

Water-Data Report 2007

09429000 PALO VERDE CANAL NEAR BLYTHE, CA

Lower Colorado Basin
Imperial Reservoir Subbasin

LOCATION.--Lat 33°43'55", long 114°30'40" referenced to North American Datum of 1927, in NW ¼ NE ¼ sec.19, T.5 S., R.24 E., Riverside County, CA, Hydrologic Unit 15030104, at canal intake structure on west side of Palo Verde diversion dam, 10 mi northeast of Blythe and 44 mi downstream from Headgate Rock Dam. San Bernardino Meridian.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Jan. 1922 to Dec. 1923, Jan. 1925 to current year (prior to Oct. 1950, monthly discharge only).

REVISED RECORDS.--WSP 1213: 1946-48.

GAGE.--The gage consist of three sensors. All sensors are interfaced to the DCP located in forbay structure via SDI-12 hardwire. Float operated encoders are used to measure and record water surface elevation at the forebay and tailrace of the diversion structure. Data from these sensors is used to calculate and record head difference. Outside reference for forebay and tailrace are enamel staff plates located both outside and inside the stilling wells. Gate opening is recorded by a gate encoder mounted to extreme right gate. Data is transmitted to the data logger where it is converted to vertical gate opening. Data is logged every 15 minutes. The gate structure has four, 4 ft high by 12 ft wide curvilinear radial gates, and all are kept at the same setting as standard operating procedure. Vertical gate movement is referenced by four staff gages with indices at 301.81 +/- 0.02 ft (levels of 1995 indicated +0.05 ft change to right gates). The gate opening log is available from PVID.

REMARKS.--Records good. Daily diversions computed on basis of head on intake gates and gate openings. Records published herein represent flow diverted from Colorado River for irrigation. Return flows to Colorado River are measured by 10 wasteways and drains extending throughout the project: 09429130, 09429155, 09429160, 09429170, 09429180, 09429190, 09429200, 09429210, 09429220, 09429230, 5 of these are equipped with water-stage recorders and Parshall flumes, 3 are equipped with Sparling flowmeters. Return flows have not been subtracted.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,360 ft³/s July 30,1981; no flow at times.

REVISIONS.--1987 & 1993, clarification of datum differences, gage paragraph. 1999 - March 1 all gages read by data logger.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,330 ft³/s, Apr. 9, gage height, 1.55 ft; minimum daily discharge, #0.00 ft³/s, on several days.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,630	723	988	0.00	643	1,130	1,100	1,500	1,840	1,690	1,730	1,670
2	1,430	732	753	0.00	644	1,110	1,260	1,500	1,960	1,800	1,870	1,520
3	1,320	748	639	0.00	557	971	1,250	1,540	1,790	1,810	1,770	1,580
4	1,400	797	813	0.00	523	750	1,350	1,570	1,840	1,850	1,860	1,770
5	1,420	663	780	0.00	787	1,110	1,460	1,570	1,820	1,920	1,730	1,840
6	1,320	714	781	0.00	884	1,260	1,500	1,400	1,780	1,890	1,850	1,910
7	1,190	870	782	0.00	797	1,210	1,300	1,580	1,790	1,810	1,850	1,950
8	1,040	823	778	88	866	1,130	1,010	1,710	1,690	1,780	1,860	1,880
9	1,100	863	703	397	969	1,130	1,520	1,700	1,680	1,980	1,940	1,660
10	1,090	939	644	416	989	1,200	1,530	1,710	1,660	2,000	1,920	1,770
11	1,250	873	841	493	886	990	1,480	1,780	1,810	1,990	1,870	1,800
12	1,290	682	812	795	909	1,130	1,320	1,700	1,840	2,000	1,800	1,780
13	1,260	846	842	770	989	1,130	1,290	1,730	1,730	1,950	1,790	1,770
14	1,120	882	763	816	1,100	1,160	1,130	1,750	1,820	1,860	1,640	1,810
15	1,010	867	712	934	1,090	1,310	1,160	1,890	1,770	1,770	1,700	1,750
16	1,130	770	580	1,170	1,160	1,290	1,130	1,970	1,850	1,840	1,880	1,710
17	1,000	789	569	1,190	1,110	1,190	1,100	1,780	1,760	1,900	1,840	1,720
18	1,200	813	821	1,240	911	1,160	1,270	1,920	1,780	1,950	1,790	1,700
19	1,150	708	906	1,180	919	1,340	1,330	1,850	1,650	1,920	1,650	1,670
20	1,060	831	846	1,040	1,050	1,390	1,350	1,440	1,700	1,970	1,760	1,670
21	1,010	835	844	795	1,130	1,530	1,220	1,780	1,800	1,900	1,740	1,760
22	770	790	871	795	1,080	1,310	988	2,010	1,770	1,750	1,810	1,610
23	852	489	627	756	1,050	861	1,220	1,970	1,790	1,900	1,870	1,190
24	663	671	373	832	999	669	1,310	1,870	1,860	1,850	1,860	1,280
25	437	662	332	800	944	490	1,430	2,030	1,900	1,750	1,760	1,360
26	455	582	843	746	1,030	677	1,580	1,820	1,870	1,800	1,650	1,360
27	634	739	1,110	595	1,120	917	1,530	1,730	1,880	1,780	1,850	1,330
28	810	749	1,160	543	1,110	1,120	1,430	1,800	1,910	1,580	1,790	1,290
29	722	710	899	712	---	1,200	1,240	1,710	1,920	1,520	1,740	1,280
30	794	794	14	678	---	1,210	1,330	1,980	1,850	1,770	1,660	1,170
31	700	---	0.00	726	---	1,140	---	2,090	---	1,690	1,650	---
Total	32,257	22,954	22,426.00	18,507.00	26,246	34,215	39,118	54,380	54,110	56,970	55,480	48,560
Mean	1,041	765	723	597	937	1,104	1,304	1,754	1,804	1,838	1,790	1,619
Max	1,630	939	1,160	1,240	1,160	1,530	1,580	2,090	1,960	2,000	1,940	1,950
Min	437	489	0.00	0.00	523	490	988	1,400	1,650	1,520	1,640	1,170
Med	1,090	780	781	726	979	1,130	1,300	1,750	1,800	1,850	1,790	1,680
Ac-ft	63,980	45,530	44,480	36,710	52,060	67,870	77,590	107,900	107,300	113,000	110,000	96,320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	941	790	708	575	954	1,199	1,445	1,536	1,707	1,791	1,623	1,373
Max	1,193	1,041	957	962	1,311	1,428	1,830	1,890	2,081	2,117	2,057	1,725
(WY)	(2003)	(1957)	(2000)	(1964)	(1964)	(1976)	(1978)	(2004)	(2001)	(1981)	(1981)	(1981)
Min	542	473	232	103	380	703	786	1,125	1,300	1,316	1,011	826
(WY)	(1973)	(1966)	(1966)	(1993)	(1993)	(1991)	(1965)	(1952)	(1952)	(1951)	(1992)	(1951)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1951 - 2007	
Annual total	428,108.00		463,939.00			
Annual mean	1,173		1,271		1,221	
Highest annual mean					1,407	1981
Lowest annual mean					987	1993
Highest daily mean	2,090	Aug 8	2,090	May 31	2,360	Jul 30, 1981
Lowest daily mean	0.00	Jan 1	0.00	Dec 31	0.00	Nov 1, 1957
Annual seven-day minimum	12	Jan 1	0.00	Dec 31	0.00	Jan 1, 1965
Annual runoff (ac-ft)	849,200		920,200		884,600	
10 percent exceeds	1,710		1,870		1,830	
50 percent exceeds	1,160		1,260		1,250	
90 percent exceeds	693		669		612	

