Colorado Division of Water Resources

Division 3
2007 Annual Report

COLORADO DIVISION OF WATER RESOURCES
ANNUAL REPORT
DIVISION III - 2007

INDEX

ACCOMPLISHMENTS

Water Administration

The year 2007 was wacky any way you look at it. During October 2006 the basin saw significant precipitation. This precipitation wet the system making for efficient river operations later in the year. The snowpack was not auspicious with a peak of 75% of normal by May. This limited snowpack indicated that the total runoff would be low for the year.

By May 1st the projected annual index was only 490,000 acre feet on the Rio Grande. With this low forecast and significant return flows the compact curtailments were kept low or off into June 2007. However by June 8th it appeared that the forecast index was too low. A curtailment was instituted in June and increased to a maximum of 33% as river flows did not drop off. The river finally turned-over on July 4 2008 after indexing approximately 200,000 acre feet more than the May 1 forecast. The year ended with 710,000 acre feet indexed on the Rio Grande. Of course the higher index forecast late in the year means a higher obligation under the compact. Unfortunately the rise in projected index came late in the runoff so higher curtailment percentages were required late in the season to 'catch up' with the final forecast. The runoff did not come out as the sharp peak we have seen the past few years, but settled in to run at a fairly constant rate that allowed for maximum diversions. The Conejos also experienced a higher runoff than forecasted and experienced similar compact administration operations.

The area involved in the "Rio Grande Water Conservation District (RGWCD) Unconfined Aquifer of the Closed Basin Change in Storage Study" gained approximately 240,000 acre feet in 2007. This was partially due to the high runoff, good recharge, and cool early season reducing pumping demand.

Diversions for irrigation ended October 31, 2007 on the Rio Grande and the Conejos because of our status under the Compact. After the irrigation season the gain on the Rio Grande below Del Norte amounted to approximately 6,000 acre feet and on the Conejos about 800 acre feet. Colorado ended the year with 6,800 acre feet of credit

Platoro Reservoir went into winter operation November 21st 2007 while the Restrictions under Article 7 of the Rio Grande Compact were in place. Due to safety concerns about icing on the main gates the reservoir the gates are closed and the bypass valve opened. The bypass valve was unable to pass all the inflows resulting in some storage during late November and December 2007.

Rio Grande Compact Administration

As was mentioned in the previous section, the administration of the Rio Grande Compact was rather challenging in 2007. With the low forecast curtailment was suspended until it was determined that the forecast was significantly lower than the basin was actually producing. After that relatively high curtailments were imposed to catch-up with the obligation under the Rio Grande Compact. After the irrigation season was over the Rio Grande and Conejos systems continued to have return flows below the upper index gages which contributed to an eventual credit situation for the state. The San Antonio and Los Pinos rivers contributed particularly to the over-delivery as these upper index gages, which are not counted against Colorado during the winter months, flowed all winter long.

Overall, Colorado started the year with an accrued credit of 15,500 acre-feet as of January 1, 2007 and ended the year with a total accrued credit of 6800 acre-feet. Diversions on the Rio Grande and Conejos started April 4, 2007 and ended October 31st. The Conejos system started 2006 with 1,700 acre-feet of accrued intrastate credit. However, the inability to operate the gates at Platoro Reservoir in winter resulted in 1200 acre feet being stored by Jan 31st 2008 despite the provisions of Article VII of the Rio Grande Compact. On the 29th of February, 2008, Texas agreed to a relinquishment of 1200 acre feet of credit in Elephant Butte in return for the water stored in Platoro.

The release of water from Rio Grande Project Storage in 2007 totaled 637,800 acre-feet. This is approximately 81% of a normal release for the Project. Usable Project Storage at the beginning of 2007 was below 400,000 acre-feet. It rose above 400,000 acre-feet on January 31, and then fell back below 400,000 acre-feet on July 3 and remained there for the remainder of the year.

Over the last 6 years, Usable Project Storage has been fluctuating above and below 400,000 acre feet. Consequently, Article VII of the Compact has been invoked and lifted several times. Article VII prevents the upstream States from increasing storage in any post-Compact reservoir without relinquishment. The major Colorado reservoir affected is Platoro Reservoir. Colorado continues to take the position that the Conejos can re-regulate pre-compact direct flow rights in Platoro as long as they are released in the same season. Project storage dropped below 400,000 acre feet on January 1, 2007 when it was determined that New Mexico had a significant credit in the reservoir. Thus the 2007 season began with a limitation on project storage.

The U.S. Bureau of Reclamation (USBR) has taken the position that they can store 'Prior and Paramount' rights for the New Mexico Pueblos in El Vado Reservoir regardless of the status of Article VII. The Commission has historically opposed this action to no avail.

Reclamation also unilaterally initiated carryover storage for the districts below Elephant Butte reservoir. The districts have unequal shares of the project water

and historically unused water was simply reallocated the next year. This was not an incentive to conserve. Reclamation developed a formula in cooperation with the districts that seems to fairly distribute the water. Reclamation has not consulted with the Rio Grande Compact Commission in regards to carryover storage to date.

The Rio Grande Compact meeting was held on March 23, 2007, in Alamosa, Colorado. At that meeting State Engineer Hal Simpson noted that he was retiring and that this would be his last meeting as a compact commissioner.

Costilla Creek Compact Administration

The Costilla Creek Compact Commission met in Santa Fe, New Mexico, on May 9, 2007. The Commission had adopted the May 5, 2005 Watermaster Operating Manual at the May 2005 annual meeting and directed the Engineer Advisers to continue to review the manual for possible improvements. The Engineer Advisers continued to look for methods to improve the manual during the 2007 season.

It was possible to deliver the 1,000 acre feet to Eastdale Reservoir by April 1, 2007, before the irrigation season started. Direct flow diversions were then allowed prior to the irrigation season. At the start of the 2007 irrigation season, May 3, 2007, Costilla Reservoir held 9,590 acre feet. The Commission determined that, based on the NRCS snowpack-forecast of 15,558 acre-feet, there would be no surplus water available for the year.

Luis Trujillo continued as the Watermaster with assistant Watermaster Wilfred Lucero for the 2007 irrigation season. The Watermaster used the spreadsheet developed by New Mexico to track the daily water deliveries and to determine the delivery amounts available to each ditch. With the Operations Manual and the spreadsheets, administration has settled down to a fairly routine affair. The Watermaster e-mailed a daily diversion sheet (most days) to the Colorado Engineer Advisor.

New Mexico and Colorado are concerned with the increasing costs and decreasing cost share that the USGS is charging for the operation of the Costilla gaging stations. The USGS operates six streamflow gaging stations and one reservoir station. Five of the six streamflow stations are only operated for 6 months per year. According to the USGS , the total cost to operate these stations in 2007 was $59,108. Of that, the USGS paid $24,560, or 41.6%, and the Costilla Compact Commission was billed for $34,548, or 58.4%.

The Engineer Advisers were tasked with reviewing the operations of Costilla Reservoir to determine if the three inflow gages need to be maintained or if Reservoir elevations are accurate enough to determine inflows for daily administration. The Engineer Advisers will be reviewing the 2007 data at the 2008 Engineer Advisers meeting.

Closed Basin

The Closed Basin Project delivered 15,038 acre feet to the Rio Grande in calendar year 2007. All of the delivery met water quality standards for the Rio Grande Compact and therefore was creditable to Colorado's delivery to the Stateline. The Project produced a total of 18,814 acre feet for all of the various purposes outlined in the enabling legislation and the decree.

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. The USBR has tried various remedies for the problem, but has met with limited success. In 2001, the USBR began a well re-drilling program in an attempt to increase the Project's production. The Bureau and Conservation district continue to re-drill wells to boost the projects production. Currently there have been 46 wells that have been redrilled with good success. We are beginning to see an increase in the overall production of the Project due to these redrilled wells. The total amount delivered from the Project for all purposes was approximately 105% of last year's total.

The Project was pumped at maximum sustainable capacity for nearly the entire year. Testing and rehabilitation of the contaminated wells reduced pumping levels at times and, therefore, the overall output of the Project. The Allocation Committee for the Project set the initial allocation at 60% for the Rio Grande and 40% for the Conejos early in the year and it remained there for the entire year. Of the creditable water delivered to the river, 6,015 acre feet were credited to the Conejos River and 9,023 acre feet were credited to the Rio Grande. The 15-year cumulative allocation expressed as a percentage of the total is 60.1% for the Rio Grande and 39.9% for the Conejos.
Project deliveries made during 2007 were as follows:

1,050 acre feet to the Blanca Wildlife Habitat Area
2,726 acre feet mitigation delivery to the Alamosa National Wildlife Refuge
15,038 acre feet (all creditable) to the Rio Grande
18,814 acre feet total volume

Reservoir Operations and Dam Safety

The Division 7 Dam Safety Engineer position was filled on July 23, 2007 by Matt Gavin. This position is responsible for conducting dam safety inspections for Water Districts 20, 21, 22, 26, and 27 in Division 3. Given the reduced inspection season, High and Significant hazard dams were given the highest priority. Inspection priorities were further refined using the Dam Safety Branch's Risk Based Profiling System (RBPS). The criteria indicated in the table below were used to develop the 2007 inspection schedule. After the High and Significant Hazard Dams, inspections of Restricted Dams, regardless of Hazard Classification, were given next priority.

Inspection Frequency Criteria for 2007:

*RBPS Score	High Hazard	Significant Hazard
>135	Every Year	Every Year
76 to 135	Every Year	Every Two Years
51 to 75	Every Two Years	Every Three Years
0 to 50	Every Three Years	Every Three Years

*RBPS score used to determine inspection frequency is the sum of the Static and Operational and Maintenance scores.

There are 12 High Hazard dams located in Division 3. Of these 12 dams, the Division 7 Dam Safety Engineer is responsible for regulating 9. Base on the RBPS scores, 8 out of the 9 were structures were due for inspection in 2007. All 8 structures were inspected in 2007. The lone High Hazard dam, which was not due for inspection during 2007, is Humphrey's Dam, which has an RBPS score of 60.

There are 15 Significant Hazard dams located in Division 3. Of these 15 dams, the Division 7 Dam Safety Engineer is responsible for regulating 14. Based on the RBPS score, 6 out of the 14 structures were due for inspection in 2007. All 6 structures were inspected in 2007.

Out of all the Division 3 dams regulated by the Division 7 Dam Safety Engineer, there are currently 4 that are restricted, two of which are High Hazard, one Significant Hazard, and one Low Hazard. All four were inspected in 2007.

There were no new restrictions imposed on Division 3 dams during 2007. A storage restriction on the Lost Lake #1 was lifted. This resulted in the recapture of 917 acre-feet of storage.

Two outlet inspections were performed in 2007, specifically at Rio Grande Reservoir and Fuchs Reservoir. The Rio Grande outlet inspection was limited to the downstream side of the gates. The gates do not appear to have sustained any significant damage since the last repairs were made. The Fuchs outlet inspection was conducted using the camera sled. The inspection indicated a currently serviceable outlet with some deterioration evident.

Currently, consultants are working on hydrology studies for Rio Grande Reservoir and Terrace Reservoir. The Terrace Reservoir emergency spillway is in substantial disrepair and is the basis for the current storage restriction. The Owners of Rio Grande Reservoir desire to expand the storage capacity. The hydrology study has been undertaken by the Owners in anticipation of the expansion.

Seepage conditions at the Trujillo Meadows Dam continue to be a source of concern. In 2007, a PVC liner was installed from the crest wall to approximately 15 feet downstream. The liner installation was largely ineffective as it had no

observable effect on the amount of seepage. In 2008, the Owner (DOW) intends to install a liner throughout the entire spillway channel upstream of the crest wall.

As of January 1, 2007 the new Rules and Regulations for Dam Safety and Dam Construction went into effect. The new Rules and Regulations contain guidance on performing hydrologic studies using the Extreme Precipitation Analysis Tool (EPAT). As of the end of 2007, the EPAT software is being further refined by HDR Engineering Inc., the developer of the software. The Basin Response Study, which is being developed for the Dam Safety Branch by hydrologist George Sabol, will serve as a guidance document for determining modeling parameters used to convert rainfall to runoff, particularly in high elevation watersheds. Completion of the Basin Response Study and release of the final version of the EPAT software are anticipated in 2008. The release of these tools will enhance dam safety in Division 3 by providing dam owners, consultants, and engineers with well-researched methods and guidance for determining inflow design floods.

Dams in district 24 and 35, Sanchez, Mountain Home, and Smith are inspected by the Division 2 Dam Safety Engineer.

Stream Administration

Stream administration in Division III during 2007 was challenging due to the 75% snowpack and the incredible yield in the basin. Early low forecasts for basin yields led to initially low compact delivery requirements and curtailment percentages. The continuing production through June resulted in high curtailments late in the season. Additionally the above average year and the smooth runout on the Rio Grande lead to high diversions into ditches The net result was a 240,000 acre-foot gain in the unconfined aquifer study area. On the Conejos the forecast was also off, however not so badly as the Rio Grande. The rise in total volume for the Conejos also meant that high curtailments were required late in the season to make up for the higher obligation. Other streams in the basin (not compact related) also produced substantial water for irrigation.

Hydrography

The Hydrographic Branch in Division 3 has the responsibility of providing accurate 'real-time' stream flow data and historic record production for streams in and around the San Luis Valley of Colorado. This includes the Rio Grande and its tributaries, the Conejos River and its tributaries, and those streams tributary to the Closed Basin. The Hydrographic Branch also supports the water commissioners and other DWR personnel by providing services such as ditch measurements, seepage investigations, structure installations, water-related consultations, etc.

The Hydrographic Branch in Division 3 was staffed by four hydrographers for most of the year. Scott Veneman, a Hydrographic Technician is performing the

Lead Hydrographer duties while continuing to manage the satellite monitoring system for this division. The three other Division 3 hydrographers perform hydro duties as well as manage portions of the hydrographic program. Stan Ditmars, also a Hydrographic Technician, is the Division 3 construction manager, and Lee Conner, an Engineer-in-Training, is in charge of repair and maintenance of Division 3 hydrographic and construction equipment. Matt Hardesty, a Professional Engineer, is in charge of construction design. A fifth hydrographer, Jesse Jaminet, began employment with the division on November 13, 2007.

In Division 3, seventy-seven gages with satellite telemetry are maintained, which includes 53 stream-gage record stations. An additional stream-gage record station is tied into the satellite telemetry network via a line of site radio-bridge to a station with satellite telemetry. There are currently only 3 stream-gage record stations with no satellite telemetry link. They are trans-mountain diversion stations owned by other entities. Other stations with satellite telemetry include 6 stream-gage administrative stations, 11 stream-gage diversion stations, and 7 reservoir stations. One of the reservoir stations also transmits outflow data for 1 additional stream-gage administrative station. Of the 77 gages with satellite telemetry, 2 of them also have phone line telemetry. One additional stream-gage administrative station that doesn't use satellite telemetry, but is equipped with phone line telemetry is maintained. DWR owns the data logger / transmitter equipment at 66 of these stations.

Division 3 operates and maintains 57 streamflow stations for which it produces streamflow records. From these stations the Division 3 Hydro Branch produces 59 published water year streamflow records and 9 published calendar year streamflow records. Also, several stations were operated as administrative stations with their flow records not being published. In addition, the Hydrographic Branch in Division 3 cooperates with the Colorado Department of Health to produce and publish 4 streamflow records for gaging stations in the Alamosa Creek drainage.

In 2007, the hydros in Division 3 measured and/or developed meter notes for stream and ditch measurements nearly 1,000 times. These measurements were used to create and calibrate stage-discharge ratings at streamflow gaging stations and diversion structures.

Satellite Monitoring

The Satellite Monitoring System Repair Facility in Division 3 is responsible for maintenance, repair, and calibration of all electronic data collection and telemetry equipment in this division. The facility provides technical support and assistance to field engineers and technicians in other divisions for system installation, field maintenance, and modifications.

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In addition to the everyday repair and maintenance duties, a trip was made to Taylor Park Reservoir in Division IV, to assist in surveying reservoir elevation and to calibrate the pressure transducer.

This year, one more station was upgraded to High Data Rate (HDR) data loggers / transmitters. This brings the total number of DWR owned HDR systems in this division to 43. Since there are 66 stations with DWR owned satellite telemetry, the upgrade phase is nearly two-thirds complete. There are 11 stations with satellite telemetry owned by other entities. Only 3 of these have been upgraded to HDR.

New Stations/Rehabilitations/Modifications

One cableway A-frame was built and installed at the South Fork Rio Grande near South Fork station. Another cableway A-frame was built for the North Channel Conejos River near La Sauses, and is scheduled for install in April, 2008. The flume at Norton Drain near La Sauses was modified with a ramped insert in the throat of the flume to prevent the well from becoming isolated at low flows and improve low flow sensitivity. Another ramped insert was installed in the existing concrete rated section at Pinos Creek near Del Norte to better define the lower end of the rating curve.

Flood Hardening

Three large construction projects where completed by Division 3 during 2007. The largest project was the installation of a J-hook and rip-rap at the Rio Grande–Alamosa County Line gage and was needed to protect the gage from high flow and also to stabilize the control section. The South Channel Conejos River near La Sauses gaging station was moved 300 feet upstream and a sheet piling control installed to provide for more accurate measurement of flows. The gage at San Antonio River near Manassa was reset at the same location with a new concrete well and new inlet and flush pipes.

Closed Basin

The Hydrographic Branch in Division III is charged with fulfilling the terms and conditions of a contract between the State of Colorado and the USBR. This contract 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 USBR and to other public entities. In addition, the Hydrographers are consulted on certain areas of concern regarding streamflow and measurement within the Project. Specifically, the Division of Water Resources is responsible for the operation of the gaging station on the Closed Basin Canal, and the development of monthly and yearly streamflow records for this location. In addition, there are at least nine other locations on the Closed Basin Project area that are to be measured when the need arises.

The current 5-year contract agreement between the State of Colorado and the USBR regarding the Closed Basin Project went into effect in February of 2005.

Well Metering

The Well Metering program went into effect in 2007. Meters were required to be installed on all non-exempt wells by March 1, 2007. With an estimated 6000 wells in the basin this was a huge task. Initially staff were kept in the office to deal with the huge volume of paperwork involved in the metering program The program allowed for variances (one meter to many wells under certain circumstances), required owners file meter installation forms or inactivation forms all of which required lots of data from the owners. The staff helped review the forms, reviewed variance requests, inspected installations, and began inventorying all the wells in the division. By the end of 2007 the staff had processed: Verification of Totalizing Flow Meter **(1,650),** Totalizing Flow Meter Installation **(3,700),** Well Owner Information **(3,000),** Water Use Data **(3,200),** Inactivation **(1,400),** Variance Request **(800).** The staff have also been scanning and linking all these forms into the lazerfiche system. To date over 14,000 forms (not pages) have been scanned.

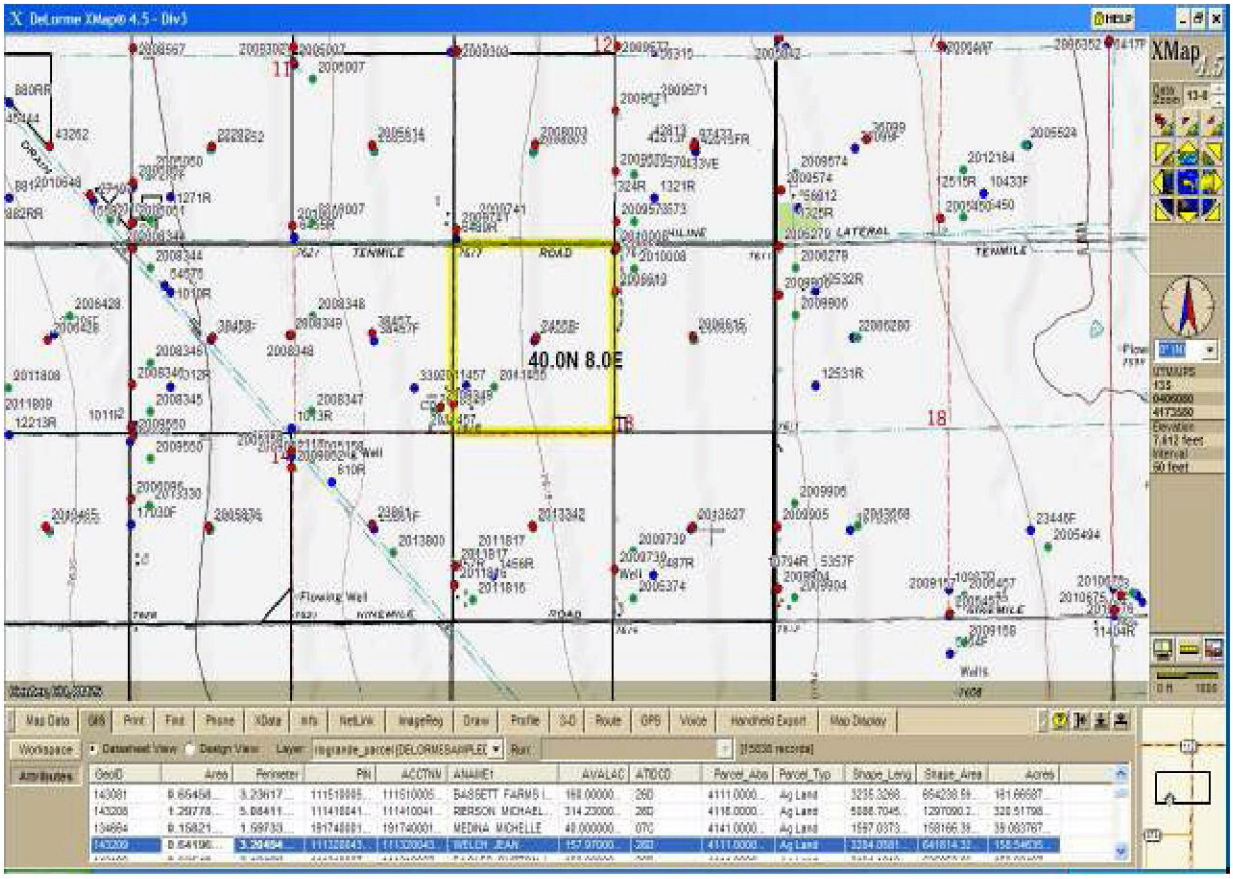
Well metering has been working closely with IT and Division 2 to incorporate the well metering into the hydrobase system. Well metering, with its requirements for certification of meters, required extensive changes to the database to accurately capture and display this data. Additionally the team worked to develop a web reporting application that allows farmers to report meter readings via the web. This went to the public in November to selected test users in the division.

The well metering branch also enlisted the assistance of a water commissioner, Bob Schultz, to develop and deploy mobile mapping products which allowed the metering technicians to inventory the wells in the valley and cross reference decree and permit databases to identify the wells in the field.

Well metering has not been accepted by all. The division has had to post 731 Well Head Orders including: 254 Cease & Desist Orders (mailed); 317 Violation Orders (mailed); 160 Cease & Desist Or Violation Orders (posted).

The division has had to use the Attorney General office to prod folks into compliance. So far the division has had forty "Wells Not In Compliance With a Violation Order" were sent to the AGO, of which 13 received warning letters from the AGO, of which 6 were followed with an intent to file a law suite letter, of which one permanent injunction (4 wells) was filed in Water Court (2007CW44). In this case, after repeated attempts to bring an individual into compliance, the court awarded a $6000 fine for pumping without a meter in violation of the rules. About 12 pending actions are still extant although basic inventory is still proceeding.

By March 1, 2008 all meters must be certified. The staff will hold refresher training in early 2008 for well testers. The division is also working with Division 2 and Division 1 to set up training for well metering in the Republican basin in 2008.

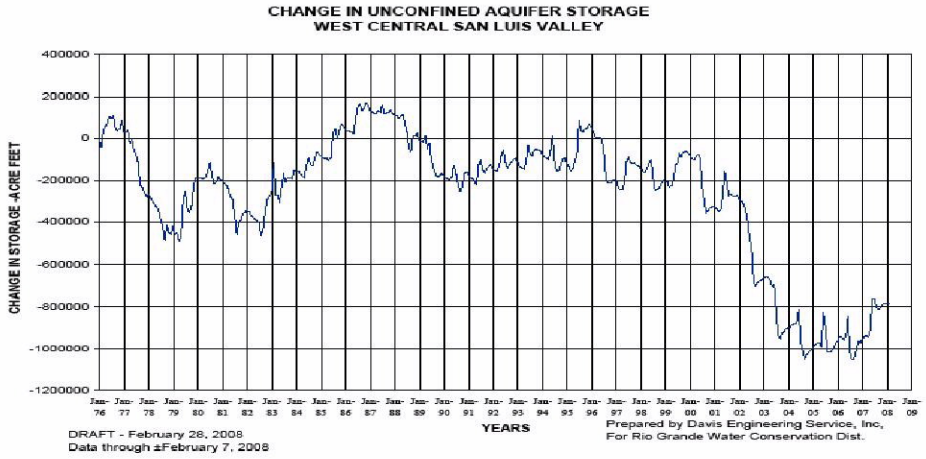


Screen shot from the mobile well tools used by metering technicians.

WATER ISSUES

In June of 2005, the Division of Water Resources promulgated rules on the measurement of groundwater in Division III. Titled "Rules Governing the Measurement of Ground Water Diversions Located in Water Division III, The Rio Grande Basin," these rules call for the metering of all non-exempt wells over fifty gallons per minute located in Division III. The Court ruled in favor of the rules in July 2006.The deadline for having meters installed on these wells is March 1, 2007. To offset the well metering workload the legislature authorized seven additional FTE for the Division staff. Hiring efforts began as soon as the new fiscal year began. By the end of 2006 the four field technicians and program manager had been hired. Two additional staff members, an Administrative Assistant and an Information Technology Professional, were hired in 2007.

The continuing impacts of the drought are felt far and wide in the entire Valley. The depletion of groundwater supplies and the dry antecedent conditions caused much concern and changes to normal administration. The poor 2007 snowpack caused much anguish early in the year. The unexpectedly high runoff caused multiple changes in compact curtailment over the year. Due to the high runoff there were higher than normal diversions into the Closed Basin again during the year. The RGWCD Unconfined Aquifer Storage Study showed a gain, over the lowest aquifer level, of 240,000 acre feet in 2007. Compared to the 1976 baseline, the study area contained approximately 800,000 acre feet less water by the end of 2007. 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 and matching the demand to it is recognized by even the most skeptical. In early 2004, SB-222 was passed at least in part because of this well and aquifer situation and provides the State Engineer a mechanism in which to proceed if he thinks that well administration is necessary.



For the last several years, the Rio Grande Water Conservation District (RGWCD) has encouraged the formation of groundwater Subdistricts to attempt to manage portions of the aquifer system. These types of Subdistricts were recognized in SB-222. They would have as their goal to stabilize the aquifers associated with each Subdistrict and prevent injury to senior rights and restore the historic stream aquifer connection and promote a sustainable system. During the summer of 2006 the Court approved the formation of Subdistrict #1 located in the closed basin north of the Rio Grande. In September 2007 the Subdistrict #1 board of managers arrived at a plan of water management. The plan was adopted by the RGWCD and was sent to the State Engineer for review. The State Engineer approved the plan. Many objections to the action of the RGWCD and the State Engineer in accepting the plan have been filed in court. It is expected that those actions will be litigated in 2008.

Meanwhile the petitions for formation of Subdistrict #2 (alluvium south of the Rio Grande) are being recollected for submission to the RGWCD for formal review and filing with the Water Court. Additionally the formation of a Subdistrict in the Conejos area started collecting petitions in the latter half of 2005, and discussions have been had regarding formation of Subdistricts in the Saguache/San Luis area, the Trinchera Area, and the Alamosa-La Jara area. The State Engineer is giving the well owners an opportunity to use SB-222 and address the depletion issues themselves but at some point will have to enact rules.

SB04-222 was passed in the 2004 session of the Colorado legislature. This bill was the combined effort of the water entities in the valley to address the confusion revolving around the ability of the State Engineer to promulgate rules regarding well administration. It cleared the way for that to happen while allowing considerable flexibility to the state in addressing these issues. The three primary goals of any plan would be to restore and stabilize the aquifers, minimize injury to senior vested rights, and insure that the State can meet her Compact obligations. The legislation recognizes entities like the Subdistrict outlined above, to provide a vehicle to address these issues within the valley. The bill also recognizes the ability of the State to consider many different issues in the overall management of the aquifers.

The State Engineer promulgated Rules and Regulations regarding new appropriations from the Confined Aquifer in 2004. Beginning in January 2006, trial was held on the merits of the Rules and Regulations and the model supporting those rules. The trial lasted six weeks. The Court issued its ruling in November 2006 affirming the rules and the underlying model. In that ruling the Court opined that Sustainability will be the next great tenant in water law. That ruling was appealed and oral arguments were heard by the Supreme Court in December 2007.

ON-GOING PROJECTS

RGDSS

As noted in Water Issues above the Rio Grande Decision Support System project was deemed sufficient by the Water Court to support the Rules and Regulations for new appropriations from the confined aquifer as required under the RGDSS enabling legislation (HB98-1011). Work continues to refine and update the model as more data become available.

Rio Grande Silvery Minnow

The Rio Grande Silvery Minnow continues to cause everyone on the Rio Grande in New Mexico to reconsider how and why things are done and where to find enough water to keep the river wetted throughout the reach from Albuquerque to Elephant Butte. The 2007 year, with its long runoff, was kind to the minnow with what appears to be good recruitment rates. The division was involved in the drafting of the Silvery Minnow Recovery Plan

Southwestern Willow Flycatcher

During 2004 the USFWS re-designated proposed critical habitat for the endangered Southwestern Willow flycatcher. In Division III the new designation included the Conejos River up to HWY 285 and the Rio Grande up to Del Norte. The Division and the RGWCD spent many hours providing comments on the listing to the USFWS. The RGWCD also formulated a Habitat Conservation Plan (HCP) that is designed to help maintain the habitat the bird needs. Additionally the USFWS personnel at the local wildlife refuges (Alamosa and Monte Vista National Wildlife Refuges) spend considerable effort in assuring useful habitat for the species. As a result of the comment, the work on the HCP, and the Refuges extraordinary success in sponsoring the bird, the final designation of critical habitat (2005) did not include any land in Colorado. The RGWCD continues to work on the HCP to satisfy the USFWS requirements.

Upper Rio Grande Water Operations Model

The Upper Rio Grande Water Operations Model being constructed by the Federal agencies in New Mexico is basically complete. The Bureau of Reclamation and Army Corps of Engineers have used it for the river accounting since 2000. The accounting module has been approved in its present state by the Engineer Advisers and the Commission for use in the future. The model is being refined on a continuing basis. Colorado again agreed to be a cooperator in the project a status that allows us to monitor the modeling efforts without substantial financial commitment.

Rio Grande Compact Commission Salinity Committee

Salinity in the Rio Grande is being studied. New Mexico has initiated studies of sources of salinity, primarily in the portion of the Rio Grande below Elephant Butte. A Salinity forum was held in El Paso in May to kick start the formation of a Salinity committee under the Rio Grande Compact Commission. The Committee is looking to the ACOE to assist with research funded under WRDA to determine sources of, and potential solutions to, salinity problems. The DE and ASE have been involved in the steering committee assisting with the development of a technical committee and with a scope of work for grant/funding applications.

Alamosa River Restoration Project

The Alamosa River Watershed Restoration Committee obtained funding via a settlement with the parties involved in the Summitville Mine project. There are severe restrictions on the use of those funds. The Committee has developed a list of projects which includes items from river stabilization structures, instream flows, to grazing management in riparian areas. The Committee is most interested in developing an instream flow in the reach using purchased water and storage in terrace reservoir. The Committee has requested that the new EPAT tool be run for Terrace reservoir so that storage for instream flows may be evaluated. The Committee has submitted funding requests for Roundtable review to supplement the existing funding.

Rio Grande Headwaters Restoration Project

With the completion of the feasibility study, the Rio Grande Restoration Project is now in transition to implementation. The report in that study will be used to continue the project in 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 implementing restoration activities as funding is available. The team has begun soliciting congressional support for WRDA funding to assist in these projects.

Rio Grande Roundtable

The Rio Grande Roundtable meets monthly in Alamosa. The Division Engineer attends these meetings as an adviser and educator on water issues. The roundtable has been successful in vetting and recommending projects to the CWCB for funding including: the Rio Grande Reservoir enlargement project, the Romero/Guadalupe diversion structure restoration, the analysis of the Hydraulic Divide, and funding for Conservation Easements through the Rio Grande Headwaters Trust.

Groundwater Enforcement

The Division III staff continues to make concerted efforts to address numerous issues regarding the use of groundwater. Since there are no groundwater administration rules in effect, the staff has tried diligently to address issues of

expanded use, improper use of wells on land they were not intended to serve and change of uses without confirmation by the State Engineer or the Water Court. Terms and conditions on permits, late registrations and decrees provide our initial guidance along with extensive aerial photo interpretation. These issues arise in various ways, but many find us without any effort on our part.

The recent implementation of well metering rules has required that owners install meters on their wells. Staff inventory of wells and review of the installations and variances has generated a host of additional issues with respect to the current use of some wells. These are being brought to the attention of the owners so they have an opportunity to correct those problems either through administrative or court proceedings.

Numerous issues, particularly in regards to expanded use come to our attention by people participating in the EQUIP program of the NRCS. With the Federal government's large cost share in this program, users have in many instances tried to add new acreages beyond that of a wells stated or historic service area. The delivery efficiencies of new pipelines, sprinklers and regulating reservoirs in many instances creates "extra water" that they want to take to new ground and dramatically increase the consumptive use of a wells production. There is little understanding that the increase in consumptive use in an over-appropriated system is detrimental to the entire area. NRCS staffs had, in some cases, not grasped the concept that conservation and efficiency cannot and does not create the ability to add new acres. It is very hard for many to understand that there is no water savings just because there may be less water pumped but the new system and its efficiency has increased consumption. We have met with the NRCS on numerous occasions and they now refer all potential "water expansion" applications to the Division office for review prior to NRCS approval. These efforts take considerable resources but are absolutely essential to us holding the line on overall consumptive use in the Rio Grande Basin. The Rio Grande and Conejos River systems are consumptive use limited pursuant to the Rio Grande Compact and, since the Basin is already over appropriated, cannot afford any new depletions to the system.

ON-GOING ISSUES

Water Court Activities

Sixty-three cases were filed in the Division III Water Court during 2007. Once again, the majority of the cases filed during the year sought a change of underground water right. Typically, the Applicant sought to adjudicate an existing alternate point of diversion or supplemental well or convert the historic use to a new use. Many of these have been filed in response to investigations under the well metering rules. The Division continues to oppose those Water Court applications that seek to deepen an existing non-exempt well or construct a new alternate or supplemental point of diversion. Pursuant to Policy 2003-3, the State

Engineer has denied well permit applications for deepening wells and/or construction of a new supplemental or alternate point of diversion. This policy has been backed by Statements of Opposition filed against such claims. A trial, scheduled to be heard in front of Judge Kuenhold during November, 2004 on this matter, was dismissed as the Applicant chose to pursue assistance with formation of a groundwater Subdistrict rather than litigate a change of water right in Court. All outstanding cases requesting alternate or supplemental wells were resolved during 2007 by either dismissal or withdrawal.

Case No. 81CW177, the USA's claim to 21 pre-McCarren Amendment wells finally came to a conclusion during 2007 via a consent decree. These wells produce from the confined aquifer and are used for wetland management at the BLM's Blanca Wildlife Habitat Area east of Alamosa. Resolution of one of the oldest open filings in the State was well received.

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 or a trial. Judge Kuenhold remains the Water Judge and Margaret "Peg" Russell continued as Water Court Referee.

Water Court casework during 2007 was assigned to Mike Sullivan, Craig Cotten, Rob Phillips 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 strived to be as involved as possible in the water user community again in 2007. 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.

The well metering staff attended many forums and put on public meetings in all areas of the valley to inform the community about the requirements of the new Rules and Regulations for Well Metering.

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. We have actively participated in the San Luis Valley Wetlands Focus Group, 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 Compact Commission Salinity Committee, The Rio Grande Headwater Restoration Project, and many other public forums which require input on water issues.

The Division staff have attended and provided input on the formation of Subdistricts under SB222 and in the development of service plans under the authorized Subdistrict Number 1.

The Division Engineer has been attending the Rio Grande Roundtable meetings as an adviser to the Roundtable. The meetings have been an opportunity to provide education on water issues to a large group of individuals with varied backgrounds and interests. The Roundtable has been evaluating water project funding proposals for submission to the CWCB.

The staff of Division III participated in a number of public forums relating to water The Division Engineer has also been involved in a number of conferences and seminars in the San Luis Valley concerning the drought including the Potato-Grain Conference, and the Adams State open forum on water issues. The level of interest is very high since 2002 especially regarding the aquifer conditions and the lack of streamflow and how to incorporate wells into the priority system. Several hundred people have attended these conferences and much information has been disseminated. Several voluntary actions are being suggested for well owners to reduce their draft on the aquifer and impact to stream system.

Activities held July 23 through July 25 in Monte Vista and Alamosa saw the culmination of several months of hard work by local citizens and agencies in an effort to celebrate 100 Years of San Luis Valley Reservoirs. The history of the reservoirs that exist and benefit the San Luis Valley was presented in varied fashion including tours of the reservoirs, a video presentation, a hayride and barbeque, a symposium at Adams State College including a banquet with keynote speaker Justice Gregory Hobbs, and a remarkable traveling exhibit. Division III staff assisted with and participated in this fun and informative festival.

PERSONNEL/WORKLOAD ISSUES

Well Administration and Permitting Activities

The well permitting workload was fairly stable in 2007 with 374 permits issued from the Division III office. As in prior years, much of the permitting is for new residences in the valley as well as replacement for older wells. The aquifers in the valley have begun to stabilize and therefore we are seeing a slight decrease in the number of emergency replacement well permit applications.

Pursuant to the Well Permitting Guidelines for Water Division III dated October 28, 1999, the Division staff continues to submit recommendations with all non-exempt well permit applications processed by the Denver staff. Older wells

continue to fail as casings rust and collapse and need replacement. A great deal of research goes into each checklist before it is submitted to the Denver office. Although this process is cumbersome at times, it allows the staff the opportunity to discover any discrepancies with the existing permits and decrees and prevent expansion of use. The addition of the well metering branch has improved the efficiency and effectiveness of the well permitting process also. The well metering employees are in the process of inventorying wells throughout Division 3, and that information assists our office in making permitting decisions.

Well Inspection program

The well inspection program continues to be an important part of the Division III operations. As noted above policy 2003-3, regarding deepening of non-exempt wells, would be difficult to oversee without a well inspector to physically review construction. The inspector continues to assure that exempt and non-exempt wells are constructed in accordance with the Construction Rules as promulgated by the Board of Examiners.

Water Records and Information

In this age of satellite uplinks and computer record keeping the Water Commissioners would not be able to perform their duties without the computer. 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 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. Daily diversion sheets are posted in all districts and are available in the division office. The division continues to look for ways to provide high-speed access for water commissioners as computer programs become larger, more interconnected and essential to daily activities. Many water commissioners work in remote areas and it is increasingly difficult for those with dial-up access to effectively use the tools the state is developing.

Diversion records went slowly but smoothly this year with the division again using Hydrobase for diversion records. The division also participates in the Hydrobase team meetings in efforts to standardize record keeping and production. The Team has met several times and succeeded in reviewing the water rights tabulation system and the diversion information system. The massive database needs of the well metering program are being incorporated into the hydrobase system creating a very usable central database.

Personnel Changes

The promotion of existing staff to new positions in 2006 created a cascade effect still being felt into 2007. At times during the late winter/early spring of 2007, Water Commissioner positions were vacant in every Division 3 district except

districts 24 and 35. Again Assistant Division Engineer Craig Cotten has been pivotal in keeping staffing changes on course in Division 3.

In January, **Art Rivale** was selected to become the Lead Water Commissioner in District 22, the Conejos River drainage. Previously, Art had been the Lead Water Commissioner in Districts 25 and 26, the Saguache Creek and San Luis Creek Drainages.

Martha Archuleta joined the Division staff as an administrative assistant in the well metering program on February 5. Martha had previously worked for the judidial system and was responsible for the water court process. Martha had also worked for the previous water court referee so her knowledge of water rights has come in very useful.

Joe McCann transferred to District 20, the Rio Grande mainstem, as a Water Commissioner on March 8. Joe had been the Lead Water Commissioner on the Alamosa-La Jara Creek drainages, District 21, prior to that.

Also on March 8, **Jim Swanson** was promoted to the Lead Water Commissioner position in Districts 25 and 26 left vacant by the relocation of Art Rivale. In addition, Jim was given oversight of District 27, the La Garita and Carnero Creek drainages.

Jackson Trappett joined the Division staff as the IT professional in March. Jackson had worked for the BLM doing GIS work previously. His experience in GIS, database manipulation and desktop support is a great help to the division.

Luis Heredia joined Division 3 as the Lead Water Commissioner in District 21 on May 7. Luis is a native of the San Luis Valley and had been the ditch superintendent of the Terrace Irrigation Company for ten years previous to joining the Division of Water Resources.

Ivan Hunter began work for Division 3 on May 19 as the Deputy Water Commissioner in District 21. Ivan has a wealth of farming experience both in Colorado and New Mexico, and has been the ditch rider for the Miller Ditch Company for the last four years.

In July, **Pat McDermott** returned to Division 3. Pat had moved to Division 4 in January of 2007 to become the Assistant Division Engineer there, but he decided to return to Alamosa, rejoin his old coworkers, and refill the position that he had vacated.

Steve Blount was hired as a permanent employee of the Division of Water Resources on August 27, in the role of Deputy Water Commissioner for Districts 25, 26 and 27. For the previous 5 months, Steve had been in a temporary position in those districts. Prior to that time, Steve had been a ditch rider for the Rio Grande Canal Company for 19 years.

Jesse Jaminet joined the Division 3 staff as a hydrographer on November 13. Jesse is a longtime resident of the San Luis Valley and previously worked for the U.S. Forest Service. He has a bachelor's degree in wildland ecology and watershed management from the University of Wyoming.

Training Activities

Division III sent several staff to supervisory training in 2007. The Hydrographers conducted streamflow training for the staff as most of the water commissioners and well technicians use streamgaging equipment as part of their daily activities. The Division also conducted various refresher training during staff meetings.

Workload Issues

The workload issues have exploded in Division III as new programs mature: implementation of Well Metering regulations, formation of Subdistricts, Roundtable activities and Salinity management under the Rio Grande Compact.

Well Metering: With the well metering staff on board the program is running well, but has also placed a burden on the IT staff in the needed development of databases and programs for collection and use of data essential to the program. The inventory of wells in the division has driven water court case load up as problems are located in the field and brought to the attention of the owners.

Subdistricts: The formation of Subdistricts has required the Division Engineer devote considerable time to meetings regarding formation of Subdistricts, development of service plans, and water management plans. The Deputy State Engineer has also been working with the Board of Managers of Subdistrict #1 to assure that the provisions of SB04-222 are firmly addressed in their planning. The upcoming trial regarding the State Engineers approval of the plan of water management will add considerably to this workload in 2008.

Roundtable: The Rio Grande Roundtable meets monthly in Division III. The Roundtable has been reviewing proposals for funding of water projects and 'becoming educated' on water issues. The Division Engineer attends all meetings, provides educational presentations, and attends/advises the subcommittee on water projects.

Salinity Committee: The Rio Grande Compact Commission has formed a Salinity Committee. The Division Engineer and Deputy State Engineer have been peripherally involved, however as the committee moves forward more time commitment will be required.

EMPLOYEE RECOGNITION

Water Commissioner of the Year

Bob Schultz was chosen as Water Commissioner of the Year for 2007 in recognition of his efforts in developing and launching well inventory mapping software and databases that allowed for efficient collection and inspection of wells for the well metering program.

Best O' the Bunch

Division 3 determined an award recognizing the contributions of staff other than Water Commissioners was warranted in light of the increase in staff and duties in the Division office. This year Lee Conner was nominated by the Hydro Branch to receiver the Best O' the Bunch award in recognition of his efforts to keep all the equipment running and his willingness to go the extra mile to get the job done.

PUBLIC RECOGNITION

Ditch Superintendent of the Year

Max Nite was honored as the "Superintendent of the Year" for 2007. Max handles some of the largest ditches on the Conejos system and is always in communication with the Water Commissions to assure that things are operating smoothly and correctly.

Water Manager of the Year

Mike Blenden was honored as the "Water Manager of the Year" for 2007. Mike has been in charge of the three national wildlife refuges in the valley for many years. Mike's ability to work with the community on water issues and his valuable assistance in wildlife issues is appreciated.

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 2008:

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,
3. Implement Phase 2 of the well metering rules and continue the process of building suitable databases and programs to effectively collect and utilize the information gathered through the program.

4. Implement the provisions of the Long-Range Plan.
5. Continue to develop and implement the quality assurance/quality control program for Division III assuring accurate present and historic diversion records, proper water rights information, current ownership/contact information, and continuing an accurate and efficient decentralized well permitting program.
6. Constantly improve the quality of our hydrographic and diversion records and meet all deadlines for the completion and submittal of final records.
7. Coordinate with water user groups, Roundtables, 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.
8. Work with CWCB, the SEO, and the consultants on the RGDSS project to update and refine the model.
9. Continue to implement Principal Centered Leadership.
10. Identify any problems with and improve water administration at every level in the organization.
11. 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.
12. 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.
13. Provide sound judgment and encouragement to the Subdistricts and well owners to move to a sustainable system that addresses impact to the surface streams and protect the rivers in all ways.
14. Promulgate effective rules that identify and address the issues facing this valley with regards management of the aquifers, senior rights, and our Compact compliance.

MAJOR ACTIVITIES IN 2007

The potential for a well-above runoff is a real possibility in 2008 including the possibility of minor flooding if temperatures get hot early in the year. Division III staff will be proactive in providing water availability/diversion information to water users and in working with emergency responders and planners.

With the implementation of the "Measurement Rules for Groundwater Withdrawals in the Rio Grand Basin" meters were required to be in place on all wells by March 1, 2007. By March 1, 2008 all those meters need to be certified that they are properly operating. Collecting, processing, populating databases, and utilizing the massive amounts of information, much of it in paper form, will present formidable tasks for the Division III staff.

Additionally the staff will be reviewing/drafting rules for both post compact depletions above the Compact index gages and well administration for possible promulgation in late 2008 or early 2009.

Dealing with the ESA issues both in Colorado and downstream in New Mexico will be another activity in 2008. The Southwestern Willow Flycatcher, which has critical habitat on the Middle Rio Grande, and the imperiled Silvery Minnow continue to effect water administration on the Rio Grande in New Mexico.

The administration of the two Interstate Compacts in Division III will be a major interest in our workload. Each 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.

The US Park Service filed an application at the end of 2004 to preserve and protect the aquifer under the Great Sand Dunes. This unique application claims all un-appropriated water in the aquifers below the dune mass. This application is being set for trial in August 2008 and will require some staff time in trial preparation.

Finally trial will be held on Subdistrict #1's water management plan during 2008 and will require considerable time from the Division Engineer.

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. Also, the Reservoir is pursuing funding that could allow for repair of the gates and a potential expansion of the Reservoir. The Division is supporting these efforts as resolution of the gate issue and addition storage may significantly assist in water administration in the basin.
2. During extremely dry winter months as seen in the last few years, there are areas in the San Luis Valley that are prone to domestic wells going dry

and the problem of stock out of water. After several different scenarios were suggested, tried, 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. While the winter of 2007 has been very cold with significant moisture generally, some areas of the valley continue to see dry conditions.

3. We used Compact Storage on the Rio Grande to reduce the volume of water indexed and to save water in the event we over-delivered. We are currently working on an operating plan that would formalize the use of a pre-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.
4. 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 on several river basins in Division III.
5. We are cooperating with the RGWCD and the well owners in the Valley to try and reduce the demand on the aquifer via the innovative SB04-222 legislation. This legislation allows for Subdistricts to develop groundwater management plans and "self-manage" groundwater issues under DWR review. In the interim we are still urging well users to continue to reduce their pumping to the extent possible in their individual operations to jump start any recovery.

MOST IMPORTANT EVENTS OF 2007

Implementation of the Rules and Regulations regarding Well Metering in the Rio Grande Basin was another milestone in 2007. The rules will allow for empirical data to be available to analyze the actual use of groundwater in the basin.

The approval of the Plan of Water Management for Subdistrict #1 (Unconfined aquifer - Closed Basin area) has generated opposition in court. Review by the court will clarify the ability for the water users in an area to solve the aquifer overdraft and attendant impacts to surface streams in new ways including the use economic means to self fund and purchase/retire water rights and reduce impacts rather than the more familiar well administration experienced in other areas of the state.

The Rio Grande drainage continued to experience wildly varying conditions. The underestimated runoff made for a difficult administrative year under the Compact. However, the slow rate of melt-out allowed for maximum diversion and utilization of water in the basin during 2007.

A. TRANSMOUNTAIN DIVERSION SUMMARY—INFLOWS 2007

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	3	2	15	8	78	4670	Trib Piedra River
20	918	Don LaFont #2 Ditch	Trib Red Mtn Creek	31	13	254	86	78	4671	Trib Piedra River
20	919	Pine River	Weminuche	395	56	529	66	31	4638	NF Los Pinos
20	920	Tabor	Trib Clear Creek	754	139	1230	156	62	774	Cebolla Creek
20	921	Treasure Pass Ditch	SF Rio Grande	173	36	200	22	29	4669	Wolf Creek
20	922	Weminuche Pass D	Weminuche	849	25	1050	29	31	4637	Rincon LaVaca
20	923	Williams Creek Squaw Pass	Squaw Creek	382	96	466	88	78	4672	Williams Creek
26	702	Tarbell	Saguache Creek	753	82	1000	120	28	4656	Cochetopa Creek

B. TRANSMOUNTAIN DIVERSION SUMMARY--OUTFLOWS

79	N/A	Hudson Branch Ditch	Huerfano River	246	69	454	72	35	657	Medano Creek
79	N/A	Medano Ditch	Huerfano River	603	56	1323	75	35	658	Medano Creek

RESERVOIR STORAGE SUMMARY
IRRIGATION YEAR – 2007
AMOUNT OF STORAGE

WD	ID	RESERVOIR NAME	SOURCE STREAM	AF	MINIMUM DATE	AF	MAXIMUM DATE	END YR
20	3532	Beaver Park	Beaver Creek	2267	10/15/2007	4528	5/14/2007	2466
20	3536	Continental	North Clear Creek	988	07/10/2007	9034	4/29/2007	1051
20	3554	Rio Grande	Rio Grande	9600	11/01/2006	32443	6/16/2007	17790
20	3558	Santa Maria	North Clear Creek	4794	8/31/2007	9342	5/31/2007	4802
21	3582	La Jara	La Jara Creek	1794	9/10/2007	2572	5/24/2007	1613
21	3583	Terrace	Alamosa River	3591	11/03/2006	12402	5/30/2007	3713
22	3574	Platoro	Conejos River	7920	11/03/2006	32427	6/25/2007	12009
24	3576	Sanchez	Culebra Creek	11960	11/01/2006	30979	8/16/2007	29441
35	3529	Mt. Home	Trinchera Creek	1880	11/01/2006	11899	6/29/2007	2068
35	3530	Smith	Trinchera Creek	276	8/04/2007	4173	5/08/2007	634

WATER DIVERSION SUMMARIES 2007

	STRUCTURES REPORTING			ALL OTHER STRUCTURES					TO IRRIGATION		
WD	With Record (1)	No Water Avail. (2)	No Water Taken (3)	No Info Avail. (4)	No Record (5)	# Visits Structure	Total Diversions AF	Total Diversions to Storage, AF	Total Diversions, AF	Number of Acres Irrigated	Average AF Per Acre
20	408	50	30	43		8048	710830	27113	713947	329225	2.17
21	80	8	12	3		3142	168574	9194	108007	71930	1.50
22	145	0	20	13		2597	282505	18996	261479	86637	3.02
24	93	0	5	15		3070	119506	31779	87103	21503	4.05
25	121	31	32	27		309	51154	0	51154	12846	3.98
26	137	89	21	17		1525	47212	0	47385	16500	2.87
27	39	16	6	6		414	24299	0	21992	5723	3.84
35	44	5	71	69		1831	63250	15256	56125	20524	2.73
TOT	1067	199	197	193		20936	1467331	102337	1347193	564888	2.38

WATER ADMINISTRATION DATA SUMMARIES

RIVER CALLS - IRRIGATION YEAR – 2007

District	Most Senior Priority Curtailed	Most Junior Priority Served	Calling Right in Spring
20 Rio Grande	#174 Chicago Ditch	1916-40A Santa Maria Reservoir	#353 Prairie Ditch
21 La Jara	#6 Garcia D#1, Le Mita D#2	#104 Keystone Ditch	#4 Hansen Ditch
21 Alamosa	#8 Terrace Main Canal	#110 Terrace Reservoir	#57 Lowland Overflow Ditch
22 Conejos	#1 Guadalupe, Romero and Manassa	#190 Christiansen Ditch	#108 Alamo Ditch
22 San Antonio	#4 Llano Ditch	#196 Eight Mile Ditch	#3 and #11 El Coda Ditch and Sinecero Ditch
24 Culebra	#53 Jose M Sanchez Ditch	1951-4 Lobato Ditch #1	#23 Guadalupe Sanchez Ditch
26 Saguache	#15 Ford Ditch	#65 Werner Clark Ditch	#14 Hearn Ditch
27 La Garita	#60F Home Ditch #1	1987 Biedell Ditch #10	#10 Biedell Ditch #10
27 Carnero	#17 La Mogote Ditch #2	#61 Johnnie Smith Ditch #1	#21 Green Ditch
35 Trinchera and Tributaries	#3 Sangre de Cristo Ditch	#70 Garland Ditch No. 1, Indian Creek Supply Ditch, Sangre de Cristo-Trinchera Ditch	#44 Beckwith Ditch

Because of the idiosyncrasies of the administration scheme in District 25, no such information could be obtained which made sense.

WATER ADMINISTRATION DATA SUMMARIES

WATER DIVERSION SUMMARIES FOR VARIOUS USES - IRRIGATION YEAR 2007

WD	TRANS-MOUNTAIN OUTFLOW	TRANS-BASIN OUTFLOW	MUNICIPAL	COMMERCIAL	INDUSTRIAL	RECREATION	FISHERY	DOMESTIC & HOUSEHOLD	STOCK
20	**0**	**14928**	**7319**	**353**	**0**	**0**	**807**	**168**	**0**
21	**0**	**0**	**70**	**0**	**0**	**0**	**0**	**0**	**0**
22	**0**	**0**	**1941**	**0**	**0**	**0**	**0**	**815**	**0**
24	**0**	**0**	**194**	**0**	**0**	**0**	**0**	**0**	**0**
25	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
26	**0**	**0**	**279**	**0**	**0**	**0**	**0**	**0**	**0**
27	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**
35	**1777**	**0**	**159**	**0**	**0**	**0**	**130**	**214**	**0**
Total	**390**	**14937**	**9310**	**1918**	**0**	**0**	**944**	**982**	**0**

WATER ADMINISTRATION DATA SUMMARIES

WATER DIVERSION SUMMARIES FOR VARIOUS USES - IRRIGATION YEAR 2007

WD	AUGMENTATION	EVAPORATION	GEOTHERMAL	SNOW-MAKING	MINIMUM STREAMFLOW	POWER GENERATION	WILDLIFE	RECHARGE	OTHER
20	3310	214	0	0	0	239	6539	7040	12198
21	5	5	0	0	0	0	0	0	40798
22	26782	3	0	0	0	0	0	216	0
24	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	551	0
27	0	0	0	0	0	0	0	2303	0
35	225	0	0	0	0	0	0	0	0
Total	30323	222	0	0	0	239	6539	10110	52997

Compact Administration

2007 RIO GRANDE COMPACT REPORT

Preliminary Figures

	Acre-feet
1. Adjusted Rio Grande Index	710,200
*Adjusted Rio Grande Delivery	202,400
Required Rio Grande Delivery	209,100
Less Paper Credit per agreement	5,000
Net Required Rio Grande Delivery	204,100
2. Adjusted Combined Conejos Index	280,000
**Adjusted Conejos Delivery	86,500
Required Conejos Delivery	95,400
Less Paper Credit per agreement	5,000
Net Required Conejos Delivery	90,400
3. ***Total Delivery at Lobatos	288,900
Total Required Delivery at Lobatos	304,500
Less Paper Credit (See Compact)	10,000
Net Required Delivery at Lobatos	294,500
Margin	-5,600

4. Rio Grande Curtailment

Delivery Target	(% of Index)	Estimated Curtailment of Ditches	(% of Index)
January 1 – April 3	100%	January 1 –April 3	100%
April 4 – May 3	5%	April 4 – May 3	5%
May 4 – June 5	0%	May 4 – June 5	0%
June 6 – June 20	2%	June 6 – June 20	0%
June 21 – July 5	8%	June 21 – July 5	returns
July 6 – July 23	25%	July 6 – July 23	25%
July 24 –August 15	30%	July 24 – August 15	30%
August 16 – September 18	33%	August 16 – September 18	33%
September 19 – October 16	24%	September 19 – October 16	24%
October 17 – October 31	17%	October 17 – October 31	17%
November 1 – December 31	100%	November 1 – December 31	100%

5. Conejos Curtailment

Delivery Target	(% of Index)	Estimated Curtailment of Ditches	(% of Index)
January 1 – April 3	100%	January 1 – April 3	100%
April 4 – May 3	7%	April 4 – May 3	7%
May 4 – June 5	0%	May 4 – June 5	0%
June 6 – June 20	4%	June 6 – June 11	0%
June 21 – August 15	16%	June 12 – June 20	4%
August 16 – August 27	25%	June 21 – August 15	16%
August 28 – September 18	16%	August 16 – August 27	25%
September 19 – October 16	11%	August 28 – September 18	16%
October 17 – October 31	8%	September 19 – October 16	11%

November 1 – December 31	100%	October 17 – October 31 November 1 – December 31	8% 100%

*Includes 9,023 a.f. of the creditable Closed Basin Project production.
**Includes 6,015 a.f. of the creditable Closed Basin Project production.
***Includes all the creditable Closed Basin Project production (15,038 a.f.).

Water Court Activities
January 1 – December 31, 2007

Water Court Applications in 2007 - Type of Claim

Type of Claim	Number of Cases	Number of Structures
Underground Water Right	3	6
Surface Right	2	1
Storage Right	0	2
Plan for Augmentation	2	N/A
Exchange	0	0
Change of Underground Water Right	45	126
Change of Surface Right	1	3
Change of Plan for Augmentation	2	25
Declaratory Judgment	1	1
Injunctive Relief	1	1
Approval of Management Plan	1	N/A
Verified Complaint	1	N/A
Finding of Diligence	2	4 (exchanges)
Instream Flow Right	1	1
Diligence - Make Conditional Absolute	1	1
Total	63	171

Note- Some applications in 2007 contained more than one type of claim or action (e.g. Change of Water Right and Plan for Augmentation). The type of claim was tabulated above under only one category of application.

Type of Decree Entered in 2007

Type of Claim	Number of Cases	Number of Structures
Finding of Diligence on Conditional Rights	4	28
Cancellation of Conditional Rights	0	0
Conditional Right Made Absolute	2	3
Conditional Right Adjudicated	0	0
Surface Right Adjudicated	1	1
Underground Right Adjudicated	2	27
Injunction: Abandonment	0	0
Petition to Correct Location	0	0
Plan for Augmentation Adjudicated	4	10
Change of Surface Right Adjudicated	0	0
Change of Underground Right Adjudicated	13	27

Complaint for Declaratory Judgment Resolved	1	1
Complaint Resolved	0	0
Total	27	97

Water Court Activities January 1 – December 31, 2007

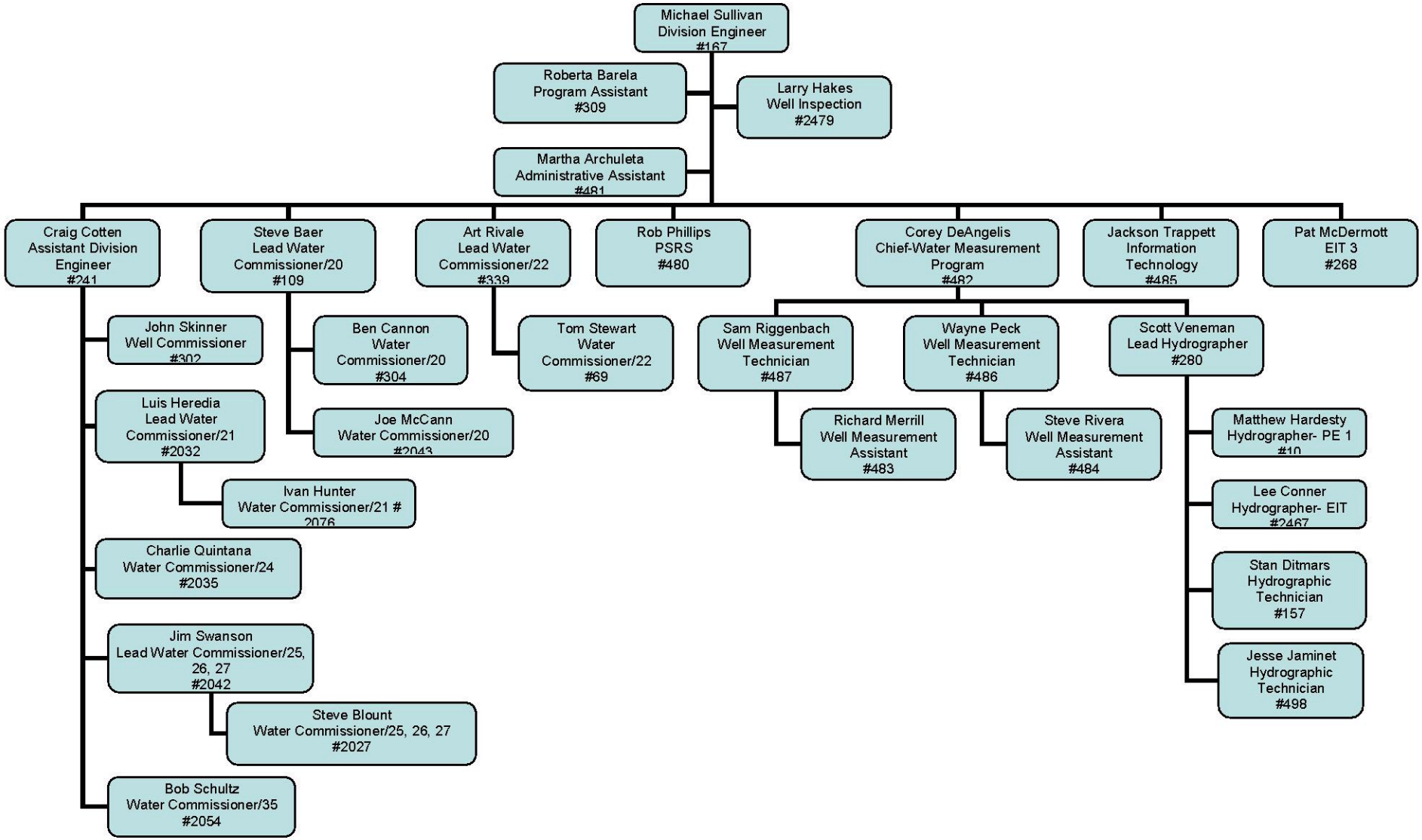
(Continued)

Number of Open Cases as of December 31, 2007:	106
Number of Cases Dismissed in 2007:	6
Number of Cases Withdrawn in 2007:	2
Decrees Issued by the Court in 2007:	27
Cases Closed in 2007:	35

DIVISION III ACTIVITY SUMMARY
2007 CALENDAR YEAR

ACTIVITY	TOTALS
Number of structures observed	1656
Number of surface rights	2891
Number of reservoirs*	362
Number of wells**	23001
Number of observations	35873e
River measurements	932
Ditch measurements	88
Dam inspections	18
New water rights administered	35
Number of Augmentation Plans	98
Plan of Augmentation Structures***	1065
New Plans of Augmentation	4
Wells administered**	23001
Active SSPs	3
Applications for decrees	63
Decrees issued by Water Court	27
Division Engineer Recommendations Filed	28
Water Court Appearances	160
Meetings with water users	626
Meetings to resolve water related disputes	72
Public assistance contacts	54648
Well permits issued	374
Miles driven by staff	286,688
Professional and Technical Staff	17
Clerical Staff	2
Water Commissioner FTE (Full/Part-Time)	5/4.7

e: this number estimated due to variables in Hydrobase
* includes Non-Jurisdictional Impoundment filings
** includes permits
*** includes "domestic" wells under aug plans. # calc from Hydrobase & Welltools data.


Michael Sullivan
Division Engineer
#167
Roberta Barela
Program Assistant
#309
Larry Hakes
Well Inspection
#2479
Martha Archuleta
Administrative Assistant
#481
Craig Cotten
Assistant Division Engineer
#241
Steve Baer
Lead Water Commissioner/20
#109
Art Rivale
Lead Water Commissioner/22
#339
Rob Phillips
PSRS
#480
Corey DeAngelis
Chief-Water Measurement Program
#482
Jackson Trappett
Information Technology
#485
Pat McDermott
EIT 3
#268
John Skinner
Well Commissioner
#302
Luis Heredia
Lead Water Commissioner/21
#2032
Ivan Hunter
Water Commissioner/21 #2076
Charlie Quintana
Water Commissioner/24
#2035
Jim Swanson
Lead Water Commissioner/25, 26, 27
#2042
Steve Blount
Water Commissioner/25, 26, 27
#2027
Bob Schultz
Water Commissioner/35
#2054
Ben Cannon
Water Commissioner/20
#304
Joe McCann
Water Commissioner/20
#2043
Tom Stewart
Water Commissioner/22
#69
Sam Riggenbach
Well Measurement Technician
#487
Richard Merrill
Well Measurement Assistant
#483
Wayne Peck
Well Measurement Technician
#486
Steve Rivera
Well Measurement Assistant
#484
Scott Veneman
Lead Hydrographer
#280
Matthew Hardesty
Hydrographer- PE 1
#10
Lee Conner
Hydrographer- EIT
#2467
Stan Ditmars
Hydrographic Technician
#157
Jesse Jaminet
Hydrographic Technician
#498

Division 3 Staff

Dangerous Well

A Posted Well

New J-Hook for Gage Station

Acoustic Doppler

Snow Survey

The Hydro