Water-Data Report 2012

11152300 Salinas River near Chualar, CA

Salinas River Basin

LOCATION.--Lat 36°33′13″, long 121°32′54″ referenced to North American Datum of 1927, Monterey County, CA, Hydrologic Unit 18060005, in Guadalupe y Llanitos de Los Correos Grant, near left bank, on upstream side of bridge on Chualar River Road, and 2 mi southwest of Chualar.

DRAINAGE AREA.--4,042 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1976 to current year.

REVISED RECORDS.--WDR CA-85-2: 1983-84 (instantaneous maximum discharge).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 68.00 ft above NGVD of 1929. Prior to January 1979, nonrecording gage at same site and datum. January 1979 to Aug. 19, 1991, at site 0.2 mi downstream at same datum.

REMARKS.--Records fair. Daily discharges prior to January 1979 determined by discharge measurements at this site correlated to streamflow for "Salinas River at Soledad" (station 11151700) and "Salinas River near Spreckels" (station 11152500). Flow regulated by Santa Margarita Lake beginning in December 1941, usable capacity, 23,000 acre-ft; Lake Nacimiento (formerly Nacimiento Reservoir) beginning in February 1957, usable capacity, 340,000 acre-ft; and Lake San Antonio beginning in December 1965, usable capacity, 330,000 acre-ft. Large withdrawals from ground water and small surface-water diversions for municipal use and for irrigation upstream from station. See schematic diagram of Salinas River Basin available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92,000 ft^3/s, estimated, Mar. 11, 1995, gage height, 19.70 ft, from rating curve extended above 18,000 ft^3/s; peak flow includes an estimate of 8,800 ft^3/s bypassing the gage; no flow at times during most years.

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 11152300, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/11152300.2012.pdf

11152300 Salinas River near Chualar, CA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	73	90	21	14	38	0.85	163	110	71	70	80	67
2	76	86	21	14	36	0.02	195	107	63	82	74	66
3	79	85	20	14	34	0.00	196	104	60	92	71	67
4	82	83	19	13	32	0.00	182	100	64	92	70	75
5	90	76	19	12	31	0.00	164	99	69	93	71	77
6	97	70	19	11	30	0.00	145	97	69	88	78	76
7	101	61	18	11	30	0.00	128	96	67	82	81	72
8	102	53	18	10	29	0.00	114	101	70	93	65	69
9	102	47	17	10	27	0.00	108	101	72	98	72	66
10	103	43	16	9.9	25	0.00	105	103	73	103	67	72
11	108	39	16	9.1	22	0.00	108	105	76	100	64	79
12	110	37	16	8.2	21	0.00	111	98	78	92	59	78
13	106	34	17	7.0	21	0.00	125	94	76	87	59	77
14	97	33	e17	5.8	22	0.00	270	92	80	83	64	73
15	85	30	e17	4.8	21	0.00	257	92	85	80	60	70
16	79	28	e17	4.9	20	0.00	259	91	88	85	63	70
17	78	26	e16	4.9	19	0.00	257	88	74	88	67	74
18	82	25	e17	3.9	18	0.00	227	81	73	85	68	83
19	81	24	e17	3.2	17	6.2	198	73	77	79	66	90
20	79	24	17	3.6	16	8.6	166	66	74	75	70	91
21	77	24	17	9.5	15	0.72	134	65	69	74	79	80
22	82	24	16	226	14	0.00	114	67	66	74	79	67
23	87	25	15	105	13	0.00	113	67	66	79	76	62
24	94	25	14	549	11	6.6	117	65	64	85	76	75
25	100	23	14	209	9.0	27	120	61	72	83	75	92
26	104	22	15	105	6.9	51	123	59	79	78	71	e101
27	102	22	15	69	5.8	74	123	60	78	74	73	101
28	99	22	15	54	4.5	81	121	68	73	72	75	99
29	97	22	16	48	3.0	127	116	77	66	71	76	97
30	94	22	15	44	---	149	113	81	62	80	70	93
31	92	---	14	41	---	147	---	79	---	84	66	---
Total	2,838	1,225	521	1,633.8	591.2	678.99	4,672	2,647	2,154	2,601	2,185	2,359
Mean	91.5	40.8	16.8	52.7	20.4	21.9	156	85.4	71.8	83.9	70.5	78.6
Max	110	90	21	549	38	149	270	110	88	103	81	101
Min	73	22	14	3.2	3.0	0.00	105	59	60	70	59	62
Ac-ft	5,630	2,430	1,030	3,240	1,170	1,350	9,270	5,250	4,270	5,160	4,330	4,680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2012, BY WATER YEAR (WY)

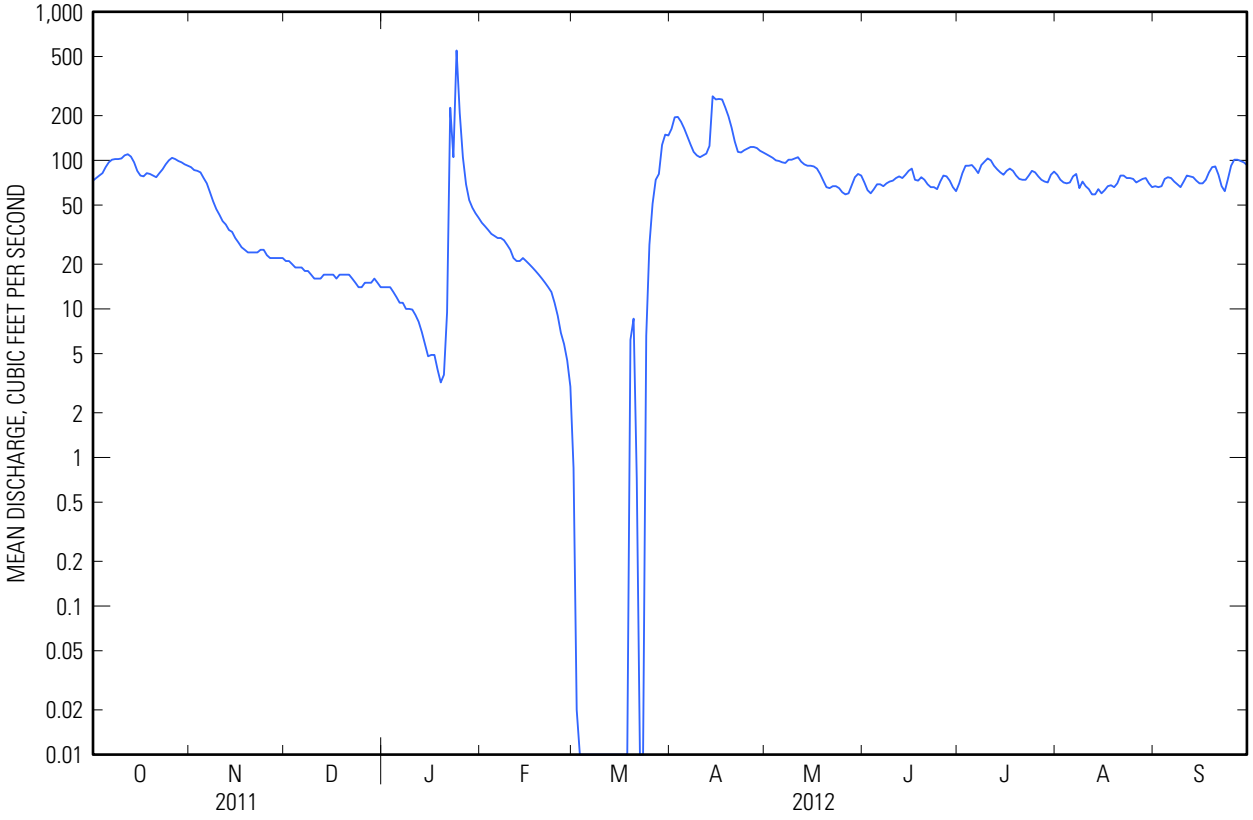
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	43.1	63.1	226	948	1,644	1,401	492	174	72.8	67.1	60.3	62.1
Max	286	474	2,757	8,328	14,350	10,690	3,360	2,418	767	462	381	425
(WY)	(1983)	(1983)	(1983)	(1997)	(1998)	(1983)	(2006)	(1983)	(1983)	(1983)	(1983)	(1983)
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1990)	(1981)	(1990)	(1990)	(1989)	(1977)	(1989)	(1990)	(1990)	(1990)	(1990)	(1990)

11152300 Salinas River near Chualar, CA—Continued

SUMMARY STATISTICS

[e, estimated]

	Calendar Year 2011		Water Year 2012		Water Years 1977 - 2012	
Annual total	224,025		24,105.99			
Annual mean	614		65.9		432	
Highest annual mean					2,796	1983
Lowest annual mean					0.00	1990
Highest daily mean	10,900	Mar 26	549	Jan 24	68,000	Mar 12, 1995
Lowest daily mean	11	Aug 28	0.00	Mar 3	0.00	Jan 27, 1977
Annual seven-day minimum	15	Dec 22	0.00	Mar 3	0.00	Feb 3, 1977
Maximum peak flow			769	Jan 24	e92,000	Mar 11, 1995
Maximum peak stage			4.92	Jan 24	19.70	Mar 11, 1995
Annual runoff (ac-ft)	444,400		47,810		312,700	
10 percent exceeds	1,440		108		715	
50 percent exceeds	149		70		52	
90 percent exceeds	22		8.5		0.00	



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.
CHEMICAL DATA: Water years 1977 to current year.
WATER TEMPERATURE: Water years 1967-69, 1977-81.
BIOLOGICAL DATA: Water years 1977-81.
SEDIMENT DATA: Water years 1967-69, 1977-95, 1997 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1977 to September 1981.
WATER TEMPERATURE: January 1977 to September 1981.
SUSPENDED-SEDIMENT DISCHARGE: December 1966 to September 1969.

INSTRUMENTATION.--Water-quality monitor from January 1977 to September 1981.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 1 of 4

[%, percent; $CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; ft^3/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; <, less than; E, estimated]

Sample date-time	Barometric pressure, mm Hg (00025)	Discharge, instantaneous, ft^3/s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Dissolved solids dried at 180°C, water, filtered, mg/L (70300)
12-14-2011 1240	766	17	14.3	120	8.4	842	8.0	E 2.2	547
04-03-2012 1225	765	196	10.1	103	8.3	414	16.5	46	252
06-20-2012 1050	756	75	9.7	105	8.1	364	18.9	68	213
08-23-2012 1130	762	77	9.2	100	8.4	353	19.1	62	255

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 2 of 4

[%, percent; $CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; ft^3/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; <, less than; E, estimated]

Sample date-time	Dissolved solids, water, filtered, sum of constituents, mg/L (70301)	Dissolved solids, water, filtered, tons per acre-foot (70303)	Hardness, water, mg/L as $CaCO_3$ (00900)	Noncarbonate hardness, water, filtered, field, mg/L as $CaCO_3$ (00904)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium adsorption ratio, water, number (00931)	Sodium fraction of cations, water, percent in equivalents of major cations (00932)
12-14-2011 1240	526	0.74	315	149	75.2	30.9	2.81	1.29	26
04-03-2012 1225	255	.34	173	50	42.7	16.1	1.67	.75	22
06-20-2012 1050	214	.29	151	32	35.1	15.5	1.56	.58	19
08-23-2012 1130	208	.35	156	37	36.4	15.8	1.56	.53	17

11152300 Salinas River near Chualar, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
Part 3 of 4

[%, percent; $CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; ft^3/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; <, less than; E, estimated]

Sample date-time	Sodium, water, filtered, mg/L (00930)	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as $CaCO_3$ (39086)	Bicarbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453)	Carbonate, water, filtered, inflection-point incremental titration method, field, mg/L (00452)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Silica, water, filtered, mg/L as SiO_2 (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)
12-14-2011 1240	52.5	166	193	4.6	52.8	0.27	13.2	173	0.25
04-03-2012 1225	22.6	123	146	1.9	17.9	.25	17.5	57.9	.57
06-20-2012 1050	16.4	120	141	2.2	12.1	.19	12.8	47.2	.99
08-23-2012 1130	15.1	119	142	1.7	10.2	.17	13.6	42.7	.83

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
Part 4 of 4

[%, percent; $CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; ft^3/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; <, less than; E, estimated]

Sample date-time	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrite, water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)
12-14-2011 1240	< .010	5.92	0.019	0.019	0.03	0.04
04-03-2012 1225	.012	1.04	.001	.052	.05	.20
06-20-2012 1050	.014	.423	.002	.051	.05	.31
08-23-2012 1130	< .010	.267	.004	.078	.07	.29

11152300 Salinas River near Chualar, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

[ft^3/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; A, average]

Sample date-time	Discharge, instantaneous, ft^3/s (00061)	Temperature, water, °C (00010)	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons per day (80155)	Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331)
12-14-2011 1214	17	8.0	7	0.32	92
04-03-2012 1234	197	15.0	122	65	95
04-03-2012 1235	197	15.0	90	48	98
04-03-2012 1236	197	15.0	92	49	99
04-03-2012 1240	197	15.0	A 99	A 53	A 96
04-03-2012 1241	197	15.0	94	50	95
04-03-2012 1246	197	15.0	97	52	96
04-03-2012 1247	197	15.0	A 96	A 51	A 97
04-03-2012 1248	197	15.0	92	49	98
04-03-2012 1250	197	15.0	84	45	98
04-03-2012 1251	197	15.0	78	41	94
04-03-2012 1253	197	15.0	114	61	97
04-03-2012 1254	197	15.0	A 93	A 49	A 97
04-03-2012 1300	197	15.0	97	52	97
04-03-2012 1302	197	15.0	91	48	95
04-03-2012 1303	197	15.0	91	48	96
04-03-2012 1304	197	15.0	88	47	97
04-03-2012 1305	197	15.0	95	51	94
04-03-2012 1306	197	15.0	A 91	A 48	A 96
04-03-2012 1307	197	15.0	92	49	98
04-03-2012 1309	197	15.0	A 91	A 48	A 97
04-03-2012 1311	197	15.0	97	52	98
04-03-2012 1312	197	15.0	89	47	100
04-03-2012 1313	197	15.0	88	47	98
04-03-2012 1314	197	15.0	A 91	A 48	A 98
04-03-2012 1315	197	15.0	91	48	95
04-03-2012 1316	197	15.0	90	48	98
06-20-2012 1056	75	18.9	140	28	94
06-20-2012 1100	75	18.9	A 137	A 28	A 96
06-20-2012 1104	75	18.9	135	27	97
08-23-2012 1404	76	21.0	138	28	93
08-23-2012 1410	76	21.0	A 136	A 28	A 92
08-23-2012 1416	76	21.0	134	28	91