

JORDAN RIVER BASIN

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 sea level. 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 daily discharge, 916 ft³/s, May 17; minimum daily discharge, 89 ft³/s, Dec 3, Jan 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	305	100	95	132	142	175	309	349	214	196	248
2	167	188	e95	92	131	140	237	331	377	194	183	230
3	174	161	e89	89	134	208	192	297	384	183	e222	237
4	178	159	92	90	134	157	184	257	346	207	e283	242
5	163	191	e96	91	135	143	256	209	305	209	e214	228
6	165	200	e96	96	134	142	275	182	254	e232	e221	240
7	165	182	93	97	185	138	235	181	225	e296	e227	226
8	174	148	93	99	175	136	312	183	210	228	e231	263
9	193	272	94	98	164	141	224	253	245	375	e220	274
10	286	239	138	92	177	157	175	365	244	e449	e222	272
11	780	203	132	101	183	267	167	368	227	e339	e228	253
12	397	192	114	144	181	215	305	377	491	288	e219	255
13	276	179	109	114	178	211	262	454	763	229	e241	269
14	256	172	112	106	174	147	222	459	415	e204	223	276
15	240	196	164	110	176	144	195	546	274	e190	242	276
16	263	179	128	102	180	274	175	e671	233	188	219	286
17	241	207	115	92	182	241	146	e916	216	176	218	312
18	158	196	114	91	182	188	141	e694	250	145	205	277
19	142	158	98	104	188	168	174	567	254	145	201	261
20	136	138	93	118	182	150	183	509	264	137	215	258
21	184	123	e95	115	177	152	201	457	253	126	603	247
22	138	e139	e96	117	174	152	220	413	246	125	583	245
23	143	136	98	117	236	139	160	398	245	144	e311	238
24	129	121	108	127	200	135	143	395	275	142	e300	234
25	127	116	110	152	170	125	130	419	268	151	271	219
26	122	116	102	140	160	128	122	476	224	e149	249	184
27	286	115	99	136	150	126	143	487	226	e169	240	174
28	276	115	98	139	133	149	173	467	232	e185	221	177
29	194	e111	95	137	---	380	270	425	215	e184	228	174
30	383	120	95	137	---	207	278	398	e219	e188	223	167
31	357	---	96	132	---	181	---	347	---	e188	238	---
TOTAL	7042	5077	3257	3470	4707	5383	6075	12810	8729	6379	7897	7242
MEAN	227	169	105	112	168	174	202	413	291	206	255	241
MAX	780	305	164	152	236	380	312	916	763	449	603	312
MIN	122	111	89	89	131	125	122	181	210	125	183	167
AC-FT	13970	10070	6460	6880	9340	10680	12050	25410	17310	12650	15660	14360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2001, BY WATER YEAR (WY)

	MEAN	278	289	305	335	414	452	513	629	682	373	277	282
MAX	1473	1616	1740	1806	1804	1882	2749	3042	3299	2158	1651	1364	
(WY)	1984	1984	1984	1984	1984	1984	1986	1986	1984	1983	1983	1986	
MIN	66.1	68.8	49.7	30.8	.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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1944 - 2001

ANNUAL TOTAL	166450	78068	
ANNUAL MEAN	455	214	402
HIGHEST ANNUAL MEAN			1968
LOWEST ANNUAL MEAN			69.6
HIGHEST DAILY MEAN	1670	May 26	916
LOWEST DAILY MEAN	89	Dec 3	89
ANNUAL SEVEN-DAY MINIMUM	93	Dec 3	93
ANNUAL RUNOFF (AC-FT)	330200		154800
10 PERCENT EXCEEDS	1170		348
50 PERCENT EXCEEDS	230		185
90 PERCENT EXCEEDS	122		107
			291100
			1060
			204
			82

e Estimated