

Division 2



1999 Annual Report

**DIVISION ENGINEER'S
ANNUAL REPORT**

Water Division 2

1999

STATE OF COLORADO

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March 1, 2000

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

Dear Hal:

On behalf of the Division 2 staff, I submit the Division 2 Annual Report summarizing activities for Water Year 1999.

I would like to express sincere gratitude to the Division 2 personnel, you, and your staff for extending the support that allowed our responsibilities and duties to be accomplished during this past year.

Respectfully submitted,

Steven J. Witte
Division Engineer, Division 2

TABLE OF CONTENTS

Cover Picture Provided from Arkansas River Basin Forum
Photo Contest 1998—1st Place
by Dennis A. Sowell
“Pot of Gold”

	<u>PAGE</u>
I. ACTIVITIES & ACCOMPLISHMENTS DURING 1999 WATER YEAR	
A. Surface Water Administration	1
B. Administration of Ground Water Use and Measurement Rules.	5
C. Development in Kansas vs. Colorado.	11
D. Legal and Litigation.	12
E. Tabulation.	13
F. Safety of Dams	14
G. Hydrography.	15
H. Information Technology	16
I. Organization	18
• Organizational Diagram	22
J. Involvement in the Water Community.	23
II. OBJECTIVES FOR 2000	23

III. APPENDIXES

Appendix A

Transmountain Diversion Summary

Appendix B

Water Diversion Summary

Appendix C

Arkansas River Calls

Appendix D

Winter Water Program Report

Appendix E

Ground Water Measurement, Use and Miscellaneous Orders Issued in 1999

Appendix F

Water Court Activity

Appendix G

Tabulation Remediation Status

I. ACTIVITIES and ACCOMPLISHMENTS
1999 WATER YEAR

A. Surface Water Administration

- The Division Engineer's office in cooperation with the Pueblo Winter Water Storage Board of Trustees administered a very successful Winter Water Storage Program during the winter of 1998-1999. A total of 174,646 acre-feet of water was stored or directly diverted during the 120 day program season. This value compares to 124,607 acre-feet stored in the previous season and 157,565 acre-feet as an average of the last five years.

All participating entities received either their full entitlements or sufficient waters to fill their private storage reservoirs with the exception of the Great Plains Reservoir system. Unfortunately all Winter Water stored in Pueblo and John Martin Reservoirs and not used by early May were lost to reservoir spills as higher priority waters were stored in place of Winter Water. A summary of operations can be found in Appendix D.

- 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, held on December 8, 1998, the Division Engineer submitted the "Annual Report of the Operations Secretary Concerning the Operations of John Martin Reservoir-1998". Additionally, Mr. Mark Rude, the Assistant Operations Secretary submitted his "Preliminary Assistant Operations Secretary Report" which differed significantly from the Operations Secretary's report. Much of the following year has been devoted to an attempt to resolve the differences between the two reports.

Three meetings were held between the Operations Secretary and the Assistant Operations Secretary at the following dates and places:

January 14, 1999	Pueblo, CO
February 25, 1999	Pueblo, CO
April 8 and 9, 1999	Garden City, KS

By the end of the April 9, 1999 meeting, both parties had a much clearer understanding of the differences between the reports. During the meeting of the Arkansas River Compact Administration, held on December 7, 1999, the Division Engineer submitted the "Annual Report of the Operations Secretary Concerning the Operations of John Martin Reservoir-1999" which contained a summary of the issues and suggested several action items to be taken to resolve the issues. A summary of the issues from the report and the suggested action items are listed below.

Issues/Actions resulting from meetings between the Operations Secretary and Assistant Operations Secretary:

- ◆ Operations Secretary to provide Assistant Operations Secretary with additional information to facilitate monitoring and reconciling of differences between reservoir accounting and operations.
- ◆ Assistant Operations Secretary asserts that the 1980 Operating Plan does not provide for interruption of releases from conservation storage into accounts. Operations Secretary's position is that the 1980 Operating Plan is silent concerning such interruptions, but that the practice is consistent with Article V F of the Arkansas River Compact.
- ◆ Assistant Operations Secretary criticizes the use of certain accounts on the basis that they are not specifically authorized by the 1980 Operating Plan. These accounts provide for the Flood Pool accounting and the accounting of water stored under the Pueblo Reservoir Winter Water Program prior to distribution into individual program participant accounts.
- ◆ Assistant Operations Secretary asserts that Agreement B between various Colorado water users is an unauthorized agreement under the Arkansas River Compact and the 1980 Operating Plan. Because of this, he criticizes the use of several accounts used by the Operations Secretary to account for water in a way that allows for the implementation of Agreement B.
- ◆ Assistant Operations Secretary asserts that spill accounting should be done on the basis of the rate of outflow from the reservoir rather than on the basis of the rate of inflow used by the Operations Secretary.
- ◆ Operations Secretary assigns evaporation charges to the flood pool during spill conditions instead of an alternative method proposed by the Assistant Operations Secretary, which the Operations Secretary considers incorrect.
- ◆ Assistant Operations Secretary asserts that the accounting for post Compact diversions occurring upstream during a spill is not provided for by the 1980 Operating Plan.

Suggested action items:

- ◆ That the Operations Committee issue a decision affirming that the practice of interrupting releases from Conservation Storage to accounts is consistent with the intent of the 1980 Operating Plan and report the decision to the Administration or consider recommending approval of a resolution amending the 1980 Operating Plan to allow the practice.
- ◆ That the Operations Committee determine to schedule a special meeting of the Committee to receive briefings and consider or direct further action related to, but not necessarily limited to the following matters:
 1. Use of accounts not specifically authorized by the 1980 Operating Plan.
 2. Spill accounting procedures.
 3. Upstream diversions during times of spill and related accounting procedures.
 4. Retroactive correction of accounting errors, if any.
 5. Assessment of evaporation from the permanent recreation pool.
- During the first quarter of 1999, reservoir storage levels were above normal while surface water supplies and snow pack levels were below normal. Water users throughout the Arkansas Valley were preparing for drought conditions when significant storms in the Fountain Creek and Arkansas River basins change the outlook dramatically. Flooding occurred during April/May in El Paso, Pueblo and Otero counties and the ensuing runoff increased reservoir storage levels and pushed surface water supplies and snow pack levels to above normal during the second quarter. Storm events in August continued the upward trend for the third quarter. The fourth quarter of 1999 showed a significant decreasing trend in surface water supplies and snow pack levels but reservoir storage levels remained high.
- The period April 28th through May 5th and August 8th through August 17th brought storm events to the Arkansas River basin drainage which caused flooding throughout southeastern Colorado. Significant damage occurred during the April/May storm event in El Paso, Pueblo and Otero counties. During the flood events, Division 2 staff monitored pertinent stream gauging stations and critical segments of the river, provided data to emergency operation centers and the National Weather Service, and coordinated Pueblo and John Martin Reservoir flood operations with the Army Corps of Engineers. After the flood, Division 2 staff continued to work with local and state emergency operation coordinators in an effort to improve the dissemination of information. Additionally, Division 2 staff is improving the reliability of pertinent gauging stations along the Arkansas River.

- Over the last several years, efforts to provide adequate monitoring and enforcement for the dams, ponds and non-jurisdictional impoundments in Division 2 have become more difficult and frustrating because of the large and increasing number of these structures, the level of resistance encountered, and the commitment of resources often necessary to effect compliance. Because it is difficult to keep up with enforcement actions for these types of structures, the Division Engineer for Division 2 appointed a committee to consider how to deal with the problem more effectively. Preliminary recommendations of the committee can be generally characterized by the following recommended activities:

- ◆ Determine the scope of the problem.
- ◆ Recommend a method for prioritizing the type/size of structures to be monitored/regulated.
- ◆ Recommend possible rule or policy changes.

The committee then concentrated its activities toward recommending methods to determine the total number, size and exposed area of the dams, ponds and non-jurisdictional impoundments in Division 2. A project proposal has been drafted for a quantification project. The proposal calls for the use of satellite imagery to locate and quantify water bodies. Quantification and location of dams/ponds/impoundments is expected to be a relatively easy process. Classification of the dams/ponds/impoundments to identify those that are decreed and actively administered; or exempt stock tanks, non-jurisdictional dams, etc., is expected to be more difficult. The amount of classification that is practical will be evaluated as the study progresses. The following needs have so far been identified for the study:

- ◆ Identify dams/ponds of all sizes, which are administered for evaporation loss.
 - ◆ Double check dams, which may be subject to regulation for dam safety purposes.
 - ◆ Provide a determination of evaporation losses to be used to determine and support policy or rules and regulations for existing or proposed non-jurisdictional dams, livestock water tanks, etc.
- As stated in the 1998 Annual Report for Division 2, the objective to refine the implementation of the Smith/Reid agreement continued to be a surface water administrative objective for 1999. On June 29, 1999, a field trip was conducted at Smith Ranch for representatives of all three parties to the agreement to review the progress in the administration of the agreement. Prior to the field trip, The Division Engineer for Division 2 had accomplished the following tasks:

- ◆ Replaced the three measuring flumes described in the agreement, and the resulting accounting system, with automated gages on both reservoirs which measure and record reservoir stage and report these values in near real time using the State Engineer's satellite monitoring system. This information, combined with the chart recorder data from the outlets of each reservoir is used in the updated accounting system. This new accounting system was recommended for use to the other participants in the agreement.
- ◆ Conducted a meeting between all three parties to the agreement on June 15, 1999 in Pueblo, CO to determine what issues were of concern to Reid Cattle Company, as described in their letter of May 11, 1999, and to initiate the process to resolve any problems determined by the Division Engineer.

In spite of several follow-up meetings by telephonic conference call after the field trip and the exchange of several letters, the parties were unable to resolve all issues. Reid Cattle Company terminated the agreement on October 29, 1999. Since that time, the Division Engineer has administered the surface water rights on Steel's Fork in accordance with existing decrees and orders and has required that an application for a Substitute Water Supply Plan be submitted to the State Engineer to provide for the operation of several of the structures which were allowed to operate under the agreement.

- In June of 1999, the Division Engineer began to formulate enforcement orders designed to more closely administer out-of-priority storage in Black Hills Reservoir (Model Reservoir). The reservoir, located approximately 12.5 miles northeast of the City of Trinidad, derives its storage waters from the Purgatoire River Basin. The goal of the enforcement action is to establish procedures for the determination of out-of-priority storage and its subsequent return to the river. Specific tasks implemented to secure the goal include measurement and recording devices, a reservoir capacity survey, canal and wasteway improvements, outlet capacity improvements and alternative return flow methods. Enforcement actions required a collaborative effort between the owner, consulting engineers, attorneys, the Colorado Water Conservation Board and Division 2 staff. Full implementation is expected by spring 2000.

B. Administration of Ground Water Use and Measurement Rules

- As a result of the Kansas-Colorado litigation over compliance with the Arkansas River Compact, a need was recognized to re-evaluate total irrigated acreage. In particular, acreage irrigated by wells in the Lower Arkansas Basin was re-evaluated for the purpose of improving the

computer model (Hydrologic Institutional Model) used to measure stream depletions that affect Kansas. Division 2 worked with GIS specialists from the Denver IT Team to complete the project during 1998 and 1999. In order to incorporate the work already used in the court case, Colorado contracted to have the field polygons established from 1985 aerial photos digitized to be used as a baseline for building a Geographical Information System to update the acreage for 1998. After reviewing improvements in technology since 1985, Colorado made the decision to acquire and process satellite imagery available for 1998. Utilization of satellite imagery to determine irrigated versus non-irrigated lands was the primary goal of this acquisition, but it was also hoped that crop type determinations could be made as well to verify the county crop data currently used in the H-I Model.

Division 2 gathered better data on total acreage and acreage irrigated by wells by utilizing the following methods:

- ◆ *Surveys.* All owners or operators of wells included in approved replacement plans during 1998 were mailed Irrigated Acreage Surveys in the summer of 1998 requesting data on the acreage irrigated on their "Farm Units" and the source of irrigation water for the acreage. Completion of the survey was made a condition for inclusion of the wells in the 1999-2000 replacement plans, and survey data was received from all 725 Farm Units with wells in approved replacement plans or used as alternate points of diversion for surface rights.
- ◆ *Field Verification.* To verify the accuracy of the information provided in the Irrigated Acreage Surveys, Division 2 had two Ground Water Commissioners visit 426 of the 725 Farm Units. During the verification visits, the Ground Water Commissioners met with the owner or operator of the farm. The Ground Water Commissioners had the Irrigated Acreage Survey and maps that included the field polygons identified from the 1985 aerial photography. The Commissioners reviewed the irrigated acreage information with the owner or operator and filled out a form showing the source of water used to irrigate each field in the farm unit.
- ◆ *Classification of Satellite Imagery.* Thematic Mapper [TM] imagery from the Landsat 5 satellite for May and August of 1998 was acquired, processed, and used to determine irrigated crop land versus non-irrigated lands, riparian areas and rangeland. The imagery was also used to review crop type classification.
- ◆ *Review of Aerial Photography.* Aerial photography from intervening periods (1988, 1991, 1993 and 1998) was used to update field polygons where significant changes had occurred or where necessary to verify data from irrigated acreage surveys.

- ◆ *Updated analysis of data from permits and decrees.* An updated analysis of permits and decrees was done to assist in reviewing Farm Unit survey results and for reference material during the verification process.
- Enforcement of the Arkansas Basin Rules and Regulations for wells on tributaries (Rule 5 Area), continued to be a significant effort for Division 2 staff during the past year. Successful augmentation plans were forged on some of the more difficult tributaries to provide replacement of depletions to senior surface rights on the tributaries. Ongoing work to establish and analyze viable replacement alternatives on the remaining tributaries will continue to be a significant undertaking during the next year. Division 2 field commissioners actively enforced compliance with the Rules and Regulations through over 1,250 field visits to wells within the Rule 5 Area.

Water rights changes and establishment of new underground water rights through Water Court decreed augmentation plans and Substitute Water Supply Plans creates a continuing need for ongoing field inventory, initial Rules enforcement, and follow-up enforcement visits to wells on the Rule 5 tributaries. Division 2 field commissioners spent a significant amount of time during the winter of 1998-1999 and again, this winter with inventory and plan follow-up.

- Fifteen plans were reviewed by Division 2 staff and approved in accordance with Rule 14 of the Use Rules. In addition to these plans, the State Engineer's Office reviewed 53 other plans for approval or renewal under the provisions of Section 37-80-120, C.R.S., which cover wells that are subject to pumping under the provisions of Rules 3 or 4 of the Use Rules. Each plan was required to show that it had sufficient replacement water to replace projected out-of-priority depletions to senior surface water rights in Colorado and projected depletions to usable Stateline flows during the 1999-2000 plan year prior to plan approval.

The fifteen plans reviewed by Division 2 staff involved 1,957 wells estimated to pump approximately 185,000 acre-feet during the 1999-2000 plan year (April-1999 through March-2000). Replacements to protect Colorado senior surface rights and usable Stateline flow were estimated to be over 48,000 acre-feet based on the depletions from previous actual pumping, and depletions from estimated pumping during the plan year.

- 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. An individual approved by the State Engineer must perform these measurement tests and submit them on required forms. For 1999, Division 2 changed its process for review of the tests conducted by the independent testers. Tests are now reviewed within a few days of receipt by one of the two well test technicians. The technicians decide at the time of review if they wish to conduct a field test to verify the independent test.

Fewer follow up tests on the independent tests were conducted in 1999 than in previous years. In 1999, 290 form 3.2's reporting a new PCC were received by our staff. We conducted follow up tests on 26 (9%) of those 290 tests. There were several reasons why fewer quality assurance tests were conducted. Extremely high rainfall in late April resulted in a minimal demand for well water during May and June. Also, one of our well testers sustained an injury, and we were limited to one tester during the later part of the summer.

The Well Tester training program is now on a two year schedule. 1999 was an off year, so our activities were limited to holding a workshop for previously certified testers. That workshop was held on April 22, 1999. Topics for the session included comparison of PCC methodology and totalizing flow meters (USGS Study), analysis of PCC variability with changing total dynamic head, and examples of well tests on complex systems.

The Power Consumption Coefficient Study which was conducted in cooperation with the USGS during the summers of 1997 and 1998 resulted in publication of "Comparison of Two Approaches for Determining Ground-Water Discharge and Pumpage in the Lower Arkansas River Basin, Colorado, 1997-98". The USGS Water-Resources Investigations Report 99-4221, was released this year. That study involved comparison of ground water pumping amounts from a network of 104 wells, which were equipped with an installed totalizing flow meter and at which a determination of a Power Consumption Coefficient could be made. While the report marked the completion of the first phase of the

study, we have developed an additional joint funding agreement to continue our field-work on a portion of the 104 wells for continued assessment of the PCC method. As a result of this effort, we made 326 visits to wells within our network and made 222 PCC tests.

- For each of the fifteen 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.

For the well pumping calculated using electric kilowatt-hour usage, raw electric use data was obtained from utility companies. The electric companies which report data electronically to Division 2 are West Plains Energy, Southeast Colorado Power, Mountain View Electric and Lamar Power & Light. The remainder of the utility companies including Colorado Springs Utilities, City of Fountain, Las Animas Municipal Power & Light, San Isabel Electric, Town of Granada, Town of Holly, KC Electric and Sangre De Cristo Electric faxed or mailed in data which was then entered by Division 2 staff.

For those wells whose pumping was measured using a totalizing flowmeter, electrical slave meter, or an hour meter, the well owners were required to read their meters and report the end of month readings to their well association office or the Division 2 office by the 10th of each month. Division 2 staff performed a quality control check to ensure that computed pumping was accurate and prepared the data for input to the monthly Ledger accounting process. Enforcement orders were sent to any well owners who failed to submit meter readings. If a well owner failed to submit meter readings more than once in the plan year, the Attorney General's office prepared a complaint to be served to the well owner.

Wellhead depletions were calculated based on the above monthly pumping data multiplied by the presumptive depletion factor determined from the Rule 13 information submitted for each member well. This figure represents the portion of total pumping that is lost to the alluvial system, which potentially impacts senior water rights in Colorado and usable Stateline flows. The wellhead depletions for all wells within an assigned

ditch user group were totaled and used as the input for the appropriate unit response modeling function which calculated the lagged effect of the depletion to the alluvial system.

Operations to replace depletions affecting senior surface water rights in Colorado were conducted on a monthly basis. The wells covered by these plans were located in several different areas. The monthly wellhead depletions were used as input for either the groundwater accounting model or the analytic stream depletion (Glover) model. The sum of the monthly wellhead depletions for all wells located in each user group in the gray area (Rule 3 Area) were input into the groundwater accounting model, one total quantity for each user group. The individual wellhead depletions for each well in the other areas were input into the analytical stream depletion model. The output from each model for all of the pumping done by wells covered by the plans yielded the total stream depletions caused in each month of the plan year by the plan's wells. Some of the wells above John Martin Reservoir covered by the plans had decreed pre-compact ground water rights, although the rights are junior to senior surface water rights in Colorado. When pumping by these wells causes out-of-priority depletions to senior surface water rights in Colorado, replacement of such out-of-priority depletions is required. When pumping by these wells causes depletions which are not out-of-priority, no replacement is required by decreed pre-compact ground water rights to the extent of their pre-compact pumping allowances.

During the plan year, monthly replacement operations were conducted and reported using a monthly replacement operations spreadsheet. When using the monthly replacement operations spreadsheet, if there was too much replacement water or not enough replacement water delivered to the river under a plan in a given month, the excess or deficit was carried forward into the next month and reflected on that month's accounting spreadsheet.

- Division 2 continued its active enforcement of well rules in the field. During the 1999 water year, three groundwater field enforcement technicians monitored well use in the field. The three individuals are assisted by the measurement technicians, as available and needed. During the 1999 water year, 4752 well visits were made for enforcement of the rules, and 203 field orders were issued.

Each enforcement technician collects and records data from each visit on a daily log and the data is entered into the computer. The data was entered by an administrative assistant, prior to 1999. Due to a vacant administrative position in Pueblo, we changed our process by having each technician enter their own data. They transfer that data electronically to a technician in Pueblo who does a quality check. A report is then sent out on a weekly basis to all Water Commissioners which keeps them informed of all enforcement activities in their districts.

C. Developments in KS vs. CO

- Division 2 staff involvement in the ongoing lawsuit, Kansas v. Colorado, No. 105 Original (U.S. Supreme Court), was primarily preparatory in nature. This was a result of a decision reached in March 1999 that the trial on compliance issues, including quantification of depletions to usable Stateline flows for 1997 and 1998, should be deferred until the trial on the remedy phase scheduled from November 8, 1999 through January 21, 2000. The activities of Division 2 staff will follow a description of other developments in the case.
 - ◆ Colorado's legal defense team conducted depositions of Kansas' economic experts during the spring of 1999.
 - ◆ On July 28, 1999, the Special Master entered an order, recommending a determination that the depletions to usable Stateline flow for the 1995-96 period were 7,935 acre-feet, bringing the total for the 1950-96 period to 428,005 acre-feet.
 - ◆ In August, 1999, Colorado experts filed reports in response to Kansas claims for money damages.
 - ◆ The testimony presented at trial concerning damages resulting from depletions to usable Stateline flow during the 1950-94 period ranged from \$9 million (as presented by Colorado, adjusted for the Consumer Price Index) to \$63 million (as presented by Kansas, adjusted for inflation and investment opportunities).

In preparation for the anticipated hearing on compliance issues, which is now expected to occur during the summer of 2000 and will involve a review of H-I Model results for the 1997-98 period, several activities were undertaken by Division 2 personnel during 1999.

- ◆ An Irrigated Acreage Project was completed. This project is described elsewhere in this report.
- ◆ An Addendum No. 4 to the "Report to the State of Kansas- The State of Colorado's Continuing Efforts to Comply with the Arkansas River Compact", was prepared on October 31, 1999.

- ◆ Review of preliminary drafts of Water-Resources Report 99-4221, prepared and released in final form by the U.S. Geological Survey on October 22, 1999. This report is entitled, "Comparison of Two Approaches for Determining Ground-Water Discharge and Pumpage in Lower Arkansas River Basin, Colorado, 1997-98".

D. Legal and Litigation

- One hundred and eighty five applications were filed with the Division Two Water Court during 1999. This number is very similar with the number of applications filed during the previous year. Sixty four of these were filed by the State and Division Engineers as enforcement actions, the majority of which were directed towards violations of the rules and regulations concerning tributary groundwater use. The remainder of the actions were fairly evenly split between applications for new junior surface water rights, decreeing exempt wells, and new augmentation plans.

The Division Engineers office was not involved in any trials during the year. However, staff members were called to court for various hearings throughout the year before both the judge and referee. Some notable court related events are listed below. A summary of applications, by type, are listed in Appendix F.

The status of several ongoing issues is detailed below:

- ◆ The State and Division Engineers participated in the Santa Fe Trail Ranches Property Owners Association case (99SA91) as the main objectors. This application centered around a plan for augmentation for a new subdivision, the water supply for which was to come from changing an existing water right to allow for augmentation uses. The subject water was originally decreed for "coking" or industrial uses and was used for such purposes until the 1920's. Subsequently the right was used for irrigation uses during a more recent time period. Upon appeal of the Water Court's partial summary judgement, the Supreme Court affirmed the Water Court's ruling that consumption claimed under the water right for undecreed purposes could not be factored in to calculation of historic consumptive use.
- ◆ The final two outstanding change of water right cases which originated from the 1990 abandonment list were finally settled with the applicants during the year. Both cases resulted in a partial abandonment of the subject water rights. One attempt was also made to belatedly remove a water right from the abandonment list. This request was opposed by the Division Engineer at a hearing before the Water Judge and subsequently denied by the judge. A decree formally abandoning the remaining rights on the 1990 abandonment list has not yet been entered however.

- Numerous meetings involving the U.S.F.S. 1979 Division Two filings for “streamflow maintenance” water rights were held throughout the year. The meetings continued to include the Division Engineers Office, C.W.C.B., private water right owners, and the U.S.F.S. After several years of failed attempts at finding workable solutions and in dealing with the bureaucracy of the federal government, agreement was reached during the year to employ a mediator in an attempt to reach a settlement in these filings. The Water Court approved of this concept in November and appointed former Division Two Water Court Judge John Tracey as “legal professional” to preside over settlement conferences. No conferences have yet taken place between the parties but are anticipated during 2000.

E. Tabulation

- During 1999 the Division Two Tabulation was again the target of concerted efforts towards improvement. The main objective in 1999 was to tabulate the backlog of decrees, which dated back to 1990. A secondary objective was to improve the quality of the existing tabulation data. In order to achieve these goals, division staff was reorganized to allow more dedicated time towards the tabulation effort. Funds were also dedicated to allow four permanent part-time Water Commissioners to work the majority of the winter season and a generous offer from Denver office staff for assistance and cross-training was also accepted. These resources allowed for the following accomplishments:
 - ◆ A new tabulation manual was developed for Division Two for the purpose of consistency of methods and style.
 - ◆ Division Two had a total of 1,721 decrees, which had not yet been tabulated for the 1990-1997 era. Through calendar year 1999, 834 of these have now been tabulated with work continuing to date.
 - ◆ 2,818 other records were retabulated or corrected. These corrections have the tabulation and structure records being very close to being compatible with the future Hydrobase system. This goal will be achieved during the next year.
 - ◆ A program was started to GPS all “active” surface water structures in Division Two. A companion program is underway by the groundwater staff.

A summary of tabulation efforts during the last four years can be found in Appendix G.

F. Safety of Dams

- The Division 2 office Dam Safety workgroup was staffed with two registered professional engineers throughout 1999. The following is their report of the significant events of the past year.
 - ◆ A dam safety-training workshop was held at the Homestake Pump Station in Buena Vista for dam owners in and around the Arkansas River Valley. Dam owners and operators were instructed in the principles of dam design and construction, dam safety, maintenance, monitoring, inspection, and emergency response. A similar workshop was also conducted for the Colorado Springs Parks and Recreation Department.
 - ◆ Repairs to the upstream guard gate at Manitou Dam were completed and accepted.
 - ◆ Conceptual design of repairs to the hole in the Palmer #5 Dam outlet conduit was completed.
 - ◆ Division 2 dam safety personnel were deposed in the Division 2 office for the lawsuit brought by homeowners against the owner of Lake Woodmoor dam.
 - ◆ The site investigation and preparation of a feasibility report for repair of Monument dam were completed. Preparation of final designs for the selected repair alternative is underway.
 - ◆ Construction of the Fisher Canyon Debris Dam was completed and accepted.
 - ◆ A slide occurred in the stability berm at the downstream toe of Karval dam in May 1999. The owner (Division of Wildlife) conducted a site investigation and retained an engineer to prepare plans for repair of the slide and the toe drain.
 - ◆ Restriction on Valley #1 dam was increased to zero storage due to inoperable outlet and obstructed spillway.
 - ◆ A Memorandum of Understanding was completed between the State Engineer's Office and the U.S. Air Force Academy (AFA) for the AFA to take over responsibility for their own dam safety program.
 - ◆ A storage restriction was placed on Teller Dam at Ft. Carson after an apparent slope failure was discovered in progress.
 - ◆ Division dam safety personnel participated in 20 hours of slope stability training presented to the Dam Safety Branch by experts in the field.
 - ◆ Plans and specifications were approved for the removal and reconstruction of the top 12 feet of DeWeese Dam. Construction was completed in November, 1999.

- ◆ Construction and rehabilitation of Horseshoe Dam in accordance with approved plans continued throughout 1999. Completion is scheduled for early 2000.
- ◆ Stability improvements continued throughout 1999 on Pueblo Dam with completion scheduled in early 2000.
- ◆ Plans and specifications were approved for an outlet replacement for Model Dam with construction scheduled to begin in early 2000.
- ◆ Geotechnical investigations and video outlet inspections were performed on North Fork Reservoir and Boss Lake.
- ◆ Plans and specifications for a 6000 foot long toe drain for Horse Creek Reservoir were approved and construction started in October, 1999. Completion is scheduled for summer, 2000.
- ◆ Plans and specifications were approved for stability and drainage improvements to Lake Meredith Dam. Construction is to begin in January, 2000.
- ◆ Plans and specifications were approved for the enlargement of Droz Creek Dam, WD 11. Construction started September, 1999 with completion scheduled for spring, 2000.
- ◆ Mike Graber attended the ASDSO Western Regional Technical Seminar in Phoenix. The seminar focus was on filter design and piping control.
- ◆ Flooding conditions resulted in high spillway flows through many dams during the spring. A concerted effort was made to check these dams for performance and problems. Only Monument was found to have problems.
- ◆ A geotechnical investigation and video outlet inspection was performed on North Lake Dam. The report is due in January, 2000.
- ◆ A comprehensive review of the hazard classifications of all Class 2 and Class 3 dams in Water District 10 was undertaken, resulting in the reclassification of six dams.

G. Hydrography

- The Division 2 Hydrographic workgroup organization began the 1999 water year with Assistant Division Engineer, Steve Kastner, continuing on an interim basis as lead hydrographer, and supported by one EIT, Lou Schultz, and two technicians, Anthony Gutierrez and Adam Adame.

Beginning February 15, 1999, the statewide hydrographic personnel organizational plan developed by Chief Hydrographer, Jim McDanold, was implemented in Division 2 with the employment of a new PE I Lead Hydrographer. The Division 2 Hydrographic workgroup is now under the overall program leadership of Assistant Division Engineer, Dale Straw, supported by Thomas Ley, Lead Hydrographer, one EIT and two technicians. Under the new organizational structure, Dale Straw also has specific hydrographic program oversight responsibilities for hydrographic work in Division 5.

The new organizational structure has considerably improved the process of hydrographic work in 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.

H. Information Technology

- **Y2K** - The year of 1999 was both interesting and exciting due to the pending Y2K dilemma. Would computers crash? Would the elevator work? Would there be a run on our neighboring bank? Would the phone system survive? The answers, as we all know now are: No, the computers did not crash; Yes, the elevator still works (although it never worked very well...); No, there was not a run on the bank; and Yes, the phone system survived. It should be noted that the Div 2 office saved close to \$1000.00 due to intense Y2K testing of the phone system, which was previously deemed non-Y2K compliant by the vendor.
- **Computer Lab** - Due to a need to accommodate for a seasonal shortage of workspace and training opportunities, a computer lab came into being in 1999. Four networked computers now are located in the old conference room and can be used for water rights data entry or CD-ROM oriented software training by all Division 2 personnel.
- **WWW** - We now have a small presence on the World Wide Web. The Division 2 "Daily Reports" of morning stream flow and diversion data are now updated to the state web server each business-day thanks to the efforts of Wendy Bogard.
- **Computer Upgrades** - Thanks to the donation of five Pentium-100 computers from the Denver IT staff, Division II personnel upgraded numerous computers this year and will strive to continue the upgrades when funding becomes available. All 486 computers, P-65's, P-70's and P-90's will hopefully be replaced with a P-100 or better by the end of the fiscal year. Janet Kuzmiak received a new Pentium 450 from the well permit group; Garrett Jackson and Mike Graber received Pentium 550's from the dam safety group and an additional \$6,000.00 was provided from the Groundwater Management Fund for additional computer upgrades this year. A new high-end performance network server is also envisioned for the Pueblo office. No, we still don't have money to purchase printers.

- **Hydrobase Ground Water Model** - In the software arena, Division 2 personnel and the Denver IT staff are in the process of developing a framework for determining how locally developed software projects can coexist with future Hydrobase models. The Division II staff is working diligently to perfect it's current groundwater model so that a statewide Hydrobase tool can be developed based upon our framework.
- **IT Board of Directors Established**
Early in 1999, Leah Lewis, the DWR Information Technology (IT) Manager, established the IT Board of Directors. It was agreed that the IT Board of Directors (IT BOD) would meet semi-annually for the purpose of opening up lines of communications between the satellite offices and the Denver IT staff. Vivian Brown has been designated to represent this Division.
- ◆ **First IT Board Meeting** - In August of 1999, the first IT BOD meeting was held in Glenwood Springs, Colorado. Steve Witte and Vivian Brown represented the Division 2 staff. The main focus of the meeting was to reprioritize IT tasks due to the inevitable Y2K failure of the Satellite Monitoring System (SMS). The SMS system had provided near real-time hydrologic readings from both DWR and USGS owned stations for the purpose of water administration. Although the VAX computer system might have survived the Y2K problems, the satellite receiver, decoder and downstream software applications were deemed non-Y2K compliant.

Leah presented a plan for converting the entire SMS system to an entirely new architecture. Leah stated that Don Wambold, Doug Stenzel and other staff members would be needed full time to perform the conversion before the end of the year. All IT BOD members agreed that the SMS conversion should be the top priority for the IT staff.

- ◆ **Second IT Board Meeting** - The IT BOD met again in December of 1999 in Frisco, Colorado. Vivian Brown represented Division 2 at this meeting. Highlights of the second IT BOD meeting:

Don Wambold presented the SMS conversion plan to the IT BOD. The project plan included a phased development cycle that initially emphasized a web-based user interface. Further development would include functionality previously provided by the old VAX system.

Deb Bell distributed a handbook for each satellite office detailing how computer setups were to be performed. The handbooks are an initial effort on the part of the IT staff to decentralize control of some IT functions such as desktop support, hardware and software installations.

Deb Bell also stated that the imaging system in the Denver office was close to completion and was a successful venture. Due to bandwidth problems, satellite offices will not be able to utilize the imaging system.

Leah presented the budget for the purchase of division office servers and PC upgrades. Division 2 ultimately will receive a new network server and \$6000.00 toward the purchase of PC upgrades.

- **Decentralization and Growing Pains** - Due to the prospects of decentralization of certain IT functions, many changes will be forthcoming in the next several years. As the division offices become more adept at hardware purchases, employee computer training and desktop support, the Denver IT staff will be enabled to focus on state wide applications that will benefit all DWR employees. Growing pains will inevitably occur during the decentralization process as operational norms are defined.

I. Organization

- Agency Meetings and Initiatives:

- ◆ General Agency Staff Meetings

Steve Witte, Division Engineer; Keith Kepler, Assistant Division Engineer; and Steve Kastner, Assistant Division Engineer attended the State Engineer's Spring Meeting in Denver, March 3-5, 1999.

Steve Witte, Keith Kepler, Steve Kastner, and Dale Straw, Assistant Division Engineer, attended the State Engineer's Late Summer Meeting in Glenwood, August 26-27, 1999.

- ◆ Division 2 General Staff Meetings

The Spring General Staff Meeting was held on June 4, 1999 in the Pueblo office (Board Room of the Security Service Federal Credit Union). The agenda included presentations regarding Water Rights Database, Reorganization of Supervisory Responsibilities, Enforcement Process, Small Impoundment Regulation Task Force, Assessment of Division 2 Response to Flood Event, and the Well Observation Program.

The Fall General Staff Meeting was held at the Occhiato Center at the University of Southern Colorado on September 24, 1999. Agenda topics included use of timesheets, Colorado Peak Performance, Abandonment 2000, Colorado Combined Campaign, Rights Remediation Project, Employee Council and Colorado Water Officials presentations. Joe Flory was presented the Water Commissioner of the Year Award. Lloyd Wadleigh was presented a Special Recognition Award for his outstanding efforts during the April/May 1999

flooding and overall dedication to work as well inspector and reserve water commissioner. Bruce Smith also received a Special Recognition Award for his involvement in promoting employee interests and training opportunities in Division 2.

◆ Division 2 Monthly Staff Meetings

Monthly staff meetings were held on the second Tuesday in each month in the Pueblo office. These meetings have been an effective means of communication of current efforts and pending projects.

◆ Leadership Team Meetings

Division 2 has continued to attend and support the Denver Leadership Team Meetings as a commitment to the future of the Division of Water Resources.

◆ 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.

◆ 1000 Annual Picnic

Several employees of Division 2 attended the Annual Employee Picnic at Ridgeway in August 1999.

◆ Employee Recognition

Bill Tyner and Ina Bernard were awarded Employee of the Year Awards at the Spring 1999 State Engineer Meeting. Bill was recognized as Manager of the Year and Ina was recognized as Technical Person of the Year. Outstanding Service Awards were presented to Janet Kuzmiak, Mark Trivisonno, Bill Tyner, Larry Hakes, Julia Faix, and Charlie Judge for their extraordinary service to the public during the Fall General Staff Meeting, September 1999.

• Safety Program

Tom Ley, Lead Hydrographer, was appointed as Safety Coordinator for Division 2. Tom has encouraged input and feedback from staff and will organize and prioritize the needs of the Division for further refinement and action.

• Training

The training program for Division 2 staff continues to be an actively promoted program in many formats. The basis of the program is aimed at addressing the

needs of staff as they see their needs. The Training Committee consists of representatives of the Pueblo staff and field staff to provide a mix of ideas to benefit the entire division. The group consists of Wendy Bogard (LTC), Keith Kepler, Dennis Bagenstos, Vivian Brown, Bruce Smith and Soraya Baroumand. The committee plans and coordinates computer training opportunities and "in-house" sessions for all staff. In addition, all employees are encouraged to seek other educational opportunities that fit their needs more specifically than the general sessions the committee sponsors.

Training requests are submitted for review by immediate supervisors and final determination of the requests is the responsibility of the Division Engineer.

Computer training for the past year has included individual mentoring (very informal and on an as-needed basis) and the purchase of CD-ROM Tutorials addressing different software programs and various levels of skill for each. These tutorials are available on a check-out basis to be used in the newly established computer lab at the Pueblo office.

In-house sessions continue to be held every 2 to 3 months during the fall and winter seasons. Most presentations are made by Division 2 staff to address current issues, review workshops attended by individual employees, teach new methods of work requirements, promote new technology, and increase water knowledge. A mix of Pueblo staff and field staff usually attends the in-house sessions and attendance numbers have consistently been about 75% of total staff. In an effort to maintain an exciting format, guest speakers are invited to make presentations and have included topics on Ergonomics and Work (Tom Bell of Risk Management), Irrigation Management (Jim Valiant of CSU Extension office), and Endangered Species Act (Steve Arveschoug of SECWCD and Doug Krieger of DOW).

The budget for Training consists of the allocation from Denver plus \$1000 from the Division 2 operating budget. Creative funding (or finding other sources of funding) adds an extra boost to the program. At the beginning of each fiscal year, priorities for training are set by the committee based on employee surveys. Allocation of funds for those priorities is determined. After this initial designation, the remaining amount of available funds is used for individual requests as submitted throughout the year. To date (2/21/2000), Fiscal Year 1999/2000 expenditures are recorded at \$4496.82. Fiscal Year 1998/1999 recorded expenses for training at \$7937.37.

- Personnel

Thomas Ley, Professional Engineer, was hired on February 15, 1999 as Lead Hydrographic Engineer. Position #256 had been previously vacated through retirement.

Gerald Hanks, EPSA I, was hired on May 24, 1999 as part-time Deputy Water Commissioner in Water District 11. Position #2142 had previously been vacated through retirement.

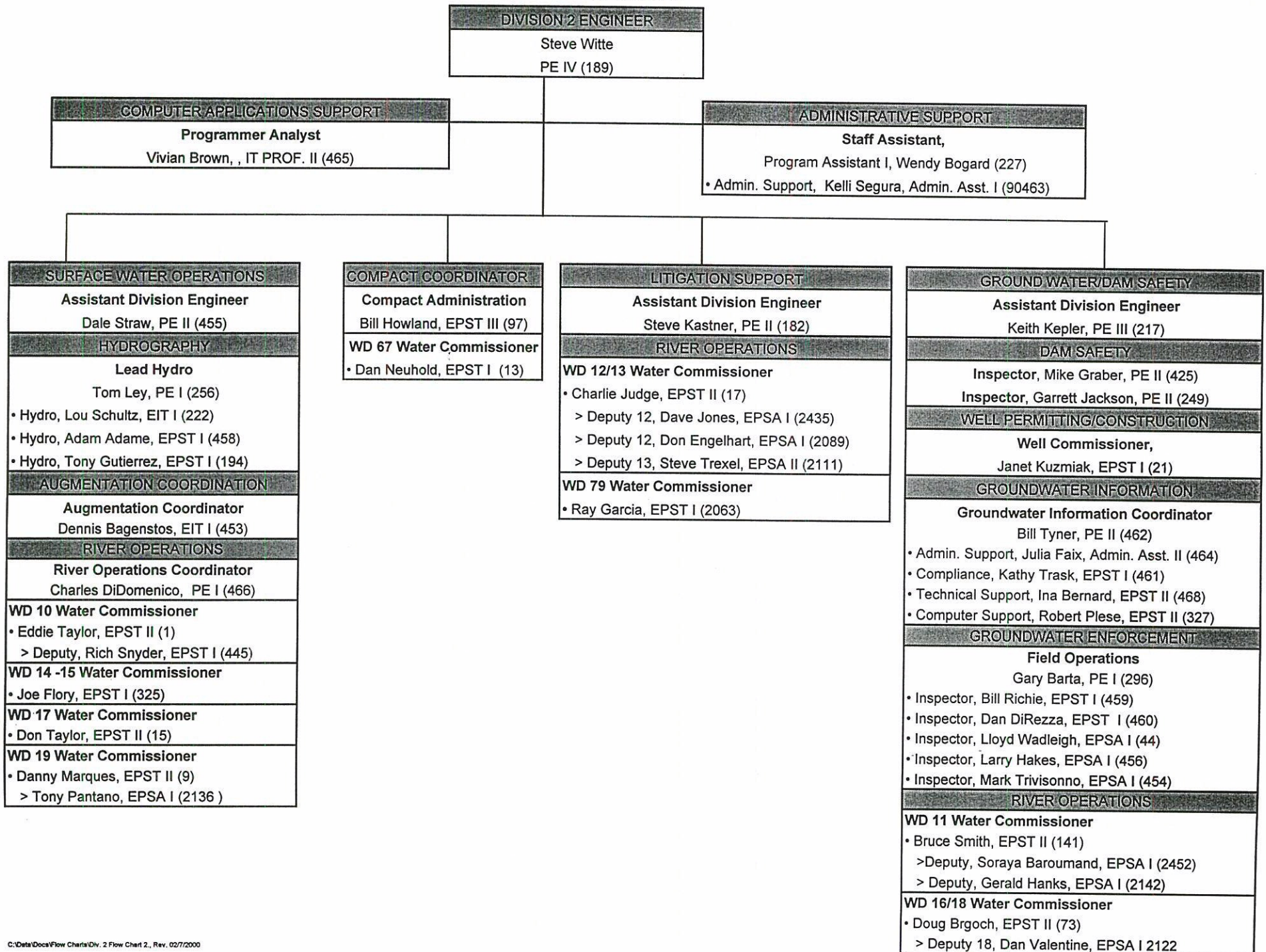
Charles DiDomenico, Professional Engineer I, was hired on July 1, 1999 as Mainstem Surface Operation Work Group Leader. Position #466 had been vacated by Joe Flory, current WD 14/15 Water Commissioner.

Sue Edling, Program Assistant I, Position #227, retired on July 9, 1999.

Wendy Bogard, Program Assistant I, was appointed to position #227 on December 1, 1999. This position had been vacated through retirement.

Organizational Diagram on following page

Colorado Division of Water Resources
 Division 2 Organizational Chart
 02/07/2000



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.
 - ◆ Additionally, Division 2 personnel have been involved in several other activities intend to increase public awareness of water related issues which are listed below:
 - Upper Arkansas River Forum
 - River of Dreams (April 1999)
 - Children's Water Festival (May 1999)

II. OBJECTIVES FOR 2000

- 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 implement changes to 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 effect 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 telemetered stream flow data using the system to be developed to replace the formerly VAX based Sutron system.
- 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.
- Redesign and deploy the John Martin Accounting System (JMAS).
- Define system requirements to develop improved surface water information system.

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

- Continue to develop trustworthy personnel through competence and character focused continuing education program.
- Provide effective supervision to adequately deal with non-performance issues and to encourage superior performance through employee recognition and implementation of performance based pay program (Colorado Peak Performance).
- 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.
- Communicate. Communicate. Communicate.

- 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.
 - Prepare a list of water rights meeting statutory criterion for presumption of abandonment, within resource constraints.
 - Continue to provide useful information and perspective to the Court through the consultation and litigation processes.
- 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 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, in order to improve access, processing, and functionality needed by staff and external customers (i.e. inclusion of ground water diversion data in official reports of annual diversions in Division 2 and for improving 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 1999 TRANSMOUNTAIN DIVERSION SUMMARY - INFLOWS

RECIPIENT					SOURCE	
DIV/WD	DIVERSION STRUCTURE	STREAM	ACRE-FEET	DAYS	DIV/WD	STREAM
2/11	COLUMBINE DITCH	ARKANSAS RIVER	933	95	5/37	EAGLE RIVER
2/11	EWING DITCH	TENNESSEE CREEK	618	135	5/37	EAGLE RIVER
2/11	WURTZ DITCH	TENNESSEE CREEK	1,230	131	5/37	EAGLE RIVER
2/11	HOMESTAKE TUNNEL	LAKE FORK CREEK	31,420	117	5/37	EAGLE RIVER
2/11	BOUSTEAD TUNNEL	LAKE FORK CREEK	43,140	365	5/38	FRYINGPAN RIVER
2/11	BUSK-IVANHOE TUNNEL	LAKE FORK CREEK	5,070	129	5/38	FRYINGPAN RIVER
2/11	TWIN LAKES TUNNEL	LAKE CREEK	16,580	365	5/38	ROARING FORK RIVER
2/11	LARKSPUR DITCH	PONCHA CREEK	6	32	4/28	TOMICHI CREEK
2/79	HUDSON DITCH	HUERFANO RIVER	299	62	3/35	MEDANO CREEK
2/79	MEDANO DITCH	HUERFANO RIVER	368	46	3/35	MEDANO CREEK
	TOTAL:		99,664			

WY 1999 TRANSMOUNTAIN DIVERSION SUMMARY - OUTFLOWS

RECIPIENT					SOURCE	
DIV/WD	DIVERSION STRUCTURE	STREAM	ACRE-FEET	DAYS	DIV/WD	STREAM
5/36&37	STEVENS-LEITER WELL	BLUE/EAGLE RIVERS	212	365	2/11	GROUNDWATER
	(AKA ARKANSAS WELL)					
	TOTAL:		212			

APPENDIX B

WATER DIVERSION SUMMARY

1999 WATER DIVERSION SUMMARY*

(ALL UNITS: ACRE-FEET)

USE TYPE	WD10	WD11	WD12	WD13	WD14	WD15	WD16	WD17	WD18	WD19	WD66	WD67	WD79	TOTAL
IRRIGATION	24,936	173,226	158,739	39,489	118,705	11,075	20,287	918,920	10,108	62,395	730	254,260	22,307	1,815,177
STORAGE	8,207	249,750	817	2,669	280,062	178	3,589	84,417	0	62,971	0	600,403	5,401	1,298,464
MUNICIPAL	150,331	4,399	10,975	183	33,409	1,702	4,159	0	63	0	0	0	0	205,221
COMMERCIAL	190	0	0	0	0	0	0	0	0	0	0	0	0	190
DOMESTIC	0	0	90	6	0	72	0	0	0	2,941	0	0	0	3,109
STOCK	0	0	56	0	0	4	0	0	0	804	0	0	0	864
INDUSTRIAL	1,948	22,928	110,661	0	9,102	15,538	0	0	0	0	0	0	0	160,177
RECREATIONAL	0	0	112	0	0	0	15	0	0	0	0	0	0	127
FISHERY	0	13,236	0	0	0	253	0	0	0	0	0	0	0	13,489
AUGMENTATION	2,178	0	259	30	0	0	0	0	0	0	0	2,899	0	5,366
RECHARGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER	24,006	4,104	2,501	0	0	0	49	0	0	0	0	1,400	0	32,060
TOTAL	211,796	467,643	284,210	42,377	441,278	28,822	28,099	1,003,337	10,171	129,111	730	858,962	27,708	3,534,244

* Does not include majority of groundwater diversions and groundwater augmentation releases.

APPENDIX C

ARKANSAS RIVER CALLS

1999 River Call

Date	Arkansas River Call	Priority Date
11/01/1998	COLORADO CANAL	06/09/1890
11/02/1998	COLORADO CANAL	06/09/1890
11/03/1998	GREAT PLAINS	08/01/1896
11/04/1998	GREAT PLAINS RESERVO	08/31/1896
11/05/1998	GREAT PLAINS RESERVO	08/31/1896
11/06/1998	GREAT PLAINS	08/01/1896
11/07/1998	GREAT PLAINS	08/01/1896
11/08/1998	GREAT PLAINS	08/01/1896
11/09/1998	GREAT PLAINS	08/01/1896
11/10/1998	GREAT PLAINS	08/01/1896
11/11/1998	GREAT PLAINS	08/01/1896
11/12/1998	GREAT PLAINS	08/01/1896
11/13/1998	GREAT PLAINS	08/01/1896
11/14/1998	GREAT PLAINS RESERVO	08/01/1896
11/15/1998	WINTER WATER	03/01/1910
11/16/1998	WINTER WATER	03/01/1910
11/17/1998	WINTER WATER	03/01/1910
11/18/1998	WINTER WATER	03/01/1910
11/19/1998	WINTER WATER	03/01/1910
11/20/1998	WINTER WATER	03/01/1910
11/21/1998	WINTER WATER	03/01/1910
11/22/1998	WINTER WATER	03/01/1910
11/23/1998	WINTER WATER	03/01/1910
11/24/1998	WINTER WATER	03/01/1910
11/25/1998	WINTER WATER	03/01/1910
11/26/1998	WINTER WATER	03/01/1910
11/27/1998	WINTER WATER	03/01/1910
11/28/1998	WINTER WATER	03/01/1910
11/29/1998	WINTER WATER	03/01/1910
11/30/1998	WINTER WATER	03/01/1910
12/01/1998	WINTER WATER	03/01/1910

Date	Arkansas River Call	Priority Date
12/02/1998	WINTER WATER	03/01/1910
12/03/1998	WINTER WATER	03/01/1910
12/04/1998	WINTER WATER	03/01/1910
12/05/1998	WINTER WATER	03/01/1910
12/06/1998	WINTER WATER	03/01/1910
12/07/1998	WINTER WATER	03/01/1910
12/08/1998	WINTER WATER	03/01/1910
12/09/1998	WINTER WATER	03/01/1910
12/10/1998	WINTER WATER	03/01/1910
12/11/1998	WINTER WATER	03/01/1910
12/12/1998	WINTER WATER	03/01/1910
12/13/1998	WINTER WATER	03/01/1910
12/14/1998	WINTER WATER	03/01/1910
12/15/1998	WINTER WATER	03/01/1910
12/16/1998	WINTER WATER	03/01/1910
12/17/1998	WINTER WATER	03/01/1910
12/18/1998	WINTER WATER	03/01/1910
12/19/1998	WINTER WATER	03/01/1910
12/20/1998	WINTER WATER	03/01/1910
12/21/1998	WINTER WATER	03/01/1910
12/22/1998	WINTER WATER	03/01/1910
12/23/1998	WINTER WATER	03/01/1910
12/24/1998	WINTER WATER	03/01/1910
12/25/1998	WINTER WATER	03/01/1910
12/26/1998	WINTER WATER	03/01/1910
12/27/1998	WINTER WATER	03/01/1910
12/28/1998	WINTER WATER	03/01/1910
12/29/1998	WINTER WATER	03/01/1910
12/30/1998	WINTER WATER	03/01/1910
12/31/1998	WINTER WATER	03/01/1910
01/01/1999	WINTER WATER	03/01/1910
01/02/1999	WINTER WATER	03/01/1910
01/03/1999	WINTER WATER	03/01/1910

Date	Arkansas River Call	Priority Date
01/04/1999	WINTER WATER	03/01/1910
01/05/1999	WINTER WATER	03/01/1910
01/06/1999	WINTER WATER	03/01/1910
01/07/1999	WINTER WATER	03/01/1910
01/08/1999	WINTER WATER	03/01/1910
01/09/1999	WINTER WATER	03/01/1910
01/10/1999	WINTER WATER	03/01/1910
01/11/1999	WINTER WATER	03/01/1910
01/12/1999	WINTER WATER	03/01/1910
01/13/1999	WINTER WATER	03/01/1910
01/14/1999	WINTER WATER	03/01/1910
01/15/1999	WINTER WATER	03/01/1910
01/20/1999	WINTER WATER	03/01/1910
01/21/1999	WINTER WATER	03/01/1910
01/22/1999	WINTER WATER	03/01/1910
01/23/1999	WINTER WATER	03/01/1910
01/24/1999	WINTER WATER	03/01/1910
01/25/1999	WINTER WATER	03/01/1910
01/26/1999	WINTER WATER	03/01/1910
01/27/1999	WINTER WATER	03/01/1910
01/28/1999	WINTER WATER	03/01/1910
01/29/1999	WINTER WATER	03/01/1910
01/30/1999	WINTER WATER	03/01/1910
01/31/1999	WINTER WATER	03/01/1910
02/01/1999	WINTER WATER	03/01/1910
02/02/1999	WINTER WATER	03/01/1910
02/03/1999	WINTER WATER	03/01/1910
02/04/1999	WINTER WATER	03/01/1910
02/05/1999	WINTER WATER	03/01/1910
02/06/1999	WINTER WATER	03/01/1910
02/07/1999	WINTER WATER	03/01/1910
02/08/1999	WINTER WATER	03/01/1910
02/09/1999	WINTER WATER	03/01/1910

Date	Arkansas River Call	Priority Date
02/10/1999	WINTER WATER	03/01/1910
02/11/1999	WINTER WATER	03/01/1910
02/12/1999	WINTER WATER	03/01/1910
02/13/1999	WINTER WATER	03/01/1910
02/14/1999	WINTER WATER	03/01/1910
02/15/1999	WINTER WATER	03/01/1910
02/16/1999	WINTER WATER	03/01/1910
02/17/1999	WINTER WATER	03/01/1910
02/18/1999	WINTER WATER	03/01/1910
02/19/1999	WINTER WATER	03/01/1910
02/20/1999	WINTER WATER	03/01/1910
02/21/1999	WINTER WATER	03/01/1910
02/22/1999	WINTER WATER	03/01/1910
02/23/1999	WINTER WATER	03/01/1910
02/24/1999	WINTER WATER	03/01/1910
02/25/1999	WINTER WATER	03/01/1910
02/26/1999	WINTER WATER	03/01/1910
02/27/1999	WINTER WATER	03/01/1910
02/28/1999	WINTER WATER	03/01/1910
03/01/1999	WINTER WATER	03/01/1910
03/02/1999	WINTER WATER	03/01/1910
03/03/1999	WINTER WATER	03/01/1910
03/04/1999	WINTER WATER	03/01/1910
03/05/1999	WINTER WATER	03/01/1910
03/06/1999	WINTER WATER	03/01/1910
03/07/1999	WINTER WATER	03/01/1910
03/08/1999	WINTER WATER	03/01/1910
03/09/1999	WINTER WATER	03/01/1910
03/10/1999	WINTER WATER	03/01/1910
03/11/1999	WINTER WATER	03/01/1910
03/12/1999	WINTER WATER	03/01/1910
03/13/1999	WINTER WATER	03/01/1910
03/14/1999	WINTER WATER	03/01/1910

Date	Arkansas River Call	Priority Date
03/15/1999	CATLIN	12/03/1884
03/16/1999	CATLIN	12/03/1884
03/17/1999	OXFORD	02/26/1887
03/18/1999	OXFORD	02/26/1887
03/19/1999	OXFORD	02/26/1887
03/20/1999	OXFORD	02/26/1887
03/21/1999	OXFORD	02/26/1887
03/22/1999	OXFORD	02/26/1887
03/23/1999	OXFORD	02/26/1887
03/24/1999	CATLIN	12/03/1884
03/25/1999	OXFORD	02/26/1887
03/26/1999	OXFORD	02/26/1887
03/27/1999	CATLIN	12/03/1884
03/28/1999	CATLIN	12/03/1884
03/29/1999	CATLIN	12/03/1884
03/30/1999	CATLIN	12/03/1884
03/31/1999	CATLIN	12/03/1884
04/01/1999	CATLIN	12/03/1884
04/02/1999	CATLIN	12/03/1884
04/03/1999	CATLIN	12/03/1884
04/04/1999	FORT LYON #2	03/01/1887
04/05/1999	FORT LYON #2	03/01/1887
04/06/1999	FORT LYON #2	03/01/1887
04/07/1999	FORT LYON #2	03/01/1887
04/08/1999	FORT LYON #2	03/01/1887
04/09/1999	FORT LYON #2	03/01/1887
04/10/1999	CATLIN	12/03/1884
04/11/1999	FORT LYON #2	03/01/1887
04/12/1999	FORT LYON #2	03/01/1887
04/13/1999	HOLBROOK	09/25/1889
04/14/1999	FORT LYON #2	03/01/1887
04/15/1999	FORT LYON #2	03/01/1887
04/16/1999	FORT LYON #2	03/01/1887

Date	Arkansas River Call	Priority Date
04/17/1999	OXFORD #2	02/26/1887
04/18/1999	OXFORD	02/26/1887
04/19/1999	OXFORD #2	02/26/1887
04/20/1999	CATLIN	12/03/1884
04/21/1999	CATLIN	12/03/1884
04/22/1999	CATLIN	12/03/1884
04/23/1999	CATLIN	12/03/1884
04/24/1999	FORT LYON #2	03/01/1887
04/25/1999	HOLBROOK	09/25/1889
04/26/1999	BESSEMER/EXCELSIOR	05/01/1887
04/27/1999	FORT LYON #2	03/01/1887
04/28/1999	FORT LYON #2	03/01/1887
04/29/1999	GREAT PLAINS	08/01/1896
04/30/1999	JOHN MARTIN RESERVOI	12/14/1948
05/01/1999	JOHN MARTIN RESERVOI	12/14/1948
05/02/1999	JOHN MARTIN RESERVOI	12/14/1948
05/03/1999	PUEBLO RES/FREE RIVE	06/25/1962
05/04/1999	PUEBLO RES/FREE RIVE	06/25/1962
05/05/1999	PUEBLO RES/FREE RIVE	06/25/1962
05/06/1999	PUEBLO RES/FREE RIVE	06/25/1962
05/07/1999	PUEBLO RES/FREE RIVE	06/25/1962
05/08/1999	FREE RIVER	
05/09/1999	FREE RIVER	
05/10/1999	FREE RIVER	
05/11/1999	FREE RIVER	
05/12/1999	FREE RIVER	
05/13/1999	FREE RIVER	
05/14/1999	FREE RIVER	
05/15/1999	FREE RIVER	
05/16/1999	FREE RIVER	
05/17/1999	FREE RIVER	
05/18/1999	FREE RIVER	
05/19/1999	FREE RIVER	

Date	Arkansas River Call	Priority Date
05/20/1999	FREE RIVER	
05/21/1999	FREE RIVER	
05/22/1999	FREE RIVER	
05/23/1999	FREE RIVER	
05/24/1999	FREE RIVER	
05/25/1999	FREE RIVER	
05/26/1999	FREE RIVER	
05/27/1999	FREE RIVER	
05/28/1999	FREE RIVER	
05/29/1999	FREE RIVER	
05/30/1999	FREE RIVER	
05/31/1999	FREE RIVER	
06/01/1999	FREE RIVER	
06/02/1999	FREE RIVER	
06/03/1999	FREE RIVER	
06/04/1999	FREE RIVER	
06/05/1999	FREE RIVER	
06/06/1999	FREE RIVER	
06/07/1999	FREE RIVER	
06/08/1999	FREE RIVER	
06/09/1999	FREE RIVER	
06/10/1999	FREE RIVER	
06/11/1999	FREE RIVER	
06/12/1999	FREE RIVER	
06/13/1999	FREE RIVER	
06/14/1999	FREE RIVER	
06/15/1999	FREE RIVER	
06/16/1999	FREE RIVER	
06/17/1999	FREE RIVER	
06/18/1999	FREE RIVER	
06/19/1999	FREE RIVER	
06/20/1999	FREE RIVER	
06/21/1999	FREE RIVER	

Date	Arkansas River Call	Priority Date
06/22/1999	FREE RIVER	
06/23/1999	FREE RIVER	
06/24/1999	FREE RIVER	
06/25/1999	FREE RIVER	
06/26/1999	FREE RIVER	
06/27/1999	FREE RIVER	
06/28/1999	FREE RIVER	
06/29/1999	FREE RIVER	
06/30/1999	FREE RIVER	
07/01/1999	FREE RIVER	
07/02/1999	FREE RIVER	
07/03/1999	FREE RIVER	
07/04/1999	FORT LYON #3	08/31/1893
07/05/1999	FORT LYON #3	08/31/1893
07/06/1999	FORT LYON #3	08/31/1893
07/07/1999	FORT LYON #3	08/31/1893
07/08/1999	FORT LYON #3	08/31/1893
07/09/1999	FORT LYON #3	08/31/1893
07/10/1999	FORT LYON #3	08/31/1893
07/11/1999	COLORADO CANAL	06/09/1890
07/12/1999	HIGHLINE #5	01/06/1890
07/13/1999	HIGHLINE #5	01/06/1890
07/14/1999	HOLBROOK #1	09/25/1889
07/15/1999	HOLBROOK #1	09/25/1889
07/16/1999	Colorado Canal	06/15/1890
07/17/1999	John Martin Reservoir	12/14/1948
07/18/1999	John Martin Reservoir	12/14/1948
07/19/1999	John Martin Reservoir	12/14/1948
07/20/1999	John Martin Reservoir	12/14/1948
07/21/1999	John Martin Reservoir	12/14/1948
07/22/1999	John Martin Reservoir	12/14/1948
07/23/1999	John Martin Reservoir	12/14/1948
07/24/1999	JOHN MARTIN RESERVOI	12/14/1948

Date	Arkansas River Call	Priority Date
07/25/1999	FORT LYON #3	08/31/1893
07/26/1999	BESSEMER	05/01/1887
07/27/1999	BESSEMER	05/01/1887
07/28/1999	HOLBROOK	09/25/1889
07/29/1999	HOLBROOK	09/25/1889
07/30/1999	BESSEMER	05/01/1887
07/31/1999	FORT LYON #3	08/31/1893
08/01/1999	JOHN MARTIN RESERVOI	12/14/1948
08/02/1999	JOHN MARTIN RESERVOI	12/14/1948
08/03/1999	JOHN MARTIN RESERVOI	12/14/1948
08/04/1999	JOHN MARTIN RESERVOI	12/14/1948
08/05/1999	JOHN MARTIN RESERVOI	12/14/1948
08/06/1999	JOHN MARTIN RESERVOI	12/14/1948
08/07/1999	JOHN MARTIN RESERVOI	12/14/1948
08/08/1999	FREE RIVER	
08/09/1999	FREE RIVER	
08/10/1999	FREE RIVER	
08/11/1999	FREE RIVER	
08/12/1999	FREE RIVER	
08/13/1999	FREE RIVER	
08/14/1999	FREE RIVER	
08/15/1999	FREE RIVER	
08/16/1999	FREE RIVER	
08/17/1999	FREE RIVER	
08/18/1999	FORT LYON #3	08/31/1893
08/19/1999	COLORADO CANAL	06/09/1890
08/20/1999	COLORADO CANAL	06/09/1890
08/21/1999	FORT LYON #3	08/21/1893
08/22/1999	FORT LYON #3	08/21/1893
08/23/1999	OTERO	03/03/1890
08/24/1999	ROCKY FORD HIGHLINE	01/06/1890
08/25/1999	BESSEMER	05/01/1887
08/26/1999	BESSEMER #2	05/01/1887

Date	Arkansas River Call	Priority Date
08/27/1999	BESSEMER #2	05/01/1887
08/28/1999	FORT LYON #2	03/01/1887
08/29/1999	FORT LYON #2	03/01/1887
08/30/1999	FORT LYON #2	03/01/1887
08/31/1999	FORT LYON #2	03/01/1887
09/01/1999	FORT LYON #2	03/01/1887
09/02/1999	FORT LYON #2	03/01/1887
09/03/1999	FORT LYON #2	03/01/1887
09/04/1999	FORT LYON #2	03/01/1887
09/05/1999	FORT LYON #2	03/01/1887
09/06/1999	FORT LYON #2	03/01/1887
09/07/1999	FORT LYON #2	03/01/1887
09/08/1999	FORT LYON #2	03/01/1887
09/09/1999	FORT LYON #2	03/01/1887
09/10/1999	FORT LYON #2	03/01/1887
09/11/1999	FORT LYON #2	03/01/1887
09/12/1999	FORT LYON #2	03/01/1887
09/13/1999	FORT LYON #2	03/01/1887
09/14/1999	FORT LYON #2	03/01/1887
09/15/1999	FORT LYON #2	03/01/1887
09/16/1999	FORT LYON #2	03/01/1887
09/17/1999	FORT LYON #2	03/01/1887
09/18/1999	FORT LYON #2	03/01/1887
09/19/1999	FORT LYON #2	03/01/1887
09/20/1999	FORT LYON #2	03/01/1887
09/21/1999	FORT LYON #2	03/01/1887
09/22/1999	FORT LYON #2	03/01/1887
09/23/1999	FORT LYON #2	03/01/1887
09/24/1999	HOLBROOK #1	09/25/1889
09/25/1999	HOLBROOK #1	09/25/1889
09/26/1999	HOLBROOK #1	09/25/1889
09/27/1999	HOLBROOK #1	09/25/1889
09/28/1999	HOLBROOK #1	09/25/1889

Date	Arkansas River Call	Priority Date
09/29/1999	HIGHLINE #5	01/06/1890
09/30/1999	HIGHLINE #5	01/06/1890
10/01/1999	COLORADO CANAL	06/09/1890
10/02/1999	COLORADO CANAL	06/09/1890
10/03/1999	COLORADO CANAL	06/09/1890
10/04/1999	COLORADO CANAL	06/09/1890
10/05/1999	COLORADO CANAL	06/09/1890
10/06/1999	COLORADO CANAL	06/09/1890
10/07/1999	COLORADO CANAL	06/09/1890
10/08/1999	COLORADO CANAL	06/09/1890
10/09/1999	COLORADO CANAL	06/09/1890
10/10/1999	COLORADO CANAL	06/09/1890
10/11/1999	COLORADO CANAL	06/09/1890
10/12/1999	COLORADO CANAL	06/09/1890
10/13/1999	HOLBROOK RESERVOIR	03/02/1892
10/14/1999	HOLBROOK RESERVOIR	09/25/1889
10/15/1999	HOLBROOK RESERVOIR	09/25/1889
10/16/1999	HOLBROOK RESERVOIR	09/25/1889
10/17/1999	HOLBROOK	09/25/1889
10/18/1999	HOLBROOK	09/25/1889
10/19/1999	COLORADO CANAL	06/09/1890
10/20/1999	COLORADO CANAL	06/09/1890
10/21/1999	COLORADO CANAL	06/09/1890
10/22/1999	COLORADO CANAL	06/09/1890
10/23/1999	COLORADO CANAL	06/09/1890
10/24/1999	COLORADO CANAL	06/09/1890
10/25/1999	COLORADO CANAL	06/09/1890
10/26/1999	COLORADO CANAL	06/09/1890
10/27/1999	COLORADO CANAL	06/09/1890
10/28/1999	COLORADO CANAL	09/25/1889
10/29/1999	HOLBROOK	09/25/1889
10/30/1999	HOLBROOK	09/25/1889
10/31/1999	HOLBROOK	09/25/1889

APPENDIX D

WINTER WATER PROGRAM REPORT

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

NOVEMBER 15, 1998 THROUGH MARCH 14, 1999

PUEBLO RESERVOIR (1) WINTER WATER PROGRAM STORAGE		DIRECT FLOW ENTITIES (4)	
BESSEMER	10603.11	BESSEMER	10603.11
HIGHLINE	14237.75	HIGHLINE	14237.75
OXFORD	3432.45	OXFORD	3432.45
CATLIN	15048.00	CATLIN	15643.05
CONSOLIDATED	0.00	CONSOLIDATED	5157.30
RIVERSIDE	226.86	RIVERSIDE	226.86
WEST PUEBLO	453.71	WEST PUEBLO	453.71
COLORADO	1000.00	-----	-----
HOLBROOK	6984.56	TOTAL	49754.23
FORT LYON	0.00		
AMITY	0.00		
-----	-----		
TOTAL	51986.44	STORAGE ENTITIES (5)	
OFF-CHANNEL STORAGE OR DIVERSION (2) FOR WINTER APPLICATION		COLORADO	12676.87
BESSEMER	0.00	HOLBROOK	15775.56
HIGHLINE	0.00	FORT LYON	62178.19
OXFORD	0.00	AMITY	34261.51
CATLIN	595.05	-----	-----
CONSOLIDATED	0.00	TOTAL	124892.13
RIVERSIDE	0.00		
WEST PUEBLO	0.00		
COLORADO	11676.87	THEORETICAL DIVISION OF DIRECT FLOW AND OFF-CHANNEL PARTICIPANTS	
HOLBROOK	8791.00	THEORETICAL 100,000 A.F. SYSTEM	
FORT LYON	41549.00	28.8% OF SYSTEM	28800.00
AMITY	16913.00	71.2% OF SYSTEM	71200.00
-----	-----	-----	-----
TOTAL	79524.92	TOTAL 100,000 A.F. SYSTEM	100000.00
JOHN MARTIN RESERVOIR (3) WINTER WATER PROGRAM STORAGE		AMITY	2750.00
AMITY	16819.38	HOLBROOK	356.00
FORT LYON	20000.00	THEORETICAL 103,106 A.F. SYSTEM	
CONSOLIDATED	5000.00	25% OF SYSTEM	17885.09
-----	-----	75% OF SYSTEM	53655.27
TOTAL	41819.39	-----	-----
ARKANSAS @ LAS ANIMAS TO JOHN MARTIN TRANSIT LOSS		TOTAL 103,106 A.F. SYSTEM	71540.36
	1315.61		
DISTRIBUTED TOTAL	174646.36	DISTRIBUTED TOTAL	174646.36

- (1) REFLECTS PARTICIPANTS WITH PROGRAM WATER IN PUEBLO RESERVOIR
 (2) REFLECTS PARTICIPANTS WITH PROGRAM WATER IN PRIVATELY OWNED OFF-CHANNEL RESERVOIRS OR PROGRAM WATER DIVERTED FOR WINTER APPLICATION
 (3) REFLECTS PARTICIPANTS WITH PROGRAM WATER IN JOHN MARTIN RESERVOIR
 (4) REFLECTS TOTAL PROGRAM WATER ATTRIBUTABLE TO DIRECT FLOW PARTICIPANTS
 (5) REFLECTS TOTAL PROGRAM WATER ATTRIBUTABLE TO OFF-CHANNEL STORAGE PARTICIPANTS

TOTAL CONTENTS PUEBLO RESERVOIR: 230906.00 AF
 TOTAL CONTENTS JOHN MARTIN RESERVOIR: 318382.00 AF

18-Mar-99

APPENDIX E

GROUND WATER MEASUREMENT, USE
AND MISCELLANEOUS ORDERS
ISSUED IN 1999

**Ground Water Measurement and Use and Miscellaneous Orders Issued
(Number of Wells)**

1999 Irrigation Year

Water District	Measurement	Measurement & Use	Use	Other	Total
10	70	6	49	5	130
11	2	1	23	9	35
12	7	1	4	4	16
13	0	5	0	0	5
14	175	11	22	15	223
15	11	0	6	6	23
16	1	0	0	5	6
17	131	9	24	12	176
19	2	0	0	4	6
67	61	5	10	20	96
Totals	460	38	138	80	716

Note: "Other" includes expanded use of exempt permits, no permit or decree, plug and abandon, etc.

APPENDIX F

WATER COURT ACTIVITY

1999 WATER COURT ACTIVITY

APPLICATIONS FILED BY TYPE	NUMBER	NUMBER OF STRUCTURES	CONSULTATIONS WITH REFEREE
AUGMENTATION	3	6	3
CHANGE OF WATER RIGHT	12	52	12
INJUNCTION/COMPLAINTS	64	102	0
SURFACE	31	51	31
STORAGE	2	9	2
UNDERGROUND	29	41	29
MULTIPLE (AUG+OTHER RIGHTS)	25	71	25
DILIGENCE	14	78	14
CONDITIONAL MADE ABSOLUTE	3	3	3
OTHER	2	7	2
TOTAL	185	420	121

APPENDIX G

TABULATION REMEDIATION STATUS

DIVISION TWO TABULATION REMEDIATION STATUS

12/31/1999

Tasks/Water District	10	11(a)	12(a)	13(a)	14	15	16	17	18	19	66	67	79(a)
Retabulate Original Adjudications (1890-1905 era)	Completed (winters of 95-98)	Completed (winters of 95-98)	Completed (winters of 95-98)	Completed (winters of 95-98)	Completed (winters of 95-98)	Completed (winters of 95-98)	Completed (winters of 95-98)	Completed (winters of 95-98)	Not completed (h)	Completed (winters of 95-98)	Completed (winters of 95-98)	Completed (winters of 95-98)	Completed (winters of 95-98)
Retabulate Supplemental Adjudications (1900-1969 era)	Completed (d)	Completed (e)	Completed (winters of 96-98)	Completed (winters of 96-98)	Completed (winters of 96-98)	Completed (winters of 96-98)	80% Completed (winters of 96-98)	Completed (winters of 96-98)	Not completed (h)	Completed (winters of 96-98)	Completed (winters of 96-98)	Completed (winters of 96-98)	90% Completed (winters of 96-98)
Retabulate Water Court Decrees (1969-1990)	Completed (winters of 96-98)	Completed (winters of 96-98)	Completed (winters of 96-98)	Completed (winters of 96-98)	Completed (winters of 96-98)	Completed (winters of 96-98)	Completed (winters of 96-98)	Completed (winters of 96-98)	Not completed	Completed (winters of 96-98)	Completed (winters of 96-98)	Completed (winters of 96-98)	Completed (winters of 96-98)
Tabulate Water Court Decrees (1991-1997)	84% Completed (winter of 99)	90% Completed (winter of 99)	100% Completed (winter of 99)	100% Completed (winter of 99)	0% Completed (winter of 99)	0% Completed (winter of 99)	22% Completed (winter of 99)	(winter of 99)	(winter of 99)	(winter of 99)	(winter of 99)	(winter of 99)	(winter of 99)
1721 Total Decrees	340/406	219/243	143/143	59/59	0/175	0/40	20/90	0/187	0/65	0/91	0/9	0/160	53/53
Update Structure Database Information for "Active" Structures	Not Completed	Not Completed	Not Completed	50% Completed (estimated)	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed
Obtain GPS Locations for all "active surface" Diversion Structures (f)	6% Completed (winter of 99) 9/142	Not Completed	Not Completed	2% Completed (winter of 99) 14/502	23% Completed (winter of 99) 14/62	19% Completed (winter of 99) 27/143	Not Completed	42% Completed (winter of 99) 51/122	Not Completed	15% Completed (winter of 99) 25/170	Not Completed	Not Completed	Not Completed
Research and Assemble Proposed Abandonment List for 2000	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed
	Deadline of April 15, 2000												

= Task Completed
 = Task Started but not yet completed
 = Task not formally started yet

- a: District where overtime and excess personal services dollars converted to extend work months of part-time water commissioners.
- b: Need to work through some transfer decrees with Water Commissioner
- d: 1954 general adjudication for non-irrigation water rights needs to be re-examined
- e: 1969 general adjudication CA-5414 needs to be retabulated
- f: GPS unit time greatly limited due to conjunctive use with groundwater staff
- g: Need to access known transfer decrees which apparently only exist on Huerfano County Courthouse microfilm. Currently stored on film not readable by current reader.
- h: Need to totally reassess co-general adjudications by Las Animas and Otero County courts and State Engineer's decree