COLORADO RIVER MAIN STEM

09380000 COLORADO RIVER AT LEES FERRY, AZ
(NATIONAL STREAM-QUALITY ACCOUNTING NETWORK)

LOCATION.--Lat 36°51'53", long 111°35'15", in NE1/4SE1/4 sec. 13, T.40 N., R.7 E., Coconino County, Hydrologic Unit 14070006, in Navajo Indian Reservation, on left bank at head of Marble Gorge at Lees Ferry, just upstream from Paria River, 16 mi downstream from Glen Canyon Dam, 28 mi downstream from Utah-Arizona State line, and 61.5 mi upstream from Little Colorado River.

DRAINAGE AREA.--111,800 mi^2, approximately, including 3,959 mi^2 in Great Divide Basin in southern Wyoming, which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Jan. 1895 to current year. Estimates of monthly and annual discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 859: 1921–23. WSP 1313: 1914–21.

GAGE.--Water-stage recorder. Datum of gage is 3,106.16 ft above sea level. Prior to Jan. 19, 1923, nonrecording gages or reference points within 400 ft of present gage, at different datums.

REMARKS.--No estimated daily discharge. Records good. Flow regulated since Mar. 13, 1963, by Lake Powell, 16 mi upstream. Many diversions above Lake Powell for irrigation, municipal, and industrial use. No diversions or inflow between Lake Powell and the gage.

AVERAGE DISCHARGE.--51 years (water years 1912–62), 17,850 ft^3/s, 12,930,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--1895–1962: Maximum discharge, 220,000 ft^3/s June 18, 1921, gage height, 26.5 ft, from floodmarks, from rating curve extended above 120,000 ft^3/s on basis of discharge computed for station near Grand Canyon; minimum, 750 ft^3/s Dec. 27, 1924.
1963–2000: Maximum discharge, 97,300 ft^3/s June 29, 1983, gage height, 18.14 ft; minimum daily, 700 ft^3/s Jan. 23, 24, 1963, result of closing coffer dam at Glen Canyon Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1868, about 300,000 ft^3/s July 7, 1884, gage height, 31.5 ft, present site and datum, from floodmark at mouth of Paria River, from rating curve extended above 120,000 ft^3/s on basis of discharge computed for flood of June 18, 1921, for station near Grand Canyon.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,900 ft^3/s, Jan. 5 at 2045, gage height, 10.71 ft. Minimum daily discharge, 7,140 ft^3/s, Oct. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8430	8150	10100	12400	13100	12800	11800	9690	11100	14900	14000	9630
2	8330	7620	10300	13100	13100	14500	11200	9200	14000	13900	14600	8130
3	8380	8370	10300	13200	13000	14300	10200	9990	14000	14100	15100	8090
4	8140	8280	10300	13100	14300	14300	9800	10100	14200	12600	15100	7810
5	7210	8240	10300	13200	14300	14300	11200	10300	13200	13700	15100	7920
6	8340	8240	9580	13100	14300	14300	11400	10100	12500	14100	15100	7910
7	8330	8240	8450	13100	14300	8230	11300	10200	14200	14000	14000	8110
8	8290	8040	10200	13100	8300	12900	11300	9110	14200	14000	14200	8120
9	8280	7600	10200	13100	12900	14300	11300	9120	14200	14300	14900	8300
10	8320	8360	10200	13100	14300	14400	10200	10100	14200	14800	15200	8240
11	8130	8270	10200	13000	14300	14200	9930	10200	14000	13900	15200	8020
12	7220	8250	10200	13100	14400	14200	11200	10300	13100	15100	15100	8080
13	8340	8220	9550	13100	14400	14300	11300	10200	12500	15300	15100	8230
14	8300	8190	8420	13100	14300	8220	11300	10200	13900	15600	13900	8260
15	8300	7950	10300	13100	8270	12800	11300	9190	14000	15600	14200	8210
16	8260	7710	10200	13100	12900	14200	11300	9220	14000	15600	14900	8220
17	8270	8330	10100	13100	14300	14200	10200	10200	14000	15100	15100	8220
18	8070	8240	10300	13100	14300	13900	9820	10300	14000	14500	15100	7910
19	7140	8220	10200	13100	14300	14300	11200	10300	13000	15400	15000	8080
20	8260	8280	9700	13100	14200	14300	11300	10400	12400	15500	15100	8200
21	8200	8190	8640	13100	14200	8220	11400	10300	13900	15500	13900	8240
22	8250	8050	10600	13000	8260	12900	11400	9260	14000	15600	14000	8210
23	8280	7620	10300	13000	12800	14300	11300	9160	14000	15600	14900	8220
24	8280	8310	10400	13000	14300	14300	10200	10200	14000	15100	15000	8220
25	8130	8200	9170	13000	14200	14200	9820	10300	13900	14100	14900	7920
26	7150	8200	10600	13000	14200	14200	11200	10300	13100	15400	15000	8060
27	8270	7440	9770	13000	14300	14300	11400	10400	12500	15300	15000	8250
28	8260	8360	9130	13000	14300	8140	11300	9730	13900	15100	13900	8230
29	8280	8020	10600	13100	8310	12900	11300	8140	14000	15000	14100	8290
30	8300	8060	10500	13100	---	14300	11300	8040	14000	14700	14800	8290
31	8290	---	10500	13100	---	14200	---	8720	---	14600	14400	---
TOTAL	252030	243250	309310	404800	382440	410910	329170	302970	408000	458000	455900	245620
MEAN	8130	8108	9978	13060	13190	13260	10970	9773	13600	14770	14710	8187
MAX	8430	8370	10600	13200	14400	14500	11800	10400	14200	15600	15200	9630
MIN	7140	7440	8420	12400	8260	8140	9800	8040	11100	12600	13900	7810
MED	8280	8210	10200	13100	14300	14200	11300	10100	14000	15000	14900	8210
AC-FT	499900	482500	613500	802900	758600	815000	652900	600900	809300	908400	904300	487200
CFSM	0.07	0.07	0.09	0.12	0.12	0.12	0.10	0.09	0.12	0.13	0.13	0.07

CAL YR 2003 TOTAL 4217490 MEAN 11550 MAX 16300 MIN 7140 MED 11500 AC-FT 8365000 CFSM 0.10
WTR YR 2004 TOTAL 4202400 MEAN 11480 MAX 15600 MIN 7140 MED 11300 AC-FT 8335000 CFSM 0.10

09380000 COLORADO RIVER AT LEES FERRY, AZ—CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Jan. to July 1926, Oct. 1926 to June 1927, Aug. 1928 to Dec. 1933, Nov. 1942 to Oct. 1945, Oct. 1947 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Oct. 1964 to Sept. 1981, Feb. 1982 to Dec. 1987, Oct. 1989 to Mar. 2003., Feb. 2004 to current year.
pH: Aug. 1990 to Apr. 1993.
WATER TEMPERATURE: July 1949 to Sept. 1981, Feb. 1982 to Dec. 1987, Oct. 1989 to Mar. 2003, Feb. 2004 to current year.
DISSOLVED OXYGEN: Aug. 1990 to Apr. 1993.
SUSPENDED-SEDIMENT DISCHARGE: Oct. 1928 to Dec. 1933, Nov. 1942 to Sept. 1944, Oct. 1947 to Sept. 1965.
TURBIDITY: Oct. 1998 to Sept. 2000, minimum daily values.

INSTRUMENTATION.--Specific conductance and water temperature recorder Mar. 1977 to Sept. 1981, Feb. 1982 to Dec. 1987, and Oct. 1990 to current year; pH, Aug. 1990 to Apr. 1993; dissolved-oxygen recorder Aug. 1990 to Apr. 1993.

REMARKS.--Daily water temperature and specific conductance records good. Unpublished daily specific conductance measurements for period Nov. 1942 to Oct. 1945, Oct. 1947 to Sept. 1964 available from District Office in Tucson, AZ. Extreme value for the period of record include only those obtained after a normal flow release pattern from Glen Canyon Dam was started after July 31, 1965.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE (Aug. 1965 to Sept. 1981, Feb. 1982 to Dec. 1987, Oct. 1990 to current year): Maximum, 1,260 microsiemens, Apr. 20, 21, 1967; minimum, 460 microsiemens, Aug. 10, 1965.
pH: Maximum, 8.3, on many days in Jan. to Apr. and June 1991; minimum, 7.6, on several days in Nov. and Dec. 1990, and Mar. 1991.
WATER TEMPERATURE (Aug. 1965 to Sept. 1981, Feb. 1982 to Dec. 1987, Oct. 1990 to current year): Maximum, 21.0°C on several days during Aug., Sept., and Oct. 1965, 1967, 1968; minimum, 2.0°C on Jan. 29, 30, 1970.
DISSOLVED OXYGEN: Maximum recorded, 11.2 mg/L, Apr. 29, 1991; minimum recorded, 6.4 mg/L, Sept. 18, 1991.
TURBIDITY: Minimum daily, less than 1.0 NTU on most days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Hardness, water, mg/L as CaCO3 (00900)
OCT													
27...	1250	9400	--	.48	683	7.4	76	8.2	827	23.5	11.7	130	260
28...	0820	6070	--	--	--	--	--	8.1	824	12.5	11.5	--	--
FEB													
24...	0935	5820	--	.58	680	8.4	80	8.1	852	8.4	8.0	140	270
APR													
27...	0940	9620	--	1.3	686	7.4	71	7.8	935	19.5	8.9	150	290
JUN													
22...	0750	9560	--	.49	683	7.4	72	7.8	901	21.5	9.4	160	280
SEP													
07...	1420	9550	<2.0	--	680	7.2	78	7.7	865	30.7	13.2	150	290

Date	Calcium water, fltrd, mg/L (00915)	Calcium water unfltrd recoverable, mg/L (00916)	Magnesium, water, fltrd, mg/L (00925)	Magnesium, water, unfltrd recoverable, mg/L (00927)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)
OCT													
27...	67.0	70.0	23.0	24.0	3.60	2	68.0	136	166	.0	48.0	.3	210
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
24...	70.0	68.0	24.0	24.0	4.00	2	74.0	129	156	.0	51.0	.3	210
APR													
27...	75.0	78.0	25.0	24.0	3.80	2	78.0	138	166	.0	59.0	.3	230
JUN													
22...	71.0	68.0	24.0	23.0	3.80	2	76.0	121	146	.0	57.0	.3	220
SEP													
07...	73.3	71.9	24.9	23.6	3.79	2	69.9	134	163	.0	54.2	.3	220

Date	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water unfltrd mg/L (71845)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Organic nitrogen, water, unfltrd mg/L (00605)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)
OCT													
27...	501	.76	560	<1	.30	--	--	<.01	--	.300	--	<.02	.60
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
24...	511	.73	537	1	.20	--	.01	.01	--	.340	.19	<.02	.54
APR													
27...	554	.81	593	1	<.20	--	.03	.02	--	.440	--	<.02	--
JUN													
22...	525	.78	577	<1	<.20	--	--	<.01	--	.420	--	<.02	--
SEP													
07...	528	.77	563	<10	.23	<.04	--	--	.43	--	--	<.01	.65

09380000 COLORADO RIVER AT LEES FERRY, AZ—CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Total nitrogen, water, unfltrd mg/L as NO3 (71887)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Antimony, water, fltrd, ug/L (01095)	Antimony, water, unfltrd ug/L (01097)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Barium, water, fltrd, ug/L (01005)	Barium, water, unfltrd recoverable, ug/L (01007)	Beryllium, water, fltrd, ug/L (01010)	Beryllium, water, unfltrd recoverable, ug/L (01012)	Boron, water, fltrd, ug/L (01020)	Boron, water, unfltrd recoverable, ug/L (01022)
OCT													
27...	2.7	7	--	<1	<1	<1	2	110	110	<1	<1	84	86
28...	--	--	E2k	--	--	--	--	--	--	--	--	--	--
FEB													
24...	2.4	14	E2k	<1	<1	2	1	110	110	<1	<1	83	83
APR													
27...	--	--	E1k	<1	<1	1	1	120	120	<1	<1	90	87
JUN													
22...	--	<5	E2k	<1	<1	1	1	120	120	<1	<1	84	81
SEP													
07...	--	--	E1k	.32	.4	1.5	2	--	111	<.06	<.06	--	87

Date	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, fltrd, ug/L (01030)	Chromium, water, unfltrd recoverable, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury water, fltrd, ug/L (71890)
OCT													
27...	<.5	<.5	<1	<1	<2	<2	<2	7	<2	<2	1	1	<.1
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
24...	<.5	<.5	<1	<1	<2	<2	<2	14	<2	<2	<1	2	<.1
APR													
27...	<.5	<.5	<1	<1	<2	<2	<2	3	<2	<2	<1	<1	<.1
JUN													
22...	<.5	<.5	<1	<1	<2	<2	<2	18	<2	<2	<1	2	<.1
SEP													
07...	<.04	E.03n	--	<.8	1.4	3.0	--	--	<.08	<.06	--	2	<.02

Date	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recoverable, ug/L (01067)	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recoverable, ug/L (01077)	Strontium, water, unfltrd recoverable, ug/L (01082)	Thallium, water, fltrd, ug/L (01057)	Thallium, water, unfltrd ug/L (01059)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspended sediment concentration mg/L (80154)
OCT													
27...	<.1	<1	1	2	2	<1	<1	830	<2	<2	10	10	1
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
24...	<.1	1	1	3	<1	<1	<1	840	<2	<2	3	3	3
APR													
27...	<.1	8	2	2	2	<1	<1	870	<2	<2	2	<2	4
JUN													
22...	<.1	<1	1	1	2	<1	<1	840	<2	<2	<2	<2	2
SEP													
07...	<.02	--	--	--	2.4	--	--	--	--	--	.8	<2	1

Date	Suspended sediment discharge, tons/d (80155)
OCT	
27...	25
28...	--
FEB	
24...	47
APR	
27...	104
JUN	
22...	52
SEP	
07...	26

Remark codes used in this table:
< -- Less than
E -- Estimated value
Value qualifier codes used in this table:
k -- Counts outside acceptable range
n -- Below the LRL and above the LT-MDL

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM 25 DEG. C),WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	927	909	917	922	902	913
2	---	---	---	---	---	---	923	902	913	916	903	910
3	---	---	---	881	855	873	910	887	896	908	896	903
4	---	---	---	880	854	870	898	887	893	896	888	895
5	---	---	---	895	868	883	911	896	905	907	888	897
6	---	---	---	901	876	890	919	901	910	911	902	908
7	---	---	---	900	875	892	910	894	901	907	894	902
8	---	---	---	894	875	886	910	893	904	904	890	900
9	---	---	---	896	883	890	918	906	912	905	896	901
10	---	---	---	891	873	884	917	886	903	903	894	898
11	---	---	---	891	872	884	917	897	902	914	903	907
12	---	---	---	885	871	880	916	901	908	915	887	905
13	---	---	---	889	881	886	913	896	906	917	896	907
14	---	---	---	891	872	882	926	903	911	916	897	906
15	---	---	---	886	874	879	929	902	914	909	879	894
16	---	---	---	902	878	886	929	903	912	904	893	896
17	---	---	---	915	885	897	930	907	919	906	892	901
18	---	---	---	910	888	902	931	916	923	897	885	893
19	---	---	---	904	875	892	952	916	936	916	894	899
20	---	---	---	908	892	902	935	896	916	916	894	905
21	---	---	---	906	886	894	936	905	922	904	885	895
22	---	---	---	902	883	891	947	922	935	897	881	887
23	---	---	---	906	896	903	939	919	931	898	886	894
24	---	---	---	912	902	907	931	911	924	906	893	899
25	---	---	---	912	896	906	931	914	927	897	880	888
26	---	---	---	921	896	909	914	892	906	897	890	893
27	---	---	---	921	908	917	913	907	910	901	890	895
28	---	---	---	921	905	914	916	909	913	897	872	887
29	---	---	---	930	879	903	920	906	913	892	882	885
30	---	---	---	932	917	926	922	902	913	892	875	881
31	---	---	---	917	898	911	---	---	---	883	875	880
MONTH	---	---	---	932	854	894	952	886	913	922	872	898

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM 25 DEG. C),WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	883	874	879	878	862	868	871	858	865	860	854	856
2	879	872	876	876	857	866	872	859	867	860	849	853
3	882	871	877	878	868	872	867	858	863	856	849	851
4	878	865	871	877	867	871	862	858	861	853	849	851
5	884	873	878	878	866	871	868	856	862	856	848	851
6	888	876	882	878	861	870	869	857	863	860	851	855
7	881	871	877	874	855	867	872	860	864	854	849	852
8	881	870	876	874	863	869	872	855	863	853	850	851
9	890	870	881	879	866	870	869	860	866	854	850	853
10	902	878	890	880	861	870	868	861	865	854	849	852
11	895	876	882	874	861	867	869	855	862	852	847	850
12	896	879	888	877	860	869	867	856	861	850	845	848
13	896	875	885	875	860	869	864	856	861	851	847	849
14	883	875	879	879	861	870	866	856	862	852	849	851
15	887	868	879	879	860	870	866	854	861	854	849	852
16	884	870	875	884	855	868	868	854	860	855	847	852
17	892	866	880	884	860	871	866	854	862	852	847	849
18	883	862	877	874	857	866	869	857	864	853	849	850
19	874	859	865	872	864	868	867	856	863	853	837	844
20	876	857	866	879	861	866	862	854	859	854	848	852
21	878	860	867	879	862	870	865	854	859	855	848	852
22	880	861	873	877	861	868	865	855	859	854	849	851
23	874	857	869	873	859	866	864	856	861	853	848	851
24	875	860	867	868	853	863	863	857	860	854	850	852
25	883	858	871	863	855	858	865	854	858	857	853	855
26	882	852	868	874	857	863	868	854	860	855	852	854
27	880	856	867	875	855	867	870	854	861	855	852	854
28	878	860	870	874	859	866	870	856	861	854	851	853
29	874	854	863	872	857	865	864	852	857	854	849	853
30	872	856	865	870	859	864	858	853	855	854	850	853
31	---	---	---	872	859	865	860	853	856	---	---	---
MONTH	902	852	875	884	853	868	872	852	861	860	837	852

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	9.8	8.8	9.3	10.2	8.9	9.6
2	---	---	---	---	---	---	9.5	9.0	9.1	10.3	9.0	9.7
3	---	---	---	8.9	8.2	8.6	9.4	8.9	9.2	10.4	9.0	9.8
4	---	---	---	8.8	8.3	8.5	9.6	8.9	9.3	10.4	9.2	9.8
5	---	---	---	8.9	8.3	8.6	9.6	9.0	9.3	10.4	9.1	9.7
6	---	---	---	9.0	8.3	8.6	9.7	8.9	9.3	10.4	9.1	9.7
7	---	---	---	9.2	8.4	8.8	9.7	9.0	9.3	10.4	9.1	9.7
8	---	---	---	9.2	8.6	8.9	9.8	8.8	9.3	10.4	9.1	9.8
9	---	---	---	9.2	8.4	8.8	9.9	8.9	9.4	10.4	9.2	9.8
10	---	---	---	9.2	8.4	8.8	9.6	8.8	9.2	10.4	9.2	9.8
11	---	---	---	9.2	8.5	8.8	9.9	8.7	9.3	10.3	9.3	9.7
12	---	---	---	9.2	8.5	8.8	10.0	8.8	9.4	10.3	8.8	9.5
13	---	---	---	9.4	8.6	9.0	10.0	8.7	9.3	10.3	8.8	9.5
14	---	---	---	9.4	8.5	9.0	9.9	8.8	9.4	10.3	8.9	9.6
15	---	---	---	9.4	8.8	9.2	10.1	8.8	9.4	10.4	9.0	9.7
16	---	---	---	9.4	8.6	9.0	10.1	8.9	9.4	10.4	9.1	9.8
17	---	---	---	9.5	8.6	9.0	10.1	8.9	9.5	10.1	9.3	9.7
18	---	---	---	9.5	8.6	9.0	9.9	8.8	9.4	10.6	9.2	9.8
19	---	---	---	9.5	8.6	9.0	9.7	8.7	9.2	10.3	9.2	9.8
20	---	---	---	9.6	8.7	9.1	10.0	8.8	9.3	10.3	9.2	9.7
21	---	---	---	9.7	8.7	9.2	10.0	8.8	9.3	10.2	9.1	9.7
22	---	---	---	9.7	9.0	9.4	9.4	8.8	9.2	10.1	9.0	9.6
23	---	---	---	9.6	8.9	9.2	9.8	8.8	9.3	10.3	9.1	9.7
24	---	---	---	9.7	8.8	9.2	10.1	8.8	9.5	10.2	9.1	9.7
25	---	---	---	9.7	8.8	9.2	10.1	8.9	9.5	10.5	9.0	9.7
26	---	---	---	9.5	8.8	9.1	10.1	8.9	9.5	10.4	9.0	9.7
27	---	---	---	9.6	8.7	9.1	10.1	8.9	9.5	10.5	9.0	9.7
28	---	---	---	9.7	8.6	9.1	10.3	8.9	9.6	10.7	9.1	9.9
29	---	---	---	9.7	9.0	9.3	9.7	8.8	9.1	10.3	9.4	9.9
30	---	---	---	9.7	8.6	9.1	9.8	8.7	9.2	10.6	9.3	10.0
31	---	---	---	9.6	8.6	9.1	---	---	---	10.6	9.4	10.1
MONTH	---	---	---	9.7	8.2	9.0	10.3	8.7	9.3	10.7	8.8	9.7

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.4	9.3	9.9	11.6	10.3	10.8	12.0	11.2	11.6	14.3	12.9	13.5
2	10.5	9.4	9.9	11.6	10.1	10.8	11.8	11.0	11.4	14.5	13.6	14.0
3	10.8	9.3	9.9	11.6	10.2	10.8	12.4	11.3	11.8	14.3	13.6	13.9
4	10.7	9.4	10.0	11.6	10.1	10.8	12.6	11.7	12.1	13.8	12.7	13.2
5	10.7	9.3	9.9	11.4	10.1	10.7	12.9	11.3	12.1	14.0	13.3	13.7
6	10.9	9.3	10.0	11.5	10.1	10.8	12.6	11.5	12.1	14.0	13.0	13.4
7	10.8	9.4	10.0	11.5	10.2	10.8	12.4	10.9	11.7	14.0	13.2	13.6
8	10.8	9.4	10.0	11.6	10.3	10.9	12.5	11.4	11.9	14.1	12.7	13.4
9	10.7	9.5	10.1	11.6	10.4	10.9	12.6	11.4	11.9	14.1	13.4	13.8
10	10.4	9.1	9.7	11.5	10.3	10.8	12.7	11.4	12.0	14.2	13.5	13.8
11	10.4	9.4	10.0	11.7	10.6	11.0	12.8	11.7	12.2	14.0	13.3	13.7
12	10.6	9.2	9.8	11.6	10.4	10.9	12.9	11.8	12.3	14.4	13.4	13.9
13	10.9	9.3	10.0	11.6	10.7	11.1	12.7	11.9	12.3	14.1	13.1	13.6
14	10.8	9.3	10.0	11.4	10.8	11.1	12.8	11.7	12.2	14.0	13.2	13.6
15	10.7	9.5	10.0	11.6	10.7	11.1	12.6	11.9	12.2	13.7	12.6	13.2
16	10.6	9.4	9.9	11.7	10.6	11.2	12.7	12.2	12.5	14.1	12.6	13.3
17	10.8	9.3	10.0	11.9	10.4	11.1	12.7	12.0	12.3	14.9	13.3	14.0
18	11.0	9.6	10.2	11.7	10.8	11.2	12.6	11.6	12.1	14.5	13.5	13.8
19	11.5	9.6	10.4	11.8	10.6	11.2	12.7	11.7	12.2	14.0	13.1	13.4
20	11.3	9.8	10.5	11.9	10.7	11.2	12.9	12.2	12.5	14.0	13.0	13.4
21	10.8	9.9	10.4	12.2	10.7	11.3	13.1	12.2	12.6	13.9	13.0	13.4
22	11.3	9.7	10.4	11.9	10.8	11.3	13.0	12.2	12.6	13.7	12.5	13.2
23	11.3	9.7	10.4	12.1	10.9	11.4	13.1	12.0	12.5	14.0	12.7	13.4
24	11.4	9.9	10.6	12.2	11.3	11.7	13.0	12.1	12.5	14.3	13.2	13.8
25	11.2	10.0	10.5	12.3	11.4	11.8	13.2	12.0	12.5	14.7	13.3	14.0
26	11.2	9.8	10.4	12.2	11.5	11.8	13.3	12.0	12.7	14.7	13.8	14.3
27	11.3	9.6	10.4	12.0	10.9	11.4	13.0	11.6	12.4	14.6	13.7	14.2
28	11.2	10.1	10.6	12.1	10.9	11.5	13.3	11.5	12.4	14.6	13.7	14.2
29	11.5	10.2	10.8	12.1	11.2	11.6	14.2	12.6	13.3	14.4	13.6	14.0
30	11.3	10.5	10.9	12.2	10.9	11.5	14.1	12.8	13.4	14.3	13.7	14.0
31	---	---	---	12.3	11.0	11.6	13.9	12.7	13.2	---	---	---
MONTH	11.5	9.1	10.2	12.3	10.1	11.2	14.2	10.9	12.3	14.9	12.5	13.7