

10170500 SURPLUS CANAL AT SALT LAKE CITY, UT

LOCATION.--Lat 40°43'37", long 111°55'33", in SE¹/₄SW¹/₄SW¹/₄ sec. 14, T. 1 S., R. 1 W., Salt Lake County, Hydrologic Unit 16020204, near right bank on upstream side of diversion dam at head of canal, and 250 ft downstream from highway bridge over Jordan River on 2100 South Street.

PERIOD OF RECORD.--December 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,223.93 ft above NGVD of 1929. Prior to October 22, 1952, at site 350 ft downstream; October 22, 1952 to September 30, 1966, at site 400 ft downstream at different datum; September 30, 1966 to October 1, 1989 at datum 10.0 ft lower.

REMARKS.--Records fair. Flow regulated by diversion structure at station. Canal was built to bypass floodwater of Jordan River around Salt Lake City residential and industrial area (see station 10170490 for records of combined flow of Jordan River and Surplus Canal). Several diversions for irrigation and waterfowl ponds below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,410 ft³/s, Jun 1, 1984, gage height, 8.91 ft, datum then in use. No flow Jan 21 to Feb 28, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,840 ft³/s, May 7, gage height, 13.89 ft; minimum daily discharge, 3.0 ft³/s, Jan 19, Feb 1, 9.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	527	106	90	127	e3.0	218	149	254	917	97	140	210
2	426	102	110	116	78	208	139	164	820	81	139	232
3	241	99	103	114	39	199	228	169	721	87	166	212
4	225	99	99	113	38	228	182	386	627	92	178	216
5	216	97	95	116	20	214	221	387	602	100	180	203
6	205	97	97	128	e6.5	199	250	207	544	118	170	207
7	195	95	102	135	e3.9	147	284	443	493	119	172	219
8	186	100	102	137	e3.4	62	189	769	490	110	172	218
9	179	130	103	130	e3.0	53	156	423	422	172	169	219
10	169	134	101	136	e3.9	51	154	774	312	128	155	591
11	160	157	100	132	e6.5	49	154	378	257	129	164	271
12	165	123	100	130	e44	49	158	338	271	145	137	262
13	153	114	100	128	137	52	168	297	238	163	114	182
14	157	105	100	119	167	53	174	354	238	172	115	152
15	149	103	97	118	155	56	286	410	217	143	125	180
16	139	103	108	116	147	244	202	446	207	134	120	200
17	133	102	159	116	174	126	174	424	214	140	126	244
18	261	101	120	63	187	146	322	413	214	141	138	144
19	191	94	110	e3.0	184	124	204	428	e225	143	156	121
20	149	82	105	e5.8	182	112	165	375	e240	159	164	150
21	124	92	107	e6.5	176	109	156	358	e280	171	171	152
22	125	87	108	e7.3	177	105	161	383	e270	148	338	131
23	200	89	107	e10	184	101	163	473	e1,000	148	304	147
24	168	102	108	e13	186	103	148	505	725	177	239	145
25	129	122	92	e18	208	115	138	441	455	175	236	148
26	122	107	97	e21	205	213	155	491	341	231	215	153
27	121	102	102	e25	206	202	144	559	225	187	223	148
28	119	97	104	325	198	151	147	592	165	189	193	145
29	118	86	101	96	---	134	151	756	140	177	189	142
30	119	90	105	52	---	132	162	890	135	156	180	144
31	112	---	128	17	---	135	---	1,000	---	156	148	---
TOTAL	5,683	3,117	3,260	2,773.6	3,122.2	4,090	5,484	14,287	12,005	4,488	5,436	5,888
MEAN	183	104	105	89.5	112	132	183	461	400	145	175	196
MAX	527	157	159	325	208	244	322	1,000	1,000	231	338	591
MIN	112	82	90	3.0	3.0	49	138	164	135	81	114	121
AC-FT	11,270	6,180	6,470	5,500	6,190	8,110	10,880	28,340	23,810	8,900	10,780	11,680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2003, BY WATER YEAR (WY)

MEAN	275	284	300	327	405	442	503	621	674	366	273	279
MAX	1,473	1,616	1,740	1,806	1,804	1,882	2,749	3,042	3,299	2,158	1,651	1,364
(WY)	(1984)	(1984)	(1984)	(1984)	(1984)	(1984)	(1986)	(1986)	(1984)	(1983)	(1983)	(1986)
MIN	66.1	68.8	49.7	30.8	0.000	55.9	44.8	74.7	44.4	69.6	50.6	77.7
(WY)	(1962)	(1944)	(1944)	(1956)	(1963)	(1945)	(1961)	(1961)	(1961)	(1961)	(1961)	(1961)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1944 - 2003

ANNUAL TOTAL	76,228	69,633.8	
ANNUAL MEAN	209	191	395
HIGHEST ANNUAL MEAN			1,968
LOWEST ANNUAL MEAN			69.6
HIGHEST DAILY MEAN	942	Jun 7	1,000
LOWEST DAILY MEAN	82	Nov 20	3.0
ANNUAL SEVEN-DAY MINIMUM	92	Nov 17	6.7
ANNUAL RUNOFF (AC-FT)	151,200		138,100
10 PERCENT EXCEEDS	351		380
50 PERCENT EXCEEDS	169		149
90 PERCENT EXCEEDS	103		87

e Estimated