GILA RIVER BASIN

09498500 SALT RIVER NEAR ROOSEVELT, AZ
(NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION)

LOCATION.--Lat 33°37'10", long 110°55'15", in SE1/4NE1/4 sec. 9, T.3 N., R.14 E. (unsurveyed), Gila County, Hydrologic Unit 15060103, in Tonto National Forest on left bank 100 ft downstream from bridge on State Highway 288, 0.3 mi downstream from Pinal Creek, 1 mi upstream from diversion dam for power canal, 14 mi east of village of Roosevelt, and 17 mi upstream from Roosevelt Dam.

DRAINAGE AREA.--4,306 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Jan. 1913 to current year (monthly discharge only Jan. to Sept. 1913, published in WSP 1313).

REVISED RECORDS.--WSP 1049: 1914, 1916, 1918–19, 1926. WSP 1343: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,177.14 ft above sea level. Prior to 1925, nonrecording gage at diversion dam about 1 mi downstream at different datum. Nonrecording gage at present site and datum 1925 to Jan. 17, 1935. May 20, 1955, to July 30, 1959, supplementary water-stage recorder at diversion dam.

REMARKS.--Records good, except estimated daily discharges, which are poor. Several small diversions for irrigation of about 4,000 acres above station and two transbasin diversions above station, one into basin from Show Low Creek and one out of basin to Willow Creek. Records show inflow to Roosevelt Lake. Tonto Creek also contributes to Roosevelt Lake; see records elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 143,000 ft^3/s Jan. 8, 1993, gage height, 30.09 ft, from rating curve extended above 108,000 ft^3/s; minimum discharge, 59 ft^3/s all or part of each day, July 1–4, 7–12, 1955.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of about 42 ft^3/s was reported Aug. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar.15.....	0110	*2,540	*10.14

Minimum daily discharge, 89 ft^3/s June 20–23.

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	199	148	192	153	204	308	930	478	141	120	160	124
2	189	149	202	186	209	336	912	459	140	105	146	120
3	181	150	199	196	210	321	934	435	134	103	145	119
4	172	158	196	214	209	322	1000	415	129	99	137	204
5	175	159	197	205	208	409	1070	396	124	98	134	629
6	184	167	186	197	217	409	1060	384	122	97	135	314
7	178	162	187	188	208	738	1010	376	116	96	257	221
8	186	164	191	179	200	e1230	975	377	113	95	186	199
9	196	166	201	185	193	1030	1090	372	109	92	149	175
10	207	164	198	194	186	1090	1150	369	105	92	140	167
11	226	166	206	186	194	1380	1210	365	104	92	130	160
12	232	185	198	185	198	1530	1310	360	102	96	193	155
13	210	638	194	183	200	1650	1350	359	100	105	150	148
14	201	840	195	184	203	2120	1300	353	100	101	212	139
15	189	484	193	185	195	2330	1180	342	98	154	276	132
16	177	545	188	191	190	2140	1070	322	97	362	629	128
17	171	452	193	199	195	2070	992	301	98	350	402	127
18	166	382	183	196	196	1940	932	286	96	335	300	125
19	164	339	166	201	195	1820	891	279	92	227	448	137
20	159	309	168	201	198	1800	849	264	89	188	373	805
21	154	287	178	205	207	1770	800	246	89	212	305	380
22	150	271	197	214	220	1790	749	233	89	171	242	214
23	149	256	200	212	239	1940	702	222	89	176	236	184
24	147	244	197	206	276	1990	667	209	90	219	197	174
25	145	234	188	207	280	1930	631	200	90	342	186	168
26	141	214	189	205	265	1850	592	191	90	302	195	180
27	141	218	200	211	261	1690	560	184	91	329	161	165
28	142	216	195	211	262	1490	530	177	94	420	152	156
29	146	207	187	200	277	1280	503	164	97	251	144	156
30	145	201	176	193	---	1130	495	155	e119	249	137	163
31	146	---	153	201	---	1010	---	148	---	182	129	---
TOTAL	5368	8275	5893	6073	6295	42843	27444	9421	3147	5860	6786	6268
MEAN	173	276	190	196	217	1382	915	304	105	189	219	209
MAX	232	840	206	214	280	2330	1350	478	141	420	629	805
MIN	141	148	153	153	186	308	495	148	89	92	129	119
MED	172	215	193	197	207	1530	933	322	99	171	186	164
AC-FT	10650	16410	11690	12050	12490	84980	54440	18690	6240	11620	13460	12430
CFSM	0.04	0.06	0.04	0.05	0.05	0.32	0.21	0.07	0.02	0.04	0.05	0.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	424	380	740	1058	1351	1991	1960	1008	356	324	572	449
MAX	4832	2150	6327	15990	9072	10390	6281	5933	1365	3276	3607	1852
(WY)	1984	1920	1966	1916	1980	1978	1979	1973	1941	1919	1921	1923
MIN	85.5	122	127	161	168	179	164	110	74.6	78.3	151	77.9
(WY)	1957	1957	1957	1964	1964	2002	2002	2002	2002	1963	1962	1956

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	227254		133673			
ANNUAL MEAN	623		365		882	
HIGHEST ANNUAL MEAN					3252	1916
LOWEST ANNUAL MEAN					191	2000
HIGHEST DAILY MEAN	7990	Mar 18	2330	Mar 15	91000	Jan 19 1916
LOWEST DAILY MEAN	82	Jul 14	89	Jun 20	59	Jul 4 1955
ANNUAL SEVEN-DAY MINIMUM	85	Jul 8	89	Jun 20	62	Jul 2 1955
ANNUAL RUNOFF (AC-FT)	450800		265100		639000	
ANNUAL RUNOFF (CFSM)	0.145		0.085		0.205	
10 PERCENT EXCEEDS	1560		994		1990	
50 PERCENT EXCEEDS	253		198		326	
90 PERCENT EXCEEDS	144		118		158	

e Estimated

09498500 SALT RIVER NEAR ROOSEVELT, AZ—CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Apr. 1958 to Sept. 1965 and Jan.1976 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Dec. 1996 to Jan. 1998.

WATER TEMPERATURE: Apr. 1958 to Sept. 1965 and Dec.1996 to Jan. 1998.

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)
DEC													
05...	1150	193	--	2.0	712	11.0	99	8.5	3580	17.0	7.5	130	350
FEB													
27...	1150	260	--	1.2	703	10.2	101	8.5	2850	12.0	10.6	89	280
MAR													
31...	1255	1010	--	35	704	8.7	98	8.1	830	28.5	16.7	22	100
APR													
21...	1250	804	--	18	701	8.8	99	8.2	1010	25.0	16.8	26	120
MAY													
27...	1145	189	--	.62	703	8.8	109	8.4	2930	31.5	21.2	90	250
AUG													
31...	1115	130	400	--	705	7.5	97	8.4	3300	35.0	23.8	90	310

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)
DEC													
05...	94.0	92.0	29.0	28.0	12.0	13	580	221	253	8	950	.2	120
FEB													
27...	75.0	79.0	23.0	24.0	10.0	12	470	193	221	7	730	.2	94.0
MAR													
31...	28.0	40.0	7.80	10.0	3.50	5	120	80	98	<1	180	.1	27.0
APR													
21...	32.0	38.0	9.00	10.0	3.60	6	150	91	105	3	220	.1	32.0
MAY													
27...	64.0	63.0	23.0	22.0	10.0	13	490	163	188	6	790	.2	76.0
AUG													
31...	84.5d	117	23.5d	32.2	12.0d	12	501d	218	255	5	826d	.3	94.3d

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)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Organic nitrogen, water, unfltrd mg/L (00605)
DEC													
05...	1920	2.71	1990	3	<.20	<.01	--	<.01	<.02	<.020	<.010	<.02	--
FEB													
27...	1520	2.14	1570	4	<.20	--	--	<.01	--	<.020	--	--	--
MAR													
31...	415	.60	444	133	.60	.01	.03	.02	<.02	<.020	<.010	.56	.58
APR													
21...	501	.73	538	61	.30	<.01	.03	.02	<.02	<.020	<.010	<.02	.28
MAY													
27...	1550	2.19	1610	6	<.20	<.01	--	<.01	.02	<.020	<.010	.03	--
AUG													
31...	1670	2.39	1760	358d	.94	<.04	--	--	.21	--	--	--	--

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

Date	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Anti-mony, water, fltrd, ug/L (01095)	Anti-mony, water, unfltrd ug/L (01097)
DEC													
05...	<.01	<.02	<.02	--	.4	<.1	.4	1.6	1.5	8	E2k	<1	<1
FEB													
27...	--	--	<.02	--	--	--	--	--	--	<5	E7k	<1	<1
MAR													
31...	.03	.03	.17	--	9.9	<.1	9.9	3.0	--	21	E31k	<1	<1
APR													
21...	.01	<.02	.13	--	3.9	<.1	3.9	2.9	--	15	E1k	<1	<1
MAY													
27...	<.01	<.02	<.02	--	.2	<.1	.2	1.9	--	13	E16k	<1	<1
AUG													
31...	--	--	.23	1.1	--	--	--	--	--	--	E200k	<.40d	<.4d

Date	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Barium, water, fltrd, ug/L (01005)	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, fltrd, ug/L (01020)	Boron, water, unfltrd recover -able, ug/L (01022)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, fltrd, ug/L (01030)	Chrom-ium, water, unfltrd recover -able, ug/L (01034)	Copper, water, fltrd, ug/L (01040)
DEC													
05...	10	10	51.0	53.0	<1	<1	293	294	<.5	<.5	<1	<1	<2
FEB													
27...	8	6	41.0	42.0	<1	<1	234	238	<.5	<.5	<1	<1	<2
MAR													
31...	2	4	24.0	44.0	<1	<1	65	67	<.5	<.5	<1	2	<2
APR													
21...	2	4	22.0	36.0	<1	<1	80	82	<.5	<.5	<1	1	<2
MAY													
27...	6	6	46.0	42.0	<1	<1	248	247	<.5	<.5	<1	<1	<2
AUG													
31...	10.8d	14	--	167d	<.12d	.52d	--	305d	<.08d	.11d	--	5.8	2.5d

Date	Copper, water, unfltrd recover -able, ug/L (01042)	Cyanide water, fltrd, mg/L (00723)	Cyanide water unfltrd mg/L (00720)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover -able, ug/L (01051)	Mangan-ese, water, fltrd, ug/L (01056)	Mangan-ese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recover -able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover -able, ug/L (01067)
DEC													
05...	<2	<.01	<.01	13	125	<2	<2	46	51	<.1	<.1	<1	<1
FEB													
27...	<2	--	--	5	75	<2	<2	17	22	<.1	<.1	<1	<1
MAR													
31...	4	<.01	<.01	12	1960	<2	3	8	101	<.1	<.1	<1	4
APR													
21...	3	<.01	<.01	7	1630	<2	<2	7	77	<.1	<.1	<1	3
MAY													
27...	<2	<.01	<.01	3	57	<2	<2	14	22	<.1	<.1	<1	<1
AUG													
31...	10.3d	--	--	--	--	E.15nd	5.27d	--	218d	<.02	E.01n	--	--

Date	Selen-ium, water, fltrd, ug/L (01145)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recover -able, ug/L (01077)	Stront-ium, water, unfltrd recover -able, ug/L (01082)	Thall-ium, water, fltrd, ug/L (01057)	Thall-ium, water, unfltrd ug/L (01059)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover -able, ug/L (01092)	olic com-pounds, water, unfltrd ug/L (32730)	Phen-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)	Sus-
DEC													
05...	1	1	<1	<1	960	<2	<2	<2	3	<16	62	32	
FEB													
27...	<1	<1	<1	<1	820	<2	<2	<2	<2	--	25	18	
MAR													
31...	<1	<1	<1	<1	260	<2	<2	<2	10	<16	273	744	
APR													
21...	<1	<1	<1	<1	310	<2	<2	<2	8	<16	331	719	
MAY													
27...	<1	<1	<1	<1	730	<2	<2	<2	<2	<16	5	2.6	
AUG													
31...	--	1.2d	--	--	--	--	--	7.2d	17d	--	492	173	

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

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