

STATE OF COLORADO

**DIVISION OF WATER RESOURCES
WATER DIVISION FIVE**

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Department of Natural Resources

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February 15, 1993

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

Dear Hal:

On behalf of the staff of Division 5, I submit the Annual Report for 1992.

I would like to express special thanks to the Division 5 personnel as well as you and your staff for the help and support in fulfilling the various responsibilities of water administration in Division 5.

Respectfully submitted,

Orlyn J. Bell
Division Engineer

:nch

1992

ANNUAL REPORT

DIVISION 5

DIVISION OF WATER RESOURCES

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ANNUAL REPORT
WATER DIVISION 5

I. WATER ADMINISTRATION

A. 1992 WATER YEAR

The overall perception in Division 5 is that 1992 was a fairly good water year. The runoff came timely as did most precipitation and for the most part water users were, if not satisfied, at least understanding and civil. The real challenges were due to budget cutbacks, internal pressures created by external politics, i.e., firing of the State Engineer and director of the Water Conservation Board, water court activity, and the changing uses for water.

Efforts to reach beyond traditional accomplishments through training, planning and perceptive management were somewhat stifled given the prevailing environment. However, some objectives were realized in the basic area of water administration and record keeping. Other areas didn't score out quite as well.

1. Accomplishments

a. Water Administration

With one eye on the issues of concern projected in last year's report, Division personnel set about accomplishing the business at hand including a balanced budget. The waters of the State were effectively administered. 50 needed Headgate and Repair Orders were issued.

Division personnel continued total river administration with daily calculations and release adjustments, refined the method for setting weekly numbers for the call and also refined consumptive use calculations for West Slope replacements. A spreadsheet just developed was used to allocate replacement water. Spreadsheets were also developed to account for water in several major systems.

b. Dam Safety

6 new reservoir capacity tables were generated. All the scheduled reservoir inspections for Class 1 and Class 2 dams were completed and most of those for Class 3 dams. 81 regular S.E.E.D. inspections were made along with 16 follow-ups. An additional 3 inspections were done by other Division personnel.

Other items accomplished were 2 design reviews, 2 designs, 5 detailed hazard evaluations, and 10 hydrology studies.

c. Hydrographic Program

The new Toshiba Laptop computer has been used for working meter notes in the field and greatly reduced computing and writing time. It also added computing accuracy by removing the obsolete rounding system.

Also, two new pressure transducers that did not arrive in 1992 hopefully will be installed in 1993 and will aid in reservoir accounting and reduce costly maintenance trips that old transducer problems were causing.

d. Ground Water and Well Permitting

83 well permits were preprocessed, 74 permits issued, 9 returned as unacceptable. The average turnaround time was 26 days for those issued.

Well inspections were made as necessary but generally lagged as the inspector's primary duties shifted toward helping fill out permit applications. Field inspections are as follows for IY 1992:

26	=	600-Ft. Spacing
22	=	Statement of Beneficial Use (SBU)
11	=	Late Registration
3	=	Verbals
<u>11</u>	=	Other (Complaints, State Engineer Office Requests, Expanded Use Not Approved, etc.)
73		TOTAL

e. Water Records & Information

The collection and recording of diversion data continues to be upgraded with an estimated 95 percent of all water rights receiving some kind of record. All water recorded is identified correctly by source, type

and use including storage deliveries, augmentation replacement, and exchange water. The 1991 records were finished and signed. Our biggest problems on records occurred where we hired new personnel. There proves to be a real learning curve involved.

f. Special Projects

Several much needed databases previously developed were expanded. The wells, water cases, abandonments, reservoirs, gravel pits and expenditures are now tracked electronically. Another interesting spreadsheet was developed which tracks personnel and what they do by program and task. That certainly comes in handy when 5-10-20% budget reduction scenarios are requested on short notice.

Water commissioners were involved in non-administrative activities by field inspecting most of the 333 water court applications. Additional inspections were made because of the 64 protests to 372 water rights on the abandonment list submitted to the Water Court December 31, 1991. (This includes 2 late protests.) Also 10 protest cases have been resolved. Gravel pits were also inspected by water commissioners.

Division 5 Water Court activity was up from 281 to 350 applications. Written Summaries of Consultation were tendered to the Court along with numerous Objections and Protests to Rulings of the Referee.

In the area of capital goods a new small 4x4 pickup and 4x4 sedan were welcomed with open arms as was the 486 computer for the office.

2. Milestones in Water Issues

The outstanding occurrence was the signing of the Stipulated Agreement on the administration of Green Mountain Reservoir. This cleared the way for the settlement and signing into decree 88CW382, the Federal Blue River Case counterpart, dozens of side issue court cases, and the withdrawal of many more. It was exciting to see one's labor of six years finally adopted by all parties.

Basically, the Division Office personnel in 1986 and 1987 devised a method to administer the Colorado River and account for the exchange replacements from Green Mountain. There was a learning curve of six years bringing the major water users, water agencies, their staff and attorneys and including the State Engineers Office to a level of knowledge, trust and acceptance to accomplish the signing with minimal litigation.

3. Involvement in the Water User Community

The core group from Item 2 above consists of staff from the Northern Colorado Water Conservancy District, the Colorado River Water Conservation District, the Denver Water Department, Colorado Springs, the Colorado Water Conservation Board, the State Engineers office and personnel from Water Division 5. With the base work done, offshoots are occurring. The group member, while working toward a common understanding and solutions to complex problems, does protect his or her own individual agency's needs. Related agreements have been signed for Clinton Reservoir with exchanges between four ski areas, several municipalities, Summit and Grand Counties and the Denver Water Department. Additionally the Wolford Mountain agreement and the Fraser River agreement were all signed in 1992 (see attached letter [Page 5] dated 8/20/92 from Summit County Board of County Commissioners).

The group sometimes referred to as the Water SWAT Team is currently think-tanking (TQM) on accounting for first reservoir fills, second reservoir fills, upstream storage fills, carryover storage, exchanges for snowmaking and the administration involved. I use this group to exchange ideas, get feedback, educate water users and educate and challenge myself to better administer the State's water.



SUMMIT COUNTY
BOARD OF COUNTY COMMISSIONERS

August 20, 1992

Mr. Orlyn J. Bell
Water Resources, DONR
1429 Grand Avenue
Box 396
Glenwood, Colorado 81601

Dear Orlyn:

In the last two weeks we have seen the culmination of the Clinton Reservoir - Fraser River agreements and the closing on the Clinton Reservoir purchase. The completion of these agreements and the purchase was made possible through the good efforts of many people, such as you. Orlyn, we appreciate your active participation in these discussions and negotiations. Your understanding of both the practical and administrative realities were extremely useful. The meeting that we had in Denver with Hal Simpson was a major turning point in the agreements and your participation at that meeting was very effective.

The Clinton purchase and the other related issues of the Fraser River Bypass, Green Mountain and Denver System operations/exchanges, Wolford Mountain Reservoir construction financing and the Substitution Agreement are very substantial in and of themselves. These agreements are also extremely important in the precedent they set for consensus built negotiation including many parties of differing interests. There have been prophecies of a new era of water dealings that involve reutilization of existing facilities instead of development of new facilities. The Clinton Reservoir - Fraser River Agreements show that with concentrated efforts consensus can be built to both find a way to put existing facilities to new uses and pave the way for new facilities. Your contribution to this process is much appreciated.

One of the largest side benefits of the Clinton - Fraser River transaction is a better understanding on how all the major diversion and storage facilities in Grand and Summit County work and how we can cooperate to maximize their potential for all our uses. We have established markedly better communications with each other based on shared knowledge. Thank you for sharing your knowledge and experience and helping the rest of us understand better the system in which we are working.

We have enjoyed working with you through the Clinton - Fraser River transaction. We hope the working relationship that we have started will allow us to continue to work together to enhance and improve Colorado's water systems and supplies while preserving the natural beauty of our rivers and streams.

Sincerely,


Rick Hum,
Commissioner


Glenn E. Porzak,
Special Water Counsel

Water Commissioners have specifically made it their responsibility to contact municipalities and non-exempt well owners including those with augmentation plans concerning measuring devices. Much diversion information has been submitted.

The Division Engineer has been carefully reviewing each new augmentation plan. It is imperative that he work with applicants' engineers and attorneys to make these plans acceptable for water administration. Establishment of accounting procedures for each is of utmost importance. Many, many problems and misconceptions have been resolved before the decrees were signed.

The Division office continues to facilitate usage by the public. The more accurate tabulation, decree books with indexes, updated structure lists, well permit information, organized diversion data, combined with a concerted effort to assist anyone with questions has brought this about. It is also convenient for them to have a place to work.

Specific meetings were held with: Mesa and Spring Creek water users, Bull Creek water users, Mesa County Planning Association, Big Creek water users, Pitkin County and Aspen planners and attorneys, Summit County Small Reservoir Study Group, realtor groups, Well Drillers Association, Northwest Council of Governments, Colorado River Water Conservation District, U.S. Bureau of Reclamation, Denver Water Conservation Board, Northern Colorado Water Conservancy District, West Divide Water Conservancy District, Collbran Water Conservancy District, Basalt Water Conservancy District, and numerous ditch companies.

4. Water Issues Not Addressed

First, as economics and/or quality issues dictate water conservation efforts or as water conversion takes place, hard decisions will have to be made as to how to handle the windfall of freed-up water. Lacking legislative action, existing law will prevail with either a water transfer application or administrative action triggering court involvement.

- a. The Grand Valley Salinity Project is freeing up water historically returned to the river as runoff. What should or will happen to the water historically called that will not be needed for decreed use? The environmental, political, legal, and socioeconomic issues of this problem are major.
- b. As each change of water right takes place, no matter what the size or location, the same windfalls are potentially available for salvaged and saved water.

Second, as the year progressed it became more evident that current pressures are building in the area of "Public Interest Values." This is an issue fraught with potential impact on Division 5 and its functioning.

- a. Conflicts over complex water demands require time and energy for the staff as the precious commodity -- water -- is bought and sold while in the legal arena very definite demands are set forth for its use. Minimum stream flows, endangered species requirements, and wetlands depletion considerations are only a few of the newer demands that must be weighed as the staff makes decisions concerning administration.
- b. Although non-point pollution concerns have not directly impacted the Division, it seems inevitable that the future holds challenges in this area. With quality concerns having a widespread focus, it seems only a matter of time before wilderness areas, "natural habitats," municipal waters, streams flowing outside state boundaries to neighboring states, groundwater and recreational waters have standards that need monitoring. Is it feasible that a new state department be established or that counties take over the quality policing?

Because quality and quantity of water are so closely related, it seems reasonable that administration of both be handled out of the same offices.

Third, relatively new diversion demands on a limited water supply are creating additional pressure on the resource.

- a. The rapid growth in the high country and associated ski industry demands, including water for snowmaking, has necessitated not only more augmentation plans but increasingly complex augmentation plans requiring more manpower and expertise in administration.
- b. East Slope demands such as Windy Gap, Northern Colorado's major transmountain water diversion, will come on-line and effectively deplete any excess water in the Upper Colorado River, requiring more stringent administrative practices. The exchange pool from Windy Gap for the Middle Park Water Conservancy District will create additional measurements and accounting to track water exchanged up the Blue River for snowmaking and municipal uses. We are even seeing pipelines heading south from the Colorado-Big Thompson and use changes occurring.
- c. The Front Range metro area has been involved in several major negotiations concerning water from the Colorado River. An agreement has been signed with Public Service Company of Colorado concerning payment in lieu of power generation at the Shoshone Power Plant (the major river call on the Colorado River), thus freeing up an additional depletion to the Colorado River of 30,000 to 50,000 acre-feet of firm yield during the non-irrigation season. No request to administer this agreement has been made but will occur sometime.
- d. Previously, agreements were signed with Summit County enabling augmentation plans and growth to proceed in the Upper Blue River with a uniform approach and protection for Denver water rights. Those have run headlong into minimum streamflow filings by the Water Conservation Board. This will create need for careful winter administration of the exchanges involved.
- e. A major agreement was worked out which basically gives Western Colorado a number of storage reservoirs for their usage, gives Northern Colorado several storage

reservoirs for their replacement usage, and gives the Denver Metro area use of the Blue River and Williams Fork River, including Green Mountain Reservoir. Fortunately, all of this will be developed very slowly which gives us time to work out the administrative details.

- f. The entry and demise of the oil shale industry has affected Division 5. Conditional water rights have been left undeveloped; water rights that were transferred from agriculture to industrial uses have been left standing; and once farmed lands are turning to sagebrush. Oil prices will rise again and therefore the industry is protecting its rights but the population growth pressures from oil shale development have been replaced by pressures from the tourism/recreation industry.
- g. Currently the cost/benefit ratio of agriculture is marginal. Therefore, there is little incentive to use water and maintain agriculture as historically practiced. As a result ranches are being divided up into smaller acreages.
- h. Further downstream the Central Arizona Project is using more water and so far has taken it from California. Someday this will affect administration in Colorado also and we should be prepared for it.
- i. San Diego, Las Vegas, and others are looking for water with interstate sales and transfers being actively contemplated.

5. Effects of Workload Changes and/or Administrative Limitations on Operations

The increased efforts in communications within and outside of the agency as well as expanded public interaction takes time but pays dividends in acceptance by the water-using public. In these times of funding shortages and personnel cuts, this will be harder to do.

Additional water rights add to the administrative and record keeping processes each year. They also require vast amounts of personnel time in their investigation and decretal process (266 decrees for 896 structures new this year).

The recent agreement to provide quality control for GIS irrigated acreage assessment with the U. S. Bureau of Reclamation by 1993 will tie up a lot of water commissioner time. This impact is still an unknown at this point.

Division 5 is beginning to review well permits as was initiated previously in Divisions 3, 6, and 7. The training of personnel and actual evaluation of 800-plus permit applications will be difficult to absorb.

The reassignment of reservoir inspections for Districts 50 and 51 is of paramount concern as the reservoir/dam safety inspector is already functioning beyond a reasonable limit.

Impact of the Budgets on Operations

Amendment 1 cannot be anything but constraining on an already thin budget.

We do not have enough FTE's to put Water Commissioners in each water district. Additionally, 12 of the 18 water commissioners are part-time employees and the seasonal nature of their employment severely hampers the updating of structure lists, administrative lists, tabulations, maps or any other non-direct water administration activity. Another problem is that as the jobs are becoming more complex, adequate training is harder to achieve. The pressure for part-timers to seek full-time employment is a problem. Two-thirds of the Water Commissioner work force is in this situation.

Not only were we short in human resources but operating funds were precariously low. We had only enough to provide us with the supplies we needed to function at a less than desirable level.

In travel we curtailed back on a percentage basis from previous years' expenditures. It is in this area that it's easiest to make up deficiencies. As we travel less, we will have to rely more on user-supplied information.

For the third year in a row expenditures matched the budget; however, mileage was adjusted to provide all the needed other operating items. This is a very undesirable situation but not yet catastrophic. Water Commissioners are finding a way to still function effectively but the situation is not good.

Operational Concerns

In order of importance based on what happened last year, I believe that toeing the line on expenditures will be more difficult without decreasing service. Training needs of the new employees will be critical, or even more critical: how do we provide service without the employees?

Field inspections regarding abandonments, water right applications, and well replacements will also be costly, time consuming, and necessary.

Quality control and data handling capability with systems design for user-supplied information is becoming increasingly important and will receive some attention.

B. 1993 WATER YEAR

1. Key Objectives

Our objectives are quite broad, yet simply stated are as follows:

Water Rights Management

- Establish the capability to administer a total river call prompted by either in-state priorities or an interstate water compact requirement.
- Uphold all other statutory duties of the State Engineer's Office.

Water Records and Information

- Provide the public with service regarding water usage.
- Address the public's needs in water resources.

In order to fulfill these Objectives, the following Goals must be attained:

- It is imperative that we have a complete and reliable tabulation of water rights. (We should have a complete and reliable tabulation of permitted wells and, likewise, a complete and reliable dams database.)
- All water usage and consumption must be inventoried and we need to possess the ability to monitor the same on a real-time basis.
- We need to know where augmentation and exchanges are taking place and in what amounts.
- We must know the locations and amounts of the water supply at any given time.
- We have to fully develop our personnel and must have an educated public willing to cooperate with us. We must also work with the legislature and other governmental agencies in order to have our needs provided for.

We can begin to reach these goals as more of the Work Projects below are completed.

a. Projected Work Items for 1993

The usual business of:

Administration of water rights,
Collecting and recording diversion data,
Reservoir inspections,
Well inspections,
Reviewing water applications.

The following are specialized Work Items for 1993 and beyond:

- (1) Train Water Commissioners in:
 - Standardization of municipal recordkeeping.
 - Field inspecting Augmentation Plans.
 - Creating schematics and coding for Aug Plans.
 - Administration of reservoirs.
 - Administration of exchanges.
 - Computer usage.

- (2) Inventory all fee wells and generate records.
(Proposal to spend SB-200 funds to accomplish)
 - Determine locations and establish mapping accordingly.
 - Determine usage.
 - Determine compliance with permit and decree.
 - Prepare ownership directory.
 - Send orders.

- (3) Lower the "NUC - No Information Available" level by 30 in each Water District.

- (4) For Augmentation Plans:
 - Finish tabulation of Augmentation Plans.
 - Establish an Aug Plan Database that can be used for administration.
 - Establish an accounting system for each active Aug Plan.

- Install control structures and measuring devices as necessary.
- Obtain field data.
- Administer.
- (5) Develop computer accounting spreadsheets for:
 - Blue River Diversion Project
 - Continental-Hoosier System
- (6) Increase utility of River Accounting Spreadsheet by:
 - Phasing in hydrographic support.
 - Utilizing real-time diversion data.
 - Mixing and matching from various spreadsheets.
 - Establishing method to electronically transfer spreadsheets to DBASE.
- (7) Write Individual Performance Objectives (IPO's) for Water Commissioners on diversion data and annual record submittals.
- (8) Organize and implement program for hydrographic data collection for Division 5.
- (9) Inventory and perform an on-site inspection of all test wells and monitoring holes. (Proposal to spend SB-200 funds to accomplish)
 - (a) Take steps necessary to bring them into compliance with State regulations.
 - (b) Insure proper abandonment where necessary.
- (10) Design system to notify public of calls.
- (11) Design system to solicit user-supplied information.
- (12) Complete backlog of hydrographic records.
- (13) Refine secretarial handbook.
- (14) Respond as necessary to abandonment protests in Water Court.

- (15) Complete GIS mapping ground control by December 31, 1993.
- (16) Add pressure transducers to 3 reservoirs.

b. Problems, Concerns, Limitations to Overcome

The main concern is the reduced ability of the staff to accomplish all that needs to be done in almost any area. The continuing areas of concern are:

- Existing mapping is being replaced as it wears out.
- Do not have the hydrographic staff to handle the river accounting.
- Number and complexity of Augmentation Plans are prohibitive to administer with existing staff until software and databases are developed along with appropriate accounting sheets.
- Some work is still needed on the tabulation. We need to include and/or revise augmentation entries.
- Five percent of diversion structures have no record at all, while others are very minimal with a smattering of user-supplied data.
- Active administration of springs, wells, and gravel pits will be difficult as well as counterproductive if water volume were the main criteria.
- Staff gages and capacity tables are still needed for many reservoirs.
- Dealing effectively with protests to the abandonment list.
- Well inspections need to be increased as inconsistencies are increasingly evident.
- Budget constraints are deepening.

- Judicial decisions (while much better) continue to be made with immediate caseload efficiency in mind rather than astute sensitivity to water laws wherein stipulated settlements are reached.
- There has been a large conversion of agricultural lands and waters to commercial and municipal development in Water District 36 and the decretal information and the data-gathering network is just now beginning with a new Water Commissioner.

2. Changes That Will Impact The Division

The people, the governor, and the legislature all talk of water planning and management, public benefits, and water quality. The discussion of these issues has been fragmented and unfocused--even ill-informed. The debate is laced with buzz words that mean different things to different people, with confused analyses which mix the ends to be achieved with the means of achieving those ends, and with misunderstandings and misconceptions about Colorado's current laws and policies. Whatever one's point of view about those issues, Colorado clearly has yet to reach a consensus on how they should be addressed. In the meantime as administrators we make many decisions with regard to beneficial use and waste of water. Clearly, change is inevitable and decisions made can help to shape the future.

TRANSMOUNTAIN DIVERSION SUMMARY - INFLOWS

RECIPIENT										SOURCE		
WD	ID	Name	Stream	10-Year Average		Current Year		WD	ID	Stream		
				AF	Days	AF	Days					
36	4905	STEVENS & LEITER WELL	TENMILE CREEK	11.4	24	212	366	11		ARKANSAS RIVER		
38	4682	ROARING FORK BYPASS FLOW	ROARING FORK RIVER	1,897	223	1,390	N/A	11		TURQUOISE RIVER		
45	577	DIVIDE-HIGHLINE FEEDER	DIVIDE CREEK	1,503	53	701	83	40		CLEAR FORK MUDDY CREEK		
50	4600	SARVIS CREEK DITCH	RED DIRT CREEK	1,251	156	781	176	58		SARVIS CREEK		
53	4716	DOME CREEK DITCH	EGERIA CREEK	329	37	25	68	58		BEAR CREEK		
53	4715	STILLWATER DITCH	EGERIA CREEK	2,302	80	699	156	58		BEAR CREEK		
72	4713	REDLANDS POWER CANAL	COLORADO RIVER	508,307	345	545,202	360	42		GUNNISON RIVER		
72	4711	GRAND JUNCTION MUNICIPAL	COLORADO RIVER	7,961	365	7,224	366	42		KANNAH CREEK		
72	4712	FRUITA WATER WORKS	COLORADO RIVER	126	110	0	0	73		LITTLE DOLORES RIVER		
				TOTAL:		\$56,234						

TRANSMOUNTAIN DIVERSION SUMMARY - OUTFLOWS

RECIPIENT										SOURCE		
WD	ID	Name	Stream	10-Year Average		Current Year		WD	ID	Stream		
				AF	Days	AF	Days					
7	927	STRAIGHT CREEK TUNNEL	CLEAR CREEK	307	183	367	366	36		STRAIGHT CREEK		
7	4626	VIDLER TUNNEL	CLEAR CREEK	617	78	1,146	128	36		SNAKE RIVER		
23	4685	BOREAS PASS DITCH	TARRYALL CREEK	21	9	189	89	36		BLUE RIVER		
23	4699	HOOSIER TUNNEL	MAIN FORK OF SO. PLATTE RIVER	8,936	115	11,570	138	36		BLUE RIVER		
80	4684	ROBERTS TUNNEL	MAIN FORK OF SO. PLATTE RIVER	31,240	132	84,041	365	36		BLUE RIVER		
11	4641	COLUMBINE DITCH	TENNESSEE CREEK	1,888	105	1,611	112	37		SO. FORK OF EAGLE RIVER		
11	4642	EWING DITCH	TENNESSEE CREEK	1,268	119	944	168	37		SO. FORK OF EAGLE RIVER		
11	4614	HOMESTAKE TUNNEL	SO. PLATTE VIA ARKANSAS RIVER	22,705	246	22,913	88	37		HOMESTAKE CREEK		
11	4648	WURTZ DITCH	TENNESSEE CREEK	2,862	109	1,644	101	37		SO. FORK OF EAGLE RIVER		
11	4625	BOUSTEAD TUNNEL	LAKE FORK CREEK	53,877	140	57,030	366	38		FRYINGPAN RIVER		
11	4613	BUSK-IVANHOE TUNNEL	LAKE FORK CREEK	5,956	163	5,220	160	38		FRYINGPAN RIVER		
11	4617	TWIN LAKES TUNNEL	LAKE FORK CREEK	38,202	355	41,860	366	38		ROARING FORK RIVER		
				SUBTOTAL:		228,535						

TRANSMOUNTAIN DIVERSION SUMMARY - OUTFLOWS. continued

RECIPIENT										SOURCE		
WD	ID	Name	Stream	10-Year Average		Current Year		WD	ID	Stream		
				AF	Days	AF	Days					
3	4601	GRAND RIVER DITCH	CACHE LA POUDRE RIVER	19,193	114	21,360	161	51		NO. FORK COLORADO RIVER		
3	4602	EUREKA DITCH	CACHE LA POUDRE RIVER	24	27	216	105	51		NO. FORK COLORADO RIVER		
4	4634	ALVA B ADAMS TUNNEL	BIG THOMPSON RIVER	235,782	318	198,300	359	51		NO. FORK COLORADO RIVER		
6	4655	MOFFAT TUNNEL	BOULDER CREEK	66,388	319	49,230	331	51		FRASER RIVER		
7	4625	BERTHOUD PASS DITCH	CLEAR CREEK	513	67	1,010	133	51		FRASER RIVER		
6	505	AUGUST P GUMBLICK TUNNEL	BOULDER CREEK VIA FRASER RIVER	INCLUSIVE IN MOFFAT TUNNEL					51		WILLIAMS FORK RIVER	
6	4603	VASQUEZ PIPELINE	BOULDER CREEK VIA FRASER RIVER	INCLUSIVE IN MOFFAT TUNNEL					51		WILLIAMS FORK RIVER	
40	758	LEON TUNNEL CANAL	SURFACE CREEK	1,640	85	3,077	69	72		LEON CREEK		
				SUBTOTAL THIS PAGE:		273,193						
				SUBTOTAL PRIOR PAGE:		228,535						
				TOTAL:		501,728						

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)					
				Minimum		Maximum		Date	End Of Year
				AF	Date	AF	Date		
36	3533	BLACK LAKE	BLACK CREEK	1,990	11/01/91	1,997	06/01/92	1,990	
	3538	CATARACT LAKE	CATARACT CREEK	1,652	11/01/91	1,664	07/01/92	1,652	
	3575	CLINTON GULCH RESERVOIR	TENMILE CREEK	3,250	11/01/91	4,250	08/01/92	4,250	
	4512	DILLON RESERVOIR BRDP	BLUE RIVER	213,226	04/01/92	256,197	07/01/92	243,573	
	3542	GOOSE PASTURE TARN	BLUE RIVER	800.2	11/01/91	922	11/19/91	922	
	3543	GREEN MOUNTAIN RESERVOIR	BLUE RIVER	68,066	05/01/92	150,141	08/01/92	96,544	
	3548	HOAGLAND RESERVOIR NO 1	ELLIOTT CREEK	40	07/30/92	100	06/08/92	49	
	3586	MOHAWK LAKE NO 2	SPRUCE CREEK	444	11/01/91	444	10/31/92	444	
	3587	MOHAWK LAKE NO 5	SPRUCE CREEK	64	11/01/91	64	10/31/92	64	
	3588	MOHAWK LAKE NO 6	SPRUCE CREEK	288	11/01/91	288	10/31/92	288	
	3565	REYNOLDS RESERVOIR	KEYSTONE CREEK	157	11/01/91	157	07/01/92	157	
	3569	UPPER BLACK CREEK RES	BLACK CREEK	600	11/01/91	604	06/05/92	600	
	3570	UPPER BLUE LAKE RES	BLUE RIVER	0	11/01/91	2,119	08/01/92	0	
	3638	UPPER SLATE LAKE	SLATE CREEK	336	11/01/91	336	10/31/92	336	
	3594	UPPER WHEELER LAKE	TENMILE CREEK	66.5	11/01/91	70	07/01/92	66.5	
	3571	WAY RESERVOIR	BEAVER CREEK	40	11/01/91	90	06/08/92	50	
36		Total of All Others < 50 AF		144.3		203.9		151.3	
36		Total For District 36		291,164		419,646.9		351,136.8	

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)						End Of Year
				Minimum		Maximum		Date	Date	
				AF	Date	AF	Date			
37	3600	BENCHMARK LAKE	EAGLE RIVER	130	11/01/91	130	05/22/92	130	130	
	3510	BLACK LAKE NO 2	GORE CREEK	90	11/01/91	90	07/01/92	90	90	
	3698	BOLTS LAKE	CROSS CREEK	48	11/01/91	48	10/01/92	48	48	
	3513	CHALK MOUNTAIN RESERVOIR	EAGLE RIVER	204.1	11/01/91	204.1	06/16/92	204.1	204.1	
	3699	CLIMAX MOLY NO 4 RES	EAGLE RIVER	783	11/01/91	783	10/01/92	783	783	
	4516	HOMESTAKE RESERVOIR	HOMESTAKE CREEK	18,556	05/01/92	41,849	08/01/92	33,511	33,511	
	3520	L E D E RESERVOIR	GYPSUM CREEK	0	11/01/91	145	07/15/92	10	10	
	3522	NOECKER RESERVOIR	EBY CREEK	0	11/01/91	96	06/09/92	80	80	
	3524	O Z LAKE	BRUSH CREEK	452	11/01/91	452	10/01/92	452	452	
	3527	ROBINSON RESERVOIR	EAGLE RIVER	1,900	06/16/92	2,000	11/01/91	1,900	1,900	
	3530	WELSH RESERVOIR	ALKALI CREEK	0	11/01/91	50	06/01/92	10	10	
37		Total of All Others < 50 AF		59.5		103.5		59.5	59.5	
37		Total for District 37		22,222.6		45,950.6		37,277.6	37,277.6	

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)						End Of Year
				Minimum		Maximum		Date	AF	
				AF	Date	AF	Date			
38	3711	ALICIA LAKE RESERVOIR	LIME CREEK	673	11/01/91	673	06/01/92	673	06/01/92	673
	4000	BEAVER LAKE	CRYSTAL RIVER	73	11/01/91	73	06/01/92	73	06/01/92	73
	3722	CONSOLIDATED RESERVOIR	WEST COULTER CREEK	0	11/01/91	552.5	05/02/92	0	05/02/92	0
	3774	CRAWFORD DAM NO 1	BLUE CREEK	160	11/01/91	160	06/01/92	160	06/01/92	160
	3773	CRAWFORD DAM NO 2	BLUE CREEK	56	11/01/91	56	06/01/92	56	06/01/92	56
	3721	CROOKED CREEK RESERVOIR	LIME CREEK	40	11/01/91	40	06/01/92	40	06/01/92	40
	4095	FLANNERY RESERVOIR	THREE MILE CREEK	0	09/19/92	78	04/14/92	0	04/14/92	0
	3727	HIMMELAND RESERVOIR	FRYINGPAN RIVER	92	11/01/91	92	06/01/92	92	06/01/92	92
	3729	HUGHES RESERVOIR	THREE MILE CREEK	0	11/01/91	78	09/10/92	78	09/10/92	78
	3732	IVANHOE RESERVOIR	FRYINGPAN RIVER	0	11/01/91	843	06/16/92	0	06/16/92	0
	3832	JACOBSEN LAKES & PONDS	ROARING FORK RIVER	225	11/01/91	225	06/01/92	225	06/01/92	225
	3736	LAKE ANN RESERVOIR	SOPRIS CREEK	0	09/30/92	154	07/04/92	0	07/04/92	0
	3713	RUEDI RESERVOIR	FRYINGPAN RIVER	67,420	04/08/92	102,373	07/20/92	80,242	07/20/92	80,242
	3744	SPRING PARK RESERVOIR	CATTLE CREEK	120	10/21/92	920	06/24/92	120	06/24/92	120
	3747	THOMAS RESERVOIR	THOMAS CREEK	160	11/01/91	160	06/01/92	160	06/01/92	160

RESERVOIR STORAGE SUMMARIES BY DISTRICT, continued

WD	ID	RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)						End Of Year
				Minimum		Maximum		Date	Date	
				AF	Date	AF	Date			
38	3753	UPPER CHAPMAN RESERVOIR	FRYINGPAN RIVER	119	11/01/91	119	06/01/92	119	06/01/92	119
	3750	VAN-CLEVE FISHER RES	MESA CREEK	0	11/01/91	0	10/31/92	0	10/31/92	0
	3752	VON SPRINGS RES NO 2	COULTER CREEK	0	11/01/91	0	10/31/92	0	10/31/92	0
	3759	WILDCAT RESERVOIR	SNOWMASS CREEK	1,100	11/01/91	1,100	06/01/92	1,100	06/01/92	1,100
	3760	WOODS LAKE RESERVOIR	LIME CREEK	300	11/01/91	300	06/01/92	300	06/01/92	300
38		Total of All Others < 50 AF		308.1		407.5		308.1		325.6
38		Total For District 38		70,846.1		108,404.0		70,846.1		83,763.6

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)					
				Minimum		Maximum		End Of Year	
				AF	Date	AF	Date		
39	3927	CITY OF RIFLE POND NO 1	COLORADO RIVER	100.8	11/01/91	112	06/01/92	100.8	
	3505	GRASS VALLEY RESERVOIR	RIFLE CREEK	754	11/01/91	5,700	05/01/92	770	
	3506	HARRIS RESERVOIR	RIFLE CREEK	99	06/24/92	200	05/01/92	99	
	3940	MEADOW CREEK RESERVOIR	ELK CREEK	885.6	11/01/91	984	05/01/92	885.6	
	3941	MIDDLE FORK RESERVOIR	PARACHUTE CREEK	65	11/01/91	100	06/01/92	85	
	3507	PARK RESERVOIR	ELK CREEK	0	10/31/92	152	04/15/92	0	
	3508	RIFLE GAP RESERVOIR	RIFLE CREEK	1,519	11/01/91	7,580	05/01/92	1,519	
39		Total of All Others < 50 AF		35.8		80.1		47.7	
39		Total For District 39		3,459.2		14,908.1		3,507.1	

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)						End Of Year
				Minimum		Maximum		Date	Date	
				AF	Date	AF	Date			
45	3524	ANDERSON POND NO 1	COLORADO RIVER	312.7	11/01/91	312.7	10/31/92	312.7	10/31/92	312.7
	3642	CENTENIAL LAKE	COLORADO RIVER	238	11/01/91	238	10/31/92	238	10/31/92	238
	3603	PORTER RESERVOIR	THREE MILE CREEK	15.6	11/01/91	222	04/30/92	222	04/30/92	15.6
45		Total of All Others < 50 AF		2.8		36		36		3.7
45		Total For District 45		569.1		808.7		808.7		570

RESERVOIR STORAGE SUMMARIES BY DISTRICT

WD	ID	RESERVOIR NAME	SOURCE STREAM	AMOUNT IN STORAGE (AF)					
				Minimum		Maximum		End Of Year	
				AF	Date	AF	Date		
50	3644	ALBERT RESERVOIR	ALBERT CREEK	0	11/01/91	125	05/25/92	3	
	3606	ANTELOPE RESERVOIR	COLORADO RIVER	0	11/01/91	346	05/14/92	55	
	3651	BASIN RESERVOIR	MUDDY CREEK	0	11/01/91	0	10/31/92	0	
	3645	BINCO RESERVOIR	TROUBLESOME CREEK	0	11/01/91	270	05/20/92	3	
	3618	HINMAN RESERVOIR	MUDDY CREEK	195	09/01/92	611	05/01/92	300	
	3623	LAKE AGNES	MUDDY CREEK	414	09/16/92	431	06/09/92	415	
	3646	MARTIN RESERVOIR	MUDDY CREEK	70	07/29/92	180	05/23/92	75	
	3625	MATHESON RESERVOIR	TROUBLESOME CREEK	0	11/01/91	1,073	06/03/92	0	
	3627	MC ELROY RESERVOIR	PASS CREEK	0	11/01/91	240	05/28/92	0	
	3629	MC MAHON RESERVOIR NO 2	RED DIRT CREEK	250	10/31/92	3,500	05/20/92	250	
	3655	MILK CREEK RESERVOIR	MUDDY CREEK	20	08/15/92	100	05/15/92	25	
	3656	NORTH MEADOW RESERVOIR (AKA MARTIN LILY POND)	MUDDY CREEK	0	07/15/92	200	06/17/92	0	