NATIONAL PARK SERVICE
Little Bighorn Battlefield National Monument – Water Year 2003
453400107263001 Little Bighorn River at Little Bighorn National Monument, near Crow Agency, MT

LOCATION. –Lat 45° 34' 00", Long 107° 26' 30", SE ¼ SW ¼ NW ¼ Sec.18, T. 3 S R 35 E, Big Horn County, Hydrologic Unit 10080016, 5 miles southeast of Crow Agency, MT, located on the NW boundary of Little Bighorn Battlefield National Monument.
DRAINAGE AREA. – 1150 mi^2 (based on GIS analysis of 1:100,000 USGS DLG data).
PERIOD OF RECORD. – November 2000 to current year.
GAGE. – Water-stage recorder. Elevation of gage is 3100 feet above sea level as interpreted from a 7.5' USGS topographic map.
REMARKS. – Estimated daily values for November through March are due to ice affects. September 2nd and 3rd are due to a 24 hour data logger delay. Estimates for these periods are considered poor. The remaining discharges are considered excellent. Limited water temperature data was recorded.

Discharge, cubic feet per second
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	80	e100	e100	e103	e107	116	216	1360	302	90	106
2	71	66	99	e96	e100	e105	136	405	1370	280	93	e105
3	74	66	78	e94	e103	e103	138	380	1180	259	90	e99
4	76	75	72	e92	e100	e103	131	324	989	234	90	100
5	77	79	74	e94	e97	e105	121	331	829	241	93	99
6	76	85	69	e92	e95	e107	111	320	745	234	95	91
7	76	89	94	90	e97	e105	104	290	718	230	93	93
8	76	86	88	87	95	e103	103	273	697	228	93	94
9	74	83	88	85	e97	e103	99	331	638	222	95	101
10	73	83	85	e84	e103	e130	97	489	590	212	92	102
11	75	79	89	e82	e102	164	95	670	581	204	92	106
12	78	79	87	e80	e100	195	97	670	573	180	96	117
13	83	77	88	e82	e103	323	98	565	550	175	92	128
14	78	76	88	e86	e105	e710	101	393	521	163	95	135
15	76	79	98	93	e103	e840	107	348	501	146	92	131
16	76	79	90	90	e107	e770	115	344	474	141	94	125
17	76	79	96	88	e110	735	120	367	465	139	98	124
18	76	78	90	89	e107	441	121	417	432	125	98	126
19	75	77	e88	90	e107	419	120	456	391	122	123	123
20	76	77	e84	e88	e105	293	128	438	433	116	130	101
21	77	76	e80	e84	e103	236	128	398	474	118	119	100
22	78	77	e79	e80	e100	210	116	378	466	113	121	93
23	79	76	e80	e84	e95	209	113	370	447	108	120	92
24	80	79	e79	e84	e85	268	138	438	439	110	117	90
25	77	79	e78	e83	e88	280	167	560	488	105	106	86
26	78	e76	e80	e84	e90	205	183	706	470	97	103	87
27	81	82	e86	e85	e92	166	184	881	428	103	100	84
28	78	86	e90	e86	e97	154	188	991	389	101	98	86
29	78	86	e89	e87	---	143	183	1060	358	95	100	85
30	80	83	e94	e92	---	129	188	1140	333	90	98	89
31	88	---	e97	e98	---	117	---	1320	---	93	102	---
TOTAL	2385	2372	2677	2729	2789	8078	3846	16269	18329	5086	3118	3098
MEAN	76.9	79.1	86.4	88.0	99.6	261	128	525	611	164	101	103
MAX	88	89	100	100	110	840	188	1320	1370	302	130	135
MIN	69	66	69	80	85	103	95	216	333	90	90	84
AC-FT	4730	4700	5310	5410	5530	16020	7630	32270	36360	10090	6180	6140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

MEAN	92.3	103	95.6	103	110	169	156	371	332	127	75.6	64.8
MAX	123	137	125	135	129	261	208	525	611	214	101	103
(WY)	2001	2001	2001	2001	2001	2003	2001	2003	2003	2000	2003	2003
MIN	76.9	79.1	75.7	84.8	99.6	86.4	128	188	126	48.7	50.7	35.6
(WY)	2003	2003	2002	2002	2003	2002	2003	2002	2001	2002	2002	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	37302		70776			
ANNUAL MEAN	102		194		148	
HIGHEST ANNUAL MEAN					194	2003
LOWEST ANNUAL MEAN					102	2002
HIGHEST DAILY MEAN	590	Jun 3	1370	Jun 2	1370	Jun 2 2003
LOWEST DAILY MEAN	20	Sep 19	66	Nov 2	20	Sep 19 2002
ANNUAL SEVEN-DAY MINIMUM	22	Sep 13	74	Oct 1	22	Sep 13 2002
MAXIMUM PEAK FLOW	631	Jun 03	1420	Jun 2	1420	Jun 2 2003
MAXIMUM PEAK STAGE	3.46	Jun 03	4.68	Jun 2	5.48	May 19 2000
INSTANTANEOUS LOW FLOW	18	Sep 19	44	Nov 3	23	Sep 29 2001
ANNUAL RUNOFF (AC-FT)	73990		140400		107300	
10 PERCENT EXCEEDS	164		460		331	
50 PERCENT EXCEEDS	82		100		94	
90 PERCENT EXCEEDS	35		78		60	

e Estimated

Revised 8/16/2005