Water-Data Report 2013

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, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 11152300, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/11152300.2013.pdf

11152300 Salinas River near Chualar, CA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	93	0.10	103	180	32	6.8	53	86	77	91	81	71
2	98	0.00	140	152	30	4.8	58	79	71	99	80	75
3	103	0.00	694	131	29	3.0	59	72	75	97	78	84
4	104	0.00	551	113	30	1.5	59	69	80	90	75	85
5	103	0.00	220	98	30	0.54	63	66	78	85	80	85
6	98	0.00	112	89	30	0.03	67	70	82	77	70	101
7	94	0.00	51	130	29	0.00	68	81	91	71	78	94
8	87	0.00	27	121	30	0.00	70	85	93	84	76	76
9	78	0.00	17	102	29	0.00	74	88	89	106	72	81
10	e81	0.00	10	89	27	0.00	73	85	96	116	75	86
11	87	0.00	6.0	81	26	0.00	67	80	e99	104	81	86
12	93	0.00	3.6	74	25	0.00	64	76	e100	91	92	90
13	100	0.00	1.8	68	23	0.00	57	74	97	82	101	95
14	103	0.00	0.25	62	22	0.00	56	74	91	70	104	96
15	98	0.00	0.00	57	21	0.00	59	69	88	74	109	86
16	98	0.00	0.00	52	20	0.00	62	64	88	76	110	87
17	94	0.00	0.00	49	19	0.00	58	79	98	74	95	92
18	83	0.00	0.00	48	19	0.00	51	86	104	92	87	87
19	71	0.00	0.00	46	20	0.00	43	88	103	103	89	82
20	67	0.00	0.00	43	21	1.7	39	94	101	85	90	78
21	71	0.00	0.00	42	20	23	42	96	94	75	84	70
22	67	0.00	0.00	42	18	46	57	93	85	76	79	67
23	61	0.00	113	40	17	61	71	89	81	77	79	74
24	55	0.00	555	e37	16	71	75	87	96	70	73	78
25	47	0.00	1,220	36	15	82	80	85	109	63	67	76
26	37	0.00	610	35	14	90	85	83	111	59	71	69
27	27	0.00	470	35	12	93	81	88	107	56	82	67
28	19	0.00	336	35	9.2	75	81	97	99	60	79	65
29	12	0.00	267	34	---	59	86	98	88	74	77	61
30	7.5	0.04	252	34	---	49	88	93	84	81	89	67
31	3.2	---	216	33	---	48	---	88	---	82	77	---
Total	2,239.7	0.14	5,975.65	2,188	633.2	715.37	1,946	2,562	2,755	2,540	2,580	2,411
Mean	72.2	0.00	193	70.6	22.6	23.1	64.9	82.6	91.8	81.9	83.2	80.4
Max	104	0.10	1,220	180	32	93	88	98	111	116	110	101
Min	3.2	0.00	0.00	33	9.2	0.00	39	64	71	56	67	61
Ac-ft	4,440	0.3	11,850	4,340	1,260	1,420	3,860	5,080	5,460	5,040	5,120	4,780

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2013, BY WATER YEAR (WY)

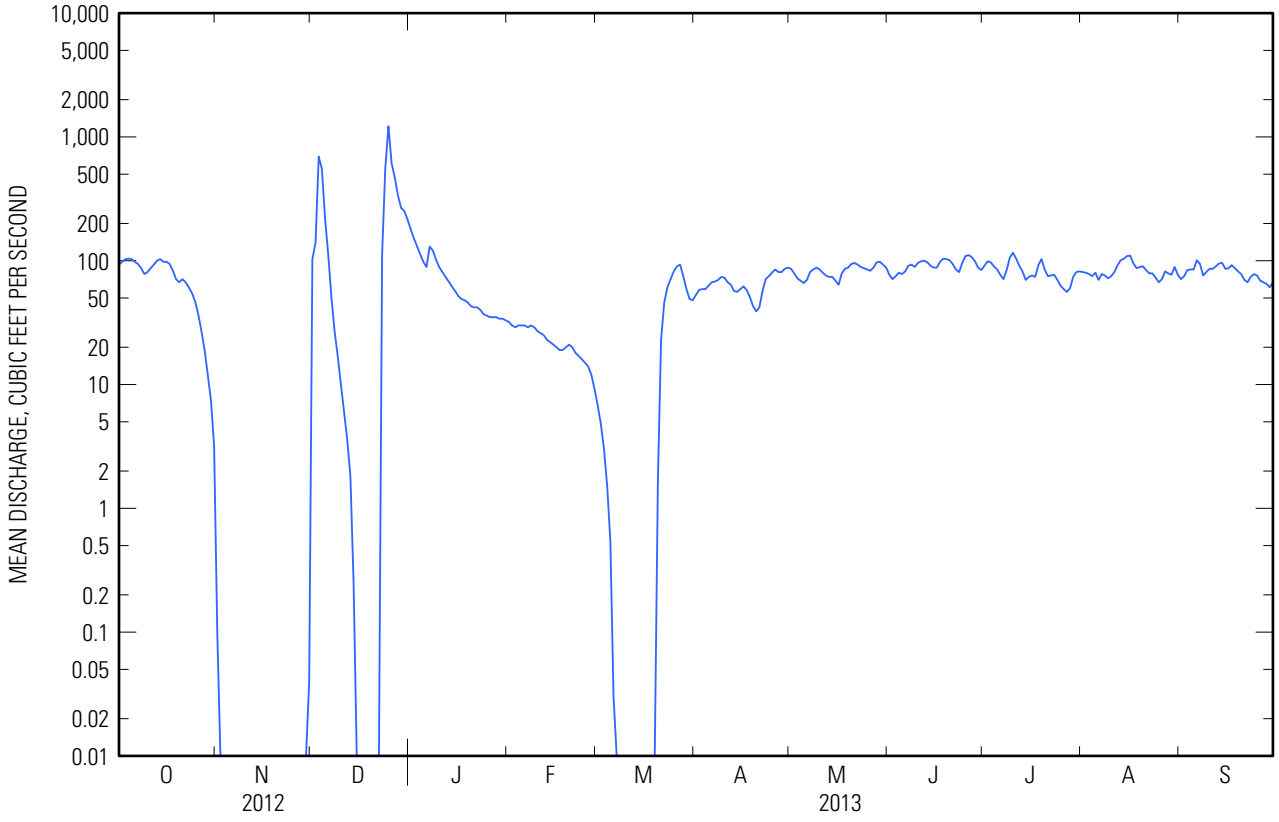
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	43.8	61.4	225	924	1,601	1,364	480	172	73.3	67.5	61.0	62.6
Max	286	474	2,757	8,328	14,350	10,690	3,360	2,418	767	462	381	425
(WY)	(1983)	(1983)	(1983)	(1997)	(1998)	(1983)	(2006)	(1983)	(1983)	(1983)	(1983)	(1983)
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 2012		Water Year 2013		Water Years 1977 - 2013	
Annual total	27,737.48		26,546.06			
Annual mean	75.8		72.7		422	
Highest annual mean					2,796	1983
Lowest annual mean					0.00	1990
Highest daily mean	1,220	Dec 25	1,220	Dec 25	68,000	Mar 12, 1995
Lowest daily mean	0.00	Mar 3	0.00	Nov 2	0.00	Jan 27, 1977
Annual seven-day minimum	0.00	Mar 3	0.00	Nov 2	0.00	Feb 3, 1977
Maximum peak flow			1,660	Dec 25	[e]92,000	Mar 11, 1995
Maximum peak stage			7.74	Dec 25	19.70	Mar 11, 1995
Annual runoff (ac-ft)	55,020		52,650		305,700	
10 percent exceeds	122		103		682	
50 percent exceeds	70		74		52	
90 percent exceeds	0.00		0.00		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 2012 TO SEPTEMBER 2013

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)
12-04-2012 1250	768	474	9.8	92	7.8	289	12.8	25	211
03-05-2013 1045	765	.55	12.0	114	8.3	1,010	13.1	E 6.9	694
05-21-2013 1115	763	98	9.2	98	8.3	429	18.5	74	255
08-27-2013 1125	761	83	8.9	100	8.3	452	20.7	72	300

11152300 Salinas River near Chualar, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

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 constit-uents, mg/L (70301)	Dissolved solids, water, filtered, tons per acre-foot (70303)	Hardness, water, mg/L as $CaCO_3$ (00900)	Non-carbonate hardness, water, filtered, field, mg/L as $CaCO_3$ (00904)	Calcium, water, filtered, mg/L (00915)	Magne-sium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium adsorption ratio, water, number (00931)	Sodium fraction of cations, water, percent in equiva-lents of major cations (00932)
12-04-2012 1250	180	0.29	118	38	32.5	8.99	2.50	0.50	18
03-05-2013 1045	660	.94	410	220	98.5	39.8	3.64	1.31	24
05-21-2013 1115	254	.35	181	53	42.6	18.2	2.21	.63	19
08-27-2013 1125	273	.41	188	65	43.8	19.1	2.78	.66	19

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

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)
12-04-2012 1250	12.6	80.5	97.7	0.2	8.74	0.17	17.0	47.5	0.35
03-05-2013 1045	60.9	190	223	4.2	66.7	.18	11.4	227	.50
05-21-2013 1115	19.6	129	154	1.7	13.5	.28	9.59	68.6	.88
08-27-2013 1125	20.7	123	146	1.9	14.5	.35	10.8	85.7	1.3

11152300 Salinas River near Chualar, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

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)
12-04-2012 1250	< .010	0.401	0.003	0.050	0.05	0.11
03-05-2013 1045	.031	8.50	.055	.076	.07	.07
05-21-2013 1115	< .010	.431	< .001	.095	.09	.31
08-27-2013 1125	< .010	.197	.001	.051	.05	.34

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

[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)	Suspended sediment, sieve diameter, percent smaller than 0.125 mm (70332)	Suspended sediment, sieve diameter, percent smaller than 0.25 mm (70333)	Suspended sediment, sieve diameter, percent smaller than 0.5 mm (70334)	Suspended sediment, sieve diameter, percent smaller than 1 mm (70335)
12-04-2012 1456	433	12.8	44	51	81	--	--	--	--
12-04-2012 1500	431	12.8	A 49	A 57	A 74	--	--	--	--
12-04-2012 1504	429	12.8	55	64	68	--	--	--	--
03-05-2013 1134	.55	15.0	11	.02	--	--	--	--	--
03-05-2013 1136	.55	15.0	A 10	A .01	--	--	--	--	--
03-05-2013 1138	.55	15.0	10	.01	--	--	--	--	--
05-21-2013 1318	98	19.5	477	126	33	33	37	72	100
05-21-2013 1321	98	19.5	A 452	A 119	A 34	--	--	--	--
05-21-2013 1325	98	19.5	426	113	34	--	--	--	--
08-27-2013 1256	83	22.5	171	38	97	--	--	--	--
08-27-2013 1301	83	22.5	A 171	A 38	A 97	--	--	--	--
08-27-2013 1307	83	22.5	171	38	97	--	--	--	--