STATE OF COLORADO DIVISION OF WATER RESOURCES

DIVISION 2 2001 ANNUAL REPORT



Falls By Eric Ponce 8th Grade Student Pueblo School for the Arts & Science

Honorable Mention, Arkansas River Basin Forum Art Contest

DIVISION ENGINEER'S ANNUAL REPORT

Water Division 2

2001

March 6, 2002

Mr. Hal Simpson State Engineer Division of Water Resources 1313 Sherman Street, Room 818 Denver, CO 80203

Dear Hal:

I submit to you the Division 2 Annual Report summarizing our activities for Water Year 2000 on behalf of the Division 2 staff.

I also express my sincere gratitude to the Division 2 employees, you and your staff for providing the support that has allowed us to effectively accomplish our responsibilities and duties in the past irrigation year. I especially want to thank the members of my staff who 'shouldered' many burdens for me to serve the public interest during my period of convalescence.

Respectfully submitted,

Steven J. Witte

Division Engineer, Division 2

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I. <u>ACTIVITIES and ACCOMPLISHMENTS</u> 2001 WATER YEAR

A. Surface Water Administration

- The Division Engineer's office in cooperation with the Pueblo Winter Water Storage Board of Trustees administered the Winter Water Storage Program during the winter of 2000-2001. A total of 158,390 acre-feet of water was stored or directly diverted during the 120-day program season. This value compares to 178,579 acre-feet stored in the previous season and 166,602 acre-feet as an average of the last five years. A summary of Program operations can be found in Appendix D.
- The remainder of the irrigation year validated the early season prediction of below average streamflow throughout the Arkansas Basin. This condition caused irrigators to draw heavily upon water stored in reservoirs. A summary of transmountain diversions is included as Appendix A. Diversions by water district are summarized in Appendix B and a record of mainstem river calls is included in Appendix C.
- The Division Engineer for Division 2 acts as the Operations Secretary to the Arkansas River Compact Administration. In that capacity, the Division Engineer is charged with conducting the operations of John Martin Reservoir during each Compact year (November 1 through October 31) pursuant to the April 24, 1980 "Resolution Concerning an Operating Plan for John Martin Reservoir" (as subsequently amended) and submitting an annual report of these operations to the Administration. During the meeting of the Arkansas River Compact Administration (ARCA), held on December 12, 2000, the Division

Engineer submitted the "Annual Report of the Operations Secretary Concerning the Operations of John Martin Reservoir-2000".

- A measure of success was achieved regarding the objective of requiring installation of water measurement and control devices as needed to facilitate administration.
- An effort was made toward developing the confidence of Colorado water users regarding administrative decisions made by Division 2 staff pursuant to the 1980 Operation Plan for John Martin Reservoir by conducting an informational seminar in Lamar, Colorado in June, 2001.
- The Colorado Legislature passed HB 01-1354, which authorized the creation of a Water Bank to operate as a pilot program in the Arkansas River Basin until July 1, 2007. The program, by statute, is limited in its application to stored water and is to be operated in conformance with rules established by the State Engineer. The primary reasons for the selection of the Arkansas basin include the thought that something needed to be done to provide water right owners with an economically

viable alternative to permanent out of basin transfers to front range municipalities and the fact that within the Arkansas basin there currently exist effective rules that serve as an effective deterrent to expanded use of ground water at the expense of senior surface water rights. Without such a deterrent, it is feared that owners of stored water would simply replace the water leased through the Water Bank by pumping their wells. In order to encourage public input concerning the terms to be included in these rules, the State Engineer conducted a series of meetings on the subject, held throughout the basin, beginning in August, 2001.

• Surface Water Administration was complicated by the limited capability of tools under development which have been released for the purpose of distributing basic streamflow information used as a basis for administrative decision making. Forthcoming improvements that will display flow rates for a number of sites over a period of time on a single page, including reliable values for U.S.G.S. stations, will greatly enhance the functional utility of "SatMon Tool" for administration officials. Additionally, the loss of a reliable telecommunications link between the LaJunta office and the Pueblo Server remained a vexation and a hindrance to timely water administration. At this writing, there appears to be definite prospects for this situation to be corrected before the start of the next irrigation season.

B. Administration of Ground Water Use and Measurement Rules

Seventeen plans were reviewed by Division 2 staff and approved in accordance with Rule 14 of the Use Rules. In addition, wells subject to the Use Rules operated pursuant to 84 plans approved under the provisions of Section 37-80-120, C.R.S.

The seventeen plans reviewed by Division 2 staff involved 2001 wells projected to pump over 195,000 acre-feet during the 2001-2002 plan year (April-2001 through March-2002). Replacements to protect Colorado senior surface rights and usable Stateline flow were estimated to be over 68,000 acre-feet based on depletions from previous actual pumping, and depletions from estimated pumping during the plan year. Actual total pumping reported during the irrigation year amounted to 157,880 a.f.

• Division 2 continued its quality control program for measurement of diversions from wells in the basin subject to the "Amended Measurement Rules." Those Rules require wells to either be equipped with a totalizing flow meter or have a Power Consumption Coefficient. Installed totalizing flow meters must be verified to be accurate each four years, and Power Consumption Coefficients must be re-determined each four years

The quality control program includes follow up tests on the independent tests of flow measurement made pursuant to the "Amended Measurement Rules." In calendar year 2001, 513

measurement forms were received, 320 forms for either new totalizing flow meters or re-verification of totalizing flow meters and 193 forms for PCCs. We conducted follow up tests on 11 totalizing flow meter tests and 30 PCC tests.

Well tester training in 2001 was limited to a field exercise for previously approved testers.

The Power Consumption Coefficient Study, "Comparison of Two Approaches for Determining Ground-Water Discharge and Pumpage in the Lower Arkansas River Basin, Colorado, 1997-98", USGS Water-Resources Investigations Report 99-4221, was released in 1999. During 2001, we continued to monitor wells in the study and continued to determine power coefficients for many of those wells for the purpose of developing long term data on the PCC method.

• For each of the seventeen Rule 14 Plans reviewed and administered by Division 2 as well as related Substitute Water Supply Plans, monthly pumping and wellhead depletions were calculated for the active wells subject to administration under the Rules. Pumping was calculated using either the electric kilowatt hour usage per month divided by the power conversion coefficient or was determined from monthly flowmeter, slave meter, or hour meter readings reported by well owners each month.

Monthly meetings were held through the irrigation season and representatives of each Rule 14 plan were notified. Meetings were generally attended by representatives of major plans as well as a Southeast Water Conservancy District Representative and Division 2 staff. At these meetings, monthly pumping and depletions were

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identified and plan operations to define releases from the sources available to each plan were discussed. Additionally, these meetings were used to communicate problems with over-pumpers and anticipated needs for updating measurement for wells.

- Division 2 continued its active enforcement of well rules in the field. During the 2001 water year, four groundwater field enforcement technicians monitored well use in the field. The four individuals are assisted by the two measurement technicians, as available and needed. During the 2001 water year, 5064 well visits were made for enforcement of the rules.
- Office based enforcement of the measurement and use rules resulted in over 545 orders for wells. Of those, 267 were measurement orders, mostly due to expired measurement techniques, 232 were use orders, mostly due to failure to report monthly pumping, with the remainder either combined measurement and use orders or other types of orders.

C. Developments in KS vs. CO

Division 2 staff involvement in the ongoing lawsuit, <u>Kansas v. Colorado</u>, No. 105 Original (U.S. Supreme Court), was primarily preparatory to additional trial proceedings to assess compact compliance for the period following 1996 and to determine the sufficiency of Colorado efforts to achieve full compliance. The activities of Division 2 staff will follow a description of other developments in the case.

- In May Kansas filed three expert reports regarding current (1997-1999) and future compact compliance. Depositions were taken from the authors of these reports later that month.
- Also in May, Kansas requested permission to submit an analysis of the Winter Storage Project, and its impact on the need for future replacement water. On July 25, 2001, Special Master Arthur Littleworth filed an Order denying this request. In his Order the Special Master states: "I concluded that Kansas did not prove that the WWSP caused material Stateline depletions, and Kansas' exception to that finding was overruled by the Supreme Court...the Winter Water Storage Program as it has been known in this case may not be considered now to cause Stateline depletions in violation of the compact."
- The United States Supreme Court issued an opinion on June 11, 2001 regarding Colorado's and Kansas' exceptions to the Special Master's Third Report which pertains to the remedy for past depletions to usable Stateline flows. The Court upheld the Special Master's recommendations, except that the Court agreed with Colorado that prejudgment interest should not begin to accrue until 1985. The Court remanded the case to the Special Master for preparation of a final judgment consistent with its opinion. The significance of this decision is that the final award will be reduced

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from something over \$40 million (as recommended) to approximately \$23 million as of the date of judgment.

- On October 1, 2001, Attorney General Ken Salazar announced that Colorado and Kansas filed a Joint Motion for Partial Stay of Proceedings so that the States could pursue a mediated settlement. However, on December 31, 2001 the States filed a Joint Report to inform the Special Master that, "...it has not been possible to settle the remaining issues..."
- At this point, it is expected that trial will resume in June 2002 in order to determine if there were depletions to usable Stateline flows during the period 1997-1999, to consider Colorado's future compliance with the Arkansas River Compact, and to complete the remedy phase of the case.

D. Legal and Litigation

One hundred and sixty new water right applications or other filings were made with the Division Two Water Court during 2001. These filings were associated with fourteen hundred and nine new or existing diversion structures. The average number of filings for the last five year period is one hundred seventy one. Contained within this number were twenty eight complaints filed by the State and Division Engineers as enforcement actions primarily directed to owners of non-exempt tributary wells for various violations of groundwater rules and regulations. One hundred and eight new decrees were also awarded during the past year. A summary of these activities is listed in Appendix E of this report. Other significant legal events are listed below:

- Continue to have a minimal number of referee hearings through more detailed consultation and negotiation process with water right applicants and opposers. Only four hearings were held before the Water Court this year.
- Continued negotiations with City of Aurora/Rocky Ford Ditch Sellers Group applications concerning changes to the Rocky Ford Ditch Company water rights. Twenty meetings were attended on these two applications alone throughout the year by Division Two staff.
- Continue to encourage and have success in having water users applied to the court and obtain change decrees correcting their previous decrees to the current situations as they may exist in the field today.

E. Tabulation and Abandonment

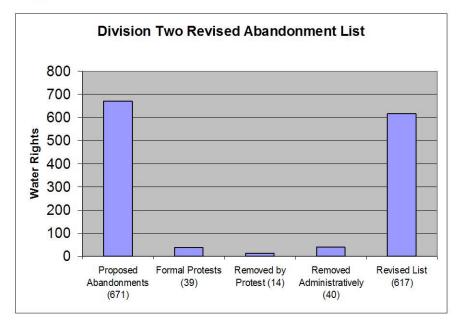
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Efforts towards the goals of tabulating the backlog of untabulated decrees in Division Two and improving the overall quality of the data contained within the tabulation and associated databases continued during 2001.

In 1998 an estimated 1,700 decrees existed which had not yet been included in the water rights tabulation. At the end of 2001 fewer than one hundred decrees remain to be tabulated. The majority of these being awarded during the last two years. Permanent part-time water commissioners were once again employed during portions of the winter period to assisting in accomplishing these tasks. Large amounts of effort were also expended during the year in addressing errors in this data and reconciling past inconsistencies of the courts. Efforts were also made in locating decrees in various county courthouses, which have never been transferred to the State Engineers Office.

The primary goal for the upcoming year consists of continuing to minimizing the number of errors in the data associated with the Hydrobase program in conjunction with the Year 2002 Tabulation publication.

⁻⁵⁻ The Division Engineer placed 671 water rights on the year 2000 Abandonment List on July 1, 2000. Five hundred and seventy eight of these were groundwater rights and the remaining 93 were various types of surface water rights. Resulting from further review and the filing of 39 formal protests to this abandonment list by water users, the Division Engineer removed 54 water rights from this list, 14 by the granting of protests and 40 administratively following further investigation. Twenty five protests were denied with these rights left on the list. This Revised Abandonment List containing the remaining 617 water rights was filed with the water court on December 31, 2001 and assigned case number 01CW157.



F. Safety of Dams

- Safety inspections were conducted for all Class I, II and III dams in accordance with the 1, 2 and 6 year interval policy. Any deviation from this schedule was approved by the Assistant State Engineer.
- The spillway at Fountain Valley #2 dam was found to be inadequate for the required Inflow Design Flood, and the maximum level of the reservoir was restricted to 1.5 feet below the spillway crest.
- Excessive flow into the masonry outlet control vault was noticed at Boehmer Dam (Class II), and the owner (Colorado Springs Utilities) voluntarily lowered the level of the reservoir until the problem could be investigated and remedied. A design for the repair was submitted and accepted, and the outlet conduit was lined with a cured-in-place epoxy membrane. The old outlet valve was removed, and the masonry control vault was abandoned and filled with concrete. A valve was installed at the downstream end of the conduit for temporary control of the reservoir until a permanent control valve can be installed at the upstream end.
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- Embankment and foundation repairs were completed and accepted at Glen Eyrie #3 dam (Class II) and South Suburban dam (Class I), and the restrictions for these dams were lifted. Outlet repairs were completed and accepted at Fisher Canyon Dam (Class I). Planned construction work at Victor #2 dam (Class II) was postponed until summer 2002.
- Division 2 Dam Safety Engineers conducted a one-day dam owner training workshop to educate dam owners and operators on dam safety, owners' responsibilities, and assistance available for dam repairs and rehabilitation.
- Division 2 DSEs assisted Division 5 by conducting safety inspections for 5 Class I dams, 5 Class II dams, and 4 Class III dams.
- In-depth Failure Modes and Consequences Analyses (FMCA) were conducted for Rampart Dam (Class I) and North Lake Dam (Class I). Division 2 DSEs are participating in development of a state-wide FMCA program to be implemented in 2002 and in development of a risk-based profiling program for identification of other dams that need the in-depth FMCA.
- New outlet valves, a new outlet discharge and structure, and grouting program was completed at North Lake Dam. Future outlet and stability improvements are currently being designed.
- Phase I seepage and stability repairs were completed at Nee Noshee dam and Phase II plans and specifications have been submitted for review and approval.
- A geotechnical investigation was performed at Lake Henry Dam for improving and controlling extensive seepage along the toe. A slope stability repair was completed on a down stream slope slide which resulted from wave over topping. The slide had blocked an old outlet discharge pipe.

- Slope stability and seepage repairs were completed at Wahatoya Dam to control a slide and extensive seepage that developed on the downstream slope.
- A geotechnical investigation was performed at Lake Beckwith Dam to investigate extensive slope stability problems on the downstream slope.
- Construction of the new Trout Creek Dam, an 80 foot high roller compacted concrete dam, was completed.

G. Hydrography

The Division 2 Hydrographic Program was conducted in WY2001 under the overall program leadership of Assistant Division Engineer, Bill Tyner, PE II, supported by Thomas Ley, PE1 Lead Hydrographer; Lou Schultz, EIT Hydrographic Engineer; and two Hydrographic Technicians, Anthony Gutierrez and Adam Adame. Bill Tyner also had specific hydrographic program oversight responsibilities for hydrographic record preparation in Division 5 during the water year.

-7-Division 2 hydrographers have assigned gaging stations/areas for which they have responsibility for station operation and maintenance, as well as the complete development and computation of streamflow records for specific historic record and/or compact gaging stations. Lou Schultz is responsible for gaging stations in WD 11 and provides some support in WD's 12 and 13. Tony Gutierrez and Tom Ley are responsible for gages in WD's 12, 13, 10, 14, 15, 16, 79, 18 and 19. Adam Adame is responsible for WD's 17 and 67.

In January of 2001, Assistant State Engineer Jack Byers prepared a paper outlining the scope of work for a Hydrographic Program Review. The purpose of the review was to examine several issues, inconsistencies, problems and concerns within the Division of Water Resources' Hydrographic Program, that were identified as a result of attempts to develop a replacement Satellite Monitoring System for surface water flow. Tom Ley, of the Division 2 office was asked to lead the effort to explore the issues and to propose resolution of those issues, where possible. Tom conducted his investigation in the January-April time period. His thirtynine page draft report, which addressed 12 separate issues was distributed in July. A revised version was distributed on October 10, 2001 under a cover memorandum from Hal Simpson, in which it is indicated that he intended "to implement the preferred solutions at the earliest opportunity". It is believed that this version has now, in effect, been adopted.

H. Information Technology

A substantial effort was made to promote an agency discussion of the proper role of Information Technology throughout the Division of Water Resources. While a number of significant issues have been addressed, few have been resolved. I know of no other single cause of discontent throughout the organization that can compare to this, at the present time.

I. Organization

• Agency Meetings and Initiatives:

♦ General Agency Staff Meetings

Steve Witte, Division Engineer; Keith Kepler, Assistant Division Engineer; Steve Kastner, Assistant Division Engineer; and Bill Tyner, Assistant Division Engineer attended the State Engineer's Spring Meeting in Denver, April 18-20, 2001.

Steve Witte attended the State Engineer's Late Summer Meeting in Frisco, July 19, 2001

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<u>Division 2 General Staff Meetings</u>

The Spring General Staff Meeting was held on May 9, 2001 at the office of Colorado Rural Water Association (CRWA) in Pueblo West. The agenda included presentations by Will Burt (IT projects, Legislation, and Performance Pay), Jack Byers (Dam Safety personnel shortage and mitigation, Hydrography, and Well Observation), Tom Ley and Bill Tyner (Flow measurement for administration), and Keith Kepler (Substitute Water Supply Plan Policy).

The Fall General Staff Meeting was held at the same location (CRWA) on November 9, 2001. Agenda topics included Division of Water Resources "Issues, Challenges, and Opportunities", Decision Items, Colorado Peak Performance pilot program results, Well Observation program, New Directions in Computers and Support, CWRAT Demonstration, Safety Issues, Water Administration/Policy/Litigation Discussions, and "What Can We Do to Help Your Do Your Job Better and Eaiser?". Ray Garcia was presented the Water Commissioner of the Year Award. A Special Recognition Award was presented to Vivian Beal for her IT efforts with Division 2 staff. In addition, Charlie Judge was recognized for his diligence related to computer support with his deputy water commissioners, and Steve Kastner and Keith Kepler were recognized for their positive influence on staff they supervise.

♦ Division 2 Monthly Staff Meetings

Due to work load and other conflicts few monthly staff meetings were held during the past year.

♦ <u>Leadership Team Meetings</u>

Division 2 has continued to be represented by Steve Witte and/or Keith Kepler during the Leadership Team Meetings held monthly in Denver.

Employee Council Participation

Bruce Smith is the Division 2 representative of this organization. Employee surveys are annually distributed and the final report is provided to staff upon Employee Council compilation of responses.

♦ 2001 Annual Picnic

Steve Witte (and Mary Kay & Kenny), Janet Kuzmiak (and John), and Tony Gutierrez (and Carol) attended the Annual Employee Picnic at Veltus Park in Glenwood Springs, August 4, 2001.

♦ Employee Recognition

Employee awards were presented to Ray Garcia (Water Commissioner of the Year), Vivian Beal, Charles Judge, Steve Kastner, and Keith Kepler. See "Division 2 Fall Gnereal Staff Meeting" for more details of these awards.

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• Personnel

A listing of individual personnel actions that occurred, follow:

Dennis Bagenstos, EIT I, (Position #453) resigned effective February 28, 2001.

Brian Boughton, EPST I, (Position #461) was hired April 4, 2001. (filling vacant position created by Kathy Trask's appointment to position #327).

Chris Lytle, Professional Engineer II, (Position #462) was hired May 7, 2001 (filling position vacated by Bill Tyner's appointment to Position #455).

Jane Wiley, Administrative Assistant II, (Position #464) was hired June 18, 2001. (filling position vacated by Julia Faix). Resigned effective August 31, 2001.

Brian Boughton, EIT I, (Position #453) appointed to position vacated by Dennis Bagenstos.

Monique Morey, PSRS I, (Position #97) was hired August 27, 2001 (filling position vacated by Bill Howland's retirement).

Janet Dash, PSRS II, (Position #2466) was hired September 17, 2001 (filling position vacated by Gary Barta's retirement—became ½ time position).

Audrey Sartin, ESPT I (Position #461) was hired November 5, 2001 (filling position vacated by Brian Boughton's appointment to Position #453).

Temporary employees hired during the year: Cheston Hart, Rudy Martinez, Jennifer Richardson, Pam Tyner, Josh Martinez, and Shannon Roybal.

Organizational Diagram on following page

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Colorado Division of Water Resources Division 2 Organizational Chart December 31, 2001

	DIVISION 2 ENGINEER	
	Steve Witte	
	PE IV (189)	
COMPUTER APPLICATIONS SUPPORT	ADMINISTRATIVE	SUPPORT
Programmer Analyst	Program Assistant I, We	ndy Bogard (227)
Vivian Beal, IT PROF. II (465)	Admin. Support, VACAN	IT, Admin Asst. II (464)
	Admin. Support, Kelli S	egura, Admin. Asst. I (463)
SURFACE WATER OPERATIONS	LITIGATION SUPPORT	GROUND WATER/DAM SAFETY
Assistant Division Engineer	Assistant Division Engineer	Assistant Division Engineer
Bill Tyner, PE II (455)	Steve Kastner, PE II (182)	Keith Kepler, PE III (217)
HYDROGRAPHY	RIVER OPERATIONS	DAM SAFETY
Lead Hydro	WD 12/13 Water Commissioner	Inspector, Mike Graber, PE II (425)
Tom Ley, PE I (256)	Charlie Judge, EPST II (17)	Inspector, Garrett Jackson, PE II (249)
Hydro, Lou Schultz, EIT I (222)	> Deputy 12, Dave Jones, EPSA III (2435)	WELL PERMITTING/CONSTRUCTION
Hydro, Adam Adame, EPST I (458)	> Deputy 12, Don Engelhart, EPSA II (2089)	Well Commissioner
Hydro, Tony Gutierrez, EPST I (194)	> Deputy 13, Steve Trexel, EPSA III (2111)	Janet Kuzmiak, EPST I (21)
AUGMENTATION COORDINATION	WD 79 Water Commissioner	GROUNDWATER INFORMATION
Augmentation Coordinator	• Ray Garcia, EPST I (2063)	Groundwater Information Coordinator
Brian Boughton, EIT I (453)		Chris Lytle, PE II (462)
RIVER OPERATIONS		Compliance, Audrey Sartin, EPST I (461)
River Operations Coordinator		Technical Support, Ina Bernard, EPST II (468)
Charles DiDomenico, PE I (466)		Technical Support, Kathy Trask, EPST II (327)
Reservoir Ops, Monique Morey, PSRS I (97)		DATA ANALYST
VD10 Water Commissioner		Data Analyst, Janet Dash, PSRS II (2466)
Eddie Taylor, EPST II (1)		GROUNDWATER ENFORCEMENT
> Deputy, Rich Snyder, EPST I (445)		Field Operations
VD 14/15 Water Commissioner		Inspector, Bill Richie, EPST I (459)
Joe Flory, EPST II (325)		> Inspector, Larry Hakes, EPSA II (456)
VD 17 Water Commissioner		> Inspector, VACANT, Temp Empl, EPSA I (454)
Don Taylor, EPST II (15)		Inspector, Dan DiRezza, EPST I (460)
VD 19 Water Commissioner		> Inspector, Lloyd Wadleigh, EPSA III (44)
Danny Marques, EPST II (9)		> Inspector, VACANT, Temp Empl, EPSA I (454)
> Deputy, Tony Pantano, EPSA II (2136)		RIVER OPERATIONS
VD 66/67 Water Commissioner		WD 11 Water Commissioner
Dan Neuhold, EPST I (13)		Bruce Smith, EPST II (141)
namenou no more all'19-18 de 1992 de 1992 - 1		>Deputy, Soraya Baroumand, EPSA II (2452)
		 Deputy, Gerald Hanks, EPSA II (2142)
		WD 16/18 Water Commissioner
		Doug Brgoch, EPST II (73)

> Deputy 18, Dan Valentine, EPSA III 2122

Safety Program

Among the activities undertaken during 2001 to promote the safety of Division 2 employees, annual vehicle safety checks were performed for all State vehicles and 23 staff members completed the "Top Driver Defensive Driving Seminar presented by Mr. Tom Bell of the Colorado Divison of Risk Management on March 7, 2001. All State leased vehicles and all privately owned vehicles operated by staff members in the course of conducting State business, were supplied with Emergency First Aid and Survival Kits. A stream-flow measurement cableway inspection program, designed to ensure the safety of all persons using Division of Water Resources' cableways was conducted. A thorough inventory and inspection of Division 2 cableways was conducted and the requisite forms filed with the State Engineer.

Much credit is due to Tom Ley, volunteer Safety Coordinator for the Division 2 office, for taking this assignment seriously and conscientiously pursuing the objectives of these activities.

Training

The Division 2 Training Program continued to suffer during this year. Wendy Bogard, Training Coordinator, remained short-handed (related to administrative support staff) and tried to attend to higher priorities during the year. The past years have provided many training/learning opportunities and the absence of a strong program over the last 2 years was certainly noticed by staff.

Documented training events include courses at colleges, State sponsored programs, and internal/external programs presented to specialty groups. These include Access and Excel classes (Chris Lytle and Steve Witte respectively), Flowmeter training (Dan DiRezza and Bill Richie), Dam Safety training (Mike Graber and Garrett Jackson), Pueblo Board of Water Works tour (Steve Kastner), Program Assistant meeting (Wendy Bogard), Hydrographers Annual Meeting (Bill Tyner, Tom Ley, Tony Gutierrez, Adam Adame, and Lou Schultz), IT Desktop Support training (Vivian Beal), IT Liaison Training (Vivian Beal and Kathy Trask), Colorado Women's Conference (Wendy Bogard), ArcView GIS (Ina Bernard), Lower Arkansas River Tour sponsored by Southeastern Colorado Water Conservancy District (Charlie DiDomenico), Outstanding Assistant (Kelli Segura and Wendy Bogard), USBR Flume training (Tony Gutierrez, Tom Ley, Bill Tyner, Adam Adame and Joe Flory), and Streamgaging Symposium (Tom Ley, Tony Gutierrez, and Adam Adame). The total cost of these programs to DWR and Division 2 training budgets totalled \$2973.77. There were some additional expenses not documented (which were charged to other budgets).

Three in-house sessions were provided to staff. They included presentations on GIS & Irrigated Acreage on the West Slope (presented by Brian Romig of Division 5), Defensive Driving (from State Risk Management), DeLorme 3D TopoQuads and GPS training. The in-house sessions were the backbone of Division 2's resurrected training program starting in 1997.

The Training Committee is comprised of Wendy Bogard (Coordinator), Keith Kepler, Vivian Beal, Bill Richie, Soraya Baroumand, and Dave Jones. There is a strong desire to again be proactive in training in future years and it is anticipated the next report on Training will show significant progress in this area.

J. Involvement in the Water User Community

- Division 2 staff members attended various meetings by other organizations held throughout the year to maintain working relationships with our constituency. These meetings are grouped by categories and identified as follows.
 - Groundwater Associations: e.g., Arkansas Groundwater Users Association (AGUA), Colorado Water Protective Development Association (CWPDA), Lower Arkansas Water Management Association (LAWMA).
 - Conservancy Districts: e.g. Southeastern Colorado Water Conservancy District (SECWCD), Purgatoire Water Conservancy District (PRWCD), and Upper Arkansas Water Conservancy District (UAWCD).
 - ◆ Ditch Companies and Water User Associations: e.g., Amity, Fort Lyon, Upper Water District 10 Water Users Association, and Wet Mountain Valley Water Users Association.
 - Arkansas River Compact Administration
 - Arkansas River Basin Technical Group: this is an alliance consisting of a variety of governmental agencies that have agreed to convene on a quarterly basis to share information concerning their water related programs.
 - Steve Witte presented information to the Nebraska Water Resources Association and the Nebraska State Irrigation Association at their joint meeting in North Platte, Nebraska on November 19, 2001 related to the ongoing litigation case with Kansas.
 - Additionally, Division 2 personnel have been involved in several other activities intend to increase public awareness of water related issues which are listed below: Arkansas River Basin Forum Discovering Water In Pueblo (DWIP) Huerfano County Farm Bureau Seminar Fryingpan_Arkansas Annual Operation Dam Safety Training for dam owners and operators Colorado State Fair Water Banking rule making/information gathering public meetings

II. **OBJECTIVES FOR 2002**

A. Contribute to the defense of Colorado's interests in the litigation with Kansas concerning the Arkansas River Compact and assure compliance with the Compact.

- Collect and provide data to update the H-I Model as needed to determine • depletions to usable Stateline flow.
- Continue efforts to assure quality of data collected for use in enforcement of ground water Measurement and Use Rules through certification training, verification measurements, consideration of flow meter standards, and continued collection of data to be analyzed by the U.S. Geological Survey.
- . Continue efforts to identify means to more efficiently and effectively evaluate replacement plans and substitute water supply plans.
- Monitor the affect of approved replacement plans; review and revise . implementation and enforcement procedures accordingly.
- Improve monitoring of approval status, operations, and accounting related to the implementation of all types of replacement plans, including decreed plans for augmentation, substitute water supply plans and Use "Rule 14" plans.

B. Conduct appropriate regulation and accounting of surface water operations.

- Develop understanding of how to access and process records from . telemetered streamflow data using the web-based system being developed.
- Require installation of water measurement and control facilities as . needed to facilitate administration.
- Establish new gaging stations or relocate existing gages to provide • additional or more reliable stream flow data for administrative decisions.
- Seek to resolve and/or narrow issues raised by the Assistant Operations . Secretary through appropriate processes of the Arkansas River Compact Administration.
- Define system requirements to develop improved surface water information system.

C. Continue process of reorganization, staffing, and staff development.

- Complete re-staffing to fill vacant positions as soon as possible.
- Continue to develop trustworthy personnel through competence and character focused continuing education program.
- Provide effective supervision and encourage superior performance through employee recognition and improved implementation of performance based pay program.
- Plan and implement changes to organizational structure and position . descriptions / recruitment as vacancies occur in order to most effectively meet the anticipated expectations to be fulfilled by this Division in the future and to provide career development opportunities for staff.
- Encourage staff members to exercise properly delegated responsibility . and authority.

- D. Protect and provide for the orderly administration of water rights within Division 2 through preservation of reliable descriptive records and effective participation in legal processes.
- Continue to improve water rights tabulation.
- Continue to provide useful information and perspective to the Court through the consultation and litigation processes.
- Perform quality control check on official diversion records for Division 2 maintained by the Division of Water Resources, clearly document changes made in all repositories and the basis for such changes.
- E. Develop and promote increased utilization of technology as a means of increasing efficiency, productivity and new or improved services.
- Strive to improve working relations and processes between centralized and decentralized Information Technology professionals through insistence upon establishment of norms defining respective functions, accountability, and standardized product development / project management procedures.
- Develop a project proposal, which addresses all established development / management standard procedures, describing a future Ground Water component of Hydrobase that meets Division 2 defined system specifications.
- Implement enhancements to current system specifications of Division 2 Ground Water Data System, according to schedule to be defined in standardized procedures referenced above. Examples of measures expected to improve access, processing, and functionality needed by staff and external customers are; inclusion of ground water diversion data in official reports of annual diversions in Division 2, establishment of an FTP site to facilitate the distribution and exchange of data and, development of an application to permit read only access to various tables to improve effectiveness of enforcement activities.
- Increase proficiency in utilization of state of the art modeling software to better analyze the risks of dam failure and associated consequences.
- Implement pilot project to quantify the effect of unregulated illegal water impoundment structures through analysis of satellite imagery as a means to develop policy or guidelines regarding the future administration of such structures.
- Expand and improve future applications of GIS technology through continued efforts to collect accurate geographic location data with GPS technology and the acquisition of other data types (i.e. maps of acreage removed from irrigation, etc.).

APPENDIX A

TRANSMOUNTAIN DIVERSION SUMMARY

WY 2001 TRANSMOUNTAIN DIVERSION SUMMARY - INFLOWS

	0.000	RECIPIENT			110.00	SOURCE
DIV/WD	DIVERSION STRUCTURE	STREAM	ACRE-FEET	DAYS	DIV/WD	STREAM
	COLUMBINE DITCH	ARKANSAS RIVER	1,790	111	5/37	EAGLE RIVER
2/11	EWING DITCH	TENNESSEE CREEK	936	155	5/37	EAGLE RIVER
2/11	WURTZ DITCH	TENNESSEE CREEK	2,230	122	5/37	EAGLE RIVER
2/11	HOMESTAKE TUNNEL	LAKE FORK CREEK	35,770	67	5/37	EAGLE RIVER
2/11	BOUSTEAD TUNNEL	LAKE FORK CREEK	50,530	365	5/38	FRYINGPAN RIVER
2/11	BUSK-IVANHOE TUNNEL	LAKE FORK CREEK	5,330	171	5/38	FRYINGPAN RIVER
2/11	TWIN LAKES TUNNEL	LAKE CREEK	45,650	365	5/38	ROARING FORK RIVEF
2/11	LARKSPUR DITCH	PONCHA CREEK	63	104	4/28	TOMICHI CREEK
	HUDSON DITCH	HUERFANO RIVER	0	0	3/35	MEDANO CREEK
2/79	MEDANO DITCH	HUERFANO RIVER	853	62	3/35	MEDANO CREEK
-	TOTAL:		143.152			

WY 2001 TRANSMOUNTAIN DIVERSION SUMMARY - OUTFLOWS

			SOURCE			
DIV/WI	DIVERSION STRUCTURE	STREAM	ACRE-FEET	DAYS	DIV/WD	STREAM
5/36&37	STEVENS-LEITER WELL	BLUE/EAGLE RIVERS	239	365	2/11	GROUNDWATER
	(AKA ARKANSAS WELL)					
	TOTAL:	100	239			101 L 101 L

APPENDIX B

WATER DIVERSION SUMMARY

IY 2001 WATER DIVERSION SUMMARY*

ACRE-FEET

12 No. 12	a		S	8	22 XX	68	Q/	3		S		a		
USE TYPE	WD10	WD11	WD12	WD13	WD14	WD15	WD16	WD17	WD18	WD19	WD66	WD67	WD79	TOTAL
IRRIGATION	40,550	137,834	141,550	31,714	94,994	8,660	5,609	570,312	652	52,410	0	289,286	20,428	1,393,999
STORAGE	9,853	199,134	1,533	2,813	65,410	183	1,597	189,689	0	6,337	0	60,834	767	538,150
MUNICIPAL	105,222	4,656	8,856	208	35,754	1,794	3,907	2,938	331	5	0	4,070	10	167,751
COMMERCIAL	108	135	0	14	0	15	42	360	0	0	0	2,017	0	2,691
DOMESTIC	7	0	20,773	4	0	21	2	68	0	4,059	0	204	0	25,138
STOCK	10	700	0	0	0	0	0	0	0	447	0	0	0	1,157
INDUSTRIAL	29	0	78,892	0	0	6,155	0	0	0	0	0	7,902	0	92,978
RECREATIONAL	0	0	130	0	0	1	0	0	0	272	0	0	0	403
FISHERY	0	2,673	0	0	0	724	0	0	0	0	0	0	0	3,397
AUGMENTATION	15,983	196	182	327	0	868	72	0	0	0	0	3,202	0	7,279
RECHARGE	0	0	0	0	0	0	0	0	0	0	0	3,094	0	3,094
OTHER	0	4,320	37,131	0	9,335	2,628	0	935	0	0	0	146	0	84,547
TOTAL	171,762	349,648	289,047	35,080	205,493	21,049	11,229	764,302	983	63,530	0	370,755	21,205	2,320,584

* Data includes groundwater diversions. Updated: 03/28/02

APPENDIX C

ARKANSAS RIVER CALLS

	IY 2001 RIVER CALL F STATE OF COLORA	
	WATER DIVISION 2	
Date	Arkansas River Call	Priority Date
1-Nov-00	FORT LYON #2	03/01/1887
2-Nov-00	FORT LYON #2	03/01/1887
3-Nov-00	FORT LYON #2	03/01/1887
4-Nov-00	FORT LYON #2	03/01/1887
5-Nov-00	FORT LYON #2	03/01/1887
6-Nov-00	FORT LYON #2	03/01/1887
7-Nov-00	FORT LYON #2	03/01/1887
8-Nov-00	FORT LYON #2	03/01/1887
9-Nov-00	FORT LYON #2	03/01/1887
10-Nov-00	FORT LYON #2	03/01/1887
11-Nov-00	FORT LYON #2	03/01/1887
12-Nov-00	FORT LYON #2	03/01/1887
13-Nov-00	FORT LYON #2	03/01/1887
14-Nov-00	FORT LYON #2	03/01/1887
15-Nov-00	WINTER WATER	03/01/1910
16-Nov-00	WINTER WATER	03/01/1910
17-Nov-00	WINTER WATER	03/01/1910
18-Nov-00	WINTER WATER	03/01/1910
19-Nov-00	WINTER WATER	03/01/1910
20-Nov-00	WINTER WATER	03/01/1910
21-Nov-00	WINTER WATER	03/01/1910
22-Nov-00	WINTER WATER	03/01/1910
23-Nov-00	WINTER WATER	03/01/1910
24-Nov-00	WINTER WATER	03/01/1910
25-Nov-00	WINTER WATER	03/01/1910
26-Nov-00	WINTER WATER	03/01/1910
27-Nov-00	WINTER WATER	03/01/1910
28-Nov-00	WINTER WATER	03/01/1910
29-Nov-00	WINTER WATER	03/01/1910
3 <mark>0-N</mark> ov-00	WINTER WATER	03/01/1910
1-Dec-00	WINTER WATER	03/01/1910
2-Dec-00	WINTER WATER	03/01/1910
3-Dec-00	WINTER WATER	03/01/1910
4-Dec-00	WINTER WATER	03/01/1910
5-Dec-00	WINTER WATER	03/01/1910
6-Dec-00	WINTER WATER	03/01/1910
7-Dec-00	WINTER WATER	03/01/1910
8-Dec-00	WINTER WATER	03/01/1910
9-Dec-00	WINTER WATER	03/01/1910

10-Dec-00	WINTER WATER	03/01/1910
11-Dec-00	WINTER WATER	03/01/1910
12-Dec-00	WINTER WATER	03/01/1910
13-Dec-00	WINTER WATER	03/01/1910
14-Dec-00	WINTER WATER	03/01/1910
15-Dec-00	WINTER WATER	03/01/1910
16-Dec-00	WINTER WATER	03/01/1910
17-Dec-00	WINTER WATER	03/01/1910
18-Dec-00	WINTER WATER	03/01/1910
19-Dec-00	WINTER WATER	03/01/1910
20-Dec-00	WINTER WATER	03/01/1910
21-Dec-00	WINTER WATER	03/01/1910
22-Dec-00	WINTER WATER	03/01/1910
23-Dec-00	WINTER WATER	03/01/1910
24-Dec-00	WINTER WATER	03/01/1910
25-Dec-00	WINTER WATER	03/01/1910
26-Dec-00	WINTER WATER	03/01/1910
27-Dec-00	WINTER WATER	03/01/1910
28-Dec-00	WINTER WATER	03/01/1910
29-Dec-00	WINTER WATER	03/01/1910
30-Dec-00	WINTER WATER	03/01/1910
31-Dec-00	WINTER WATER	03/01/1910
1-Jan-01	WINTER WATER	03/01/1910
2-Jan-01	WINTER WATER	03/01/1910
3-Jan-01	WINTER WATER	03/01/1910
4-Jan-01	WINTER WATER	03/01/1910
5-Jan-01	WINTER WATER	03/01/1910
6-Jan-01	WINTER WATER	03/01/1910
7-Jan-01	WINTER WATER	03/01/1910
8-Jan-01	WINTER WATER	03/01/1910
9-Jan-01	WINTER WATER	03/01/1910
10-Jan-01	WINTER WATER	03/01/1910
11-Jan-01	WINTER WATER	03/01/1910
12-Jan-01	WINTER WATER	03/01/1910
13-Jan-01	WINTER WATER	03/01/1910
14-Jan-01	WINTER WATER	03/01/1910
15-Jan-01	WINTER WATER	03/01/1910
16-Jan-01	WINTER WATER	03/01/1910
17-Jan-01	WINTER WATER	03/01/1910
18-Jan-01	WINTER WATER	03/01/1910
19-Jan-01	WINTER WATER	03/01/1910
20-Jan-01	WINTER WATER	03/01/1910
21-Jan-01	WINTER WATER	03/01/1910

22-Jan-01	WINTER WATER	03/01/1910
23-Jan-01	WINTER WATER	03/01/1910
24-Jan-01	WINTER WATER	03/01/1910
25-Jan-01	WINTER WATER	03/01/1910
26-Jan-01	WINTER WATER	03/01/1910
27-Jan-01	WINTER WATER	03/01/1910
28-Jan-01	WINTER WATER	03/01/1910
29-Jan-01	WINTER WATER	03/01/1910
30-Jan-01	WINTER WATER	03/01/1910
31-Jan-01	WINTER WATER	03/01/1910
1-Feb-01	WINTER WATER	03/01/1910
2-Feb-01	WINTER WATER	03/01/1910
3-Feb-01	WINTER WATER	03/01/1910
4-Feb-01	WINTER WATER	03/01/1910
5-Feb-01	WINTER WATER	03/01/1910
6-Feb-01	WINTER WATER	03/01/1910
7-Feb-01	WINTER WATER	03/01/1910
8-Feb-01	WINTER WATER	03/01/1910
9-Feb-01	WINTER WATER	03/01/1910
10-Feb-01	WINTER WATER	03/01/1910
11-Feb-01	WINTER WATER	03/01/1910
12-Feb-01	WINTER WATER	03/01/1910
13-Feb-01	WINTER WATER	03/01/1910
14-Feb-01	WINTER WATER	03/01/1910
15-Feb-01	WINTER WATER	03/01/1910
16-Feb-01	WINTER WATER	03/01/1910
17-Feb-01	WINTER WATER	03/01/1910
18-Feb-01	WINTER WATER	03/01/1910
19-Feb-01	WINTER WATER	03/01/1910
20-Feb-01	WINTER WATER	03/01/1910
21-Feb-01	WINTER WATER	03/01/1910
22-Feb-01	WINTER WATER	03/01/1910
23-Feb-01	WINTER WATER	03/01/1910
24-Feb-01	WINTER WATER	03/01/1910
25-Feb-01	WINTER WATER	03/01/1910
26-Feb-01	WINTER WATER	03/01/1910
27-Feb-01	WINTER WATER	03/01/1910
28-Feb-01	WINTER WATER	03/01/1910
1-Mar-01	WINTER WATER	03/01/1910
2-Mar-01	WINTER WATER	03/01/1910
3-Mar-01	WINTER WATER	03/01/1910
4-Mar-01	WINTER WATER	03/01/1910
5-Mar-01	WINTER WATER	03/01/1910

6-Mar-01	WINTER WATER	03/01/1910
7-Mar-01	WINTER WATER	03/01/1910
8- <mark>M</mark> ar-01	WINTER WATER	03/01/1910
9-Mar-01	WINTER WATER	03/01/1910
10-Mar-01	WINTER WATER	03/01/1910
11-Mar-01	WINTER WATER	03/01/1910
12-Mar-01	WINTER WATER	03/01/1910
13-Mar-01	WINTER WATER	03/01/1910
14-Mar-01	WINTER WATER	03/01/1910
15-Mar-01	Highline	03/11/1886
16-Mar-01	FORT LYON #2	03/01/1887
17-Mar-01	COLORADO CANAL/G.PLAINS	06/09/1890-08/01/1896
18-Mar-01	COLORADO CANAL/G.PLAINS	06/09/1890-08/01/1896
19-Mar-01	COLORADO CANAL/G.PLAINS	06/09/1890-08/01/1896
20-Mar-01	HOLBROOK	09/25/1889
21-Mar-01	Highline	03/11/1886
22-Mar-01	FORT LYON #2	03/01/1887
23-Mar-01	FORT LYON #2	03/01/1887
24-Mar-01	FORT LYON #2	03/01/1887
25-Mar-01	FORT LYON #2	03/01/1887
26-Mar-01	FORT LYON #2	03/01/1887
27-Mar-01	FORT LYON #2	03/01/1887
28-Mar-01	FORT LYON #2	03/01/1887
29-Mar-01	FORT LYON #2	03/01/1887
30-Mar-01	FORT LYON #2	03/01/1887
31-Mar-01	FORT LYON #2	03/01/1887
1-Apr-01	FORT LYON #2	03/01/1887
2-Apr-01	FORT LYON #2	03/01/1887
3-Apr-01	FORT LYON #2	03/01/1887
4-Apr-01	FORT LYON #2	03/01/1887
5-Apr-01	FORT LYON #1	03/01/1887
6-Apr-01	OXFORD #2	02/26/1887
7-Apr-01	OXFORD	02/26/1887
8-Apr-01	CATLIN	12/03/1884
9-Apr-01	Catlin	12/03/1884
10-Apr-01	CATLIN	12/03/1884
11-Apr-01	FORT LYON #2	03/01/1887
12-Apr-01	FORT LYON #2	03/01/1887
13-Apr-01	FORT LYON #2	03/01/1887
14-Apr-01	FORT LYON #2	03/01/1887
15-Apr-01	FORT LYON #2	03/01/1887
16-Apr-01	CATLIN	12/03/1884
17-Apr-01	CATLIN	12/03/1884

18-Apr-01	CATLIN	12/03/1884
19-Apr-01	CATLIN	12/03/1884
20-Apr-01	CATLIN	12/03/1884
21-Apr-01	CATLIN	12/03/1884
22-Apr-01	CATLIN	12/03/1884
23-Apr-01	CATLIN	12/03/1884
24-Apr-01	CATLIN	12/03/1884
25-Apr-01	CATLIN	12/03/1884
26-Apr-01	CATLIN	12/03/1884
27-Apr-01	CATLIN	12/03/1884
28-Apr-01	CATLIN	12/03/1884
29-Apr-01	CATLIN	12/03/1884
30-Apr-01	CATLIN	12/03/1884
1-May-01	CATLIN	12/03/1884
2-May-01	CATLIN	12/03/1884
3-May-01	CATLIN	12/03/1884
4-May-01	Oxford	02/26/1887
5-May-01	FORT LYON #2	03/01/1887
6-May-01	COLORADO CANAL	06/09/1890
7-May-01	BESSEMER/EXCELSIOR	05/01/1887
8-May-01	FORT LYON #2	03/01/1887
9-May-01	FORT LYON #2	03/01/1887
10-May-01	FORT LYON #2	03/01/1887
11-May-01	FORT LYON #2	03/01/1887
12-May-01	FORT LYON #2	03/01/1887
13-May-01	FORT LYON #2	03/01/1887
14-May-01	FORT LYON #2	03/01/1887
15-May-01	FORT LYON #2	03/01/1887
16-May-01	FORT LYON #2	03/01/1887
17-May-01	COLORADO CANAL	06/09/1890
18-May-01	GREAT PLAINS	08/01/1896
19-May-01	GREAT PLAINS	08/01/1896
20-May-01	GREAT PLAINS	08/01/1896
21-May-01	GREAT PLAINS	08/01/1896
22-May-01	GREAT PLAINS	08/01/1896
23-May-01	COLORADO CANAL	6/9/1890
24-May-01	OTERO	3/3/1890
25-May-01	COLORADO CANAL	06/09/1890
26-May-01	COLORADO CANAL	06/09/1890
27-May-01	COLORADO CANAL	06/09/1890
28-May-01	GREAT PLAINS	08/01/1896
29-May-01	GREAT PLAINS	08/01/1896
30-May-01	GREAT PLAINS	08/01/1896

31-May-01	GREAT PLAINS	08/01/1896
1-Jun-01	COLO CANAL / GREAT PLAINS	06/09/1890 - 08/01/1896
2-Jun-01	GREAT PLAINS	08/01/1896
3-Jun-01	GREAT PLAINS	08/01/1896
4-Jun-01	GREAT PLAINS	08/01/1896
5-Jun-01	GREAT PLAINS	08/01/1896
6-Jun-01	GREAT PLAINS	08/01/1896
7-Jun-01	GREAT PLAINS	08/01/1896
8-Jun-01	GREAT PLAINS	08/01/1896
9-Jun-01	GREAT PLAINS	08/01/1896
10-Jun-01	GREAT PLAINS	08/01/1896
11-Jun-01	COLORADO CANAL	06/09/1890
12-Jun-01	Excelsior / Highline	01/06/1890
13-Jun-01	Excelsior / Highline	01/06/1890
14-Jun-01	Excelsior / Highline	01/06/1890
15-Jun-01	COLORADO CANAL	06/09/1890
16-Jun-01	COLORADO CANAL	6/9/1890
17-Jun-01	HOLBROOK	09/25/1889
18-Jun-01	Consolidated	03/13/1888
19-Jun-01	FORT LYON #2	03/01/1887
20-Jun-01	FORT LYON #2	03/01/1887
21-Jun-01	FORT LYON #2	03/01/1887
22-Jun-01	FORT LYON #2	03/01/1887
23-Jun-01	FORT LYON #2	03/01/1887
24-Jun-01	FORT LYON #2	03/01/1887
25-Jun-01	FORT LYON #2	03/01/1887
26-Jun-01	OXFORD	02/26/1887
27-Jun-01	OXFORD	02/26/1887
28-Jun-01	FORT LYON #2	03/01/1887
29-Jun-01	FORT LYON #2	03/01/1887
30-Jun-01	FORT LYON #2	03/01/1887
1-Jul-01	FORT LYON #2	03/01/1887
2-Jul-01	FORT LYON #2	03/01/1887
3-Jul-01	FORT LYON #2	03/01/1887
4-Jul-01	FORT LYON #1	03/01/1887
5-Jul-01	Amity #1	02/26/1887
6-Jul-01	Amity #1	2/21/1887
7-Jul-01	Amity #1	02/21/1887
8-Jul-01	Amity #1	02/21/1887
9-Jul-01	Catlin #1	12/03/1884
10-Jul-01	CATLIN#1	12/03/1884
11-Jul-01	CATLIN#1	12/03/1884
12-Jul-01	Catlin #1	12/03/1884

13-Jul-01	Amity #1	02/21/1887
14-Jul-01	BESSEMER #2	05/01/1887
15-Jul-01	Consolidated	03/13/1888
16-Jul-01	GREAT PLAINS	08/01/1896
17-Jul-01	Consolidated	03/13/1888
18-Jul-01	FORT LYON #2	03/01/1887
19-Jul-01	Amity #1	02/21/1887
20-Jul-01	Amity #1	02/21/1887
21-Jul-01	Amity #1	02/21/1887
22-Jul-01	Amity #1	02/21/1887
23-Jul-01	Amity #1	02/21/1887
24-Jul-01	CATLIN	12/03/1884
25-Jul-01	CATLIN	12/03/1884
26-Jul-01	Catlin	12/03/1884
27-Jul-01	Amity #1	2/21/1887
28-Jul-01	FORT LYON #2	3/1/1887
29-Jul-01	FORT LYON #2	3/1/1887
30-Jul-01	FORT LYON #2	03/01/1887
31-Jul-01	CATLIN	12/03/1884
1-Aug-01	CATLIN	12/03/1884
2-Aug-01	CATLIN	12/03/1884
3-Aug-01	CATLIN	12/03/1884
4-Aug-01	CATLIN	12/03/1884
5-Aug-01	CATLIN	12/03/1884
6-Aug-01	CATLIN	12/03/1884
7-Aug-01	CATLIN	12/03/1884
8-Aug-01	Amity #1	2/21/1887
9-Aug-01	Amity #1	2/21/1887
10-Aug-01	Amity #1	02/21/1887
11-Aug-01	Amity #1	02/21/1887
12-Aug-01	Amity #1	02/21/1887
13-Aug-01	Amity #1	02/21/1887
14-Aug-01	OXFORD	02/26/1887
15-Aug-01	OXFORD	02/26/1887
16-Aug-01	Amity #1	02/21/1887
17-Aug-01	Amity #1	02/21/1887
18-Aug-01	Amity #1	02/21/1887
19-Aug-01	Amity #1	02/21/1887
20-Aug-01	Amity #1	02/21/1887
21-Aug-01	Amity #1	02/21/1887
22-Aug-01	CATLIN	12/03/1884
23-Aug-01	CATLIN	12/03/1884
24-Aug-01	CATLIN	12/03/1884

25-Aug-01	CATLIN	12/03/1884
26-Aug-01	CATLIN	12/03/1884
27-Aug-01	Amity #1	2/21/1887
28-Aug-01	Amity #1	2/21/1887
29-Aug-01	CATLIN	12/03/1884
30-Aug-01	CATLIN	12/03/1884
31-Aug-01	CATLIN	12/03/1884
1-Sep-01	CATLIN	12/03/1884
2-Sep-01	OXFORD	02/26/1887
3-Sep-01	FORT LYON #2	03/01/1887
4-Sep-01	Amity #1	02/21/1887
5-Sep-01	CATLIN	12/03/1884
6-Sep-01	CATLIN	12/03/1884
7-Sep-01	CATLIN	12/03/1884
8-Sep-01	CATLIN	12/03/1884
9-Sep-01	CATLIN	12/03/1884
10-Sep-01	CATLIN	12/03/1884
11-Sep-01	CATLIN	12/03/1884
12-Sep-01	CATLIN	12/03/1884
13-Sep-01	CATLIN	12/03/1884
14-Sep-01	CATLIN	12/03/1884
15-Sep-01	CATLIN	12/03/1884
16-Sep-01	CATLIN	12/03/1884
17-Sep-01	CATLIN	12/03/1884
18-Sep-01	CATLIN	12/03/1884
19-Sep-01	CATLIN	12/03/1884
20-Sep-01	CATLIN	12/03/1884
21-Sep-01	CATLIN	12/03/1884
22-Sep-01	CATLIN	12/03/1884
23-Sep-01	CATLIN	12/03/1884
24-Sep-01	CATLIN	12/03/1884
25-Sep-01	CATLIN	12/03/1884
26-Sep-01	FORT LYON #1	04/15/1884
27-Sep-01	FORT LYON #1	04/15/1884
28-Sep-01	FORT LYON #1	04/15/1884
29-Sep-01	FORT LYON #1	04/15/1884
30-Sep-01	FORT LYON #1	04/15/1884
1-Oct-01	FORT LYON #1	04/15/1884
2-Oct-01	FORT LYON #1	04/15/1884
3-Oct-01	FORT LYON #1	04/15/1884
4-Oct-01	FORT LYON #1	04/15/1884
5-Oct-01	FORT LYON #1	04/15/1884
6-Oct-01	FORT LYON #1	04/15/1884

7-Oct-01	CATLIN	12/03/1884
8-Oct-01	CATLIN	12/03/1884
9-Oct-01	CATLIN	12/03/1884
10-Oct-01	CATLIN	12/03/1884
11-Oct-01	CATLIN	12/03/1884
12-Oct-01	CATLIN	12/03/1884
13-Oct-01	CATLIN	12/03/1884
14-Oct-01	CATLIN	12/03/1884
15-Oct-01	CATLIN	12/03/1884
16-Oct-01	CATLIN	12/03/1884
17-Oct-01	CATLIN	12/03/1884
18-Oct-01	CATLIN	12/03/1884
19-Oct-01	CATLIN	12/03/1884
20-Oct-01	CATLIN	12/03/1884
21-Oct-01	CATLIN	12/03/1884
22-Oct-01	CATLIN	12/03/1884
23-Oct-01	OXFORD	02/26/1887
24-Oct-01	OXFORD	02/26/1887
25-Oct-01	OXFORD	02/26/1887
26-Oct-01	OXFORD	02/26/1887
27-Oct-01	OXFORD	02/26/1887
28-Oct-01	OXFORD	02/26/1887
29-Oct-01	OXFORD	02/26/1887
30-Oct-01	OXFORD	02/26/1887
31-Oct-01	OXFORD	02/26/1887

APPENDIX D

WINTER WATER PROGRAM

	E	
	PUEBLO JOHN MARTIN RESERVOIR RESERVOIR TOTAL TOTAL DIV	
	PUEBLO J RESERVOIR TOTAL	9092.64
14, 2001	AMITY NET TRANSIT THEORETICAL LOSS TOTAL	9092.64
IGH MARCH	AMITY TRANSIT LOSS	70.87
NOVEMBER 15, 2000 THROUGH MARCH 14, 2001	EORETICAL GROSS 103,106 AF THEORETICAL SYSTEM TOTAL	9163.51
NOVEMBE	AMITY 103,106 AF THEORETICAL & SYSTEM 103,106 AF BROOK PERCENT SYSTEM	297151
	103,106 AF SYSTEM PERCENT	21.50
	TICAL AMITY 103,106 AF 00 AF & SYSTEM STEM HOLBROOK PERCENT	
	TICAL 00 AF STEM	92.00

WINTER WATER PROGRAM REPORT COLORADD DIVISION OF WATER RESOURCES DIVISION ENGINEER WATER DIVISION TWO

	0-100,000 AF SYSTEM	THEORETICAL 100 000 AF	AMITY	103,106 AF SVSTEM	AMITY 103,106 AF THEORETICAL & SVSTEM 103.106 AF	GROSS	AMITY	NET NET	PUEBLO	PUEBLO JOHN MARTIN BESERVOIR BESERVOID	CANAL	CVCTEM
ENTITY	PERCENT	SYSTEM	HOLBROOK	PERCENT	SYSTEM	TOTAL	LOSS	TOTAL	TOTAL	TOTAL D	TOTAL DIVERSIONS	STATUS
DECEMIN	01 50	00 0010			0074 E4	1 0000	10.01	10 0000	100000			
DECOREMEN	06.12	0132.00		nc: 17	101/67	10.0018	10.01	9032.04	3032.04		0.00	-0.00
HIGHLINE	28 87	8314.56		28.87	3990.12	12304.68	95.16	12209.51	12209.51		0.00	-0.00
OXFORD	6.96	2004.48		6.96	961.94	2966.42	22.94	2943.48	2943.48		0.00	0.00
CATLIN	3172	9135.36		31.72	4384 01	13519.37	104.56	13414.82	13289.82		125.00	00 0
CONSOLIDATED	0 957	2756.16		9 57	1322.67	4078.83	31.54	4047.28	00.0	3824.74	17.00	-82.19
RIVERSIDE	0.46	132.48		046	63.58	196.06	1.52	194.54	194.54	1	0.00	-0.00
WEST PUEBLO	0 92	264.96		0 92	127.15	392.11	3.03	389.08	389 08		0.00	-0.00
COLORADO	15 01	10687.12		17 07	7077.72	17764.84	137.39	17627.45	1430.12		18767.91	2570.58
HOLBROOK	11.97	8522.64	356.00	14.05	5825.54	14704.18	113.72	14590.46	5318 27		6866.00	-2406 19
FORT LYON	53.60	38163.20		50.88	21096.34	59259.54		59259.54	1589 54	000	57670.00	-0.00
AMITY	1942	13827.04	2750.00	18 00	7463.33	24040.37	185.92	23854.44	000	23772.26	0.00	-82.19
TOTALS	200.00	10000 00	3106.00	200 00	55283.91	158389.91	766.65	157623.26	46457.00	27597.00	83445.91	00.0-
DI JERI O BAL ANCE ACCOUNT	TH DOOD BUT	00.0										
		000										
SYSTEM GRAND TOTAL:	D TOTAL:	158389 91										

COMMENTS:	Lake Meredith & Lake Henry will be used to balance Holbrock, Amity & Consolidated canals. Pueblo Reservoir WW Balance accol will be used to balance Ft. Lyon	ARKANSAS @	ARKANSAS @ LAS ANIMAS
		WINTER WATER	TRANSIT LOSSES
	SYSTEM GRAND TOTAL AT THIS TIME LAST YEAR = 178578 AF LAST FIVE YEAR AVERAGE = 186602 AF	AMITY 24538.91 FORT LYON 0.00 CONSOLIDATED 3948.09 ====================================	766.65 0.00 123.35 ======

	WINTER W	ATER PROGRAM REPORT	
		IVISION OF WATER RESOURCES GINEER WATER DIVISION TWO	
	NOVEMBER 15	2000 THROUGH MARCH 14, 2001	
	No VENDER 10,		
PUEBLO RESERVOIR (1)	1	DIRECT FLOW ENTITIES (4)	
WINTER WATER PROGRAM	STORAGE		
DEADENED	0000.04	BESSEMER	9092.64
BESSEMER	9092.64	HIGHLINE	12209 51
HIGHLINE	12209.51	OXFORD	2943.48
OXFORD	2943 48	CATLIN	13414.82
	13289.82	CONSOLIDATED	3965 09
	0.00	RIVERSIDE	194.54
	194 54	WEST PUEBLO	389 08
VEST PUEBLO	389.08	TOTAL	
	1430.12	TOTAL	42209.16
HOLBROOK	5318 27		
FORT LYON	1589.54	STODAGE ENTITIES (5)	
AMITY	0.00	STORAGE ENTITIES (5)	
TOTAL	46457.00	COLORADO	20100.02
TOTAL	40457.00	HOLBROOK	20198.03 12184 27
OFF-CHANNEL STORAGE O	P DIVERSION (2)	FORT LYON	59259.54
FOR WINTER APPLICATION		AMITY	24538.91
OR WINTER AFFLICATION		AMILT	24538.91
BESSEMER	0.00	TOTAL	116180,75
HIGHLINE	0.00	TOTAL	110100.75
OXFORD	0.00		
CATLIN	125.00		
CONSOLIDATED	17.00		
RIVERSIDE	0.00	THEORETICAL DIVISION OF DIRECT	
WEST PUEBLO	0.00		FLOW
COLORADO	18767.91	AND OFF-CHANNEL PARTICIPANTS	
HOLBROOK	6866.00	THEORETICAL	1945
FORTLYON	57670.00		
AMITY	0.00	100,000 A.F. SYSTEM 28.8% OF SYSTEM	28800.00
AMILLE	0.00	71.2% OF SYSTEM	
FOTAL	83445.91	71.2% OF STSTEM	71200.00
IOHN MARTIN RESERVOIR	(2)	TOTAL 100,000 A.F SYSTEM	100000.00
WINTER WATER PROGRAM			2750 00
INTER WATER TROOMAN	OTORAGE	HOLBROOK	356.00
AMITY	23772.26	HOLDROOK	550.00
FORT LYON	0.00	THEORETICAL	*
CONSOLIDATED	3824 74	103,106 A.F. SYSTEM	
SONGCEIDATED	002474	25% OF SYSTEM	13820 98
TOTAL	27597 00	75% OF SYSTEM	41462.93
io nie	2.001.00		+1+02.00
ARKANSAS @ LAS ANIMAS	TO JOHN MARTIN	TOTAL 103,106 A.F. SYSTEM	55283.91
TRANSIT LOSS	890.00		
na contra contra de antes de la contra de la c			
DISTRIBUTED TOTAL	158389 91	DISTRIBUTED TOTAL	158389.91
(1) REFLECTS PARTICIPANT	S WITH PROGRAM V		
		ATER IN PRIVATELY OWNED OFF-CHANNEL	1
(2) REFLECTS PARTICIPANT	S WITH PROGRAM V	ATER IN PRIVATELY OWNED OFF-CHANNEL D FOR WINTER APPLICATION	
2) REFLECTS PARTICIPANT RESERVOIRS OR PROGR	TS WITH PROGRAM WATER DIVERTI		
 2) REFLECTS PARTICIPANT RESERVOIRS OR PROGR 3) REFLECTS PARTICIPANT 	TS WITH PROGRAM W RAM WATER DIVERTI TS WITH PROGRAM W	D FOR WINTER APPLICATION	
2) REFLECTS PARTICIPANT RESERVOIRS OR PROGF 3) REFLECTS PARTICIPANT 4) REFLECTS TOTAL PROG	TS WITH PROGRAM W RAM WATER DIVERTI TS WITH PROGRAM W RAM WATER ATTRIB	D FOR WINTER APPLICATION ATER IN JOHN MARTIN RESERVOIR	
2) REFLECTS PARTICIPANT RESERVOIRS OR PROGF 3) REFLECTS PARTICIPANT 4) REFLECTS TOTAL PROG	IS WITH PROGRAM W RAM WATER DIVERTI IS WITH PROGRAM W RAM WATER ATTRIB RAM WATER ATTRIB RESERVOIR:	D FOR WINTER APPLICATION (ATER IN JOHN MARTIN RESERVOIR JTABLE TO DIRECT FLOW PARTICIPANTS	04-Mar-2002

APPENDIX E

WATER COURT ACTIVITY

2001 WATER COURT ACTIVITY

APPLICATIONS BY TYPE	NUMBER OF CASES	NUMBER OF STRUCTURES
Augmentation	5	22
Change of Water Right	22	89
Injunction/Complaints	28	33
Surface	22	27
Storage	2	23
Underground	18	137
Multiple Types	36	334
Diligence	18	90
Conditional Made Absolute	4	5
Other	4	28
Abandonment	1	621
Total	160	1409

Decrees issued in 2001	108