

	Appendix C GRCA Climate Data																			
	South Rim (Grand Canyon Village) 1903 to 2007											North Rim (Bright Angel Ranger Station) 1948 to 2007								
	Average High		Average Low		Average		Average Precip		Average Snow		Average High		Average Low		Average		Average Precip		Average Snow	
	°F	°C	°F	°C	°F	°C	in	cm	in	cm	°F	°C	°F	°C	°F	°C	in	cm	in	cm
January	43.3	6.3	18.7	-7.4	30.9	-0.6	1.48	3.7	13.4	34.1	38.1	3.4	17.1	-8.3	27.6	-2.4	3.8	9.7	34.3	87.1
February	46.9	8.3	21.6	-5.8	34.3	1.3	1.52	3.9	11.6	29.5	40.1	4.5	18.4	-7.6	29.2	-1.6	3.2	8.1	25.3	64.3
March	52.8	11.6	25.5	-3.6	39.2	4.0	1.55	3.9	10.6	26.9	44.5	6.9	21.9	-5.6	33.1	0.6	3.4	8.6	28.2	71.6
April	62.2	16.8	31.6	-0.2	46.9	8.3	0.92	2.3	3.8	9.6	52.7	11.5	28.3	-2.1	40.6	4.8	1.6	3.9	11.0	27.9
May	72.2	22.3	38.8	3.8	55.5	13.1	0.61	1.6	1.2	3.1	62.4	16.9	33.6	0.9	48.0	8.9	0.9	2.2	2.3	5.8
June	83.3	28.5	46.8	8.2	65.0	18.3	0.43	1.1	0.0	0.0	73.1	22.8	40.5	4.7	56.7	13.7	0.6	1.5	0.1	0.3
July	87.1	30.6	54.2	12.4	70.6	21.5	1.83	4.6	0.0	0.0	77.6	25.3	46.8	8.2	62.2	16.8	2.0	5.0	0.0	0.0
August	83.9	28.9	53.1	11.7	68.5	20.3	2.19	5.6	0.0	0.0	74.5	23.6	45.8	7.7	60.2	15.7	2.6	6.6	0.0	0.0
September	78.0	25.5	46.7	8.2	62.4	16.9	1.45	3.7	0.0	0.0	68.8	20.4	39.7	4.3	54.3	12.4	1.7	4.3	0.1	0.3
October	66.2	19.0	36.1	2.3	51.1	10.6	1.22	3.1	1.1	2.9	58.3	14.6	31.3	-0.4	44.8	7.1	1.6	4.1	4.3	10.9
November	53.3	11.9	26.6	-3.0	40.0	4.4	1.05	2.7	4.9	12.5	46.3	7.9	24.3	-4.3	35.4	1.9	1.6	4.1	12.7	32.3
December	45.1	7.3	20.0	-6.7	32.6	0.3	1.45	3.7	10.7	27.1	40.0	4.4	18.4	-7.6	29.2	-1.6	2.5	6.2	18.9	48.0
Annual	64.5	18.1	35.0	1.7	49.8	9.9	15.70	39.9	57.4	145.9	56.4	13.6	30.5	-0.8	43.4	6.3	25.3	64.3	137.3	348.7
Winter	45.1	7.3	20.1	-6.6	32.6	0.3	4.44	11.3	35.7	90.8	39.4	4.1	17.9	-7.8	28.7	-1.8	9.5	24.0	78.6	199.6
Spring	62.4	16.9	31.9	0.0	47.2	8.4	3.09	7.9	15.6	39.6	53.2	11.8	27.9	-2.3	40.6	4.8	5.8	14.7	41.5	105.4
Summer	84.8	29.3	51.3	10.7	68.0	20.0	4.45	11.3	0.0	0.0	75.1	23.9	44.4	6.9	59.7	15.4	5.2	13.1	0.1	0.3
Fall	65.8	18.8	36.5	2.5	51.2	10.6	3.73	9.5	6.1	15.5	57.8	14.3	31.8	-0.1	44.8	7.1	4.9	12.5	17.2	43.7

Appendix C GRCA Climate Data, continued

South Rim
(Grand Canyon Village)
1903 to 2007

North Rim
(Bright Angel Ranger Station)
1948 to 2007

Extremes

Extremes

	Hottest	Coldest	Wettest	Driest	Snowiest	Hottest	Coldest	Wettest	Driest	Snowiest
January	71 1/18/2003	-20 1/1/1919	5.4 1993	0 1972	60.0 1949	64 1/18/2003	-18 1/30/1979	12.5 1993	0.09 1976	88.5 1993
February	69 2/18/1996	-20 2/1/1985	4.4 1927	0 1967	36.0 1913	64 2/14/1957	-23 2/1/1985	10.0 1980	0.04 1977	67 1998
March	77 3/17/2007	-7 3/25/1913	5.4 1970	0 1914	43.5 1952	66 3/21/2004	-4 3/28/1975	9.6 1991	0 1997	77 1954
April	82 4/13/1913	8 4/2/1975	4.0 1926	0 1904	46.0 1965	74 4/30/1981	3 4/2/1975	5.4 1995	0 1966	52 1995
May	92 5/26/1974	10 5/3/1915	3.0 1965	0 1904	19.0 1957	85 5/30/2002	12 5/6/1978	4.7 1957	0 1963	12 1977
June	105 6/26/1974	25 6/11/1976	3.1 1927	0 1904	0.0 1904	89 6/22/1968	22 6/2/1999	3.2 1955	0 1951	5 1999
July	101 7/11/2003	31 7/2/1971	6.0 1904	0 1993	0.0 1904	92 7/29/2000	27 7/11/1971	4.9 2006	0 1993	0 1948
August	96 8/1/1938	30 8/14/1968	7.1 1904	0 1912	0.0 1904	90 8/9/1956	24 8/24/1968	8.3 1951	0.06 1974	0 1948
September	93 9/5/1924	24 9/19/1978	8.6 1939	0 1912	1.0 1905	88 9/4/1950	21 9/18/2006	9.6 1997	0 1953	8 1965
October	83 10/1/1973	3 10/30/1971	8.5 1907	0 1904	13.5 2004	82 10/16/1973	6 10/21/1949	5.7 1960	0 1950	32 1960
November	78 11/1/1906	-6 11/19/1985	7.0 1905	0 1903	37.0 1905	66 11/4/1949	-2 11/28/1976	6.8 1985	0 1956	48.8 1985
December	70 12/9/1903	-20 12/23/1990	7.5 1906	0 1903	39.8 1924	68 12/7/1981	-22 12/8/1978	8.8 1951	0.02 2005	56 1978
Annual	105 6/26/1974	-20 1/1/1919	36.7 1907	7.6 1956	148.0 1965	92 7/29/2000	-23 2/1/1985	45.0 1978	14.2 1989	272.8 1978
Winter	71 1/18/2003	-20 1/1/1919	12.8 1907	0.5 2006	102.0 1949	68 12/7/1981	-23 2/1/1985	24.0 1993	1.6 2006	184.6 1979
Spring	92 5/26/1974	-7 3/25/1913	8.1 1965	0.3 1972	78.0 1965	85 5/30/2002	-4 3/28/1975	14.5 1995	0.6 1955	88.4 1975
Summer	105 6/26/1974	25 6/11/1976	13.1 1904	0.6 1920	0.0 1904	92 7/29/2000	22 6/2/1999	9.9 2006	1.0 1978	5 1999
Fall	93 9/5/1924	-6 11/19/1985	14.8 1907	0.2 1904	38.5 1905	88 9/4/1950	-2 11/28/1976	12.4 1997	0.8 1989	49.6 1985

GRCA Climate Data, continued										
Inner Canyon (Phantom Ranch) 1948 to 2007										Notes about the data
Average High		Average Low		Average		Average Precip		Average Snow		
°F	°C	°F	°C	°F	°C	in	cm	in	cm	
56.3	13.5	36.6	2.6	46.5	8.1	0.9	2.3	0.2	0.4	<i>Data are prepared from National Weather Service reports by the Western Regional Climate Center (http://www.wrcc.dri.edu) of the University of Nevada's Desert Research Institute.</i> <i>For monthly and annual means, thresholds, and sums: Months with five or more missing days are not considered Years with one or more missing months are not considered</i> <i>Seasons are climatological, not calendar:</i> <i>Winter December, January, February</i> <i>Spring March, April, May</i> <i>Summer June, July, August</i> <i>Fall September, October, November</i> <i>Three Grand Canyon Village and two Phantom Ranch station Western Regional Climate Center data sets were combined for South Rim and Inner Canyon sections, respectively.</i> Compiled January, 2008 by Carl Bowman Grand Canyon National Park Air Quality Specialist
63.4	17.4	41.2	5.1	52.3	11.3	0.8	2.1	0	0	
72.2	22.4	46.9	8.3	59.6	15.4	0.9	2.2	0	0	
82.2	27.9	54.5	12.5	68.4	20.2	0.5	1.3	0	0	
91.9	33.3	63.0	17.2	77.4	25.2	0.3	0.9	0	0	
102.3	39.1	71.5	21.9	87.0	30.5	0.3	0.7	0	0	
106.0	41.1	76.7	24.8	91.4	33.0	0.9	2.4	0	0	
102.5	39.2	74.0	23.4	88.2	31.2	1.4	3.7	0	0	
96.0	35.6	68.1	20.1	82.0	27.8	0.9	2.3	0	0	
83.7	28.7	57.8	14.3	70.7	21.5	0.9	2.2	0	0	
67.8	19.9	45.4	7.4	56.5	13.6	0.7	1.7	0	0	
56.8	13.8	37.2	2.9	47.0	8.3	0.7	1.9	0.1	0.3	
81.8	27.7	56.1	13.4	68.9	20.5	9.3	23.5	0.3	0.7	
58.9	14.9	38.4	3.5	48.6	9.2	2.5	6.2	0.3	0.7	
82.1	27.8	54.9	12.7	68.5	20.3	1.7	4.4	0	0	
103.6	39.8	74.1	23.4	88.9	31.6	2.6	6.7	0	0	
82.5	28.1	57.1	13.9	69.8	21.0	2.4	6.2	0	0	

GRCA Climate Data, continued

Inner Canyon
(Phantom Ranch)
1948 to 2007

Extremes

Hottest		Coldest		Wettest		Driest		Snowiest	
81	1/18/2003	-9	1/5/1971	4.4	1980	0.01	2002	4.0	1971
91	2/8/1963	21	2/6/1989	2.7	1980	0.00	1953	0	1949
93	3/31/1966	25	3/13/2006	2.9	1991	0.00	1955	0	1949
106	4/30/1981	28	4/5/1983	2.1	1988	0.00	1950	0	1949
111	5/28/2000	32	5/9/1977	2.0	1965	0.00	1952	0	1949
119	6/22/1954	50	6/14/1955	2.1	1955	0.00	1951	0	1949
120	7/11/1958	60	7/23/1968	3.5	1999	0.00	1958	0	1948
120	8/7/1981	58	8/31/1957	4.2	1963	0.15	1977	0	1948
114	12/1/1950	48	9/24/1973	2.9	2004	0.00	1953	0	1948
103	10/2/1963	39	10/19/1949	3.6	1972	0.00	1952	0	1948
87	11/6/1988	19	11/30/2004	4.7	1978	0.00	1948	0	1948
77	12/1/1980	12	12/13/1967	2.4	1978	0.00	1950	3.0	1967
120	7/11/1958	-9	1/5/1971	16.4	1978	4.7	1989	3.0	1967
91	2/8/1963	-9	1/5/1971	8.1	1993	0.2	1964	2.0	1961
111	5/28/2000	25	3/13/2006	4.8	1965	0.00	1955	0	1949
120	7/11/1958	50	6/14/1955	7.3	1999	0.5	1991	0	1949
114	9/1/1950	19	11/30/2004	9.0	2004	0.3	1950	0	1948



Grand Canyon firefighters at work on a fire-use fire.