DIVISION ENGINEER'S ANNUAL REPORT IRRIGATION DIVISION NO. 2

1988 IRRIGATION YEAR

Nov.1, 1987 - Oct. 31, 1988

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ANNUAL REPORT

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Submitted to:
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State Engineer

by:
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Division Engineer

January 17, 1989

Index
(1988 Irrigation Year)

INTRODUCTORY STATEMENT

ANNUAL DIVISION ENGINEER'S REPORT

IRRIGATION DIVISION NO. 2

PUEBLO, COLORADO

1988

This report is the annual summary compiled by the Division Engineer's office for the State Engineer, and is a summary of water administration activities completed or in progress as of October 31, 1988. It attempts to identify upcoming problems and work items for Irrigation Year 1989. The recommendations portion of this report is respectfully submitted to the State Engineer to assist him to formulate administrative policy and guidelines with regards to personnel and water administration as more fully defined in section 37-80-101 through 109, CRS, 1973 (Amended.)

AREAL EXTENT

Irrigation Division number 2 consists of all lands within the Arkansas River drainage, including its tributaries and all lands irrigated from ditches and canals diverting water from same. The Division is composed of thirteen water districts (10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 66, 67 and 79) comprising the counties of El Paso, Chaffee, Lake, Fremont, Custer, Pueblo, Park, Las Animas, Teller, Crowley, Otero, Bent, Prowers, Baca and Kiowa. Division 2 overall covers an area of 26,150 miles or 25.1% of the state.

WINTER WATER PROGRAM

The Winter Water Program has maximized use of irrigation water normally applied in the winter months by storing the water for summer application. The 1988 Winter Water Program commenced November 15, 1987 and concluded March 15, 1988. This was the twelfth year of operation of the Winter Water Program since its inception in irrigation year 1976. (The Program was not in operation in irrigation year 1978). During the 1988 program, storage in Pueblo Reservoir by participants was curtailed to 38,050 A.F. because of lack of storage space in the reservoir. A summary of Winter Water Progam storage is included in the statistical section of this report.

WINTER WATER PROGRAM OPERATIONS

A. By foregoing winter diversions, the water will be accounted for by storage in Pueblo Reservoir or headgate diversions on a percentage basis of total river production.

B. A division of total river production below 100,000 A.F. entitles the off channel storage participants to 71.2 percent of the river flow and the direct flow participants, 28.8 percent of the river flow.

C. The Amity Canal receives the next 2,750 A.F. over 100,000 A.F.

D. When the system reaches 102,750 A.F., 2,250 A.F. of water is released to the Colorado Canal, pro-rata from winter water stored in reservoirs upstream from Pueblo.

E. The Holbrook Canal receives the next 356 A.F. over 102,750 A.F.

F. A division of total river production above 103,106 A.F. entitles the off channel storage participants to 75 percent of the river flow and the direct flow participants, 25 percent of the river flow.

G. Winter water that is delivered to the Amity Canal account in John Martin Reservoir will not be depleted by transit loss occurring from the Arkansas at Las Animas Gauge to John Martin Reservoir. All participating entities except Fort Lyon will stand that loss, based on the Livingston Formula, on a pro-rata basis. Any winter water delivered to the Fort Lyon or Consolidated accounts in John Martin will be charged a transit loss based on the Livingston Formula

After eleven years of a successful volutary Winter Water Program the Division 2 Water Court , awarded the applicants a interlocutory Decree for the Winter Water Program on November 10, 1987.

ARKANSAS COMPACT OPERATIONS

The allocation of storage in John Martin was made by the Engineering Technician in Las Animas, according to the April 14, 1980 Operating Plan as supplemented by the spill criteria adopted by the Compact Commission in 1984.

The 1988 Irrigation Year began Nov. 1, 1987 with John Martin Storage totaling 246,367.85 distributed as follows: 13,624.41 A.F. in the Conservation Pool, 223,366.03 A.F. in Agreement Accounts and 9,377.41 A.F. in the Recreational Pool.

The Fort Lyon did not store in John Martin again this year, although the Amity did store part of the water allocated to the Great Plains System under their 1987 decree so that the Oct. 31, 1988 contents of Amity were 8,843.54 Article III water. Winter stored Water totaled 29,215.84 A.F., stored during the period Nov. 1, 1987 through Mar. 31, 1988.

At the meeting in December, the Division Engineer was re-elected as the Operations Secretary of the Compact and was allocated $6,100.00 for expenses incurred by him in the Operations Secretary's office.

The Compact Administration participated in the Sutron Satellite Monitoring System and did contribute $7,000.00 to the operations of the satellite. The Kansas Water Commissioner's did have access to the system and did frequently use the system in the administration in Kansas, as did the Water Commissioner, the Engineering Technician and the Division Engineer in Colorado.

The storage of water for the Amity in John Martin, under Article III, encountered no problems. The 35% charge to the Transit Loss Account was assessed and delivered with no problem and the operations were marked by cooperation with Kansas and the water users in both states this year. The unused Transit Loss Account in the amount 6,263.11 A.F. was reallocated under

the formula to both states in the first one-half of December.

Kansas had 26,818.18 A.F. on November 1, 1988, not counting their share of water stored so far this winter.

The credited delivery to Kansas totaled 108064, which is 100+ % of demand and all runs were made with a release from Nov. 1 to Oct. 31 of 2,299.64 A.F. from the Transit Loss Account. There is no question that all runs were made.

This year there were no storage events on Muddy Creek so that no additional water was stored in the Permanent Pool. The Permanent Pool contained 7,432.97 A.F. on Nov. 1, 1988.

There were three times during the year when a call from District 67 was effective through John Martin, those being July 17th, Sept. 14th and Sept. 19th. In all cases the effective call was Amity's first right of Feb. 21st, 1887. Also during that time there was an upstream call of the Ft. Lyon's second, of third, March, 1988 being partially filled so that there was effectively a split call on the main stem. (refer to River Call Sheet later in report.

A new area-capacity table for John Martin Reservoir was adopted February 1. The new table shows a lost capacity due to siltation of 6,341.00 A.F. at elevation 3,845.67 (the elevation on Feb. 1.) A proportionate reduction of all accounts took place on that date and are noted by "releases."

Storage in Pueblo Reservoir under the Winter Water Program began November 15, 1987 and was limited to 38,050 A.F. due to a lack of storage space in the reservoir.

From March 6, 1988, through April 9, 1988, the Bureau or Reclamation permitted water to be stored in the Joint Use Pool. The Joint Use Pool is space above the Conservation Pool which can be used during the winter months, but must be evacuated by April 15 for flood protection.

The maximum contents reached in Pueblo Reservoir in irrigation year 1988 was 271,010 A.F. attained on March 14, 1988.

In accordance with the allocation priniciples of the SECWCD, project water purchased for agricultural purposes can be retained until May 1 of the following year, and project water purchased for domestic use can be carried over from year to year. This year the SECWCD elected to allow the remaining agricultural project water to be held in storage for an additional year

Pueblo Reservoir did not store any water under its 1939 storage right, in irrigation year 1988. Storage under this decree occurs when John Martin Reservoir spills.

No water was stored for flood control in Pueblo Reservoir in irrigation year 1988. The peak flow criteria of 6,000 c.f.s. at the Arkansas River gage was not reached at any time this year. The peak flow criteria is set by the Corps of Engineers and flow is regulated at Pueblo Reservoir.

GROUND WATER WELL INSPECTIONS AND INVESTIGATIONS

Most of the ground water investigations in Division 2 were in south-eastern Lincoln county concerning the Smith Cattle Company and Reid Cattle Company call on wells in the upper Steele's Fork basin. Two Division 2 staff members gave their depostion in 1988. Three field trips with engineers and lawyers hired by the litigants were made in 1988. Division 2 hydrographers are now making measurements once a week. The court case (86CW91) is still pending.

In spite of a dryer year than 1987, there was no more well pumping, probably due to the fact there were a number of farm foreclosures.

There were 104 applications to late register existing exempt wells that were individually field checked. Over 2100 miles were driven in field checking late registrations.

There were 25 Statements of Beneficial Use field checked in 1988. No mileage figure has been calculated for these inspections.

Water Year 1988 Well Permits Issued in Division 2

Numbers	Type
209	Domestic or Livestock
200	Household Use Only
57	Exempt Replacements
11	Exempt Commercial
27	Wells in Subdivisions with Decreed Augmentation Plans
4	Senate Bill 5 Wells
61	Monitoring Wells
8	Geothermal
15	Household Use Only amended to include domestic/animal watering
27	Replacements for non-exempt Decree Wells
17	Well Permit Denials

JOHN MARTIN RECREATION POOL

In the beginning of Irrigation Year 1988, on November 1, there was 9377.41 A.F. in the Recreation Pool, while the reservoir contained 226308 A.F. There was no inflow into nor outflow from the Recreation Pool in 1988.

The February 1st 'Release' was a result of pro-rata apportionment of the reduced capacity determined by the Corp of Engineers new area-capacity curve. A time summary of contents follows:

1988 RECREATION POOL ACCOUNT

Month	Contents Beg Of Month A.F.	Inflow A.F.	Evap A.F.	Release A.F.	Contents End Of Month A.F.
November	9377.41	.00	67.32	.00	9310.09
December	9310.09	.00	42.41	.00	9267.68
January	9267.68	.00	.31	.00	9267.37
February	9267.37	.00	13.64	204.64	9049.09
March	9049.09	.00	128.76	.00	8920.33
April	8920.33	.00	144.16	.00	8776.17
May	8776.17	.00	207.47	.00	8568.70
June	8568.70	.00	239.15	.00	8329.55
July	8329.55	.00	279.90	.00	8049.65
August	8049.65	.00	278.78	.00	7770.87
September	7770.87	.00	211.98	.00	7558.89
October	7558.89	.00	125.92	.00	7432.97
TOTALS		.00	1739.80	204.64	

REGULAR PARTICIPATION IN THE WATER USER COMMUNITY

There was one Winter Water meeting in Dec., 1987 for the 1988 Irrigation Year for which the Division keeps records and makes reports. Winter Water was decreed in an interlocatory judgement in Water Case 84CW179 on November 10, 1987.

The Division Engineer and/or the Assistant Division Engineer attended all special and regular meetings of the Southeastern Colorado Water Conservancy District. There were approximately 15 of these, during which the Division office makes a report giving the contents of the major reservoirs and flows of rivers, and a summary of administration within the Division. The meetings usually have a question and answer session during which the local paper and occasionally T.V. and radio media coverage. Quite often, the Division Engineer's report/comments are quoted by these news media, and copies of newspaper articles are routinely forwarded to the Denver office. Additionally, the Division Engineer attended three special meetings discussing transit loss.

There are a total of five Conservancy Districts within Division 2. The Staff has attended approximately 12 meetings of the Purgatoire District. The Upper Arkansas Conservancy District meetings were attended by Bruce Smith, Water Commissioner of District 11 on twelve occasions.

OFFICE INVOLVEMENT AND CHRONOLOGY OF ACTIVITIES IN THE WATER USER COMMUNITY

Invited Participation:

The following is a chronologic listing of contacts with water user community, which were accomplished during Irrigation Year 1988.

Date:	Meeting, Investigation, Etc.:
Nov. 9	Meeting was conducted with Kevin Pratt and the retired Division Engineer. No one else was present and no information regarding this meeting was conveyed to staff.
Nov. 10	The Water Judge for Water Division 2, John Tracey, signed the interlocatory decree for Winter Water. Staff attended the signing, however no other Winter Water meetings were attended except by the retired Division Engineer and occasionally an Engineering Technician.
Nov. 13	The now retired Division Engineer and staff attended the ARCA public meeting at Pueblo Reservoir auditorium. The retired Division Engineer gave a non-technical Water Rights talk to the Chamber of Commerce.
Nov. 20	The retired Division Engineer attended an all day conference with Tommy Thomson, Manager SECWCD, in Lamar. No information with regard to business.
Nov. 24	The retired Division Engineer attended the Upper Water District 10 Water Users Association meeting. No information was shared with staff.
Nov. 30	The Assistant Division Engineer met with USGS personnel and Denver Computer Services personnel to accomplish the connection of the DWR computers to the USGS data retrieval system. This allowed DWR to run the USGS transit loss model for Fountain Creek drainage.
Dec. 2	ARCA Engineering Committee meeting attended by the retired Division Engineer. No information given to staff.
Dec. 3-4	A tour of the Arkansas River Valley was conducted by the retired Division Engineer. No staff was along, no information conveyed.
Dec. 7-8	The annual ARCA meeting was held. It was attended by the retired Division Engineer, the Assistant Division Engineer (for the first time as he was not allowed to attend the 1986 meeting), and a WRE "C" and an Engineering Tech. from the Pueblo office.
Jan. 4	The retired Division Engineer met with Colorado Department of Health personnel, no information was shared regarding this meeting.
Jan. 4	The Assistant Division Engineer with a hydrographer snow-catted into Homestake Tunnel to do measurement during record flow conditions. We were accompanied by Otero Pump Station personnel employed by Colorado Springs.
Jan. 14	The Assistant Division Engineer met with representatives for Colorado Springs, regarding the transit loss program of the USGS and its application to the Colorado Springs Exchange.
Feb. 1	The now retired Division Enigneer and an Engineering Technician attended the Pueblo Water Works trial, which listed the Assistant Division Engineer as a witness, however the now retired Division

Engineer did not allow him to attend.

Feb. 2 The Assistant Division Engineer and staff engineer attended the Lower Arkansas Water Management Association annual meeting in Lamar.

Mar. 1 The Assistant Division Engineer met with representatives of Tezak Construction to develop the necessary and sufficient elements of the substitute water supply plan, subsequently approved by the State Engineer.

Mar. 2 The former Division Engineer attended the Arkansas River Parkway Committee meeting. No information conveyed.

Mar. 3 The now retired Division Engineer met in the field with Mr. Franklin Springer regarding a long term problem which remained unresolved during Mr. Jesse's tenure.

Mar. 7 The former Division Engineer met in Las Animas with water users(?) for some undisclosed reason.

Mar. 23-24 The former Division Engineer met with Division Engineers from Divisions 3, 4 and 7 in Alamosa to discuss his pending retirement and successor.

Apr. 4, 5 & 6 The Assistant Division Engineer took annual leave to attend the Dam Safety meeting in Montrose. He was denied administrative leave.

Apr. 14 The former Division Engineer and the Assistant Division Engineer (at his own insistance) participated in a field trip in Chaffee County to inspect the Bovee fish hatchery.

Apr. 15 The former Division Engineer continues tour of Upper Arkansas region.

Apr. 27 The former Division Engineer attended a meeting regarding the Operating Principals of Trinidad Reservoir. Eventhough he would be retiring no other engineer from the Division II office attended.

May 9 The Assistant Division Engineer toured the South Slope system of Colorado Springs with their representatives.

May 23 The former Division Engineer toured Pueblo West with a representative of SECWCD.

May 24 The Assistant Division Engineer performed a field reconnaissance in the Northern part of W. D. 2 with the Water Commissioner to discuss duties and responsibilities of the new deputy water commissioner and to introduce her in the water user community.

June 3 Mr. Robert Jesse retired as Division Engineer in Water Division II after a long 13 1/2 year career in that position.

June 20 The Acting Division Engineer performed a field reconnaissance with the W. D. 12 Water Commissioner to meet with Canon City and Cotter Corporation representatives to determine metering locations and diversion points for the approved Cotter Corporation Substitute Water Supply Plan.

June 23 The Acting Division Engineer attended his first Southeastern Colorado Water Conservancy District meeting. He had never before been invited to accompany the Division Engineer to these meetings. During this meeting he gave the Division Engineer's report and discussed transit loss methods to be applied to project waters to be used by Ft. Lyon canal. Ft. Lyon canal subsequent to several discussions and meetings expressed a great deal of pleasure in the fair way water was going to be administered. The Acting Division Engineer continued to attend

these meetings on a regular basis.

June 24 The Division 2 office, at the request of the local SCS office, hosted a delegation of Egyptian engineers for the day, giving them an in depth overview of Division of Water Resources operations.

June 28 The Acting Division Engineer hosted a delegation from Colorado University and Colorado State University, headed by Mr. Chuck Howe, for 1/2 day to discuss exchanges of water rights in general.

July 1 During pre-trial conference with Mr. Franklin Springer, a post PTC meeting was held with Mr. Springer and his attorney and the Acting Division Engineer to begin negotiations for resolution of the long term problem occurring during Mr. Jesse's tenure as Division Engineer. A field reconnaissance was arranged for August 30th and arrangements made to meet Mr. John Ward, another participant in this problem, in the field.

July 18 The Acting Division Engineer met with representatives of Colorado Springs and the Colorado Canal Irrigation Company to tour and discuss the Lake Meredith-Henry Lake-Colorado Canal system and its administration with regard to the Colorado Springs Exchanges.

July 21 The Acting Division Engineer met with representatives of Colorado Springs to discuss access to the satellite monitoring system of Colorado Springs. The result of this meeting was the ability of the Division 2 office and the Water Commissioner of W. D. 17 to access and read Colorado Springs Satellite monitored data.

July 29 The Acting Division Engineer, with the Water Commissioner in W.D. 12, performed filed reconnaissance of apparent illegal impoundment in that Water District. These were subsequently administered so as to release improperly impounded waters of the state.

Aug 2 The Acting Division Engineer performed field reconnaissance with the Water Commissioner in W.D. 10 and Denver office personnel with regard to water rights of the Colorado Metro. Centre.

Aug 3 The Acting Division Engineer met with the W. C. for W. D. 13 and Mr. Robert Scafe regarding illegal impoundments.

Aug 5 A field reconnaissance was performed with the W.D. 13 W. C. and Mr. Scafe in order to avoid administrative action from the Division Engineer's office.

Aug 9 The Acting Division Engineer met with Mr. Richard Estep of the Rocky Ford Highline canal to discuss delivery problems with reservoir runs.

Aug 9 Mr. Steven J. Witte was appointed Division Engineer in Water Division 2 to assume duties on October 1.

Aug 11 The Acting Division Engineer performed a field reconnaissance of the Valley High-Roy Pring Water Rights and points of diversion with the W.D. 10 W. C.

Aug 12 The Acting Division Engineer performed a field reconnaissance of the Parson Land Co. water rights with the W. C. in W.D. 19.

Aug 30 The Acting Division Engineer performed a field reconnaissance investigation and an all day meeting with the W. C. from W.D. 11 and Mr. Franklin Springer and Mr. John Ward. The meeting resulted in a tentative resolution of the long standing problem which had occurred in a previous administration. This agreement was incorporated in

the decree of Water Case 87CW65.

Sept 16 The Acting Division Engineer reviewed the Blue Lands of the Booth Orchard case and implemented the study of current irrigation practices which was surveyed and conducted by the W. C. for W.D. 14.

Sept 20 The Acting Division Engineer performed hydrographic measurements in the field with the Upper Arkansas River Hydrographer at the stations at Cottonwood Creek, Chalk Creek, Arkansas River @ Salida, Arkansas River @ Wellsville, and Marshall Pass.

Sept 21 The Acting Division Engineer attended the Fry-Ark Project Review Committee meeting at SECWCD headquarters.

Sept 23 The Acting Division Engineer attended a Winter Water meeting at SECWCD office. Transit Loss determinations were discussed.

Oct 3 Mr. Steven J. Witte assumed the duties of the position of Division Engineer, Water Division 2.

Oct 4 The Assistant Division Engineer met with representatives of the Pueblo Board of Water Works to demonstrate Sutron capabilities to PBWW who had recently acquired access to the system by user subscription.

Oct 5 The Assistant Division Engineer attended the trial of Case 87CW65 (Springer & Ward mentioned earlier) and was a participant in the signing of the stipulations in this decree which laid to rest this long lasting water feud.

Oct 11 The Division Engineer and the Assistant Division Engineer attended a meeting at SECWCD office to discuss transit loss calculation methods.

Oct 13 & The Division Engineer and Assistant Division Engineer performed a filed reconnaissance of the Fry-Ark Project waters with representatives of the USBR.

KANSAS-COLORADO LAWSUIT PROGRESS

State of Kansas vs Colorado, No. 105 Original, which was filed on December 16, 1985, has considerable increased the Division 2 work load. The function of the Division 2 office in regard to case No. 105 has been to act as liaison between engineering consultants, attorneys, and basin water water users and to supplement the information gathering process. This activity has been carried out by Division Engineer Jesse and his staff which includes a Water Resource Engineer, P.O. Abbott, hired by the State for this purpose.

The first Special Master to hear State of Kansas vs State of Colorado, No. 105, Original; The Honorable Wade H. McCree, Jr., passsed away after a short illness in September 1987. Mr. Arthur L. Littleworth of California was appointed Special Master. The engineering-studies phase of trial preparation is now expected to last into the summer of 1989.

Liaison activities conducted by the Division Office in the period November 1987 through October 1988 are as follows:

Nov. 23, 1987 Supplied Chuck Reich with ARCA reports of Operation Secretary, 1979-80,1980-81.

Nov. 25, Supplied Ray Bennett with copy of Ralph Adkins 1962 report.

Dec. 1, Reviewed table 3.9 of June 1985 Sprock report.

Dec. 10, Reviewed Trinidad Project Operating Principals Review draft of Dec.,1987, by the Bereau of Reclamation.

Jan. 4, 1988 Supplied Chuck Reich with memo on inspection of Medano and Hudson Ditches.

Jan. 5 Supplied Chuck Reich with certain information on various requested subjects including Medano and Hudson Ditches; Buffalo, Lamar, and Oxford Ditches; and Adobe Creek Reservoir.

Jan. 5 Sought out information on M.M. Skinner and his report of 1965.

Jan. 11, Searched through certain engineering reports for references to irrigation efficiencies for canals in the Arkansas basin.

Jan. 13, 1988 Supplied Chuck Reich with references on construction completion and first storage in Pueblo reservoir.

Jan. 22 Supplied Chuck Reich with additional data on canal efficiencies.

Jan. 25 Supplied Dennis Montgomery with requested photocopies of certain U.S. Bureau of Reclamation reports.

Jan. 25 Completed draft report "Transmountain Diversions Into and Out Of the Arkansas River Basin, Colorado

Jan. 28 Supplied Chuck Reich with information requested by his letter of Jan. 20 to Dennis Montgomery.

A number of meetings were held on the subject of Division 2 diversion record interpretation. These meetings involved personnel of the Denver Engineering Section, Boyle Engineering Corp., the Pueblo Division 2 office, water commisioners, and Dennis Montgomery of Hill and Robbins. The following is a summary of those meetings:

DATE	LOCATION	SUBJECT
Feb. 4	Denver	Initial
Feb. 8	Pueblo	W.D. 67
Feb. 12	Pueblo	W.D. 67
Feb. 19	Pueblo	W.D. 67 and W.D. 17
May 2	Pueblo	W.D. 17 and W.D. 14

Feb. 5 Supplied Chuck Reich and Ray Bennett information on distribution of transmountain diversions.

Feb. 5 Supplied Dennis Montgomery CWPDA and LAWMA membership list.

Feb. 19 Supplied Chuck Reich and Ray Bennett information on Lamar Power Plant wells.

Feb. 19 Supplied Chuck Reich with copies of water cases and other information requested by telephone.

Feb. 22 Supplied Dennis Montgomery, Hal Simpson, Ray Bennett and Chuck Reich additional information on Lamar Power Plant well discharge.

Feb. 25 Supplied Dennis Montgomery information on Fryingpan-Arkansas Project water allocation.

Mar. 3, 1988 Furnished copy of Dumeyer 1977 Bessemer Ditch report to Chuck Reich.

On request, supplied Rao Suvarna, Bob Hamburg, and U Win of the Denver Engineering Section estimates of first-of-month content of various Arkansas River basin reservoirs. Usually as reply to telephone request, these estimates were supplied on the following dates:

Mar. 3, Mar. 8, Mar.16,
Apr. 8, Apr.12, Apr.14, Apr.18.

A number of meetings were held on the subject of irrigated acreage in the Arkansas River basin. These meetings were held in the Pueblo office. The meetings were attended by personnel from the Engineering Section of the Denver office, Boyle Engineering, Publo Division 2 offfice, water commissioners, and Hill and Robbins. The meetings were as follows:

DATE	SUBJECT
Mar. 2	Maps 71 through 106 of 1985 series
Apr. 18	Laterals and drains.
Apr. 25	Maps 71 up to confluence of Huerfano
May 26	Maps 26 through 1 of the 1985 series.

Mar. 4 Supplied updated list of LAWMA membership to Dennis Montgomery

Mar. 7 Supplied Dennis Montgomery with information on initial sale of Fry-Ark water.

Mar. 9 Called additional bibliography to the attention of Chuck Reich.

Mar. 11 Compiled list of former water commissioners for use by Bob Jesse in answering inquiry by Dennis Montgomery.

Mar. 15 Checked through currently-in-use code listing to determine status of certain ditches in W.D. 67.

Mar. 18 Answered inquiry by Dennis Montgomery on W.D. 67 Ditch Assoc.

Mar. 21 Checked through currently-in-use code listings to determine status of certain ditches in W.D. 17 and W.D. 14

Mar. 22, 1988	Supplied Ray Bennett copies of reports by Division 2 Engineer from Biennial Reports of the State Engineer for 1940 through 1944.
Mar. 22	Personnel of Division 2 office, Denver Engineering Section, Boyles Engineering and Hill and Robbins met with Don Miles, Colorado Extension Agent for the Arkansas Valley in a discussion of farm efficiencies and cropping patterns.
Mar. 22	Supplied Hal Simpson information on Manval Canal and Granada Irrigation District.
Apr. 1	Supplied, to be copied and returned, four reports cited in memo of March 9.
Apr. 4 & Apr. 7	Supplied Dennis Montgomery information on the operation of Buffalo wells and LAWMA.
Apr. 11	Supplied Dennis Montgomery information on temporary Plans for Augmentation.
May 3	Replied to Dennis Montgomery's inquiry concerning irrigated acreage under certain Arkansas basin ditches.
May 4	Supplied information on well users under the Booth-Orchard Ditch to Dennis Montgomery.
May 16	Supplied Ray Bennett copies of Appendix B and C W.W. Wheeler report on Colorado Canal.
May 25	A meeting was held in the Pueblo office attended by attorneys and consultant engineers involved in the Kansas Colorado case, personnel of Division 2 and of the Engineering Section of the Office of the State Engineer, and attorneys and water users of the Arkansas Valley. The purpose of the meeting was to assure the entities from the Valley that the current data collection activities were needed in the trial preparation.
May 26	Ron Steger and Bill Paine of the U.S. Geological Survey explained to Dennis Montgomery, and personnel of the Pueblo and Denver offices the G.S.'s current study of the Fort Lyon Canal.
May 26	Replied to certain specific questions on Booth Orchard "blue lands" from Dennis Montgomery.

May 27	Supplied to Chuck Reich photocopies of Judgment and Decree and Ruling of the Referee of certain requested court cases.
June 1	Supplied Dennis Montgomery with an updated list of the stockholders of the Twin Lakes Reservoir and Canal Co.
June 3	Additional correspondence with Dennis Montgomery on Booth Orchard wells.
June 6	Supplied Dennis Montgomery requested photocopies of Judgment and Decree of certain court cases.
June 9	Supplied Dennis Montgomery with list of sockholders Bessemer Irrigating Ditch Co.
June 17	Interviewed Bill Mullen in order to reply to inquiry by Dennis Montgomery on lands irrigated by the Bessemer Irrigating Co.
June 23	Replied to certain specific questions on irrigated land under the Booth Orchard Ditch from Dennis Montgomery.
June 28	NOT TRIAL RELATED. With Chuck Roberts, met with a study group composed of professors and graduate students from U. of Colorado and Colorado State U. They were collecting data on change in water rights from irrigation to municipal use.
July 6	Supplied Chuck Reich with requested court documents relating to the Las Animas Town Ditch.
July 12	Supplied Purushottom Dass information on artificial recharge projects in the Arkansas River basin of Colorado (??Kansas vs Colorado??).
July 14	Supplied Chuck Reich additional data on the Las Animas Town Ditch transfer.
July 15	Supplied Chuck Reich additional data on the Las Animas Town Ditch Transfer.
July 19	Completed preliminary tabulation, based on data available in the Pueblo Office, of first-of-month contents, miscellaneous reservoirs over 1000 acre feet. Data recorded by water commissioners or in official reports to the State Engineer only in this draft.

July 29 — Transmitted additional information on Las Animas Town Ditch data supplied earlier.

August 8 — Tom Simpson supplied Chuck Reich information on river miles and transit loss between various reservoirs and canal headgates.

August 17 — Supplied Dennis Montgomery with additional copies of WRI Report 85-4092.

August22 — Supplied Hal Simpson with examples of Arkansas Daily Reports and Weekly Supplements.

August 23 — With Dennis Montgomery and Bill Crick met with Frank Malenski (Catlin), Quentin Smith (Oxford Farmers), Bill Mullen (Bessemer) and Rexford Mitchell, attorney to discus irrigated land under the various ditches.

August 26 — For Bill Crick, scaled overlays of Booth-Orchard Grove "blue lands" and acreage irrigated under Melvin Rich's Avondale Property System as delineated by Sprock Water Engineers to size of 1985 aerial coverage.

Over a number of days in late August and early September, worked with Bob Hamburg both over the telephone and in the Division 2 office using the Arkansas River Daily Reports to help interpret the record of Holbrook and Dye Lake exchanges. This in correcting the computer record of diversions for that canal.

September 7 — Supplied Dennis Montgomery daily diversion record for 1977 for the Rocky Ford Ditch as found in the Water Commissioner's report and the Arkansas River Daily Report.

September 7 — Extended tables on transmountain diversions as found with the January 1988 draft on that subject through July 1988.

September 13 - 14 Special Master Authur Littleworth was given a tour of the Arkansas River basin by Jeris Danielson and David Robbins. On the tour with the Special Master were Gregory K. Wilkinson, his associate; Richard Simms, attorney for Kansas, David Pope, State Engineer of Kansas; Andrew Walch, Assistant U.S. Attorney; and Ray Willms, Bureau of Reclamation. Robert Jesse conducted the tour and Bill Howland participated.

September 19 Supplied Bob Hamburg weekly contents of Dye and Holbrook Reservoirs for 1940 - 1951. Data from the Arkansas River Daily Reports.

September 21 Supplied the remainder of the record sent September 19 through Irrigation Year 1985.

September 27 Furnished additional comment to Bill Crick on irrigation under the Booth-Orchard Grove Ditch

October 3 Supplied George Moravec photocopies of U.S.B.R. land classification coverage of Las Animas Town Ditch.

October 4 Supplied Dennis Montgomery July 1977 Rocky Ford Ditch diversion record which included a photocopy of the recorder chart for that period.

October 6 Supplied Chuck Reich data on Amity Canal Pueblo Winter Water Program water stored in John Martin Reservoir.

October 7 Replied with information discovered to Dennis Montgomery's letter of September 20, 1988 which sought certain specific information on irrigation of excepted land under the Booth-Orchard Grove Ditch. As part of the research for this reply spent a day in the field with George Ridenour inspecting irrigation under the Booth.

October 11 At Hal Simpson's request, set up meetings between the various canal companies and representitives of the Denver Engineering Section, Boyles Engineering, this office and Dennis Montgomery as follows: November 1, am Colorado Canal, pm Holbrook Canal; November 2, am Amity Canal, pm Lamar Canal; November 3, am Las Animas Consolidated Canal, pm High Line Canal.

October 12 Met with George Moravec on U.S.B.R. land classification coverage of Las Animas Town Ditch. Moravec and George Ridenour discussed Ridenour's assignment to locate on the 1985 aerial coverage the laterals, turnouts, and drains of the Bessemer and other ditches in W.D. 14.

October 17 Supplied Chuck Reich with revised summary of Pueblo Winter Water Program for years of operation.

October 25 — Supplied Ray Bennett with partial tabulation of CF&I Steel Plant return flow at Salt Creek.

October 25 — At Hal Simpson's request, checked irrigated acreage of Booth "blue lands" given in my letter of October 7, 1988 to Dennis Montgomery against the values supplied by George Ridenour.

October 28 — Tried unsuccessfully to set up a meeting for the noon hour of November 3 with the Otero Canal. This was to be with the people attending the meetings with Las Animas Consolidated and the High Line also to be held November 3. (see entry of October 11).

October 31 — At Dennis Montgomery's request, tried to locate 1955 aerial photography mentioned in an early memorandum uncovered by Montgomery in his research.

PERSONNEL

Several personnel changes have occurred in Division II in Irrigation Year 1988. Eddie Taylor was promoted on Nov. 1, 1987 to Senior Water Commissioner in Water District 12 replacing George Wichmann, who retired the previous year and who was temporarily replaced by Charlie Judge. On Feb. 10, Vicki Taylor was appointed as (Deputy) Water Commissioner A in Water District 12 to fill a three month permanent part time position. Also, on February 10, 1988 Mr. Dan Neuhold, the former Water Commissioner in District 13 was promoted to Senior Water Commissioner in Lamar for Water Districts 66 and 67. Mr. Neuhold's position was subsequently filled on a full time basis by Mr. Charles Judge at the Water Commissioner A level on June 2, 1988.

On April 1, 1988 Mr. Craig Lis was promoted to Water Resource Engineer B after having passed his EIT examination.

On June 6, 1988 Bob Jesse retired as Division Engineer after fourteen years in that position.

Mr. Tom Simpson was promoted to Engineering Technician II on Sept. 15. On that same date, Mr. Frank Kipple, a registered professional engineer in the Division II office, was promoted to Water Resource Engineer B level.

During the irrigation season, the position of Deputy Water Commissioner A, in Wetmore area of Water District 12, vacated by Mr. Judge's appointment, was filled on a temporary basis by Gary Woolley. Likewise, a temporary opening in Water District 16 caused by the continued illness of Mr. Bob Brgoch was filled by Doug Brgoch.

On Oct. 3, 1988 Mr. Steven J. Witte assumed the duties of Division Engineer in Division II after being laterally transferred from the Division Engineer's position in Division 6.

Annually, starting in 1986, the Division office has awarded a Water Commissioner of the Year Award to one of the deserving Water Commissioners. The Water Commissioner of the Year for 1988 was Bob Ermel in Water District 10. Bob's award was given to him by the State and Division Engineers on October 20th at the annual Water Commissioner's meeting.

Public contacts by Division II personnel include office walk-ins, telephone calls and person to person contacts. Non-irrigation season public contacts average 946 per month, while the irrigation season averaged nearly 1,980 per month with a high in June of 2,462. Overall, Division 2 personnel, including office personnel and Water Commissioners, made over 20,180 public contacts in I. Y. 1988.

ARKANSAS RIVER COMPACT OPERATIONS
EXECUTIVE OVERVIEW

The Arkansas River Compact, again in Irrigation Year 1988, consumed much of Division 2 personnel's time, including portions of the time of 2.0 FTE Engineers (Pueblo office), 1.0 FTE Engineering Technician II (at Las Animas) and partial FTEs for an Engineering Technician I and the Division Engineer.

There was only one compact meeting during the Irrigation Year 1988, occurring on December 13, 1988. The regular order of business included a Winter Water and a Cheraw Lake report from Tommy Thomson of the Southeastern Colorado Water Conservancy District. The Commission scheduled a subsequent meeting for the last week in February, 1989 for discussion of the USBR Operations Study report presented orally by Ray Willms.

Mr. Steve Witte, Division Engineer for Water Division II was elected Operations Secretary for 1988, taking over for Mr. Bill Howland, the Acting Operations Secretary.

Kansas failed to report on its Intensive Groundwater Use Control Area in Hamilton, Kearney, Finney, Gray and Ford Counties.

The Commission has approved support of the Satellite linked streamflow measurement system in the amount of $8000.00 in 1989-90.

The Acting Operations Secretary's report given orally by Mr. Bill Howland is included on the following pages.

December 12, 1988

Report of Operations Secretary
to
Operations Committee
of
The Arkansas River Compact Administration

Gentlemen:

The 1988 Compact water year began on November 1, 1987, with 246,368 af impounded in John Martin Reservoir. This water was apportioned as follows: State of Kansas-102,906 af; State of Colorado-120,461 af; Transit loss account-0 (13,790 af residual water transferred to Colorado and Kansas on November 1 as follows: 24/35 to Colorado-9,456 af; 11/35 to Kansas- 4,334 af); Recreation pool- 9,377 af; Conservation pool- 13,624 af. Of the 223,367 af available in irrigation accounts, Colorado's share was 53.9% and Kansas' share was 46.1%.

On February 1, 1988, a new area-capacity table was introduced at reservoir elevation 3845.67 feet above mean sea level. This resulted in a reduction in capacity of 2.21% or 6,341 af. The Kansas account was reduced by 2,246 af; Colorado accounts were reduced by 2934 af; the Recreation pool was reduced by 205 af; and the Conservation pool was reduced by 956 af.

The maximum elevation for the year was reached on April 10. The elevation was 3848.50 and the corresponding storage content was 310,748 af.

75,323 af was stored in the conservation pool during the season. 52,736 af was stored during the winter storage season and 22,587 af was stored during the summer storage season. This was all transferred to accounts according to the Operating Plan.

93,385 af was released from the Kansas account for irrigation. In addition, 2,300 af of transit loss water was released to facilitate delivery to the State Line gages. 130,323 af was released to Colorado ditches for irrigation. This included 1,419 af of well augmentation water.

At the close of the Compact year the reservoir was at an elevation of 3817.88 feet and contained 78,984 af. This was a drop of 30.62 vertical feet from the year's maximum elevation and a decline of 231,764 af from maximum storage. At 2400 hours October 31, contents of the reservoir were distributed as follows: Kansas-26,231 af; Colorado accounts- 39,057 af; Recreation pool- 7,433 af; Transit loss account- 6,263 af (this has now been re-apportioned 11/35 to Kansas and 24/35 to Colorado). Of the water in irrigation storage accounts, Kansas' share was 40.2% and Colorado's share was 59.8%.

The total evaporative loss from the reservoir during 1988 was 40,127 af.

Respectfully submitted

William Howland
Acting Operations Secretary

DAILY STATUS REPORT
JOHN MARTIN RESERVOIR

DEC 11,1989

ACCT	NAME	INFLOW	RELEASE	EVAP	GWI
1	JOHN MARTIN RESERVOIR	[illegible]	0.00	21.00	91111.06
2	AGREEMENT WATER	0.00	0.00	16.31	70497.58
3	SUMMER COMPACT WATER	0.00	0.00	0.00	0.00
4	WINTER COMPACT WATER	[illegible]	0.00	1.76	7762.75
5	PERMANENT POOL	0.00	0.00	1.70	7330.58
6	WINTER WATER	[illegible]	0.00	1.23	5529.89
45	FLOOD POOL	0.00	0.00	0.00	0.00
2	AGREEMENT WATER	0.00	0.00	16.31	70497.58
7	SUMMER STORED WATER	0.00	0.00	5.92	25583.37
8	KANSAS	0.00	0.00	6.43	27784.27
10	TRANSIT LOSS	0.00	0.00	0.00	0.00
20	1988 WINTER STORED WATER	0.00	0.00	1.46	6300.76
31	ARTICLE III	0.00	0.00	2.01	8712.40
35	1989 WINTER STORED WATER	0.00	0.00	0.49	2115.78
7	SUMMER STORED WATER	0.00	0.00	5.92	25583.37
9	KEESEE	0.00	0.00	0.02	[illegible]
10	FT. BENT	0.00	0.00	0.09	[illegible]
11	AMITY	0.00	0.00	0.04	[illegible]
12	LAMAR	0.00	0.00	0.18	[illegible]
13	HYDE	0.00	0.00	0.56	[illegible]
14	MANVEL	0.00	0.00	0.38	[illegible]
15	X-Y	0.00	0.00	0.04	[illegible]
16	BUFFALO	0.00	0.00	3.69	[illegible]
17	SISSON	0.00	0.00	0.82	[illegible]
20	1988 WINTER STORED WATER	[illegible]	0.00	1.46	[illegible]
21	KEESEE	[illegible]	0.00	0.14	[illegible]
22	FT. BENT	[illegible]	0.00	0.12	[illegible]
23	AMITY	0.00	0.00	0.00	[illegible]
24	LAMAR	[illegible]	0.00	0.17	[illegible]
25	HYDE	[illegible]	0.00	0.05	[illegible]
26	MANVEL	[illegible]	0.00	0.17	[illegible]
27	X-Y	0.00	0.00	0.06	[illegible]
28	BUFFALO	0.00	0.00	0.53	[illegible]
29	SISSON	0.00	0.00	0.09	[illegible]
31	ARTICLE III	0.00	0.00	2.01	[illegible]
32	AMITY	0.00	0.00	2.01	8712.40
33	FT. LYON	0.00	0.00	0.00	0.00
34	LAS ANIMAS CONSOLIDATED	0.00	0.00	0.00	0.00
35	1989 WINTER STORED WATER	0.00	0.00	0.49	2115.78
36	KEESEE	0.00	0.00	0.02	90.11
37	FT. BENT	0.00	0.00	0.09	391.84
38	AMITY	0.00	0.00	0.04	157.60
39	LAMAR	0.00	0.00	0.18	792.71
40	HYDE	0.00	0.00	0.01	30.55
41	MANVEL	0.00	0.00	0.02	91.84
42	X-Y	0.00	0.00	0.04	192.83
43	BUFFALO	0.00	0.00	0.08	328.00
44	SISSON	0.00	0.00	0.01	47.02

AUGMENTATION WATER

There are two organizations whose principal business is to provide augmentation water to non-exempt tributary wells. These are the Colorado Water Development and Protective Association, 160 members and 370 member wells, and the Lower Arkansas Water Management Association, 119 members and 395 member wells. CWDPA has not, as of this date, yet applied to Water Court to decree a Plan of Augmentation to cover its work.

As of January 1, 1989 there are 107 decreed Plans of Augmentation varying in size from one well to 250 wells. Eighty-seven of these plans are in operation.

There were 8 new Plans of Agumentation decrees in 1988.

In 1988, 68.55 shares of Twin Lakes water were released for 28 Plans of Augmentation that use Twin Lakes water.

RIVER ADMINISTRATION REPORT

Unlike the near Free River condition of 1985 and 1986 or the Free River of 1987, this year's river administration was "normal" except for one condition. The varying condition that occurred was a split call on the main stem. The Amity was calling from Water District 67 with its first right of 283.50 c.f.s. with a priority of Feb. 21st, 1887 while upstream a call from Ft. Lyon second water right of 597.16 c.f.s. with a priority of Mar. 1, 1887 was being partially filled. In this call condition Amity's senior call was being made up by return flows so that Ft. Lyon's junior call could be operative on the upper reaches. The reader is referred to the Statistical Summary of River Calls in this report.

In March of this irrigation year, the Division II office began administering exchangeable transmountain return flows on the Fountain by use of the USGS transit loss model. By memo from the Acting Division Engineer on July 14, 1988 provided for conditions when the transit loss model might not be operable because of breakdown or lack of data. Transit losses in these cases reverts to straight percentage charges for transit losses.

No resolution has been found for the problem of administering transmountain imported water which is quantified by measurement through a flume and then the quantity adjusted because of a shift application. One solution yet to be adopted is to apply shifts only time forward with no retroactive application.

GOALS AND OBJECTIVES REPORT FOR 1988

On June 2nd, 1987, the State Engineer directed each Division Engineer to formulate and submit goals and objectives for I. Y. 1987. Division II's Goals and Objectives were submitted to the State Engineer on June 26th. The following is a list of objectives ordered by priority, tabulating the degree to which they have been attained as compared to last year. These objectives were aimed at the overall goals of 1) More complete and accurate records, 2) Better meet public informational and service needs and 3) Administer waters within the Division better. The following chart categorizes objectives by work activity:

CATEGORY	OBJECTIVES	% ACCOMPLISHED 1987	% ACCOMPLISHED 1988	RE-DEFINITION
Hydrograph	1. To eliminate backlog of unworked hydrographic records	50%	75%	Continue as defined.
	2. To implement a more efficient system of working records.	50%	100%	Records program. on line.
	3. To improve the reliability & Utility of the Sat. Mon. Sys. -moving toward directly using SAT. DATA for records.	100%	100%	Accomplished. Cont. maintenance. (See Special Rpt.)
Water Comm.	1. To provide diversion records on time to Denver.	90%	50%	Continue as defined-I.Y. '88 *
	2. To begin admin. lists which would be used to cross-train or train new personnel & be used by the Pueblo ofc. to better supervise.	35%	45%	Increased to #2 all W.C. are working on this.
	3. To provide field recon. supp't to the Pueblo ofc. for water cases, wells, etc.	100%	100%	Cont. as def.
Ground Water	1. Meter all N. T. wells.	35%	35%	Cont. as def. No progress.
	2. Maintain at least annual rpts.	25%	25%	Cont. as def. No progress.
	3. Create a d-base management file for all Plans of Aug., espec. those used to augment wells.	5%	5%	Cont. as def. No progress.
	A. Clerical			
Office	1. Reorganize Filing System.	35%	35%	Cont. as def. No progress.
	2. Implement word processing into everyday activities.	25%	35%	Cont. as def.
	3. Cross-train for work effic. during leaves of absence.	25%	45%	Cont. as def.
	4. Reorganize well permit file.	0%	0%	Delete, file: partially destrd.

		% ACCOMPLISHED 1987	% ACCOMPLISHED 1988	RE-DEFINITION
	5. Rebuild well permit file.	0%	0%	New objective.
	B. Supervisory			
	1. Provide cross-training and documentation to promote effic. during absences.	10%	25%	Same.
	2. Improve & Implement supervisory skills & techniques.	70%	75%	Continue, enrolled in mgt. sem.
	3. Manage by objective.	90%	90%	Continue.
Water Court	1. To provide comprehensive consultations with the Water Referee which have each app. field checked & reported.	80%	85%	Same-except NOT ALL app's. need field ck.
	2. To maintain & enhance liaison w/Water Ref. & Judge to open channels of communication of DWR policy & Court decisions.	60%		Continue-more staff involvemt.
Reservoir	1. To continue & maintain accurate res. acctg. on a daily basis.	100%	100%	Continue.
	2. To increase # of Reservoirs for which computer programs are developed (currently= 5 to include others by 1/88) & charge '88) & charge evap. to all storage.	75%	75%	Continue. No Progress.
	3. Develop Programs to archive reservoir data & riv. calls by 1/88.	5%	5%	Continue. No Progress.
	4. Cross-train personnel so that there is multiplicity of duties within Division office.	5%	25%	Continue and Redefine at a higher priority. Week-end Res. acctg. shared.
KS vs CO Suit	To coordinate records & provide liaison for parties involved. To collect & dessimate needed data & info. efficiently.	100%	100%	Continue.
	To provide Engineering support to the Div. Eng. & State Engineer's office.	50%	75%	Continue.

*Diversion records in 1987 were done on WISP with all data entry done by the Division office. In 1988 all data entry will be by the Water Commissioners themselves. This will greatly increase the speed of entry of diversion data submitted by as much as 10 months.

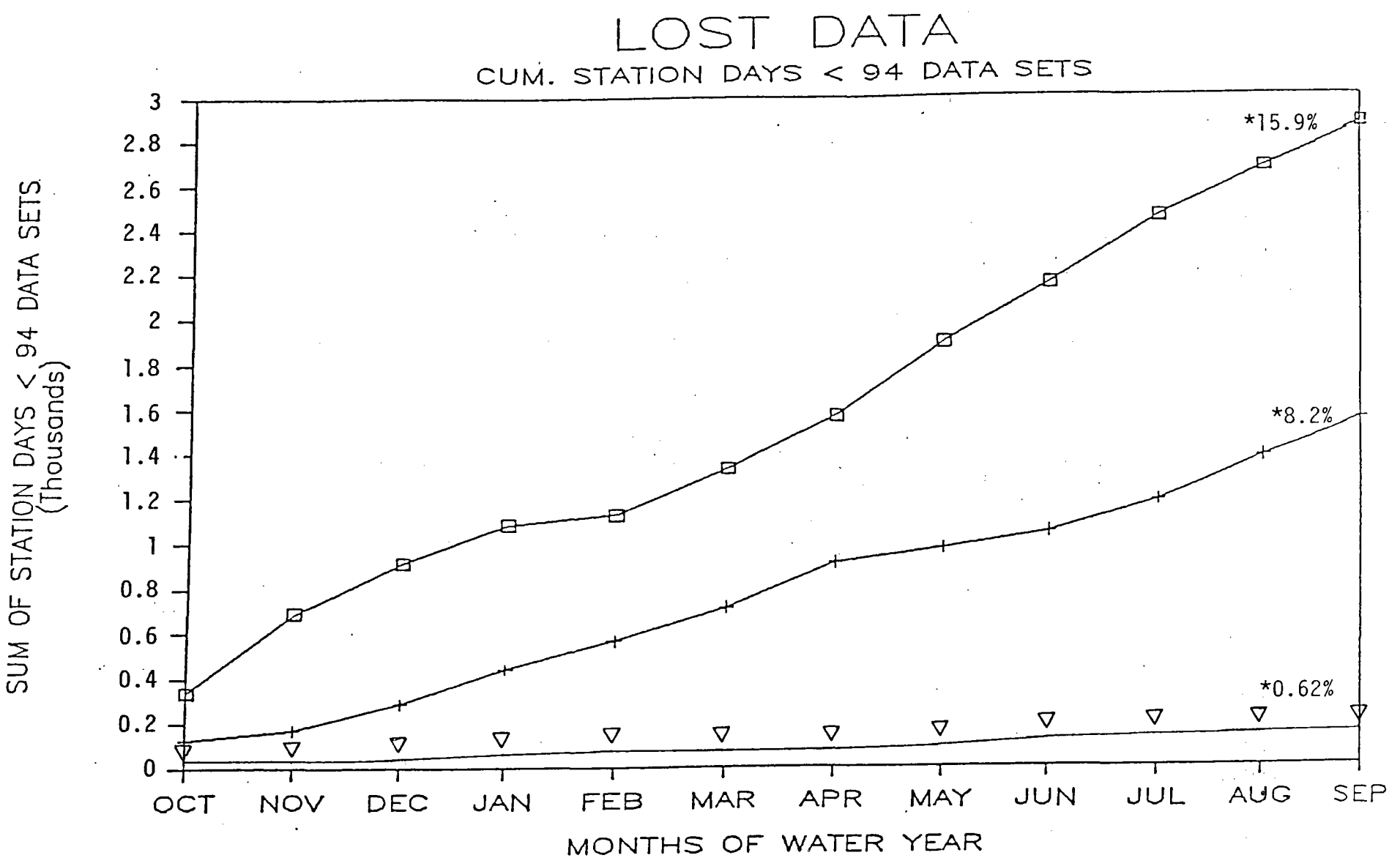
SATELLITE MONITORING MAINTENANCE

(Fig. 1 Reference)

In moving toward a real time stream flow measurement system, Division 2 embarked on a concerted effort toward zero mechanical defects in the system. Item 3 of Goals and Objectives of the Hydrography work in Division 2 has been accomplished. An accurate and preferred method of determining the degree of success of zero mechanical defects is best accomplished by reviewing missing data under Database Quality of the DMS System Diagnostics. Unfortunately, the VAX system has not maintained these records for I. Y. 88 except for the last 10 days of each month. A review of the transmissions would over the I. Y. show if we're moving closer toward zero mechanical defects. Absent this data a review of computed average daily flows was done to verify performance of the system. Because daily averages are not computed if fewer than 94 data sets are collected within a 24 hour period (i. e. more than 2 transmissions are lost) that statistic was used to verify enhanced system performance accomplished by extra effort by Division 2 personnel. Figure 1 is a Months vs. Cum Days of less than 94 transmissions for 1986, 1987 and 1988. Clearly, an improvement is measured and notable. Particularly, since the annual percentage of lost data to total data transmitted has decreased from 15.9% in 1986 to 0.69% in 1988. In tabular form the following table shows the improvement that's occurred over the last 3 years:

LOST DATA (cum. sta days less than 94 data sets) x 1000

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
1986	.35	.72	.91	1.02	1.10	1.30	1.53	1.87	2.10	2.43	2.60	2.35
1987	.15	.17	.30	.40	.55	.69	.90	.97	1.02	1.15	1.30	1.53
1988	.010	.013	.014	.023	.032	.045	.050	.066	.086	.096	.116	.117



*Percentage of lost data to total data transmitted.

Figure 1

CHERAW LAKE
SPECIAL REPORT (IY 1988)

Cheraw Lake is a natural closed basin playa lake, located approximately 10 miles North of La Junta, containing approximately 10,000 A.F. It has historically collected irrigation tailwater, seepage and runoff and untreated wastewater from a turkey processing plant (until the early 1970's.) In an "average" water supply year, evaporation is sufficient to prevent the lake from spilling, however, in recent years it has been filling. In previous years evaporation was greater than inflow, producing an increasing TDS concentration to the present level of 17,000 ppm to approximtely 15' depth and upwards of 30,000 ppm at greater depths.

In 1985 releases from Cheraw Lake were done to relieve flooding conditions on S. H. 109 and the Town of Cheraw. Complaints arose from downstream users regarding the quality of the released water and to Colorado Department of Health, Water Quality Control Commission was asked to intercede and require NPDES permits. The Colorado Department of Health (CDH) determined that NPDES permits were not required because 1) discharges by dams have been determined by a Federal Court to not constitute point source discharge because there was no "addition of pollutants" as required by the Federal Clean Water Act and 2) the State of Colorado Water Quality Control Act.

The Colorado Water Quality Control Commission, after public hearings on January 4, 1988 adopted an emergency regulation entitled "Regulation Controlling Water Quality of Releases from Cheraw Lake in Otero County" (4.4.0). The Findings Regarding Basis for Emergency Rule are to be found on pages following the text. The Emergency Regulation was in affect from effective date of January 29, 1988 through the end of IY88 on October 31, 1988. Further, permanent regulations will be forthcoming from the WQCC. Efforts of Tommy Thomson, General Manager of Southeastern Colorado Water Conservancy District, on the AD HOC Committee, were fruitless and of no consequence. In fact, the condition of inadvertant discharge is no longer pending because of considerable drop of head in the lake due to reduced inflow and continued evaporation (normal arid conditions.)

AS APPROVED BY THE
WATER QUALITY CONTROL COMMISSION ON
JANUARY 22, 1988

FINDINGS REGARDING BASIS FOR EMERGENCY RULE:

The Commission finds that the immediate adoption of this regulation is imperatively necessary for the preservation of public health, safety, or welfare and that compliance with normal notice requirements would be contrary to the public interest. The reasons for this finding are that action needs to be taken during this winter season to minimize the risk of uncontrolled releases of highly saline water from Cheraw Lake. Specifically, there is a possibility of significant damage to agricultural and domestic water supply uses downstream of Cheraw Lake if undiluted releases occur. There was evidence that the water level in Cheraw Lake currently is near the top of the outlet structure and that therefore releases could occur in the near future, depending on precipitation and return flows into the Lake.

The two release prohibitions which are scheduled to go into effect in 1990 would, of course, not become effective during the life of this emergency rule. However, the Commission finds that the two-year period established in the regulation is necessary for affected entities to take the actions necessary to come into compliance by that time. Necessary actions would include assessment of the problem, analysis of the feasibility of compliance options, arrangements for financing, and completion of design and implementation of any structures or facilities to achieve compliance. Therefore, the Commission finds there is an emergency basis for adopting these provisions, in order to provide adequate notice to affected entities, should these or similar provisions be adopted as permanent regulations. At the same time, the Commission intends to consider at the permanent adoption hearing any other options that may be developed by the Division or outside parties prior to that time.

Paragraph 4.4.2(3) prohibits any release of water from water collection systems into Cheraw Lake after March 15, 1990, irrespective of the quality of such releases. From the evidence provided, it appears that even if distilled water were released into Cheraw Lake, after mixing there is a substantial risk that the water released from Cheraw Lake would be of an unacceptable quality. Moreover, long-term downstream protection can not be accomplished solely by regulating controlled releases, since uncontrolled releases are likely to occur, depending on precipitation and return flows. Therefore, water releases into Cheraw must be controlled in order to control outflows.

From the information currently available to the Commission, the limitation on releases into Cheraw Lake should have no adverse impact on water rights. The testimony indicated that there are no current water rights to the water in Cheraw Lake, and did not indicate that any water users upgradient of the Lake currently use the return flows that run into the Lake. In fact, diverting water around Cheraw Lake to comply with section 4.4.2(3) may have a beneficial impact on water rights by increasing the water supply downstream. Of course, should different information regarding a potential impact on water rights become available prior to the permanent adoption hearing, that may affect any action that the Commission would take as a result of that hearing.

Because of the Commission's extremely full agenda and the time necessary to develop a proposed regulation on this complex issue, the Commission finds that it may be necessary for the emergency regulation to be in effect for up to one year. Therefore, the regulation is to be effective immediately and continue in effect until the effective date of permanent regulations or for one year, whichever comes first. The Commission has agreed to schedule a permanent adoption hearing for November 7, 1988, which is the earliest available time on the Commission's agenda.

The purpose of this regulation is to protect the agricultural uses of water in Horse Creek (Otero and Bent Counties) from the highly saline discharges from tributary Cheraw Lake, while also avoiding an unacceptable adverse impact on other downstream water uses, particularly domestic water supplies.

The saline condition of water in Cheraw Lake appears to be caused by highly alkaline native soils in the area together with routing of irrigation return flows to the lake. Traditionally, the shortage of water in the Arkansas River Basin has prevented the lake from overflowing into Horse Creek. Evaporation losses then contributed to the increase in salinity which has exceeded 17000 mg/l (TDS) in the upper layer and 60,000 mg/l at the bottom of the lake based on samples collected by the Division and the USGS. The excess of water caused by the past "wet" years has caused levels in the lake to rise significantly which, in turn, threatened to cause property damage to State Highway 109 and the Town of Cheraw. This led several parties to effect releases from the lake which have damaged and endangered the agricultural use downstream on Horse Creek. This statement is supported by the EPA "Red Book" criteria for irrigation water and Division water quality investigations of the Lake and Horse Creek.

The ambient quality of Horse Creek has exceeded 5000 ppm TDS without influence from Cheraw Lake based on the existing water quality database. Since the agricultural use of the Horse Creek water under those conditions did not appear to be impaired, the salinity levels of Horse Creek will be controlled based on the mean plus one standard deviation of the measured TDS levels in Horse Creek, which is 5270 mg/l. The TDS standard adopted for Horse Creek should help assure that this level is met in the future.

EMERGENCY

4.4.0

REGULATION
CONTROLLING WATER QUALITY OF RELEASES FROM CHERAW LAKE
IN OTERO COUNTY

4.4.1 AUTHORITY

Section 25-8-205, C.R.S., 1983, as amended.

4.4.2 REGULATION

(1) Effective March 15, 1990, there shall be no controlled release of water from Cheraw Lake. Prior to that date, there shall be no controlled release of water from Cheraw Lake unless one of the following conditions can be met:

(a) The salinity of the water released, measured as total dissolved solids (TDS), is less than or equal to 5270 parts per million (ppm); or

(b) An adequate quantity of water of less saline nature can be supplied for dilution purposes such that a salinity level of 5270 ppm, measured as TDS, can be maintained in Horse Creek immediately below the confluence with the Cheraw Lake outlet channel.

(2) The entity effectuating the release from Cheraw Lake shall have the responsibility for monitoring for the purpose of demonstrating compliance with this regulation.

(3) Effective March 15, 1990, no water from water collection systems shall be released into Cheraw Lake.

(4) The provisions of these regulations are severable, and if any provisions or the application of the provisions to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of these regulations, shall not be affected thereby.

HYDROLOGY REPORT
SNOW SURVEY

The following snow course stations were maintained by the Soil Conservation Service in the Arkansas River Drainage for I. Y. '88 and their % of average snowpack are as indicated:

SNOW COURSE	DATE	MAX SNOW DEPTH	MAX ACCUM WATER CONTENT	May 1 1961-1985 AVG. %
Apishapa	3/21/88	25	11.9	163
Burbon	3/31/88	23	6.1	80
Bison Reservoir	3/31/88	18	4.6	102
Biglow Divide	3/29/88	31	8.4	111
*Brumley	4/2/88	--	9.3	87
Fremont Pass	3/30/88	55	17.0	105
Four Mile	2/25/88	20	4.6	90
Huerfano	4/27/88	26	9.1	88
Ivanhoe	3/29/88	53	15.5	83
La Veta	3/23/88	35	10.2	89
Monarch Offshoot	3/29/88	39	13.0	94
South Colony	3/29/88	47	15.8	62
Saint Elmo	4/26/88	35	9.9	75
Spruce Creek	3/27/88	26	8.5	89
Trout Creek	2/25/88	15	3.9	98
Westcliffe	2/25/88	22	6.8	94
*Whiskey Creek	4/15/87	--	6.9	173

*No snow course estimated from SNOTEL site.

A Thiessen polygonal analysis of the snow pack data above 9,000 indicates that the Arkansas River Drainage received 94% of the average snowpack basinwide. The Division 2 office has utilized SNOTEL data accessed through our own user account acquired in I. Y. 1988.

Hydrology (Continued)

PRECIPITATION

The following precipitation stations in the Arkansas River Drainage show a range of 89% to 134% of the average precipitation during the irrigation year 1988.

Station	I. Y. 1988	Average (as indicated)	% Average
Turquoise Lake (1)	12.77	9.51 (49-84)	134%
Pueblo Reservoir (1)	9.68	10.87*(51-80)	89%
Trinidad Reservoir (2)	17.18	15.10 (31-84)	114%
John Martin (2)	14.35	11.72 (41-80)	122%

*Pueblo Airport

(1) Precipitation records from USBR Pueblo

(2) Precipitation records from Corps of Engineers; Trinidad & John Martin Reservoirs.

WINTER WATER PROGRAM
STORAGE SUMMARY
1988

Pueblo Reservoir	38,050.00	A.F.
Fort Lyon	81,838.91	
Holbrook	10,062.37	
Colorado	27,261.02	
Amity John Martin	25,253.10	
Consolidated John Martin	4,463.62	
Total System	186,929.02	A.F.

Theoretical 100,000 A.F. System		
28.8% of System	28,800	A.F.
71.2% of System	71,200	
Amity	2,750	
Holbrook	356	
Theoretical 103,106 A.F. System		
25% of System	20,955.76	
75% of System	62,867.26	
Total System	186,929.02	A.F.

TRANSMOUNTAIN DIVERSION SUMMARY

W.D.	RECIPIENT		IYR 1987 AF	IYR 1987 DAYS	IYR 1988 AF	IYR 1988 DAYS	W.D.	SOURCE
14	CITY OF PUEBLO	TENN CRK	813	102	1030	150	11	EWING D
14	CITY OF PUEBLO	TENN CRK	2200	103	881	58	11	WURTZ D
14	CITY OF PUEBLO	TENN CRK	580	93	431	79	11	WURTZ EXT
14	CITY OF PUEBLO	ARK RIV	1210	100	1050	108	11	COLUMBINE D
17	CATLIN CANAL	ARK RIV	77	72	119	104	11	LARKSPUR D
11	TURQOISE RES LK	FK CRK	3330	52	14280	41	11	BOUSTEAD TU
14	CITY OF PUEBLO	LK FK CRK	3580	174	4270	154	11	BUSK IV TUN
14	HIGHLINE CANAL							
14	CITY OF PUEBLO							
10	CITY OF CO SPRGS	LK FK CRK	20420	141	28690	125	11	HOMESTK TUN
2	CITY OF AURORA							
14	CITY OF PUEBLO	LAKE CRK	18110	338	32420	365	11	TW LKS TUN
10	CITY OF CO SPGS	LK CRK						
19	CUERNO VERDE CATTLE & LAND CO		322	35	1027	116	19	MEDANO D. & HUDSON EXT.

WATER DIVERSION SUMMARIES BY DISTRICT* IY '88

W.D.	OBSERVED RECORDINGS	TOT. DIV. A.F.	TOT. DIV. TO STORAGE	NO ACRES IRRIGATED	AVERAGE A.F. ACRE	TOT. DIV. NON-IRR.
10	3338	51300	0	9005	2.81	26000
11	2179	108206	82600	15572	6.95	114000
12	2353	142868	1000	12580	11.40	NA
13	696	35250	0	18700	1.88	0
14	2982	267500	25800	25900	10.35	43300
15	1231	14620	2000	4600	2.74	0
16	1203	7029	0	2064	3.41	0
17	1841	393100	170000	92500	4.25	271400
18	406	6150	0	3383	1.82	0
19	2935	70000	46700	25000	2.80	5000
66 & 67	300	137400	0	61800	2.28	NA
79	955	12635	0	3990	3.17	0

*Estimated actual values will be provided in later reports.

RESERVOIR STORAGE SUMMARY

I.D.	RESERVOIR	SOURCE	CONTENT AF NOV 1, 1986	CHANGE CONTENT %	CONTENT AF APR 1, 1987	CHANGE IN CONTENT %	CONTENT AF NOV 1, 1987	CHANGE IN CONTENT %	CONTENT AF APR 1, 1988	CHANGE IN CONTENT %	CONTENT AF NOV 1, 1988
.1	Turquoise	Lake Fork	127685	-1.50	125766	-1.10	124385	-4.61	118646	6.04	125818
.1	Twin Lakes	Lake Creek	136465	-4.50	130320	-3.52	125732	-6.32	117780	13.87	134114
.1	Clear Creek	Clear Creek	9662	6.75	10314	-49.84	5174	56.84	8115	-100.00	0
.4	Pueblo	Arkansas	250647	6.11	265956	-13.95	228850	16.21	265956	-43.86	149318
.9	Trinidad	Purgatoire	14492	77.60	25738	80.70	46508	12.82	52472	-62.47	19693
.7	John Martin	Arkansas	226308	55.93	352882	-30.18	246367	23.37	303934	-74.01	78984
	Total Others	Ark. Riv. Basin	267600	37.56	368100	-28.55	263000	5.13	276500	-73.92	72100
	TOTALS	ARK. RIV. BASIN	1032859	23.84	1279076	-18.69	1040016	9.94	1143403	-49.27	580027

WATER COURT ACTIVITIES

(CALENDAR YEAR 1988)

No. Application for Decrees	104	Cases
No. Consultations with Referee	110	
No. Decrees Issued	105	
No. Dismissals (Includes 3 U. S. Cases)	10	
TYPES OF RULINGS		
Findings of Diligence on Conditional Rights	27	
Cancelled Conditional Rights	9	
Conditional Rights Made Absolute	5	
Augmentation Plans Approved (Including Exchanges)	8	
Cases Awarding New Wells	14	
Cases Awarding New Wells in Denver Basin Wells	10	
Cases Awarding New Springs	12	
Cases Awarding New Hydro-Electric Plants	0	
Cases Awarding New Reservoirs (Includes Stock Ponds)	5	
Cases Awarding Change of Location	5	
Cases Awarding Change of Use	0	
Rulings on Protest to 1984 Abandonment List	0	
Cases Appealed to Colorado Supreme Court	4	(84CW177, 86CW91, 81CW192, 85CW100)
Cases Awarding Other Structures (Pipelines, Alternate Points of Diversion, Etc.)	7	
NEW STRUCTURES IN DECREES		
Reservoirs (Includes Stock Ponds)	240	
Wells (Includes 30 Denver Basin Wells)	194	
Springs	123	
Other (Pipelines, Alternate Points of Diversion, Etc.)	10	

Month December, 1988

WATER DIVISION NO. 2

ACTIVITY SUMMARY

ACTIVITY	MONTHLY TOTAL	FISCAL YEAR TO DATE
Number of professional and techncial staff		7
Number of clerical staff		2
Number of Water Commissioner FTE assigned (full and part-time)		18
Number of decreed surface rights (incl/Spgs)		*8,000
Number of surface rights administered		5,800
Number of wells		***23,170
Number of plans for augmentation		91
Number of consultations with Referee	15	106
Number of Water Court appearances	2	36
Number of meetings with water users	1075	8541
Number of meetings to resolve water related disputes		
Number of contacts to give public assistance on water matters (including telephone inquiries and an estimated number of contacts made by water commissioners)	1264	9672

* Estimate from Tabulation.

** All meetings were to resolve water problems.

*** Includes Domestic.

RIVER CALL

Irrigation Year 1988

DATE	PRIORITY DATE	ENTITY	DISTRICTS	DURATION OF CALL/DAYS
11/01/87	03/01/1887	Ft. Lyon #12	10-15, 17	15
11/15/87	03/01/1910	Winter Water	ALL	120
03/15/88	12/03/1884	Catlin #1	10-15, 17	2
03/17/88	09/25/1889	Holbrook #1	10-15, 17	4
03/21/88	03/01/1887	Fort Lyon #2	10-15, 17	11
04/01/88	1948	John Martin	ALL	6
04/07/88	03/01/1887	Fort Lyon #2	10-15, 17	21
04/28/88	12/03/1884	Catlin #1	10-15, 17	4
05/02/88	04/15/1884	Fort Lyon #1	10-15, 17	1
05/03/88	12/03/1884	Catlin #1	10-15, 17	5
05/08/88	04/15/1884	Fort Lyon #1	10-15, 17	10
05/18/88	03/01/1887	Fort Lyon #2	10-15, 17	3
05/21/88	06/09/1890	Colorado	10-15, 17	3
05/24/88	09/25/1889	Holbrook #1	10-15, 17	2
05/26/88	03/01/1887	Fort Lyon #2	10-15, 17	3
05/29/88	01/06/1890	Highline (Jr.)	10-15, 17	3
06/01/88	06/09/1890	Colorado	10-15, 17	1
06/02/88	01/06/1890	Highline (Jr.)	10-15, 17	1
06/03/88	03/01/1887	Fort Lyon #2	10-15, 17	4
06/07/88	06/09/1890	Colorado	10-15, 17	12
06/19/88	03/01/1887	Fort Lyon #2	10-15, 17	1
06/20/88	09/25/1889	Holbrook #1	10-15, 17	2
06/22/88	11/04/1886	Lamar	10-15, 17, 67	1
06/23/88	05/01/1887	Bessemer (Jr.)	10-15, 17	1
06/24/88	06/09/1890	Colorado	10-15-17	11
07/05/88	03/01/1887	Fort Lyon #2	10-15, 17	6
07/11/88	11/14/1887	Catlin #2	10-15, 17	2
07/13/88	03/01/1887	Fort Lyon #2	10-15, 17	2
07/15/88	02/26/1887	Oxford #2	10-15, 17	2
07/17/88	02/21/1887	Amity	10-15, 17, 67	9
07/26/88	12/03/1884	Catlin #1	10-15, 17	1
07/27/88	04/15/1884	Fort Lyon #1	10-15, 17	1
07/28/88	12/03/1884	Catlin #1	10-15, 17	8
08/05/88	05/01/1887	Bessemer (Jr.)	10-15, 17	1
08/06/88	06/09/1890	Colorado	10-15, 17	1
08/07/88	05/01/1887	Bessemer (Jr.)	10-15, 17	1
08/08/88	03/01/1887	Fort Lyon #2	10-15, 17	1
08/09/88	12/03/1884	Catlin #1	10-15, 17	1
08/10/88	05/01/1887	Bessemer (Jr.)	10-15, 17	1
08/11/88	03/03/1890	Otero	10-15, 17	1
08/12/88	03/01/1887	Fort Lyon #2	10-15, 17	1
08/13/88	02/26/1887	Oxford #2	10-15, 17	2
08/15/88	12/03/1884	Catlin #1	10-15, 17	14
08/29/88	03/11/1886	Highline	10-15, 17	3
09/01/88	12/03/1884	Catlin #1	10-15, 17	13

RIVER CALL continued

DATE	PRIORITY DATE	ENTITY	DISTRICTS	DURATION OF CALL/DAYS
09/14/88	02/21/1887	Amity	10-15, 17, 67	2
09/16/88	03/01/1887	Fort Lyon #2	10-15, 17	3
09/19/88	02/21/1887	Amity	10-15, 17, 67	1
09/20/88	12/03/1884	Catlin #1	10-15, 17	18
10/08/88	03/11/1886	Highline	10-15, 17	23
10/30/88	02/26/1887	Oxford #2	10-15, 17	1
10/31/88	03/01/1887	Fort Lyon #2	10-15, 17	15

COMPACT RELEASES & DELIVERIES FOR THE STATE OF KANSAS

Release #1 began at 1300 hours March 29, at a rate of 400 c.f.s. The release was decreased to 324 c.f.s. at 1400 hours March 31, and stopped at 1600 hours March 31. This release totalled 1673.41 a.f.

Release #2 began at 1030 hours April 13, at a rate of 350 c.f.s. The release was increased to 700 c.f.s. at 1600 hours on April 21, and stopped at 0900 hours April 26. This release totalled 12,250.14 a.f.

Release #3 began at 0900 hours May 19, at a rate of 450 c.f.s. and stopped at 0900 hours May 22. This release totalled 2677.74 a.f.

Release #4 began at 0900 hours June 21, at a rate of 650 c.f.s. The release was decreased to 450 c.f.s. at 1100 hours July 8, increased to 550 c.f.s. at 0900 hours July 13, decreased to 400 c.f.s. at 0900 hours July 21, increased to 650 c.f.s. at 0900 hours July 27, increased to 700 c.f.s. at 0900 hours August 2, decreased to 600 c.f.s. at 1200 hours August 10, decreased to 400 c.f.s. at 1500 hours August 19, increased to 600 c.f.s. at 1300 hours August 22, and stopped at 1130 hours August 26. This release totalled 76,784.08 a.f.

Releases from the state of Kansas account totalled 93,385.37 a.f. total state-line flow during the period of these releases was 108,064 a.f.

RELEASES AND DELIVERIES TO KANSAS

WATER YEAR 1988 MONTH	DEMAND RELEASES AF	TRANSIT LOSS ACCT RELEASE AF	FRONTIER DITCH AF	ARK @ COOLIDGE AF	DITCH/RIV DELIVERY AF	CREDITED DELIVERY AF
NOVEMBER	.00	.00	.00		.00	
DECEMBER	.00	.00	.00		.00	
JANUARY	.00	.00	.00		.00	
FEBRUARY	.00	.00	.00		.00	
MARCH	1673.41	421.49	.00	484.00	484.00	484.00
APRIL	12250.14	192.16	520.00	21695.00	22215.00	20132.00
MAY	2677.74	595.05	646.00	5902.00	6548.00	5903.00
JUNE	12409.32	892.59	695.00	9508.00	10203.00	10051.00
JULY	33461.07	.00	2540.00	36390.00	38930.00	34794.00
AUGUST	30913.69	198.35	1740.00	36510.00	38250.00	35970.00
SEPTEMBER	.00	.00	105.00	625.00	730.00	730.00
OCTOBER	.00	.00	.00	.00	.00	.00
TOTALS	93385.37	2299.64	6246.00	111114.00	117360.00	108064.00

The above table reflects only times when actual releases were being made from John Martin Reservoir plus a 7 day rundown period. "Credited delivery" refers to the limitation that credit will not be taken for more than 105% of Kansas' demand.

SUMMARY OF HYDROGRAPHIC RECORD
1988 IRRIGATION YEAR

STATION	TOTAL DISCHARGE	MAX DISCHG	MIN DISCHG
Lake Fork Crk Above Turq. Res.	9850	150	1.0
Lake Fork Crk Bel. Turq. Res.	5380	17	3.0
Lake Crk above Tw. Lks. Res.	79600	1390	7.8
Lake Crk bel. Tw. Lks. Res.	78910	966	10
Ark. Riv. @ Granite	191700	2320	70
Cl. Crk. above Cl. Crk. Res.	35350	440	9.0
Cl. Crk. bel. Cl. Crk. Res.	38333	249	0
Cottonwood Crk. @ Buena Vista	14020	105	.25
Chalk Crk. @ Nathrop	20870	312	1.0
Ark. Riv. @ Salida	333800	2480	200
Ark. Riv. nr. Wellsville	380800	2520	220
Grape Crk. nr. Westcliffe	22410	453	6.4
Ark. Riv. @ Canon City	388200	2560	224
Ark. Riv. @ Portland	416000	2290	224
Ark. Riv. above Pueblo	419800	2020	95
Ark. Riv. nr. Nepesta	398400	3290	107
Ark. Riv. nr. Fowler (Bel. Cat. Dam)	393720	2150	70
Huerfano Riv. nr. Redwing	18520	500	10
Cucharas Riv. @ Boyd Ranch nr. La Veta	9750	41	5.4
Purgatoire Riv. @ Trinidad	58990	640	1.9
Luning Arroyo nr. Model	1210	2100	.08
Van Bremer Arroyo nr. Model	1020	167	.08
Purgatoire Riv. nr. Thatcher	43350	2960	13
Ark. Riv. @ La Junta	97600	1450	12
Ark. Riv. @ Las Animas	84790	522	19
Purgatoire River @ Las Animas	31780	1460	2.4
Purgatoire River @ Nine Mile Dam	51900	2450	0
Muddy Crk. @ Muddy Crk. Reservoir	0	0	0
Rule Crk. off Highway 101	67	44	0

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June 15, 1989

Paula
Please give me all copies of the 1988 Annual Report so I can remove the page Hal

Steven J. Witte
Division Engineer
Water Division No. 2
P.O. Box 5728
Pueblo, CO 81002

Re: Kansas v. Colorado
No. 105, Original

Dear Steve:

The Division Engineer's Annual Report for the 1988 Irrigation Year (November 1, 1987 - October 31, 1988) contains a summary of activities conducted by the Division Office in connection with the lawsuit in Kansas v. Colorado. Some of the activities described involved privileged matters. For example, work done pursuant to requests made by me. I do not know whether the report is circulated outside of the Division of Water Resources, but it should not be provided to persons who are not employees of the Division of Water Resources unless the progress section is removed. Bob Jesse gave me a copy which was given to him, but I would appreciate it if you would make sure no other copies are floating around where they might be subject to discovery by Kansas.

Very truly yours,

Dennis M. Montgomery

DMM:cp

cc: Hal D. Simpson
(287)

[redacted]