

Division 2 Annual Report 2014



Steven J. Witte
Division Engineer
Division 2

April 29, 2015



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, 2014

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

Dear Sir,

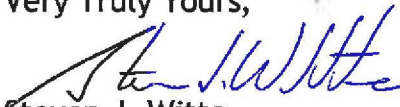
Please accept this executive summary report describing some of the principle activities and accomplishments of Division 2 personnel during 2014.

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 2014 presented Division of Water Resources personnel with challenges of drought, fire and flooding and regardless of what 2015 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,

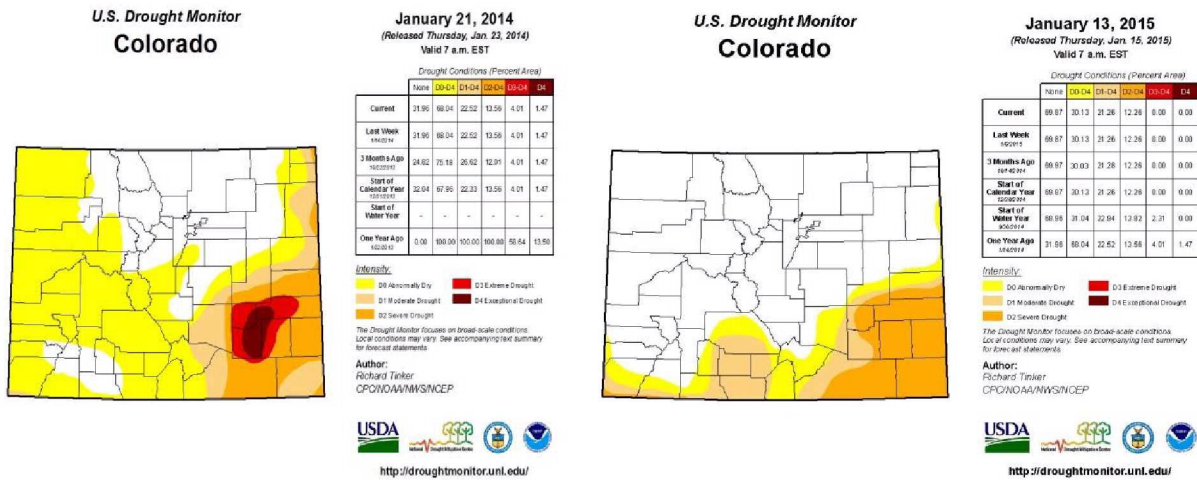

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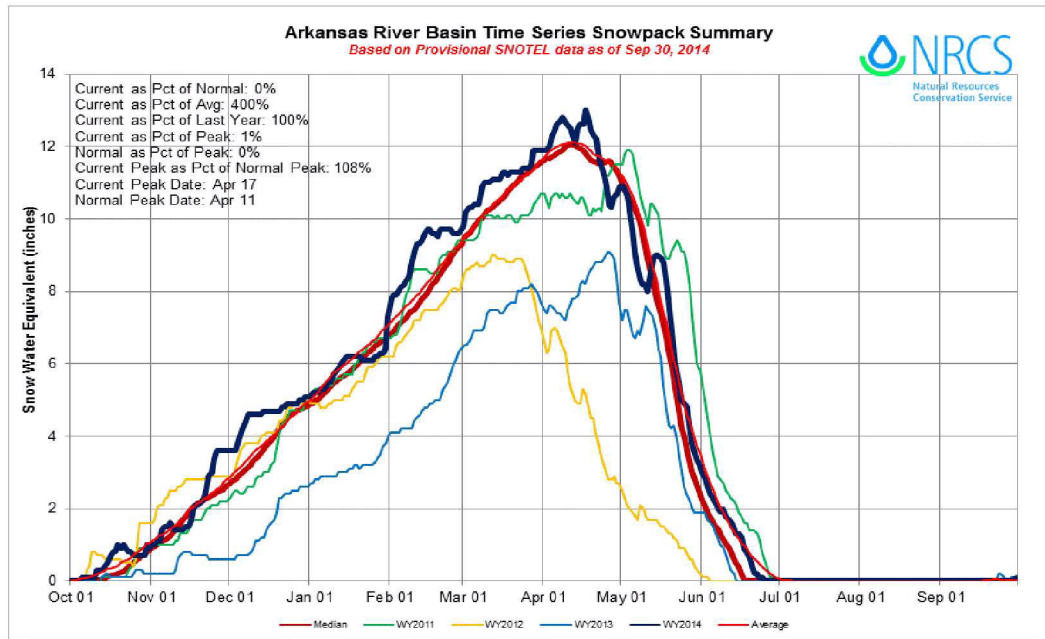
Section 1 – General Description of 2014 Operations

The 2013-2014 water year was nearly average! Finally, for the first time since 2011, the Arkansas River Basin, the Arkansas River Basin finally struggled out of the extraordinary and exceptional drought categories by the end of the calendar year.

The following illustrations indicate that conditions appear to have improved during 2014, according to the U.S. Drought Monitor.



The following graph illustrates that the snow pack produced over the course of the 2013-14 was very close to average.



Winter storage Date accumulation at the end of the Pueblo Winter Storage Program storage period on March 14, 2014 was 100,377.85 acre-feet, which was 149% of that stored the previous year and 73.65% of the

previous 20 year average. During the Winter Storage Period (Nov. 1, 2013 – Apr. 1, 2014) only 8384 acre-feet was stored in John Martin Reservoir which is 54% of the 1950 – 1975 average.

According to the United States Bureau of Reclamation 80,300 acre-feet were imported into the Arkansas River basin by the Fryingpan-Arkansas Project during 2014. The total of all transmountain water imported into Division 2 during WY 2014 was 190,150 acre-feet.

Overall irrigation well pumping in 2014 was nearly at the average since Colorado’s Amended Use Rules for well pumping went into effect in 1996

The 2014-2015 Rule 14 Plan approvals for AGUA, CWPDA and LAWMA 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	8,231	6,813	4,117
CWPDA	33,000	24,080	17,677
LAWMA	68,091	50,691	11,855
TOTALS	109,322	81,584	33,649

The 2014 calendar year actual pumping and stream depletions for AGUA, CWPDA and LAWMA were as follows:

Plan	Actual 2014 Calendar Year Pumping (AF)	Actual 2014 Calendar Year Rule 3 Irrigation Pumping (AF)	Actual 2014 Calendar Year Stream Depletions (AF)
AGUA	5,530	4,999	3,122
CWPDA	22,417	16,700	15,642
LAWMA	40,725	37,167	32,367
TOTALS	68,672	58,866	51,131

2014 was the tenth year since the last 10-year review of the Trinidad Project was completed. Therefore, the United States Bureau of Reclamation held a meeting in Trinidad on September 5, 2014 to outline the scope of the review for the 2005-2014 period.

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 3, 2014 a copy of the Ten-year Accounting of Depletions and Accretions to Usable Stateline Flow for the period 2004-2013 was submitted into the record which shows that for the most recent compliance period, Colorado is credited with an accretion of 58,118 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 2014, the reader is referred to the Annual Report to Kansas, Operation of Rule 14 Replacement Plans, H-I Model Year 2013 (January 2014 – December 2014) 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. Three Compact Compliance Plans were submitted pursuant to Rule 10 and were approved in 2014. One plan submitted by the Lower Arkansas Water Conservancy District (LAVWCD) included only farms supplied by the Fort Lyon Canal and the other plan included only farms supplied by surface water from other ditch systems. The Lower Arkansas Water Management Association (LAWMA) also submitted a plan to cover four farms within the Lamar Canal service area. Between these plans, 102 total farms were enrolled, including the six additional farms added to LAVWCD's non-Ft. Lyon plan by amendment. Originally, it was estimated that 2738 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 March 2015 was 3543 acre-feet. The source of water used to maintain return flow obligations has included transmountain acquired from various sources by the LAVWCD and released from Pueblo Reservoir, or subsequent to trades made with other entities, from Meredith Reservoir. Additionally, the LAVWCD was able to acquire return flows from Busk-Ivanhoe water leased to farmers by Aurora in 2014. LAWMA's plan relied upon augmentation credits produced from Lamar Canal shares.

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 2014. 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, 2014.

Prior to June 27, 2014, the most recent release of water from John Martin Reservoir to Kansas ended on July 24, 2011. During that period of almost three years, Kansas determined the stream conditions below John Martin to be so unfavorable and the anticipated transit losses so significant so as to defer making any releases in the hope that stream conditions might improve and that more water would

accumulate in order to increase the prospects for obtaining usable amounts of water being delivered to them. As a consequence of these decisions, 7334 acre-feet evaporated from the waters stored in various Kansas accounts in 2012, an additional 9317 acre-feet was lost due to evaporation and 6115 acre-feet were also lost during the first seven months of the compact year prior to when Kansas called for water to be released for a total of 22,766 acre-feet. In comparison, Kansas released all water available to them in 2014, totaling 31, 615 acre-feet.

During the years when Kansas elected not to call for the release of water stored in their accounts in John Martin, the stream channel stream channel became smaller as a result of the encroachment of vegetation and sedimentation, which made deliveries to the stateline more challenging. This was especially true with respect to the first release ordered by Kansas which began on June 27, 2014 and these difficulties were compounded by the lack of timely measurements to update the provisional flow data of Coolidge Kansas gauge which are relied upon according to the agreement used to determine transit losses. Colorado computed a transit loss of 712 acre-feet resulted from a release of 11, 928 acre-feet, whereas Kansas determined that the transit loss should have been computed using “corrected” data derived by retrospective application of shift corrections contrary to the provision of the agreement. This issue was resolved in Colorado’s favor by members of the Arkansas River Compact Administration’s Operations Committee at their December 2014 meeting.

On October 21, 2014, Kelley Thompson proposed two changes to the HI Model to Kansas through a report. The first was a revision to the H-I Model Tailwater Factor Calculation methodology and revision of John Martin Reservoir Information used in the model. The proposed revisions do cause changes in model results, and as such are “substantive changes” pursuant to Amended Appendix B.1.V. of the Kansas v. Colorado decree (U.S. Original No. 105). Colorado contends that these changes represent a correction to an error and incorporation of new information into the model, and “improve the accuracy or reliability of the model” as required by Amended Appendix B.1.V.A. Kansas experts have verbally acknowledged to us that they agree with the changes but are allowed 6 months (until April 21, 2015) within which to respond. At this writing, no response has yet been received.

As noted in the 2013 report, a special meeting of the Arkansas River Compact Administration was held in Holly, Colorado on September 17, 2013 in response to concerns related to a proposed development by GP Irrigated Farms (GP). GP submitted a substitute water supply plan in which they sought approval to irrigate 2143.3 acres using 16 wells in addition to 1776.7 acres to be irrigated pursuant to the Lower Arkansas Water Management Associations Rule 14 plan. The acreage that is the subject of the substitute water supply plan was not recognized as having been irrigated prior to 1985 and therefore was determined to be ineligible to be irrigated pursuant to a Rule 14 plan under the provisions of Appendix A 3 of the final decree entered by the United States Supreme Court in Kansas v. Colorado (No. 105 Original). The substitute water supply plan approved May 7, 2014 anticipated stream depletions of 1175 acre feet based on pumping of 1876 acre-feet for the irrigation of 2143.3 acres from the 16 wells. GP exceeded the approved pumping limits without having secured approval of either an amendment or of a new substitute water supply plan, resulting in cease and desist orders being issued for these 16 wells in early February 2015. Calculated stream depletions through November 2014 totaled 2118.61 acre-feet, however, despite the lack of approval LAWMA was able to make the necessary replacements to offset the actual stream depletions using the consumptive component of Lamar Canal diversions as quantified through augmentation stations.

Section 3 – Problems Solved

Crucial Conversations

Fight or flight...these are universal responses to real or perceived danger to our well being. These deeply ingrained and natural responses have served humanity well in terms of survival but neither promotes cooperation, conflict resolution or collaboration. Thus, left to our own devices we sometimes make a mess of things and find it necessary to find a better way. It is said that time heals all wounds, but for the leadership group of Division Two the book "Crucial Conversations" also helped ...or least provided a common focal point for discussion regarding how we might learn to work together better.

Working through the book in weekly installments we learned that Crucial Conversations are those interactions we all have (and often handle poorly) where the stakes and emotions generally run high. We recognized that the key to mutually satisfactory resolution is simply to keep talking, or in the vocabulary of CC to "remain in dialogue", neither of which is possible when either of the participants is engaged in fight or flight syndrome. Further we learned to recognize when a conversation is about to turn critical and what we can try to do about it.

Is this a quick fix? No. But, I believe that for us, Crucial Conversations was a helpful aide to improved working conditions within our office and is recommended to others.

Litigation

2014 was Asst. Division Engineer Julie Pearson's first full year in responsible charge of attending to Water Court matters on behalf of the Division 2 Engineer. Julie implemented a number of changes and process improvements that have and are expected to further increase the input of field staff in developing positions and in making the consultation process conform to Water Court Rules and existing statutes in an efficient manner.

Aurora's Busk Ivanhoe change case, 09CW142, went to trial in late June of 2013. The Court's final order was issued in May 2014, notices of appeal were filed in the fall of 2014. Oral arguments in 14SA303 are scheduled for June 2, 2015.

In a change of water right case initiated by Fountain and Widefield (08CW47) the court held, in ruling in favor of our motion for a declaratory judgment, 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 was appealed to the Colorado Supreme Court under case number 13SA197 and the lower court's ruling was upheld. The case was remanded and is now set for trial in September 2015.

The disposition of cases related to the 2010 Abandonment List in 2014 is as follows:

- 12CW52, McKenna, which went to trial in June 2013. The Division 2 Water Court confirmed abandonment, and in the appeal to the Colorado Supreme Court in case number 13SA304, the lower court's ruling was upheld in a April 2015 decision.
- In December 2013 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). This appeal was withdrawn.

- In early January of 2014 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. The quiet title action was scheduled for trial March 2015; however, a stipulation to settle this matter is pending at this time.

Although Division 2 was not a party to the case of Mountain Properties (12CW111, Water District 79 Commissioner, David Deidrich, was subpoenaed to provide testimony at trial and reportedly performed very well. An interesting aspect of this case was that the applicant was awarded absolute water rights perfected under conditions when calls from the Huerfano were determined to be futile.

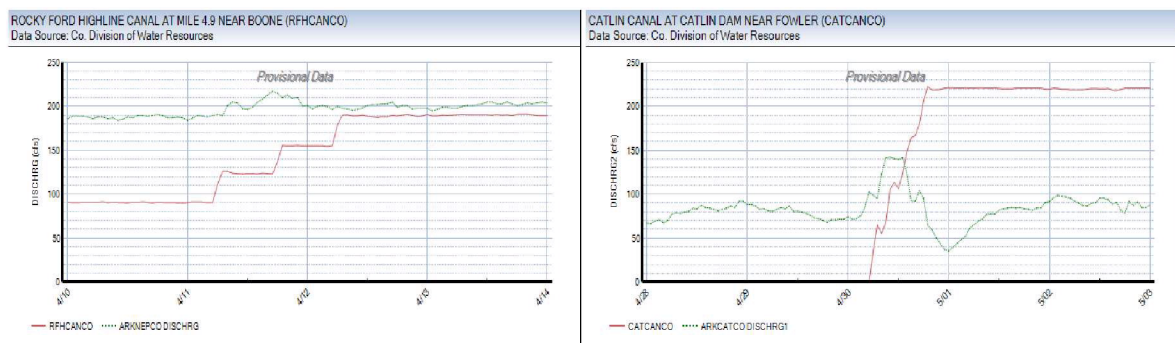
Similarly, Division Engineer Steve Witte was required to testify in El Paso District Court in a case filed by Meridian Service Metropolitan District (13CV031263) on an appeal from the Colorado Ground Water Commission of a case which originated in Division 2 Water Court, Case No. 10CW95 for a water storage right within the Upper Black Squirrel Designated Ground water Basin. In a decision entered in August 2014, Judge Larry E. Schwartz determined that designated ground water and surface water rights may coexist within the geographic boundary of a designated basin, but are administered separately. The Ground Water Commission has the authority to make the determination as to whether water to be appropriated is designated ground water or surface water left following recharge for appropriation under the 1969 Act.

In response to a letter written to the Hoehne Ditch Company in February 2013 which threatened an administrative order if information could not be provided to this office justifying the current point of diversion of the Hoehne ditch by March 2014 or alternatively, a change of water right to correct the location by that date, an application was filed as case no. 13CW26. Subsequently, this office worked with Hoehne's attorney to sift through various evidence which resulted in finding a previously unknown decree dated January 10, 1919 in the State Archives which provided the legal basis for the current headgate location and dismissal of the pending change case. The order of dismissal of 13CW26 was entered on January 2, 2014.

Later in the year, we were able to successfully negotiate settlement of two long pending cases. The Silver Mountain Preserve case (00CW153) provided for a change of water rights of a direct flow right to storage and for augmentation purposes for a the Silver Mountain Preserve development and Pinion Hills Estates subdivision. Another noteworthy case involved a change of direct flow irrigation rights for the Gonzales Ditch, the most senior water right on the Apishapa system, for the town of Aguilar (05CW103). The change was for the purpose of augmenting the winter depletions of Aguilar's wells and involved significant challenges associated with Aguilar's limited financial resources.

In 2014 we began implementing the Revised Livingston Transit Loss Method for the reach of the Arkansas River below Pueblo Reservoir and upstream of John Martin Reservoir. The development of this revised methodology has been discussed in previous reports. Based on the experience gained in

2014, confidence has been developed in the reliability of the results in predicting the appropriate amount of transit loss to be charged on releases of stored water. Improved predictions of travel time and the cooperation of water users have enabled us to direct staged deliveries to receiving ditches which has lessened the impacts experienced by downstream water users that have occurred when receiving ditches divert the full net rate to be delivered to them at one time. Staged deliveries more closely replicate the actual increased amount of water available over time. The following examples illustrate the uniform flow downstream of a reservoir delivery (the Rocky Ford Highline Canal) when a staged delivery was conducted as opposed to the reduced flow or “hole in the river” that typically occurs when the upstream receiving ditch (the Catlin Canal, in this case), takes water too early or diverts the full amount that will ultimately arrive in one single gate change.



In March 2014 Steve Witte was asked to provide a presentation to the Custer County Water Forum on the subject of ponds. As part of that presentation, which attempted to outline the legal basis for the entire gamut of surface water impoundments, it was explained that if ground water is exposed to the surface by means of excavating overlying earth coupled with an intent to use the water for some beneficial purpose, such a pond is actually a well, under Colorado law. Afterward Mr. Bill Jones a landowner stated that he had such an excavated pond on his property and wanted to know if he could legitimize his “pond” by obtaining an exempt stock water well permit. After learning that the pond had been constructed prior to May 8, 1972, the speaker assured Mr. Jones that he was aware of no legal obstacle that would prevent him from late registering his livestock pond as a well. Mr. Jones submitted an application later that month which was returned for additional information and resubmitted in May. Subsequently a denial was issued in July on the basis that the amount of evaporation from exposed surface area would be excessive resulting in injury. As is his right, Mr. Jones appealed and an administrative hearing was held in November. Mr. Jones established that the size of his pond well was comparable to some other livestock water tanks filled with traditionally constructed (drilled) exempt wells and on this basis a permit was issued. As a result of this experience, a guideline was developed by Mr. Caleb Foy for distribution to staff outlining the parameters whereby such livestock pond wells may be permitted elsewhere. This was distributed to staff by Kevin Rein by email on February 23, 2015.

In an over-appropriated basin, such as the Arkansas, ponds and reservoirs constructed without any water rights which illegally and impudently impound water out of priority are a vexation that we have, in numerous instances, strived to ensure do not continue to do so with impunity. Some of the more interesting cases we were involved with in 2014 include:

- Broken Shamrock Pond is a small pond located a short distance below Wright's Reservoir, a.k.a. Mt. Pisgah Reservoir. The dam was of sufficient height to be jurisdictional and was constructed without any water right. Broken Shamrock captured a significant amount of silt discharged from Mt. Pisgah Reservoir in August 2011. An administrative order was issued to the owners of Broken Shamrock Pond requiring that water stored in the pond to be released. On April 25, 2014 we entered into a stipulation that the owner would either obtain a substitute water supply plan and install an outlet structure sufficient to pass all inflow or cause the water level in Broken Shamrock Pond to be reduced so that there is no incremental evaporation loss above that of the ordinary stream channel through the pond by March 15, 2015. Subsequently, to settle an enforcement action in case 13CW3032 we also stipulated without disturbing the terms of the April stipulation upon payment of \$29,410 in penalties and fees. The owner is attempting to satisfy the latter alternative of the April stipulation.
- Riss Reservoirs involve three dams on streams tributary to Four Mile Creek that are of jurisdictional size and lack outlets. Efforts to regulate these three structures date back to 1967 when Division Engineer Rudy Styduhar ordered storage to cease until plans and specifications had been submitted. "As Built" plans and specifications were not filed until 1989. Through a succession of owners and staff we have continued efforts to appropriately regulate these reservoirs. We even secured temporary replacement plans culminating in a consent decree for one of the reservoirs (Riss East) in 07CW27 and yet, satisfactory regulation of these structures has remained elusive. Most recently, orders were again issued in September 2014 requiring compliance by no later than October 2015.
- Mitotes Reservoir, a.k.a. Apishapa Reservoir dam was constructed by the State Engineer in the late 1800s, similar to Monument Reservoir, Boss Lake and others. Most recently title has passed into private ownership from the State Land Board. This dam is also jurisdictional in height but an interesting and as yet unresolved aspect of this reservoir from a water rights perspective is that tributary produced water from Coal Bed Methane (CBM) extraction operations is being discharged into the reservoir. The CBM operator has filed for well permits solely for CBM extraction purposes and has filed for a plan for augmentation to replace out of priority stream depletions associated with that use, but not the fishery, aesthetic and aviary habitat uses to which the water stored in Mitotes Reservoir is applied. Under the law, the produced water once discharged by the CBM operator passes from their dominion and control and is to be allocated pursuant to the doctrine of prior appropriation...and would be, but for the dam impounding it in Mitotes Reservoir. It is hoped that significant progress will be made during 2015 in the resolution of both the dam safety and water rights issues associated with this structure.
- The Waldo Canyon fire which occurred during June and July 2012 had significant impacts on the Monument Creek and Fountain Creek watersheds. Initially, a representative of the

Colorado Springs Utilities' Watershed Planning group contacted me to advise of their intent to work with the United States Forest Service and the Coalition of the Upper South Platte to construct a number of sediment detention basins within the fire affected watersheds for the purpose of mitigating the affects of storm runoff. The representations made to me were that these structures would be below ground excavations, that would not intercept ground water and with no embankments that to impound water that would function to temporarily detain water but retain water borne sediment. It was explained that these structures would serve to prevent erosion and sediment transport and thereby facilitate watershed recovery and thereby hasten reestablishment of pre-fire hydrology. With this understanding I consented to construction without erosion control dam permits or notices of non-jurisdictional dam construction. Subsequently, I became aware of news reports which touted the effectiveness of these structures and received a letter of complaint from the Lower Arkansas Water Conservancy District insisting on equitable enforcement of the law prohibiting out of priority diversions without augmentation. On May 23, 2014 I inspected some of these structures and found that several were not constructed in compliance with the representations previously made to me. Therefore, I encouraged Water Commissioner Doug Hollister to continue reconnaissance inspections of all of these detention facilities that he could locate and to report to me. His report resulted in a letter being sent to the responsible entities advising them of the types of structures that are and are not consistent with Colorado water law and advising them of appropriate actions to be taken by April 1, 2015. Rather than comply with existing law, Colorado Springs elected to try to change the law and prevailed upon this office to withhold enforcement action while they sought a legislative remedy.

The Thompson Ditch is one of the most senior water rights on Cottonwood Creek, west of Buena Vista and has been the subject of several changes of water right and at least one subdivision plan for augmentation. Water Commissioner Brian Sutton discovered a long standing practice of delivering more Thompson Ditch water to one of the subdivision lakes than could be justified by decree and noted that as a consequence much of the land formerly irrigated by the Thompson has yet to be dried-up as is required by decree. This discovery led to the discovery of other related issues that were described in a letter to the various stakeholders dated July 30, 2014 and follow-up meetings on August 11th and November 3rd. These meetings led to a plan of action which includes temporary augmentation of subdivision wells and a dry-up monitoring plan of Thompson Ditch lands which will continue through the 2015 irrigation season. Additionally, a plan of administrative exchange has been devised in an effort to maintain Ice Lake through the coming year and several enforcement orders have been issued.

A Following-Leasing Pilot Project under HB 13-1248 was submitted to the Colorado Water Conservation Board on September 24, 2014, by the Lower Arkansas Valley Water Conservancy District and the Lower Arkansas Valley Super Ditch Company, Inc. Pursuant to law a 75 day comment period ensued and Conference Committee meetings were held on December 18th and 22nd. The plan was approved January 26, 2015. Bill Tyner was recognized for his extraordinary work

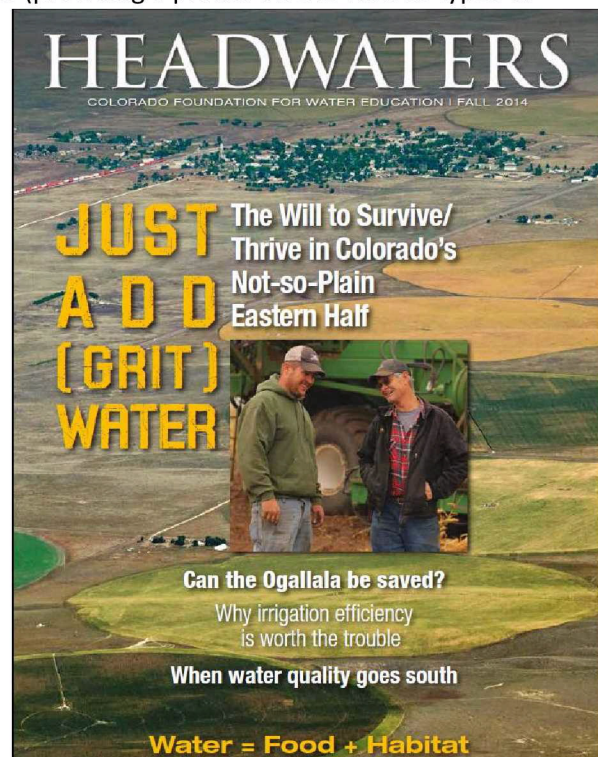
in addressing the many comments received and for having forged the compromises necessary for success.

Section 4 – Community Involvement

Throughout 2014, 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

Outreach by Division 2 staff provided educational opportunities to communities, school programs and the world beyond. On January 29, 2014, Steve Witte provided a recap of highlights of Division 2 activities during 2013 as part of the Colorado Water Congress' "Around the State Workshop". As a member of the Colorado Supreme Court's Water Court Committee, Steve Witte participated in two subcommittees which focused on revisions to the "Non-Attorney's Guide to Colorado's Water Courts" (January) and revisions to Water Court Rule 6 (May-July). March 1, 2014 Steve Witte and Jerry Livengood were presenters at the Custer County Water Forum. Lonnie Spady and John Van Oort conducted a first-ever irrigation season kickoff coordination meeting with the ditch superintendents and board members of the primary irrigation ditch companies on March 11, 2014. Steve Witte addressed a Colorado College class on April 7, 2015 to provide a historical overview of the interstate conflict between Colorado and Kansas over access to water. Steve Witte (providing an over view of water sources used for augmentation purposes) and Bill Tyner (providing a primer on the various types of replacement plans utilized in Division 2) were panelists on the topic of Agricultural Water Use for the Arkansas River Basin Water Forum held on April 24, 2014. Phil Reynolds volunteered at the 4th Grade Water Festival held at CSU-Pueblo on May 6, 2014. Pete Kasper was involved in the 3rd Annual Water Festival in Trinidad on May 15, 2014. Steve Witte also participated in CWCB's tour of the Fry-Ark project on May 20, 2014. Steve Witte and Bill Tyner were involved in a tour of the Lower Arkansas Basin for New Mexico State Engineer, Scott Verhines and members of his staff, representatives of the New Mexico Interstate Stream Commission (Rolf Petersen) and the Attorney General (Sarah Bond) on May 29-30, 2014 to explain how Colorado has incorporated conjunctive surface and ground water administration, which is also an interstate issue on the lower Rio Grande River, below Elephant Butte Reservoir. Steve Witte was invited to assist the Magazine: "Just add Water Grit – The Will to Thrive on Colorado's Eastern Plains". The initial scoping



Magazine: “Just add Water Grit – The Will to Thrive on Colorado’s Eastern Plains”. The initial scoping meeting was held in June, story development was conducted in July with layout and editing continuing through September. Steve Witte, John VanOort and Brian Sutton participated in a workshop on the fundamentals of Colorado water law with the United States Forest Service on June 18, 2014. An ad-hoc group of water users was convened in October to gather input on water administration operations that the public would like to have made more transparent or more readily accessible. The consensus of this group was that measures should be undertaken as part of the ARKDSS development program to show exchange operations and to make river calls more understandable. Steve Witte also presented his views on the value of the Consultation Process on October 17, 2014 to a Continuing Legal Education seminar entitled “Engineering and Water Practice Under the "New" Water Court Rules”. John Van Oort, Phil Reynolds, and Lonnie Spady attended and presented information regarding the 2013-14 and 2014-15 Winter Water Storage Programs at the annual meeting of the Program Board of Trustees held on October 17, 2014. Pete Kasper also volunteered at the Science, Technology, Engineering and Math (STEM) program at Otero Junior College on December 15, 2014.

Section 5 – Highlights of 2014

Although an account of many of the activities that involved Division 2 staff time have been given elsewhere in this report, two others stand out.

Marijuana Cultivation Water Supplies

One of the biggest challenges encountered in 2014 was in the incorporation of marijuana cultivation facilities into the processes and paradigms of Colorado water law. In the year 2000, Colorado voters passed Amendment 20 which permitted medical marijuana patients to legally possess 2 oz of marijuana and to grow up to six plants. The impact of this was scarcely more than that which might have occurred as a result of the chia pet fad of the 1980s. In 2010, HB10-1248 authorized the legalization of full-scale dispensaries, marijuana cultivation operations and manufacturing of edibles. While the number of medical marijuana cardholders jumped from 4800 in 2008 to 108,000 by 2012, any increase in demand for water went largely unnoticed as formerly illegal grow operations were quietly legitimized or obtained their water supplies as customers of municipal providers. HB10-1248 also created the Marijuana Enforcement Division within the Department of Revenue to oversee the burgeoning industry, but apparently their outreach efforts to coordinate activities of various state agencies did not extend to the Department of Natural Resources. In 2012, Amendment 64 was passed by the voters legalizing recreational marijuana use and facilities already licensed for medical marijuana were allowed to apply for recreational licenses. On January 1, 2014, existing medical marijuana licensees were allowed to open the first recreational dispensaries. However, the flood gates were opened on July 1, 2014 when it became possible for any resident to apply for a recreational grow license, which prompted numerous aspiring industrial agriculturists to begin making inquiries regarding how to acquire the necessary elements of production, including water.

By the end of 2014 there were 204 licensed grow facilities in Division 2. While many of these were licensed without any review of the propriety of the source of water to be used in the irrigation, sanitation, drinking, cooling and humidity control aspects of their businesses, this scarcely was of any concern except to those seeking licenses in certain counties where our office has been successful in forging relationships with county personnel who have taken the initiative to request approval of applicant’s water supply plans. Our experience has been as near that of a pick and shovel purveyor in the midst of a gold rush and we found ourselves entirely unprepared. The profits potential was so great that our new class of customers were often impatient and we found that we needed to learn as much about their needs and constraints as they needed to learn about the vagaries of water law.

Dealing with this unanticipated demand on staff time has been very trying. Rachel Zancanella truly established herself as a valuable member of our engineering staff by delving into a program of self education, in reaching out to county licensing staff and the Division of Marijuana Enforcement as well as making extraordinary efforts to educate individuals interested in learning the necessary steps to confirm their needs to existing law. While we were very gratified that many of the beachhead positions we established in early skirmishing were later supported by the State Engineer's Written Instruction and Order 2015-1, there are yet a number of issues which need to be decided to ensure consistent statewide administration including interpretation of Policy 2011-3 Concerning Commercial Activities on Property Served by Exempt Wells and possibly the need to develop a policy regarding enforcement procedures pertaining to unlicensed grow facilities.

Post-85 Well Depletions

Well owners in the Arkansas Valley have operated under amended ground water use rules since 1996. We originally considered the Amended 1996 Ground Water Use Rules (1996 Use Rules) to be applicable to all tributary wells within the Arkansas Basin. However, in negotiating the final terms of the decree entered in Kansas v. Colorado (No. 105, Original) Colorado agreed to apply the 1996 Use Rules only to ground water practices in existence as of 1985 and conceded that "Post-1985" depletions would be treated differently. The agreement reached with Kansas is incorporated into the Final Decree in Kansas v. Colorado as Appendix A-3. The Colorado General Assembly has provided a unique opportunity that could allow additional uses beyond those which occurred prior to 1986 or even new uses through administratively approved annual plans. But this approach would require a new set of rules that would have different conditions than those specified by the existing rules. Currently, such new or increased uses may only occur pursuant to court decreed plans for augmentation.

In HB14-1248 Representative Fischer proposed that surface water right owners be allowed to augment wells used to irrigate the same land as has been irrigated by their surface water. However, after discussing perceived defects in this proposal, he agreed to pull the bill with assurances that we intended to explore public interest in rule making that might accomplish similar purposes.

After holding two public meetings with water users an online survey of meeting participants was held. The results were mixed. Overall, almost 39% of survey responses were favorable, a little over 32% were opposed and 29% were neutral. Our efforts to refine the results to just those offered by farmers, ranchers, well association members and ditch company officials provided no clearer results. In short, we did not receive the mandate that we thought necessary to proceed at this time.



Section 6 – Organizational Changes

There were a number of personnel changes during the year and Division 2 began putting the pieces together in a re-organizational plan. 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.

For the reorganization, Brian Sutton became the West Team Leader (overseeing WD11 & WD12 and promoted to an EPSTIII); Doug Hollister became the North Team Leader (overseeing WD10, WD14/WD15 and was already an EPSTIII); Doug Brgoch became the South Team Leader (overseeing WDs 16, 18, 19 & 79 and was already an EPSTIII); and Lonnie Spady became the East Team Leader (overseeing WDs 17, 66 & 67 and was already an EPSTIII). Other organizational improvements changed a PSRSI position (formerly held by Janet Garoutte) to a PSRSII to which Andy Flor was appointed. Charlie DiDomenico's position was reallocated from EITIII to PEI. Donna Smith assumed new duties as AAll (no classification change).

Employees that left Division 2 during the year include: Garrett Markus (La Junta hydrographer) who left State employment; Ashenafi Hydebo (hydrographer) transferred to the Denver office; Janet Garoutte (well permitting) retired; Dave Kelly (WD11 deputy water commissioner) retired; and Bill Richie (decreed augmentation coordinator) retired.

Moves within our organization included: Rachel Zancanella moving to the Pueblo office as a water resource engineer, leaving the Water District 10 deputy position vacant; David Diedrich became the deputy water commissioner in WD10, leaving the WD79 deputy water commissioner position vacant; and Josh Kasper became the lead water commissioner in WD12, leaving the WD66/67 water commissioner position vacant.

Reallocations based on hiring commitments and successful completion of training plans included: Jeff Thomas (WD12 deputy water commissioner, EPSAII to EPSAIII); David Diedrich (while the WD79 deputy water commissioner, EPSAII to EPSAIII); and Joey Talbott (lead hydrographer, PEI to PSRSIV).

New hires during the year were Warren Gabbert (hydrographer in our La Junta office); Lori Lest (engineer hydrographer in the Pueblo office); Becky Nichols (water commissioner in WD66/67) and Lenna Rauber (deputy water commissioner in WD79). Don Morton and Doug Baxter worked as groundwater temporary employees and Donald Jones worked as a summer intern with the hydrography program.

Training/Staff Development:

Colorado Water Congress Annual Convention (1/29-1/31), Witte, Tyner, Pearson

Well meter testing/training (2/12-2/13), Stratman, Brumit
HI Primer (2/19)

Supervisor training in Alamosa (3/5-3/6), Sutton, Baker, DiRezza, Brgoch, Van Oort, Spady, Reynolds

CORE Overview (3/31-4/1) Hunker

Legal & Policy Dialogue (4/10), Pearson

Annual Meeting / Litigation training (4/30-5/2)

CORE Training (5/19-5/20), Hunker

Nuts & Bolts (9/16-9/17), Zancanella

CWOA Steamboat (10/1-10/3), Hunker, Sutton, Zancanella, Hollister, Reynolds, Richie, Hart, Sartin, J.

Kasper, Stratman, Livengood

Marijuana Grow Facility Tour (11/20), Flor, Diedrich, Hunker

