ANNUAL REPORT

1984 - Water Year

Irrigation Division No. 4

RICHARD D. LAMM
Governor

J. A. DANIELSON
State Engineer

DIVISION OF WATER RESOURCES

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January 14, 1985

Mr. Jeris A. Danielson, P.E.
State Engineer
Division of Water Resources
1313 Sherman Street, Room 818
Denver, Colorado 80203

Dear Mr. Danielson:

On behalf of the office and field personnel of Irrigation Division Four, I submit herewith the Annual Report for 1984.

Special attention is directed to the Division Four staff who have attended to the various responsibilities of water administration with a high degree of professionalism.

Division Four is pleased to submit this year's Annual Report by using the new Wang PC word processor and the multiplan system for the statistical part of our Annual Report. This is our first attempt at utilizing this equipment for this type of report, and it is anticipated that this will be a significant tool as far as future communications from the division office. Also, it is important to commend Jean Kurtz and Chuck David in their efforts to use this equipment with such short acquaintance to this computer.

Respectfully submitted,

Ralph V. Kelling

Ralph V. Kelling
Division Engineer

RVK: jk
Enc.

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ANNUAL WATER DIVISION ENGINEER'S REPORT

Irrigation Division Four

I. WATER ADMINISTRATION

A. Water Year 1984

1. Accomplishments for the Year: Division Four would like to outline many activities which are considered accomplishments for the water year 1984. Some of the following activities have taken place throughout the division and are considered significant at the specific location concerned.

The Division Four staff played a major role in cooperating with all concerned during the spring runoff. Because of heavy snow accumulations throughout the division drainages, all of the rivers and streams were approaching, or above flood stage at some time during the runoff season. The Gunnison River in the Gunnison area was in flood stage for approximately a month and during this time the field water officials kept the local citizens, government, and water users advised of river stages, changes and trends in flow. This was considered an important part of overall community attention to these conditions. State Water Commissioners were not only active in the Gunnison area, but along the Uncompahgre River from Ouray to Delta, the main stem of the Gunnison River through the Delta area and many tributaries to the Gunnison and the North Fork of the Gunnison River.

Division Four considers the association with the division Water Court as continually improving. It is felt that the division staff is inspecting and commenting to the water right applications at a higher level of detail. And the Water Court is able to improve the quality of the new decrees. The activities of the entire division staff as it relates to water right applications has improved their overall knowledge of each individual water district. This is considered an improvement in the total accomplishments for all members of the division staff.

Division Four continues to better utilize the personnel of the division. This is accomplished through several methods. One is slowly acquainting each commissioner with some of the adjacent areas of responsibility in order that they can function as back-up during times of emergency. This also has been implemented by the consolidation of two positions existing on Surface Creek drainage into one position. And also the replacement of retired and transferred personnel with local, well qualified recruits. It is extremely difficult to find good part-time employees throughout the division, and it is felt that one of the significant accomplishments of 1984 and years past has been the ability to recruit and retain well qualified part-time employees.

Division Four field personnel continue to develop communications with reservoir owners and water users, and it is felt that the lack of serious dam failures and water management problems is directly related to this communication between the field personnel, the division office and the water using public.

This division was able to meet all of the deadlines set forth for the 1984 publication of the Water Rights Tabulation and the 1984 abandonment tabulation. The division was able to notice more than 97 per cent of all the proposed abandonment water rights owners/agents.

2. Community Water Users Involvement: Division Four is the major source of diversion data and water decree information. Water users groups, conservancy districts, large canal companies, state and federal governments, land developers, attorneys, and consulting engineers are regular visitors to the field commissioners' homes, and the Division Four offices. Their requests concern all aspects of water administration and water use throughout the division. Division Four staff members are involved in "water meetings" with various entities concerning administration, dam safety, water diversion control structures and other miscellaneous activities.

During 1984 many of the division staff were an integral part of the "flood watch" and information services on the majority of the major tributaries throughout the division. Reports were furnished to the various County Commissioners, United States Weather Service, city and county law enforcement departments, and many interested individual citizens.

3. Impact from Policies, Statutes and Administrative Practices: During early 1984 Division Four was continuously involved in the generation of 1984 Water Rights Tabulation and the 1984 propsed Water Rights Abandonment List. This was directed by statute and has had far reaching consequences on the personnel and fiscal resources of the division. Most of the full and part-time winter employees were involved in the development of these tabulations and all of the various deadlines were met as they were requested. Minimum inquiry has been made concerning the Water Rights Tabulation and what was considered minimal interest in the abandonment tabulation was experienced until late November and into the month of December, 1984. At this particular time, the public became very active in their concerns with the abandonment list and nearly one hundred fifty protests to Division Four abandonment list have been filed before the January 1,1985 deadline.

The abandonment list has required significant time from all the field personnel in public contact, explanation, and directing water users to the Division Water Court and Division Engineer's office. Inquiry and protests have been made from all segments of the division water users (individual farmers and ranchers, various commercial corporations, nearly all the municipalities throughout the division, and state and federal governments.) One significant result coming from these activities is the emphasizing of the need for accurate, consistent, and timely diversion records of water rights throughout the division.

The association with the Division Water Court continues to require considerable time, mileage, and effort on the part of the division staff in order to evaluate and make recommendations through the consultation process. This additional workload was somewhat lighter than 1983 due to a smaller number of water right filings. However, in several instances, the importance of good solid diversion records were emphasized by the need to verify diversion and acreage relative to change of water rights and plans of augmentation.

The United States Bureau of Reclamation appears to have established a firm position in the subordination of a portion of their water rights that involve the Upper Gunnison Basin. This has resulted in a revised well permit policy and part of the Upper Gunnison Basin is no longer considered an over-appropriated system.

The increased emphasis on dam safety has had some impact on personnel throughout Division Four. However, Division Four is pleased to note that the majority of the field personnel responsible for reservoir administration have always taken a very active part in field inspection and evaluation of reservoirs and the many dams throughout the division. Several structures were requested to be looked at and this was accomplished in a timely manner.

The change in the specifications concerning jurisdictional dams is considered to be a positive step and also the requiring of intent to construct non-jurisdiction dams shall be helpful; however, at this time, this particular policy is not widely assimilated throughout the division.

4. Problems, Concerns, Issues not Addressed During the Year: It remains impossible to thoroughly visit all diversion structures during the irrigation season. It is necessary that water officials organize their time, and in some instances, choices had to be made and various concerns were left unaddressed. The water officials experienced increased demands and very often, insufficient time to address all needs. The water using public is demanding better diversion records and in some cases, due to personnel and time limitations, it is not possible to show improvement for the year.

During 1984 the division office was not able to make any significant effort in the mapping of irrigated acreage due to the demands of required abandonment list and Water Rights Tabulation. Also, budget limitations made it necessary to reduce mileage for field staff to travel and work in the division office.

5. Effect of Workload Change: In the past ten years, increases in division staff have been very limited and the field commissioners are not able to always keep up with new water rights. These new decrees have in some instances nearly doubled their field workload, and commissioner time and staff have not increased accordingly. Many of the new, along with some of the old, water rights are not identified adequately in the annual diversion records.

The division continues to increase their participation in the evaluation, inspection, and review of new water rights applications. This can be a very time consuming activity and in some instances, require the neglecting of other responsibilities in order to meet the court and statute set deadlines.

Division Four assisted in the research and coding of three water districts from Irrigation Division Five for tabulation purposes. This involved six of the full-time employees and approximately six weeks of full-time work. These individuals checked and corrected nearly every court action within these particular water districts. It was necessary for them to make several trips to Division Five to consult with the

Division Engineer or his representative and devote their total energies to this project for the time mentioned above. This work I am sure, was of great assistance to Division Five and this particular work was considered of a higher priority than other projects contemplated by Division Four.

6. Budget Impact: Budget restrictions have limited off-season attention to water diversion administration records throughout the entire division. Because so many of Division Four's personnel are part-time employees, and with the ongoing responsibilities assigned to the annual employees, attention to winter diversion records and administration has been kept at a minimum. The records resulting from these activities are considered marginal at best. Division mileage allocations have limited travel during the winter months for some of the full-time employees and this has resulted in the reduced work on special projects in the division. Salary allocations to part-time employees for the division generally met the minimum need to fund the seasonal employees for the irrigation season. During 1984, it was possible to reallocate two part-time employees in the Cedaredge area and combine these positions into one position with some additional months allocated. This time saved was sufficient to allow the remainder of the part-time employees in that area to fully complete the irrigation season and be allowed some time for earned annual leave after their water administration duties were completed. This action was received locally as very controversial. The matter was discussed by all the water users within the affected area. Meetings were held, committees were formed, and petitions were circulated; however, the change was implemented and it was considered successful for the year 1984. It should be noted that 1984 was considered an excellent water supply year, and it is not known what impact might occur if a less than average irrigation year were to occur in this area. All change however minor is met with considerable resistance in most instances throughout the division, and usually takes months of lobbying on the part of the field and division staff to persuade the water users to accept the proposed changes.

B. 1985 Water Year

1. Problems and Concerns to Impact Division Operations: Water right filings continue to have time and budget impact throughout Division Four. This is not considered a negative impact; however, it requires specific planning and setting of work priorities by all employees. These activities effect the majority of the division staff and requires considerable additional field attention in the areas where heavy filings take place, i.e., Upper Gunnison Basin, parts of San Miguel drainage, upper Uncompahgre drainage, and most locations throughout District 40. The required special attention and administration of water right augmentation plans will add additional responsibilities to field personnel and division office staff.

The changing status of the Upper Gunnison Basin relative to the ground water over-appropriation position will continue to generate inquiry and concerns throughout the local area. Conditions in this area have been in a state of transition with some significant change being brought about by the subordination of the Bureau of Reclamation senior storage rights.

At this writing, we are not able to fully anticipate the impact that will be generated by the legal activities surrounding the proposed abandonment of water rights in Division Four. As earlier mentioned in the report, only a few protests were entered until the final two weeks of 1984 at which time 120 protests were filed. It is anticipated that at the very least, court time required in attending to these cases will be nearly a month and this could very likely start at the beginning of the irrigation season.

Another concern to division operations is the completion of the Ridgway Dam in the summer of 1985 and the development of administrative procedure in storage and release from this structure. An always present concern is the ongoing improvements of diversion records, measuring devices and diversion structures. Improvement always seems to be appropriate in some areas throughout the division, and as a higher quality of diversion records are demanded, upgrading of these structures become more important.

2. Particular Problems and Concerns That Will Not Be Addressed: Attention to winter diversions again will be addressed only as needed on a minimal basis. However, there should be some improvement over the past year. Many water rights throughout the division will not be recorded; however it is anticipated that infrequent records will be increased on some of the structures in order to at least identify the diversion use. It is felt that the division should be able to address and adequately take care of the majority of problems that may arise during the 1985 irrigation season and barring unforeseen weather conditions or significant personnel losses all the responsibilities of Division Four should be adequately attended to.

3. Projected Work Items Planned for 1985 for the Division Staff: During the winter of 1984, the division staff will continue to update and correct Water Rights Tabulation. The division staff hopes to continue the mapping or identification of irrigated acreage throughout the division. It is hoped that at least five per cent of the total acreage can be mapped during the winter season. (The goal set for 1984 was not met, perhaps one to two per cent additional mapping was accomplished.)

Better planning toward the inspection, review and consultation process of new water right applications is planned for 1985. It is proposed that the division field staff increase the total number of structures identified and records kept by seven to ten per cent during the 1985 irrigation season.

4. Division Priorities in Terms of Goals and Objectives: Division Four needs to continue working toward improvement of water administration and diversion record-keeping throughout the 1985 season. To respond to all the protests of the 1984 proposed water right abandonments. To keep as current as possible in the ongoing review and consultation of new water right applications with the Water Court. To pick up and conclude water right cases that are outstanding for more than one year. To continue an ongoing instruction process with field personnel concerning their water administrative and record-keeping responsibilities. To continue to be sensitive to the public concerns as they relate to the Division of Water Resources and to respond in an accurate and timely fashion.

To utilize the satellite monitoring system recently installed and to utilize the computer equipment that is now part of Division Four's standard office equipment will be considered a major objective during 1985. It is hoped that all key personnel, both office and field, will have a working knowledge of these various pieces of equipment in order to access remote gaging terminals and also to access other division data through the computer system as needed. To reach this particular objective, it is anticipated that a formal study instructional program will be instituted with the various staff members being involved in classes throughout the winter months and as necessary, during the irrigation season. One final objective of the computer equipment is to be able to utilize the word processing capabilities on a regular basis.

II. Recommendations

A. Policies

1. Water Administration: It is not anticipated that there will be any significant change in the policies of Division Four during 1985. The division will continue to meet the responsibilities of water administration throughout the division area and to be responsive to the directions of the State Engineer and the requests of the water using public. It is hoped that the quality and quantity of diversion records can be improved and it is a goal to improve at least five per cent during this irrigation season. This would include increasing the number of visits to diversion structures, better coordinating the activities of field personnel, eliminating duplication, working toward closer contact of division office and field personnel and improving communications between the division office and the Denver office of the Division of Water Resources.

2. Personnel: Division Four is faced with the replacing of one Water Commissioner "B" at the end of the 1985 season. This is due to the retirement of Lester Whiting, and it is hoped that recruitment for this replacement can begin prior to his retirement. No other personnel changes are anticipated during the 1985 season; however, it is the experience of this office that at least one individual in one of the part-time jobs will be leaving state employment before the conclusion of the irrigation season. Additional goals for the 1985 season includes the improvement of planning and review of employees under the PACE system, a/k/a FAPAS. It is hoped throughout the division that this procedure will have greater meaning to all personnel.

3. Budget: With the consolidation of two positions in Water District 40, and the rearranging of man-months available for allocation to Water District 40 and throughout the division, the total allocation of man-months for part-time employees is now near what is considered necessary to maintain the present level of water administration throughout the division. These allocations are considered minimum without any latitude for unusual situations such as particularly dry years, unusual weather conditions, etc., and does not leave any additional time for attention to special needs and projects during the winter season.

4. Litigation Activities: Division Four's policy is to minimize the necessity of litigation as much as possible through close communication with the State Engineer's office, the Water Court, and the various water user applicants. It is anticipated that one or two cases during 1985 may be subject to the legal process. At the present time, there is one deep non-tributary water well right application that has been opposed by the State Engineer. It is not anticipated that this matter will be carried to a court hearing; however, it will be necessary to monitor this particular action. It is also possible with the great number of protests to the Division Engineer's Abandonment List that the Attorney General's assistance will be requested and needed during various parts of the court hearings concerning these abandoned water rights. At this writing, the court has given no indication on how these matters will be addressed; however, there is some anticipation that the court may inquire as to the position and intent of the Division of Water Resources identifying these water rights.

B. Personnel Changes: At this writing, there is one employee in Division Four who will retire at the end of the 1985 irrigation season. This is Lester Whiting and his area of responsibility is in Water District 42, specifically the Kannah Creek drainage. Mr. Whiting's 70th birthday will be during the month of June; however, request has been made and approved for an extension to the completion of the 1985 irrigation season. Due to the great number of part-time employees, it is anticipated that there is a good chance that one other employee somewhere throughout the division will be changing jobs before the conclusion of 1985. This concern will be attended to whenever it arises.

C. Budgetary Priorities: (See A.3.) Several items are considered important concerning budgetary priority for 1985. The funding of the recommended promotions would probably be considered foremost. Additional concern would be increasing the division operating fund. It is anticipated that with the mandatory cuts and increased state vehicle costs that this total allocation will be somewhat short of the needs for 1985. It is also considered important to replace the division staff vehicle, and consider replacing the division hydrographer's vehicle, and the purchase of an additional vehicle for Richard Belden who consistently exceeds the 15,000 mile annual mileage level.

D. Administrative Practices: It is anticipated in 1985 that the division will be more involved in the administration of plans of augmentation, dam safety inspections and reports, better and more accurate diversion records, arbitrators in jurisdictional water disputes, and a general attention to the various responsibilities as in past years.

E. Legislation:

F. Other: It is recommended that the Division of Water Resources consider establishing a formal or informal training program responsible for regular training sessions to division staff and water commissioners. Also, teaching on matters such as personnel management, field instruction concerning ground water to field water officials, dam safety follow-up classes, computer instruction and operation, and many other associated subjects that involve the responsibilities of the Division of Water Resources and the irrigation divisions.

III. Statistical Information

A. Transmountain Diversions (See attached tables.)

B. Storage Water (See attached tables.)

C. Water Diversions (See attached tables.)

D. Court activities (See attached tables.)

E. Office Administration: It is not anticipated that the office administration shall change significantly from past years. The office is open from eight o'clock to five o'clock to assist the general public in water related matters. We will continue to direct and advise water well applicants, help with routine water right applications, interpret water decrees, and present the position of the State Engineer to the public.

F. River Calls: The mountain snow-pack at this time is above average; however, not nearly as great as in 1984. Some stream administration was necessary during 1984 in the Cedaredge area and on Kannah Creek. It is considered that this would be a similar area for river calls during 1985. The remainder of the division should have sufficient water to meet all anticipated needs and a call is not anticipated except as noted above.

G. Compact Deliveries: Division Four is under the Colorado River Compact and at the present time, there is no administration involvement in the delivery of water to the Colorado River Water Compacts.

H. Administration of Plans of Augmentation: During 1984 there was not any administration of plans of augmentation throughout the division. This was primarily due to the great abundance of flow in all drainage areas. It is possible that in 1985 it may be necessary to make some minor administrative releases in order to address injury created by out-of-priority diversions. However, this is not considered to be a major item during the 1985 irrigation season.

1984 TRANSMOUNTAIN DIVERSIONS SUMMARY - INFLOWS

RECIPIENT			PREVIOUS IYR		IYR OF RECORD		SOURCE	
WD	NAME	STREAM	AF	DAYS	AF	DAYS	WD	STREAM
28	None							
40	Leon Lake Tunnel	Surface Creek		83	1,923	118	72	Leon Creek
41	None							
42	None							
59	None							
60	None							
61	None							
62	None							
63	None							
68	Carbon Lake Ditch	Uncompahgre River	0	0	0	0	30	Animas River Tributary
	Red Mountain Ditch	Uncompahgre River	0	0	0	0	30	Mineral Creek
73	None							
TOTAL			1,859		1,923			

1984 RESERVOIR STORAGE SUMMARIES

WD	RESERVOIR NAME	STREAM SOURCE	PREVIOUS IYR BEG. AF	PREVIOUS IYR IYR %	PREVIOUS IYR BEG.I.SEAS. AF	PREVIOUS IYR BEG.I.SEAS. %	IYR OF RECORD BEG. AF	IYR OF RECORD IYR %	IYR OF RECORD BEG.I.SEAS. AF	IYR OF RECORD BEG.I.SEAS. %	IYR OF RECORD END IYR AF
	MAJOR										
28	Hot Springs Reservoir	Hot Springs Creek	254	42	603	100	24	4	603	100	158
28	McDonough Reservoir #1	Los Pinos Creek	805	100	805	100	805	100	805	100	805
28	McDonough Reservoir #2	Los Pinos Creek	742	84	742	84	742	84	887	100	887
28	Needle Creek Reservoir	Needle Creek	413	49	742	87	492	58	610	72	642
28	Upper Cochetopa Res.	Cochetopa Creek	395	45	492	56	442	50	606	69	442
28	Vouga Reservoir	Razor Creek	565	62	910	100	495	54	910	100	530
	MAJOR										
40	Alexander Lake Res.	Ward Creek	133	85	157	100	121	77	157	100	49
40	Ault Reservoir	Muddy Creek	0	0	116	100	0	0	116	100	0
40	Bailey Reservoir	Leroux Creek	110	26	423	100	79	19	423	100	0
40	Barren Lake Reservoir	Kiser Creek	719	90	800	100	521	65	800	100	506
40	Basin #1 Reservoir	Dirty George Creek	0	0	258	100	65	25	258	100	65
40	Basin #2 Reservoir	Dirty George Creek	0	0	63	53	0	0	41	35	0
40	Battlement #2 Reservoir	Dirty George Creek	913	100	913	100	913	100	913	100	713
40	Baxter Reservoir	Smith Fork Creek	318	100	318	100	318	100	318	100	318
40	Beaver Dam Reservoir	Escalante Creek	0	0	396	100	0	0	396	100	0
40	Beaver Reservoir	Minnesota Creek	41	3	1,308	97	123	9	1,146	85	0
40	Bruce Park Reservoir	Hubbard Creek	0	0	650	93	0	0	650	93	0
40	Carbonate Camp #6	Youngs Creek	96	85	113	100	50	44	113	100	86
40	Carbonate Camp #7	Youngs Creek	65	60	108	100	0	0	86	80	15
40	Carl Smith Reservoir	Leroux Creek	569	68	838	100	0	0	838	100	838
40	Cedar Mesa Reservoir	Surface Creek	480	52	926	100	325	35	926	100	288
40	Cole #5 Reservoir	Surface Creek	0	0	117	100	0	0	117	100	0
40	Columbine #1 Reservoir	Muddy Creek	0	0	176	100	0	0	176	100	176
40	Crawford Reservoir	Iron Creek	8,271	58	14,300	100	7,723	54	14,300	100	10,125
40	Daniels Sl. Reservoir	Kiser Creek	180	79	228	100	140	61	228	100	170
40	Deep Slough Reservoir	Ward Creek	212	43	498	100	161	32	498	100	251
40	Deep Ward Reservoir	Ward Creek	1,043	61	1,700	100	1,213	71	1,700	100	1,256
40	Dog Fish Lake Reservoir	Leroux Creek	0	0	243	100	0	0	243	100	0
40	Donnelly Slough Res.	Kiser Creek	165	60	277	100	252	91	277	100	184
40	Dowdy Reservoir	Leroux Creek	0	0	264	100	0	0	264	100	0
40	Dugger Reservoir	Oak Creek	117	55	212	100	212	100	212	100	212
40	East Beckwith #1 Res.	Anthracite Creek	156	43	360	100	80	22	360	100	16
40	Eggleston Lake Res.	Kiser Creek	2,350	87	2,705	100	2,143	79	2,705	100	2,272
40	Elk Wallows Reservoir	Leroux Creek	218	100	218	100	86	39	218	100	14

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WD	RESERVOIR NAME	STREAM SOURCE	PREVIOUS IYR BEG. IYR AF	PREVIOUS IYR BEG. IYR %	PREVIOUS IYR BEG.I.SEAS. AF	PREVIOUS IYR BEG.I.SEAS. %	IYR OF RECORD BEG. IYR AF	IYR OF RECORD BEG. IYR %	IYR OF RECORD BEG.I.SEAS.END AF	IYR OF RECORD BEG.I.SEAS.END %	IYR OF RECORD END IYR AF
	MAJOR										
40	Ella Reservoir	Leroux Creek	0	0	98	90	0	0	98	90	0
40	Fruitgrowers Reservoir	Dry Creek	3,503	81	4,312	100	1,927	45	4,312	100	1,453
40	Goodenough Reservoir	Kiser Creek	90	60	149	100	90	60	149	100	116
40	Goodenough #2 Res.	Leroux Creek	684	78	872	100	372	43	872	100	326
40	Grandby #11 Reservoir	Dirty George Creek	579	75	775	100	761	98	703	91	724
40	Grandby #12 Reservoir	Dirty George Creek	499	66	610	81	480	64	634	84	402
40	Gray Reservoir	Leroux Creek	56	13	424	100	126	30	424	100	79
40	Hanson #2 Reservoir	Leroux Creek	0	0	225	100	0	0	225	100	0
40	Holy Terror Reservoir	Terror Creek	0	0	146	100	0	0	146	100	0
40	Hotel Lake Reservoir	Ward Creek	436	80	548	100	451	82	548	100	455
40	Island Lake Reservoir	Ward Creek	1,251	75	1,678	100	1,454	87	1,678	100	1,317
40	Kehmeir Reservoir	Surface Creek	177	55	320	100	116	36	320	100	111
40	Kiser Slough Reservoir	Kiser Creek	290	57	512	100	158	31	512	100	287
40	Knox Reservoir	Surface Creek	138	57	241	100	58	24	241	100	49
40	Kennicott Slough Res.	Kiser Creek	272	33	812	98	324	39	812	98	272
40	Lake Brennand Reservoir	Anthracite Creek	367	100	367	100	367	100	367	100	367
40	Leon Lake Reservoir	(Transmountain)	1,237	52	2,324	98	1,237	52	2,305	98	1,254
40	Leon Park Reservoir	Surface Creek	0	0	218	100	10	5	192	88	0
40	Little Gem Reservoir	Ward Creek	118	54	219	100	111	51	219	100	219
40	Lone Cabin Reservoir	Minnesota Creek	0	0	150	100	25	17	150	100	0
40	Marcott Park Reservoir	Surface Creek	0	0	447	89	0	0	448	90	0
40	McKoon Reservoir	Youngs Creek	121	82	148	100	105	71	148	100	139
40	Military Reservoir	Surface Creek	159	67	237	100	35	15	237	100	47
40	Monument Reservoir	Minnesota Creek	0	0	461	92	0	0	461	92	0
40	Onion Valley Reservoir	Crystal Creek	430	5	8,671	94	4,301	47	8,956	98	2,668
40	Overland #1 Reservoir	Hubbard Creek	0	0	3,360	83	0	0	4,000	99	0
40	Paonia Reservoir	Muddy Creek	6,319	34	18,468	100	3,733	20	18,468	100	10,169
40	Park Reservoir	Surface Creek	1,930	57	3,383	100	1,745	52	3,383	100	1,754
40	Patterson #2 Reservoir	Leroux Creek	0	0	151	100	151	100	151	100	151
40	Pedro Reservoir	Youngs Creek	166	85	195	100	171	88	195	100	139
40	Pitcairn Reservoir	Doughspoon Creek	10	10	76	76	60	60	100	100	100
40	Porter #1 Reservoir	Oak Creek	201	100	201	100	125	62	201	100	163
40	Prebble Reservoir	Youngs Creek	162	83	195	100	138	71	180	92	160
40	Reynolds Reservoir	Reynolds Creek	0	0	100	100	0	0	100	100	0
40	Rim Rock Lake	Ward Creek	37	35	107	100	107	100	107	100	107
40	Rockwell Reservoir	Iron Creek	0	0	118	100	5	4	118	100	100

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WD	RESERVOIR NAME	STREAM SOURCE	PREVIOUS IYR BEG. IYR AF	PREVIOUS IYR BEG. IYR %	PREVIOUS IYR BEG.I.SEAS. AF	PREVIOUS IYR BEG.I.SEAS. %	IYR OF RECORD BEG. IYR AF	IYR OF RECORD BEG. IYR %	IYR OF RECORD BEG.I.SEAS.END IYR AF	IYR OF RECORD BEG.I.SEAS.END IYR %	IYR OF RECORD END IYR AF
	MAJOR										
40	Sackett Reservoir	Surface Creek	108	100	108	100	62	57	108	100	51
40	Scotland Peak Reservoir	Ward Creek	28	9	256	85	0	0	134	45	0
40	Sheep Lake Reservoir	Ward Creek	114	75	153	100	120	78	153	100	127
40	Spatafore Reservoir	Muddy Creek	0	0	100	100	0	0	100	100	0
40	Todd Reservoir	McDonald Creek	0	0	160	100	100	63	160	100	81
40	Trio Reservoir	Surface Creek	119	73	164	100	63	38	164	100	50
40	Twin Lake Reservoir #1	Surface Creek	0	0	133	99	68	51	134	100	10
40	Twin Lake Reservoir #2	Surface Creek	0	0	160	89	43	24	126	70	20
40	Tyler Reservoir	Iron Creek	0	0	169	100	110	65	169	100	85
40	Upper Hotel Lake Res.	Ward Creek	110	100	110	100	110	100	110	100	82
40	Vela Reservoir	Surface Creek	437	100	437	100	245	56	437	100	235
40	Ward Creek Reservoir	Ward Creek	226	80	284	100	158	56	284	100	161
40	Weir & Johnson #2 Res.	Surface Creek	545	86	545	86	488	77	631	5	455
40	West #1 Reservoir	Jay Creek	0	0	450	100	177	39	450	100	450
40	Williams Creek Res.	Muddy Creek	37	37	100	100	80	80	100	100	100
40	Willow Reservoir	Leroux Creek	0	0	128	100	0	0	128	100	0
40	Womack #1 Reservoir	Ward Creek	35	17	207	100	106	51	202	98	79
40	Womack #2 & #3 Res.	Kiser Creek	54	35	156	100	45	29	156	100	8
40	Young Creek Res #1 & #2	Youngs Creek	561	70	797	100	521	65	797	100	553
40	Young Creek Res. #3	Youngs Creek	113	57	200	100	76	38	200	100	7
40	Y & S Reservoir	Surface Creek	126	67	189	100	124	66	189	100	51
	OTHER										
40	VARIOUS		852	27	2,941	93	1,022	32	2,818	89	1,033
	MAJOR										
41	Buckhorn Reserevoir	Beaton Creek	182	74	247	100	206	83	247	100	238
41	Fairview Reservoir	(Imported Water)	400	100	358	90	400	100	400	100	400
41	Garnet Mesa Reservoir	Uncompahgre River	1,372	100	1,372	100	1,372	100	1,372	100	1,372
	OTHER										
41	Various		0	0	73	100	0	0	73	100	0

1984 RESERVOIR STORAGE SUMMARIES

WD	RESERVOIR NAME	STREAM SOURCE	PREVIOUS IYR BEG. IYR AF	PREVIOUS IYR BEG. IYR %	PREVIOUS IYR BEG.I.SEAS. AF	PREVIOUS IYR BEG.I.SEAS. %	IYR OF RECORD BEG. IYR AF	IYR OF RECORD BEG. IYR %	IYR OF RECORD BEG.I.SEAS. AF	IYR OF RECORD BEG.I.SEAS. %	IYR OF RECORD END IYR AF
	MAJOR										
42	Anderson #1 Reservoir	Kannah Creek	298	64	466	100	413	89	466	100	386
42	Anderson #2 Reservoir	Kannah Creek	400	70	568	100	165	29	568	100	158
42	Anderson #6 Reservoir	Kannah Creek	65	65	100	100	80	80	100	100	0
42	Bolen Reservoir	Kannah Creek	315	59	535	100	256	48	535	100	235
42	Bolen Anderson Res.	Kannah Creek	199	68	293	100	60	20	293	100	0
42	Carson Reservoir	Kannah Creek	637	100	637	100	637	100	637	100	637
42	Deep Creek Reservoir #2	Kannah Creek	80	23	350	100	0	0	350	100	0
42	Dry Cr. Res.(Chambers)	Kannah Creek	0	0	230	100	5	2	230	100	0
42	Flowing Park Reservoir	Kannah Creek	200	26	782	100	0	0	782	100	0
42	Fruita Reservoir #1	No. Fk. East Creek	NO RCD		NO RCD		NO RCD		NO RCD		NO RCD
42	Fruita Reservoir #2	No. Fk. East Creek	0		0		0		0		0
42	Fruita Reservoir #3	No. Fk. East Creek	NO RCD		NO RCD		NO RCD		NO RCD		NO RCD
42	Grand Mesa #1 Res.	Kannah Creek	75	22	348	100	222	64	348	100	70
42	Grand Mesa #6 Res.	Kannah Creek	0	0	0	0	0	0	230	100	0
42	Grand Mesa #8 Res.	Kannah Creek	45	12	0	0	0	0	0	0	0
42	Grand Mesa #9 Res.	Kannah Creek	0	0	0	0	0	0	153	100	0
42	Hollenbeck #1 Reservoir	Kannah Creek	645	95	680	100	645	95	680	100	563
42	Hollenbeck #2 Reservoir	Kannah Creek	215	43	503	100	81	16	503	100	87
42	Juniata Reservoir	Kannah Creek	5,550	83	6,723	100	6,723	100	6,723	100	6,385
42	Mirror Lake	No. Fk. East Creek	140	74	190	100	120	63	NO RCD		NO RCD
42	Scales No. 1	Kannah Creek	0	0	130	100	0	0	130	100	0
42	Scales No. 2	Kannah Creek	0	0	101	100	0	0	101	100	0
42	Somerville Reservoir	Whitewater Creek	0	0	837	100	0	0	837	100	0
	MAJOR										
59	Taylor Reservoir	Taylor River	73,115	68	108,100	100	68,240	63	108,100	100	71,814
59	Spring Creek	Spring Creek	780	48	1,630	100	820	50	1,630	100	650
59	Rainbow Lake	Willow Creek	120	100	120	100	60	50	120	100	0
59	Meridian Lake	Slate River	390	78	500	100	320	64	500	100	250
	OTHER										
59	Various		0	0	15	100	10	67	15	100	0

1984 RESERVOIR STORAGE SUMMARIES

WD	RESERVOIR NAME	STREAM SOURCE	PREVIOUS IYR BEG. IYR AF	PREVIOUS IYR BEG. IYR %	PREVIOUS IYR BEG.I.SEAS. AF	PREVIOUS IYR BEG.I.SEAS. %	IYR OF RECORD BEG. IYR AF	IYR OF RECORD BEG. IYR %	IYR OF RECORD BEG.I.SEAS. AF	IYR OF RECORD BEG.I.SEAS. %	IYR OF RECORD END IYR AF
	MAJOR										
60	Gurley Reservoir	Beaver Creek	5,112	53	6,211	64	3,866	40	9,730	100	5,112
60	Lilylands	Naturita Creek	88	18	494	100	191	39	494	100	110
60	Lone Cone	Naturita Creek	900	64	1,400	100	530	38	1,400	100	760
60	Miramonte Reservoir	Naturita Creek					4,966	72	4,966	72	4,966
60	Trout Lake	San Miguel River	3,382	100	2,476	73	2,850	84	3,382	100	3,111
60	Paxton Reservoir	Horsefly Creek	643	72	898	100	487	54	898	100	306
	OTHER										
60	Various		0	0	24	100	0	0	24	100	0
	MAJOR										
61	Buckeye Reservoir	Stateline Ditch	700	41	1,700	100	1,300	76	1,700	100	1,300
	OTHER										
61	Various		90	53	170	100	60	35	170	100	170
	MAJOR										
62	Blue Mesa Reservoir	Gunnison River	723,600	88	823,900	100	695,800	84	669,400	81	767,700
62	Morrow Point Reservoir	Gunnison River	114,000	97	114,706	98	109,800	94	115,900	99	115,300
62	Crystal Reservoir	Gunnison River	16,910	93	16,950	93	14,230	78	18,200	100	17,510
62	Silverjack Reservoir	Big Cimarron	5,530	41	13,600	100	4,865	36	13,600	100	5,670
62	San Cristobal Reservoir	Big Cimarron	9,786	100	9,786	100	9,786	100	9,786	100	9,786
62	Fish Creek No. 1 Res.	Big Cimarron	100	70	143	100	85	59	143	100	0
62	Fish Creek No. 2 Res.	Big Cimarron	100	19	522	100	325	62	522	100	0
62	Soderquist Reservoir	Willow Creek	45	27	165	100	85	52	165	100	65
62	Arrowhead Reservoir	Big Blue Creek	0	0	25	8	25	8	65	22	25
62	High Park Lake	Big Cimarron	50	12	422	100	100	24	400	95	85
	MAJOR										
63	Burg Reservoir	West Creek	0	0	122	100	0	0	122	100	0
63	Casement Reservoir	West Creek	0	0	155	100	0	0	155	100	0
63	Casto	West Creek	0	0	171	100	0	0	171	100	0
	OTHER										
68	Various		180	81	222	100	191	86	222	100	192

1984 WATER DIVERSION SUMMARIES BY DISTRICT Div 4

WD	TOTAL DITCHES REPORTING ACTIVE WA	ACTIVE NWA	INACTIVE NU	INACTIVE NR	ESTIMATED NUMBER OF DITCH VISITATIONS	TOTAL DIVERSIONS - AF -	TOTAL DIVERSIONS TO STORAGE - AF -	IRRIGATION TOTAL DIVERSIONS - AF -	IRRIGATION NUMBER OF ACRES IRRIGATED	IRRIGATION AVERAGE AF PER ACRE
28	363	0	52	55	2,065	249,590	1,824	250,547	34,391	7.29
40	790	0	56	884	20,031	442,705	52,656	461,672	120,510	3.83
41	79	0	0	147	2,185	**886,026	41	**631,353	109,890	5.75
42	41	17	3	100	3,080	24,357	4,379	29,502	8,352	3.53
59	202	0	21	39	2,122	289,214	40,910	326,850	35,220	9.28
60	383	0	183	100	2,332	108,959	7,888	104,733	29,750	3.52
61	72	0	0	27	1,250	25,608	2,493	11,489	3,282	3.50
62	230	0	127	53	1,032	***4,476,107	629,310	110,120	39,250	2.81
63	53	19	9	30	835	22,742	448	21,557	2,887	7.47
68	164	0	124	260	1,502	86,024	222	79,190	22,160	3.57
73	27	9	5	53	227	7,556	0	7,556	2,553	2.96
TOTAL	2,404	45	580	1,748	36,661	6,618,888	740,171	2,034,569	408,245	4.98

*This includes 233,909 AF imported through the Gunnison Tunnel. This amount consists of 4,538 AF diverted from WD-62 for municipal use and 229,371 AF for irrigation.

**These figures include approximately 200,000 AF water diverted through project canals to alleviate flooding on main stem.

***This includes 4,140,292 AF diverted through the turbines of the Curecanti units.

1984 WATER DIVERSION SUMMARIES BY DISTRICT IN ACRE FEET (Continued) DIU 4

WD	TRANSMTN OUTFLOW	TRANSBASIN OUTFLOW	STOCK	MUNICIPAL	DOMESTIC	INDUSTRIAL	RECREATION	FISHERY	COMMERCIAL
28	855						1,102	1,441	
40	1,144	553	19,134	6,200	206		108,034	4,085	87
41			23,065	4,538			1,548	1,460	
42	489,043						5,002		
59				1,247		363	110,350		
60		1,203	594	2,894	648	324	24,725	1,371	12,729
61			1,509		175		1,700		
62	1,196	233,909	4,538				847,286		4,140,292
63			1,459						
68		173	6,222	850	410		143	30	2,078
73									
TOTAL	492,238	235,838	56,521	15,729	1,439	687	1,099,890	8,387	4,155,186

WATER COURT ACTIVITIES

No. Applications for Decrees		448
No. Protests under Applications	123	
No. Structures Proposed Abandoned	334	
No. Consultations with Referee		522
No. Decrees Issued by Water Court		285
Type of Decree		
Surface Water	214	
Ground Water	70	
Reservoir	31	
Transfer	9	
Alternate Point	2	
Change of Use	25	
Plan Augmentation	13	
In-Stream Flow	91	
No. Structures in Decrees		460
Types of Structures		
Ditches	279	
Reservoirs	38	
Wells	143	

TABLE OF ORGANIZATION - PERSONNEL

IRRIGATION DIVISION NO. 4

Division Engineer - Ralph V. Kelling
Assistant Division Engineer - Thomas A. Kelly
Secretary - Jean Kurtz
Hydrographer - Charles G. David

Water District 28

WATER COMMISSIONER
John S. Garber

Water District 40

PR. WATER COMMISSIONER
*Richard L. Drexel

SR. WATER COMMISSIONER
*Robert H. Starr

WATER COMMISSIONERS
Tim Bacon
Willard N. Bull
Mack Gorrod
Henry LeValley
Albert Mahannah
**Kenneth Mahannah
John L. McHugh
James Miller
L. Gregg Scott
Charles E. Stein
Stephen W. Tuck
Charley E. Woolley

Water District 41

WATER COMMISSIONER
Crandall Howard

Water District 42

SR. WATER COMMISSIONER
*Richard Belden

WATER COMMISSIONER
Lester Whiting

Water District 59

WATER COMMISSIONER
*Edwin S. Hofmann

WATER COMMISSIONER
Robert Drexel

Water District 60

WATER COMMISSIONER
Lyman D. Campbell

Water District 61

WATER COMMISSIONER
Clinton L. Oliver

Water District 62

WATER COMMISSIONER
Edwin S. Hofmann

Water District 63

SR. WATER COMMISSIONER
Richard Belden

WELL COMMISSIONER
*Dwayne Mansker

Water District 68

WATER COMMISSIONER
*H. Roger Noble

Water District 73

SR. WATER COMMISSIONER
Richard Belden

*Annual
**Temporary Employee