

Water-Data Report 2009

09429600 COLORADO RIVER BELOW LAGUNA DAM, AZ-CA

Lower Colorado Basin
Lower Colorado Subbasin

LOCATION.--Lat 32°48'44", long 114°30'51" referenced to North American Datum of 1927, in SE ¼ NE ¼ sec.35, T.15 S., R.24 E., Imperial County, CA, Hydrologic Unit 15030107, San Bernardino meridian, on right bank 1.4 mi downstream from Laguna Dam, 2.8 mi northeast of Bard, CA, and 10 mi northeast of Yuma, AZ.

DRAINAGE AREA.--188,600 mi² of which 4,000 mi² probably is noncontributing, in Great Divide basin in southern Wyoming.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--December 1971 to current year.

GAGE.—An electronic data-logger with fifteen minute interval, GOES radio and GPS antenna connected to a gas pressure transducer system. All instruments are housed in a 5x5 ft steel walk-in shelter mounted on a six inch concrete floor located on the right bank within the A-frame fenced area. The reference gage is an outside staff gage of standard enamel sections, reading from 2.50 ft to 10.14 ft. Outside staff is located at the end of the orifice. Gage datum is 120.77 ft.

Cableway zero station, after refurbishing in 1990, is the bottom of turnbuckle of 7/8 inch cable on left bank. This reversed the previous stationing.

REMARKS.--Record is rated fair. Natural flow of Colorado River at this point is affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation, municipal, and industrial uses, and return flows from irrigated areas. Flow past station consists mainly of water released through Imperial Dam, sludge from the desilting basins at Imperial Dam, seepage through Imperial Dam, and seepage from the All-American Canal and the Gila Gravity Main Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge of 30,900 ft³/sec on August 19, 1983; minimum daily discharge of 71 ft³/sec on May 29, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge of 3,150 ft³/sec on December 18; minimum daily discharge of 264 ft³/sec on July 10.

09429600 COLORADO RIVER BELOW LAGUNA DAM, AZ-CA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	462	416	1,050	339	386	418	963	1,540	434	282	328	483
2	435	486	939	331	391	490	424	1,560	429	280	314	435
3	413	451	547	331	387	620	425	2,560	427	278	331	430
4	387	407	418	794	391	490	422	1,520	429	276	343	380
5	358	379	396	655	389	448	421	703	424	273	362	386
6	340	355	376	460	376	442	420	672	423	273	375	402
7	333	355	357	412	665	443	419	750	421	270	382	408
8	330	335	341	513	2,430	555	423	504	420	268	420	611
9	607	316	324	807	2,710	737	427	489	416	265	462	390
10	725	314	316	589	2,440	670	446	475	414	264	423	375
11	447	320	312	648	2,090	690	699	464	408	265	420	391
12	417	300	307	492	698	535	3,140	456	405	265	416	404
13	392	289	307	421	441	503	2,420	450	403	267	402	436
14	363	283	306	405	417	491	998	445	400	268	499	421
15	345	274	302	390	399	477	524	441	399	271	1,090	397
16	333	280	383	377	384	469	498	436	396	272	434	396
17	329	282	1,920	362	371	458	481	433	396	272	418	398
18	460	281	3,150	348	356	449	474	432	393	271	410	397
19	1,720	280	1,930	337	345	444	721	429	393	274	407	398
20	1,160	282	2,240	331	368	439	598	426	390	274	403	400
21	457	286	971	326	385	436	491	425	387	273	406	401
22	419	284	1,010	324	396	635	478	427	385	275	1,480	437
23	398	282	597	323	404	700	470	428	375	279	1,930	454
24	374	281	601	321	409	1,040	461	445	343	280	662	442
25	454	283	590	320	405	1,200	1,060	453	312	290	452	431
26	2,020	1,100	437	343	407	1,100	3,050	449	297	542	432	423
27	732	2,440	410	332	411	1,090	2,070	446	292	572	497	417
28	434	1,520	394	351	413	1,100	1,240	442	287	433	729	451
29	408	2,250	379	365	---	1,160	1,080	436	318	391	1,270	435
30	385	2,280	365	372	---	1,180	1,240	433	292	371	619	394
31	396	---	349	382	---	1,090	---	435	---	352	652	---
Total	16,833	17,691	22,324	13,101	19,664	20,999	26,983	20,004	11,508	9,486	17,768	12,623
Mean	543	590	720	423	702	677	899	645	384	306	573	421
Max	2,020	2,440	3,150	807	2,710	1,200	3,140	2,560	434	572	1,930	611
Min	329	274	302	320	345	418	419	425	287	264	314	375
Ac-ft	33,390	35,090	44,280	25,990	39,000	41,650	53,520	39,680	22,830	18,820	35,240	25,040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,650	1,498	1,656	1,941	1,709	1,514	1,290	1,375	1,648	2,034	2,112	1,910
Max	22,660	15,570	15,680	15,420	15,570	13,750	12,610	12,400	15,150	24,380	26,350	22,440
(WY)	(1984)	(1984)	(1985)	(1984)	(1984)	(1984)	(1984)	(1986)	(1984)	(1983)	(1983)	(1983)
Min	259	274	261	234	190	333	345	285	316	306	318	256
(WY)	(1974)	(1994)	(1974)	(1976)	(1979)	(1979)	(1978)	(1973)	(1973)	(2009)	(1996)	(1996)

09429600 COLORADO RIVER BELOW LAGUNA DAM, AZ-CA—Continued

SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1972 - 2009	
Annual total	215,978		208,984			
Annual mean	590		573		1,724	
Highest annual mean					14,940	1984
Lowest annual mean					352	1996
Highest daily mean	3,370	Sep 1	3,150	Dec 18	30,900	Aug 19, 1983
Lowest daily mean	274	Nov 15	264	Jul 10	71	May 29, 1973
Annual seven-day minimum	280	Nov 14	266	Jul 8	141	Feb 1, 1979
Annual runoff (ac-ft)	428,400		414,500		1,249,000	
10 percent exceeds	1,040		1,090		3,980	
50 percent exceeds	408		418		461	
90 percent exceeds	330		287		296	

