



Water-Data Report UT-2005

**09183500 MILL CREEK AT SHELEY TUNNEL, NEAR MOAB, UT**

Colorado River Basin

LOCATION.--Lat 38°28'59", long 109°24'12" referenced to North American Datum of 1927, in NW ¼ NW ¼ SW ¼ sec.4, T.27 S., R.23 E., San Juan County, Hydrologic Unit 14030005, a tributary between Dolores River and Green River, on the left bank 1,000 ft above Sheley Tunnel, and 9 mi southeast of Moab.

DRAINAGE AREA.--26.8 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--October 1954 to September 1959, October 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,500 ft above NGVD of 1929, from a topographic map. Prior to October 1, 1987 at different site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Small diversion for irrigation above the station. Sheley Tunnel, which diverts water from Mill Creek for K. E. McDougald Reservoir, is located 1,000 ft below the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft<sup>3</sup>/s, Aug 8, 1993, gage height, 7.66 ft from floodmarks, from rating curve extended above 340 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow; minimum recorded, 2.1 ft<sup>3</sup>/s, Apr 5, 1955 and Aug 26, 27, 28, 2002.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 25	0200	111	3.34
Jul 25	1800	*297	*4.43
Aug 10	1445	99	3.24
Aug 16	0515	190	3.87

Minimum daily discharge, 3.7 ft<sup>3</sup>/s, Feb 2.

## 09183500 MILL CREEK AT SHELEY TUNNEL, NEAR MOAB, UT—Continued

**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	6.9	5.9	e4.1	4.7	3.9	4.0	4.9	17	75	48	14	9.5
2	6.7	5.3	e4.3	4.5	3.7	3.9	5.2	16	74	46	14	9.5
3	6.6	6.1	e4.5	4.4	3.8	4.0	6.0	16	80	44	14	9.6
4	6.5	6.1	e4.7	4.5	4.0	4.0	7.3	18	73	40	14	9.6
5	6.6	6.0	4.7	4.5	4.2	4.0	7.0	21	67	35	13	9.6
6	6.6	6.0	5.1	4.4	4.1	4.0	7.0	30	62	33	13	9.4
7	6.6	5.9	5.1	4.3	4.3	4.2	8.2	27	62	32	13	9.3
8	6.5	6.3	5.2	4.4	4.2	4.3	10	25	60	31	13	13
9	6.5	e14	5.1	4.4	4.1	4.4	9.6	31	60	30	12	13
10	6.3	6.5	5.0	4.8	4.2	4.6	9.0	37	57	29	19	14
11	6.2	6.1	5.0	5.7	4.1	4.7	8.0	33	55	27	16	8.9
12	6.0	5.8	5.0	4.7	4.3	4.9	8.0	27	56	26	15	8.8
13	5.9	6.0	5.0	3.9	4.2	5.0	8.8	26	51	25	14	8.7
14	5.9	5.7	4.9	4.1	4.1	4.8	10	33	48	24	14	8.7
15	5.9	5.6	4.8	4.4	4.1	4.6	13	38	49	24	12	8.3
16	5.8	5.6	4.7	4.4	4.1	4.8	18	50	60	23	e20	8.4
17	5.8	5.6	4.8	4.4	3.9	4.8	23	56	65	23	e12	8.3
18	5.9	5.5	4.7	4.3	3.9	4.6	25	57	69	22	e14	8.4
19	5.8	5.3	4.7	4.3	4.1	4.5	25	62	67	22	13	8.3
20	5.6	5.3	4.7	4.4	4.1	4.7	22	76	65	21	12	8.2
21	5.6	5.3	4.7	4.4	3.9	4.6	17	90	63	21	12	8.2
22	6.6	5.3	e4.4	4.4	4.0	4.6	17	96	72	20	12	8.6
23	6.4	5.3	e4.3	4.4	4.0	4.7	19	102	81	19	12	8.4
24	6.6	5.2	e4.2	4.4	3.9	4.8	28	102	75	20	11	8.2
25	6.6	5.3	e4.3	4.2	3.9	5.2	24	104	71	31	11	8.1
26	6.5	5.3	4.7	4.3	4.1	8.0	21	101	65	18	11	7.8
27	6.5	5.2	4.7	4.5	3.9	5.2	21	94	61	16	11	7.1
28	9.4	5.3	4.6	4.4	4.0	5.2	19	91	58	15	11	7.6
29	6.6	4.3	5.4	4.3	---	6.3	18	95	54	15	10	7.3
30	6.3	e4.3	4.7	4.2	---	5.1	17	92	51	15	10	7.1
31	6.3	---	4.6	4.2	---	4.9	---	81	---	14	9.7	---
Total	198.0	175.4	146.7	137.2	113.1	147.4	436.0	1,744	1,906	809	401.7	269.9
Mean	6.39	5.85	4.73	4.43	4.04	4.75	14.5	56.3	63.5	26.1	13.0	9.00
Max	9.4	14	5.4	5.7	4.3	8.0	28	104	81	48	20	14
Min	5.6	4.3	4.1	3.9	3.7	3.9	4.9	16	48	14	9.7	7.1
Ac-ft	393	348	291	272	224	292	865	3,460	3,780	1,600	797	535

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955-59, 1988-2005, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	7.90	7.02	6.37	5.86	5.49	6.07	10.6	27.7	26.7	13.9	9.73	8.24
Max	15.4	15.6	11.0	8.82	8.06	9.43	22.2	70.5	67.9	40.7	18.7	13.5
(WY)	(1998)	(1988)	(1988)	(1988)	(1988)	(1988)	(1958)	(1958)	(1957)	(1995)	(1993)	(1993)
Min	3.63	3.63	3.71	3.66	3.59	3.85	5.42	6.54	4.40	2.78	2.48	3.92
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(1990)	(2002)	(2002)	(2002)	(2002)	(2002)

**09183500 MILL CREEK AT SHELEY TUNNEL, NEAR MOAB, UT—Continued****SUMMARY STATISTICS**

	<b>Calendar Year 2004</b>	<b>Water Year 2005</b>	<b>Water Years 1955-59, 1988-2005</b>	
<b>Annual total</b>	2,742.0	6,484.4		
<b>Annual mean</b>	7.49	17.8	11.3	
<b>Highest annual mean</b>			20.4	1993
<b>Lowest annual mean</b>			4.73	2002
<b>Highest daily mean</b>	27	May 11	141	May 27, 1993
<b>Lowest daily mean</b>	3.8	Feb 12	2.2	Aug 26, 2002
<b>Annual seven-day minimum</b>	4.0	Feb 7	2.3	Aug 23, 2002
<b>Annual runoff (ac-ft)</b>	5,440	12,860	8,200	
<b>10 percent exceeds</b>	15	57	22	
<b>50 percent exceeds</b>	5.9	7.0	7.2	
<b>90 percent exceeds</b>	4.1	4.2	4.5	

