Water-Data Report 2011

11102300 Rio Hondo below Whittier Narrows Dam, CA

Los Angeles River Basin

LOCATION.--Lat 34°01′00″, long 118°05′15″ referenced to North American Datum of 1927, Los Angeles County, CA, Hydrologic Unit 18070105, in Paso de Bartolo Grant, on right levee, 0.2 mi upstream from Beverly Boulevard, 0.4 mi downstream from axis of Whittier Narrows Dam, and 1.0 mi northeast of Montebello.

DRAINAGE AREA.--124 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 175 ft above NGVD of 1929, from topographic map.

COOPERATION.--Discharge records for current year provided by Los Angeles County Department of Public Works. A total of 48 days of USGS data was used from station 11102300 are as follow: Nov. 20, 21, 25-27, Dec. 06, 10-15, 18-25, 28, 29, Jan. 02-06, 11, 12, Feb. 19, 26-28, Mar. 10-15, 21, 22, 25, Apr. 13-18. The rest of the water year used the Los Angeles County Department of Public Works data for a total of 317 days. The data provided by Los Angeles County Department of Public Works was not reviewed by the U.S. Geological Survey.

REMARKS.--Records poor. Flow regulated by Whittier Narrows Flood-Control Reservoir, capacity, 36,160 acre-ft. There are several small flood-control reservoirs (combined capacities, 1,700 acre-ft) and several small debris basins above Whittier Narrows Dam. Many diversions for domestic use and irrigation. At times flow is diverted from San Gabriel River to Rio Hondo from sites below Santa Fe Dam and above Whittier Narrows Dam. See schematic diagram of San Gabriel River and Los Angeles River Basins available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,800 ft^3/s, Jan. 25, 1969, gage height, 13.82 ft, from rating curve extended above 15,000 ft^3/s, on basis of gate openings at dam at gage heights 12.32 and 13.82 ft; no flow at times in most years.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 11102300, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/11102300.2011.pdf

11102300 Rio Hondo below Whittier Narrows Dam, CA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	10	183	139	170	102	98	57	185	0.33	7.9	90	56
2	10	199	92	914	100	29	33	185	0.64	6.6	120	13
3	11	235	57	408	122	34	28	186	0.37	3.1	143	13
4	4.4	233	40	420	174	19	23	186	0.41	1.4	156	15
5	24	223	62	454	177	14	97	160	0.31	1.4	217	20
6	50	225	546	353	172	13	183	13	0.98	1.4	217	21
7	16	225	28	88	178	36	114	1.3	0.59	1.3	232	79
8	21	253	16	40	193	128	25	0.73	61	1.2	239	9.8
9	17	230	36	34	194	90	21	0.33	68	1.1	207	9.5
10	12	230	313	100	191	598	19	0.09	57	0.91	136	22
11	14	192	301	475	189	632	58	0.04	109	0.64	115	63
12	12	149	316	358	58	507	181	0.02	137	0.31	100	90
13	5.6	126	329	78	35	650	302	0.01	120	0.34	61	99
14	7.5	115	328	64	21	633	319	0.00	87	0.21	118	108
15	11	109	309	50	14	486	460	0.29	88	0.45	79	110
16	13	129	109	39	321	78	443	6.5	94	0.75	89	116
17	10	160	38	32	20	15	457	16	92	0.73	156	113
18	20	166	1,570	25	159	34	407	18	92	0.70	160	128
19	27	100	8,170	9.9	1,810	89	210	0.62	95	0.72	158	134
20	102	446	8,610	50	459	821	30	0.46	102	0.75	116	129
21	118	524	5,860	27	27	2,330	12	0.41	107	0.72	110	126
22	151	91	11,000	25	60	390	4.7	0.39	181	0.70	109	128
23	143	185	732	23	134	164	3.0	0.32	158	0.70	93	124
24	155	217	742	22	77	140	2.7	0.49	125	0.70	50	80
25	205	320	622	18	223	362	4.1	0.57	115	0.70	1.6	52
26	173	338	224	94	2,190	204	76	0.40	114	0.70	1.5	35
27	173	381	451	105	369	211	133	0.48	118	1.4	1.3	27
28	175	193	312	115	442	193	164	0.46	76	43	1.2	23
29	177	164	810	129	---	185	157	0.51	64	80	0.53	21
30	313	158	179	161	---	129	172	0.56	40	93	0.03	21
31	187	---	173	122	---	195	---	0.72	---	95	129	---
Total	2,367.5	6,499	42,514	5,002.9	8,211	9,507	4,195.5	964.70	2,303.63	348.53	3,406.16	1,985.3
Mean	76.4	217	1,371	161	293	307	140	31.1	76.8	11.2	110	66.2
Max	313	524	11,000	914	2,190	2,330	460	186	181	95	239	134
Min	4.4	91	16	9.9	14	13	2.7	0.00	0.31	0.21	0.03	9.5
Ac-ft	4,700	12,890	84,330	9,920	16,290	18,860	8,320	1,910	4,570	691	6,760	3,940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	90.9	124	182	358	504	305	115	94.8	86.5	60.0	47.1	58.3
Max	302	362	1,371	2,753	3,459	2,265	371	323	355	205	244	413
(WY)	(1984)	(1992)	(2011)	(2005)	(1969)	(1983)	(1983)	(1998)	(1992)	(1993)	(1991)	(1991)
Min	0.00	0.00	10.3	10.7	22.1	4.97	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1978)	(2006)	(1977)	(2009)	(1984)	(2008)	(2009)	(1999)	(2001)	(2001)	(2000)	(2001)

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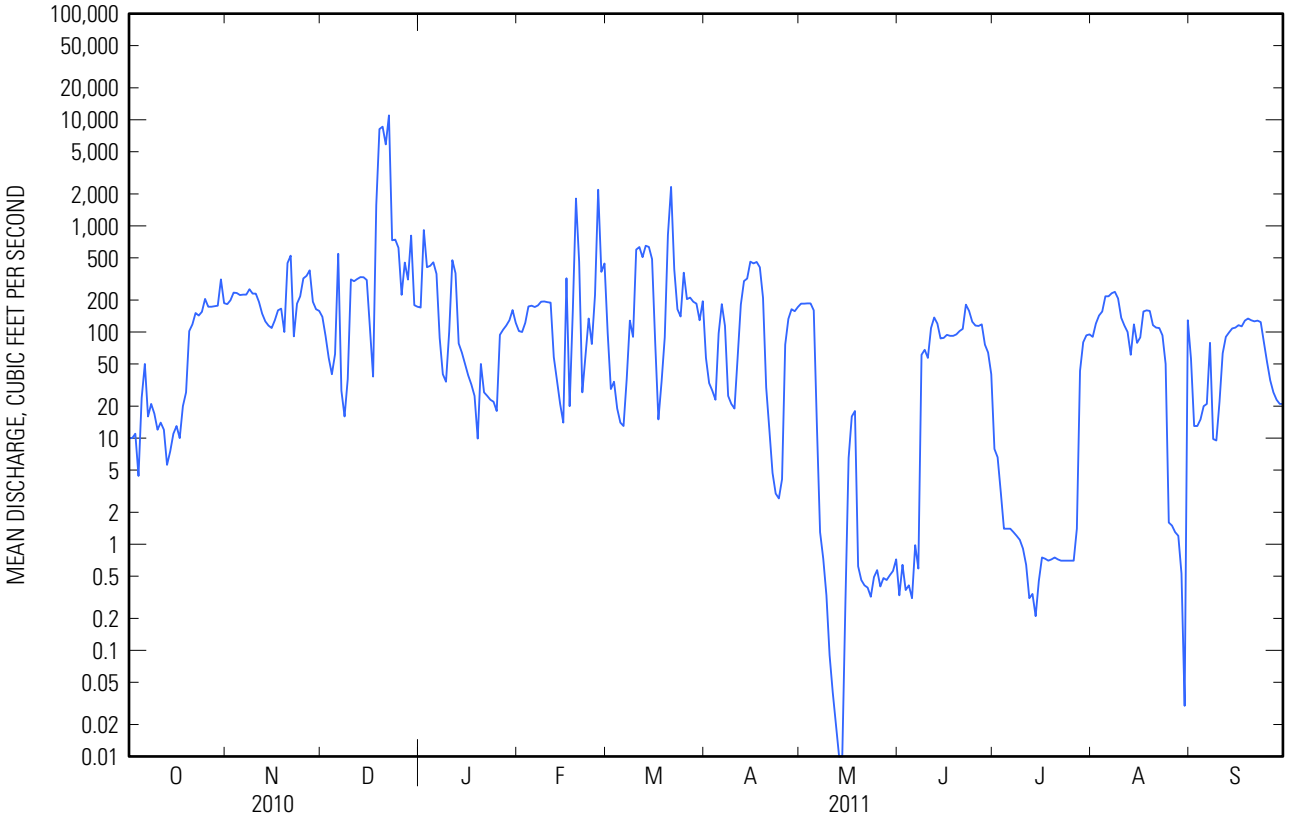
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1967 - 2011	
Annual total	83,289.69		87,305.22			
Annual mean	228		239		167	
Highest annual mean					638	1993
Lowest annual mean					40.9	1972
Highest daily mean	11,000	Dec 22	11,000	Dec 22	21,200	Mar 2, 1983
Lowest daily mean	0.00	Jul 1	0.00	May 14	0.00	Oct 29, 1966
Annual seven-day minimum	0.00	Jul 1	0.11	May 9	0.00	Sep 10, 1969
Maximum peak flow			29,600	Dec 20	38,800	Jan 25, 1969
Maximum peak stage			12.07	Dec 20	13.82	Jan 25, 1969
Annual runoff (ac-ft)	165,200		173,200		121,000	
10 percent exceeds	314		374		239	
50 percent exceeds	21		94		63	
90 percent exceeds	0.00		0.70		0.01