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.

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.--72 years, 1,001 ft^3/s, 725,000 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, 1,640 ft^3/s June 18. Minimum daily discharge, 4.8 ft^3/s Dec. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1070	7.9	7.8	374	60	93	109	425	948	1180	1060	257
2	970	7.9	7.4	504	87	59	255	396	915	1220	920	403
3	1010	7.7	7.4	312	217	59	423	638	935	1150	763	600
4	981	7.8	14	368	309	58	528	535	894	1100	589	761
5	960	8.1	9.7	449	485	102	615	399	957	1180	645	489
6	932	7.7	7.5	355	340	140	539	472	1060	1040	629	458
7	842	7.8	7.2	307	327	119	415	533	1200	912	684	340
8	776	8.1	7.1	308	374	102	234	578	1150	829	690	150
9	805	8.2	7.2	375	349	88	264	630	1010	1000	755	255
10	754	7.5	6.4	355	350	77	336	774	1100	1050	702	687
11	806	7.9	7.2	301	331	76	355	675	1170	957	579	342
12	843	8.3	8.2	318	297	75	426	537	1330	1020	589	189
13	740	8.0	8.2	352	325	75	400	572	1390	916	990	282
14	362	8.3	8.0	317	282	73	320	713	1470	770	1020	229
15	192	8.3	7.7	338	280	77	401	760	1280	745	1070	245
16	90	8.3	7.7	442	280	79	472	806	1300	639	1180	285
17	58	8.5	7.2	491	279	83	602	976	1550	377	838	132
18	16	8.6	7.2	442	268	87	516	841	1640	273	798	69
19	12	8.5	7.0	384	188	81	482	758	1360	741	814	157
20	11	8.4	6.5	357	60	66	450	694	1350	731	790	179
21	9.9	8.3	5.8	355	96	115	310	708	1300	478	678	186
22	9.6	8.8	5.5	382	113	139	382	819	1050	689	542	185
23	9.4	8.5	5.4	298	114	124	652	816	869	1020	658	185
24	9.2	8.4	5.2	210	82	79	605	932	919	927	678	182
25	9.3	8.0	5.0	158	82	63	513	760	1300	638	363	157
26	8.9	8.5	5.1	150	80	74	509	670	1280	785	300	157
27	8.3	8.2	4.8	131	81	312	457	736	1280	585	416	157
28	7.8	7.9	163	131	102	489	331	730	1420	357	504	150
29	7.9	8.1	474	131	---	243	424	859	1240	607	642	103
30	8.0	7.7	462	127	---	72	438	849	1050	841	466	94
31	7.9	---	402	104	---	58	---	998	---	940	333	---
TOTAL	12326.2	244.2	1694.4	9626	6238	3437	12763	21589	35717	25697	21685	8065
MEAN	397.6	8.140	54.66	310.5	222.8	110.9	425.4	696.4	1191	828.9	699.5	268.8
MAX	1070	8.8	474	504	485	489	652	998	1640	1220	1180	761
MIN	7.8	7.5	4.8	104	60	58	109	396	869	273	300	69
AC-FT	24450	484	3360	19090	12370	6820	25320	42820	70840	50970	43010	16000

CAL YR 2001 TOTAL 194866.1 MEAN 533.9 MAX 1660 MIN 3.0 AC-FT 386500
WTR YR 2002 TOTAL 159081.8 MEAN 435.8 MAX 1640 MIN 4.8 AC-FT 315500

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 TEMPERATURES: Dec. 1950 to Sept. 1982, Mar. 1983 to Sept. 1990.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT													
03...	0950	1000	2.3	725	6.0	74	8.0	1820	26.5	23.0	71	200	50.0
APR													
04...	1100	617	3.5	725	12.0	122	8.1	1820	29.0	13.6	67	200	52.0
MAY													
10...	1110	777	.90	720	6.5	71	8.0	1820	29.0	16.6	63	210	53.0
AUG													
29...	0945	725	1.9	722	6.5	79	7.7	1820	32.0	21.8	66	210	52.0

Date	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT													
03...	51.0	19.0	19.0	6.40	8	260	132	161	<1	440	.3	69.0	5
APR													
04...	52.0	18.0	19.0	6.50	8	260	137	167	<1	440	.4	70.0	6
MAY													
10...	54.0	18.0	18.0	6.30	8	260	143	175	<1	440	.4	66.0	5
AUG													
29...	54.0	19.0	19.0	7.00	8	280	142	173	<1	450	.3	67.0	6

Date	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)
OCT													
03...	1.35	995	924	.30	.01	.01	<.020	.29	.02	14	E3k	E5k	<1
APR													
04...	1.35	992	929	.40	.02	.03	<.020	.38	.02	<5	E5k	E6k	<1
MAY													
10...	1.32	974	930	.50	<.01	--	<.020	--	<.02	12	E2k	E5k	<1
AUG													
29...	1.39	1020	961	.40	.02	.03	<.020	.38	.04	9	97	--	<1

Date	ANTI-MONY, TOTAL (UG/L AS SB) (01097)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
OCT													
03...	<1	5	6	76.0	79.0	<1	<1	153	159	<.5	<.5	<1	<1
APR													
04...	<1	4	4	87.0	97.0	<1	<1	160	162	<.5	<.5	<1	<1
MAY													
10...	<1	7	4	66.0	71.0	<1	<1	158	163	<.5	<.5	<1	<1
AUG													
29...	<1	10	12	85.0	90.0	<1	<1	173	172	<.5	<.5	<1	<1

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WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
OCT													
03...	<2	<2	<2	65	<2	<2	10	99	<.10	<.1	<1	<1	<1
APR													
04...	<2	<2	<2	98	<2	<2	8	68	<.10	<.1	<1	<1	<1
MAY													
10...	<2	<2	10	56	<2	<2	52	141	<.10	<.1	<1	<1	<1
AUG													
29...	<2	<2	<2	51	<2	<2	11	161	<.10	<.1	<1	<1	<1

Date	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	THAL-LIUM, DIS-SOLVED (UG/L AS TL) (01057)	THAL-LIUM, TOTAL (UG/L AS TL) (01059)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT										
03...	<1	<1	<1	550	<2	<2	6	<2	5.0	13.5
APR										
04...	<1	<1	<1	660	<2	<2	6	<2	6.0	10.0
MAY										
10...	<1	<1	<1	590	<2	<2	15	<2	3.0	6.3
AUG										
29...	<1	<1	<1	590	<2	<2	11	5	3.0	5.9

Remark codes used in this report:
< -- Less than
E -- Estimated value
Value qualifier codes used in this report:
k -- Counts outside acceptable range