



Water-Data Report 2007

08393610 RIO HONDO NEAR ROSWELL, NM

Upper Pecos Basin
Rio Hondo Subbasin

LOCATION.--Lat 33°24'31.59", long 104°28'18.18" referenced to North American Datum of 1983, Chaves County, NM, Hydrologic Unit 13060008, on right bank 0.25 mi upstream from Red Bridge Road, 0.60 mi upstream from Berrendo Creek, and 1.1 mi north on State Road 265 (intersection of Red Bridge Road and U.S. Highway 380), at Pecos River mile 588.

DRAINAGE AREA.--2,900 mi², approximately (contributing area).

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1997 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,500 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by Two Rivers Reservoir (08390600) 25.0 mi upstream. Diversions and groundwater withdrawals for irrigation upstream from station. Several observations of water temperature were made during the year.

Water-Data Report 2007

08393610 RIO HONDO NEAR ROSWELL, NM—Continued

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	10	49	7.1	4.2	12	6.8	2.2	3.2	4.8	3.9	5.4	4.7
2	6.8	55	13	4.2	12	4.0	4.5	37	4.2	4.0	29	4.7
3	4.6	41	14	7.0	12	3.7	6.2	4.0	4.2	3.8	32	4.9
4	4.3	35	15	9.3	12	3.6	4.1	3.5	12	4.1	14	4.9
5	4.4	35	4.1	7.6	12	3.7	4.0	3.5	4.7	4.1	4.7	4.9
6	4.6	25	3.5	6.8	11	3.5	4.0	3.5	4.0	7.9	5.0	5.0
7	5.0	27	23	6.3	9.4	3.6	4.0	3.5	4.1	3.7	4.7	5.2
8	5.3	14	17	6.7	8.7	3.6	4.1	36	4.0	3.9	4.6	7.6
9	12	6.6	21	6.7	9.0	4.1	4.0	4.2	3.9	4.3	6.9	16
10	7.9	11	20	4.5	6.0	3.4	6.3	3.5	3.8	4.7	4.5	12
11	5.5	12	14	4.6	5.5	3.3	5.5	3.5	4.0	13	4.7	20
12	69	9.4	3.9	5.0	5.5	5.2	4.5	3.6	4.4	21	4.9	5.1
13	8.6	9.1	3.5	10	5.5	3.6	7.5	3.7	3.9	3.5	5.1	5.0
14	8.3	7.9	29	7.2	6.9	3.0	4.2	3.9	3.8	3.4	4.8	4.8
15	11	5.0	19	14	15	2.9	4.0	4.0	3.8	3.4	4.6	4.7
16	65	4.8	9.3	7.7	15	2.9	4.0	4.1	3.9	3.5	4.7	4.6
17	103	3.8	10	6.1	11	2.9	3.9	14	4.0	3.5	5.5	4.5
18	13	4.3	11	6.2	12	2.9	3.7	4.4	4.1	3.6	6.0	4.5
19	72	3.7	12	6.5	14	2.8	3.7	7.1	4.0	3.6	5.8	4.5
20	107	3.6	13	10	8.8	3.0	3.9	18	3.8	3.7	5.7	11
21	4.1	4.6	17	9.9	6.3	3.4	3.7	39	4.1	3.9	5.6	11
22	3.8	7.8	16	13	9.0	3.1	3.5	24	4.0	3.8	4.9	4.2
23	68	12	21	12	14	32	3.4	18	22	3.9	4.7	12
24	74	6.8	15	12	4.7	8.4	3.4	13	5.5	4.0	4.5	5.0
25	4.1	5.9	14	12	4.4	4.9	3.4	8.4	3.6	4.2	4.5	4.0
26	45	3.7	14	12	4.4	2.6	3.5	5.9	3.5	4.3	4.5	4.0
27	118	3.5	8.6	12	5.7	2.5	3.6	12	3.6	4.2	4.5	3.9
28	61	3.5	4.4	11	5.2	2.3	3.5	18	65	4.4	4.5	3.8
29	56	3.6	4.2	10	---	2.3	29	12	5.8	4.7	4.8	4.2
30	47	3.7	4.3	9.9	---	2.4	4.6	7.4	4.1	4.8	5.0	4.2
31	36	---	4.2	12	---	2.2	---	7.8	---	5.0	4.8	---
Total	1,044.3	417.3	385.1	266.4	257.0	138.6	149.9	333.7	210.6	153.8	214.9	194.9
Mean	33.7	13.9	12.4	8.59	9.18	4.47	5.00	10.8	7.02	4.96	6.93	6.50
Max	118	55	29	14	15	32	29	39	65	21	32	20
Min	3.8	3.5	3.5	4.2	4.4	2.2	2.2	3.2	3.5	3.4	4.5	3.8
Ac-ft	2,070	828	764	528	510	275	297	662	418	305	426	387

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	10.0	7.56	7.40	7.51	5.57	5.25	5.44	7.23	6.85	5.62	10.6	12.8
Max	33.7	13.9	12.4	10.7	9.52	11.2	8.98	28.0	16.5	13.8	47.1	86.5
(WY)	(2007)	(2007)	(2007)	(2002)	(2001)	(2001)	(2004)	(1999)	(1997)	(1999)	(2006)	(2006)
Min	3.01	3.11	2.75	3.02	2.68	3.07	2.54	2.16	2.57	2.01	3.24	3.70
(WY)	(2003)	(2004)	(2004)	(2004)	(2005)	(2004)	(2005)	(2006)	(2005)	(2005)	(1999)	(1998)

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1997 - 2007	
Annual total	6,611.7		3,766.5			
Annual mean	18.1		10.3		7.64	
Highest annual mean					14.1	2006
Lowest annual mean					3.96	2004
Highest daily mean	193	Aug 16	118	Oct 27	516	May 1, 1999
Lowest daily mean	1.6	Jul 19	2.2	Mar 31	0.88	Jun 4, 2003
Annual seven-day minimum	1.8	Jul 19	2.4	Mar 26	1.4	Sep 14, 2005
Maximum peak flow			611	Jun 28	6,390	May 1, 1999
Maximum peak stage			10.62	Jun 28	15.96	May 1, 1999
Instantaneous low flow			0.83	Oct 3	0.42	Jun 3, 2003
Annual runoff (ac-ft)	13,110		7,470		5,540	
10 percent exceeds	60		20		11	
50 percent exceeds	3.7		4.9		4.2	
90 percent exceeds	2.1		3.5		2.5	

