09180000 DOLORES RIVER NEAR CISCO, UT

Dolores River Basin

LOCATION.--Lat 38°47′50″, long 109°11′40″ referenced to North American Datum of 1927, in SW ¼ SE ¼ sec.18, T.23 S., R.25 E., Grand County, Hydrologic Unit 14030004, on left bank 0.2 mi downstream from Line Canyon, 9.1 mi upstream from mouth, 13.5 mi downstream from Colorado-Utah State line, and 13.9 mi southeast of Cisco.

DRAINAGE AREA.--4,580 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

REVISED RECORDS.--WDR UT-75-1: 1974.

GAGE.--Water-stage recorder. Elevation of gage is 4,165 ft above NGVD of 1929, from river-profile map. December 6, 1950 to April 18, 1967, at site 200 ft downstream at different datum; April 19, 1967 to September 3, 1975 at site 10 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by McPhee Reservoir, capacity 381,000 acre-ft, since 1986. Many diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft^3/s, Apr 21, 1958, gage height, 9.84 ft at different datum; minimum daily discharge, 1.5 ft^3/s, Jul 21, 2002.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 18	1715	5,020	11.15
May 26	0130	*9,420	*13.16

Minimum daily discharge, 104 ft^3/s, Dec 26.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	397	226	183	e170	201	258	511	e2,600	2,770	1,120	264	141
2	349	205	166	e173	189	246	464	e2,560	2,520	975	286	130
3	310	190	171	e165	180	250	496	e2,550	2,550	880	382	122
4	271	173	173	e163	170	247	648	e2,600	2,620	874	494	133
5	221	179	190	e170	168	233	925	e2,800	2,280	770	337	127
6	213	176	205	174	169	210	1,030	e2,840	2,020	713	331	166
7	365	169	209	166	182	211	1,090	e2,930	1,890	675	305	175
8	248	165	167	147	185	215	1,520	e3,000	1,720	646	349	164
9	212	183	170	143	181	236	2,410	e3,300	1,570	610	437	300
10	190	184	158	e160	171	296	2,600	e3,600	1,600	565	324	376
11	182	202	172	e170	164	391	1,770	e3,500	1,540	567	370	422
12	176	194	162	e200	181	563	1,320	e3,460	1,410	526	462	328
13	171	184	162	e260	212	715	1,280	e3,600	1,400	505	474	210
14	167	191	153	e180	232	789	1,830	e3,800	1,360	491	405	187
15	164	194	150	e190	273	798	2,830	e3,900	1,320	535	334	167
16	165	179	147	e200	304	692	3,430	e4,200	1,280	542	299	158
17	161	174	153	211	284	566	3,770	e4,800	1,350	504	285	157
18	156	179	168	201	271	523	4,340	e4,970	1,620	441	415	143
19	155	170	162	200	272	483	4,330	e4,870	2,150	417	311	140
20	155	180	172	199	321	458	3,800	e5,100	2,050	405	251	128
21	158	183	178	195	333	462	3,020	6,090	1,900	e330	228	134
22	157	185	182	183	374	441	2,410	7,060	1,890	312	212	131
23	160	186	195	189	359	414	2,340	7,650	1,970	296	194	146
24	163	185	120	186	363	427	2,920	8,670	1,950	313	191	157
25	164	195	128	188	340	454	3,620	9,020	1,960	548	183	171
26	168	178	104	192	319	491	3,490	9,030	1,870	464	173	147
27	168	200	138	211	296	449	e3,000	8,650	1,590	631	161	134
28	186	229	156	229	272	413	e2,700	7,770	1,370	464	183	200
29	233	215	171	226	---	462	e2,600	5,820	1,340	369	174	378
30	336	204	e200	222	---	588	e2,350	3,670	1,300	306	168	226
31	296	---	e280	221	---	565	---	3,200	---	278	150	---
Total	6,617	5,657	5,245	5,884	6,966	13,546	68,844	147,610	54,160	17,072	9,132	5,698
Mean	213	189	169	190	249	437	2,295	4,762	1,805	551	295	190
Max	397	229	280	260	374	798	4,340	9,030	2,770	1,120	494	422
Min	155	165	104	143	164	210	464	2,550	1,280	278	150	122
Ac-ft	13,120	11,220	10,400	11,670	13,820	26,870	136,600	292,800	107,400	33,860	18,110	11,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2005, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	234	232	191	167	214	425	1,585	2,536	1,410	474	276	236
Max	617	894	606	370	518	1,037	5,338	8,803	3,895	1,827	917	779
(WY)	(1987)	(1987)	(1987)	(1987)	(1987)	(1997)	(1993)	(1993)	(1995)	(1995)	(1999)	(1999)
Min	112	115	93.5	92.3	112	132	177	113	76.5	5.41	9.57	80.6
(WY)	(2002)	(2004)	(2003)	(2003)	(2003)	(2002)	(1990)	(2002)	(2002)	(2002)	(2002)	(1989)

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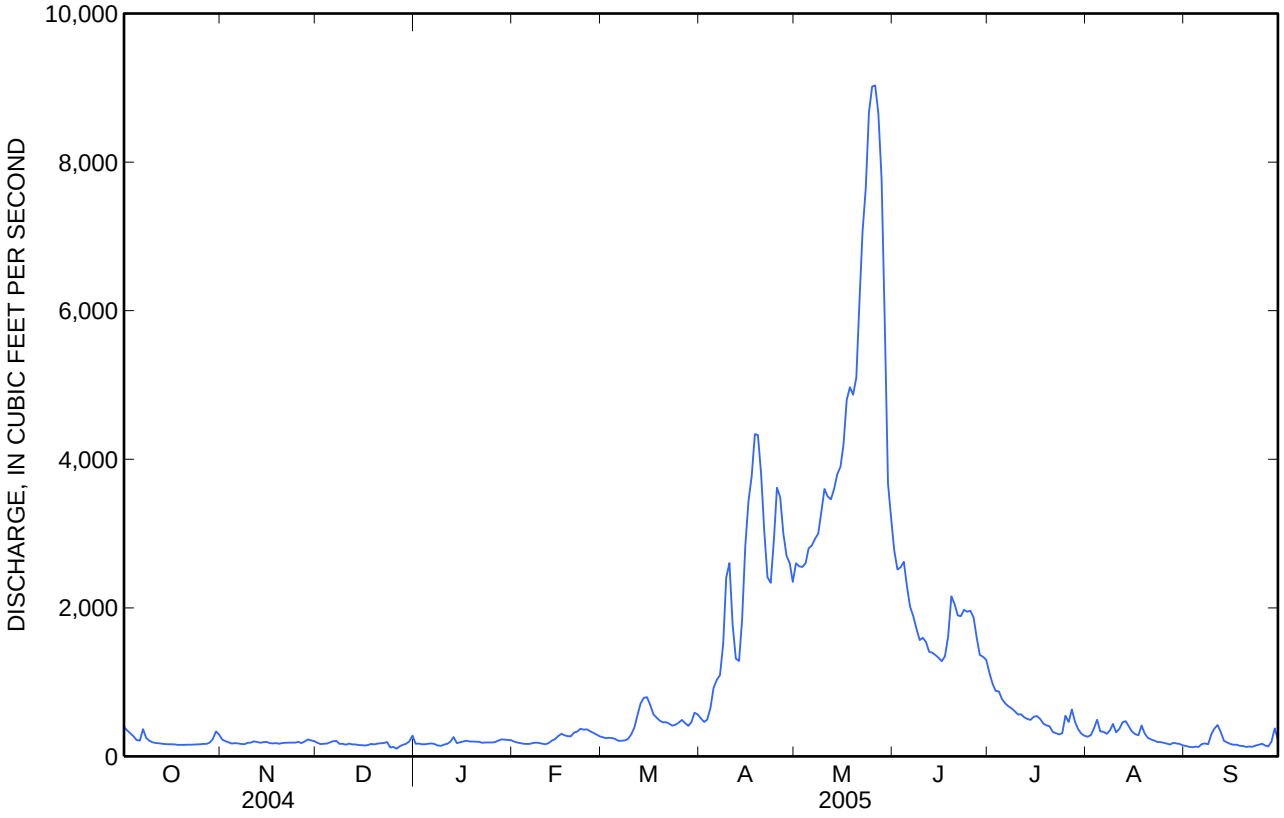
SUMMARY STATISTICS

	Calendar Year 2004		Water Year 2005		Water Years 1987 - 2005	
Annual total	116,005		346,431			
Annual mean	317		949		666	
Highest annual mean					1,768	1993
Lowest annual mean					107	2002
Highest daily mean	1,340	Mar 26	9,030	May 26	12,900	May 18, 1993
Lowest daily mean	70	Sep 3	104	Dec 26	1.5	Jul 21, 2002
Annual seven-day minimum	73	Aug 29	138	Aug 31	1.7	Jul 16, 2002
Annual runoff (ac-ft)	230,100		687,100		482,600	
10 percent exceeds	754		2,830		1,700	
50 percent exceeds	180		280		223	
90 percent exceeds	113		161		106	



WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1951 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1951 to September 1959, October 1964 to September 1981, March 1982 to current year.
WATER TEMPERATURE: March 1951 to September 1959, October 1964 to September 1981, March 1982 to current year.
SUSPENDED-SEDIMENT DISCHARGE: March 1951 to December 1953, October 1957 to September 1964.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office. No temperature and specific conductance data was collected in the 2005 water year, but a continuous quality water monitor for temperature and specific conductance will be in place for the 2006 water year.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 21,600 microsiemens/cm, Jul 9, 1977; minimum observed, 240 microsiemens/cm, Jun 22, 1983.
WATER TEMPERATURE: Maximum observed, 32.0°C, Jul 9, 2002; minimum observed, -0.1°C, Dec 31, 2002, Jan 1, 2003.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Gage height, feet (00065)	Instan-taneous dis-charge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Residue on evap. at 180degC wat flt mg/L (70300)
Nov								
18...	0915	7.18	183	8.3	1,180	9.0	7.5	706
Dec								
15...	0930	6.96	171	8.3	1,400	2.0	2.0	848
Mar								
02...	0930	7.33	242	8.4	1,410	6.0	7.0	853
Apr								
14...	0900	8.92	1,510	8.1	420	13.0	10.0	255
May								
13...	0850	10.43	3,610	8.1	350	17.0	10.5	206
Jun								
23...	0900	9.25	1,950	8.2	360	29.0	19.0	206
Aug								
05...	0830	7.45	270	8.0	1,090	24.0	22.0	636