# ANNUAL REPORT WATER DIVISION 5

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# ANNUAL REPORT WATER DIVISION 5

#### WATER ADMINISTRATION

#### A. 1989 Water Year

This was the year that Division 5 experienced some of the good, the bad, and the ugly. We've played catch-up in many areas, continued training and data collection, and of course focused much of our efforts on the work of water administration.

In review it's clear that the good of 1989 includes many accomplishments in administration, updating tabulation information, attendance at both organized and informal meetings with the water user community, and a stabilization of the dams and reservoir inspections. The office staff has remained stable which has helped the water commissioners in their daily attacks on the work load. And the closer we get to a complete understanding on Green Mountain exchange operations, the closer we are to the good.

Budget is the bad word for 1989 with the Division overspending by nearly \$4000. We are faced with the continuing task of trying to do more with less and although this is challenging, it also proves difficult.

The 1989 water commissioner situation has been ugly as only 7 of the 17 commissioners remain in the same position they occupied at the start of the year. Retirement, heart attacks, death and transfers have plagued the staff. This has had a huge impact on training demands and water administration in an already stressful drought year.

#### 1. Accomplishments

The goals and objectives of the last several years' reports are continually coming closer to being a reality as various work items are accomplished or near completion.

In the area of completing the jobs required of us, we did finish and sign the 1988 diversion records and are closing in on those for 1989.\*

The untimely death of the water commissioner in Districts 52 and 53 along with the transfer out of the Division of the water commissioner in District 38, the transfer out of the Division of a water commissioner in District 72 combined with the replacement contracting cancer and not working, one other retiring early season after a heart attack with the replacements taking several months to hire, and the lead water commissioner spending over a month with a heart condition — all left some holes that could not be filled.

With the help of the information section we designed diversion record sheets which included permanent water rights and structure information from the Rights and WISP databases. This greatly enhanced the commissionrs' ability to handle more data with better quality control. This in turn allowed for more emphasis to be put into administration which was fortunate considering the extremely dry year. The commissioners also had better administrative lists to work from as our collective computer literacy permitted them to be developed.

The upgrade of Water District 36 was completed this year and added to the Tabulation, which was nearly a year's work in itself by one engineer. The annual upgrade of the previous years' signed decrees were also added as were about half of the outstanding augmentation plans. All the protests to the 1988 official printing of the tabulation were reviewed and additions or corrections made as needed.

The 1984 abandonment list was recently signed by the Chief Water Judge and in less than a year abandonments were again a big time-consumer with the commissioners fine-tuning the currently-in-use codes (CIU) in the structure lists and the non-use-codes (NUC) from the diversion records. Initial abandonment lists have been prepared and are in the process of being field inspected before finalization.

We continue to develop and use several much-needed databases. The wells, water cases, abandonments, reservoirs, and our expenditures are now tracked electronically.

Of the 327 new water court applications filed with Water Division No. 5, 287 were processed this year for Division 5 with the appropriate field inspections, consultations, objections, and other assorted work accomplished. This corresponds to 1986 wherein 328 were processed, 1987 for 398, and 1988 for 483.

Hydrographic work on the Fryingpan-Arkansas Project was completed as required. Additional measurements for administrative purposes were made and were extremely helpful in areas that do not ordinarily have calls.

Having the resident Dam Safety engineer continued to pay results. Not only are the dams being inspected, etc., but the personal touch is paying off in increased efforts by owners to upgrade their structures. Water Commissioner understanding and administrative levels have increased as well. There is definite positive public relations through it all.

Eighty-four (84) regular S.E.E.D. (Safety Evaluations of Existing Dams) inspections and 18 follow-up inspections were done by the Dam Safety Engineer and 23 of the 44 required of the Water Commissioners.\* (See Footnote Page 1) Thirty (30) restricted reservoirs were monitored by the water commissioners; new restrictions were placed on 3 reservoirs; and restrictions were removed from 6 reservoirs.

Well inspections were made as absolutely necessary but generally lagged as the inspector's primary duties were directed toward filling in on necessary administration.\* (See Footnote Page 1)

A total river call was administered much of the year -- not perfectly by any means -- but many of the individual parts are coming together. Water Commissioner understanding and ability to timely deliver real-time diversion data is increasing. Satellite-supplied data as well as user-supplied information is now possible, and for the second year the records reflect replacements from Green Mountain Reservoir and the exchanges involved.

As footnoted on Page 1, Division 5 had some drastic <u>personnel</u> changes take place. Two top part-time water commissioners transferred early in the season into other divisions for full-time positions. The replacement for one worked one day then tested positive for cancer and terminated employment. A second replacement was subsequently hired. Another water commissioner retired during the winter and was replaced. A fifth water commissioner died early in the season and was replaced by a transferee from Division 6. A sixth water commissioner suffered a mild heart attack mid-season and subsequently retired. That position has not yet been filled. A seventh (the principal water commissioner in District 72) also suffered a mild heart problem and was out of action for over a month. During the same time the Division 4 and 5 combined Grand Junction field office was opened and, needless to say, not very well manned by personnel from Division 5.

The Division Engineer, Assistant, and other office engineers all got in some excellent cross training under fire as water commissioners. All of the regular water commissioners as well as the engineers have been involved with orientation of new personnel and ongoing training of each other, sharing their various expertises. Additionally many Division 5 personnel attended the CSU symposium, the training sessions in Montrose, various Fred Prior type classes, a number of state-offered Moving Ahead Seminars, and two attended the state-offered Supervisory Certificate Program. In addition, each employee was given a performance evaluation and has a new plan in place.

In the area of resource management we were able to temporarily get additional office space for the winter in order to have water commissioners work in the Glenwood office. That space is now under permanent lease. The Grand Junction office as mentioned above is also new. The open house for it was held December 15 and was well attended by water users, local officials, agency representatives, and area members of the legislature.

During the winter the water commissioners revised and upgraded their administrative lists. They also made many contacts regarding the installation or resetting of measuring devices; 138 orders were subsequently sent out. In conjunction with the Dam Inspector, 10 new reservoir staff gages were installed with corresponding capacity tables supplied.

We did not have funds for capital goods but did divert small amounts of operating money to purchase used goods through the government resale program.

We also received a second IBM-compatible PC purchased through funding trade-offs associated with the contract operation of Aspen's Roaring Fork River gage and satellite monitoring hardware.

Still in the area of accomplishments, not enough can be said about the satellite monitoring system itself, along with the PC's that came with it. Our ability to administer and record has truly been revolutionized as we train ourselves to utilize the storage, manipulation, and communication capabilities of the system.

# 2. Involvement in the Water User Community

There has been continued effort this year to increase contact with the water user community. Water Commissioners have specifically made that their responsibility and have been successful in it. Municipalities and non-exempt well owners including those with augmentation plans have been systematically contacted concerning measuring devices and have submitted much diversion information.

The Division Engineer has been carefully reviewing each new augmentation plan. It is imperative that he work with the 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: Cache Creek water users, Bull Creek water users, Mesa Planning Association, Big Creek water users, Mesa County Commissioners and Planning Commission and staff, Pitkin County and Aspen planners and attorneys, Eagle County Soil Conservation Service, Town of Gypsum officials and other water users, Summit County Small Reservoir Study Group, realtor groups, Well Drillers Association, several Sierra Clubs, Northwest Council of Governments (COG), Colorado River Water Conservation District, U.S. Bureau of Reclamation, Denver Water Conservation Board, Northern Colorado Water Conservancy District (WCD), West Divide WCD, Basalt WCD, numerous ditch companies, and the Governor's "Dome on the Range."

One of the more important involvements was the continued effort to work very closely with the Denver Water Board, Northern, Colorado Springs, U.S. Bureau of Reclamation, Colorado River Water Conservation District, and the Colorado Water Conservation Board in the "Clarification of Division 5 Water Administration" including exchange administration, Green Mountain, and the Blue River Decrees and cases. A final stipulated settlement between all factions, including many other West Slope entities, has yet to be signed but has gotten close. This would come under the several topics of public, self, and interagency education through mutual communication efforts.

# 3. <u>Issues Impacting Division 5</u>

There are several important trends that are impacting Division 5 which affect the direction of water administration. Decisions will be made for manpower needs, work coverage, and new technology required to deal with these trends.

First, relatively new DIVERSION DEMANDS on a limited water supply are creating all kinds of pressures.

- (1) The rapid growth in the high country and associated ski industry demands, including water for snow making, has necessitated not only more augmentation plans but increasingly complex augmentation plans requiring more manpower and expertise in administration.
- (2) 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 snow making and municipal uses.
- (3) The Front Range metropolitan 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.
- (4) 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.

(5) 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 the Blue River and Williams Fork River, including Green Mountain Reservoir.

"All of these agreements will necessarily be administered by exchanges with very little of the administrative details as of yet even conceived. The fairly new principal operating policy for Green Mountain Reservoir along with the Federal Blue River decrees and Senate Document 80 now look like interim steps in the continual movement of water to the highest usage."

The above quote from last year's Annual Report couldn't have been more on target in that a multiplicity of court applications including motions to clarify have been filed in both the State and Federal District Courts concerning the operation of Green Mountain Reservoir.

- (6) 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 their rights but the population growth pressures associated with it have waned.
- (7) 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.
- (8) 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.

Second, the very real event of "PUBLIC INTEREST VALUES" including basin of origin considerations, public right to use water, and finally water quality considerations is on the threshold of emerging as a real force in water allocation.

#### 4. Issues of Concern

Again, we have many of the same concerns that we had last year. The main concern is the inability of the staff to accomplish all that needs to be done in almost any area. The continuing areas of concern are:

- -- Do not have the hydrographic staff to handle the river accounting. [See Notes (1) and (3) below]
- -- Number and complexity of augmentation plans are prohibitive to administer with existing staff and methods.
- -- Much work is still needed on the tabulation. We need to include and/or revise augmentation plans.
- -- Twenty percent of the structures have no record at all.
- -- Many diversion records are estimated rather than observed.
- -- Staff gages and capacity tables are still needed for many reservoirs.
- -- Many structures have no control and/or measuring devices.
- -- Drought shortages seem imminent at this time.
- -- Retirements, etc., have created a very new workforce which will take considerable time and resources to develop.
- -- 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.
- (1) A general river call requiring deliveries of Green Mountain water and the accounting of such is still not satisfactory. The Satellite Monitoring system has improved our accessibility to accurate data; however, there are a number of holes in the system.
- (2) There is a lack of Water Commissioner coverage in the Blue River area. There has been a large conversion of agricultural lands and waters to commercial and municipal development in District 36 and the decretal information and the data-gathering network cannot function without a Water Commissioner.
- (3) 300,000 to 500,000 acre-feet of diversions are not monitored for quality control by any neutral party, which creates nervousness and feeds East Slope/West Slope tensions.

### 5. Effect of Workload Changes

The biggest impacts were due to the much tougher than normal drought administration complicated by a one-third turnover or vacancy in water commissioners. Only 7 of 17 water commissioners completed the season where they started without disruption for change of duties, location, or serious illness.

The increased efforts in communications within and outside of the agency as well as expanded public interaction takes time but is paying dividends already in acceptance by the water-using public.

Additional water rights add work but in this case the rate of addition slowed over the previous year. The abandonment list preparation added some work certainly as did the general upgrading of the recordkeeping process.

# 6. Impact of the Budgets on Operations

We do not have enough FTE's to put Water Commissioners in each water district. Additionally, 12 of the 17 Water Commissioners are part—time employees and the seasonal nature of their employment severely hampers the updating of structure lists, administrative lists, tabulations, 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. 71% 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. Expenditures for the phone expansion helped break the budget.

Funds for capital expenditures were not received. However, we did divert small amounts of operating to purchase used goods through the government resale program.

In travel we spent what was needed to do the job but that turned out to be excessive.

The bottom line is that we spent what was needed and consequently overspent by about \$4000.

#### B. 1990 Water Year

This coming year will probably find Division 5 again facing some of the good, the bad, and the ugly. We hope to keep the ugly to a minimum and watch for the good.

Hopefully, staffing and training will stabilize so that the operation of the workforce can be at maximum output and we can work to see our specific goals met.

#### 1. Operational Concerns

In order of importance based on what happened last year, I believe that toeing the line on expenditures and time allocations given the drought situation and training needs of the new employees will be critical.

Field inspections regarding abandonments will also be very costly, time consuming, and necessary.

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

Lastly, the people, governor, and 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 and hopefully won't catch too much heat or lawsuits in those decisions.

# 2. Projected Work Items for 1990:

Other than the usual business of:

- A. administering water,
- B. collecting and recording diversion data,
- C. reservoir inspections,
- D well inspections,
- E. hydrographic work, and
- F. reviewing water applications,

### the following are specialized work items for 1990 and beyond:

- A. Train Water Commissioners in:
  - 1. Standardization of municipal record keeping.
  - 2. Field inspecting augmentation plans.
  - 3. Creating schematics and coding for augmentation plans.
  - 4. Administration of reservoirs.
  - 5. Administration of exchanges.
- B. Inventory all fee wells and generate records. (Proposal to spend SB 200 funds to accomplish)
  - 1. Determine usage.
  - 2. Determine location.
  - 3. Determine compliance with permit and decree.
  - 4. Prepare ownership directory.
  - 5. Send orders.
- C. Lower the "NUC = No information available" level by 30 in each water district.
- D. For Augmentation Plans:
  - 1. Finish tabulation of augmentation plans.
  - 2. Establish an augmentation plan data base that can be used for administration.
  - 3. Establish an accounting system for each active augmentation plan.
  - 4. Install control structures and measuring devices as necessary.
  - 5. Obtain field data.
  - 6. Administer.
- E. Add 1989 decrees to Tabulation.
- F. Add 1989 decrees to Structure Lists.
- G. Do computer accounting spreadsheets for:
  - 1. Blue River Diversion Project Williams Fork Moffat System,
  - 2. Continental-Hoosier System,
  - 3. McMahon/Red Dirt System.
- H. River Accounting Spread Sheet increase utility by:
  - 1. Phasing in hydrographic support,
  - 2. Utilizing real-time diversion data,
  - 3. Mixing and matching from various spreadsheets.

- I. Install reservoir staff gages and get capacity tables to match for 50% of each district's reservoirs.
- J. Pursue getting restricted dams repaired and off the restriction list.
- K. Develop an updated capacity table book for reservoirs in which capacity tables have been developed.
- L. Finish spillway hydrology studies for Class I dams and most of the Class II dams, time permitting.
- M. Write Individual Performance Objectives (IPO's) for Water Commissioners on diversion data and annual record submittals.
- N. Organize and implement program for hydrographic data collection for Division 5, including appropriation of money from legislature for same.
- O. Inventory gravel pits. (Proposal to spend SB 200 funds to accomplish)
  Using aerial photos for dating:
  - 1. Plot on mapping.
  - 2. Prepare directory of owners.
  - 3. Work to bring those needed into well permit compliance.
- P. Inventory and perform an on-site inspection of all test wells and monitoring holes. (Proposal to spend SB 200 funds to accomplish)
  - 1. Take steps necessary to breing them into compliance with State regulations.
  - 2. Insure proper abandonment where necessary.
- Q. Design system to notice public of calls.
- R. Design system to solicit user-supplied information.
- S. Complete backlog of hydrographic records.
- T. Implement a secretarial handbook.

# 3. Goals and Objectives

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

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

#### B. Water Records and Information

- 1. Provide the public with service regarding our administration.
- 2. 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. 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 are completed.

We are much closer to obtaining these objectives because of the past year's accomplishments. The prospects for the upcoming year look challenging.

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							72	72	72		53	53	 50		45		38	Ð		
							Fruita Water Works	Grand Junction Municipal	Redlands Power Canal		Stillwater Ditch	Dome Creek Ditch	Sarvis Creek Ditch		Divide-Highline Feeder		Roaring Fork Bypass Flow	NAME		
	TOTAL DIV % IMPORTS:						Colorado River	Colorado River	Colorado River		Egeria Creek	Egeria Creek	Red Dirt Creek	i.	Divide Creek		Roaring Fork River	STREAM	RECIPIENT	
. *	570,774						0	6,143	559,307		901	0	1,481		1,357		1,585	AF   AF   D)		
	1,228						0	364	360		NIA	0	168		56		280	DAYS		
	533,904						0	6,695	519,252		2,560	58	1,#667	-	2,086		1,586	IYR OF AF	) (	
	1,554						0	365	323		107	49	350		56		304	DAYS	1989	
							73	42	42		58	58	58		40		11	WD		
							Little Dolores River	Kannah Creek	Gunnison River		Bear Creek	Bear Creek	Sarvis Creek		Clear Fork Muddy Cr.		Turquoise River	STREAM	SOURCE	

							(12	(Page 1 of 2)
		RECIPIENT		1988	19	189		SOURCE
			ᄖ	JS IYR	吊	RECORD		
§	NAME	STREAM	AF	DAYS	AF	DAYS	¥	STREAM
7	Straight Creek Tunnel	Clear Creek	1,2188	365	820	365	36	Straight Creek
7	Vidler Tunnel	Clear Creek	743	127	966	120	36	Snake River
23	Boreas Pass Ditch	Tarryall Creek	58	NIA	0	0	36	Blue Kover
23	Hoosier Tunnel	Main Fork of South Platte River	9,838	160	10,720	130	36	Blue River
80	Roberts Tunnel	Main Fork of South Platte River	19,480	365	74,410	265	36	Blue River
						<b>-</b>		
11	Columbine Ditch	Tennessee Creek	1,050	87	1,420	114	37	South Fork of Eagle River
11	Ewing Ditch	Tennessee Creek	1,110	105	786	152	37	South Fork of Eagle River
11	Homestake Tunnel	South Platte via Arkansas River	33,730	172	22,760	199	37	Homestake Creek
Î1	Wurtz Ditch	l M	881	57	2,070	127	37	South Fork of Eagle River
П	Boustead Tunnel	Lake Fork Creek	14,280	43	37,140	94	38	Fryingpan River
11	Busk-Ivanhoe Tunnel	Lake Fork Creek	4,300	184	3,750	192	38	Fryingpan River
111	Twin Lakes Tunnel	Lake Fork Creek	32,434	365	37,390	365	38	Roaring Fork River
		PAGE 1 SUBTOTALS:	119,123	2,030192	192,232	2,123		

N V -EXPORTS

(PAGE 2 of 2)

		RECIPLENT	NT 19 3		301	1)(		SOURCE
5	NAME	STREAM	PREVIOUS	JS IYR	IYR OF	RECORD	ş	STREAM
	!							North Fork of
U	Grande Kiver Ditch	cache La Foudre Kivi	D68 61 L	130	18,680	791	10	Colorado River
ω <sub>,</sub>	Eureka Ditch	Cache La Poudre Rivr	140(est)	NIA	40(est)	NIA	51	North Fork of Colorado River
4	Alva B. Adams Tunnel	Big Thompson River	283,980	365	275,100	365	51	North Fork of Colorado River
6	Moffat Tunnel	Boulder Creek	78,570	365	64,890	365	51	Fraser River
7	Berthoud Pass Ditch	Clear Creek	684	60	0	0	51	Fraser River
6	August P. Gumlick Tunnel	Boulder Creek via Fraser River	INCLUSIVE	IVE IN	MOFFAT T	UNNEL	51	Williams Fork River
6	Vasquez Pipeline	- H I	INCLUSIVE	IN	MOFFAT T	UNNEL	51	Williams Fork River
40	Leon Tunnel Canal	Surface Creek	1,760	118	1,577	80	72	Leon Creek
		PAGE 2 SUBTOTALS:	384,924	1,038	360,287	972		
		PAGE 1 SUBTOTALS:	119,123	2,030	192,232	2,123		
		TOTAL DIV 5 EXPORTS: 504,047	504,047	3,068	552,519	3,095		
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		 	 					<u>  </u>									36		<b>ទ</b>	
				Clinton Gulch	Lower Black Creek Res	Dillon Reservoir BRDP	Goose Pasture Tarn	Buffehr Enlarged Res	Way Reservoir	Upper Blue Lake Res	Upper Black Creek Res	Reynolds Reservoir	Lost Lake	Hoagland Reservoir No 1	Green Mtn Reservoir	Cataract Lake	Black Lake		RESERVOIR NAME	
		TOTALS:		Ten Mile Creek	Black Creek	Blue River	Blue River	Ten Mile Creek	Springs Creek	Blue River	Black Creek	Keystone Creek	Brush Creek	Elliott Creek	Blue River	Cataract Creek	Black Creek		STREAM SOURCE	
		351,172		0		240,418	900	103	0	0	400	157	125	15	105,557	1,500	1,997	AF 7	PREVI Beg. IYR	
		416,464		0	NOT CONSTRUCTED	259,279	900	103	0	2,119	522	157	125	119	149,491	1,652	1,997	AF %	Beg.Irr.Season	
		334,573		4,670	TON DE	237,697	900	35	25	0	650	157	125	35	86,630	1,652	1,997	AF 7	IYR OF I	
		422,468		4,670	CONSTRUCTED	257,815	900	35	80	2,119	660	157	125	100	152,158	1,652	1,997	AF	RECORD  Beg.Irr.Season	
		325,05		4,670		242,084	900	35	75	0	655	157	125	35	72,669	1,652	1,997	% AF	n End I	

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L															37		<u>.</u>	<u>-</u>
					Welsh Reservoir	Robinson Reservoir	0. Z. Reservoir	Noecker Reservoir	Lower G. G. Reservoir	L.E.D.E. Reservoir	Homestake Reservoir	G. G. Reservoir	Chalk Mountain Reservoir	Black Lake No 2	Benchmark Lake	<del></del>	RESERVOIR NAME	
TOTALS:					Alkali Creek	Eagle River	Brush Creek	Eby Creek	Eby Creek	Gypsum Creek	Homestake Creek	Eby Creek	Eagle River	Gore Creek	Eagle River		SOURCE	STREAM
42,345			-		0	3,136	450	0	0	0	38,297	0	204	90	168	AF 7	Beg. IYR	1s PREV
39,726					0	3,136	450	280	0	222	35,176	0	204	90	168	AF %		1988 PREVIOUS IYR
27,798					0	3,136	452	0	0	0	23,735	0	217	90	168	AF	Beg. IYR	1989 IYR OF R
27,555					105	2,020	452	280	0	180	24,095	0	217	90	116	% AF %	Beg.Irr.Season	ECORD
18,570					0	2,020	452	0	0	0	15,675	0	217	90	116	AF	n End I	1

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			-	-	-	-	ļ	-					_	-					38		ទ	
	Upper Chapman Res	Thomas Res	Tagert Lake	Spring Park Res	Ruedi Res	Ralston No. 1 Res	Polaris Res	McNulty Res	Lake Ann Ditch Res	Jacobson Lakes & Ponds	Ivanhoe Res	Hopkins Res	Himmeland Lake	Crooked Creek Res	Crawford Dam No. 2	Crawford Dam No. 1	Consolidated Res	Beaver Lake	Alicia Lake Res		RESERVOIR NAME	1909
SUBTOTAL (Pg. 1):	Fryingpan River	Thomas Creek	Roaring Fork River	Blue Creek	Fryingpan River	West Coulter Creek	Coulter Creek	Slipper Run Creek	Sopris Creek	Roaring Fork River	Fryingpan River	Landis Creek	Roaring Fork River	Lime Creek	Blue Creek	Blue Creek	West Coulter Creek	Crystal Lake	Lime Creek		STREAM SOURCE	
94.823	24 <u>5</u> 0	160	NIA	0	90,874	0	NIA	0	10	225	0	NIA	92	NIA	56	160	50	73	673	AF	PRI Beg. IYR	
105,543	2450	160	NIA	2067	97,881	0	NIA.	0	274	225	627	NIA	92	NIA	56	160	805	73	673	Z AF Z	PREVIOUS IYR YR   Beg.Irr.Season	1088
87,826	2450	160	NIA	30	83,816	0	NIA	0	4.5	225	7	NIA	92	VIN	56	160	80	73	673	AF	INR OF Beg. IYR	1989
104,099	2450	160	NIA	1412	97,262	0	NIA	0	325	225	409	NIA	92	377	56	160	802	73	673	Z AF	RECOR Bes	
88,329	2450	160	VIA	4	84,405		IN		20	22		NI	9	NH	5	16		7	67	Z AF	on End ]	

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												Woods Lake Res	Wildcat Res	Von Springs Res No. 2	38 Van Cleve-Fisher Res		WD RESERVOIR NAME	
TOTAL:						SUBTOTAL Page 2:	SUBTOTAL Page 1:			SUBTOTAL (Pg. 2):		 Lime Creek	Snowmass Creek	Coulter Creek	Mesa Creek		STREAM SOURCE	
96,453						1630	94,823			1630		300	1100	230	0	ĄF.	PRI Beg. IYR	
107,523						1980	105,543			1980		300	1150	230	300	Z AF Z	EVIOUS IYR  Beg. Irr. Season	1 0 8 8
89,411						1585	87,826			1585		300	1125	160	0	Z AF	IYR OF n Beg. IYR	1989
105,822						1723	104,099			1723		300	1175	102	146	Z AF	RECORD Beg.Irr.Season	÷
89,807						147	88,32			147:		30(	1100	7:		Z AF	on End	

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											Rifle Gap Res	Park Res	Middle Fork Res	Meadow Creek Res	Harris Res	Grass Valley Res	City of Rifle Pond No. 1		RESERVOIR NAME		H. C.O.
TOTALS:											Rifle Creek	Elk Creek	Parachute Creek	Elk Creek	Rifle Creek	Rifle Creek	Colorado River		SOURCE	STREAM	-
6,626											2,143	45	140	984	100	3,158	56	AF	Beg. IYR	PRI	
19,583											12,240	163	140	984	200	5,800	56	7 AF 7		PREVIOUS IYR	
13,546											1,888	19	7,463	984	100	3,036	56	AF %	Beg. IYR	IYR OF	
27,015											12,276	176	7,463	984	200	5,860	56	AF Z	Beg.Irr.Season	RECORD	
10,412											1,282	0	7,435	984	100	555	56	AF	End I		

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									Centenial Lake	Barton Porter Reservoir	Anderson Pond No 1		RESERVOIR NAME	
TOTALS:									Colorado River	East Alkali Creek	Colorado River		SOURCE	STREAM
556.9									238	6.9	312	AF 7	Beg. IYR	PREV
756.7									238	206.7	312	AF 7	Beg.Irr.Season	PREVIOUS IYR
555.8									238	5.8	312	AF 7		IYR OF
734.8									238	184.8	312	% AF	Beg.Irr.Season	RECORD

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	•			Woods Res	Whiteley Peak Res	Parsons Res	North Meadow Res	Milk Creek Res	McMahon Res No. 2	McElroy Res	Matheson Res	Martin Res	Oak <b>s</b> Reservoir	Lake Agnes	Hinman Res	Binco Res	Basin Res	Antelope Res	0 Albert Res		WD RESERVOIR NAME	
	TOTAL:			Muddy Creek	Muddy Creek	Muddy Creek	Pond Muddy Creek	Milk Creek	Red Dirt Creek	Pass Creek	Troublesome Creek	Muddy Creek	Muddy Creek	Muddy Creek	Muddy Creek	Troublesome Creek	Muddy Creek	Colorado River	Albert Creek		SOURCE	STREAM
	2027			5	300	0	0	25	375	0	349	15	2	432	230	120	21	150	w	AF Z	Beg. IYR	PRE
	8144			50	600	20	204	40	3500	240	1073	215	50	432	611	516	118	350	125	AF	Beg.Irr.Season	1988 PREVIOUS IYR
	1853			5	350	0	0	25	440	0	50	215	15	400	300	50	0	0	ω	Z AF	Beg. I	198 IYR OF
	9268			50	773	0	300	105	3490	240	1073	215	50	431	611	500	80	280	125	Z AF		1989 OF RECORD
1	1068			15	100	0	0	25	440	0	0	55	20	400	20	5.	0	35	ω	Z AF	son End	

		Sun V	Shadow	Schol1	Rock	Musgrave	Moore	Meadow	Langholen	Lake	Kings	Jack	Hanki	I W I	East	Cotto	51 Bull		WD RES	1989
		Valley Reservoir	ow Mtn Reservoir	ll Reservoir	Creek Reservoir	cave Reservoir	Reservoir	ow Creek Reservoir	nolen Reservoir	Granby	s Reservoir	Orr Reservoir	Hankinson Reservoir	Linke No 2 Reservoir	Branch Reservoir	Cottonwood Reservoir	Run Reservoir		RESERVOIR NAME	9
		North Fork of Colo	Colorado River	Corral Creek	Rock Creek	Corral Creek	Williams Fork River	Ranch Creek	Battle Creek	Colorado River	Buffalo Creek	Colorado River	Fraser River	Ten Mile Creek	Williams Fork River	Gardiner Creek	Williams Fork River		STREAM SOURCE	NEGET VOID OF
		72	17,653	20	100	50	75	206	20	428,765	731	20	116	5	1250	10	200	AF	PRI Beg. IYR	STOKAGE SOFEE
		72	18,130	120	140	300	200	5371	53	492,392	731	20.	116	60	2000	35	250	% AF %	PREVIOUS IYR YR  Beg.Irr.Season	1008
720 570		72	18,075	0	140	80	70	934	8	399,454	731	20	116	0	700	10	160	AF %	IYR Beg. I	JO AF
400 - 684		72	17,687	165	100	300	130	5100	50	374,644	170	20	116	50	1800	80	200	AF 8	OF RECORD YR  Beg.Irr.Season	page
294,67		72	17,785	C	0	0	75	200	(J	273,95	170	20	116		2000	30	192	Z AF	n End	e 1 of 2

SESENVOLA STORAGE SOFTWARES GREATER THAN SO AF

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+	 		-					<u> </u>		<u> </u>	<u> </u>	 -					-	51		£		
															Willow Creek Reservoir	Williams Fork Reservoir	Ute Creek Reservoir	Sylvan Reservoir		RESERVOIR NAME		
				TOTALS:	SUBTOTALS PAGE 2:	SUBTOTALS PAGE 1:							SUBTOTALS:		Willow Creek	Williams Fork River	Williams Fork River	Little Muddy Creek		SOURCE	STREAM	¥ .
				535,872	86,579	449,293	· .						86,579		7243	79,176	70	90	AF	Beg. IYR	ם ב	-
				626,925	106,935	519,990					-		106,935		10,017	95,818	100	1000	7 AF 7	Beg.	PREVIOUS LAS	
				499,240	78,670	420,570							78,670		9962	68,573	40	95	2 AF 7	Beg. IYR	IYR OF R	
				495,923	95,239	400,684							95,239		9110	85,029	100	1000	AF Z	Beg. Irr. Season	RECORD	
				368,189	73,515	294,624							73,515		7776	65,712	72	5	AF	End IY		

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	 		 	<u> </u>		 ļ						52		B	
										Rock Gap Dam	Jones Res	Christenson Res		RESERVOIR NAME	
							TOTALS:			Unnamed Tributary to Colorado River	Sheephorn Creek	Sheephorn Creek		SOURCE	MIBETO
							190.4			52.0	69.2	69.2	A.F	Beg. IY	Ū.
							190.4			52.0	69.2	69.2	2 AF }2	IYR Beg. Irr. Season	REVIOUS TYR
<del></del>							190.4			52.0	69.2	69.2	AF	Beg. IYR	IVR OF
							190.4			52.0	69.2	69.2	7 AF 7	Beg. Irr. Season	RECORD
							190.4			52.0	69.2	69.2	AF	n End IY	

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	Tonier Gulch Res	Sweetwater Res	Sterner Res	Reid Res No. 3	Newton Gulch Res	Morris Res	Mackinaw Lake Res	Luark Res	Kelly Res	Jones No. 2 Res	Jones No. 1 Res	Hidden Springs Res	Heart Lake Res	Hadley Res	Grimes Brooks Res	Egeria Res	Ed W. Harper	Cresent Lake	53 Clyde Res		RESERVOIR NAME		
SUBTOTAL (Pg. 1):	Tonier Gulch	Sweetwater Creek	Egeria Creek	Egeria Creek	King Creek	Toponas Creek	Derby Creek	Spring Creek	Egeria Creek	Sheep Creek No. 2	Sheep Creek No. 2	Horse Creek	Deep Creek	Egeria Creek	Red Ditch Creek	Egeria Creek	Egeria Creek	Derby Creek	Egeria Creek		SOURCE	STREAM	VESEVACTY
16,049.8	64	12,000	0	93	0	0	NIA	0	43	0	0	NIA	3,255	164	316	7	14.2	87.2	6.4	AJ:	Beg. IYR		סוטגאינ סטבו
17,516.8	64	12,000	100	93	120	294	NIA	90	93	83	240	NIA	3,255	164	316	107	194.2	237.2	66.4	Z AF	Beg.Irr.S	EVIOUS IYR	SUPPLIANTES GREATER
15,972.8	64	12,000	30	93	0	0	NIA	0	43	ω	0	NIA	3,255	164	206	7	14.	87.	6.	Z AF	eason Beg.	 	THAN 50 AF
17,7		12,											ω				2	2	4	27	IYR Be	IYR OF RECORD	
11.7	64	12,000	90	93	123	75	NIA	90	226	400	200	NIA	255	164.6	326	107.3	194.2	237.2	66.4	AF Z	Beg.Irr.Season	RD .	(PAGE 1 OF
15,888.8	64	12,000	0	93	0	0	NIA	0	30	255	0	NIA	3,255	164.6	0	7	14.:	0	6	AF	n End		2)

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															Wohler Res	Toponas Rock No. 2 Res		D RESERVOIR NAME	
							TOTAL:	SUBTOTAL PAGE 2:	SUBTOTAL PAGE 1:			SUBTOTAL (Pg. 2):			Elk Creek	Toponas Creek		SOURCE	STREAM
							16,142.8	93	16,049.8			93			93	0	AF	Beg. IYR	ĺ
-							17,693.8	177	17,516.8			177			93	84	Z AF	Beg. Irr	1988 PREVIOUS IYR
-							 -										7	.Season	
							 16,065.8	93	15,972.8			93			93	0	AF	Beg. I	<del>ਖ਼</del>
-					<del> </del>		 		-								1.4	×	اس اس
							17,892.7	18)	17,711.7			181			93	88	AF	Beg. Irr. Season	989 RECORD
-				-			 11			 							7	nost	
							15,981.	93	15,888.			93			93	0	AF	End	

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	Cottonwood Lake Res No 2	Cottonwood Lake Res No l	Coon Creek No 3 Res	Coon Creek No 2 Res	Coon Creek No 1 Res	Colby Horse Park Res	Bull Creek No 5 Res	Bull Creek No 4 Res	Bull Creek No 3 Res	Bull Creek No 2 Res	Bull Creek No 1 Res	Bull Basin No 2 Res	Bull Basin No l Res	Big Creek No 7 Reservoir	Big Creek No 5 Reservoir	Big Creek No 4 Reservoir	Big Creek No 3 Reservoir	Big Creek No l Reservoir	Big Beaver Reservoir		RESERVOIR NAME	
SUBTOTALS:	Cottonwood Creek	Cottonwood Creek	Coon Creek	Coon Creek	Coon Creek	Leon Creek	Bull Creek	Bull Creek	Bull Creek	Bull Creek	Bull Creek	Bull Creek	Bull Creek	Big Creek	Big Creek	Big Creek	Big Creek	Big Creek	Bull Creek		SOURCE	STREAM
4,911	0	1,445	0	0	0	130	68	0	0	70	0	0	0	891	55	0	1,506	746	0	AF	Beg. IYR	PR
7,031	220	1,743	0	0	0	490	236	226	0	70	83	62	70	1,223	94	181	1,506	746	81	% AF	Beg.Irr.Season	1988 PREVIOUS IYR
4,019	0	1,670	0	0	0	162	106	0	0	0	0	0	0	592	0	181	1,308	0	0	% AF	Вев	1 1YR 01
6,404	143	1,114	47	120	0	490	236	226	0	70	83	30	0	1,223	105	143	1,549	746	79	% AF	Irr.	1989 IYR OF RECORD
2,694	0	1,378	0	0	0	30	35	0	0	0	0	0	0	271	0	0	980	0	0	7 AF	Season End IYR	

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	Palisade Storage Res 1	Palisade Cabin Reservoir	Monument No 2 Reservoir	Monument No l Reservoir	Mesa Creek No 4 Res	Mesa Creek No 3 Res	Mesa Creek No 1 Res	Mack Mesa Reservoir	Lost Lake Reservoir	Leon Lake Reservoir	Kirkendall Reservoir	Kendall Reservoir	Jerry Creek Res No 2	Jerry Creek Res No 1	Highline Reservoir	Hawxhurst Reservoir	Dawson Reservoir	Cottonwood Lake Res No 5	Cottonwood Lake Res No 4		RESERVOIR NAME	
SUBTOTALS:	Rapid Creek	Rapid Creek	Leon Creek	Leon Creek	Mesa Creek	Mesa Creek	Mesa Creek	Mack Wash	Bull Creek	Leon Creek	Leon Creek	Leon Creek	Plateau Creek	Plateau Creek	Mack Wash	Hawxhurst Creek	Big Creek	Cottonwood Creek	Cottonwood Creek		SOURCE	STREAM
11,947	109	970	0	66	0	290	187	NIA	0	602	NIA	NIA	5,495	1,320	2,080	117	220	342	149	AF	Beg. IYR	
14,129	109	1,009	102	572	9	285	131	NIA	0	1,924	NIA	NIA	5,495	1,320	2,080	154	220	342	377	7 AF 7		PREVIOUS IYR
11,183	87	957	0	0	0	0	0	NIA	0	665	0	0	5,668	1,037	2,080	0	220	209	260	AF	Beg.	IYR OF R
13,208	NIA	775	102	572	109	146	78.3	NIA	24	1,477	112	84	5,705	1,197	2,080	71	220	171	285	% AF 2	Beg.Irr.Season	l <del>Im</del>
10,022	NIA	800	0	0	0	0	0	NIA	0	378	0	0	5,350	192	2,770	0	203	72	257	A.F	E.	

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								Jensen Reservoir	YI Reservoir	Vega Reservoir	Twin Basin Reservoir	T E Kitson Reservoir	Stubbs McKinney Clark Res	Rapid Creek No 2 Res	Rapid Creek No l Res	Parker Basin Res No 3	Parker Basin Res No 2	Parker Basin Res No 1	Palisade Storage Res 2		RESERVOIR NAME		
		TOTALS:		SUBTOTALS PAGE 1:	SUBTOTALS PAGE 2:	SUBTOTALS PAGE 3:		Cottonwood Creek	Grove Creek	Plateau Creek	Bull Creek	Cottonwood Creek	Spring Creek	Rapid Creek	Rapid Creek	Cottonwood Creek	Cottonwood Creek	Cottonwood Creek	Rapid Creek		SOURCE	STREAM	
		26,382		4,911	11,947	9,524		225	0	8,009	68	0	0	900	50	0	0	272	0	AF	Beg. IYR		
		53,370		7,031	14,129	32,210		225	0	30,131	114	132	230	900	50	0	60	272	96	7 AF 7	Beg.Irr.Season	1988 PREVIOUS IYR	
:		23,521		4,019	11,183	8,319		225	0	6,619	0	132	153	800	50	0	0	244	96	AF	Вев	1989 IYR OF RECORD	
		47,777		6,404	13,208	28,165		NIA	180	26,398	30	159	230	884	50	0	60	174	NIA	Z AF	Beg.Irr.Season	RECORD	क्रम्
		16,047		2,694	10,022	3,331		NIA	0	2,254	0	178	0	700	0	0	0	199	NIA	Z AF	on End IYR		hake n or n

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												Shane Reservoir	Sawmill Reservoir	Jones Reservoir	Griggs Reservoir No 3	Griggs Reservoir No 2	Griggs Reservoir	Dillon	Bumgarner Reservoir		RESERVOIR NAME	
TOTALS:												Shane Gulch	Carter Creek	Sawmill Creek	Beaver Creek	Beaver Creek	Beaver Creek	Salt Lick Creek	Beaver Creek		SOURCE	STREAM
85												0	0	0	0	0	41	44	0	AF	Beg. IYR	PR
		-			-			<u>                                      </u>					<u> </u>							%	i	1988 PREVIOUS
155												0	0	14	34	0	41	44	22	AF	• 1	S IYR
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115.5			,									G.	17	0.5	0	8	41	44	0	AF	Beg. IYR	IYR O
-	-	-	-	-	-	-	-			-							-			72	<del></del>	1989 F REC
178												6	17	15	25	8	41	44	22	AF	deg.Irr.Season	1989 IYR OF RECORD
	-	-		-								-								%	son	
11:													17	.5			41	44		AF	End	

¥ 37 1989 Black Lake Nottingham Reservoir June Creek Lake Creek Meadows RESERVOIR NAME Nottingham Creek Lake Creek June Creek Gore Creek STREAM SOURCE TOTALS: Beg. 0 NIA NIA NIA 0 AF. IYR PREVIOUS IYR ... 24 1988 Beg. Irr. Season NIA NIA NIA 0 AF 0 >4 IYR OF RECORD

Beg. IYR Beg. Irr. Season 89.4 AF 44.4 38 0 1989 39 89.4 AF 38 44.4 0 7 End IN 89.4 38 44 끍 0

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-								<u> </u>		·									38		ð	
	Highland Pond No 3	Highland Pond No 1	Hendricks Fish Pond	Hell Roaring Res No l	Hawk Gulch Reservoir	Elk Creek Res No 2	East Creek Res and PL	Deane Pond No 2	Deane Pond No 1	Crooked Creek Reservoir	Crawford Dam No 3	Christine Lake	Carroll Pond	C and M Pond	Buck Point Ranch Res 2	Buck Point Ranch Res 1	AMV Reservoir No 3	AMV Reservoir No 2	AMV Reservoir No 1	-	RESERVOIR NAME	
SUBTOTALS:	Maroon Creek	Maroon Creek	Fryingpan River	Crystal River	Edgerton Creek	Elk Creek	Crystal River	Roaring Fork River	Roaring Fork River	Fryingpan River	Blue Creek	Roaring Fork River	Four Mile Creek	Four Mile Creek	Mesa Creek	Mesa Creek	Blue Creek	Blue Creek	Blue Creek		SOURCE	STREAM
201.1	9	2	2	2	12	10	6	20	<u>ر</u>	40	25	17	•31	.25	15	20.5	5	ن.	Vi	AF 7	Beg. IYR	1988 PREVIOUS
211.7	9.5	2.3	2.3	2.3	13	10.5	6.2	22	\( \sigma \)	43	26	17.5	.41	•35	15.5	20.5	5.1	5.1	5.1	AF Z	•	1988 TOUS IYR
200.6	9	2	2	2	12	10	6	20	5	40	25	17	.31	.25	15	20	5	\( \sqrt{1} \)	5	AF	Beg. I	1989 IYR OF RE
200.6	9	2	2	2	12	10	6	20	Ci .	40	25	17	0.3	0.3	15	20	5	G	5	% AF	Beg.Irr.Season	989 RECORD
175.(	9	2	2	2	12	10	6	20	5	40	0	17	0.3	0.3	15	20	5	5	5	A	1 End	

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		Wexner Pond	Waters Reservoir	Von Springs Res No 1	Tagert Lake	Stainton Pond No 4	Stainton Pond No 3	Stainton Pond No 2	Stainton Pond No 1	St. John Reservoir	R E H Reservoir	McVey Reservoir	Martin Reservoir Alt 1	Magnifico Ponds	Kopp Pond	James Reservoir	Hutchins Bros Res 2	Hutchins Bros Res 1	Hignett Pond		RESERVOIR NAME		
TOTALS:	SUBTOTALS:	Roaring Fork River	Coulter Creek	Coulter Creek	Roaring Fork River	Four Mile Creek	Four Mile Creek	Four Mile Creek	Four Mile Creek	Thomas Creek	Crystal River	Cattle Creek	Four Mile Creek	Waste and Seeps	Roaring Fork River	Roaring Fork River	Sopris Creek	Sopris Creek	Blue Creek		SOURCE	STREAM	VESEVACTV OF
361.3	160.2	8.5	17.5	0	30	4	8	1	ļ	0	13.6	ω	4	5.3	4	8.3	7	40	5	AF 7	Beg. IYR	PRE	STORMED SOURCE
409.0	197.3	8.8	18	25	31	5	00	1.1	1.1	5	14	3.2	5	5.5	4.1	8.6	7.3	41.5	5.1	, AF	Beg. Irr. Season	1988 PREVIOUS IYR	N+110
355.6	155.0	8.5	17.5	0	30	1.8	4.5	₽	ļ-4	4.5	13.6	ω	0	5.3	4	8.3	7	40	5	% AF	Ве	I#	
396.3	195.7	8.5	17.5	34	30	5	8		 	4.5	13.6	ω	4	5.3	4	8.3	7	40	,	% AF	Beg. Irr.	89 F RECORD	0
320.3	144.7	8.5	17.5	0	30	0	0	<u></u>	-   · · · · · ·	4.5	13.6	w	0	5.3	4	8.3	7	40		% AF	Season End I	-	

WIND CANDON CONTRACT THE CANDON CONTRACTOR

																			39		ទ	
							Sample Reservoir No 2	Sample Reservoir No 1	Raymond Pond	Lisa Pond	Emmer Reservoir	Cozza Reservoir	Clough Stock Water Res	Cherry Creek Pond No 5	Cherry Creek Pond No 4	Cherry Creek Pond No 3	Cherry Creek Pond No 2	Cherry Creek Pond No 1	Brungs Pond		RESERVOIR NAME	
TOTALS:							East Elk Creek	East Elk Creek	West Rifle Creek	Colorado River	Rifle Creek	Cozza Gulch	Colorado River	West Elk Creek	East Elk Creek		SOURCE	CTBFAK				
36.9							5	2	ω	∞	7.9	0	<b>-</b>	۲	1	Н	Н	Þ	G	AF Z	Beg. IYR	1988
40.4							ر ر	2	ω	8	7.9	3.5	L	1	<b> </b>	1	<b>,</b>	Н	5	AF	.Irr.Seas	1988 TOUS TYR
26.7							2	1.8	ω	P	7.9	0	₽	1	<u> </u>	1	<b>⊢</b>	Ľ	5	Z AF	on Beg. IYR	IYR OF
31.7							2	1.8	ω	<b>⊢-1</b>	7.9	5	1	1	 	<b>⊢</b>	 	<u></u>	5	7 AF	Beg.Irr.S	1989 RECORD
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26.7							2	1.8	ω		7,5	0	H	1	-	г	1	1	5	AF	End	

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						Weller Lake	Susan Stock Water Ponds	Miklish Reservoir	KIC Reservoir	Jonathan Gant Res	Island Ranch Lake No 3	Island Ranch Lake No 2	Island Ranch Lake No l	Frei Reservoir	Conger Reservoir		RESERVOIR NAME	1707
	TOTALS:					Colorado River	Elk Horn Gulch	South Canon Creek	Alkali Creek	West Mamm Creek	Colorado River	Colorado River	Colorado River	Divide Creek	Cottonwood Creek		STREAM SOURCE	
	76.7					6	4	2.5	2.4	0	16	18	3.7	24.1	0	AF.	Beg. IYR	
	109.6					6	4	2.5	2.4	0	20	24	5	26.6	19.1	7 AF 7	PREVIOUS IYR IYR   Beg.Irr.Season	
	79.2					6	4	2.5	2.4	0	16	18	3.7	26.6	0	AF 7	IYR OF Beg. IYR	
	104.5					6	4	2.5	2.4	12.2	20	24	<b></b>	26.6	8	AF Z	Beg.Irr.Season	
	59.9					6	4	2.	2.	0	16	18	ω	6.	0	AF	End I	

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				Wheatley Divr Pond No 1	Slide Reservoir	Saraceno Reservoir	Paul Pool	Lewis Reservoir	Heini-Kramer Reservoir	Heini Reservoir	Hartman Res No 2	Davidson Reservoir	Confluence Reservoir	Colburn Reservoir No 2	Colburn Reservoir		RESERVOIR NAME		1989
Totals:				Lawrence Creek	Troublesome Creek	Pass Creek	Muddy Creek	Pinto Creek	Pinto Creek	Pinto Creek	Star Gulch	Muddy Creek	Antelope Creek	Muddy Creek	Muddy Creek		SOURCE	STREAM	VESEVACTV OF
75				NIA	5.0	7.0	NA	1.0	2.0	47	NIA	NIA	7.0	5.0	1.0	AF 7	Beg. IYR	PREV	סדריאטר חחידיציירים
181				NIA	18.0	11.0	NA	40.0	19.0	47	NIA	NIA	7.0	23.0	16.0	AF %	Beg.Irr.Season	1988 PREVIOUS IYR	ייירי ברנינו זייירי
1007				3.0	4.0	6.0	0.7	0.0	0.0	48	30	0.5	7.0	0.5	1.0	AF 7	Beg. IYR	1989 YR OF	
224.2				ω 	12.0	11.0	0.7	35.0	19.0	47	48	2.0	7.0	23.0	16.0	AF %	Beg.Irr.Season	RECORD	
98.2				3.0	4.0	10.0	0.7	0.0	0.0	45	35	0.5	0.0	0.0	0.0	AF	t n	-	

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				Springdale Reservoir	Skylark Reservoir	Robinson Swan Pond No 1	Pickering Reservoir	McCandliss Reservoir	Marte-Linke Reservoir	Little HO Reservoir	Linke Reservoir	Lewis Pond Empoundment	Huntington Reservoir	Gregerson Reservoir	F W Linke Reservoir	F W Linke No 3 Reservoir	Doe Creek Reservoir	Dale Reservoir	Cole Reservoir		RESERVOIR NAME		
TOTALS:				Copper Creek (Kinney)	Skylark Creek	Williams Fork River	Fraser River	Skylark Creek	Nine Mile Creek	Walden Hollow	Ten Mile Creek	Williams Fork River	Sheriff Creek	Copper Creek (Kinney)	Ten Mile Creek	Ten Mile Creek	Doe Creek	Battle Creek	Battle Creek		SOURCE	STREAM	
93				NIA	0	Н	20	0	20	20	2	ωj	0	8	5	5	0	9	0	AF	Beg. IYR	PR	
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274				NIA	12	ω	20	24	20	20	40	w	0	30	4	26	4	25	43	AF		1988 PREVIOUS IYR	
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77				0	0	P	20	0	20	20	0	W	0	∞	0	0	0	4	0	AF	Beg. IYR	1989 IYR OF	
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319				0	12	ω	20	24	36	34	20	ω	15	38	35	20	4	25	30	AF	Beg.Irr.Season	RECORD	
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97				0	0	H	20	0	18	20	0	ω	0	33	0	0	0	2	0	AF	End		

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Piney Peak Pond No 5	Dool Bond No	Piney Peak Pond No 4	Piney Peak Pond No 3	Piney Peak Pond No 2	Piney Peak Pond No 1	Olsen Reservoir No 5	Olsen Reservoir No 4	Olsen Reservoir No 3	Olsen Reservoir No 2	Olsen Reservoir No 1.5	Olsen Reservoir No 1	Hurt Reservoir	Gore Canyon Ranch Lake 4	Gore Canyon Ranch Lake 3	Gore Canyon Ranch Lake 2	Gore Canyon Ranch Lake 1	Forster Reservoir	Castle Reservoir	Box Canyon Reservoir		RESERVOIR NAME
TOTALS:	1	Sheephorn Creek	Sheephorn Creek	Sheephorn Creek	Sheephorn Creek	Piney River	Piney River	Alkali Creek	Colorado River	Colorado River	Colorado River	Colorado River	Sheephorn Creek	Piney River	Piney River		SURCE				
101.7	1.2	1	1.16	1.6	10	3.1	5	2.3	2.5	ω	37	0	. 8	2.5	.75	.75	NIA	0	29	AF ,	Beg IYR
181.7	1.2	H	1.16	1.6	10	3.1	U	2.3	2.5	ω	37	50		2.5	.75	.75	NIA	30	29	% AF %	Beg.Irr.Season
101.7	1.2	<b>-</b>	1.16	1.6	10	3.1	5	2.3	2.5	ω	37	0	. &	2.5	.75	.75	NIA	0	29		Beg. IYR
211.66	1.2	1	1.16	1.6	10	3.1	5	2.3	2.5	ω	37	50	.8	2.5	.75	.75	30	30	29	% AF %	Beg.Irr.Season
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				Yarmony Reservoir	Tepe Reservoir	Stout Reservoir	Sawmill Reservoir	Roberta Reservoir	P J Martin Reservoir	Noble Reservoir	Maloney Reservoir	King Mountain Reservoir	Jones No 3 Reservoir	J F Reimer Reservoir	Hadley No 2 Reservoir	Fairview Reservoir	E M Curry Reservoir	Calvick Reservoir	A J Reservoir		RESERVOIR NAME		
	TOTALS:			Yarmony Creek	Tepe Creek	Sweetwater Creek	Horse Creek	Egeria Creek	Sheep Creek 2	Sutton Creek	Horse Creek	Egeria Creek	Sheep Creek 2	Toponas Creek	Egeria Creek	Rock Creek	Skinner Creek	Sweetwater Creek	King Creek		SOURCE	STREAM	
	261.1			0	0	∞	10	49.6	15	0	13	25	42.5	NIA	24	12	0	24	38	AF	Beg. IYR		
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,	373.1			44	10	∞	10	49.6	15	32	13	25	42.5	NIA	24	12	26	24	38	AF	Beg.Irr.Season	1988 PREVIOUS IYR	
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	223.1			0	0	8	10	49.6	15	0	13	25	42.5	NIA	24	12	0	24	0	A.F	Beg. IYR	1989 IYR OF	
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	337.1			45	10.5	∞	10	49.6	0	32.6	13.7	25	42.5	NIA	24	NIA	30	24	22.2	AF	Beg. Irr. Season	RECORD	
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	196.8			0	0	&	10	49	0	0	13	25	42	NIA	24	NIA	0	24	0	Ą	End		

ਬ 70 Trough Springs Res RESERVOIR NAME Dry Fork STREAM SOURCE TOTALS: Beg. IYR |Beg.Irr.Season 0 0 ΑF PREVIOUS IYR 1988 0 AF 0 74 Beg. IYR 0 AF 0 IYR OF RECORD
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											Michaelson No l Reservoir	Macs Reservoir	Gardnier Reservoir	Fred DeCamp Reservoir	Currier Reservoir No 2	Carpenter Reservoir		RESERVOIR NAME	
TOTALS:											Big Creek	Brush Creek	Colorado River	Cottonwood Creek	Buzzard Creek	Leon Creek		SOURCE	STREAM
68											0	NIA	30	38	0	0	AF	Beg. IYR Beg.	PR
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128											0	25	30	38	20	15	AF	Beg.Irr.Season	CORD
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	-		-	-		72	70	53	52	51	50	45	39	38	37	36		AT D
																		RESERVOIR NAME
					TOTALS:													STREAM SOURCE
					1158.5	68.0	0	261.1	101.7	93.0	75.0	76.8	36.9	361.0	0	85.0	ĄF	PR Beg. IYR
					1832.8	68.0	0	373.1	181.7	274.0	181.0	113.7	77.3	409.0	0	155.0	Z AF	PREVIOUS IYR IYR  Beg.Irr.Season
					1237.7	68.0	0	223.1	101.7	77.0	101.0	79.3	26.7	356.0	89.4	115.5	AF	IYR OF Beg. IYR
					2019.4	128.0	0	337.1	211.7	319.0	224.0	104.5	31.7	396.0	89.4	178.0	AF AF	F RECORD Beg.Irr.Season
					1152.6	50.0	0	196.8	101.7	97.0	98.0	59.5	26.7	320.0	89.4	113.5	AF	m m

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Ī	 					 	72	70	53	52	51	50	45	39	38	37	36			Ð	
		NOISIVIA		DIVISION TOTAL RESERVOIRS	DIVISION TOTAL RESERVOIRS													DISTRICT TOTALS RESERVOIRS		RESERVOIR NAME	
	,	5 TOTAL STORAGE:		LESS THAN 50 AF:	GREATER THAN 50 AF:													RS GREATER THAN 50 AF		SOURCE	STREAM
		1,074,443	1	1,159	1,073,284		26,382	0	16,143	190	535,872	2,027	557	2,143	96,453	42,345	351,172		AF 7	Beg. IYR	PREV
		1,284,866		1,833	1,283,033		53,370	0	17,694	190	626,925	8,144	757	12,240	107,523	39,726	416,464		AF %	Beg.Irr.Season	PREVIOUS IYR
		996,334		1,238	995,096		23,521	0	16,066	190	499,240	1,853	556	1,888	89,411	27,798	334,573		AF %		IYR OF R
		1,141,926		2,019	1,139,907		47,777	0	17,893	190	495,923	9,268	722	12,276	105,822	27,555	422,468		AF 7	Beg.Irr.Season	RECORD
		837,9		1,1	836,7		16,0	0	15,9	1	368,1	1,0	5	1,2	89,8	18,5	325,0		AF	End	

# WATER DIVERSION SUMMARIES BY DISTRICT

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# WATER DIVERSION SUMMARIES BY DISTRICT

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# D. WATER COURT ACTIVITIES

Calendar Year 1989

(1/1/89 thru 12/31/89))

Number of Water Rights Applications = 89CW001 thru 89CW327 287 = Division 5 39 = Division 6 1 = Change of Venue to Division 4

Number of Structures in 1989 Applications = 682

Water Court Cases Decreed For Division 5 in 1989 = 323

# E. OFFICE ADMINISTRATION Calendar Year 1989

(1/1/89 thru 12/31/89)

# A. Notes below pertain to the page following this one:

*	Shelden, Jim E.	Passed away 7/21/89
*	Nichols, Becky	Transferred out 3/1/89
π	Klenda, Robert	Made full-time 9/1/89
*	McEwen, Bill	Transferred in 6/22/89 began working WD 38 then
		began working WD 52/53
*	Bergquist, Joe	Hired 9/11/89
*	Bieser, Robert	Retired 10/88
*	Hildebrand, Richard	Hired 4/15/89 then terminated employment after one day
π	Greene, Ronald	Hired 6/14/89
*	Reed, Miles	Retired 6/88; returned temporarily thru 5/89
*	Carlson, Robert	Transferred out 4/1/89
*	Wilson, Marshall	Hired 5/20/89
*	Hill, Clifford	Retired 11/1/89; suffered heart attack 7/7/89

# E. OFFICE ADMINISTRATION (continued)

	NAME	POSITION				MILEAGE	
	Bell, Orlyn J.	Division Engi	neer	• • • • • • • • • • • • • • • • • • • •		16,185	
			_			923	
	Martellaro, Alan C.	Asst Division	Engineer	• • • • • • • • • • • •		444	
	McCabe, Robert D.					1,129	
	Schieldt, Wayne I.	or wir kes Eng	gr (Hydro)	• • • • • • • • • • • •	• • • • • • • •	3,038	
	Hitchcock, Nancy C.	Cr Coaretter				182	
	Blair, John G.		: (Dam Safety	Inspector)		358	Р
	,	nor nob Engl	o (bam baree)	inspector,			
	FULL-TIME EMPLOYEES	IN THE FIELD					
				MONTHS	MONTHS		
	NAME	POSITION	DISTRICT	BUDGETED	WORKED	MILEAGE	
	Wells, L. Wayne	Sr Wtr Comm	36/37	12	12	9,268	s
÷			•			4,964	
	Cerise, Alvin L.	Wtr Comm C	38/39/45	12	12	18,869	
	Thompson, Wm. H.	Wtr Comm C	50	12	12	14,056	
	Shelden, Jim E.	Wtr Comm C	52/53*	12	6.5	5,662	
	Klocker, Marcus A.	Prin Wtr Comm	72	. 12	12	11,644	
	PERMANENT PART-TIME	EMPLOYEES IN T	THE FIELD			323	P
	Nichols, Becky	Wtr Comm B	38≭	11	8	707	D
	Whitehead, Dwight	Wtr Comm B	38/Wells	12	12	11,029	
	,				12	917	
	Klenda, Robert C.	Wtr Comm C	45*	12	12	12,299	
	McEwen, Bill	Wtr Comm B	38/52/53*		6.3	5,520	
	Bergquist, Joe	Wtr Comm B	38*		3.5	3,962	
	Lemon, James	Wtr Comm B	39 .	9	9	6,962	
	Nelson, Glen	Wtr Comm B	45	3	3	1,894	
	Daxton, James	Wtr Comm B	51	8	9	10,456	
	Anderson, George	Wtr Comm B	70	6	6.8	7,195	
	Bieser, Robert	Wtr Comm B	72*	6	0		
	Hildebrand, Richard	Wtr Comm B	72*		0		
	Greene, Ronald	Wtr Comm A	72*		3.5	3,824	P
	Reed, Miles	Wtr Comm B	72*		1	1,952	P
	Carlson, Robert	Wtr Comm B	72*	7.4	0		
	Wilson, Marshall	Wtr Comm A	72≭		4.5	5,134	P
	Cox, Tom	Wtr Comm B	72	6	6	5,049	P
	Hill, Clifford	Wtr Comm B	72*	6	5.5	1,622	P
	Hittle, Ray	Wtr Comm B	72	5	5	4,008	P
			TOTALS:	91.4	95.1	61,164	S
						118,411	
		GF	RAND TOTAL:	151.4	149.6	179,575	

# F. COLORADO RIVER CALLS FOR 1989

DATE OF CALL	CALLING STRUCTURE	AMOUNT OF CALL	ADMIN NUMBER
12/1/88 12/1/88	Shoshone Power Plant	158.0 cfs 1250.0 cfs	33023.28989 20427.18999
3/10/89	All Mainstem Calls Off		
7/5	Shoshone Power Plant	158.0 cfs	33023.28989
7/13	Shoshone Power Plant Call for 158.0 cfs Off		
7/17	Shoshone Power Plant	158.0 cfs	33023.28989
7/19	Grand Valley Canal	119.47 cfs	30895.23491
7/23	Shoshone Power Plant Call for 158.0 cfs OFF		
8/28	Grand Valley Project	730.0 cfs	22729.21241
9/6	Shoshone Power Plant	158.0 cfs	33023.28989
9/12	Shoshone Power Plant 1250.0 cfs		20427.18999
10/31	Grand Valley Canal Call for 119.47 cfs Off		
10/31	Grand Valley Project Call for 730.0 cfs Off		
12/31	Shoshone Power Plant Call for 1250.0 cfs Still On and for 158.0 cfs Still On		

# January 2, 1990

### **MEMORANDUM**

TO: DIVISION 5 PERSONNEL

FROM: ORLYN J. BELL

RE: Staff Meeting

January 3, 1990 - 2 p.m.

# Items to be discussed:

- 1) 1989 Annual Report Overview
  - a. What was accomplished
  - b. What was not accomplished
- Personal and/or Division Goals for 1990
  (Need at least 4)
- 3) Major Items of Importance and Unique Situations Encountered During the 1989 Irrigation Year
- 4) Concerns About Next Year
- 5) Improvements Accomplished and Improvements Needed

Please have your information ready for collection and discussion at the meeting.

OJB/nch

### INFORMAL MEMORANDUM

TO: Orlyn J. Bell

FROM: Robert C. Klenda, Water Commissioner, District 45

RE: 1/3/90 Staff Meeting Agenda Comments

### I. My 1990 Goals:

- 1. To keep on top of my District by:
  - A. Keeping up with my 1989 goals.
  - B. Better use of the computer:
    - 1) By 4/1/90 having a copy of the Comments section of the 1989 diversion records, separated by stream number.
    - 2) By 4/1/90 having daily diversion sheets ready.
    - 3) By 4/1/90 having a copy of the CIU (Current In Use) Codes I and U, separated by stream number.
    - 4) By 4/1/90 having a copy of the Infrequent Diversion section of the 1989 diversion records separated by stream number.
- 2. How To Achieve My No. 1 Goal By 4/5/90 having the above items distributed to my commissioners and myself with instructions to do diversion records as usual; also to update and add to the Infrequent diversions; to update the Comments section as per 1990 situations; review the CIU Codes I and U; and complete by 11/5/90.
- 3. To complete the abandonment list on schedule.
- 4. To improve my computer skills.
- 5. To learn more about water law.
- 6. My No. 1 Goal To have my district's diversion records signed by 11/22/90.
- 7. To get a tabulation that is current to 1/1/90.
- 8. To upgrade my people skills.
- 9. To accompany George Anderson during administration.

# II. My 1989 goals:

- 1. To take better charge of my district:
  - a. By getting some specialized training seminars.
  - b. By keypunching my data monthly.
    - 1) Having my deputies correct the keypunching.
    - 2) Keeping up with dividing water as it happens.
  - c. By visiting a greater percentage of my infrequently recorded diversions.
  - d. Doing a more thorough job on field inspections.
- 2. Work up a Standard Operating Procedure for:
  - a. Mamm Creek
  - b. Garfield Alkali Creek
  - c. Dry Hollow
- Get a complete handle on my records
  - a. Get a print-out.
- 4. Get my monthly sheets labeled, sorted by stream and locality, and presented to my deputies before irrigation season.

Memorandum To File From Bob Klenda, Water Commissioner Page 2

Comments To Item 3 of Staff Meeting Agenda - Major Items of Importance and Unique Situations Encountered During the 1989 Irrigation Year:

Situations such as the reversal of priority, as has been necessary on Garfield and Divide Creeks, has created several unique situations, the first of those being a feeling amongst water users that the State can just come along and change a water right regardless of the fact that they believe it's been the old way for generations.

The Porter situation on Garfield, Alkali, and South Canyon Creeks: As I have heard neighbors say, "You know Mike was not killed over a deer, it was water." Or, "There was never a question of, 'Would Mike be killed?' It was a question of, 'Who would do it and when?' "

The Mamm Creek and Gustafson Draw situation: A very small amount of water involved but neighbor relationships go much deeper.

The Shideler Waste Water Ditch situation where a water user has used the water for generations but now files on the water and loses the right to use it.

Cache Creek is undoubtedly unique. An overappropriated stream, a commissioner working the stream who also owns or leases very critical senior rights, and a junior user who enjoyed the use of water which he was only entitled to because he was industrious enough to develop ways to legitimately divert this water. Presently suffering the loss of that water because of tighter administration and other industrious water users.

I think you, Orlyn, as Division Engineer and the Division itself can be complimented for the unique situation of a roving commissioner and commissioners who serve as a commissioner in one district and a deputy to another commissioner in another district.

# Comments to Item 4 of Staff Meeting Agenda - Concerns in 1990:

- 1. Drought.
- 2. Tight budget.
- 3. Personnel.
- 4. Ever expanding work load with a stable to diminishing work force.
- 5. Increasing cost of operating a vehicle versus a stable reimbursement.

# <u>Comments to Item 5 of Staff Meeting Agenda</u> - Improvements Improvements Accomplished:

Tabulation, stream administration lists, maps, annual records that are easily viewed and understood, field inspection training, computer understanding and abilities, hydro assistance and the resulting upgrading of diversions. Quality of administration has greatly improved, ability of commissioners to provide factual information to the public.

# Improvements Needed:

More manpower, especially during high administration periods; state vehicle or increased mileage; higher rate of pay, especially for commissioners who become extremely proficient; more continuing education; a legislature that recognizes the obligation of ownership of water and the necessity of competent administration and its costs.

(WTRWORK.DOC) (Page Breaks Reworked to Fit Annual Report Format)

**MEMORANDUM** 

TO: Gary Barta

FROM: John G. Blair

RE: Winter 1989-1990 Work Schedule and Hydrology Questionnaires

DATE: October 27, 1989

As you requested, below is a list of work items I would like to do this winter and what I feel should be my priorities versus the required hydrologic questionnaires. My basic feelings are that follow-up work to this inspection season, design review of repairs submitted, and determining the actual hazard ratings on dams should have higher priority than the hydrologic questionnaire.

My reasoning on the hazard ratings having a higher priority is that, at least in Division 5, there are many land use and development changes occurring below dams. As the economy changes from agricultural-based to recreation-based, new developments get built below these existing dams; therefore, many of the existing hazard ratings are outdated or wrong. Since the Rules and Regulations are based upon the hazard class, it is important to know correctly what the actual classes are before we can determine how to treat these dams during inspection and determine whether spillways are adequate or not.

I would also like to stress that it is a good idea you are re-evaluating the requirements to have all Class 1 hydrologic questionnaires done by December 31. In order for me to complete all these questionnaires by December 31 and complete all the items I feel need to be done this winter, I will have to work at or greater than the same overtime rate I did this summer (on the average this was about 20 hours a month). In fact, I would appreciate it if you allowed me to take 3 to 4 hours comp time off a week this winter to account for the 82-plus hours of overtime I worked this summer. I can be flexible with my workload, requested comp time off, and priorities to get more hydrology questionnaires done by December 31. Very few items of my list have to be done by December 31. In fact, since we are in the winter mode in Division 5, it makes very little difference whether many of these items are done by December 31 or April 1; but in order for me to accomplish what I feel needs to be done this winter, flexibility is a necessity on your part too with these hydrology questionnaires.

It is very hard to equate my workload with everyone else's workload in our field engineering unit. Every field engineer has a distinct area with their own distinct characteristics and the fact I work in a Division office offers even more differences. I feel there is too much emphasis on numbers in our PACE Plans (i.e., number of dams inspected, number of hydrology studies to be done, etc.).

Following is a list of items I feel take higher priority than the hydrology questionnaires and need to be done before the end of the year:

- 1) Follow-up to my recent inspection of Sylvan Lake in District 51 and removal restriction letter.
- 2) Possibility of Coon Creek No. 3 final inspection if they got the repair work done before it snowed (I should know early next week).
- 3) Mount pictures of inspections I did this year.
- 4) Review water commissioner inspection reports.
- 5) Design review of Parsons Reservoir. We have put Ed Opitz off long enough.
- 6) Preliminary hazard evaluation for all the dams on Leon Creek and possible field trip. This is necessary to see if I have to make another field trip to the two major diversion structures I did not know how to get to earlier this summer. This field trip has to be done before the snow gets too deep so I can see the structures. If the preliminary analysis not considering these structures shows these dams to be Class 2 or 1, then this trip is not necessary.
- 7) Help with the Division or some diversion records which are due around the middle of December. Because of the drought, and the fact that there were shortages in water commissioners due to transfers, illness, and death, many reservoirs were not visited this year by a water commissioner to get storage readings. My dam inspections are the only source of storage levels. I should help the Division some in establishing accurate reservoir diversion records. This would also involve in finishing capacity tables for which I collected data on. These are: Spring Park District 38; LEDE District 37; Milk Creek, Whitely Peak, Binco District 50.
- 8) Any necessary follow-up on the Sterner Reservoir design review and Rapid Creek design review that needs to be done in a timely manner.
- 9) Michaelson Reservior inspection of repair work and necessary follow-up.

Gary Barta October 27, 1989

The status of the hydrology questionnaires of Class 1 dams that are presently required to be done by December 31 for a Standard rating on my PACE Plan are listed below. This disagrees with the 15 you told me over the phone.

1.	Consolidated	Dist 38	Almost done, just need to complete
2.	Grass Valley	Dist 39	Almost done, just need to complete
3.	Goose Pasture Tarn	Dist 36	
4.	Dillon	Dist 36	
5.	Upper Blue	Dist 36	
6.	Clinton Gulch	Dist 36	
7.	Robinson	Dist 37	
8.	Climax Moly No. 4	Dist 37	
9.	Homestake	Dist 37	
10.	Spring Park	Dist 38	
11.	Wildcat	Dist 38	
12.	Binco	Dist 50	
13.	Whitely Peak	Dist 50	

I have completed hydrology questionnaires on six Class 1 dams and three Class 2 dams, one of which was downgraded from Class 1 to 2. Matheson Reservoir, which does not have a questionnaire completed, was originally on the list but it was downgraded to Class 2 which may be a reason for the discrepancy.

There are several work items that I feel need to be done this winter, some of which can wait until after December 31, if need be. However, the number of questionnaires I have to do will affect my completing these items if I have to wait until after December 31 to do any of this work. These items are listed below in order of importance.

- Finish the Luark Dam hazard analysis to find what level the owner has to cut the spillway to make the dam Class 4. This has been put off since April.
- 2) Schedule dams I want to inspect in February, March, and April and send a tentative schedule to the owners to alert them I will be inspecting them early this year. This will help spread the load for next year.
- 3) Finish the Leon Creek Dams hazard evaluation if I had to make a field check to the diversion structures on Leon Creek.
- 4) Finish the Rock Creek hazard evaluation that I already started, with the new adjusted capacity.

- 5) Help Sally Lewis with the District 50 and 51 files and coordinate a smooth transition.
- 6) Hazard evaluation of Mesa Lake No. 1, Mesa Creek No. 4, and Mesa Lake No. 3. This is a touchy area. Each year they query me on why I inspect some dams each year and not others. I found some potential errors in the old hazard study. I want to be able to answer the Mesa Creek Reservoir Company next year with consistent reliable facts.
- 7) Hazard evaluation of Griggs No. 1. This is a likely candidate for Class 4 status like Griggs No. 3. The owner is very much against dam inspectors inspecting his dams. He is also a very vocal and powerful member of the farming community. I would like to get this item taken care of before this dam comes up at its 5-year cycle, which will be next year.
- 8) Hazard evaluation of Grimes Brooks Reservoir. There has been much new development below the reservoir. It may be upgraded to Class 1. I wanted to check this last winter but did not have time.
- 9) Hazard evaluation of Black Lake No. 2 in District 37. This dam sits above Vail and is now listed as Class 3. Both owner (Division of Wildlife) and I feel this is wrong and needs to be checked for Class 2 or Class 1 status.
- 10) Hydrology analysis of Bull Creek No. 3 and Big Beaver (currently Class 3 dams), and Big Beaver hazard evaluation of both dams. This is another sensitive area. Bull Creek No. 3 was just recently repaired and I am getting hints from the Bull Creek Reservoir Company that Big Beaver may get repaired (or attempt a repair) this next year. I need to be prepared for this with some answers on what exactly needs to be done and whether an engineer is needed. The spillway of Big Beaver is questionable and so is the hazard rating. Bull Creek No. 3 is in the system so the hydrology for it is needed to do the hydrology for Big Beaver.
- 11) Make a preliminary screening for Class 4 status of the Class 3 dams I am to inspect next year.
- 12) Hazard evaluation of East Branch and Ute Creek. The tailings pond below these dams are large enough to possibly contain a dam break flood without causing damage downstream. This is pending data sent to us by AMAX.

Other items optional that I would like to do only if I have time are:

- 1) Finalize hydrology studies of Class 3 dams I inspected last year in which the spillway adequacy is unknown so that I can keep the files up to date with my inspections. These would include: Hankison, Little H O, and Cottonwood in District 51; and Black Creek in District 36.
- 2) Graph seepage data for Little King Dam in District 51 for a better evaluation of its performance. They have been keeping very accurate records and the seepage is extensive.
- 3) Hazard evaluation of Black Lake in District 36 which is possibly a Class 4 dam and is a waste of time to inspect. I have the data and it comes up for inspection in 1991.
- 4) Hazard evaluation of Davis Gulch dam which is currently listed as nonjurisdictional but it is jurisdictional and potentially has a Class 4 rating. Exxon has supplied contour maps for this. However, this is not a sensitive area and it can wait, if need be.
- 5) Hazard evaluation of Ivanhoe. I question its Class 2 rating. This needs to be done before the hydrology questionnaire is completed.

Gary, please keep this memo in mind when you re-evaluate the hydrologic questionnaire requirements for this year and let's discuss my winter work load.

JGB/nch

cc: Orlyn J. Bell, Division Engineer

THE FOLLOWING PAGES CONTAIN:

ANNUAL WATER DIVERSION STATISTICAL SUMMARY REPORTS