

# Division 2 Annual Report 2013



Two Butte Reservoir – August 2013

Steven J Witte  
Division Engineer  
Division 2

April 29, 2014



COLORADO

Division of Water Resources

Department of Natural Resources

Water Division 2 - Main Office  
310 E. Abriendo Ave, Suite B  
Pueblo, CO 81004

April 29, 2013

Mr. Dick Wolfe  
State Engineer  
Colorado Division of Water Resources  
1313 Sherman St.  
Denver. CO 80203

Dear Sir,

Please accept this executive summary report describing some of the principle activities and accomplishments of Division 2 personnel during 2013.

I want to thank you for your untiring support and assistance to me throughout the year. Your leadership and personal involvement have contributed significantly to the accomplishment of our shared objectives.

I would also like to publicly acknowledge and thank the men and women of Division 2 who have worked faithfully and diligently to provide such excellent service to the people of Colorado. As you know, we are indeed fortunate to have such talented and committed staff members. While there is always a risk of inadvertently failing to specifically acknowledge the commendable efforts of certain individuals, I have attempted to give credit where particularly due throughout the report.

As you will see in the following report 2013 presented Division of Water Resources personnel with challenges of drought, fire and flooding and regardless of what 2014 may hold in store, please be assured that we will continue to do our best on your behalf and for the citizens of Colorado.

Very Truly Yours,

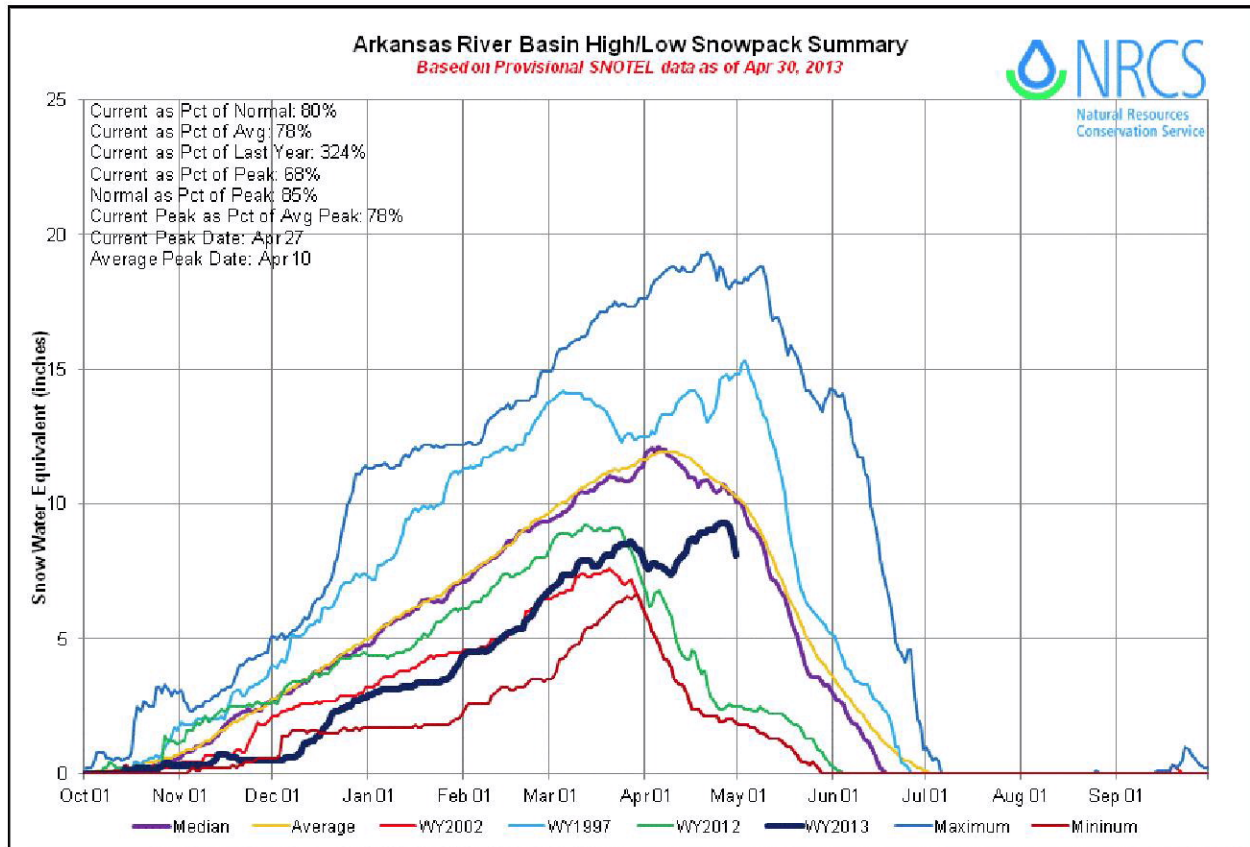
Steven J. Witte  
Division Engineer



## Section 1 – General Description of 2012 Operations

The 2012-13 water year was another very meager year of drought conditions in the Arkansas River Basin of Colorado. Using the combined flows of the Arkansas River measured below Pueblo, Fountain Creek at Pueblo and the Purgatoire River near Las Animas, 2013 was the second driest year since 1950, surpassed only by 2002.

The following graph illustrates the point that expectations for water supply availability were very low throughout much of last spring, but conditions did actually improve during the month of April:



Winter storage accumulation at the end of the Pueblo Winter Storage Program storage period on March 14, 2013 was only 67,168 acre-feet, which was only 53% of that stored the previous year and 48% of the previous 20 year average. During the Winter Storage Period (Nov. 1, 2012 – Apr. 1, 2013) only 6,515 acre-feet was stored in John Martin Reservoir which is 29% of the 1950 – 1975 average.

According to the United States Bureau of Reclamation 46,700 acre-feet were imported into the Arkansas River basin by the Fryingpan-Arkansas Project during 2013. This is approximately 92% of average. The total of all transmountain water imported into Division 2 during WY2013 was 119,748 acre-feet.

Overall irrigation well pumping in 2013 was by far the lowest year since Colorado's Amended Use Rules for well pumping went into effect in 1996. The amount pumped by Rule 3 irrigation wells was only 57% of the prior low experience in 2004 following the two successive very dry years in 2002 and 2003 and 31% of average.

The 2013-2014 Rule 14 Plan approvals for AGUA, CVPDA and LAVMA provided for an estimated amount of pumping and stream depletions as follows:

Plan	Estimated Total Pumping (Original Plan without Amended Pumping)  (AF)	Estimated Rule 3 Irrigation Pumping (Original Plan without Amended Pumping)  (AF)	Estimated Stream Depletions (Original Plan without Amended Pumping)  (AF)
AGUA	4,839	4,202	3,376
CVPDA	14,666	6,668	15,335
LAVMA	10,132	6,284	8,649
TOTALS	30,898	17,154	27,360

The 2013 calendar year actual pumping and stream depletions for AGUA, CVPDA and LAVMA were as follows:

Plan	Actual 2013 Calendar Year Pumping (AF)	Actual 2013 Calendar Year Rule 3 Irrigation Pumping (AF)	Actual 2013 Calendar Year Stream Depletions (AF)
AGUA	4,099	3,335	3,053
CVPDA	14,643	8,086	16,994
LAVMA	13,712	9,819	12,534
TOTALS	32,454	21,240	32,581

The low amount of pumping administratively approved under Rule 14 replacement plans in 2013 was due to several factors; primarily the low amount of replacement water projected to be available, the relatively high amount of lagged depletions anticipated from pumping which occurred in previous years, the need to “repay” some un-replaced depletions to in-state senior water rights which occurred in 2012, the need to prioritize available replacement resources to cover the depletions anticipated due to continued pumping for uses considered to be too critical to curtail, such as municipal uses and important economic drivers such as feed lots which provide markets for local agricultural products.

As a result of the drought conditions, farmers in southeastern Colorado reduced their planted acreage substantially. Almost no corn was planted in 2013. Vegetable acreage in Otero County was reportedly less than 30% of average. Often available irrigation water was allocated to save previously planted alfalfa, and yet, estimated losses exceeded 40%. Farmers in southwestern Kansas faced similar conditions. For the second consecutive year, Kansas declined to call for the release of their water supplies stored in John Martin Reservoir based on a calculation that the evaporative losses would be exceeded by the transportation losses, if the water would have been released. This decision, while controversial, saved Colorado from having to recompense Kansas for any portion of the losses of Section II water that would have occurred in the reach between John Martin Reservoir and Coolidge Kansas.

As is said, when it rains, it pours. Although it occurred too late to affect planning decisions, the monsoon season brought welcome relief in the form of generally beneficial rain over much of Division 2. Beginning in July, rains occurred in the Purgatoire River Basin which caused the flow of the Purgatoire, measured at Las Animas, Colorado to exceed 10 cfs for the first time since . In early August the inflow to Model Reservoir on a tributary to the Purgatoire River, caused that dam to fail. The same storm system caused Two Butte Reservoir to fill to the highest level since 1965, which created significant concerns related to the safety of that structure.

A later series of storms which occurred in September caused widespread flooding throughout South Platte River Basin. Less catastrophic effects were experienced within the Arkansas. Two small dams failed on the south slope of Pikes Peak and several days of high flows were experienced along Fountain Creek which scoured the channel and deposited a number of trees further downstream in the City of Pueblo. It has been reported in the Pueblo Chieftain (2/5/14) that during this storm, a new state record for rainfall in a 24-hour period was likely established at a location on Fort Carson on September 12, 2013 when a total of 11.85 inches fell. If confirmed by the National Oceanic and Atmospheric Administration, the old record of 11.08 inches measured at Holly, Colorado in 1965 will be toppled.

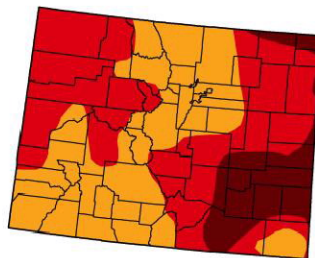
The following illustrations indicate that although conditions appear to have improved during 2013, according to the U.S Drought Monitor, portions of the Arkansas Basin remain in a severe drought.

## U.S. Drought Monitor Colorado

January 15, 2013  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	100.00	59.64	13.50
Last Week (01/08/2013 miss)	0.00	100.00	100.00	95.06	53.47	13.48
3 Months Ago (10/16/2012 miss)	0.00	100.00	100.00	91.36	51.05	14.01
Start of Calendar Year (01/01/2013 miss)	0.00	100.00	100.00	95.06	53.47	13.48
Start of Water Year (09/01/2012 miss)	0.00	100.00	100.00	61.75	16.89	
One Year Ago (01/10/2012 miss)	58.24	41.78	24.98	10.60	0.04	0.00

**Intensity:**  
 D0 Abnormally Dry  
 D1 Drought - Moderate  
 D2 Drought - Severe  
 D3 Drought - Extreme  
 D4 Drought - Exceptional



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu>



Released Thursday, January 17, 2013  
David Simeral, Western Regional Climate Center

## U.S. Drought Monitor Colorado

January 21, 2014  
(Released Thursday, Jan. 23, 2014)  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	31.95	68.04	22.52	13.96	4.31	1.44
Last Week (01/14/2014 miss)	31.95	68.04	22.52	13.96	4.31	1.44
3 Weeks Ago (01/07/2014 miss)	24.82	75.18	26.52	12.01	4.31	1.47
Start of Calendar Year (01/01/2014 miss)	32.94	67.06	23.39	13.66	4.31	1.47
Start of Water Year (09/01/2013 miss)	-	-	-	-	-	-
One Year Ago (01/10/2013 miss)	0.00	100.00	100.00	100.00	59.64	13.50

**Intensity:**  
 D0 Abnormally Dry  
 D1 Moderate Drought  
 D2 Severe Drought  
 D3 Extreme Drought  
 D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

**Author:**  
Richard Turner  
OPCON/MAN/MSH/ICEP



<http://droughtmonitor.unl.edu/>

## Section 2 – Compact Issues

Colorado remains in compliance with the requirements of the Arkansas River Compact. At the meeting of the Arkansas River Compact Administration, held December 18, 2013 a copy of the Ten-year Accounting of Depletions and Accretions to Usable Stateline Flow for the period 2003-2012 was submitted into the record which shows that for the most recent compliance period, Colorado is credited with an accretion of 58,708 acre-feet.

Post compact well pumping approved pursuant to the Arkansas Ground Water Use Rules (Rule 14) has been summarized for the three largest well associations, previously. For a more complete description of the operation of these plans in 2013, the reader is referred to the Annual Report to Kansas, Operation of Rule 14 Replacement Plans, H-I Model Year 2013 (January 2013 – December 2013) by Bill Tyner, Ina Bernard, Charlie Di Domenico and Kelley Thompson.

Rules pertaining to improvements to surface water irrigation practices were implemented in 2011 to insure continued compliance with the Arkansas River Compact. Two Compact Compliance Plans that were submitted pursuant to Rule 10, were approved in 2013. One plan includes only farms supplied by the Fort Lyon Canal and the other plan includes only farms supplied by surface water from other ditch systems. The Lower Arkansas Valley Water Conservancy District (LAWWCD) continues to provide technical assistance to farmers who have made improvements to their irrigation systems. Between the two plans, 81 total farms were enrolled which included 107 different improvements. Originally, it was estimated that 1100 acre-feet of replacement water would be needed to maintain historical return flow obligations, however, the actual amount of water delivered for replacement purposes through November 2013 was 1160 acre-feet. The source of water used to maintain return flow obligations has included transmountain acquired from various sources by the LAWWCD and released from Pueblo Reservoir, or subsequent to trades made with other entities, from Meredith Reservoir. Additionally, the LAWWCD was able to acquire return flows from Busk-Ivanhoe water leased to farmers by Aurora in 2013.

Steve Witte is the elected Operations Secretary for the Arkansas River Compact Administration (Administration). One of his duties is to prepare an annual report to be submitted to the Administration detailing the operation of John Martin Reservoir pursuant to the amended resolution of the Administration often referenced as the 1980 Operating Plan. The reader is referred to the Annual Report of the Operations Secretary Concerning the Operation of John Martin Reservoir, Compact Year 2013. Additionally, pursuant to another resolution of the Administration, the Colorado State Engineer is required to submit an annual report to the Administration concerning the operation of the Offset Account. The reader is referred to the Report of the Colorado State Engineer Concerning Accounting and Operations of an Offset Account in John Martin Reservoir for Colorado Pumping, 2013.

In response to concerns related to a proposed development by GP Irrigated Farms project involving GP Resources owned by Karl Nyquist, Grasmick Farms represented by Bill Grasmick and Syracuse Dairy, which will improve the surface water irrigation methods used on the West Farm and Grasmick Farm under the Lamar Canal and proposes to expand the acreage irrigated by certain existing wells on what is referred to as the Holly Farm, near the Colorado state line, a special meeting of the Administration was held in Holly, Colorado on September 17, 2013. One of the main purposes for this meeting, which drew a very large audience, was to explain the processes that are in place, which the developer will be required to follow, that might allow this project to be accomplished within the parameters of Colorado law and without a violation of the Arkansas River Compact.

### Section 3 – Problems Solved

- Litigation  
2013 was a busy year for Division 2. We spent time in the court room and even more time working to settle cases. Additionally, we had protest cases from the 2010 Abandonment process to work through and fortunately, we were able to see several cases through to decree this past year.

As a brief overview and highlight of those solved cases:

- 08CW106 added water stored by exchange to Upper Arkansas Water Conservancy District's existing plans
- 88CW23A allows Triview Metro District to augment well pumping
- 10CW61 decreed augmentation of CBM production and recovery wells for Petroglyph Operation Company
- 11CW95 gave decreed storage to Lance O. Verhoeff. We are still working through administration items with Mr. Verhoeff but are happy to have reached a stipulated settlement with the support of other water users who entered protests in this case.

A brief description of other noteworthy cases follows:

We instigated case number 88CW23A to address what we understood to be an undecreed point of diversion for the Hoehne Ditch and at our prompting it was submitted under CRS 37-92-305 (3.6)(b). However, this case was dismissed when a 1919 decree awarding this change was found in State Archives.

Aurora's Busk Ivanhoe change case, 09CW142, went to trial in late June of 2013. At question was whether over twenty years of use for undecreed purposes should be included in historical CU analysis. One interesting note in this case was that it was that it involved Divisions 1, 2, and 5. Another is this case was received very differently than was the case in which Pueblo Board of Water Works (PBWW) changed their interests in the Busk Ivanhoe water. PBWW had no objectors, while Aurora had 35. Our closing brief in this case spelled out our position that the historical CU analysis must be determined on the particular facts of this case, that the historical CU analysis period for this case should include the twenty plus years of undecreed use as zeros. We are awaiting the final ruling.

Another case in which we argued over questions of legal uses considered in consumptive use analysis was 08CW47, Fountain and Widefield. We were set for trial in June of 2013. When the applicant tried to block testimony of our staff, we filed a motion for a declaratory judgment, which was granted. The court held that only historic consumptive use attributable to each of the subject water rights, as historically used on the parcels specifically decreed to be irrigated under each right in 1896 can be included in the historic use determination for each right. This case is being appealed to the Colorado Supreme Court under case number 13SA197.

We had 26 protest cases related to the 2010 Abandonment List to manage in 2013. The disposition of those cases is as follows:

- 12CW52, McKenna, which went to trial in June. We won a ruling confirming abandonment, but this is being appealed to the Colorado Supreme Court in case number 13SA304.

- 12CW66, Kinnery, is a case in which we also won a ruling confirming abandonment.
- We were not so successful in October when we went to court over the Bessemer protest case, 12CW79, where the ruling removed this water right from the 2010 Abandonment List.
- In December we went to court in Colorado Springs over case number 12CW63, the US Army protest case. Here we successfully presented our case and the ruling confirmed abandonment, though the Army has appealed to the Colorado Supreme Court (14SA60).
- In early January of this year we went to court again to work through two protest cases 12CW58, Menegatti, and 12CW75, Ferraro, to establish ownership and intent of use of the Labrie Ditch water right being claimed by both parties. The court has ruled that Ferraro must initiate Quiet Title proceedings if his claims are to be considered.

Additionally, five other protest case rulings removed water rights from the 2010 Abandonment List. Nine other cases resulted in water rights being abandoned, one stipulated to abandon by 1/23/15, and two others had water rights abandoned in part. There are two protest cases still pending under stipulated conditions (12CW71, JBar SFarms, and 12CW72, Palmer Lake).

- John Van Oort did an exceptionally good job of assuming the responsibility for overseeing the development of the revised Livingston transit loss programs to make them practically useful by coordinating with Jim Brannon in the fulfillment of his contract and providing user feedback on the programming work.
- Each year by September 1st, Colorado must evaluate and propose the presumptive depletion factor to be used in the up-coming replacement plan year for replacement of depletions caused post-compact well pumping and irrigation by supplemental flood application. This year, Kelley Thompson recognized an inequity in the process and proposed a method to rectify the process while still staying within the agreement with Kansas. The net effect of Kelley's change is that this depletion factor will drop for 2014 from the 38-39% to around 36%. That may not sound like a lot, but it is very important to the Colorado well associations.
- On May 13, 2013, the Colorado State Legislature passed HB13-1248, the Fallowing and Leasing Pilot Projects bill. This bill left many details to be ironed out collaboratively and through inter-agency consultation. As a result of significant efforts on the part of Kevin Rein of the Division of Water Resources and Tom Browning of the Colorado Water Conservation Board, and many others a set of Criteria and Guidelines for Fallowing and Leasing Pilot Projects was produced by November 19, 2013. Additionally, Assistant Division Engineer Bill Tyner worked as part of a technical sub-committee to develop a streamlined process to evaluate the consumptive use and return flow components involved in pilot alternative transfer programs for temporary municipal use. The streamlined process relies upon a Lease-Fallow tool, which is based on ISAM, a spreadsheet accounting method originally developed by Bill. The tool utilizes conservative assumptions to ensure that the resulting quantification of transferable water will not result in injury to other vested water rights and was used by a consultant in preparing a lease-fallow proposal involving the Rocky Ford Highline Canal. It is hoped that training sessions will be scheduled to familiarize other technical experts with this tool which will lead to its wider use and acceptance as a possible means of facilitating expedited processing of future water transfers.
- Division 2 has been using the Delorme XMap suite for its GIS needs for several years now. It allows the field personnel to efficiently work with datasets in the field and then easily share updates with their office colleagues.



However, GIS software is expensive, and the three largest Well Associations in the Arkansas Valley had not been able to afford such licenses. Valuable time was lost trying to receive updates pertaining to such projects as Rule 14 Dry-Up, efficiency improvements and irrigated acreage data sets. It was very frustrating for the Division 2 personnel to deal with hand drawn, often illegible copies of maps, questions about acreage and dry-up parcels because the Associations were not able to 'look' and utilize the same data as Division 2 personnel use. All that changed in November 2013, when, thanks to money made available by the CWC, the Associations were able to purchase their own Delorme XMap software. Delorme XMap was chosen due to its ease of learning, comparatively low cost and the ability to interface with XMap use in the Division 2 office.

During a hands-on training session led by Division 2 office personnel the Association managers were able to learn and subsequently implement their own GIS program. In the short months since this introductory training session one Association in particular has been very pro-active in continuing to learn and use their new found GIS capabilities, already allowing for an easier management and exchange of data to occur.

#### **Section 4 – Community Involvement**

Throughout 2013, Division 2 personnel sought to be accessible to the citizens of Colorado through regular attendance at various Water Conservancy District meetings throughout the basin. The Division Engineer routinely attends meetings of the Southeastern Colorado Water Conservancy District. Meetings of the Purgatoire River Water Conservancy District, the Huerfano County Water Conservancy district and the Upper Arkansas Water Conservancy District are usually attended by the water commissioners in their respective service areas and meetings of the Lower Arkansas Valley Water Conservancy District were attended by Division staff at the invitation of the District.

Assistant Division Engineer Bill Tyner attended meetings of the Arkansas River Basin Roundtable to monitor a grant request for a water delivery pipeline to supply Ordway feedyard, to follow the progress of the Basin Implementation Plan development and to assist CDM Smith to supply data needed for the Basin Operations Report as part of the Arkansas Basin Implementation Plan. The operations report will summarize the water use of major users in the basin during wet, average, and dry years. Various staff members accepted speaking engagements throughout the year. These included Phil Reynolds, who spoke on the Fryingpan-Arkansas Project to an audience of students at Heaton Middle School and Pete Kasper to explained Colorado's water allocation system to students at Otero Junior College. Pete also served as a board member on the Colorado Water Education Foundation.

The Colorado Supreme Court's Water Court Committee was established to identify rule changes, statutory changes, and educational needs to promote the efficient operation of the Colorado Water Court System. Division Engineer, Steve Witte and State Engineer Dick Wolfe are charter members of this Committee and continued to serve in this capacity in 2013.

Division Engineer, Steve Witte was awarded the Bob Appel "Friend of the Arkansas" Award at the 19<sup>th</sup> Arkansas River Basin Water Forum, held in Walsenburg, Colorado in 2013. This annual award is to honor an individual who has served and worked to improve the condition of the Arkansas River in southeastern Colorado. The award is in memory of Bob Appel who, as Coordinator for the Southeast Colorado Resource Conservation and Development Council, tirelessly provide leadership for the Forum.

## Section 5 – Highlights of 2013

Due to the drought conditions that have persisted in Division 2, arguably since mid-2011, the concept of augmentation – the ability to divert water out of priority pursuant to a plan to replace the resulting depletions in the proper amount and at the proper time and location, so that senior vested water rights are not injured – has certainly been tested. For this reason this Division’s efforts to administer decreed plans for augmentation has been selected to be highlighted in this annual report.

Although plans for augmentation have been a part of the fabric of Colorado water law since 1969, it wasn’t until after the drought of 2002-03, that a position was dedicated to the task of effectively administering these plans. Bill Richie was appointed to that role in September of 2004. Initially, a great deal of effort was given to inventorying the plans, developing familiarity with the terms of each plan and developing contacts to provide reporting and accountability.

The following table shows the current number of decreed plans that are subject to administration:

Decreed Aug Plans by WD  
February                      2014

10	287
11	110
12	31
13	27
14	9
15	9
16	19
17	13
19	8
67	8
79	1

**522**

Prior to the 2013 irrigation season, an investigation was conducted for the purpose of determining, to the best of our ability the number of plans which failed to meet the replacement obligations as decreed due to a deficiency of the replacement sources relied upon by each plan and to develop a strategy to be implemented with respect to each failed plan as a means to fulfill our statutory obligation under CRS37-92-501.5.

The following is a summary of the methods used, our findings and of the strategy utilized during 2013 as described by Bill Richie:

A good many decreed plans of augmentation that replace out-of-priority diversions of ground water in the Arkansas Basin are those dealing with domestic type uses in small, post 1972 subdivisions. These wells are generally of two types, either wells pumping to a central distribution system or individual on-lot wells.

Wells common to a central distribution system are often subject to health department standards and as such are maintained by a water quality operator which includes measurement and routine recording of yield. These records are generally available to DVR either through the operator or a home-owners group.

To a large extent, the subdivision wells in Water District 10 are in the Denver Basin not-nontributary and non-tributary aquifers where replacements are made with septic returns. Ironically, these subdivisions are well-structured and very cooperative in providing annual diversion records to the Water Commissioner.

In Districts 11, 12 and 13, use from individual on-lot wells is typically much more difficult to obtain with any regularity. Many of these wells were not originally equipped with flow meters, a problem which, for the majority, has been resolved. Owners and users of these wells are often reluctant to provide meter readings because of a lack of understanding or a fear that reporting their uses will cost them money. Another prevalent issue is the idea that their private well is not subject to any type of government intrusion and purchasing a flow meter or reporting uses just adds an exclamation point to that belief. Education of state statutes pertaining to water administration and specific terms and conditions of court decrees along with well permitting conditions has provided Division 2 with some success in having these wells equipped with flow meters.

Because user supplied meter readings are only requested twice each year, it is not unusual for the user to miss one or both reports. Currently, we are sending out approximately 700 postcard or email reminders to well owners asking for a spring and a fall meter reading. The two readings each year is an attempt by Division 2 to enable an estimated winter time indoor base use and subsequently an estimated outside summer use for those homes with outside privileges. If one or both of these readings is missed, estimates cannot be determined and calculation of actual, annual uses for published diversion records is not possible.

When a determination of actual diversions is not possible, Division 2 is currently estimating a gross diversion amount for the entire subdivision by using the available actual uses, as reported, and adding the maximum decreed amounts for those lots or wells where actual uses are not known. As an example, for the 2012-2013 water year, a 52 lot subdivision in Water District 11 currently has 24 homes with wells. Six of those homes had provided adequate meter readings that allowed a combined annual calculation of 1.38 acre feet of diversion. The other 18 were assigned the decreed diversion amount of .39 acre feet each for an estimated total of 7.02 acre feet which when added to the 1.38 acre feet totaled 8.4 acre feet of diversion for the subdivision. In this way, we incorporate the actual user supplied data received into the annual diversion record and, in some cases, are able to reduce the replacement obligation.

The replacement obligation is much more difficult to assess and will be the focus of Division 2 augmentation plan administration in 2014. Many subdivision plans allow diversion of ground water for in-house uses only with one depletion factor, usually ten percent of pumping for homes on septic systems and five percent for homes on sewer wastewater treatment systems. These are straight forward and easy to calculate depletion amounts based on diversions. The difficult plans allow not only in-house use, but maybe some lawn irrigation or a certain number of livestock or any combination of all three at varying rates. Without adequate reporting of pumping, the square footage of irrigation and/or the number of livestock watered, we are forced to replace the maximum depletion amounts described in the decree.

That can be a difficult task. Two situations create problems in making an appropriate determination of adequate replacement. First, many home owners in subdivisions supported by augmented wells have added additional augmentation sources and plans that allow for additional uses, generally outside. (The Upper Arkansas Water Conservancy District blanket plan is a common provider of these additional

plans). To be properly administered, such situations would require much better reporting than we typically receive. The second situation involves Arkansas Basin augmentation plans utilizing replacement water from trans-mountain diversions via the Independence Pass Transmountain Diversion System managed by the Twin Lakes Reservoir and Canal Company. These "Twin Lakes" plans allow for various types of uses with the familiar varying depletion factors but the amount of replacement water available is directly tied to the annual yield per share of the trans-mountain diversion. As an example, in 2012, the yield per share was only .56 acre feet, an unheard of amount when the yields accepted by Water Court range generally from .75 to 1.1 acre foot per share.

The majority of plans using Twin Lakes share holders dedicate their shares to the State Engineers Account in Twin Lakes and the decrees allow the State or Division Engineer to administer that water. We are currently calling for a monthly release from the SEO account for 95 plans. In 2012, Division 2 was able to make all of the replacements for all of those Twin Lake plans in spite of the low yield, by using the previous year's remaining storage in the SEO account and by "borrowing" from a water rich plan in that account to help pay the obligation for a water short plan. Language in some Twin Lakes decrees suggest that this method may not be proper in that the specific share(s) are dedicated to that one specific plan. It was Division 2's opinion, however, that because all of the shares involved have been dedicated by decree to the SEO account, all shares were available for use in replacing depletions by this select group. In this way, Division 2 acted to protect senior rights and to protect some of these plans from failing.

Water year 2013 saw Twin Lakes shares yield .81 acre feet per share which relieved the need of robbing Peter to pay Paul in the SEO account. Additionally, late summer rains allowed all augmentation plans reliant on direct flow diversions to develop sufficient consumptive use credits to keep their plans whole. The rains also created exchange potential on certain tributaries which in one case, allowed a church camp to exchange their replacement water up into storage as provided by their decree and gave them the opportunity to make up two years of overdue replacements and continue on a monthly release schedule.

Division 2 also administers augmentation plans that rely on direct flow water rights, typically irrigation rights and a dry-up of formerly irrigated lands to generate consumptive use credits which are then released to the stream to offset out-of-priority diversions. Many of these direct flow rights consist of multiple appropriation dates and often, the water dedicated to the augmentation plans is split among the various rights. This fact makes determination of plan performance difficult as one must assess if the appropriation that came into priority developed a sufficient amount of credits to replace depletions on a subdivision that is probably not yet built out. To help in this determination, Division 2 is also stressing the installation of augmentation stations to help identify consumptive use credits being returned to the stream during periods of low flows and partial diversion of decreed rights.

Following the 2012 water year, Division 2 identified approximately 382 homes in 9 subdivision augmentation plans whose direct flow rights did not come into priority during that year. In response to this finding, Division 2 contacted each home owners group, or each individual home owner by letter explaining the concern and followed up with on-site meetings with those groups to further explain the issues, stress conservation measures and the need to research and identify alternate sources of replacement water to avoid the worst case scenario of curtailment should the drought continue. In one case, Division 2 has worked closely with the AG's office, the Hearing Officer and Denver permitting personnel to enforce Orders of the Division Engineer issued to residents who regard participation in their subdivision augmentation plan as being discretionary. That effort has prompted some well users

to become plan members, some to create their own individual augmentation plan and the revocation of four well permits.

In addition to contacting home owners, State Legislators and County Commissioners were contacted by mail to alert them to the situation and possible consequences. A part of that conversation included a discussion on placing moratoriums on building permits and well permits in subdivisions whose augmentation plans may be at risk of failure.

### **Section 6 – Organizational Changes**

During 2013 Division 2 hired numerous employees and ended the year with only two remaining vacancies. Steve Stratman was hired in January as a groundwater technician and Joseph Talbott was hired as Lead Hydro in February. Temporary employees Don Morton and John Morgan were hired to assist groundwater efforts in April. Chad Brumit (groundwater technician), David Diedrich (deputy water commissioner in WD79) and Ashenafi Hydebo (hydrographer) were hired in April. Jeff Thomas, deputy water commissioner in WD12, was hired in May. Robert (Justin) Lucero became the WD18/ 19 deputy water commissioner in July. Other hiring actions included Brian Sutton's transfer as water commissioner in WD11, leaving WD12 and Julie Pearson was appointed to the Assist Division Engineer for litigation leaving the groundwater group in October. Retirements included Dan Valentine (February), Lloyd Wadleigh (March), and Steve Kastner and Bruce Smith (June).

Two part-time positions were combined to make a 10-month position. The WD18 deputy (2402122) & WD19 deputy (2402136) were combined, keeping the position number 2402136 & abolishing 2402122. This is the position Justin Lucero was appointed to as WD18/ 19 deputy.

Several reallocations were completed. Employees Janet Garoutte, Ina Bernard and Audrey Sartin all became Physical Science Researcher/ Scientist I after serving in Engineering Physical Science Technician II positions. Janet's became effective in May and Ina and Audrey's became effective in September.

Due to some key retirements and the successful filling of those positions with great internal candidates, Division 2 took the opportunity to evaluate the remaining vacant positions and the overall Division 2 staffing structure to identify ways the Division can be structured to better meet the needs of our water users and water right owners, other external customers and partners, and other Division of Water Resources' staff. A white paper was finalized in December 2013 to describe the current and proposed structure; identify the anticipated improvements to be gained by the proposed structure and recognize areas of concern; describe the likely places where there is an increase or decrease in salary that will impact budget, and to lay out the proposed hiring sequence and timeline that would result if this plan is approved. The concept was presented to the State Engineer and his staff and was partially and conditionally approved.

Some of the key components of the plan were to attempt further integration of ground water and surface water administration using existing personnel, to develop a lead worker concept among PSRS classified personnel and to equalize the classification of engineering positions within the Engineering/ Technical Support Group, and to establish organization of regional work groups among field administration staff to promote efficiency and development of personnel. At this writing implementation of the plan is in flux and a more complete explanation of what can actually be accomplished may be anticipated as part of the 2014 report.

# Organizational Chart December 2013

