

APPENDIX C
Temperature Data

Table 1

Mean Monthly Temperature Values - San Juan River at Farmington, New Mexico

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1961	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8
1962	-8888.8	-8888.8	-8888.8	-8888.8	14.5	17.4	22.3	25.4	21.9	15.8	9.6	4.4
1963	0.8	6.1	9.5	12.8	17.0	21.9	26.6	23.8	21.0	17.0	9.5	4.2
1964	2.1	5.4	9.8	14.5	15.8	19.0	22.9	22.0	21.1	15.9	8.4	3.5
1965	5.1	6.3	9.7	12.1	13.8	14.0	19.4	21.2	17.3	14.6	10.4	6.4
1966	3.4	5.1	9.2	12.8	16.0	19.8	25.2	24.8	22.0	14.9	10.2	4.3
1967	2.5	6.6	11.2	14.1	16.5	19.6	26.5	22.1	20.9	17.0	9.9	2.4
1968	1.0	7.9	10.7	12.3	13.5	13.1	22.4	21.6	20.4	14.6	7.7	2.5
1969	3.7	6.2	7.9	10.9	13.9	16.6	21.3	23.5	19.4	11.3	7.4	4.5
1970	2.6	6.2	8.6	12.5	16.0	16.5	22.8	24.0	17.3	11.9	7.8	4.7
1971	2.6	6.6	10.5	12.8	16.2	17.4	22.4	22.0	21.1	15.5	8.7	3.5
1972	2.8	6.2	11.4	13.2	15.6	19.1	25.1	21.3	14.2	11.1	3.8	2.5
1973	2.7	4.5	5.3	6.9	9.4	13.9	14.8	14.2	13.4	12.5	9.3	6.0
1974	4.4	5.4	10.5	11.7	15.5	20.5	24.3	21.7	18.3	12.3	7.4	2.5
1975	1.3	4.5	6.7	7.0	10.4	12.2	16.6	17.0	14.7	10.6	6.9	3.0
1976	2.0	6.0	10.4	13.2	15.2	17.2	21.8	21.1	16.6	-8888.8	-8888.8	2.7
1977	2.7	4.8	7.2	14.2	17.0	21.2	21.6	21.4	16.7	13.0	6.8	3.6
1978	3.8	4.6	8.8	12.0	12.3	14.4	21.5	21.7	14.7	9.3	5.2	-8888.8
1979	1.8	4.5	7.7	11.2	11.2	12.7	15.7	17.9	19.5	14.2	6.3	5.8
1980	6.0	6.9	7.7	11.6	13.5	16.9	23.1	21.0	18.4	12.4	8.3	16.5
1981	4.5	3.8	6.6	12.8	16.6	17.9	20.6	19.1	15.7	11.5	10.4	2.0
1982	3.4	4.1	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8

* -8888.8 indicates missing values

Table 2

Mean Monthly Temperature Values - Animas River at Farmington, New Mexico

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1950	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	3.5
1951	2.5	5.4	8.8	13.5	16.2	19.6	27.2	25.1	20.5	13.7	6.2	1.0
1952	1.9	2.8	5.8	10.1	12.7	14.9	20.4	21.5	19.7	17.4	2.8	2.1
1953	1.7	3.7	8.3	12.3	15.1	19.1	24.2	23.6	16.3	15.0	7.9	0.9
1954	2.5	6.5	9.0	14.7	17.0	20.8	23.9	22.1	19.4	13.0	8.8	2.6
1955	1.8	2.3	4.2	6.4	10.3	13.8	18.3	19.6	17.2	14.3	5.8	1.4
1956	4.4	4.7	5.8	9.5	10.6	16.6	24.9	22.5	22.3	14.1	5.0	1.6
1957	1.9	4.6	5.4	7.3	10.6	11.0	15.0	19.4	18.1	13.1	5.3	2.3
1958	1.7	5.8	7.0	10.7	14.0	17.1	22.6	24.5	20.7	14.4	7.4	3.8
1959	2.1	5.6	10.6	15.3	16.5	19.5	25.3	23.9	21.4	12.9	5.6	2.5
1960	1.0	3.0	8.8	11.6	14.4	17.2	23.4	24.1	21.4	12.9	7.4	2.2
1961	1.6	7.3	9.7	12.5	13.7	17.7	23.6	25.1	19.2	13.1	6.9	1.7
1962	1.2	5.5	9.0	13.0	13.6	17.9	20.9	25.4	22.8	15.3	8.9	4.3
1963	0.8	5.4	9.6	12.5	16.2	19.9	26.0	23.5	19.8	16.9	8.8	3.1
1964	1.2	4.6	8.9	13.6	15.4	18.6	25.8	22.8	20.6	15.1	7.4	2.8
1965	4.4	5.9	9.7	12.7	13.8	14.6	19.3	21.6	17.0	13.7	9.0	4.3
1966	1.7	4.7	9.4	12.8	13.5	18.7	25.2	25.0	21.8	15.7	9.8	3.9
1967	2.1	6.0	11.7	13.9	16.0	19.0	25.6	23.5	21.6	16.3	9.5	2.5
1968	0.7	7.0	10.3	11.8	11.8	12.3	21.5	21.1	20.9	14.7	7.5	2.1
1969	3.3	5.8	6.6	8.5	11.3	16.2	21.0	23.9	19.6	11.3	6.8	4.0
1970	2.8	6.2	8.6	13.2	16.1	17.0	22.9	23.6	17.1	11.5	7.4	3.7
1971	1.9	5.9	9.6	12.4	15.3	16.9	22.2	23.5	21.0	14.3	7.8	2.4
1972	1.8	5.4	10.9	12.6	15.0	18.8	26.0	24.0	16.7	11.8	4.0	0.8
1973	0.5	4.9	5.9	7.4	9.7	13.9	18.1	22.2	18.2	15.1	8.6	2.8
1974	1.8	3.9	11.3	13.1	14.7	19.1	25.2	25.2	23.4	16.0	8.1	2.6
1975	0.6	4.1	7.4	7.6	10.8	12.5	17.0	22.0	18.7	13.4	7.8	2.9
1976	2.0	6.2	10.5	13.6	15.5	17.4	22.4	21.6	16.8	10.5	-8888.8	0.7
1977	0.8	4.8	10.0	16.6	18.9	22.3	24.1	24.4	19.0	14.6	7.5	2.8
1978	2.8	4.2	8.5	11.1	11.9	13.6	20.1	23.7	17.3	12.8	4.5	2.0
1979	1.4	4.2	8.4	11.2	12.4	14.0	19.4	22.4	22.7	17.5	6.4	4.8
1980	5.4	7.6	9.0	12.5	14.5	18.8	24.3	26.2	23.5	15.9	8.6	3.0
1981	2.6	3.4	7.5	13.2	16.1	17.9	22.2	24.0	19.6	12.6	9.8	1.5
1982	3.0	4.0	9.1	11.5	12.3	14.0	19.1	20.8	17.1	12.3	7.0	3.0
1983	1.9	5.0	7.2	11.0	13.3	14.4	17.9	23.3	20.8	13.4	6.3	1.8
1984	1.6	4.2	8.6	10.8	13.5	15.4	19.7	21.6	18.1	9.3	6.0	2.7
1985	2.9	3.6	7.7	11.5	13.4	15.5	20.4	22.5	17.1	13.4	7.1	3.0
1986	4.4	7.1	11.1	11.8	14.1	16.3	19.8	23.6	20.5	10.3	5.9	2.6
1987	2.5	6.3	7.8	12.7	13.4	16.9	21.6	23.3	20.9	14.3	3.0	2.8
1988	1.6	6.1	9.5	12.9	16.5	20.9	25.5	24.6	20.7	-8888.8	-8888.8	-8888.8

* -8888.8 indicates missing values

Table 3

Mean Monthly Temperature Values - San Juan River at Bluff, Utah

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1943	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8
1944	-8888.8	-8888.8	-8888.8	-8888.8	15.3	17.6	22.3	21.9	20.5	13.6	6.5	1.2
1945	1.9	4.4	6.6	10.0	15.2	19.9	24.0	24.4	19.2	14.6	5.4	0.5
1946	0.8	4.1	8.3	14.9	16.6	21.3	25.4	24.3	19.7	12.1	5.9	2.8
1947	0.0	4.3	8.9	12.2	18.0	18.8	24.1	22.8	20.1	14.6	4.2	1.6
1948	1.1	3.7	6.3	11.2	16.0	19.3	23.8	22.8	19.5	12.9	4.4	1.0
1949	1.0	2.4	8.8	13.3	15.5	18.4	23.1	22.6	20.4	12.4	6.8	1.9
1950	1.2	5.8	10.6	19.2	20.1	23.1	24.2	23.6	19.9	16.2	6.9	5.1
1951	3.2	6.1	10.7	14.5	17.2	20.6	25.2	21.6	-8888.8	-8888.8	-8888.8	0.7
1952	1.8	3.9	5.6	12.4	16.2	18.3	23.1	24.0	19.3	15.7	6.0	1.5
1953	2.4	4.2	8.5	11.3	14.8	19.8	24.0	21.7	17.3	12.4	6.2	1.4
1954	2.0	5.6	6.8	14.3	17.7	20.2	24.7	22.3	20.2	13.5	6.9	2.6
1955	1.0	2.1	6.8	10.0	15.0	18.6	22.1	23.2	18.6	13.1	5.1	4.3
1956	3.7	3.2	7.0	12.1	16.2	20.7	23.1	20.6	18.5	11.5	4.5	1.2
1957	2.2	6.2	8.1	12.8	13.9	17.7	24.6	22.5	18.5	13.4	5.1	1.9
1958	1.5	5.2	6.8	10.4	16.2	20.0	24.3	24.2	19.1	14.1	6.3	4.2
1959	2.1	4.4	8.6	13.4	15.8	21.8	23.6	22.6	17.0	12.6	5.5	3.0
1960	0.8	2.7	8.1	11.4	15.9	19.8	24.0	22.3	20.3	12.4	6.1	1.1
1961	0.6	3.9	8.2	11.6	15.8	21.4	24.2	22.5	17.4	10.8	5.6	3.1
1962	0.4	3.8	6.0	13.7	16.3	20.8	24.2	24.7	22.0	16.6	9.0	6.7
1963	-8888.8	6.0	10.9	11.8	20.1	22.3	28.0	25.8	21.9	16.2	8.1	1.9
1964	1.3	3.9	10.8	14.8	19.3	20.8	25.0	22.6	18.9	13.1	5.6	3.0
1965	3.7	5.1	8.4	14.6	16.5	18.6	24.0	23.7	18.9	14.3	9.9	4.8
1966	2.2	3.7	8.9	13.9	19.2	22.6	27.1	25.5	21.6	13.8	8.4	3.2
1967	0.9	4.9	10.5	13.9	18.5	21.4	25.3	23.9	21.2	14.9	5.2	0.2
1968	0.4	5.8	9.6	12.2	17.2	21.2	26.0	22.7	20.2	14.0	5.8	1.5
1969	2.4	4.9	7.5	14.0	18.6	21.1	24.5	26.4	21.2	12.6	7.8	3.5
1970	2.9	5.7	7.8	11.0	17.2	22.1	26.2	25.9	17.1	11.1	6.1	2.8
1971	3.0	4.2	8.2	12.5	15.7	19.3	25.4	24.5	19.9	13.3	6.3	1.4
1972	1.4	5.1	11.3	14.9	19.3	22.4	27.5	26.1	21.1	13.4	5.5	1.6
1973	1.0	3.3	7.0	10.7	17.3	20.0	23.5	23.8	18.9	14.3	8.2	2.7
1974	1.0	2.1	8.1	11.8	18.0	23.5	25.5	24.0	24.0	15.8	8.0	2.9
1975	1.0	3.6	7.5	10.4	16.0	20.8	22.0	22.0	17.0	7.9	7.2	1.4
1976	2.0	7.6	11.0	16.4	17.9	21.7	24.3	20.3	20.9	14.4	4.9	-8888.8
1977	-8888.8	4.3	7.0	10.7	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8
1978	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	-8888.8	10.5	-8888.8	0.0
1979	0.0	0.0	6.5	8.5	13.5	-8888.8	23.0	-8888.8	21.5	-8888.8	-8888.8	-8888.8

* -8888.8 indicates missing values

Table 4

Miscellaneous Water Temperatures, San Juan and Animas Rivers, New Mexico

San Juan River (above Animas Confluence)

<u>Location</u>	<u>July 1989</u>	<u>Oct. 1989</u>	<u>Sep. 1990</u>
Navajo Dam	--	--	11.5
Gobernador Wash	--	9.9	
Hammond Diversion	13.9	11.4	
64 Bridge	13.9		
4 km above Bloomfield	16.6		
Bloomfield	19.3		
1 km above Armenta Canyon	14.7		
Armenta Canyon	16.1		
Lee's Acres Bridge	20.0		
5 km below Bloomfield	21.3		
3.2 km above Animas	20.9		
Animas Confluence	21.1		

Animas River (Colorado/New Mexico Border to San Juan Confluence)

<u>Location</u>	<u>Oct. 1987</u>	<u>July 1989</u>	<u>Sep. 1990</u>
Colorado/New Mexico Border			17.5
Colorado Road 2125	8.9		
Segment 1			15.5
Segment 2			12.0
Segment 3			19.0
Segment 4			23.0
Segment 5			22.0
Segment 6			21.0
U.S. 550	--		--
Colorado Road 2800	11.0		23.0
Aztec	13.0		21.0
Farmington		21.0	

(David Propst, New Mexico Game and Fish, Personal Communication)

Table 5

Water Temperature, San Juan River, San Juan Co., NM. River Mile 0 = Animas San Juan rivers confluence,
 Parenthetic #s = No. of Measurements.

Downstream River Mile	May 1987	Mar 1988	Apr/May 1988	May 1990	Aug 1987	Jul/Aug 1988	1989	Sep 1990	Oct 1987	Oct 1988	1989	Oct 1990
Animas	--				22.2(1)				--			
0-2 (Farmington)	--				23.2(1)				--			
3-7	10.0(1)				20.9(4)				13.0(3)			
8-12	10.6(1)				23.6(5)				14.5(3)			
13-17	8.9(1)				23.2(3)				--			
18-22	10.6(1)	9.7(2)			23.5(1)				--			
23-27 (Hogback)	--	10.5(7)	16.4(3)		--				--			
28-32	10.10(1)	11.4(4)	16.9(3)		24.0(1)			25.0(1)	--			
33-37	12.2(1)	13.0(1)	12.3(2)	16.5(5)	24.1(1)	24.3(5)		21.0(4)	15.2(4)	11.9(4)		17.3(2)
38-42	12.8(1)	10.6(3)	11.7(4)	16.2(5)	24.0(3)	26.1(6)		24.3(3)	14.8(2)	12.3(5)		16.4(2)
43-47	--	10.1(4)	13.4(4)	19.6(4)	23.2(3)	24.9(4)		26.0(2)	15.8(2)	10.1(4)		--
48-52	13.0(2)	11.3(5)	15.6(5)	18.9(5)	24.1(3)	23.6(6)		--	--	10.9(3)		14.3(1)
53-57	13.0(1)	12.4(3)	17.1(5)	18.2(4)	22.1(4)	24.9(4)		23.0(1)	--	11.5(3)		--
58-Bridge (4 Corners)	14.4(1)	14.6(3)	16.0(3)	19.0(5)	--	26.2(5)		24.0(1)	--	10.2(4)		--

(David Propst, New Mexico Game and Fish, Personal Communication)