Water-Data Report 2006

10257720 Chino Canyon Creek below Tramway, near Palm Springs, CA

Salton Sea Basin

LOCATION.--Lat 33°50′39″, long 116°36′16″ referenced to North American Datum of 1927, in NW ¼ NE ¼ sec.7, T.4 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on left bank, 0.5 mi downstream from tram building, 3.5 mi west of Highway 111 on road leading to Palm Springs Aerial Tramway, and 5.5 mi west of Palm Springs.

DRAINAGE AREA.--4.71 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1986 to current year.

REVISED RECORDS.--WDR CA-89-1: 1987(M).

GAGE.--Water-stage recorder and crest-stage gage. Concrete control with low-water v-notch weir since June 25, 1996. Elevation of gage is 2,100 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Two small diversions upstream, one for city of Palm Springs and one for Palm Springs aerial tramway. October 1974 to July 1985, data published as "Chino Canyon Creek near Palm Springs" (station 10257710), with station located 0.45 mi upstream from present location. Previous gage destroyed by debris flow on July 19, 1985. Data for these sites are roughly equivalent. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 153 ft^3/s, Jan. 7, 1993, gage height, 10.18 ft, from rating curve extended above 35 ft^3/s, on basis of critical depth computations, maximum gage height, 10.83 ft, Jan. 9, 2005; no flow for many days in some years.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.73	1.2	1.1	0.87	0.89	3.0	2.4	1.1	0.70	0.13	0.00	0.00
2	0.75	1.4	1.1	2.0	0.88	2.8	2.3	1.0	0.64	0.16	0.00	0.00
3	0.77	1.3	1.0	1.7	0.85	2.9	2.2	1.0	0.61	0.00	0.00	0.00
4	0.77	1.4	0.99	1.3	0.88	2.7	2.3	0.95	0.57	0.04	0.00	0.00
5	0.80	1.4	1.0	1.2	0.85	2.2	3.2	0.98	0.54	0.21	0.00	0.00
6	0.80	1.4	1.0	1.1	0.87	2.1	2.9	0.98	0.55	0.15	0.00	0.00
7	0.77	1.3	1.0	1.1	0.83	2.1	2.9	0.96	0.52	0.01	0.00	0.00
8	0.79	1.3	1.0	1.0	0.84	2.0	2.9	0.95	0.50	0.02	0.00	0.00
9	0.84	1.5	1.1	0.96	0.82	2.0	2.9	0.92	0.44	0.01	0.00	0.00
10	0.82	1.5	1.0	0.98	0.82	2.2	3.0	0.87	0.42	0.01	0.00	0.00
11	0.80	1.5	0.99	0.99	0.81	2.5	3.2	0.83	0.42	0.00	0.00	0.00
12	0.79	1.4	0.99	0.99	0.82	e2.2	2.9	0.80	0.39	0.00	0.00	0.00
13	0.77	1.4	1.0	0.96	0.81	e2.2	2.7	0.80	0.40	0.00	0.00	0.00
14	0.75	1.4	1.0	0.95	0.85	2.3	2.8	0.80	0.39	0.00	0.00	0.00
15	0.76	1.4	1.0	0.97	0.85	2.3	2.6	0.81	0.36	0.01	0.00	0.00
16	0.86	1.5	1.0	0.98	0.88	2.4	2.7	0.76	0.33	0.00	0.00	0.00
17	2.0	1.4	1.0	0.96	0.91	2.4	2.6	0.71	0.28	0.16	0.00	0.00
18	3.8	1.4	1.0	0.93	0.86	2.6	2.5	0.73	0.27	0.29	0.00	0.00
19	1.9	1.2	1.00	0.94	0.88	2.6	2.0	0.68	0.26	0.15	0.00	0.00
20	1.9	1.1	0.97	0.97	0.89	2.5	1.6	0.72	0.26	0.00	0.00	0.00
21	1.5	1.2	0.94	0.97	0.89	2.4	1.2	0.74	0.23	0.00	0.00	0.00
22	1.1	1.2	0.92	0.98	0.87	2.4	1.2	0.87	0.21	0.00	0.00	0.00
23	1.0	1.2	0.88	0.96	0.86	2.2	1.2	0.84	0.18	0.00	0.00	0.00
24	1.0	1.2	0.86	0.96	0.84	2.1	1.2	0.79	0.20	0.00	0.00	0.00
25	1.0	1.2	0.89	0.94	0.82	2.1	1.3	0.77	0.17	0.00	0.00	0.00
26	1.1	1.2	0.88	0.94	0.82	2.1	1.3	0.76	0.18	0.00	0.00	0.00
27	1.1	1.2	0.87	0.94	1.4	2.1	1.2	0.79	0.17	0.00	0.00	0.00
28	1.1	1.2	0.87	0.93	6.8	2.2	1.3	0.84	0.21	0.00	0.00	0.00
29	1.1	1.2	0.86	0.92	---	2.2	1.2	0.82	0.19	0.00	0.00	0.00
30	1.1	1.2	0.88	0.91	---	2.2	1.1	0.75	0.14	0.00	0.00	0.00
31	1.1	---	0.91	0.91	---	2.2	---	0.71	---	0.00	0.00	---
Total	34.37	39.4	30.00	32.21	30.39	72.2	64.8	26.03	10.73	1.35	0.00	0.00
Mean	1.11	1.31	0.97	1.04	1.09	2.33	2.16	0.84	0.36	0.04	0.00	0.00
Max	3.8	1.5	1.1	2.0	6.8	3.0	3.2	1.1	0.70	0.29	0.00	0.00
Min	0.73	1.1	0.86	0.87	0.81	2.0	1.1	0.68	0.14	0.00	0.00	0.00
Ac-ft	68	78	60	64	60	143	129	52	21	2.7	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	0.29	0.40	0.49	2.24	2.15	1.87	1.21	0.62	0.24	0.08	0.14	0.21
Max	1.19	1.32	1.49	17.7	17.8	8.82	3.85	2.34	0.88	0.53	1.25	1.38
(WY)	(1994)	(1987)	(1994)	(2005)	(1993)	(1993)	(1993)	(1998)	(1998)	(2005)	(2005)	(1993)
Min	0.00	0.00	0.00	0.00	0.10	0.02	0.05	0.00	0.00	0.00	0.00	0.00
(WY)	(1991)	(1991)	(1991)	(2004)	(1999)	(1999)	(1999)	(2004)	(1992)	(1989)	(1990)	(1990)

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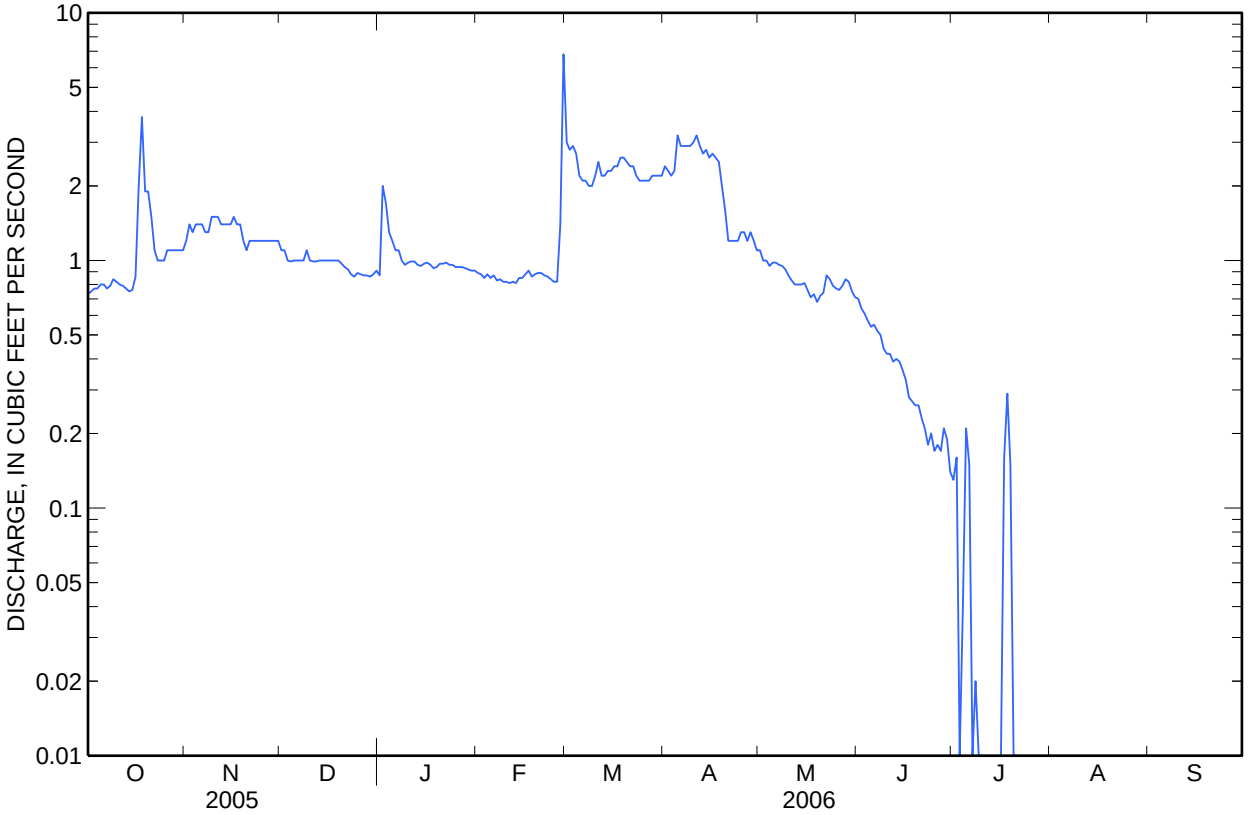
SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1987 - 2006	
Annual total	1,199.15		341.48			
Annual mean	3.29		0.94		0.82	
Highest annual mean					4.02	1993
Lowest annual mean					0.04	2004
Highest daily mean	110	Jan 11	6.8	Feb 28	110	Jan 11, 2005
Lowest daily mean	0.17	Jul 18	0.00	Jul 3	0.00	Jun 15, 1989
Annual seven-day minimum	0.19	Jul 16	0.00	Jul 20	0.00	Jun 15, 1989
Maximum peak flow			46	Oct 18	153	Jan 7, 1993
Maximum peak stage			10.59	Oct 18	10.83	Jan 9, 2005
Annual runoff (ac-ft)	2,380		677		597	
10 percent exceeds	5.5		2.2		1.8	
50 percent exceeds	1.2		0.87		0.18	
90 percent exceeds	0.73		0.00		0.00	



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1987 to current year.
CHEMICAL DATA: Water years 1987 to current year.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 1 of 3
[Remark codes: <, less than.]

Date	Time	Instantaneous discharge, cfs (00061)	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, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)
Mar													
13...	0720	2.3	730	12.0	98	8.1	215	5.1	83	28.4	2.79	5.42	.5
Apr													
07...	1500	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 3
[Remark codes: <, less than.]

Date	Sodium fraction of cations percent (00932)	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)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	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)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
Mar													
13...	19	9.50	103	125	<.02	2.71	.1	17.6	6.2	136	.19	138	.11
Apr													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

10257720 Chino Canyon Creek below Tramway, near Palm Springs, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 3 of 3
[Remark codes: <, less than.]

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Organic carbon, water, unfltrd mg/L (00680)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)	Mangan-ese, water, fltrd, ug/L (01056)
Mar									
13...	<.04	.36	<.008	<.02	<.04	2.2	14	15	2.8
Apr									
07...	--	--	--	--	--	--	--	--	--