

JORDAN RIVER BASIN

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10172200 RED BUTTE CREEK AT FORT DOUGLAS, NEAR SALT LAKE CITY, UT
(Hydrologic bench mark station)

LOCATION.--Lat 40°46'48", long 111°48'19", in NE^{1/4}SE^{1/4}NW^{1/4} sec. 35, T. 1 N., R. 1 E., Salt Lake County, Hydrologic Unit 16020204, on right bank 0.4 mi upstream from dam forming Red Butte Reservoir, and 1.7 mi northeast of Fort Douglas.

DRAINAGE AREA.--7.25 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year. Figures of monthly discharge for January 1942 to September 1963, collected by Corps of Engineers, U.S. Army, available in files of Salt Lake City District Office, Geological Survey.

GAGE.--Water-stage recorder. Elevation of gage is 5,400 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 105 ft³/s, May 28, 1983, maximum gage height, 3.81 ft, May 17, 1984; minimum, 0.17 ft³/s, Nov 20, 1992, possible ice jam upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Mar 23	1945	*13	*1.41					

Minimum discharge, 0.52 ft³/s, Oct 2.

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	0.53	0.85	0.91	1.1	e1.1	1.4	8.6	6.4	3.6	1.8	1.2	1.1
2	0.52	0.84	0.88	0.99	1.1	1.4	9.3	6.2	3.4	1.7	1.2	1.1
3	0.60	0.86	0.87	e1.1	1.1	1.5	11	6.1	3.4	1.7	1.3	1.2
4	0.58	0.86	0.88	e1.3	1.1	1.5	10	6.0	3.2	1.7	1.3	1.2
5	0.58	0.85	0.89	e1.4	1.1	1.5	10	5.9	3.1	1.6	1.2	1.2
6	0.60	0.85	0.91	e1.4	0.97	1.5	9.9	5.7	3.0	1.6	1.2	1.1
7	0.62	0.85	1.0	e1.2	0.99	1.6	10	5.6	3.0	1.6	1.2	1.1
8	0.63	0.88	1.0	e1.1	1.0	2.0	11	5.5	2.9	1.6	1.1	1.1
9	0.63	0.87	0.92	e1.1	e1.1	2.8	10	5.3	2.8	1.5	1.1	1.1
10	0.64	0.97	1.0	e1.1	e1.0	3.6	9.4	5.2	3.5	1.4	1.1	1.1
11	0.64	0.93	0.96	e1.1	e0.95	4.0	8.7	5.1	3.2	1.4	1.1	1.0
12	0.65	0.91	0.96	e1.3	e0.90	4.2	8.2	5.0	2.9	1.4	1.1	1.1
13	0.65	1.0	1.0	e1.4	e0.90	4.6	8.0	5.1	2.8	1.3	1.1	1.1
14	0.65	1.1	1.0	e1.5	e0.95	5.1	7.7	5.0	2.6	1.3	1.1	1.1
15	0.65	0.97	e0.91	e1.4	e1.0	5.4	7.6	4.6	2.6	1.3	1.1	1.1
16	0.65	1.1	e0.88	e1.3	e1.1	5.5	7.3	4.6	2.5	1.3	1.1	1.1
17	0.65	1.0	e0.87	1.2	1.1	5.8	7.1	4.4	2.5	1.6	1.1	1.1
18	0.65	0.96	e0.96	1.1	1.2	6.3	7.5	4.2	2.4	1.7	1.1	1.0
19	0.65	0.96	1.0	1.1	1.2	7.1	7.1	4.3	2.3	1.4	1.2	1.1
20	0.67	0.95	1.0	1.1	1.2	7.9	7.0	4.3	2.3	1.5	1.1	1.2
21	0.70	0.93	1.1	1.1	1.2	8.5	7.3	4.2	2.2	1.4	1.1	1.1
22	0.70	0.83	1.0	1.1	1.2	9.4	7.4	4.2	2.2	1.3	1.1	1.2
23	0.70	0.86	0.98	1.2	1.3	11	7.4	4.2	2.1	1.4	1.2	1.2
24	0.70	0.90	1.0	e1.1	1.3	12	7.3	4.1	2.0	1.4	1.2	1.2
25	0.71	0.86	e1.1	e1.1	1.4	11	7.2	4.1	2.0	1.3	1.2	1.2
26	0.73	0.88	e0.87	1.1	1.5	11	7.0	4.0	1.9	1.3	1.1	1.2
27	0.75	0.86	e0.57	1.1	1.4	10	6.9	3.9	1.9	1.3	1.2	1.2
28	0.75	0.89	e1.2	1.1	1.4	8.9	7.0	3.9	1.9	1.3	1.2	1.2
29	0.75	0.92	1.2	1.1	1.1	8.3	6.8	4.3	1.9	1.3	1.1	1.2
30	0.80	0.93	1.1	1.1	---	8.1	6.6	3.9	1.9	1.3	1.1	1.2
31	0.83	---	1.2	1.1	---	8.3	---	3.7	---	1.3	1.1	---
TOTAL	20.56	27.42	30.12	36.49	32.86	181.2	246.3	149.0	78.0	45.0	35.6	34.1
MEAN	0.66	0.91	0.97	1.18	1.13	5.85	8.21	4.81	2.60	1.45	1.15	1.14
MAX	0.83	1.1	1.2	1.5	1.5	12	11	6.4	3.6	1.8	1.3	1.2
MIN	0.52	0.83	0.57	0.99	0.90	1.4	6.6	3.7	1.9	1.3	1.1	1.0
AC-FT	41	54	60	72	65	359	489	296	155	89	71	68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	1.92	1.99	1.90	1.93	2.33	4.53	9.06	12.4	6.53	3.26	2.11	1.80
MAX	3.86	3.53	3.37	3.46	7.00	12.8	22.2	50.5	29.7	9.22	5.77	4.10
(WY)	(1984)	(1984)	(1984)	(1971)	(1986)	(1983)	(1986)	(1983)	(1983)	(1983)	(1983)	(1983)
MIN	0.66	0.91	0.91	0.83	1.00	1.06	1.79	1.55	0.95	0.60	0.44	0.47
(WY)	(2004)	(2004)	(1964)	(1964)	(1964)	(1964)	(1990)	(1990)	(1992)	(1990)	(1990)	(1990)

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1964 - 2004
ANNUAL TOTAL	425.51	916.65	
ANNUAL MEAN	1.17	2.50	
HIGHEST ANNUAL MEAN			4.16
LOWEST ANNUAL MEAN			12.5
HIGHEST DAILY MEAN	3.2	May 12	1.12
LOWEST DAILY MEAN	0.39	Aug 21	1983
ANNUAL SEVEN-DAY MINIMUM	0.41	Aug 15	1990
ANNUAL RUNOFF (AC-FT)	844	1,820	95 May 28, 1983
10 PERCENT EXCEEDS	2.1	7.1	0.38 Aug 9, 1990
50 PERCENT EXCEEDS	1.0	1.2	0.39 Sep 10, 1990
90 PERCENT EXCEEDS	0.48	0.85	3,010 9.5 2.4 1.1

e Estimated

