

Missouri River Region - Water Management Information

U. S. Army Corps of Engineers - Civil Works

Discharge Measurements for January 2001

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
22,400	1,200	NCNE	1-4-01	1430	5.73	21,200	33	Air Temp 41	5
15,000	-2,200	SUX	1-5-01	1100	11.05	17,200	32	Air Temp 39	15
17,700	+100	DENE	1-5-01	1315	17.47	17,600	42	Air Temp 34	<1
17,800	-900	OMA	1-6-01	1000	11.34	18,700	33	Air Temp 34	5
22,500	-200	RUNE	1-8-01	1330	5.03	22,700	37	Air Temp 36	<1
16,500	+100	SUX	1-9-01	1100	10.32	16,400	32	Air Temp 27	<1
17,000	0	DENE	1-9-01	1420	17.23	17,000	33	Air Temp 39	0
23,100	-400	STJ	1-9-01	1045	4.60	23,500	33	Air Temp 33	2
24,100	+600	MKC	1-10-01	0915	7.00	23,500	35	Air Temp 46	2
27,200	+400	BNMO	1-11-01	0930	4.22	26,800	34	Air Temp 35	<2
26,000	-1,700	HEMO	1-11-01	1700	2.02	27,700	36	Air Temp	<7
24,000	+300	NCNE	1-16-01	1445	6.14	23,700	36	Air Temp 30	1
24,500	+200	RUNE	1-16-01	1145	5.54	24,300	36	Air Temp 28	<1
13,200	-2,200	SUX	1-17-01	1200	9.39	15,400	32	Air Temp 32	17
14,900	-300	DENE	1-17-01	1200	16.39	15,200	34	Air Temp 34	2
16,000	-1,000	OMA	1-17-01	0840	10.55	17,000	34	Air Temp 28	6
25,300	-400	STJ	1-18-01	0845	5.23	25,700	35	Air Temp 33	2
13,400	-600	OMA	1-22-01	1250	9.47	14,000	34	Air Temp 40.1	4
20,100	+100	NCNE	1-23-01	1515	5.11	20,000	35	Air Temp 42	<1
20,000	-1,500	RUNE	1-23-01	1145	4.39	21,500	37	Air Temp 40	8
13,100	-900	SUX	1-24-01	1245	9.37	14,000	32	Air Temp 19	7
23,200	+800	MKC	1-24-01	0900	6.78	22,400	36	Air Temp 37	3
12,200	-1,500	SUX	1-31-01	1205	8.98	13,700	32	Air Temp 30	12

Discharge Measurements for February 2001

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
85,700	+600	HEMO	2-1-01	1220	10.96	85,100	32	Air Temp	<1
22,000	+900	NCNE	2-6-01	1320	5.61	21,100	37	Air Temp 41	4
19,500	-1,000	RUNE	2-6-01	1005	4.25	20,500	37	Air Temp 32	5
14,600	-700	SUX	2-7-01	1035	9.69	15,300	32	Air Temp 28	5
15,500	-600	DENE	2-7-01	1405	16.60	16,100	32	Air Temp 27	4
33,100	+1,100	BNMO	2-8-01	0915	5.63	32,000	41	Air Temp 63	3
15,100	-700	SUX	2-13-01	1040	9.85	15,800	32	Air Temp 37	5
15,900	-400	DENE	2-13-01	1305	16.72	16,300	35	Air Temp 37	3
30,900	+400	WVMO	2-13-01	0213	8.75	30,500	38	Air Temp 40	1
16,000	-700	OMA	2-14-01	1025	10.55	16,700	36	Air Temp 18	4
28,800	+1,700	MKC	2-14-01	0915	8.22	27,100	39	Air Temp 38	6
15,800	-300	DENE	2-20-01	1205	16.74	16,100	35	Air Temp 30	2
16,700	-600	OMA	2-20-01	1520	10.78	17,300	36	Air Temp 30	<4
23,400	+400	NCNE	2-21-01	1350	5.98	23,000	36	Air Temp 21	2
23,300	-100	RUNE	2-21-01	1040	5.23	23,400	36	Air Temp 21	<1
15,100	+200	SUX	2-22-01	1050	9.83	14,900	32	Air Temp 33	1
27,400	+800	MKC	2-22-01	0900	8.24	26,600	33	Air Temp 33	3
28,200	+500	NCNE	2-26-01	1245	7.28	27,700	35	Air Temp 41	<2

Discharge Measurements for March 2001

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
15,200	-800	OMA	3-1-01	1045	5.26	16,000	34	Air Temp 34	5
117,200	-16,100	BNMO	3-1-01	0930	16.89	133,300	32	Air Temp 32	<14
14,200	-1,100	SUX	3-5-01	1130	9.58	15,300	32	Air Temp 36	8
14,900	+100	DENE	3-5-01	1430	16.39	14,800	34	Air Temp 32	<1
26,300	+200	NCNE	3-6-01	1445	6.71	26,100	36	Air Temp 39	<1
30,800	-900	RUNE	3-6-01	1140	7.34	31,700	37	Air Temp 36	3
46,800	-1,800	MKC	3-7-01	1130	12.55	48,600	37	Air Temp 44	4
32,000	-2,100	NCNE	3-13-01	1400	8.15	34,100	37	Air Temp 56	7
47,400	-300	RUNE	3-13-01	1050	11.08	47,700	36	Air Temp 50	<1
13,400	-1,200	SUX	3-14-01	1100	9.25	14,600	33	Air Temp 48	9
15,200	-300	DENE	3-14-01	1400	16.48	15,500	36	Air Temp 59	2
16,800	-200	OMA	3-14-01	1700	10.85	17,000	41	Air Temp 59	<1
56,700	-11,200	STJ	3-14-01	0945	12.41	67,900	40	Air Temp 56	20
79,400	+100	BNMO	3-14-01	1215	12.65	79,300	46	Air Temp 59	<1
24,900	+700	SUX	3-19-01	1100	12.54	24,200	33	Air Temp 41	3
23,300	-200	DENE	3-19-01	1345	19.50	23,500	35	Air Temp 41	<1
45,400	+2,500	NCNE	3-20-01	1350	10.89	47,900	38	Air Temp 61	6
53,900	+100	STJ	3-20-01	1230	11.91	53,800	42	Air Temp 56	<1
67,800	-100	MKC	3-21-01	0900	16.52	67,900	40	Air Temp 56	<1
31,200	-1,500	OMA	3-26-01	1445	15.58	32,700	36	Air Temp 43	5
44,900	-1,400	NCNE	3-26-01	1130	10.78	46,300	36	Air Temp 43	3
82,200	-3,800	MKC	3-26-01	1030	19.02	86,000	45	Air Temp 50	5
27,800	+3,000	SUX	3-27-01	1030	13.32	24,800	35	Air Temp 33	11
26,400	-300	DENE	3-27-01	1245	20.54	26,700	35	Air Temp 50	1
87,500	-300	WVMO	3-27-01	1100	17.05	87,800	45	Air Temp 57	<1
43,800	-1,800	RUNE	3-29-01	1050	10.30	45,600	41	Air Temp 55	4
68,400	+800	MKC	3-29-01	1000	16.64	67,600	46	Air Temp 63	1
114,900	-100	HEMO	3-29-01		14.18	115,000			0

Discharge Measurements for April 2001

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
35,100	-1,300	OMA	4-2-01	1-15	16.57	36,400	40	Air Temp 46	4
43,000	-400	NCNE	4-2-01	1400	10.34	43,400	44	Air Temp 63	1
48,700	-500	STJ	4-4-01	0845	10.95	49,200	47	Air Temp 50	1
72,000	1,500	WVMO	4-5-01	1045	15.15	70,500	56	Air Temp 73	2
34,100	2,600	SUX	4-6-01	1130	14.93	31,500	41	Air Temp 50	8
33,400	2,900	DENE	4-6-01	1335	21.91	30,500	42	Air Temp 49	7
99,300	2,200	BNMO	4-6-01	1130	15.16	97,100	59	Air Temp 77	2
37,300	3,700	SUX	4-9-01	1100	12.91	33,600	45	Air Temp 55	10
39,300	4,300	DENE	4-9-01	1320	10.94	35,000	47	Air Temp 64	11
43,000	300	OMA	4-10-01	0920	18.12	42,700	47	Air Temp 55	<1
78,500	2,700	BNMO	4-10-01	1100	12.91	75,800	61	Air Temp 75	3
55,500	-100	RUNE	4-11-01	1130	12.30	55,600	53	Air Temp 68	<1
76,300	+3,100	WVMO	4-11-01	1130	15.68	73,200	61	Air Temp 75	4
71,000	-1,700	MKC	4-12-01	0830	17.09	72,700	55	Air Temp 56	2
64,900	-1,000	NCNE	4-13-01	0915	14.28	65,900	54	Air Temp 52	<2
65,700	+4,200	OMA	4-17-01	1400	21.82	61,500	50	Air Temp 61	6
74,600	-600	NCNE	4-17-01	1100	15.57	75,200	50	Air Temp 48	<1
84,800	-2,600	MKC	4-18-01	1100	19.28	87,400	55	Air Temp 61	4
107,800	+1,200	BNMO	4-18-01	1200	16.40	109,000	65	Air Temp 68	1
90,300	-3,800	WVMO	4-19-01	1045	17.59	94,100	58	Air Temp 77	4
38,300	+1,800	SUX	4-23-01	1045	16.77	36,500	46	Air Temp 40	<5
38,200	+1,600	DENE	4-23-01	1330	23.65	36,600	50	Air Temp 47	4
3,000	-400	ASSD	4-24-01	1115	17.87	3,400	46	Air Temp 50	13
8,372	+152	DRSD	4-24-01	--	14.18	8,220			<2
12,200	+400	NCSD	4-24-01	1640	20.46	11,800			3
47,700	+3,200	OMA	4-24-01	0915	19.01	44,500	52	Air Temp 48	7
58,900	+1,100	STJ	4-24-01	0830	12.82	57,800	55	Air Temp 47	2
96,100	+1,600	BNMO	4-25-01	0800	15.19	94,500	60	Air Temp 63	2
68,700	+1,700	NCNE	4-25-01	1405	14.80	67,000	54	Air Temp 81	<3
59,600	0	RUNE	4-25-01	1405	14.80	59,600	56	Air Temp 77	0
116,600	+8,600	HEMO	4-25-01	1200	14.4	108,000	61		7

30,000	-7,500	AKIA	4-26-01		23.1	37,500			25
75,500	+800	MKC	4-27-01	1000	17.65	74,400	61	Air Temp 73	1
56,000	+3,000	SUX	4-30-01	1020	20.58	53,000	63	Air Temp 70	5
58,500	+4,300	DENE	4-30-01	1245	27.60	54,200	62	Air Temp 77	7

Discharge Measurements for May 2001

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
64,200	+4,300	OMA	5-1-01	1235	21.92	59,900	64	Air Temp 82	7
78,900	+5,600	NCNE	5-1-01	0950	16.27	73,300	64	Air Temp 68	7
75,500	-2,000	STJ	5-1-01	0945	15.56	77,800	64	Air Temp 73	3
80,000	+1,900	MKC	5-2-01	0845	18.42	78,100	65	Air Temp 74	2
81,500	0	WVMO	5-3-01	1200	16.57	81,500	68	Air Temp 77	0
93,300	-2,500	HEMO	5-4-01	1045	12.39	95,800			
102,900	+5,000	NCNE	5-6-01	1330	19.50	97,900	64	Air Temp 84	14
128,600	+22,700	RUNE	5-6-01	1020	19.46	105,900	64	Air Temp 73	17.7
57,700	+9,500	OMA	5-7-01	0945	22.65	67,200	60	Air Temp 61	14
5,000	-100	LVIA	5-7-01	1300	19.17	5,100	60	Air Temp 63	<1
38,300	+700	SUX	5-8-01	0815	17.16	37,600	59	Air Temp 55	<2
40,200	+100	DENE	5-8-01	1120	24.61	40,100	60	Air Temp 86	<1
164,700	-6,300	BNMO	5-8-01	0945	21.27	171,000	68	Air Temp 73	4
115,100	-3,900	WVMO	5-9-01	1030	20.21	119,000	67	Air Temp 89	3
1,100	+100	PRIM	5-9-01	1330	4.05	1,000	82	Air Temp 82	9
84,900	-3,100	STJ	5-10-01	0900	16.75	88,000	65	Air Temp 71	4
127,500	-4,800	HEMO	5-11-01	1100	15.86	132,300			4
36,900	+600	SUX	5-14-01	1230	16.81	36,300	76	Air Temp 102	2
37,900	-100	DENE	5-14-01	1545	24.13	38,000	74	Air Temp 93	<1
48,300	+3,500	OMA	5-15-01	1100	19.74	44,800	72	Air Temp 84	7
59,600	+2,300	NCNE	5-15-01	1330	13.99	57,300	77	Air Temp 94	<4
65,400	+3,400	RUNE	5-16-01	0850	13.85	62,000	73	Air Temp 77	5
111,900	-100	BNMO	5-17-01	0915	16.76	112,000	75	Air Temp 83	<1
30,500	-400	SUX	5-21-01	1045	15.24	30,900	63	Air Temp 54	1
30,100	-1,300	DENE	5-21-01	1330	22.32	31,400	66	Air Temp 57	3
37,900	+800	OMA	5-22-01	0935	18.15	37,900	64	Air Temp 61	3
61,200	+200	RUNE	5-22-01	1115	13.96	61,000	64	Air Temp 64	<1
78,300	+3,300	MKC	5-22-01	1030	18.13	75,000	68	Air Temp 66	4
48,800	-1,200	NCNE	5-23-01	1445	12.28	50,000	64	Air Temp 61	3
67,800	+5,200	STJ	5-23-01	1100	14.20	62,600	66	Air Temp 69	8
82,200	+3,600	WVMO	5-24-01	1100	16.65	78,600	64	Air Temp 56	4

121,000	-5,000	HEMO	5-24-01	1200	15.11	126,000	68		4
35,200	-900	OMA	5-29-01	0950	17.37	36,100	63	Air Temp 63	3
43,600	-400	NCNE	5-29-01	1220	11.17	44,000	64	Air Temp 64	<1
28,600	-600	SUX	5-30-01	1110	14.56	29,200	60	Air Temp 58	2
28,900	-1,300	DENE	5-30-01	1345	21.98	30,200	63	Air Temp 55	5

Discharge Measurements for June 2001

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
27,600	0	SUX	6-4-01	1045	14.18	27,600	64	Air Temp 57	0
28,000	-1,900	DENE	6-4-01	1250	21.60	29,900	64	Air Temp 60	7
34,900	+700	OMA	6-5-01	1045	17.20	34,200	63	Air Temp 60	2
44,100	-200	NCNE	6-6-01	1415	11.29	44,300	64	Air Temp 75	<1
119,700	-23,000	MKC	6-7-01	1000	24.35	143,000	68	Air Temp 83	19
138,000	+2,000	WVMO	6-8-01	1100	22.68	136,000	70	Air Temp 86	1
313,000	-20,000	HEMO	6-8-01	1030	29.3	333,000			6
28,400	-400	SUX	6-11-01	1055	14.40	28,800	73	Air Temp 58	1
29,200	-600	DENE	6-11-01	1340	21.92	29,800	72	Air Temp 91	2
4,130	+20	HAIA	6-11-01	1145	15.06	4,110	74	Air Temp 82	<1
52,700	+800	STJ	6-11-01	1130	11.96	51,900	73	Air Temp 81	<2
34,200	-600	OMA	6-12-01	1215	17.05	34,800	75	Air Temp 85	<2
44,000	+600	NCNE	6-12-01	0940	11.26	43,400	78	Air Temp 82	1
85,000	-2,100	WVMO	6-12-01	1045	17.21	87,100	74	Air Temp 90	<3
46,800	+400	RUNE	6-13-01	1135	11.32	46,400	78	Air Temp 82	<1
78,500	+300	MKC	6-13-01	0930	18.18	78,500	78	Air Temp 85	<1
54,400	+6,000	OMA	6-15-01	1000	20.95	48,400	71	Air Temp 79	11
45,700	+2,400	OMA	6-18-01	0930	19.46	43,300	73	Air Temp 81	5
49,700	+200	NCNE	6-18-01	1300	12.46	49,500	73	Air Temp 91	<1
35,500	+400	SUX	6-19-01	1000	16.14	35,100	73	Air Temp 63	1
37,600	+700	DENE	6-19-01	1230	23.84	37,600	74	Air Temp 68	2
136,000	+11,000	BNMO	6-19-01	1100	19.01	125,000	78	Air Temp 92	8
61,400	+100	RUNE	6-20-01	1050	13.81	61,300	73	Air Temp 64	<1
135,000	-33,000	MKC	6-20-01	1045	26.28	168,000	70	Air Temp 71	24
27,600	-600	SUX	6-25-01	1100	14.11	28,200	76	Air Temp 84	2
27,900	-1,100	DENE	6-25-01	1315	21.59	29,000	76	Air Temp 89	4
35,600	+1,300	OMA	6-25-01	1335	17.37	34,300	77	Air Temp 90	4
41,100	+600	NCNE	6-26-01	1040	10.58	40,500	77	Air Temp 82	2
45,200	+1,200	RUNE	6-26-01	1320	10.97	44,000	78	Air Temp 97	<3
158,000	-3,000	BNMO	6-26-01	1000	20.75	161,000	78	Air Temp 90	<2
81,900	+2,100	MKC	6-27-01	1030	18.74	79,800	79	Air Temp 90	<3

174,000	+4,200	HEMO	6-27-01		19.78	178,200			2
45,200	+1,500	STJ	6-28-01	1030	10.52	43,700	79	Air Temp 90	3

Discharge Measurements for July 2001

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
28,400	-800	SUX	7-3-01	1045	14.26	29,200	70	Air Temp 57	3
29,150	-450	DENE	7-3-01	1245	21.73	29,600	73	Air Temp 79	<2
41,900	+2,400	STJ	7-3-01	1430	9.76	39,500			
122,400	+4,400	HEMO	7-3-01	1200	15.27	118,000			4
33,600	+100	OMA	7-5-01	0930	16.90	33,500	79	Air Temp 77	<1
65,200	+1,000	MKC	7-5-01	1015	15.81	64,200	79	Air Temp 81	<2
101,800	+8,900	BNMO	7-5-01	1200	15.79	92,900	81	Air Temp 90	9
70,100	+5,400	WVMO	7-6-01	1130	15.36	64,700	82	Air Temp 84	8
29,200	-300	SUX	7-9-01	1115	14.47	29,500	84	Air Temp 95	1
29,900	+300	DENE	7-9-01	1445	21.94	29,600	84	Air Temp 93	1
33,800	+500	OMA	7-10-01	1120	16.95	33,300	81	Air Temp 75	1
39,000	+1,600	NCNE	7-10-01	1345	10.06	37,400	82	Air Temp 84	4
52,600	-300	WVMO	7-10-01	1200	13.21	52,900	85	Air Temp 93	<1
87,800	+2,000	HEMO	7-11-01	1200	11.84	85,800	77		2
60,700	+1,000	MKC	7-12-01	0845	14.99	59,700	83	Air Temp 78	2
31,000	+1,100	OMA	7-16-01	1345	16.21	29,900	79	Air Temp 79	4
37,200	+1,900	NCNE	7-16-01	1100	9.60	35,300	79	Air Temp 75	5
71,700	+200	BNMO	7-16-01	1145	12.83	71,500	79	Air Temp 86	1
2,900	-900	LUNE	7-16-01		3.09	3,840			31
28,300	+100	SUX	7-17-01	1015	14.07	28,200	77	Gage Reset from 14.22 to 14.08 @11:15 - AT = 82	>1
28,900	+300	DENE	7-17-01	1245	21.73	28,600	79	Air Temp 89	1
50,500	+1,600	MKC	7-17-01	0800	13.05	48,900	82	Air Temp 84	3
52,400	+3,400	WVMO	7-17-01	1030	13.18	49,000	81	Air Temp 90	6
38,300	+1,800	RUNE	7-18-01	1245	21.73	36,500	82	Air Temp 88	5
30,300	+700	OMA	7-23-01	0845	16.02	29,600	84	Air Temp 81	2
36,400	+2,100	NCNE	7-23-01	1215	9.40	34,300	84	Air Temp 82	6
28,700	+700	SUX	7-24-01	1120	14.20	28,000	80	Air Temp 77	2
45,100	+2,100	MKC	7-25-01	1045	11.96	43,000	82	Air Temp 76	<5
42,000	+500	STJ	7-26-01	1200	9.80	41,500	85	Air Temp 79	1

74,200	-4,900	HEMO	7-26-01		10.16	79,100	82	Air Temp 82	7
31,400	+700	SUX	7-29-01	1000	14.91	30,700	79	Air Temp 82	2
32,400	+700	DENE	7-29-01	1215	22.65	31,700	78	Air Temp 86	2
38,000	+800	OMA	7-29-01	1445	17.90	37,200	84	Air Temp 93	2
42,000	+1,200	NCNE	7-29-01	1700	10.79	40,800	85	Air Temp 91	3
44,200	+1,100	RUNE	7-30-01	0820	10.75	43,100	82	Air Temp 81	3

Discharge Measurements for August 2001

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
77,400	-3,400	BNMO	8-1-01	0915	13.55	80,800	83	Air Temp 104	4
28,000	+500	SUX	8-6-01	1120	13.88	27,500	83	Air Temp 87	2
28,900	+700	DENE	8-6-01	1345	21.72	28,200	85	Air Temp 91	<2
31,100	+800	OMA	8-7-01	0930	16.23	30,300	86	Air Temp 82	3
35,400	+2,700	NCNE	8-8-01	1435	9.15	32,700	82	Air Temp 86	8
37,100	+2,600	RUNE	8-8-01	1200	9.01	34,500	88	Air Temp 91	7
42,100	+2,900	MKC	8-07-01	1130	11.35	39,200	88	Air Temp 95	7
47,700	+2,000	BNMO	8-08-01	1645	9.17	45,700	88	Air Temp 97	4
39,700	+300	WVMO	8-10-01	1045	11.23	39,400	86	Air Temp 73	<1
29,800	-500	SUX	8-13-01	14.36	1305	30,300	77	Air Temp 72	<1
29,900	-500	DENE	8-13-01	21.99	1550	30,400	79	Air Temp 82	<2
34,100	+100	NCNE	8-14-01	8.80	1415	34,000	79	Air Temp 82	<1
35,100	+2,700	RUNE	8-14-01	8.5	1030	32,400	82	Air Temp 73	8
38,800	-2,100	MKC	8-14-01	10.66	0814	40,900	83	Air Temp 80	5
42,700	-2,400	BNMO	8-15-01	8.29	0915	45,100	83	Air Temp 80	6
35,500	+100	STJ	8-16-01	8.17	1100	35,400	26	Air Temp 79	4
28,100	+100	SUX	8-20-01	1389	1315	28,000	73	Air Temp 81	<1
28,800	+400	DENE	8-20-01	1050	21.69	28,400	73	Air Temp 75	1
42,400	-5,600	HEMO	8-20-01	1130	5.89	48,000	80		13
29,500	+600	OMA	8-21-01	1140	15.98	30,100	74	Air Temp 82	2
36,900	+2,200	NCNE	8-21-01	1345	9.53	34,700	77	Air Temp 91	6
39,100	+1,700	MKC	8-21-01	1130	10.55	37,400	81	Air Temp 97	4
37,000	+2,300	RUNE	8-22-01	1030	8.98	34,700	78	Air Temp 76	6
43,900	+300	WVMO	8-24-01	1200	11.90	43,600	81	Air Temp 86	<1
28,300	-200	SUX	8-27-01	1050	13.95	28,500	77	Air Temp 80	<1
28,500	+100	DENE	8-27-01	1310	21.61	28,400	79	Air Temp 86	<1
30,400	-1,800	OMA	8-27-01	1520	16.04	32,200	80	Air Temp 85	<6
47,300	+900	MKC	8-28-01	0830	12.25	46,400	81	Air Temp 81	2
35,000	+2,300	NCNE	8-29-01	0830	9.05	32,700	79	Air Temp 73	<7
35,200	+2,500	RUNE	8-30-01	1130	8.54	32,700	80	Air Temp 78	7
44,300	0	WVMO	8-30-01	1045	11.96	44,300	85	Air Temp 89	0
68,700	+4,100	HEMO	8-30-01	1345	9.45	64,600	82	Air Temp 86	6

Discharge Measurements for September 2001

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
28,300	+100	SUX	9-4-01	1030	13.94	28,300	75	Air Temp 78	<1
28,300	-400	DENE	9-4-01	1240	21.56	28,700	76	Air Temp 75	<1
34,900	500	OMA	9-4-01		15.92	34,400	77	Air Temp 86	1
34,200	100	STJ	9-4-01	0945	7.84	34,100	80	Air Temp 85	4
34,900	+2,500	NCNE	9-5-01		9.01	32,400	77	Air Temp 82	7
38,200	+1,600	MKC	9-5-01	1000	10.36	36,600	79	Air Temp 86	4
45,200	-2,000	BNMO	9-5-01	0930	8.75	47,200	83	Air Temp 87	4
38,000	-1,300	WVMO	9-6-01	1100	10.94	39,300	81	Air Temp 86	3
30,900	+500	SUX	9-10-01	0945	14.64	30,500	70	Air Temp 62	<2
30,500	+300	DENE	9-10-01	1200	22.17	30,200	70.7	Air Temp 70	<1
37,400	+100	STJ	9-11-01	1115	8.65	37,300	75	Air Temp 78	<1
42,500	-1,000	MKC	9-11-01	0800	11.28	43,500	74	Air Temp 82	2
46,000	+100	HEMO	9-14-01	1300	6.42	45,900	75	Air Temp 72	<1
31,200	+100	SUX	9-17-01	1300	14.60	31,100	65	Air Temp 68	<1
31,200	-1,300	DENE	9-17-01	1700	22.22	32,500	65	Air Temp 74	4
46,600	-2,900	WVMO	9-17-01	1300	12.30	49,500	73	Air Temp 71	6
30,200	-1,300	OMA	9-18-01	1445	16.48	31,500	65	Air Temp 64	4
40,700	0	NCNE	9-18-01	1120	10.48	40,700	65	Air Temp 63	0
48,600	-2,500	BNMO	9-18-01	1100	9.32	51,100	71	Air Temp 68	5
45,800	-1,600	STJ	9-19-01	1045	10.63	47,400	66	Air Temp 66	4
39,300	-200	RUNE	9-20-01	0930	9.55	39,500	67	Air Temp 68	<1
108,200	+200	BNMO	9-20-01	0920	16.73	108,000	68	Air Temp 81	<1
69,900	-3,400	WVMO	9-21-01	1130	15.41	73,300	70	Air Temp 77	5
27,700	+500	SUX	9-24-01	1115	13.66	28,400	62	Air Temp 62	2
28,100	+500	DENE	9-24-01	1345	21.20	27,600	64	Air Temp 63	<2
28,500	-100	OMA	9-25-01	1430	15.39	28,600	64	Air Temp 65	<1
34,900	+1,600	NCNE	9-26-01	1100	9.03	33,300	65	Air Temp 58	<5
34,900	+1,300	RUNE	9-26-01	0800	8.46	33,600	65	Air Temp 48	<4
68,800	+700	HEMO	9-28-01	1115	9.46	68,100	66	Air Temp 68	1

Discharge Measurements for October 2001

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
28,600	+400	SUX	10-1-01	1120	13.80	28,200	64	Air Temp 72	1
28,800	+500	DENE	10-1-01	1400	21.51	28,300	64	Air Temp 64	<2
35,300	+2,000	NCNE	10-2-01	1139	9.11	33,300	73	Air Temp 73	<6
35,200	-600	STJ	10-2-01	0945	8.09	35,800	66	Air Temp 67	<2
51,300	-400	BNMO	10-2-01	1215	9.76	51,700	61	Air Temp 81	<1
35,000	-700	RUNE	10-3-01	1445	8.47	35,700		Air Temp 73	2
28,900	-2,400	OMA	10-4-01	1515	15.5	31,300	65	Air Temp 59	8
29,600	+800	SUX	10-9-01	1045	14.06	28,800	60	Air Temp 61	<3
29,400	+600	DENE	10-09-01	1330	21.66	28,800	60	Air Temp 60	2
30,100	-200	OMA	10-10-01	1215	15.86	30,300	61	Air Temp 58	<1
36,400	+600	NCNE	10-10-01	0945	9.39	35,800	62	Air Temp 57	<2
36,900	0	RUNE	10-11-01	1010	8.88	36,900	62	Air Temp 50	0
40,600	-1,200	MKC	10-12-01	1100	10.87	39,400	64	Air Temp 66	3
76,900	+1,900	HEMO	10-12-01	1145	10.58	75,000	66	Air Temp	3
29,200	+500	SUX	10-15-01	1145	13.96	28,700	54	Air Temp 50	2
29,100	+100	DENE	10-15-01	1430	21.59	29,000	57	Air Temp 50	<1
43,900	+600	BNMO	10-15-01	1015	8.51	43,300	64	Air Temp 59	1
44,900	+3,500	WVMO	10-19-01	1130	11.58	41,400	57	Air Temp 63	7
29,300	-100	SUX	10-22-01	1115	14.08	29,400	55	Air Temp 54	<1
29,500	-100	DENE	10-22-01	1330	21.69	29,600	55	Air Temp 57	<1
31,000	-1,300	OMA	10-23-01	1245	15.75	29,700	56	Air Temp 65	4
36,800	+500	NCNE	10-23-01	1015	9.49	36,300	55	Air Temp 51	1
38,800	-1,700	MKC	10-23-01	0945	10.50	40,500	65	Air Temp 75	4
36,200	+300	RUNE	10-24-01	0930	8.73	35,900	57	Air Temp 48	<1
37,600	-1,300	STJ	10-24-01	1000	8.62	38,900	56	Air Temp 51	3
44,800	+100	HEMO	10-24-01	1130	6.16	44,700	61	Air Temp 52	<1
43,400	-2,300	BNMO	10-25-01	1015	8.43	45,700	54	Air Temp 54	5
29,000	-2,000	OMA	10-29-01	1200	15.4	31,000	47	Air Temp 55	7
34,100	-1,000	NCNE	10-29-01	1405	8.81	35,100	48	Air Temp 58	3
29,600	-400	SUX	10-30-01	1245	14.16	30,000	49	Air Temp 59	1
28,900	-600	DENE	10-30-01	1040	21.54	29,500	50	Air Temp 58	2

40,500	-100	WVMO	10-31-01	0900	10.87	40,600	56	Air Temp 68	<1
48,300	-1,300	HEMO	10-31-01	1145	6.74	49,600	58	Air Temp 77	3

Discharge Measurements for November 2001

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
34,500	-1,100	RUNE	11-1-01	1220	8.30	35,600	54	Air Temp 70	3
35,900	-200	STJ	11-1-01	1345	8.04	36,100	57	Air Temp 77	<1
29,500	-600	SUX	11-5-01	1115	14.05	30,100	52	Air Temp 63	2
29,700	-300	DENE	11-5-01	1340	21.69	30,000	52	Air Temp 68	1
38,600	+300	MKC	11-5-01	0900	10.14	38,300	57	Air Temp 57	<1
39,900	-2,000	WVMO	11-5-01	1108	10.78	41,900	34	Air Temp 50	5
40,500	1,900	BNMO	11-5-01	1200	7.70	38,600	57	Air Temp 66	<5
30,800	-400	OMA	11-6-01	1320	15.63	31,200	54	Air Temp 70	1
35,800	+100	NCNE	11-6-01	1010	9.12	35,700	54	Air Temp 64	<1
29,800	-1,000	SUX	11-13-01	1215	14.13	30,800	54	Air Temp 61	3
29,800	-900	DENE	11-13-01	1415	21.72	30,700	53	Air Temp 62	3
31,800	-1,000	OMA	11-14-01	1320	15.66	31,800	34	Air Temp 64	3
35,400	-600	NCNE	11-14-01	1045	9.03	36,000	34	Air Temp 62	2
40,200	-1,800	BNMO	11-14-01	0945	7.64	42,000	71	Air Temp 58	<5
40,600	-1,000	HEMO	11-14-01	1200	5.43	41,600	55	Air Temp 72	3
36,400	-600	STJ	11-15-01	0830	8.16	37,000	57	Air Temp 67	<2
37,500	+300	MKC	11-15-01	1000	9.98	37,200	56	Air Temp 73	<1
30,300	-600	SUX	11-19-01	1130	14.17	30,900	48	Air Temp 38	<2
30,600	+300	DENE	11-19-01	1345	21.76	30,300	52	Air Temp 43	<1
38,400	+1,000	MKC	11-19-01	0900	10.06	37,400	55	Air Temp 46	<3
31,200	+100	OMA	11-20-01	1515	15.2	31,100	34	Air Temp 52	<1
35,700	-100	NCNE	11-20-01	1230	9.07	35,800	51	Air Temp 49	<1
39,400	-400	WVMO	11-20-01	1230	10.70	39,800	59	Air Temp 58	1
40,700	+1,100	BNMO	11-20-01	0800	7.46	39,600	48	Air Temp 43	<3
36,100	+200	RUNE	11-21-01	1050	8.38	35,900	50	Air Temp 46	<1
39,700	-1,000	HEMO	11-21-01	1030	5.16	40,700	54	Air Temp 50	<3
38,700	-400	STJ	11-26-01	1100	8.74	39,100	50	Air Temp 61	1
42,700	+100	MKC	11-27-01	1015	10.97	42,600	45	Air Temp 35	<1
28,600	+100	OMA	11-29-01	1145	14.94	28,500	34	Air Temp 28	<1
36,600	-1,500	RUNE	11-29-01	1715	8.5	38,100	42	Air Temp 33	4
34,100	-1,800	NCNE	11-30-01	0915	8.7	35,900	38	Air Temp 34	5

Discharge Measurements for December 2001

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
30,200	+2,300	NCNE	12-4-01	1530	7.70	27,900	40	Air Temp 58	8
29,400	+800	RUNE	12-4-01	1145	6.72	28,600	40	Air Temp 60	3
40,800	+600	BNMO	12-4-01	0930	7.48	40,200	47	Air Temp 68	<2
19,300	-1,600	OMA	12-5-01	1140	11.89	20,900	34	Air Temp 49	8
18,100	-1,200	OMA	12-10-01	1335	11.42	19,300	34	Air Temp 47	6
26,200	+100	NCNE	12-10-01	1550	6.68	26,100	39	Air Temp 49	<1
27,600	+900	RUNE	12-11-01	1100	6.28	26,700	39	Air Temp 42	3
28,900	-1,000	MKC	12-11-01	0915	7.87	29,900	42	Air Temp 48	<4
14,400	-1,900	SUX	12-12-01	1045	9.18	16,300	37	Air Temp 36	14
16,500	-300	DENE	12-12-01	1345	17.00	16,800	39	Air Temp 37	<2
14,200	-2,100	SUX	12-17-01	0945	8.99	16,300	36	Air Temp 34	15
16,800	-700	DENE	12-17-01	1315	16.84	16,800	38	Air Temp 39	4
27,700	-400	MKC	12-17-01	0915	7.45	28,100	44	Air Temp 43	1
27,800	-1,800	WVMO	12-18-01	1245	8.46	29,600	43	Air Temp 54	6
25,400	+200	STJ	12-19-01	1130	5.30	25,200	42	Air Temp 32	<1