

Table 3.1 Lateral Service Areas**Cochiti Division**

Service Area Name	Service Area Acreage
ALGODONES ACEQUIA SA	541
COCHITI MAIN CANAL SA	8,408
COCHITI MAIN CANAL SA (UNUSED)	296
LEYBA LATERAL SA	61
MAJADA LATERAL SA	104
RIVERA LATERAL SA	453
SAN FELIPE DITCH SA	687
SANTA ANA LATERAL SA	32
SANTA ANA LATERAL SA	17
SILI MAIN CANAL SA	4,161
SILI MAIN CANAL SA (UNUSED)	993
YESO LATERAL SA	279

Albuquerque Division

Service Area Name	Service Area Acreage
ALAMEDA LATERAL SA	2,386
ALBUQUERQUE MAIN CANAL SA	2,424
ARENAL ACEQUIA SA	1,116
ARENAL MAIN CANAL SA	3,826
ARMIJO ACEQUIA SA	1,605
ATRISCO ACEQUIA SA	461
ATRISCO LATERAL SA	84
BARELAS DITCH (ABANDONED) SA	3,017
BARR MAIN CANAL SA	3,253
BERNALILLO ACEQUIA SA	1,269
BOSQUE LATERAL #1 SA	686
BOSQUE LATERAL #2 SA	525
BUTTE LATERAL SA	224
CHAMISAL LATERAL SA	1,830
CORRALES ACEQUIA SA	1,344
CORRALES MAIN CANAL SA	1,916
DERAMEDERA ACEQUIA SA	420
DURANES LATERAL SA	2,137
GALLEGOS LATERAL	1,000
GRIEGOS ACEQUIA SA	1,564
GRIEGOS LATERAL SA	834
GUN CLUB LATERAL SA	1,088
INDIAN LATERAL SA	2,109
MERCANTILE LATERAL SA	77
MIRABEL LATERAL SA	17
NICHOLS LATERAL SA	35
PAJARITO ACEQUIA SA	1,843
PAJARITO LATERAL SA	1,803
PUEBLO ACEQUIA SA	668
SAN JOSE LATERAL SA	449
SANDIA ACEQUIA SA	2,027
SANDIA INTERIOR DITCH SA	780
SANDOVAL LATERAL SA	1,026
SANTA ANA ACEQUIA SA	456
SUMMERFORD LATERAL SA	179

Table 3.1 Lateral Service Areas**Belen Division**

Service Area Name	Service Area Acreage
ARROYOS LOWER ACEQUIA	1,305
ARROYOS UPPER ACEQUIA	424
BELEN GRANT # 1 LATERAL	396
BELEN GRANT # 2 LATERAL	815
BELEN HIGHLINE CANAL	5,557
BELEN NEW ACEQUIA	3,581
BELEN NEW WASTEWAY	350
BELEN OLD ACEQUIA	520
BELEN RIVERSIDE LATERAL	34
BOSQUE - SMITH LATERAL	258
BROUGHT LATERAL	165
CALDWELL LATERAL	389
CASA COLORADO DITCH OR SAIS LATERAL	1,169
CHICAL LATERAL	797
CHICAL LATERAL EXTENSION	508
CITY OF BELEN (NO IRRIGATED PLOTS WITHIN)	606
ENRIQUE LATERAL	251
GABALDON LATERAL	620
GARCIA # 1 LATERAL	1,188
GARCIA EXTENTION ACEQUIA	6,069
GARCIA UPPER ACEQUIA	878
HARLAN HENDERSON LATERAL	2,213
HELLS CANYON LATERAL	2,021
HUNING LATERAL	1,408
JACKSON ACEQUIA	478
JARAL # 1 LATERAL	874
JARALES NEW ACEQUIA	113
JARALES OLD ACEQUIA	2,465
LA CONSTANCIA LATERAL	1,858
LA JOYA ACEQUIA	1,175
LAS CERCAS ACEQUIA	1,148
LAS NUTRIAS LATERAL	1,012
LOS CHAVES ACEQUIA	1,275
LOS CHAVES LATERAL	154
LOS LUNAS ACEQUIA	1,501
MIDDLE UPPER ACEQUIA	664
OTERO LATERAL	2,184
PERALTA ACEQUIA	930
PERALTA MAIN CANAL	6,272
RINCON ACEQUIA	159
SABINAL # 1 LATERAL	1,116
SAN FERNANDEZ #4 ACEQUIA	115
SAN JUAN ACEQUIA	453
SAN JUAN MAIN CANAL	2,999
SANCHEZ ACEQUIA	129
SAUSAL LATERAL	1,071
TIBO FEEDER?	136
TOME ACEQUIA	1,322
VALENCIA ACEQUIA	919
VALLEJOS LATERAL	286

Table 3.1 Lateral Service Areas**Socorro Division**

Service Area Name	Service Area Acreage
ALAMILLO ACEQUIA	442
APODOCA LATERAL	255
CHAMBRON LATERAL	404
FLORIDA LATERAL	443
ISLA LATERAL	308
JARAL ACEQUIA	445
LEMITAR ACEQUIA	321
LEMITAR LATERAL	959
LEMITAR WASTEWAY	987
LUIS LOPEZ #1 ACEQUIA	221
LUIS LOPEZ #2 ACEQUIA	595
MORTON LATERAL	151
MOSLEY LATERAL	483
POLVADERA ACEQUIA	668
RINCONADA ACEQUIA	216
SAN ACACIA FEEDER	42
SAN ACACIA LOWER DRAIN	92
SAN ANTONIO ACEQUIA	1,508
SAN ANTONIO LATERAL	578
SARRACINO LATERAL	60
SOCORRO ACEQUIA	1,522
SOCORRO CENTER MAIN C.	1,772
SOCORRO N. MAIN CANAL	2,122
SOCORRO SOUTH MAIN C.	2,406
VASQUEZ LATERAL	417
(UNNAMED)	0.1

Table 3.2 Summary of Ditchrider Service Areas

MRGCD Ditchrider Number	Acreage within Ditchrider Area
101	1,189
102	621
103	446
201	816
202	1,824
203	4,623
204	2,442
205	3,685
206	4,234
207	2,059
208	1,871
209	3,886
210	3,366
211	3,975
212	2,219
301	2,806
302	5,184
303	5,619
304	4,646
305	3,913
306	7,397
307	4,572
308	6,288
309	9,245
310	6,845
401	1,539
402	5,858
403	4,745
404	6,589

MRGCD DIVISION	Acreage within Ditchrider Area
COCHITI (100's)	2,256
ALBUQUERQUE (200's)	34,998
BELEN (300's)	57,688
SOCORRO (400's)	18,731

Existing and Planned Gaging Stations for Monitoring Key MRGCD Irrigation System Flows

Table 3.3 Cochiti Division

Gage Name	Gage ID	Operator	Gage Purpose	Period of Record
Cochiti East Side Main Canal	CCCN5	USGS	Canal Heading	1954 - present
Sili Main Canal	SILN5	USGS	Canal Heading	1954 - present
Approximately 10 - 14 return flow points	-----	-----	Returns to River	TBD
Cochiti Main at San Felipe	CMCCN	MRGCD	mid-reach	(1954) 1974 - present

Table 3.4 Albuquerque Division

Gage Name	Gage ID	Operator	Gage Purpose	Period of Record
Albuquerque Main Canal	ALBCN	MRGCD	Canal Heading	1974 - present
Atrisco Feeder Canal	ATFCN	MRGCD	Canal Heading	1974 - present
Algodones Riverside Drain	ALGDR	MRGCD	Return from Cochiti Div.	1974 - present
Arenal Main Canal	ARECN	MRGCD	Central Ave. X-Section	1974 - present
Armijo Acequia	ARMCN	MRGCD	Central Ave. X-Section	1958 - present
Atrisco Ditch	ATDCN	MRGCD	Central Ave. X-Section	1958 - present
Albuquerque Riverside Drain @ Central Avenue	ALBDR	MRGCD	Central Ave. X-Section	1954 - present
Corrales Main Canal	CORCN	MRGCD	Secondary Canal	1974 - present
Upper Corrales Riverside Drain	UCRDR	MRGCD	Drain to River	2001 - present
Corrales Main Canal Wasteway	CORWW	MRGCD	Wasteway to River	1997 - present
Central Avenue Wasteway	CENWW	MRGCD	Wasteway to River	2000 - present
Atrisco Riverside Drain	ATRDR	MRGCD	Drain to River	1997 - present
Lower Corrales Riverside Drain	LCRDR	MRGCD	Drain to River	2000 - present
Albuquerque Riverside Drain	ARSDR	MRGCD	Drain to River	1997 - present
Sandia Lakes Wasteway	SANWW	MRGCD	Wasteway to River	2000 - present
Bernalillo Acequia	BERCN	MRGCD	Secondary Canal	2001 - present

¹This gage also forms the basis for estimating return flow to the river from this drain.

² Diversions from the Low Flow Conveyance Channel gaged intermittently by USGS.

³ MRGCD has a new gage here beginning 2001.

TBD - the installation date has not yet been established.

Existing and Planned Gaging Stations for Monitoring Key MRGCD Irrigation System Flows

Table 3.5 Belen Division

Gage Name	Gage ID	Operator	Gage Purpose	Period of Record
Belen Highline Canal	BELCN	MRGCD	Canal Heading	1974 - present
Peralta Main Canal	PERCN	MRGCD	Canal Heading	1974 - present
Chical Lateral	CHICN	MRGCD	Canal Heading	1974 - present
Chical Acequia	CHACN	MRGCD	Canal Heading	1974 - present
Cacique Acequia	CACCN	MRGCD	Canal Heading	1974 - present
Lower San Juan Riverside Drain	LSJDR	MRGCD	Bernardo X-Section ¹	1974 - present
Isleta Drain Outfall	ISLDR	-----	Drain to River	TBD
Barr-Chical Canal	BCHCN	-----	Return from Alb. Division	1997; 2002 planned
Peralta Main Wasteway	PERWW	MRGCD	Wasteway to River	1999 - present
Feeder #3 Wasteway	FD3WW	MRGCD	Wasteway to River	2000 - present
240 Wasteway	240WW	MRGCD	Wasteway to River	2002 planned
Belen Riverside Drain	BELDR	MRGCD	Drain to River	2000 - present
New Belen Acequia Wasteway	NBLWW	MRGCD	Wasteway to River	2002 planned
Lower Peralta Riverside Drain #1	LP1DR	MRGCD	Drain to River	2001 - present
Lower Peralta Riverside Drain #2	LP2DR	MRGCD	Drain to River	2002 planned
Sabinal Riverside Drain	SABDR	MRGCD	Drain to River	2001 - present
Storey Wasteway	STYWW	MRGCD	Wasteway to River	2002 planned
San Francisco Riverside Drain	SFRDR	MRGCD	Drain to River	2002 planned
Unit 7 Drain	UN7DR	MRGCD	Return to Socorro Division	2001 - present

Table 3.6 Socorro Division

Gage Name	Gage ID	Operator	Gage Purpose	Period of Record
Socorro Main Canal	SOCN	USGS/MRGCD ³	Canal Heading	2001 - present
San Acacia Wasteway	SNAWW	MRGCD	Wasteway to LFCC	2002 planned
Escondida Wasteway off Socorro Main Canal	ESCWW	MRGCD	Wasteway to LFCC	2002 planned
Socorro Wasteway	SOCWW	MRGCD	Wasteway to LFCC	2002 planned
Brown Arroyo Wasteway	BRNWW	MRGCD	Wasteway to Brn. Arroyo	2002 planned
Socorro Riverside Drain at Bosque del Apache	SOCDR	MRGCD	end of MRGCD reach	2002 planned
Socorro Main Canal South at Bosque del Apache	SMSCN	MRGCD	end of MRGCD reach	2002 planned
San Antonio Ditch at Bosque del Apache	SADCN	MRGCD	end of MRGCD reach	2002
Elmendorf Drain at Bosque del Apache	ELMDR	MRGCD	end-reach	2002 planned
Lemitar Diversion	LEMDV	MRGCD	Diversion from LFCC ²	TBD
Socorro Diversion	SOCDV	MRGCD	Diversion from LFCC ²	TBD
Neil-Cupp Diversion	NCPDV	MRGCD	Diversion from LFCC ²	TBD

¹This gage also forms the basis for estimating return flow to the river from this drain.

² Diversions from the Low Flow Conveyance Channel gaged intermittently by USGS.

³ MRGCD has a new gage here beginning 2001.

TBD - the installation date has not yet been established.

Table 3.7 Recommendations for Improvements to Specific Gages or Locations

Gage or Location	Recommendation	Rationale
Sandia Lakes and Central Avenue Wasteways	Replacement of the radial gates with Langemann Weir Gates. Also: Should take discharge measurements, to define the rating curves for the gates.	Gives a much better picture of the amount of flow leaving the system within the Albuquerque Division, than previously available.
Algodones Drain	Find a way to improve the record being collected.	There is presently no correlation between stage and discharge.
Corrales Main Canal	Relocate the gaging station.	Backwater problems at the present location.
Peralta Main Canal	Review the rating curve and measurements.	This gage is a concrete structure, but manually measured points have a lot of scatter around the theoretical curve.
Cacique Acequia	Review the rating curve for the end of 2001 irrigation season.	Evaluate whether or not backwater conditions were as prevalent in 2001, as they were in 2000.

Table 3.8 Summary of MRGCD Water Distribution Data Reported to USBR
(values reported in acre-feet)

Year*	Net Supply	Waste	Transportation Losses	Delivered to Farms
1976	550,110	179,190	195,310	175,610
1979	547,726	178,586	209,878	159,262
1980	513,465	169,363	205,306	138,796
1981	475,590	154,160	189,740	131,690
1982	434,790	129,580	155,820	149,390
1983	465,330	135,290	159,300	170,740
1984	525,883	171,360	192,920	148,410
1985	468,930	187,860	163,540	117,530
1986	565,950	221,220	203,110	141,620
1987	588,670	176,300	205,670	205,670
1988	596,650	172,760	223,470	200,420
1989	567,650	187,300	198,670	181,680
1990	506,730	167,990	177,310	162,330
1991	554,450	185,900	192,120	176,430
1992	599,890	210,030	204,200	185,660
1993	609,050	213,160	200,970	194,920
1994	606,030	219,120	209,570	177,340
1995	617,530	214,920	203,970	198,640
1996	618,419	216,447	204,079	197,894
1997	653,872	228,855	215,778	209,239
1998	679,266	237,744	224,158	217,365
1999	612,120	214,242	202,000	195,589
Average	561,732	189,608	197,131	174,374

NOTE: For comparison purposes, 1936 diversions are reported as 619,989 in Table 72, Rio Grande Joint Investigation, 1938 for 59,159 irrigated acres.

*Records prior to 1975 and 1977-1978 were not located for this study, but should be available in USBR archived files.

Source of Information:

1983, 1985 - 90, 1992-99: Monthly Water Distribution Reports

1991: Monthly Water Distribution and Annual Operation and Maintenance Costs

1976, 1979-82, 1984: 19__ Summary Statistics, Vol. 1, Water, Land and Related Data, USBR

**Table 3.9 Comparison of MRGCD Reported Net Supply to Composite Diversions
(values reported in acre-feet)**

Year	Net Supply Reported to USBR	Composite MRGCD Diversions
1976	550,110	---
1979	547,726	---
1980	513,465	---
1981	475,590	---
1982	434,790	385,742
1983	465,330	451,266
1984	525,883	470,751
1985	468,930	442,141
1986	565,950	564,762
1987	588,670	549,040
1988	596,650	418,340
1989	567,650	431,551
1990	506,730	517,144
1991	554,450	570,210
1992	599,890	---
1993	609,050	600,109
1994	606,030	603,396
1995	617,530	613,071
1996	618,419	590,244
1997	653,872	---
1998	679,266	---
1999	612,120	---

Table 3.10 2001 Monthly Discharge by Division
(values reported in acre-feet)

Station Code ¹	Type of flow	Data Source	Annual Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Inter-divisional flow fr Alb. ²	MIRGCD	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
CHACN	Canal heading	MIRGCD	3,479	0	0	175	427	549	614	452	528	427	289	20	0
CACCN	Canal heading	MIRGCD	9,275	0	0	216	1,164	1,272	1,308	1,206	1,253	1,164	1,515	177	0
BELCN	Canal heading	MIRGCD	105,839	0	0	10,781	13,432	15,138	16,551	15,708	12,931	11,080	9,873	345	0
CHICN	Canal heading	MIRGCD	18,102	0	0	105	2,238	2,840	3,061	2,989	2,309	2,762	1,766	31	0
PERCN	Canal heading	MIRGCD	104,398	0	0	4,644	14,424	15,681	17,462	16,089	13,501	13,278	9,013	306	0
LSJDR	Bernardo Cross-section	MIRGCD	71,789	2,877	2,615	5,630	8,560	8,920	7,913	7,510	8,150	8,118	9,871	1,623	0
LP1DR	Drain to river	MIRGCD	26,496	1,229	754	1,110	2,380	2,459	3,909	3,900	3,803	4,251	2,326	375	0
LP2DR	Drain to river	MIRGCD	11,888	2,459	2,578	853	297	307	297	307	307	297	595	2,717	873
BELDR	Drain to river	MIRGCD	15,083	2,459	2,110	1,528	743	585	569	477	615	595	1,123	3,333	946
SABDR	Drain to river	MIRGCD	9,033	1,249	2,618	1,507	297	307	307	307	307	297	615	1,229	0
L PERWW	Wasteway to river	MIRGCD	26,332	0	0	3,003	3,460	4,246	4,297	4,398	3,675	3,253	0	0	0
E FD3WW	Wasteway to river	MIRGCD	7,621	0	0	2,464	1,173	984	1,188	613	369	436	316	79	0
ISLDV	Total River Diversion (CHACN + CACCN + BELCN + CHICN + PERCN - Barr Chical Lateral)	MIRGCD³	233,406	0	0	15,921	31,686	35,480	38,817	34,600	28,678	26,926	20,612	687	0
BELSUP	Division Supply (CHACN + CACCN + BELCN + CHICN + PERCN)	CALC	241,093	0	0	15,921	31,686	35,480	38,995	36,444	30,522	28,711	22,456	878	0
ISLRR	Total River Returns (LP1DR + LP2DR + BELDR + SABDR + PERWW + FD3WW)	CALC	96,453	7,397	8,059	10,465	8,350	8,889	10,558	10,003	9,076	9,130	4,976	7,732	1,818
UN7DR	Inter-divisional flow to Socorro	MIRGCD	87,956	2,314	1,447	7,081	10,111	10,335	9,450	10,357	11,221	11,528	11,148	2,044	919
BELOUT	Total outflow from Belen Division (Inter-divisional flow to Socorro + River Returns)	CALC	184,408	9,711	9,506	17,546	18,462	19,224	20,008	20,360	20,298	20,658	16,124	9,776	2,737
UN7DR	Inter-divisional flow fr Belen	MIRGCD	87,956	2,314	1,447	7,081	10,111	10,335	9,450	10,357	11,221	11,528	11,148	2,044	919
SOCCN⁴	Canal heading	USGS	111,948	0	0	10,559	12,878	14,702	14,991	15,275	14,155	14,688	14,700	0	0
SNADV	Total River Diversion (SOCCN - UN7DR)	MIRGCD⁵	30,717	0	0	3,478	2,766	4,367	5,542	4,918	2,933	3,160	3,552	0	0
SOCSUP	Division Supply (SOCCN + LEMDV + 12HDV + NCPDV)⁵	-	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
SNARR	Total River Returns	-	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
NR	Outflow to Bosque del Apache	-	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
RO	Total outflow fr Socorro Division (Outflow to Bosque del Apache NWR + River Returns)	-	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

¹ Station codes representing calculated totals have been assigned by SSPA for the purpose of this study.

² Inter-divisional flow from Albuquerque to Belen divisions is comprised of flow in the Barr Chical Lateral and Iseta Drain.

³ Formulas provided for River Diversion totals are as calculated by David Gensler of the MRGCD.

⁴ Data for SOCCN is reported from the USGS gage due to operational problems with the MRGCD gage.

⁵ LEMDV -- LFCC diversion at Lemitar; 12HDV -- LFCC diversion at Socorro (1200); NCPDV -- LFCC diversion at Neil Cupp

⁶ This total does not include a small, un-gaged quantity from the Lower Corrales Riverside Drain (LCRRD).

NM -- Not Measured

NA -- MRGCD QA/QC'd data was unavailable at time of report

est -- values estimated by MRGCD

USGS -- Data obtained from New Mexico USGS

MRGCD -- Data either obtained from MRGCD QA/QC'd data set, or

calculated by MRGCD and reported here (may include estimates)

CALC -- Division Supply, Total River Returns and Total Return values

calculated according to formulas provided

Table 4.1 Summary of Historic Data regarding Irrigated Acres within the MRGCD

Year	Harvested Cropland and Pasture	Cropland Not Harvested	Soil building	Acres Irrigated	Fallow or Idle Lands	Total Area in Irrigation Rotation
1956	49,442	3,429	595	53,466	13,879	67,345
1957	52,185	1,635	298	54,118	11,530	65,648
1958	51,638	2,601	117	54,356	10,428	64,784
1959	51,076	3,186	38	54,300	9,820	64,120
1961	48,784	3,956	407	53,147	34,434	87,581
1962	48,480	2,268	226	50,974	36,779	87,753
1963	46,810	4,051	264	51,125	37,211	88,336
1964	51,904	2,626	159	54,689	33,227	87,916
1965	54,158	2,982	593	57,333	30,384	88,117
1982	54,242		117	54,359	14,902	69,261
1983*	55,994		250	56,244	13,812	70,056
1984	56,967		265	57,232	12,945	70,177
1985	58,158		275	58,433	11,648	70,081
1986	57,796		285	58,081	11,821	69,902
1987	55,271		290	55,561	14,246	69,807
1988	57,058		283	57,341	12,343	69,684
1989	55,931		400	56,331	12,549	68,880
1990	53,736		400	---	14,481	--
1991	57,058		283	57,341	12,343	69,684
1992	57,234		295	57,529	12,241	69,770
1993	52,281		2,329	54,610	14,511	69,121
1994	53,457		300	53,757	15,000	68,757
1995	49,718		0	49,718	5,087	54,805
1996	52,163		0	52,163	5,335	57,498
1997	50,593		0	50,593	9,742	60,235
1998	51,126		0	51,126	10,273	61,399

(Source: USBR Crop Census Reports, 1956 - 1965 and 1982 - 1998)

*After 1983 Cropland not harvested and soil building is one category

Table 4.2 MRGCD Crop Census Reports- Summary of Acreage in Crop Categories

Years	Cereals	Forage	Miscellaneous Field Crops	Vegetables	Seeds	Fruits	Nuts	Other	Total, ¹ Calculated	Total, ² Reported	Acres Multiple ³ Cropped	Total Harvested Cropland and Pasture
1956	9,835	34,831	1,566	1,065	20	1,174	0	1,033	49,524	49,524	82	49,442
1957	10,161	36,535	2,095	1,330	86	1,095	0	1,213	52,515	52,515	330	52,185
1958	8,937	37,746	1,748	1,315	50	1,184	0	1,084	52,064	52,064	426	51,638
1959	9,572	35,161	2,691	1,429	87	968	0	1,338	51,246	51,246	170	51,076
1961	5,289	38,331	2,253	937	103	823	0	1,222	48,958	48,958	174	48,784
1962	4,907	37,791	2,365	1,195	59	768	0	1,448	48,533	48,533	53	48,480
1963	3,889	38,852	2,131	987	12	379	0	872	47,122	47,122	312	46,810
1964	3,989	43,280	2,086	786	0	982	0	951	52,074	52,074	170	51,904
1965	3,493	46,306	2,198	1,016	99	510	0	1,161	54,783	54,783	625	54,158
1982	3,888	48,407	0	950	93	367	0	606	54,311	54,311	69	54,242
1983	3,246	50,464	8	1,117	83	413	0	625	55,956	56,079	85	55,994
1984	3,292	51,429	0	1,086	65	423	0	767	57,062	57,062	95	56,967
1985	3,432	52,226	0	1,220	70	451	0	909	58,308	58,308	150	58,158
1986	4,516	50,271	20	1,493	95	491	0	1,060	57,946	57,946	150	57,796
1987	4,460	48,591	11	1,404	90	476	0	980	56,012	55,446	175	55,271
1988	4,918	49,235	15	1,499	95	436	0	1,010	57,208	57,208	150	57,058
1989	4,077	51,077	27	1,715	0	620	0	1,341	58,857	56,831	300	55,931
1990	1,364	49,622	38	1,359	0	463	0	1,224	54,070	54,070	334	53,736
1991	4,918	49,235	15	1,499	95	436	0	1,010	57,208	57,208	150	57,058
1992	4,907	49,370	15	1,521	95	336	0	1,165	57,409	57,409	175	57,234
1993	6,512	39,846	0	2,629	48	351	0	2,895	52,281	52,281	0	52,281
1994	0	52,970	0	896	0	301	0	190	54,357	54,357	-900	53,457
1995	0	48,482	0	811	0	266	0	159	49,718	49,718	0	49,718
1996	0	50,704	0	631	0	216	45	835	52,431	52,423	260	52,163
1997	0	49,490	0	707	0	242	22	743	51,204	51,183	590	50,593
1998	0	49,587	0	565	0	203	0	771	51,126	51,126	0	51,126

Source: Crop Utilization and Production Reports Years 1956 to 1999, years missing 1966 to 1981

Note: 1- Calculated sum of acreage for 8 crop categories shown.

2- Reported sum of acreage from Crop Census reports.

(differences in total calculated and reported noted for years: 1983, 1987, 1989, 1996, 1997, & 1999)

3- Total Harvested Cropland and Pasture as reported in Crop Census reports equals total (reported) minus acres multiple cropped.

Table 4.3 List of Land Use Classes for Estimating Irrigated Acreage

Land Use (Vegetation) Classification	-X- Irrigated Crops and Fallow Lands
	O Other Land Use Categories
Alfalfa	-X-
Pasture Grasses	-X-
Sorgum/Sudex	-X-
Wheat	-X-
Corn	-X-
Chile Peppers	-X-
Grapes	-X-
Fallow Ag	-X-
Idle Ag	O
Residential	O
Residential - dense	O
Urban Residential Irrigated	O
Parks & Golf Courses	O
Urban Vacant	O
Commercial/Industrial	O
Riparian Woodland	O
Saltcedar	O
Riparian Shrub	O
Marsh Veg	O
Desert Scrub	O
Pinion Juniper	O
Arroyo - Desert Scrub	O
Open Water	O
Misc. Grasses	O
Sand/Gravel Pit	O
Feeding Farms	-X-
Melons	-X-
Tree Fruit	-X-
Nursery Stock	-X-
Oats	-X-
Beans	-X-
Misc. Fruit	-X-
Misc. Vegetables	-X-
Bosque	O

Table 4.4 Irrigated Areas between Cochiti and Bosque del Apache National Wildlife Refuge

County	Crop Acres (Class 1-7, 26-33)	Fallow Agriculture Acres (Class 8)	Idle Agriculture Acres (Class 9)	Crop and Fallow Agriculture Acres
Sandoval	7,338	670	3,867	8,008
Bernalillo	8,786	505	2,631	9,292
Valencia	28,136	323	5,097	28,460
Socorro	17,532	359	3,191	17,892
TOTAL	61,793	1,858	14,786	63,651

Note: Acreages include irrigation activities outside the MRGCD lateral service area boundary

Division	Crop Acres (Class 1-7, 26-33)	Fallow Agriculture Acres (Class 8)	Idle Agriculture Acres (Class 9)	Crop and Fallow Agriculture Acres
Cochiti	3,743	386	2,413	4,130
Albuquerque	12,318	789	4,067	13,107
Belen	33,948	543	7,061	34,492
Socorro	11,783	140	1,244	11,923
TOTAL	61,793	1,858	14,786	63,651

Note: Acreages include irrigation activities outside the MRGCD lateral service area boundary

Table 4.5 Comparison of Reported Irrigated Acres

USBR Census Report, Harvested Cropland and Pasture, 1992	57,234
USBR Census Report, Harvested Cropland and Pasture, 1993	52,281
NMSU Ag. Exp. Station Reports, Total Acres Irrigated, 1992	59,850
NMSU Ag. Exp. Station Reports, Total Acres Irrigated, 1993	61,570
Revised RGIS from EDAC, Irrigated Crop plus Fallow	63,651

Table 6.1 Division Characteristics

Characteristic	Division			
	Cochiti	Albuquerque	Belen	Socorro
Irrigation Density ¹	0.26	0.29	0.54	0.67
Irrigation Acreage Factor ²	0.06	0.21	0.54	0.19
Acres Served per Canal Mile ³	39	64	106	88

¹ Ratio of number of irrigated acres over total acres in lateral service areas

² Ratio of acres in division to total acres in district

³ Irrigated acres divided by mapped canal miles

Table 6.2 Acreage Distribution Factors by Division and Accounting Zone

Cochiti Division

Sub-Division Zone	Total Area of Irrigation within Accounting Zone (acres) Excluding Idle Lands	Acreage Distribution Factors
1	1,253	0.02
2	870	0.01
3	1,126	0.02
4	526	0.01
5	234	0.00
All Sub-Divisions	4,009	0.06

Albuquerque Division

Sub-Division Zone	Total Area of Irrigation within Accounting Zone (acres) Excluding Idle Lands	Acreage Distribution Factors
1	2,838	0.05
2	1,584	0.03
3	2,212	0.04
4	4,451	0.07
5	1,816	0.03
All Sub-Divisions	12,902	0.21

Belen Division

Sub-Division Zone	Total Area of Irrigation within Accounting Zone (acres) Excluding Idle Lands	Acreage Distribution Factors
1	12,925	0.21
2	8,659	0.14
3	7,205	0.12
4	5,024	0.08
All Sub-Divisions	33,813	0.54

Socorro Division

Sub-Division Zone	Total Area of Irrigation within Accounting Zone (acres) Excluding Idle Lands	Acreage Distribution Factors
1	757	0.01
2	4,114	0.07
3	2,517	0.04
4	4,339	0.07
All Sub-Divisions	11,726	0.19

MRGCD	62,450
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Note: Acreages include irrigated crop classes and fallow acres that fall within the MRGCD lateral service area boundary

Table 6.3 General Description of Accounting Zones

COCHITI DIVISION

ZONE INFLOWS	UPSTREAM BOUNDARY LOCATION
<i>Zone 1 Inflows</i>	~RM 232.6
Sile Main Canal	Downstream of Cochiti Dam
<i>Zone 2 Inflows</i>	~RM 232.6
Cochiti East Side Main Canal	Downstream of Cochiti Dam
<i>Zone 3 Inflows</i>	~RM 224.5
Cochiti East Side Main Canal	South of Galisteo Creek North of Santo Domingo Pueblo
*Note: wasteway into Galisteo Creek does not flow into Zone 3 but flows out of Zone 2	
<i>Zone 4 Inflows</i>	~RM 214.0
Algodones Lateral	South of Arroyo Tongue Across the Rio Grande from San Felipe Pueblo Approx. 0.6 RM south of San Felipe Bridge
Angostura Lateral (aka. Cochiti East Side Main Canal)	
*San Felipe Siphon @ RM 214.3	
<i>Zone 5 Inflows</i>	~RM 214.0
Southwest San Felipe Ditch	South of San Felipe Pueblo on west side of Rio Grande

Table 6.3 General Description of Accounting Zones

ALBUQUERQUE DIVISION

ZONE INFLOWS	UPSTREAM BOUNDARY LOCATION
<i>Zone 1 Inflows</i>	~RM 209.7
Algodones Riverside Drain	Beginning of MRGCD Albuquerque Division North of Angostura Arroyo (Las Huartas Creek)
Santa Ana Acequia	
Algodones Acequia	
<i>Zone 2 Inflows</i>	~RM 190.9
Corrales Main Canal	Near Rio Rancho North of Arroyo de Las Lomatas Negras
Corrales Siphon	
<i>Zone 3 Inflows</i>	~RM 195.0
Albuquerque Riverside Drain	North of AMACA North Diversion Channel approx. 0.8 RM Northern edge of Mora, R.'s, Ditchrider #2, service boundary
Albuquerque Main Canal	
<i>Waterway – Unknown</i>	
Sandia Acequia	
<i>Zone 4 Inflows</i>	~RM 184.0 – 183.0
Atrisco Siphon	Near Central Avenue Bridge in City of Albuquerque
Isleta Drain	
Arenal Main Canal	
<i>Zone 5 Inflows</i>	~RM 180.2
Albuquerque Riverside Drain	South of Bridge Blvd Bridge approx. 1 RM North of AMAFCA South Diversion Channel approx 3.5 RM Northern edge of Trujillo, J.'s, Ditchrider #10, service boundary
Barr Main Canal	
Barelas Ditch	

Table 6.3 General Description of Accounting Zones

BELEN DIVISION

ZONE INFLOWS	UPSTREAM BOUNDARY LOCATION
<i>Zone 1 Inflows</i>	~RM 169.3
Peralta Main Canal	Isleta Diversion Dam South of Isleta Bridge on East side of Rio Grande
<i>Zone 2 Inflows</i>	~RM 169.2
Belen Highline Canal	Isleta Diversion Dam South of Isleta Bridge on West side of Rio Grande
Isleta Drain	
Isleta Riverside Drain (begins)	
<i>Zone 3 Inflows</i>	~RM 150.5
Belen Hiline Canal	North of NM 6 on West side of Rio Grande North of NM 6 & US 85 intersection
New Belen Acequia	
Garcia Acequia	
Santa Fe Ditch	
Upper Arroyos Acequia	
Old Jarales Acequia	
Lower Belen Riverside Drain	
<i>Zone 4 Inflows</i>	~RM 145.0
San Juan Feeder Canal	North of San Juan Wasteway (LP2DR) South of NM 47 & AT&SF Railroad intersection

Table 6.3 General Description of Accounting Zones

SOCORRO DIVISION

ZONE INFLOWS	UPSTREAM BOUNDARY LOCATION
<i>Zone 1 Inflows</i>	~RM 116.2
Socorro Main Canal	San Acacia Diversion Dam
LFCC	
<i>Zone 2 Inflows</i>	~RM 113.6
Polvadera Acequia	East of San Lorenzo Settling Basin at arroyo/wash North of Chamisal
Socorro Main Canal	
Lemitar Riverside Drain	
LFCC	
<i>Zone 3 Inflows</i>	~RM 104.8
Socorro Main Canal	North of Escondida Bridge at Arroyo de La Parida Pueblito on east side of Rio Grande
McAllistar Drain	
Lemitar Riverside Drain	
LFCC	
<i>Zone 4 Inflows</i>	~RM 94
Luis Lopez Acequia #2	At Brown Arroyo South of Wasteway near Brown Arroyo
Socorro Main Canal	
Socorro Riverside Drain	
LFCC	

Table 6.4 Irrigation Density by Division and Accounting Zone

Cochiti Division

Sub-Divison Zone	Area of Zone (acres)	Total Area of Irrigation within Accounting Zone (acres) Excluding Idle Lands	<i>Irrigation Density</i>
1	5,608	1,253	0.22
2	2,805	870	0.31
3	3,991	1,126	0.28
4	2,611	526	0.20
5	687	234	0.34
All Sub-Divisions	15,701	4,009	0.26

Albuquerque Division

Sub-Divison Zone	Area of Zone (acres)	Total Area of Irrigation within Accounting Zone (acres) Excluding Idle Lands	<i>Irrigation Density</i>
1	7,519	2,838	0.38
2	4,499	1,584	0.35
3	14,930	2,212	0.15
4	14,159	4,451	0.31
5	3,702	1,816	0.49
All Sub-Divisions	44,809	12,902	0.29

Belen Division

Sub-Divison Zone	Area of Zone (acres)	Total Area of Irrigation within Accounting Zone (acres) Excluding Idle Lands	<i>Irrigation Density</i>
1	20,177	12,925	0.64
2	16,273	8,659	0.53
3	17,863	7,205	0.40
4	8,018	5,024	0.63
All Sub-Divisions	62,331	33,813	0.54

Socorro Division

Sub-Divison Zone	Area of Zone (acres)	Total Area of Irrigation within Accounting Zone (acres) Excluding Idle Lands	<i>Irrigation Density</i>
1	1,634	757	0.46
2	5,554	4,114	0.74
3	4,403	2,517	0.57
4	5,825	4,339	0.74
All Sub-Divisions	17,417	11,726	0.67

MRGCD	140,259	62,450
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Note: Acreages include irrigation activities within the MRGCD lateral service area boundary

Table 7.1 Advantages and Concerns Related to Rotational Water Delivery

	Advantages	Concerns	
General	Greater ditchrider control of water delivery	Cropping patterns: types and practices	Weather patterns
	Limits irrigator water use through creation of scarcity	Inconvenient: users expect to irrigate when best for them	Labor requirements
	Has already been implemented in water short situations	Decreased support for riparian corridor along canals	Pre-season planning and management requirements
	Most required infrastructure is already in place	Lack of technical infrastructure	System layout
Site Specific	Guarantee of equitable water delivery to all users	Concern for lack of adequate water for tail-end of system	Reduced diversions may impact water pressure or head for delivery
	More feasible in large scale agriculture than small-scale	Increased weed growth in drying canals	Too many irrigators in urbanized areas: free-flow irrigators
	Prevents users from taking water out of turn	Canal characteristics: length, number of users, capacity	Alterations in schedule due to: repairs, maintenance, emergencies
	Provides water to Pueblo at a prescheduled time	Pueblo delivery requirement	Water level fluctuations: gophers and erosion

Table 7.2 Approximate Percentage of MRGCD Lands Devoted to Different Land Use Practices

Year	1938	1954	1975	1986
Cultivated	51%	56.3%	54.9%	48%
Grass & Brush	34.5%	26.5%	19.4%	15.4%
Bosque	12.7%	9.3%	8.3%	10.2%
Urban	1.7%	7.9%	17.4%	26.4%
Total	100%	100%	100%	100%