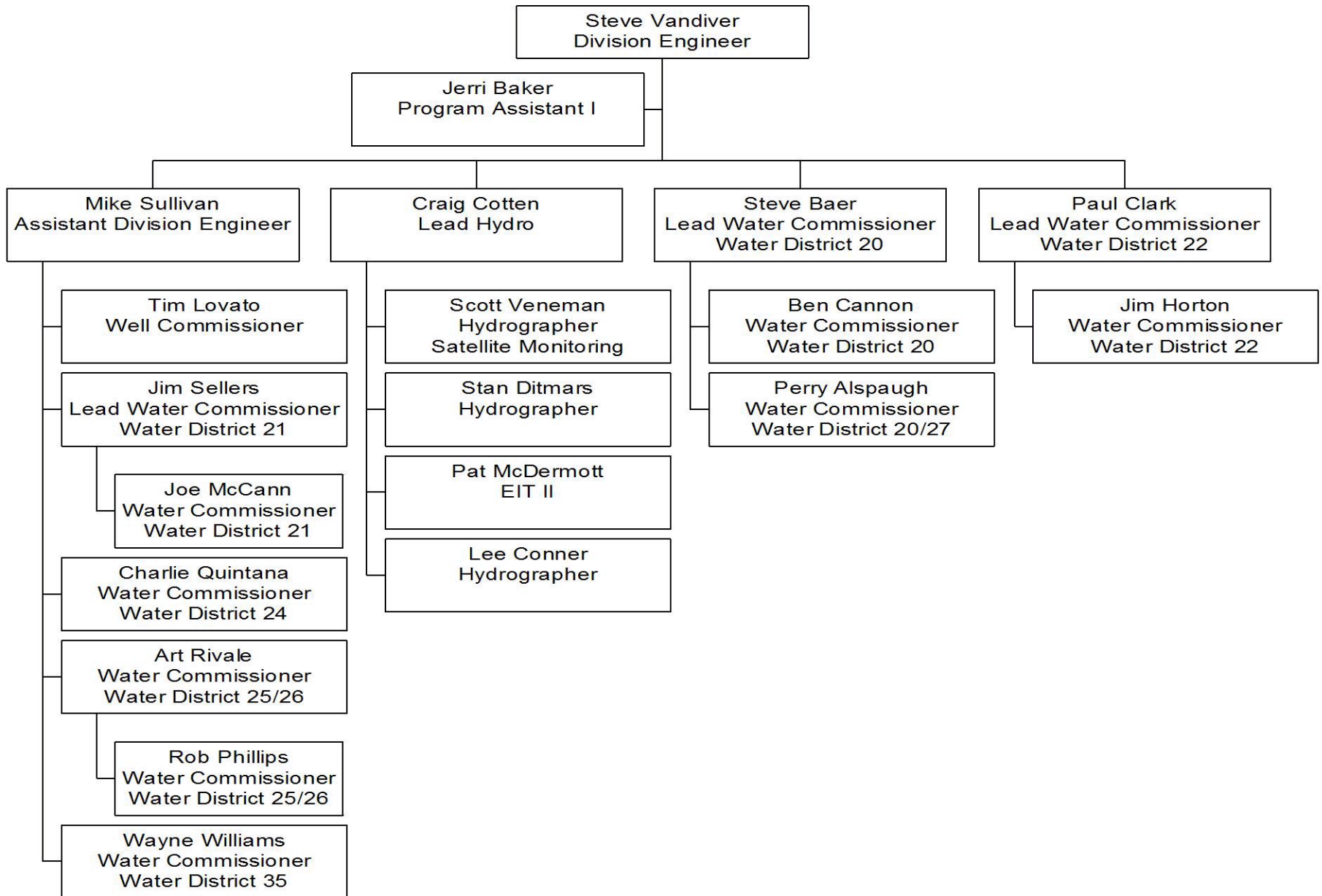
The decrease in our personal services budget is a great concern and the proposed cut in Out-of State travel and new round of personnel services budget is going to make the task of water administration and running our Division very difficult. If we are not allowed to travel to critical out-of-state meetings involving the Compacts and ESA issues the State will be at a big disadvantage.

The Federal legislation authorizing the Great Sand Dunes National Park sailed through Congress in 2000. The Nature Conservancy's purchase in 2001 of the Baca

Ranch may remove the threat of exportation of large amounts of water from the Rio Grande basin.

The Rio Grande Headwaters Restoration project feasibility study was completed and was a job well done by Montgomery-Watson, Inc., and the other consultants. The project looks to improving riparian habitat, improving flow conditions in the Rio Grande, evaluating flooding potential, evaluating structures in the river, and stopping some of the degradation and accretions in the River which make it difficult to deliver water to the priority water rights and to the Compact. The implementation phase of the project is now under way.

The RGDSS development is continuing with most of the work completed. Most of the work to be completed is the development of the groundwater model. Contractors installed many of the new monitoring wells and conducted pump tests to gather data for the groundwater model. Much of the surface structure and irrigated acreage mapping was completed during 2000 and the data has been incorporated into the GIS system. Rules and regulations for new appropriations from the confined aquifer were originally required to be written by July 1, 2001. Legislation passed in 2001 would delay implementation of rules and regulations until July 1, 2003. This is due to the contractors being unable to provide sufficient data as a basis for the rules and the completion of the ground water model.



WATER ADMINISTRATION DATA SUMMARIES
Transmountain Diversion Summary - Inflows/Outflows
TRANSMOUNTAIN DIVERSION SUMMARY - INFLOWS 2001

| Recipient | | | | | | | | | | |
|-----------|-----|---------------------------|--------------------|-----------------|------|--------------|------|--------|-------|-------------------|
| | | | | 10-Year Average | | Current Year | | Source | | |
| WD | ID | Name | Stream | AF | Days | AF | Days | WD | ID | Stream |
| 20 | 917 | Don LaFont #1 Ditch | Trib Red Mtn Creek | 8 | 6 | 0 | 0 | 78 | 4,670 | Trib Piedra River |
| 20 | 918 | Don LaFont #2 Ditch | Trib Red Mtn Creek | 100 | 37 | 0 | 0 | 78 | 4,671 | Trib Piedra River |
| 20 | 919 | Pine River | Weminuche | 486 | 75 | 462 | 110 | 31 | 4,638 | N.F. Los Pinos |
| 20 | 920 | Tabor | Trib Clear Creek | 876 | 152 | 501 | 136 | 62 | 774 | Cebolla Creek |
| 20 | 921 | Treasure Pass Ditch | S.F. Rio Grande | 125 | 34 | 57 | 22 | 29 | 4,669 | Wolf Creek |
| 20 | 922 | Weminuche Pass Ditch | Weminuche | 758 | 28 | 0 | 0 | 31 | 4,637 | Rincon LaVaca |
| 20 | 923 | Williams Creek Squaw Pass | Squaw Creek | 377 | 84 | 387 | 98 | 78 | 4,672 | Williams Creek |
| 26 | 702 | Tarbell | Saguache Creek | 606 | 74 | 1050 | 102 | 28 | 4,656 | Cochetopa Creek |

TRANSMOUNTAIN DIVERSION SUMMARY - OUTFLOWS

| | | | | | | | | | | |
|----|-----|---------------------|----------|-----|----|-----|----|----|-----|--------|
| 79 | N/A | Hudson Branch Ditch | Huerfano | 115 | 31 | 0 | 0 | 35 | 657 | Medano |
| 79 | N/A | Medano Ditch | Huerfano | 780 | 57 | 853 | 62 | 35 | 658 | Medano |