09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, AZ

LOCATION.--Lat 33°33'10", long 111°34'33", in NW1/4NW1/4 sec. 6, T.2 N., R.8 E. (unsurveyed), Maricopa County, Hydrologic Unit 15060106, on left bank 3.5 mi downstream from Stewart Mountain Dam and 6 mi upstream from Verde River.

DRAINAGE AREA.--6,232 mi^2, of which 21 mi^2 is below Stewart Mountain Dam.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Mar. 1930 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Stewart Mountain Dam" 1934–41.

REVISED RECORDS.--WSP 1343: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,370 ft above sea level, from topographic map. Prior to Sept. 27, 1934, at site 3.2 mi upstream at different datum. Sept. 27, 1934, to Jan. 20, 1950, at site 2.8 mi upstream at datum 1,396.33 ft above sea level.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Flow regulated by four reservoirs above station. (See elsewhere in this report.) Entire flow (except during infrequent periods of extreme flooding) is diverted at Granite Reef Dam, 10 mi downstream, for irrigation in Salt River Valley and for municipal use by the city of Phoenix.

AVERAGE DISCHARGE.--75 years, 975 ft^3/s, 706,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,200 ft^3/s Feb. 15, 1980, gage height, 25.0 ft, from highwater mark inside gage well, from rating curve then in use, extended above 10,000 ft^3/s defined by known release rates from Stewart Mountain Dam and recorded gage heights; maximum daily discharge, 64,000 ft^3/s Feb. 16, 1980; no flow at times in recent years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 5,550 ft^3/s Feb. 12. Minimum daily discharge, 7.4 ft^3/s May 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	7.9	8.2	9.8	10	176	38	823	710	1160	1180	1390
2	364	8.7	8.2	9.5	10	181	226	1250	784	1030	1180	1360
3	273	8.8	7.8	13	11	151	348	1260	830	970	845	1180
4	271	8.6	8.4	2380	10	19	509	1520	538	905	602	1040
5	334	8.5	8.7	946	10	14	638	1530	536	957	532	1080
6	347	8.7	9.8	245	10	11	678	1400	531	1090	554	1170
7	344	7.9	8.9	224	10	9.5	804	1330	463	1210	548	1280
8	312	8.2	8.6	222	10	9.6	1030	1240	698	1240	646	1350
9	242	8.0	8.6	220	11	9.3	762	1070	954	1150	622	1370
10	221	8.3	8.6	220	11	9.0	699	1070	1010	1000	399	1250
11	140	8.3	8.6	219	14	9.3	799	875	952	1090	379	1080
12	22	8.1	8.5	218	5550	9.2	1030	1010	828	1150	438	1130
13	17	8.2	8.5	e217	2590	8.8	e1240	1010	846	1140	437	1160
14	22	8.9	8.3	e121	2360	9.3	e1440	e782	946	1250	314	1160
15	14	8.8	7.9	e10	1870	9.7	e1430	698	959	1230	412	1170
16	11	8.6	8.4	e9.8	1850	9.6	e1420	e687	1170	1160	570	1230
17	9.7	8.8	8.1	e9.8	1870	9.8	e1290	e692	1220	1160	616	1060
18	12	8.9	e7.8	e9.8	1040	9.7	e1160	e698	1020	935	582	975
19	10	8.8	e7.8	e9.6	444	10	e1340	e695	972	915	631	919
20	9.9	8.3	e8.2	9.2	1910	10	e1560	764	890	1060	621	1050
21	10	8.4	e8.2	9.3	1910	10	e1630	636	1020	1180	625	1110
22	10	9.5	e8.3	9.4	1910	10	e1630	566	1170	1120	626	1140
23	7.9	9.1	e8.7	9.3	986	9.9	e1630	607	1220	936	833	1200
24	7.8	8.6	e8.2	9.6	184	9.8	e1190	909	1230	854	1170	1050
25	7.8	8.9	e8.2	10	178	9.7	e687	852	1170	818	1150	999
26	7.7	9.1	e8.7	12	176	9.5	e687	1040	1010	938	1210	939
27	7.5	8.7	e8.6	11	176	8.9	e691	1070	1030	1060	1100	982
28	11	7.9	8.9	11	176	7.6	938	961	1060	1420	1150	1040
29	11	7.9	15	14	---	7.4	1190	709	1100	1370	1140	1070
30	9.0	8.0	15	12	---	7.5	973	761	1210	1370	1230	1010
31	8.4	---	11	11	---	7.7	---	863	---	1220	1280	---
TOTAL	3333.7	255.4	276.7	5441.1	25297	782.8	29687	29378	28077	34088	23622	33944
MEAN	108	8.51	8.93	176	903	25.3	990	948	936	1100	762	1131
MAX	364	9.5	15	2380	5550	181	1630	1530	1230	1420	1280	1390
MIN	7.5	7.9	7.8	9.2	10	7.4	38	566	463	818	314	919
AC-FT	6610	507	549	10790	50180	1550	58880	58270	55690	67610	46850	67330

CAL YR 2004 TOTAL 110692.8 MEAN 302 MAX 1470 MIN 3.3 AC-FT 219600
WTR YR 2005 TOTAL 214182.7 MEAN 587 MAX 5550 MIN 7.4 AC-FT 424800

e Estimated

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, AZ—CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Dec. 1950 to Aug. 1992, Aug. 1999 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Oct. 1964 to Sept. 1982, Mar. 1983 to Sept. 1990.
WATER TEMPERATURE: Dec. 1950 to Sept. 1982, Mar. 1983 to Sept. 1990.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instan-taneous dis-charge, cfs (00061)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)	Noncarb hard-ness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)
DEC													
08...	1145	8.7	<2.0	732	11.0	116	7.9	1840	18.0	15.5	260	120	66.7
FEB													
02...	1022	11	<2.0	733	9.1	89	8.3	2090	19.5	12.3	270	120	67.2
12...	1440	17300	<2.0	727	10.6	107	8.3	2050	15.0	13.5	220	88	55.3
JUL													
19...	1030	905	<2.0	724	7.6	95	8.1	1680	42.0	23.4	200	72	52.0

Date	Calcium water unfltrd recover -able, mg/L (00916)	Magnes-ium, water, fltrd, mg/L (00925)	Magnes-ium, water, unfltrd recover -able, mg/L (00927)	Potas-sium, water, fltrd, mg/L (00935)	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti-tuents mg/L (70301)
DEC													
08...	74.0dc	23.3	20.6dc	8.05	9	333	145	177	<1	551d	.4	75.1d	1150
FEB													
02...	73.7c	24.3	21.9	7.78	8	311	144	168	4	530d	.4	75.7d	1100
12...	54.8	20.6	20.5	8.05	9	310	134	158	3	504d	.4	70.3d	1050
JUL													
19...	53.1	17.5	16.6	6.62	7	222	130	158	<1	397d	.4	57.1	832

Date	Residue water, fltrd, tons/ acre-ft (70303)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, water, unfltrd mg/L (00600)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Anti-mony, water, fltrd, ug/L (01095)	Anti-mony, water, unfltrd ug/L (01097)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)
DEC													
08...	1.62	1190	<10	.26	<.04	<.06	E.01n	--	<1k	E.11n	<.2	3.7	4
FEB													
02...	1.59	1170	<10	.27	<.04	<.06	E.01n	--	E3k	E.13n	E.1n	3.6	3
12...	1.48	1090	14	.52	<.04	<.06	.04	--	<1k	E.18n	E.2n	4.1	5
JUL													
19...	1.21	889	<10	.38	<.04	.08	.05	.47	E10k	E.16n	E.2n	5.0	5

Date	Barium, water, unfltrd recover -able, ug/L (01007)	Beryll-ium, water, fltrd, ug/L (01010)	Beryll-ium, water, unfltrd recover -able, ug/L (01012)	Boron, water, unfltrd recover -able, ug/L (01022)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover -able, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover -able, ug/L (01051)	Mangan-ese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)
DEC													
08...	83	<.06	<.06	166	<.04	<.04	E.7n	.9	2.4	<.08	<.06	20	<.01
FEB													
02...	83	<.06	<.06	178	<.04	<.04	<.8	1.5	3.2	<.08	E.04n	42	<.01
12...	91	<.06	<.06	175	<.04	<.04	<.8	2.5	3.1	E.05n	.43	48	<.01
JUL													
19...	72	<.06	<.06	161d	<.04	<.04	<.8	1.7	.8	.16	<.06	81	<.01

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Mercury water, unfltrd recover -able, ug/L (71900)	Selen-ium, water, unfltrd ug/L (01147)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover -able, ug/L (01092)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)
DEC						
08...	<.01	.7	E.4n	E2n	1	.02
FEB						
02...	<.01	.9	4.8	<2	1	.03
12...	<.01	.7	5.4	4	38	1770
JUL						
19...	<.01	.5	3.2	<2	3	7.3

Remark codes used in this table:
< -- Less than.
E -- Estimated.

Value qualifier codes used in this table:
c -- See laboratory comment
d -- Diluted sample: method hi range exceeded
k -- Counts outside acceptable range
n -- Below the LRL and above the LT-MDL