07124200 PURGATOIRE RIVER AT MADRID, CO

LOCATION.--Lat 37°07'46", long 104°38'22", in SW¼NE¼ sec.35, T.33 S., R.65 W., Las Animas County, Hydrologic Unit 11020010, on left bank 70 ft downstream from county road bridge, 0.3 mi northeast of Madrid, 1.0 mi downstream from Burro Canyon, and 9 mi west of Trinidad.

DRAINAGE AREA.--505 mi^2.

PERIOD OF RECORD.--March 1972 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07124200

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 6,261.61 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records good except for July 17 to August 13, and estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, ground-water withdrawals, and return flows from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	31	24	e15	18	14	23	477	132	155	147	78
2	40	30	22	e16	e18	19	25	624	130	130	133	70
3	56	28	20	e15	e18	17	70	540	134	111	124	64
4	69	27	20	e15	e15	19	47	441	153	102	190	64
5	48	25	23	e16	e16	21	49	406	177	95	1,490	67
6	41	23	22	e17	e16	16	52	398	197	94	686	60
7	45	26	21	e18	e17	19	61	401	203	88	488	57
8	43	27	20	e17	e17	20	82	405	206	81	351	54
9	39	26	20	e17	e18	21	100	392	204	76	310	54
10	37	24	14	e18	e17	23	99	390	198	74	258	52
11	35	23	24	e19	e17	23	96	389	168	85	670	48
12	36	22	27	e20	17	22	90	386	150	78	525	46
13	35	25	20	e19	e18	23	100	363	138	73	456	44
14	34	26	e14	e20	e19	24	118	318	134	66	212	40
15	33	25	e12	e19	e21	24	114	269	136	71	162	38
16	31	25	e14	e19	28	22	111	249	129	87	123	37
17	30	25	e15	18	28	21	116	250	121	302	109	34
18	28	23	e17	16	24	21	124	240	118	201	101	31
19	26	22	e18	15	24	22	121	232	123	236	144	34
20	28	26	e21	e16	21	24	115	239	121	181	230	38
21	29	24	e20	e15	18	25	110	251	118	170	223	34
22	29	23	e20	13	15	26	111	248	117	164	175	37
23	30	18	e21	e15	15	27	117	233	109	157	137	37
24	27	19	e20	e15	19	27	169	212	99	266	113	34
25	27	e20	e17	16	14	28	209	191	120	528	104	36
26	28	e21	e14	e18	16	28	281	171	117	287	87	34
27	30	21	e14	e19	20	29	642	161	127	246	90	34
28	31	14	e13	e18	20	30	753	157	135	260	95	40
29	30	e23	e14	e18	15	27	564	164	197	270	82	47
30	29	e23	e14	e18	---	25	494	163	187	205	76	37
31	31	---	e15	e17	---	23	---	144	---	167	83	---
TOTAL	1,099	715	570	527	539	710	5,163	9,504	4,398	5,106	8,174	1,380
MEAN	35.5	23.8	18.4	17.0	18.6	22.9	172	307	147	165	264	46.0
MAX	69	31	27	20	28	30	753	624	206	528	1,490	78
MIN	26	14	12	13	14	14	23	144	99	66	76	31
AC-FT	2,180	1,420	1,130	1,050	1,070	1,410	10,240	18,850	8,720	10,130	16,210	2,740

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2004, BY WATER YEAR (WY)

MEAN	29.9	24.5	20.6	18.5	19.2	20.7	49.2	145	189	122	112	55.4
MAX	78.5	39.2	40.3	36.6	37.2	55.9	204	547	589	313	342	232
(WY)	(1983)	(1999)	(1984)	(1984)	(1983)	(1987)	(1987)	(1999)	(1983)	(1983)	(1981)	(1981)
MIN	9.89	12.7	8.47	7.60	5.80	9.72	11.0	14.4	9.51	12.5	8.12	11.0
(WY)	(1973)	(1977)	(1977)	(1973)	(1977)	(1979)	(2002)	(2002)	(2002)	(2002)	(2002)	(1978)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1972 - 2004	
ANNUAL TOTAL	16,329.7		37,885			
ANNUAL MEAN	44.7		104		68.8	
HIGHEST ANNUAL MEAN					145	1983
LOWEST ANNUAL MEAN					13.0	2002
HIGHEST DAILY MEAN	291	Sep 3	1,490	Aug 5	1,640	Sep 7, 1981
LOWEST DAILY MEAN	8.6	Feb 4	e12	Dec 15	1.4	Sep 7, 2002
ANNUAL SEVEN-DAY MINIMUM	9.3	Feb 2	e14	Dec 26	2.8	Aug 26, 2002
MAXIMUM PEAK FLOW			a6,230	Aug 5	b14,300	Jul 20, 1976
MAXIMUM PEAK STAGE			7.12	Aug 5	c12.80	Jul 20, 1976
ANNUAL RUNOFF (AC-FT)	32,390		75,140		49,830	
10 PERCENT EXCEEDS	114		250		174	
50 PERCENT EXCEEDS	27		36		29	
90 PERCENT EXCEEDS	12		17		13	

e Estimated.
a From slope-area measurement of peak flow.
b From timed-drift measurement of peak flow.
c From floodmarks.