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Table 1: Measurement Location Codes

Code	Measurement Locations Name
9MO	9 Mile Outfall
ALMDT	Alamillo Ditch
AQMAD	Acequia Madre
BELDR	Belen Drain
BRD309	Belen Riverside Drain at Hwy 309
BRDBS2	Belen R/S Drain below separation 2
BRDDH	Belen Riverside Drain downstream of Harlan Drain
BRDDSD	Belen Riverside Drain downstream of Sausal Drain
BRDOUT	Belen Riverside Drain adjacent to RGUSOUT
BRDTM	Belen Riverside Drain at Tome
BRDUH	Belen Riverside Drain upstream of Harlan Drain
BRDUSD	Belen Riverside Drain upstream of Sausal Drain
BRNWW	Brown Arroyo Wasteway
DR1BRD	Drain #1 into Belen Riverside Drain
DU7#2	Drain Unit 7 #2
DU7#3	Drain Unit 7 #3
DU7G	Drain Unit 7 near MRGCD gage
DU7RG7	Drain Unit 7 adjacent to RGBDU7
DU7X	Drain Unit 7 Extension
ELMDR	Elmendorf Drain North Boundary
ELMESM	Elmendorf Drain East of Socorro Main Canal
FD3WW	Feeder Ditch #3 Wasteway
HARD	Harlan Drain
LAJ1	La Joya #1
LAJ2	La Joya #2
LAJ3	La Joya #3
LAJ4	La Joya #4
LAJ5	La Joya #5
LAJ6	La Joya #6
LAJ7	La Joya #7
LFCC #1	LFCC at Corral
LFCC #10	LFCC below Brown Arroyo
LFCC #11	LFCC #11, downstream of 1200 check structure
LFCC #13	LFCC downstream of wasteway to Rio Grande

Code	Measurement Locations Name
LFCC #18	LFCC at San Acacia
LFCC #2	LFCC at Ft. Craig
LFCC #3	LFCC at San Marcial
LFCC #5	LFCC at South Boundary of Bosque del Apache
LFCC #7	LFCC at North Boundary of Bosque del Apache
LFCC #8	LFCC downstream of Hwy 380
LNDR	Las Nutrias Drain
LP1DR	Lower Peralta Riverside Drain #1
NBLWW	New Belen Wasteway
OSALT	Old San Antonio Lateral
OTDR	Otero Drain
OUTB23	Outfall between La Joya #2 and La Joya #3
PERWW	Peralta Wasteway
PRD309	Peralta Riverside Drain at Hwy 309
PRDOUT	Peralta Riverside Drain adjacent to RGUSOUT
PRDTM	Peralta Riverside Drain at Tome
RG1200	Rio Grande at 1200 Check Structure
RG309	Rio Grande downstream of Hwy 309
RG380	Rio Grande downstream of Hwy 380
RGASA#2	Rio Grande above San Acacia #2
RGASA#3	Rio Grande above San Acacia #3
RGBA	Rio Grande at Brown Arroyo
RGBC	Rio Grande at Blue Cup
RGBDU7	Rio Grande below Drain Unit 7
RGCOR	Rio Grande North of Corral
RGESC	Rio Grande at Escondida Bridge
RGISL	Rio Grande Below Isleta Pueblo
RGNBB	Rio Grande at North Boundary of Bosque
RGNC	Rio Grande at Neil Cupp
RGNSD	Rio Grande at North Socorro Diversion
RGSACA	Rio Grande at San Acacia
RGSBB	Rio Grande at South Boundary of Bosque
RGSDR	Rio Grande upstream of Lower Sabinal drain
RGSM	Rio Grande at San Marcial
RGTM	Rio Grande at Tome
RGUS60	Rio Grande Upstream of Hwy 60

Code	Measurement Locations Name
RGUSOUT	Rio Grande Upstream of Wastewater Outfall
RIVDS1200	Riverside Drain downstream of 1200 Check Structure
RIVDSLEM	Riverside Drain downstream of Lemitar Diversion
RIVDSNC	Riverside Drain downstream of Neil Cupp Diversion
RIVUS1200	Riverside Drain upstream of 1200 Check Structure
RIVUSLEM	Riverside drain upstream of Lemitar Diversion
RIVUSNC	Riverside Drain upstream of Neil Cupp Diversion
SABDR	Sabinal Riverside Drain
SADCN	San Antonio Ditch North Boundary
SALAR	Salas Arroyo
SFBDWW	Bernardo Drain Wastewater Inflow
SFRD60	San Francisco Riverside Drain upstream of Hwy 60
SJBDU7	Lower San Juan Riverside Drain below Drain Unit 7
SJDR60	Lower San Juan Riverside Drain upstream of Hwy 60
SJFC	San Juan Feeder Canal
SJMN	San Juan Main
SJWW	San Juan Riverside Drain Wasteway
SM1	Socorro Main #1, at stop sign
SM11	Socorro Main #11
SM2	Socorro Main #2
SM3	Socorro Main # 3, upstream of Siphon
SM7	Socorro Main #7, downstream of Chambon Lateral
SM8	Socorro Main #8
SM9	Socorro Main #9, downstream of check structure
SMSA	Socorro Main at San Acacia
SMSCN	Socorro Main Canal South, North Boundary
SOCDR	Socorro Riverside Drain North Boundary
SOCWW	Socorro Riverside Drain Wasteway at Brown Arroyo
STYWW	Story Wasteway
TOMDR	Tome Drain

Table 2: Seepage Run Activity Summary Table

Activity	Date(s)	Division (B=Belen; S=Socorro)	Description	Top of Reach	Bottom of Reach
S4-01	6/9-6/12	S	Rio Grande	San Acacia	Corral
S4-02	6/10-6/13	S	LFCC, #13	LFCC #13, below 9 mile outfall	LFCC #1, end of channel
S4-03	6/23-6/24	B	Rio Grande	Hwy 309	Drain Unit 7 Extension
S4-05	6/27	S	Rio Grande	San Acacia	Corral
S4-06	6/28-6/29	B	Rio Grande	Upstream of wastewater outfall	Drain Unit 7 Extension
S4-07	7/6-7/9	B	Rio Grande	Isleta	San Acacia
S4-08	7/10	B	La Joya Acequia		
S4-09	7/18	S	Socorro Main Canal, Section 2	Downstream of Chambon	Downstream of check structure
S4-10	7/19	S	Socorro Main Canal, Section 1	Stop Sign	Siphon
S4-11	7/19	S	Socorro Main Canal, Section 3	Downstream of check structure	Upstream of Bosque del Apache
S4-12	7/22	B	Lower San Juan Riverside Drain	Upstream of Hwy 360	Drain Unit 7
S4-13	7/22	B	Rio Grande	Upstream of Hwy 60	Drain Unit 7
S4-15	7/23	B	Lower San Juan Riverside Drain	Upstream of Hwy 360	Drain Unit 7
S4-16	7/23-7/24	B	Rio Grande	Upstream of Hwy 60	San Acacia
S4-17	7/23-7/24	B	West Riverside Drains	Upstream of Hwy 60	San Acacia
S4-18	7/25	B	Peralta Riverside Drain	Adjacent to wastewater outfall on Rio Grande	Tome
S4-19	7/25-7/26	B	Rio Grande	Upstream of wastewater outfall	Hwy 309
S4-20	7/25-7/26	B	Belen Riverside Drain	Adjacent to wastewater outfall on Rio Grande	Tome
S4-21	8/2-8/3	B	Peralta Riverside Drain	Adjacent to wastewater outfall on Rio Grande	Hwy 309
S4-22	8/2-8/3	B	Rio Grande	Upstream of wastewater outfall	Hwy 309
S4-23	8/2-8/3	B	Belen Riverside Drain	Adjacent to wastewater outfall on Rio Grande	Hwy 309
S4-24	8/8-8/9	S	Rio Grande	Escondida Bridge	Neil Cupp
S4-25	8/8/-8/9	S	LFCC, #13	LFCC #13, below 9 mile outfall	LFCC #8, downstream of Hwy 380

Note: Activity S4-04 was renamed X4-01 because measurements were intended to be part of valley-cross section activity. Seepage run S4-14 was not completed.

**Table 3: Valley Cross-Section and
Other Activity Summary Table**

Activity	Date(s)	Division (B=Belen; S=Socorro)	Description
B4-01	6/26	S	Proposed MRGCD Gage Location
B4-02	6/26	S	Proposed MRGCD Gage Location
B4-03	6/26	S	Proposed MRGCD Gage Location
B4-04	6/26	S	Proposed MRGCD Gage Location
B4-05	6/26	S	Proposed MRGCD Gage Location
B4-06	6/26	S	Proposed MRGCD Gage Locations (multiple measurements)
B4-07	6/26	S	Proposed MRGCD Gage Locations (multiple measurements)
X4-01	6/26	both	3 cross-sections on Rio Grande, Socorro Main, and Drain Unit 7
X4-02	7/9	both	3 cross-sections on Rio Grande, Socorro Main, and Drain Unit 7

Table 4
Summary of Calculated Rio Grande Seepage Rates, Belen Division

Rio Grande Reach	River Loss (cfs/reach)							River Loss (cfs/mile)						
	Activity							Activity						
	S4-03	S4-06	S4-07	S4-13	S4-16	S4-19	S4-22	S4-03	S4-06	S4-07	S4-13	S4-16	S4-19	S4-22
Rio Grande at Isleta to Upstream of Wastewater Outfall			62.2							9.4				
<i>Sub-Reach: Upstream of Wastewater Outfall to Tome</i>			75.7			53.9	70.4			10.1			7.2	9.4
<i>Sub-Reach: Tome to Highway 309</i>			-10.3			17.4	-2.0			-5.1			8.7	-1.0
Upstream of Wastewater Outfall to Hwy 309		-54.9	65.5			71.4	68.4		-5.8	6.9			7.5	7.2
Highway 309 to Blue Cup	17.2		-9.7					2.5		-1.4				
Blue Cup to Upstream of Lower Sabinal Drain			14.1							3.6				
Upstream of Lower Sabinal Drain to Hwy 60			4.8							0.9				
Hwy 309 to Below Drain Unit 7 Extension		12.4							0.6					
Hwy 60 to Below Drain Unit 7 Extension			11.3	26.4	-12.5					1.8	4.1	-1.9		
Blue Cup to Below Drain Unit 7 Extension	81.8							5.3						
Below Drain Unit 7 Extension to San Acacia #3			-31.7		21.3					-5.9		4.0		
San Acacia #3 to San Acacia #2			25.2		12.6					8.3		4.2		

Note:
 Positive values indicate losses from the river; negative values indicate gains to the river.

**Table 5
Summary of Calculated Rio Grande Seepage Rates, Socorro Division**

Rio Grande Reach	River Loss (cfs per reach)												River Loss (cfs per mile)															
	Irrigation Season 2000								Post Irrigation Season	Winter	Irrigation Season 2001				Irrigation Season 2000								Post Irrigation Season	Winter	Irrigation Season 2001			
	Phase I, Run 1	Phase I, Run 2	Phase II, Cycle 1, Run 1	Phase II, Cycle 2, Run 1	Phase II, Cycle 2, Run 2	Phase II, Cycle 3, Run 1	Phase II, Cycle 4, Run 1	Phase II, Cycle 4, Run 2	Phase II, Cycle 5, Run 1	Phase IV, S4-01	Phase IV, S4-05	Phase IV, S4-24	Phase I, Run 1	Phase I, Run 2	Phase II, Cycle 1, Run 1	Phase II, Cycle 2, Run 1	Phase II, Cycle 2, Run 2	Phase II, Cycle 3, Run 1	Phase II, Cycle 4, Run 1	Phase II, Cycle 4, Run 2	Phase II, Cycle 5, Run 1	Phase IV, S4-01	Phase IV, S4-05	Phase IV, S4-24				
Overall Seepage Run Quality Rating*	Poor	Fair	Excellent	Good	Good	Fair	Poor	Fair	Excellent	Fair	Good	Good	Poor	Fair	Excellent	Good	Good	Fair	Poor	Fair	Excellent	Poor	Good	Good				
San Acacia to Escondida	(-4.2)		20.7	40.5	5.3	12.3	-70.8	-12.2	27.6	-17.4	40.6		(-0.4)		2.0	3.9	0.5	1.2	(-6.7)	-1.2	2.6	-1.7	3.9					
<i>Sub-Reach: Escondida to North Socorro Diversion</i>												17.0												11.4				
<i>Sub-Reach: North Socorro Diversion to 1200 Check Structure</i>												10.3												3.3				
<i>Sub-Reach: Escondida to 1200 Check Structure</i>									93.2	6.1	42.1										20.1	1.3	9.1					
<i>Sub-Reach: 1200 Check Structure to Brown Arroyo</i>									-42.2	22.7	19.7	38.6									-9.1	4.9	4.3	8.3				
<i>Sub-Reach: Escondida to Brown Arroyo</i>					96.0	64.0	56.5	79.7	51.0							10.4	(6.9)	(6.1)	(8.6)	5.5								
<i>Sub-Reach: Brown Arroyo to Neil Cupp</i>									53.7	108.8	60.0	21.4									21.0	42.5	24.8	8.4				
<i>Sub-Reach: Neil Cupp to Highway 380</i>									71.8	-36.4	12.9	13.7									18.9	-9.6	3.3	3.6				
<i>Sub-Reach: Brown Arroyo to Highway 380</i>					83.5	51.5		101.4	125.5							13.1	(8.1)		(16.0)	19.7								
Escondida to Highway 380	(221.7)		131.0	107.1	179.5	115.5	--	181.1	176.5	101.2	134.6	100.9	(14.2)		8.4	6.9	11.5	7.4	--	11.6	11.3	6.6	8.9	6.5				
Highway 380 to North Bosque	(74.5)		40.1	18.8	--	26.0	--	-39.8	-2.7	154.3		--	(22.1)		11.9	5.6	--	7.7	--	-11.8	-0.8	45.8		--				
North Bosque to South Bosque			53.5	64.0	--	63.6	--	132.5	55.7	8.3		--			4.4	5.2	--	5.2	--	10.8	4.6	0.7		--				
South Bosque to San Marcial			10.5	20.1	--	9.2	--	27.9	60.4	29.5		--			1.6	3.2	--	1.4	--	4.4	9.5	4.6		--				
Highway 380 to San Marcial											136.7	--											6.2	--				
San Marcial to Fort Craig	(-9.8)	16.1	6.4	6.3	--	6.8	--		-16.9			--	(-2.4)	3.9	1.6	1.6	--	1.7	--		-4.1			--				
San Marcial to Corral					--		--	37.7		-25.6	29.5	--					--		--	4.3		-2.9	3.4	--				
Fort Craig to Corral			34.4	16.4	--	28.9	--	--	-6.5	--	--	--			7.3	3.5	--	6.1	--		-1.4	--	--	--				

Notes:

- Seepage rates reported in italics indicate a sub reach calculation.
- Rates reported in parentheses designate that data is incomplete for this reach and that rates may not well represent actual seepage.
- Positive values indicate losses from the river; negative values indicate gains to the river.
- Seepage Run Quality Rating Criteria:
 - Excellent: All wave discharge variations less than 10% of reference flow at San Acacia at start of run.
 - Good: Wave discharge variations predominatly less than 20% of reference flow.
 - Fair: Wave discharge variation predominatly less than 25% of reference flow. Some points may exceed 30%.
 - Poor: A significant number of reaches are subject to wave discharge variations exceeding 30%.

Table 6
Summary of Calculated Low Flow Conveyance Channel Seepage Rates

LFCC Reach	LFCC Loss (cfs per reach)										LFCC Loss (cfs per mile)											
	Irrigation Season 2000						Post Irrigation Season	Winter	Irrigation Season 2001				Irrigation Season 2000						Post Irrigation Season	Winter	Irrigation Season 2001	
	Phase I, Run 1	Phase I, Run 2	Phase II, Cycle 1, Run 1	Phase II, Cycle 2, Run 1	Phase II, Cycle 3, Run 1	Phase II, Cycle 4, Run 1	Phase II, Cycle 4, Run 2	Phase II, Cycle 5, Run 1	Phase IV, S4-02	Phase IV, S4-25	Phase I, Run 1	Phase I, Run 2	Phase II, Cycle 1, Run 1	Phase II, Cycle 2, Run 1	Phase II, Cycle 3, Run 1	Phase II, Cycle 4, Run 1	Phase II, Cycle 4, Run 2	Phase II, Cycle 5, Run 1	Phase IV, S4-02	Phase IV, S4-25		
San Acacia to Polvadera	-9.8		-9.6	-9.3	-8.8	-10.2	-12.3			-2.0		-1.9	-1.9	-1.8	-2.1	-2.5						
Polvadera to LFCC #13	-9.8		-5.2	-13.1	-3.7	-20.6	-7.7	-3.0		-2.0		-1.1	-2.7	-0.8	-4.2	-1.6	-0.6					
LFCC #13 to 1200 Check Structure	-10.6		-21.6	-16.5	-18.9	-20.2	-25.7	-22.5	-24.3	-15.2	-2.2		-4.6	-3.5	-4.0	-4.3	-5.4	-4.8	-5.1	-3.2		
1200 Check Structure to below Brown Arroyo			-54.9	-50.3	-48.6	-55.7	-50.3	-52.1	-48.4	-54.0			-12.4	-11.4	-11.0	-12.6	-11.4	-11.8	-10.9	-12.2		
Below Brown Arroyo to downstream of Hwy 380			-42.4	-49.7	-49.5	--	-43.2	-38.0	-38.7	-29.7			-6.8	-8.0	-8.0	--	-7.0	-6.1	-6.2	-4.8		
Downstream of Hwy 380 to North Boundary			5.1	-27.2	-11.7	--	-7.1	8.1	25.8	--			1.5	-8.2	-3.5	--	-2.2	2.4	7.8	--		
North Boundary to Concrete Bridge	-36.2	-28.9	-18.4	-32.9	-32.2	--	-31.6	-38.1		--	-6.6	-5.3	-3.4	-6.0	-5.9	--	-5.8	-6.9		--		
Concrete Bridge to South Boundary	-11.2	-13.4	-18.6	-4.2	-6.4	--	--	-19.8		--	-1.9	-2.3	-3.2	-0.7	-1.1	--	--	-3.4		--		
North Boundary to South Boundary	-47.4	-42.3	-37.0	-37.1	-38.6	--	--	-57.9	-61.2	--	-4.2	-3.8	-3.3	-3.3	-3.4	--	--	-5.1	-5.4	--		
South Boundary to San Marcial			-3.6	-8.0	-48.0	--	--	-14.6		--			-0.6	-1.3	-7.9	--	--	-2.4		--		
San Marcial to Fort Craig	-22.6	3.7	-4.4	-1.0	20.3	--	--	-1.1	-22.3	--	-5.0	0.8	-1.0	-0.2	4.5	--	--	-0.2	-5.0	--		
Fort Craig to Corral	--	--	2.1	4.1	-11.3	--	--	10.2	26.4	--	--	--	0.6	1.2	-3.2	--	--	2.9	7.6	--		

Note:
Positive values indicate losses from the LFCC; negative values indicate gains to the LFCC.