1989

ANNUAL REPORT

DIVISION OF WATER RESOURCES
DIVISION III

COLORADO DEPARTMENT OF NATURAL RESOURCES

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WATER ADMINISTRATION

The Rio Grande and its tributaries and Division III in general suffered through a very dry year in 1989. After what started out to be an exceptional snow pack, the weather turned sour and warm winds sublimated it away over the next three months to yield approximately sixty percent of normal snow pack and runoff. The second consecutive year of less than 500,000 acre feet at Del Norte is beginning to cause a number of difficult situations including reduction of ground water tables, lessening of soil moisture, low reservoir levels, and decrease of return flows and tributary inflows to the major streams in the Valley. To exaserbate the problem the San Luis Valley floor received less than five inches of precipitation in 1989. The only irrigated areas which produced normal levels of crops were those that were irrigated with irrigation wells.

A. CURRENT WATER YEAR 1988-1989

1. ACCOMPLISHMENTS

A. Colorado's obligation under the Rio Grande Compact was met by curtailment of decreed rights, Closed Basin Project deliveries, return flows and winter flows on both the Conejos and Rio Grande. A spill of Rio Grande Project storage which appeared very possible in the late winter did not occur because of the change in the weather pattern and lack of any substantial runoff. The irrigators were curtailed little throughout the entire season because the projected index was low and throughout the spring less and less curtailment occurred until June 12 when the Compact curtailment was reduced to zero on both rivers. River calls, the priority system and short supplies were evident on all streams in the Division during 1989. Many disputes and instances of users taking water out-of-priority had to be handled this year in all districts and the water commissioners spent much of their time "refereeing" those disputes or issuing orders for illegal diversions. The carry-over effects of the high years of 1985 through 1987 are quickly disappearing. Most reservoir levels are down considerably or at low levels and ground water tables are being drawn down but have not reached the levels that they were during the early 1980's. Even with all of the problems with the drought, generally water users were able to get some crops produced and with the open winter we are having stock producers should be able to get by with the hay they produced.

Late in the year, after it was evident our Compact obligation would be met, recharge was allowed in a number of ditches on both rivers. This continued through November for most when icing conditions forced them to cease diversions. This operation will help some to reduce declines in the water table experienced the last two years.

B. The satellite monitoring system works as well or better in times of extreme low flows than it does when there is ample water. With the extreme dry conditions water use and distribution was critical to us as administrators as well as the users. The water commissioners have the ability to accurately monitor the flows in the river, reservoir releases, and ditches equipped with the Sutron hardware which enabled us to quite accurately distribute what water was available. The entire satellite monitoring program, in our opinion, not only greatly enhances our ability to administer water but also raises the confidence of the water user public in our ability to do so. Because of the very low runoff any change in flow was critical to the administration of water rights and the satellite system allowed us to immediately detect those changes and make changes accordingly.

C. Although the Division of Water Resources has no claim to the progress of the Closed Basin Project construction several accomplishments were made in conjunction with that project in 1989. The project funding ceilings were raised this year to $100,000,000 with some cost sharing by the state of Colorado and the Rio Grande Water Conservation District. This will allow Stages 4 and 5 to be constructed. New work on Stage 4's pipeline laterals from the wells to the conveyance channel is in progress at this time. For the first time water from the Project was delivered to the Rio Grande River to help Colorado meet Compact obligations. This water met the Compact water quality standards throughout the year except during testing periods when Project goals concerning San Luis Lake were being accomplished. Deliveries from the Project are as follows: 1,384 acre feet to the Blanca Wildlife Habitat area, 1,947 acre feet to the Alamosa National Wildlife Refuge, and 23,124 acre feet to the Rio Grande River of which 17,343 was creditable under the Compact. This creditable water was allocated between the Rio Grande and Conejos rivers on a 60/40 percent split pursuant to the 1985 resolution. The cleaning up of San Luis Lake continued off and on throughout 1989 to try to reduce the TDS (Total Dissolved Solids) in the Lake to make it a useable facility to store and release Project water in the coming years as well as making it a viable recreational facility. This was attempted by circulating good quality water from the Project through the lake to help reduce the TDS levels. The Bureau of Reclamation and the District worked very hard with the Division of Wildlife and our office to achieve this goal. The water quality in general throughout the Project is better than anticipated in many of the wells and water quality standards under the Compact have been quite easily met. The benefits of the Project are obvious in that the water delivered from the Project meeting Compact standards reduced the amount of water which had to be taken from the Conejos and Rio Grande users thereby increasing their supplies in an extremely dry year.

D. Division III continued to have turnover in personnel during 1989. Steve Baer in District 21 and Wayne Williams in District 35 were hired as water commissioners to fill vacancies in those positions. They did an excellent job in learning their Districts and getting up to speed to serve the water users in a very difficult year. Ken Knox was transferred to the Pueblo office in Division II to take over the hydrographic program for Steve Witte. Ken did an excellent job for Division III and we are sure he will make a worthwhile addition to Division II. Ken's absence is drastically felt in our office and we need a replacement for him as soon as possible to allow us to meet the deadlines for hydrographic records.

E. The continuing turnover in the hydrographic section and the new duties involving the satellite monitoring program have prevented us from training the engineers in the daily office duties. This is of serious concern to us and it will be resumed as quickly as possible after the vacancy is filled.

F. The Bureau of Reclamation and the Division of Water Resources are currently negotiating a contract for the measurement and rating of a number of structures in the Closed Basin Project. This contract will provide for the hiring of a part-time person to help in that program which will allow the Bureau, the District and the Division of Water Resources to properly administer the Closed Basin Project.

G. The diversion record production went even better this year than last because of the initiative of the commissioners, additional computer equipment and the hard work of all involved. The concept of being able to enter, generate, edit and print our diversion records in the office is much better than the previous system. It provides a very efficient way of handling this large amount of data. Thanks go to Bob Plaska, Sue Edling, all the water commissioners and the Information Services branch for a job extremely well done.

H. The correction and update of the 1988 water rights tabulation was completed, all protests were addressed, and notice of the publication of that document was in the December, 1989 resume. The update and correction of the tabulation went very well and we feel that our tabulation is an extremely useable and very accurate document. Thanks again to those staff memebers in Division III and Denver involved in the project.

I. The administration of our augmentation plans continued to progress during 1989. The contacts and accounting involved in those plans are extremely time consuming and much slower than we would like. Agressive administration of those plans will be continued in 1990.

J. We were very pleased that water from Platoro Reservoir on the Conejos River was able to be used again this year for irrigation. Because of the continuing attempt to get legislation passed that would give control of the Reservoir to the Conejos Water Conservancy District an interim agreement with the USBR was used to allow for the release of approximately 14,670 acre feet for irrigation. The Conejos District paid approximately $44,000 to the Bureau for the operation and maintenance of the Reservoir to allow the release of the water. The users within the District purchased that water to supplement their surface supplies. It was especially helpful under the dry conditions as it allowed many users to get a crop that they wouldn't have otherwise. Legislation that would allow the District to buy the Reservoir was changed late in the year to a bill that would allow the District to assume the operation and maintenance responsibility at the Reservoir and the Bureau retain title. The bill was not considered in the 1989 session of Congress and will be considered after the first of the year.

K. Relations with the water court continued to improve in 1989 with both the water judge and the newly appointed referee, George Woodard. Mr. Woodard has been an attorney in the San Luis Valley for many years and handled a large water related practice. This allowed him to hit the ground running in his duties as referee. He has worked very hard to fill that position well. Our office and Mr. Woodard have worked very well together since he was appointed.

L. Charlie Quintana, from District 24, was chosen as the Division III "Water Commissioner of the Year for 1989." Charlie is one of the most diligent and hardworking employees in the Division and runs a difficult district in an exemplary fashion. He is very efficient in his duties on the Culebra Creek basin and its tributaries.

M. A considerable amount of both short and long range planning has been done this year in Division III. Changes in work load and the reorganization of two districts into one have been addressed in those plans. We also are attempting to prepare for two additional retirements of veteran water commissioners in 1990 and plan to make a number of changes when those positions are refilled which will make the operations of those districts more efficient and effective.

N. A slide program and narrative has been prepared by the Division Engineer, Steven E. Vandiver, describing the Rio Grande and its drainage from the headwaters to Ft. Quitman, Texas. This program was finalized this past year. The program has been shown to several groups by Steve and the feedback has been very complimentary as to the education received by the audiences with regard to the physical structures and the geography of the Rio Grande River and especially the knowledge imparted in reference to the Rio Grande Compact.

O. Division III was able to operate within their budget allocation for the 1988-89 fiscal year. Bob Plaska was heavily involved in making the accounting of the budget useable, so we had the ability to monitor our status throughout the year.

2. INVOLVEMENT IN THE WATER USER COMMUNITY

A. Our daily routines provide constant involvement with the water user community. Several hundred people a month come in or call the Division office for help solving their particular water problems. Working with the water bar and consulting engineers also keeps us in constant contact with the users.

B. The Division Engineer teaches several classes at Adams State College each year for the International Irrigation Center. These classes generally include instruction on water rights and their administration, Compact concerns, and state government structure. The students are engineers and water administrators from third world countries which are extremely interested in our water system.

C. Our greatest exposure to the water user community comes with attendance at many of their meetings and Conservation and Conservancy District board meetings. The Rio Grande Water Users Association (RGWUA), the San Luis Valley, Alamosa-LaJara, Costilla, and Conejos Water Conservancy Districts (CWCD), the Rio Grande Water Conservation District (RGWCD) and the San Luis Valley Well Owners Association are the main organized groups. The public meetings we were involved in this year went very well and were generally well attended by users not normally associated with the organized groups. It provided a whole new forum to reach and educate users which we were never exposed to before.

D. The water commissioners and hydrographers have constant involvement with the water user community. Ditch administration and measurements, field and dam inspections, and river measurements provide an excellent opportunity for our staff to be involved with the users.

E. We provide information to the public through media releases to try and keep them up-to-date on river conditions and Rio Grande Compact concerns.

F. We have participated in interagency meetings of natural resource related agencies from both the federal and state governments. This provides us with a good opportunity to inform and educate other agencies of our duties, responsibilities, and opinions on resource related matters.

G. Our office has been involved in the formulation of a water plan which the Division of Wildlife is preparing to handle their water rights in the San Luis Valley. This plan still has considerable work which needs to be done on it and we are sure we will be involved throughout that process.

H. Division III staff also helped coordinate, advise and reviewed two studies which the San Luis Valley Water Convservancy District has initiated: the San Luis Valley Confined Aquifer Study and the Rio Grande Water Supply Study.

I. The office staff has worked very hard to address the issues of the Bureau of Land Management (BLM) plan for Wild and Scenic designation of the last eight (8) miles of the Rio Grande River in Colorado and their illegal wells on the Blanca Wildlife Habitat area. Changes in staff handling those plans for the BLM has helped immensely in trying to resolve their problems. We look forward to working out solutions with them to these and other problems.

3. PARTICULAR ISSUES OF CONCERN AND THEIR IMPACT

A. The delivery obligation under the Rio Grande Compact is always a concern to the Division of Water Resources. Proper administration of the Compact, meeting our delivery obligations, integrating the Closed Basin Project production into our delivery, and formulating plans of how to administer the rivers involves a considerable amount of time by the Division Engineer and the staff. Coordinating the water users' ideas with the State and Division Engineer's ideas and responsibilities is a very interesting and important task. With only one year under our belts in administration of the Compact without the stipulation we do not have enough knowledge to know how best to run the two rivers, when or when not to build credit or debits, and attain the most benefit out of the provisions of the Compact. If the drought continues as it has for the past two and one-half years the items mentioned above will demand more and more attention as we learn how better to handle the rivers to insure the most beneficial use of the water for Colorado.

B. The continuing problem of the legislation involving the use of Platoro Reservoir is a great concern to this office as well as the Conejos Water Conservancy District. Hopefully with the changes in the legislation in late 1989 some resolution of the matter will be accomplished and we can start working with the District on how better to manage the reservoir.

C. The concern over diversion records, tabulation updates and data entry was greatly diminished this past year with improved software and dedicated work by many individuals. Both systems work very nicely for Division III and have greatly increased our accuracy and completeness of record.

D. The backlog of cases on the Water Court docket was 68 at the end of 1989. We have made continual progress because of streamlining processes in the court and by a significant reduction in cases filed the last two years. In 1988, 35 cases were filed and in 1989 only 52 cases were filed. This has reduced our court time considerably.

The new procedures for handling recommendations to the court brought about by HB1269 is still rather cumbersome and time consuming but we have established a routine to allow us to get it done well. We would still suggest that the Division as a whole document the time and expense involved in this change in the law and ask the legislature to consider that for further appropriation and manpower.

E. Concerns over the completion of the Closed Basin Project, its production, legal and political challenges to it, and amounts of creditable water available constantly weigh in the planning of our administration of the Rio Grande Compact. We continue to work very closely with the Rio Grande Water Conservation District and the Operating Committee of the Project to effectively integrate the production of the Project into our decisions involving the Compact.

The Rio Grande Water Conservation District has assumed a large portion of the case against the application of AWDI (86CW46) because of what they consider a direct attack against the Closed Basin Project and other important issues in which they are involved. The complexion of the case changes daily with vast interrogatories and discovery requests and is going to affect many parties, including the State, for a long time to come.

F. The litigation of large cases like AWDI, the USA's reserved rights, Battle Mountain Gold, and Otaka International are always a concern. The resources and time required to conclude these matters are costly and take away from many other things but the importance of them is so great that under the present system we must be in the cases to protect State interests as well as the water rights of others. I believe a review of the present litigation system as it involves the State and Division Engineer should be considered by the Division, the legislature, and the water bar to determine whether the State's interest is being served or being wasted in a cumbersome system.

4. EFFECTS OF WORK LOAD CHANGES

A. The continuous training of the Division III staff in the use of the computer has taken some time but the benefits of that training have been numerous. Most of the commissioners have really taken to the diversion data entry process and we hope to continue and expand on it in the future.

B. The water commmissioners have arranged their work to allow for diversion data entry in the computer. As near as we can tell it has not had an affect on their responsiblities for ditch administration.

C. Having evaluated all of the the Division III augmentation plans we now have the necessary information to administer these plans correctly. This new task will take some time of the commissioners and Division staff and will demand efficient planning in our work load to accomplish this task.

D. Several work load changes have been made for office staff personnel as well as the water commissioners in Districts 20, 21 and 27. The effects of those changes we believe have been to more efficiently use our manpower resources and help conserve precious budget expenditures. The effects have been noticeable from the standpoint that we have reduced mileage expenses and produced a greater amount of work with the same amount of people.

5. IMPACT OF BUDGET ON DIVISION OPERATIONS

A. Division III has been fortunate enough to have a budget for 1988-89 and 1989-90 that allows what we consider to be a basic, normal operation. We still have to be extremely careful with water commissioner travel and office expenses to stay within our budget. There are a number of projects which we would like to do but do not have the resources available or man month time to accomplish those things.

B. 1989-1990 I.Y.

1. CONCERNS WHICH WILL IMPACT DIVISION OPERATIONS

A. The biggest concern of the staff in Division III for the upcoming 1990 year is the extreme drought conditions which prevail in the Rio Grande Basin. Through the end of the 1989 calendar year the San Juan Mountains have a five percent of normal snow pack. This, coupled with low reservoir storage, declining water tables, and lack of valley floor precipitation causes a great deal of concern for administrators and users alike. Without a normal or above normal runoff serious shortages are going to occur on the Rio Grande and its tributaries.

B. As mentioned earlier the problems with the future operations and utility of Platoro Reservoir are as great as ever as we start a new irrigation year. Hopefully, if the legislation is not complete by the beginning of the irrigation season in 1990, the Bureau will positively consider another interim contract to allow the use of the reservoir. If not, the Platoro issue will be greatly clouded as the existing repayment contract is initiated.

C. As expected the court case, 86CW46, filed by American Water Development, Inc., has caused increasing difficulty for the valley water user groups, the state of Colorado, and the USBR. The amount of time involved in discovery requests, depositions, and computer modeling is enormous. Hopefully the model being constructed by the State Engineer's office will provide much needed information and analyses of the application and will limit the issues in the case.

D. As mentioned, the operations of the Closed Basin Project will concern us in 1990 but current operating plans and procedures will help us adequately administer the Project to the benefit of Valley users.

E. Hiring good qualified people for vacant positions and training them adequately to handle their areas of responsibility is a large concern. Filling the vacant hydro position with an engineering technician and insuring staff are prepared for the retirement of the two veteran commissioners in Districts 20 and 25 are of critical concern to our operations in the upcoming year.

F. The use and utility of the satellite monitoring project both from a hardware standpoint and additional platforms on both public and private structures will be of great importance to the staff. With the potential addition of three gaging stations equipped with the instrumentation and the inclusion of several major ditches into the system we should be able to provide the entire valley with much needed information and more adequately administer water rights.

G. The continued use of our computer capabilities will also be stressed throughout 1990 with emphasis on utilizing the computers to their full capability. We will be designing programs to allow staff to generate and handle data now done manually in a much quicker and accurate fashion.

PROJECTED WORK ITEMS FOR 1990

1) Prepare the proposed abandonment list for a July 1, 1990 publication date.

2) Prepare a computerized personnel database.

3) Obtain diversion records from municipalities and include them in the annual diversion records.

4) Improve the accounting procedures for augmentation plans and include in the annual diversion records.

5) Improve reservoir accounting methods and standardize them as much as possible for all districts in Division III.

6) Continue to help attain the use of Platoro Reservoir for the Conejos water users.

7) Prepare the District 20 and 27 personnel for the consolidation of these two districts and the retirement of the senior water commissioner from District 20 in 1991.

8) Prepare for the retirement of the District 25 water commissioner and the training of his successor.

9) Work for a full staff and train new personnel as quickly as possible to handle their respective responsibilities.

10) Monitor all dams.

11) Meet all deadlines for submission of records.

12) Involve the Assistant Division Engineer to a greater degree in reviewing court applications, field inspections and administrative decisions.

13) Start to develop a well inventory of irrigation wells verified by on-site inspections by water commissioners.

14) Develop a slide presentation about diversion record development for the State Engineer.

1990 GOALS AND OBJECTIVES

1) Administer the Rio Grande River basin to assure Colorado's obligation under the Rio Grande Compact is met.

2) Administer water rights according to decrees, statutes, and applicable case law.

3) Serve the public in a helpful, courteous and conscientious manner.

4) Operate the Division III office within the confines of our allocated operating budget.

5) Develop a personnel database for Division III employees.

6) Promote the satellite monitoring system for use on private ditches and reservoirs in our division.

7) Maintain contact with local state legislators.

8) Publish proposed 1990 abandonment list.

9) Provide opportunity for all office personnel to obtain basic computer training.

10) Improve the quality of diversion records.

11) Identify and administer water rights requiring special administrative action required by decree.

12) Prepare District 20 and District 27 personnel for the forthcoming consolidation of these two Districts.

13) Prepare for the orderly transition in Districts 20 and 25 as the senior staff in those Districts retire.

14) Develop and complete a court case file database for Division III.

15) Develop and maintain a court docket database for Division III.

A P P E N D I X A

1989 DIVISION III STAFF

Office Staff

Steven E. Vandiver.	Division Engineer Principal Water Resource Engineer
Robert M. Plaska.	Assistant Division Engineer Supv. Water Resource Engineer
Sue Edling.	Sr. Secretary
Bruce Whitehead	Sr. Water Resource Engineer
Kenneth Knox. . . . . (Transferred 11/1/89)	Water Resource Engineer C
Steven Kastner.	Water Resource Engineer B
Dennis Felmlee.	Well Commissioner C
Norman Hill	Well Inspector
(Vacant).	Engr/Physical Science Tech 1

Water Commissioners and Deputies

Max Nash.	Sr. Water Commissioner District 20
Travis Smith.	Deputy/Water Commissioner C District 20
Ben Cannon.	Deputy/Water Commissioner C District 20
Jim Sellers.	Water Commissioner B District 21
Steve Baer	Deputy/Water Commissioner B District 21
Paul Clark	Sr. Water Commissioner District 22
Jim Horton	Deputy/Water Commissioner C District 22
Charlie Quintana	Water Commissioner B District 24
Henry Lamm	Water Commissioner C District 25
Timothy Lovato	Water Commissioner C District 26
Perry Alspaugh	Water Commissioner B District 27
Wayne Williams	Water Commissioner A District 35

A P P E N D I X B

WATER DIVISION NO. 3

1989 CALENDAR YEAR

ACTIVITY SUMMARY

ACTIVITY	TOTAL
No. of Professional and Technical Staff.	5
No. of Clerical Staff.	1
No. of Water Commissioner FTE. Assigned (Full/Part-Time)	4/8
No. of Decreed Surface Rights.	Approx. 2500 total
No. of Surface Rights Administered (water diverted this year)	664
No. of Wells.	Approx 22,836 Decreed Wells
No. of Plans for Augmentation	0 new - 47 total
No. of Consultations with Referee	59
No. of Water Court Appearances.	43
No. of Meetings with Water Users.	274
No. of Meetings to Resolve Water. Related Disputes	124
No. of Contacts to Give Public. Assistance on Water Matters	23,863*

*Includes Water Commissioner Contacts

A P P E N D I X C

1989 RIO GRANDE COMPACT REPORT

Preliminary Figures

	Acre-Feet
1. Rio Grande River Index	494,100
*Actual Rio Grande Delivery	132,581
**Adjusted Rio Grande Delivery	126,800
Required Rio Grande Delivery	125,200
2. Combined Conejos Index	246,500
***Adjusted Conejos Delivery	84,200
Required Conejos Delivery	72,900
3. Combined Rio Grande River System Index	740,600
****Total Adjusted Delivery at Lobatos	211,000
Total Required Delivery at Lobatos	198,100
Margin Including 10,000 a.f. Credit	22,900

4. Rio Grande Curtailment

Target (% of Index)		Actual (% of Index)	
Jan. 1 - Apr. 13	100+%	Jan. 1 - Apr. 13	100 %
Apr. 14 - May 7	10 %	Apr. 14 - May 20	0 %
May 8 - Jun. 11	5 %	May 21 - Jun. 11	3-5%est
Jun. 12 - Oct. 31	1 %	Jun. 12 - Dec. 31	0 %
Nov. 1 - Dec. 31	10 %		

5. Conejos Curtailment

Target (% of Index)		Actual (% of Index)	
Jan. 1 - Apr. 13	100 %	Jan. 1 - Apr. 13	100 %
Apr. 14 - Apr. 20	35 %	Apr. 14 - Apr. 20	46 %
Apr. 21 - May 6	30 %	Apr. 21 - May 6	35 %
May 7 - May 20	20 %	May 7 - May 20	25 %
May 21 - Jun. 11	10 %	May 21 - Jun 11	15 %
Jun. 12 - Nov. 20	0 %	Jun. 12 - Nov. 20	0 %
Nov. 21 - Dec. 31	100 %	Nov. 21 - Dec. 31	100 %

*Includes the noncreditable Closed Basin Project production delivered to the Rio Grande River which was 5,781 a.f.

**Includes 60% of the creditable Closed Basin Project production (17,343 a.f. total)

***Includes 40% of the creditable Closed Basin Project production (17,343 a.f. total)

****Includes all of the creditable Closed Basin Project production (17,343 a.f. total)

APPENDIX D

PRELIMINARY

TRANSMOUNTAIN DIVERSIONS SUMMARY - INFLOWS

WD	NAME	RECIPIENT STREAM	1988 PREVIOUS I YR AF	1988 PREVIOUS I YR DAYS	1989 I YR OF RECORD AF	1989 I YR OF RECORD DAYS	1989 I YR OF RECORD WD	SOURCE STREAM
20	Weminuche Pass Ditch	Weminuche Cr	602	51	694	30	31	Rincon La Vaca Cr
20	Pine River Weminuche Pass	Weminuche Cr	865	83	508	39	31	N Fork Los Pinos
20	Williams Cr Squaw Pass D	Squaw Creek	230	63	238	75	78	Williams Creek
20	Tabor Ditch	Clear Creek	370	60	487	147	62	Cebola Creek
20	Don La Font #1 Ditch	South River	234	140	57	81	78	Trib Piedra River
20	Don La Font #2 Ditch	South River	552	148	244	95	78	Trib Piedra River
20	Treasure Pass Ditch	S.F. Rio Grande	223	57	163	47	29	Wolf Creek
20	Tarbell	Saguache Creek	195	21	344	50	28	Cochetopa Creek

PRELIMINARY

TRANSMOUNTAIN DIVERSIONS SUMMARY - OUTFLOWS

16	Hudson Branch D	Huerfano	0	NA	478	165	35	Medano Creek
16	Medano Ditch	Huerfano	518	NA	1696	57	35	Medano Creek

APPENDIX E

RESERVOIR STORAGE SUMMARIES

WD	RESERVOIR NAME	CAPACITY AF	STREAM SOURCE	PREVIOUS I YR 1988 BEG I YR AF	%	BEG IRR SEAS AF	%	I YR OF RECORD 1989 BEG I YR AF	%	BEG IRR SEAS AF 4/1/89	%	END I YR AF 10/30/89	%
20	Continental	22,679	N Clear Creek	9,126	40	12,753	56	1,381	6	5,114	23	1,597	3
20	Rio Grande	51,113	Rio Grande River	3,000	6	9,441	18	6,414	13	17,942	35	0	0
20	Santa Maria	45,070	N Clear Creek	13,179	29	13,607	30	8,296	18	9,337	21	9,434	21
21	Terrace	15,182	Alamosa River	3,290	22	7,200	47	1,500	10	6,693	44	1,651	11
22	Platoro	59,570	Conejos River	44,150	74	43,354	73	28,988	49	30,779	52	18,100	30
24	Sanchez	103,114	Culebra Creek	45,599	44	43,506	42	32,070	31	33,661	33	14,400	14
35	Mt. Home	17,347	Trinchera Creek	2,377	14	3,847	22	2,324	13	4,082	24	1,255	7
35	Smith	*5,808	Trinchera Creek	4,358	75	6,045	104	3,076	53	6,045	104	2,320	40

-9,921

*Corrected Reservoir Capacity

APPENDIX F

WATER DIVERSION SUMMARY BY DISTRICT

IY 1989

WD	NO STRUCTURES REPORTED	NO OF DITCH VISITATIONS	TOTAL* DIVERSIONS [AF]	TOTAL DIVERSION TO STORAGE [AF]	IRRIGATION USE DIVERSIONS [AF]	IRRIGATION USE ACRES IRRIGATED	IRRIGATION USE AVERAGE AF/ACRE
20	216	11,920	510,072**	28,485	483,220	383,609	1.3
21	80	3,177	86,174	6,037	85,964	48,992	1.8
22	102	4,848	207,071	4,278	204,520	84,061	2.4
24	69	2,450	53,422	2,241	53,422	21,443	2.5
25	85	1,024	39,754	0	39,682	10,593	3.7
26	42	1,004	24,379	0	24,379	10,100	2.4
27	27	960	7,582	0	7,582	2,980	2.5
35	43	2,859	37,574	7,013	36,959	17,864	2.1
TOTAL DIV 3	664	28,242	966,028	48,054	935,728	579,642	1.6

*Excludes All Diversions for Exempt Type and Use Codes and Diversions to Storage

** Includes 29,666 AF of diversions from the Closed Basin Project.

APPENDIX F, continued

WATER DIVERSION SUMMARY BY DISTRICT

IY 1989

WD	MUNICIPAL (AF)	INDUSTRIAL (AF)	DOMESTIC (AF)	AUGMENTATION (AF)	RECHARGE
20	0*	0	1410	844	0
21	0	210	0	220	0
22	434	0	424	0	1689
24	0	0	0	0	0
25	0	0	0	0	0
26	0	0	0	0	0
27	0	0	0	0	0
35	0	0	0	534	0
TOTAL	434	210	1834	1598	1689

*Data from municipalities was not recieved in time to include in the 1989 Diversion Records.