

Missouri River Region - Water Management Information

U. S. Army Corps of Engineers - Civil Works

Discharge Measurements for January 2004

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
16,600	600	SUX	1-12-04	1035	10.32	16,000	34	Air Temp 48	<4
18,100	-800	NCNE	1-12-04	1400	4.70	18,900	37	Air Temp 48	4
18,100	-800	RUNE	1-12-04	1130	3.98	19,200	42	Air Temp 37	4
34,800	600	HEMO	1-12-04	1215	3.40	34,200	39	Air Temp 48	<2
17,500	300	OMA	1-13-04	1000	10.74	17,200	37	Air Temp 39	<2
16,200	-3,400	MKC	1-13-04	0945	4.32	19,600	33	Air Temp 40	21
19,300	-400	STJ	1-15-04	1000	3.38	19,700	34	Air Temp 37	2
16,900	-3,600	WVMO	1-14-04	1330	5.66	20,500	37	Air Temp 48	21
30,200	600	BNMO	1-21-04	1115	4.28	29,600	36	Air Temp 46	2

Discharge Measurements for February 2004

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
25,400	200	BNMO	2-11-04	1130	3.12	25,200	33	Air Temp 36	<1
18,700	-4,000	MKC	2-12-04	0915	4.93	22,700	33	Air Temp 36	22
19,900	-600	NCNE	2-12-04	1420	5.19	20,500	36	Air Temp 20	3
17,300	520	OMA	2-13-04	1510	10.67	16,800	36	Air Temp 39	3
20,400	-100	RUNE	2-13-04	1140	4.58	20,500	36	Air Temp 32	<1
14,200	-600	DENE	2-17-04	1120	16.28	14,800	32	Air Temp 25	4
14,700	1,200	SUX	2-18-04	1050	9.68	13,500	35	Air Temp 46	8
38,400	-400	HEMO	2-19-04	1215	4.15	38,800	37	Air Temp 64	1
14,300	800	SUX	2-23-04	1035	9.55	13,500	39	Air Temp 35	5
14,500	-600	DENE	2-23-04	1325	16.40	15,100	36	Air Temp 41	4
21,900	800	NCNE	2-23-04	1125	5.32	21,100	40	Air Temp 39	4
23,300	1,500	RUNE	2-23-04	1125	5.32	21,800	43	Air Temp 39	6

Discharge Measurements for March 2004

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
16,600	-700	DENE	3-01-04	1155	17.24	17,300	36	Air Temp 41	4
24,600	700	OMA	3-01-04	1300	13.26	23,900	40	Air Temp 41	<3
20,000	3,500	SUX	3-2-04	1150	11.21	16,500	35	Air Temp 36	18
36,800	-3,900	NCNE	3-2-04	1310	9.4	40,700	40	Air Temp 45	11
41,100	-2,500	RUNE	3-02-04	1000	9.71	43,600	43	Air Temp 42	6
34,700	-3,000	MCK	3-02-04	0900	9.0	37,700	42	Air Temp 44	9
45,200	-1,700	STJ	3-02-04	1000	10.13	46,900	41	Air Temp 42	4
16,100	600	SUX	3-08-04	1207	10.06	15,500	40	Air Temp 55	<4
17,700	600	DENE	3-08-04	1500	17.25	17,100	42	Air Temp 67	>3
24,400	1,100	OMA	3-08-04	1410	13.2	23,300	42	Air Temp 70	>4
34,900	500	NCNE	3-08-04	1120	8.63	34,400	42	Air Temp 61	>1
37,500	1,800	RUNE	3-09-04	1215	8.47	35,700	45	Air Temp 48	<5
59,000	-8,400	MKC	3-09-04	1000	13.64	67,400	41	Air Temp 41	14
117,800	2,800	HEMO	3-12-04	0945	14.10	115,000	46	Air Temp 40	2
25,500	2,900	NCNE	3-16-04	1335	6.25	22,600	44	Air Temp 40	11
26,500	3,100	RUNE	3-16-04	1100	5.77	23,400	47	Air Temp 38	12
16,200	100	OMA	3-17-04	1025	10.54	16,100	42	Air Temp 38	<1
34,700	600	MKC	3-17-04	1130	8.73	34,100	46	Air Temp 53	<2
12,500	-200	SUX	3-18-04	1015	9.03	12,700	43	Air Temp 41	<2
14,400	-800	DENE	3-18-04	1310	15.94	13,600	44	Air Temp 42	<6
48,500	800	BNMO	3-18-04	1200	8.00	47,700	46	Air Temp 62	<2
18,300	800	OMA	3-22-04	1320	11.14	17,500	49	Air Temp 52	>4
23,400	1,300	NCNE	3-22-04	1100	5.97	22,100	50	Air Temp 48	>5
21,000	2,400	SUX	3-22-04	1045	11.50	18,600	45	Air Temp 45	11
19,900	400	DENE	3-22-04	1445	18.06	19,500	46	Air Temp 46	2
27,300	3,300	RUNE	3-23-04	1115	5.97	24,000	52	Air Temp 55	12

29,100	800	MKC	3-23-04	1130	7.42	28,300	50	Air Temp 59	<3
78,100	3,600	HEMO	3-25-04	1215	9.67	74,500	52	Air Temp	<5
26,400	2,100	SUX	3-29-04	1000	13.25	24,300	48	Air Temp 53	<8
25,600	400	DENE	3-29-04	1250	20.06	25,200	52	Air Temp 61	>1
35,400	300	NCNE	3-29-04	1420	9.04	35,100	57	Air Temp 50	<1
38,800	-900	RUNE	3-29-04	1200	9.70	39,700	59	Air Temp 66	2
29,100	1,100	OMA	3-30-04	1020	15.18	28,000	54	Air Temp 51	<4
64,400	-1,800	WVMO	3-31-04	1230	14.39	66,200	57	Air Temp 50	<3

Discharge Measurements for April 2004

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
21,400	200	SUX	4-5-04	1045	12.19	21,200	52	Air Temp 55	<1
22,400	-100	DENE	4-5-04	1330	18.98	22,500	54	Air Temp 67	<1
23,400	-300	OMA	4-5-04	1140	13.36	23,700	55	Air Temp 66	<2
42,200	2,300	MKC	4-5-04	1100	10.05	39,900	57	Air Temp 61	>5
41,700	-600	WVMO	4-5-04	1430	11.03	42,300	58	Air Temp 68	>1
29,700	1,900	NCNE	4-5-04	1300	7.61	27,800	58	Air Temp 77	>6
30,300	-1,300	RUNE	4-5-04	1015	7.61	31,600	59	Air Temp 66	>4
50,500	2,200	BNMO	4-6-04	1230	8.32	48,300	58	Air Temp 67	>4
25,000	100	OMA	4-12-04	1145	13.90	24,900	55	Air Temp 54	<1
24,700	1,200	SUX	4-13-04	1110	13.12	23,500	51	Air Temp 55	>4
24,800	200	DENE	4-13-04	1335	19.78	24,600	52	Air Temp 58	<1
30,800	600	NCNE	4-13-04	1215	7.89	30,200	54	Air Temp 63	<2
31,600	-200	RUNE	4-13-04	1000	7.62	31,800	56	Air Temp 57	<1
33,500	1,400	STJ	4-14-04	1230	7.12	32,100	55	Air Temp 60	4
35,700	1,500	MCK	4-15-04	1200	8.88	34,200	58	Air Temp 75	4
51,900	1,800	HEMO	4-15-04	0900	6.24	50,100	59	Air Temp 50	>3
35,200	0	WVMO	4-16-04	1100	9.70	35,200	61	Air Temp 74	0
26,500	1,300	SUX	4-19-04	1115	13.59	25,200	61	Air Temp 55	<5
26,100	400	DENE	4-19-04	1415	20.23	25,700	62	Air Temp 57	2
25,000	-500	OMA	4-19-04	1730	14.23	25,500	63	Air Temp 64	2
31,700	200	STJ	4-19-04	1130	6.94	31,500	64	Air Temp 65	<1
52,000	1,600	HEMO	4-19-04	1135	6.49	50,400	65	Air Temp 73	3
30,800	1,000	NCNE	4-20-04	1420	8.06	29,800	64	Air Temp 82	3
31,700	300	RUNE	4-20-04	1120	7.64	31,400	60	Air Temp 68	<1
25,300	500	SUX	4-26-04	1145	13.4	24,800	57	Air Temp 63	<2
26,400	200	DENE	4-26-04	1400	20.30	26,200	57	Air Temp 64	<1

29,200	100	OMA	4-26-04	1550	15.06	29,100	62	Air Temp 73	<1
33,200	0	NCNE	4-26-04	1340	8.66	33,200	61	Air Temp 64	0
35,000	-200	RUNE	4-26-04	1115	8.47	35,200	62	Air Temp 75	<1
38,300	500	MKC	4-28-04	1015	9.75	37,800	63	Air Temp 73	1
35,600	-1,000	STJ	4-28-04	1245	8.04	36,600	63	Air Temp 81	<3
39,000	-100	WVMO	4-29-04	1100	10.36	39,100	64	Air Temp 63	<1
42,200	1,200	BNMO	4-29-04	1415	6.89	41,000	64	Air Temp 73	<3

Discharge Measurements for May 2004

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
30,000	1,900	SUX	5-3-04	1020	14.66	28,100	55	Air Temp 53	6
29,900	400	DENE	5-3-04	1245	21.36	29,500	56	Air Temp 60	>1
29,100	1,000	OMA	5-3-04	1430	15.18	28,100	58	Air Temp 66	3
32,000	1,100	NCNE	5-3-04	1400	8.34	30,900	59	Air Temp 64	3
32,800	400	RUNE	5-3-04	1115	7.91	32,400	62	Air Temp 58	1
32,500	-600	STJ	5-3-04	1145	7.26	33,100	60	Air Temp 60	<2
32,600	2,200	SUX	5-10-04	1045	15.33	30,400	67	Air Temp 74	<7
34,100	2,600	DENE	5-10-04	1300	22.39	31,500	68	Air Temp 79	8
57,800	1,100	HEMO	5-10-04	1310	7.54	56,700	72	Air Temp 80	<2
36,600	200	NCNE	5-11-04	0955	9.51	36,400	70	Air Temp 73	<1
39,200	100	RUNE	5-11-04	1440	9.50	39,100	72	Air Temp 78	<1
31,300	-400	OMA	5-13-04	0945	16.06	31,700	69	Air Temp 49	>1
45,300	-200	MKC	5-14-04	1200	11.41	45,500	67	Air Temp 55	<1
26,700	-600	SUX	5-17-04	1040	14.26	27,300	62	Air Temp 63	2
27,000	-600	DENE	5-17-04	1320	21.09	27,600	62	Air Temp 63	2
31,800	-200	OMA	5-17-04	1340	16.20	32,000	65	Air Temp 73	<1
37,000	-600	STJ	5-17-04	1230	8.39	37,600	68	Air Temp 77	<2
35,200	300	NCNE	5-18-04	1320	9.16	34,900	67	Air Temp 77	<1
38,200	-300	RUNE	5-18-04	1050	9.25	38,500	67	Air Temp 72	<1
42,700	-1,300	STJ	5-20-04	1200	9.80	44,000	69	Air Temp 77	3
69,700	-1,700	MKC	5-20-04	1530	16.04	71,400	70	Air Temp 80	2
100,600	6,700	HEMO	5-20-04	0930	12.87	93,900	70	Air Temp 80	<7
78,900	1,300	WVMO	5-21-04	1135	16.06	77,600	70	Air Temp 79	<2
119,600	1,600	BNMO	5-21-04	1430	16.46	118,000	72	Air Temp 90	1
61,100	10,400	OMA	5-25-04	0900	21.77	50,700	67	Air Temp 65	17
73,400	-6,100	NCNE	5-25-04	1510	21.5	79,500	67	Air Temp 71	8

92,700	-7,300	RUNE	5-25-04	1800	18.0	100,000	71	Air Temp 75	8
31,700	1,100	SUX	5-26-04	1220	15.6	30,600	63	Air Temp 72	>3
32,800	-300	DENE	5-26-04	1510	22.67	33,100	64	Air Temp 73	<1
137,000	-6,000	BNMO	5-26-04	1300	18.08	143,000			4
117,800	2,800	WVMO	5-27-04	1145	20.30	115,000	69	Air Temp 90	>2
205,900	6,900	HEMO	5-27-04	1220	21.60	199,000	63	Air Temp 78	>3

Discharge Measurements for June 2004

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
48,500	6,300	OMA	6-1-04	1700	19.75	42,200	70	Air Temp 79	13
50,700	1,900	NCNE	6-1-04	1415	12.72	48,800	72	Air Temp 79	<4
64,100	6,500	RUNE	6-1-04	1130	14.20	57,600	72	Air Temp 79	10
80,000	-11,600	MKC	6-2-04	1200	17.83	91,600	70	Air Temp 77	>14
39,500	4,000	SUX	6-3-04	1150	17.49	35,500	66	Air Temp 79	10
43,900	4,200	DENE	6-3-04	1010	25.00	39,700	64	Air Temp 74	>9
86,000	1,900	WVMO	6-3-04	1200	16.92	84,100	72	Air Temp 75	2
135,100	7,100	BNMO	6-3-04	1630	17.90	128,000	70	Air Temp 83	5
169,700	2,300	HEMO	6-3-04	1200	18.90	172,000	72	Air Temp 77	1
50,800	300	RUNE	6-8-04	1100	12.05	50,500	75	Air Temp 86	<1
52,200	1,100	STJ	6-8-04	1200	11.71	51,100	73	Air Temp 84	2
42,200	3,900	OMA	6-9-04	1100	18.54	38,300	75	Air Temp 82	10
45,400	-500	NCNE	6-9-04	1325	11.64	45,900	77	Air Temp 84	1
62,500	4,900	WVMO	6-9-04	1100	13.88	57,600	73	Air Temp 71	>8
71,300	4,100	BNMO	6-9-04	1345	11.34	67,200	74	Air Temp 76	<6
50,200	-300	MKC	6-11-04	1015	12.38	50,500	72	Air Temp 79	<1
36,400	1,600	SUX	6-14-04	1215	16.75	34,800	75	Air Temp 86	<5
36,900	1,000	DENE	6-14-04	1015	23.56	35,900	77	Air Temp 77	<3
49,400	1,600	NCNE	6-14-04	1345	12.47	47,800	76	Air Temp 88	>3
63,100	4,100	RUNE	6-14-04	1110	14.05	59,000	75	Air Temp 86	>6
94,100	1,400	WVMO	6-15-04	1230	17.82	92,700	77	Air Temp 72	>1
124,000	5,000	BNMO	6-15-04	1435	16.90	119,000	77	Air Temp 85	4
102,500	-500	HEMO	6-15-04	1200	13.08	103,000	79	Air Temp 85	<1
56,600	-2,700	STJ	6-16-04	1115	12.5	59,300		Air Temp 84	<5
73,600	-3,800	MKC	6-16-04	1445	16.74	77,400		Air Temp 79	>5
66,100	14,700	OMA	6-18-04	1130	22.48	51,400	72	Air Temp 62	22

37,600	3,200	SUX	6-21-04	1045	17.04	34,400	72	Air Temp 78	<9
40,600	+7,400	DENE	6-21-04	1245	24.34	33,200	70	Air Temp 80	18
50,300	-600	NCNE	6-21-04	1130	12.64	50,900	73	Air Temp 82	1
52,400	-2,200	RUNE	6-21-04	1130	12.65	54,600	74	Air Temp 77	4
69,400	-5,100	MKC	6-21-04	1245	16.0	74,500	75	Air Temp 81	7
47,000	2,200	OMA	6-22-04	1440	19.5	44,800	73	Air Temp 84	<5
86,500	4,800	BNMO	6-24-04	1145	13.16	81,700	76	Air Temp 81	6
48,300	1,800	STJ	6-25-04	1350	10.98	46,500			<4
31,700	2,100	SUX	6-28-04	1050	15.59	29,600	70	Air Temp 74	<7
32,800	2,800	DENE	6-28-04	1310	22.65	30,000	72	Air Temp 80	9
36,900	1,100	OMA	6-28-04	1415	17.41	35,800	74	Air Temp 81	3
44,100	-700	RUNE	6-28-04	1115	10.68	44,800	76	Air Temp 73	<2
40,800	700	NCNE	6-29-04	1015	10.57	40,100	75	Air Temp 82	<2

Discharge Measurements for July 2004

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
52,900	-200	MKC	7-01-04	1000	12.92	53,100	75	Air Temp 80	<1
56,800	2,500	WMVO	7-01-04	1300	13.08	54,300	75	Air Temp 82	4
30,600	-1,100	SUX	7-06-04	1045	15.76	31,700	73	Air Temp 69	<4
31,300	-1,500	DENE	7-06-04	1330	22.74	32,800	76	Air Temp 71	<5
37,300	-1,000	OMA	7-06-04	1520	17.96	38,300	79	Air Temp 73	<3
45,200	-300	NCNE	7-06-04	1310	11.61	45,500	79	Air Temp 79	<1
49,400	-500	RUNE	7-06-04	1045	11.79	49,900	82	Air Temp 82	1
47,900	-1,200	STJ	6-07-04	1200	10.89	49,100			>2
74,200	-3,900	MKC	6-07-04	1530	16.85	78,100	81	Air Temp 86	5
100,400	-1,600	HEMO	7-07-04	1000	12.85	102,000	78	Air Temp 76	<2
70,500	3,300	WVMO	7-08-04	1225	15.0	67,200	80	Air Temp 77	<5
99,800	6,400	BNMO	7-08-04	1445	14.55	93,400			>6
29,800	-1,600	SUX	7-12-04	1050	15.53	31,400	79	Air Temp 90	>5
30,800	-2,300	DENE	7-12-04	1245	22.62	33,100	79	Air Temp 91	<8
48,200	-600	NCNE	7-12-04	1415	12.23	48,800	27	Air Temp 91	>1
56,900	0	RUNE	7-12-04	1140	13.11	56,900	27	Air Temp 91	0
87,500	300	HEMO	7-13-04	0845	11.33	87,200	82	Air Temp 90	<1
49,800	1,400	STJ	7-14-04	1130	11.27	48,400	80	Air Temp 87	<3
35,600	1,700	OMA	7-15-04	1250	17.58	33,900	80	Air Temp 85	>4
64,600	-1,100	MKC	7-15-04	1045	15.11	65,700	84	Air Temp 97	>2
67,800	3,900	WVMO	7-16-04	1230	14.65	63,900	82	Air Temp 86	>6
32,200	-500	OMA	7-19-04	1230	16.73	32,700	83	Air Temp 87	>1
40,300	1,900	NCNE	7-19-04	1010	10.45	38,400	83	Air Temp 87	>4
64,100	-2,000	MKC	7-20-04	0930	15.03	66,100	84	Air Temp 97	>3
26,200	-1,900	SUX	7-22-04	0945	14.44	28,100	28	Air Temp 80	7
28,600	-300	DENE	7-22-04	1215	21.64	28,900	83	Air Temp 82	1

40,600	-700	STJ	7-22-04	1200	9.28	39,900	85	Air Temp 93	<2
38,200	1,800	NCNE	7-23-04		9.91	36,400			>4
62,400	3,700	BNMO	7-23-04	1200	10.13	58,700	83	Air Temp 83	6
27,300	0	SUX	7-26-04	1020	14.18	27,300	77	Air Temp 77	0
27,700	0	DENE	7-26-04	1300	21.34	27,700	80	Air Temp 79	0
30,400	-100	OMA	7-26-04	1550	15.80	30,500	80	Air Temp 87	<1
34,700	200	NCNE	7-26-04	1350	9.42	34,500	80	Air Temp 82	<1
38,200	500	RUNE	7-26-04	1120	9.26	37,700	82	Air Temp 80	>1
54,400	-2,700	MKC	7-26-04	1400	13.01	57,100			<5
75,200	-4,200	WVMO	7-26-04	1145	15.76	79,400			<6
92,400	-2,400	HEMO	7-27-04	1120	11.91	94,800	77	Air Temp 72	<3

Discharge Measurements for August 2004

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
26,600	0	SUX	8-2-04	1120	14.00	26,600	81	Air Temp 91	0
27,100	-200	DENE	8-2-04	1335	21.15	27,300	82	Air Temp 91	<1
29,000	-1,300	OMA	8-3-04	1540	15.38	30,300	83	Air Temp 99	>4
32,000	1,200	NCNE	8-3-04	1010	8.73	33,200	82	Air Temp 90	<4
35,100	-900	RUNE	8-3-04	1245	8.49	36,000	82	Air Temp 97	<3
79,600	4,500	BNMO	8-5-04	1400	12.63	75,100	78	Air Temp 80	<8
86,100	-4,800	HEMO	8-5-04	1015	11.44	90,900	80	Air Temp 70	>5
44,100	-3,700	STJ	8-6-04	1130	10.13	47,800	81	Air Temp 79	>8
50,500	-100	MKC	8-6-04	1415	12.25	50,600	81	Air Temp 77	<1
27,100	-700	SUX	8-10-04	1150	14.12	27,800	73	Air Temp 62	>2
27,400	-800	DENE	8-10-04	1440	21.24	28,200	77	Air Temp 70	<3
32,600	0	NCNE	8-11-04	1516	8.58	32,600	77	Air Temp 68	0
34,600	-1,100	RUNE	8-11-04	1145	8.38	35,800	79	Air Temp 70	3.2
36,100	1,800	STJ	8-11-04	1145	7.8	34,300	79	Air Temp 75	5
63,600	300	HEMO	8-11-04	1210	8.25	63,300	80	Air Temp 72	<1
28,700	-1,800	OMA	8-12-04	0915	15.28	30,500	74	Air Temp 60	>6
38,000	0	MKC	8-12-04	1130	9.71	38,000	79	Air Temp 69	0
35,600	-4,400	WVMO	8-13-04	1145	10.35	40,000	77	Air Temp 78	12
26,500	-500	SUX	8-16-04	1200	13.95	27,000	70	Air Temp 84	<2
26,500	-2,000	DENE	8-16-04	1010	20.98	28,500	69	Air Temp 81	>8
27,700	-1,000	OMA	8-17-04	1545	14.98	28,700	75	Air Temp 86	<4
31,300	-300	NCNE	8-17-04	1350	8.25	31,600	75	Air Temp 88	1
32,800	-600	RUNE	8-17-04	1100	7.92	33,400	75	Air Temp 84	<2
34,900	-1,600	MKC	8-19-04	1000	9.01	36,500			>4
32,400	1,000	STJ	8-20-04	1200	7.06	31,400	75	Air Temp 74	>3
39,600	600	BNMO	8-20-04	1330	6.64	39,000	76	Air Temp 70	<2
25,000	1,700	SUX	8-23-04	1250	13.82	26,700	74	Air Temp 87	>6

27,000	-400	DENE	8-23-04	1010	20.91	26,600	74	Air Temp 70	>2
31,800	2,000	NCNE	8-25-04	0845	8.22	29,800	78	Air Temp 73	6
35,500	800	RUNE	8-26-04	1630	8.58	34,700	81	Air Temp 97	2
97,400	800	HEMO	8-26-04	1215	12.41	96,600		Air Temp 89	<1
25,500	-1,300	SUX	8-30-04	1125	13.70	26,800	75	Air Temp 78	5
26,500	-1,300	DENE	8-30-04	1345	20.74	27,800	75	Air Temp 79	5
28,000	300	OMA	8-27-04	1410	14.90	27,700	80	Air Temp 81	1
30,600	1,300	NCNE	8-30-04	1300	7.94	29,300	78	Air Temp 85	4
31,700	700	RUNE	8-30-04	1550	7.65	31,000	81	Air Temp 91	2
32,800	-500	STJ	8-30-04	1525	7.14	33,300	82	Air Temp 82	1
53,200	500	MKC	8-30-04	1145	12.65	52,700	82	Air Temp 68	1

Discharge Measurements for September 2004

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
27,100	-1,000	OMA	9/2/04	1325	14.66	28,100	79	Air Temp 84	<4
38,300	100	MKC	9-2-04	1000	9.63	38,200	78	Air Temp 81	<1
38,700	-3,600	WVMO	9-2-04	1300	10.91	42,300	80	Air Temp 88	9
76,500	1,600	BNMO	9-3-04	1200	12.24	74,900	78	Air Temp 86	2
26,800	-800	SUX	9-7-04	1045	14.04	27,600	72	Air Temp 67	<3
27,700	-600	DENE	9-7-04	1345	21.10	28,300		Air Temp 73	>2
28,300	-400	OMA	9-7-04	1550	15.17	28,700	78	Air Temp 85	<1
30,800	1,200	NCNE	9-7-04	1340	8.23	29,600	78	Air Temp 83	<4
32,900	1,200	RUNE	9-7-04	1110	7.94	31,700	79	Air Temp 74	<4
40,400	-3,600	WVMO	9-7-04	1130	11.18	44,000		Air Temp 73	<9
49,400	1,800	BNMO	9-7-04	1445	8.39	47,600	78	Air Temp 81	<4
52,100	-800	HEMO	9-8-04	1120	6.71	52,900	77	Air Temp 75	<2
32,600	200	STJ	9-9-04	1230	7.09	32,400			<1
37,000	-100	MKC	9-10-04	1230	9.36	37,100	77	Air Temp 76	<1
28,000	-1,000	SUX	9-13-04	1315	14.37	29,000	73	Air Temp 86	3
28,400	-1,000	OMA	9-13-04	1400	15.20	29,400	76	Air Temp 96	>3
30,500	700	NCNE	9-13-04	1420	8.16	29,800	76	Air Temp 91	2
31,600	1,800	RUNE	9-13-04	1220	7.62	29,800	77	Air Temp 88	>5
41,400	1,200	BNMO	9-14-04	1200	6.99	40,200	81	Air Temp 82	3
27,500	500	DENE	9-16-04	1235	23.1	32,600	73	Air Temp 74	8
36,200	900	OMA	9-20-04	1545	17.22	35,300	90	Air Temp 90	>2
37,500	400	NCNE	9-20-04	1345	9.84	37,100	74	Air Temp 84	1
40,000	100	RUNE	9-20-04	1130	9.7	39,900	73	Air Temp 79	4
28,000	500	DENE	9-21-04	1710	21.21	27,500	70	Air Temp 74	<2
46,800	-3,500	WVMO	9-22-04	1115	12.18	50,300	73	Air Temp 77	>7
63,400	-3,100	BNMO	9-22-04	1445	10.51	66,500	73	Air Temp 85	5
24,000	0	SUX	9-27-04	1055	13.28	24,000	68	Air Temp 73	0

26,000	-500	DENE	9-27-04	1315	20.59	26,500	70	Air Temp73	<2
35,600	-800	OMA	9-27-04	1540	17.28	36,400	71	Air Temp 88	>2
40,300	-300	NCNE	9-27-04	1340	10.54	40,600	71	Air Temp 87	<1
42,400	-700	RUNE	9-27-04	1120	10.46	43,100	79	Air Temp 73	<2
43,000	-1,500	STJ	9-27-04	1050	10.61	44,500	72	Air Temp 75	3
43,000	-1,500	MKC	9-27-04	1050	10.61	44,500	72	Air Temp 75	3
44,000	-1,200	WVMO	9-27-04	1400	11.14	45,200	73	Air Temp 84	<3
42,100	-900	STJ	9-30-04	1230	10.44	43,000	70	Air Temp 64	2
42,100	-900	MKC	9-30-04	1230	10.44	43,000	69	Air Temp0 64	2

Discharge Measurements for October 2004

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
43,200	1,200	WVMO	10-01-04	1001	11.02	42,000	69	Air Temp 63	<3
48,300	1,900	BNMO	10-01-04	1305	8.21	46,400	69	Air Temp 62	<4
25,200	-600	SUX	10-04-04	1045	13.62	25,800	67	Air Temp 61	2
26,500	-400	DENE	10-04-04	1300	20.74	26,900	68	Air Temp 64	>1
30,700	0	OMA	10-04-04	1610	15.88	30,700	63	Air Temp 70	0
34,600	700	NCNE	10-04-04	1340	9.12	33,900	64	Air Temp 67	2
35,900	1,300	RUNE	10-04-04	1110	8.68	34,600	65	Air Temp 68	>3
36,000	200	STJ	10-05-04	1005	7.95	35,800			<1
36,900	900	MKC	10-07-04	1350	9.33	37,400	66	Air Temp 64	2
38,300	300	WVMO	10-07-04	1043	10.22	38,000	64	Air Temp 66	<1
16,300	300	DENE	10-12-04	1200	17.09	16,000	61	Air Temp 55	<2
26,500	1,200	NCNE	10-12-04	1400	7.07	25,300	64	Air Temp 64	<5
29,100	1,400	RUNE	10-12-04	1135	7.01	27,700	64	Air Temp 57	<5
38,000	-1000	WVMO	10-12-05	1012	10.17	39,000	54	Air Temp 54	<3
43,700	0	BNMO	10-12-04	1012	7.41	43,700	63	Air Temp 55	0
28,500	-200	STJ	10-13-04	1100	6.06	28,700	M	Air Temp 55	<1
31,900	-600	MKC	10-13-04	1415	8.20	32,500	M	Air Temp 60	<2
18,400	-1,100	OMA	10-14-04	1110	11.83	19,500	58	Air Temp 52	>5
12,000	-1,600	SUX	10-18-04	1028	9.02	13,600	54	Air Temp 53	13
14,000	200	DENE	10-18-04	1345	16.46	14,500	55	Air Temp 61	>1
23,600	-3,300	MKC	10-18-04	1330	6.10	26,900	56	Air Temp 56	14
16,100	500	OMA	10-19-04	1610	10.88	16,600	56	Air Temp 68	3
20,000	-300	NCNE	10-19-04	1340	5.34	20,300	56	Air Temp 63	>1
21,900	400	RUNE	10-19-04	1110	5.2	21,500	56	Air Temp 56	>1
11,100	-1,900	SUX	10-25-04	1100	8.77	13,000	54	Air Temp 55	17
14,200	-200	DENE	10-25-04	1400	16.23	14,000	55	Air Temp 57	<1

21,100	-2,000	MKC	10-26-04	1330	6.10	23,100	62	Air Temp 64	9
15,000	-600	OMA	10-26-04	1610	10.41	15,600	61	Air Temp 65	4
18,900	-200	NCNE	10-26-04	1350	5.06	19,100	61	Air Temp 67	1
20,400	100	RUNE	10-26-04	1125	4.80	20,300	62	Air Temp 64	<1
23,900	-1,000	WVMO	10-27-04	1030	7.27	24,900	64	Air Temp 64	4
30,700	900	BNMO	10-27-04	1345	4.64	29,800	64	Air Temp 64	3
18,700	-1,500	STJ	10-29-04	1315	3.21	20,200	65	Air Temp	<7
35,900	2,200	MKC	10-30-04	1030	8.83	33,700	59	Air Temp 68	6
34,000	0	WVMO	10-30-04	1400	9.44	34,000	60	Air Temp 70	0

Discharge Measurements for November 2004

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
14,600	-1,600	OMA	11-02-04	0855	10.22	16,200	55	Air Temp 48	10
19,100	-600	NCNE	11-02-04	1110	5.12	19,700	57	Air Temp 49	3
19,200	-400	RUNE	11-02-04	1425	4.49	19,600	58	Air Temp 51	2
68,400	3,800	BNMO	11-02-04	1230	11.20	64,600	58	Air Temp 51	6
10,000	-1,500	SUX	11-03-04	1120	8.40	11,500	49	Air Temp 55	15
13,300	700	DENE	11-03-04	1425	15.86	12,600	51	Air Temp 55	5
11,400	-400	SUX	11-08-04	1110	8.42	11,800	49	Air Temp 11	4
12,800	500	DENE	11-08-04	1410	15.66	12,300	53	Air Temp 59	4
54,900	-2,100	HEMO	11-08-04	1315	7.09	57,000	57	Air Temp 56	4
13,700	-700	OMA	11-09-04	1500	9.86	14,400	52	Air Temp 71	5
17,100	-1,500	NCNE	11-09-04	1300	4.56	18,600	53	Air Temp 66	9
18,400	-500	RUNE	11-09-04	1040	4.28	18,900	52	Air Temp 60	3
24,100	-200	WVMO	11-09-04	1500	7.32	24,300	55	Air Temp 64	<1
34,600	2,100	BNMO	11-09-04	1215	5.54	32,500		Air Temp 65	6
19,100	-500	STJ	11-10-04	1320	3.32	19,600	51	Air Temp 60	<3
21,100	-1,200	MKC	11-10-04	1030	5.13	22,300	54	Air Temp 54	>5
12,900	-1,300	OMA	11-15-04	1510	9.52	14,200	47	Air Temp 58	10
17,000	-1,500	NCNE	11-15-04	1250	4.54	18,500	47	Air Temp 52	<9
17,900	-1,100	RUNE	11-15-04	1040	4.16	19,000	50	Air Temp 50	>6
10,700	-500	SUX	11-16-04	1050	8.22	11,200	47	Air Temp 54	5
12,700	1,400	DENE	11-16-04	1340	15.59	12,300	49	Air Temp 63	10
22,100	-2,100	WVMO	11-18-04	1015	6.78	24,200	54	Air Temp 64	<10
19,700	-2,300	MKC	11-18-04	1015	4.75	22,000	54	Air Temp 56	<12
10,500	-700	SUX	11-22-04	1120	8.16	11,200	45	Air Temp 48	<7
12,100	200	DENE	11-22-04	1400	15.32	11,900	46	Air Temp 51	<2
13,000	-1,400	OMA	11-23-04	1530	9.55	14,400	47	Air Temp 43	<11
19,100	-1000	NCNE	11-23-04	1250	5.11	20,100	48	Air Temp 42	5

19,800	-700	RUNE	11-23-04	1035	4.66	20,500	52	Air Temp 47	<4
20,100	-500	STJ	11-23-04	1445	3.63	20,600	51	Air Temp	2
21,900	-400	MKC	11-23-04	1500	5.10	22,300	51	Air Temp 51	2
30,300	-2,700	HEMO	11-23-04	1130	2.89	33,000	55	Air Temp53	9
22,800	-1,100	MKC	11-29-04	1200	2.98	23,900			5
59,100	-1,400	BNMO	11-29-04	1230	9.89	60,500	46	Air Temp 41	2

Discharge Measurements for December 2004

COE Discharge	Difference	Station	Date	Time	Gage Height	Measured Discharge	Water Temp (F)	Remarks	% Diff
17,800	-1,400	NCNE	12-01-04	1020	4.76	19,200	39	Air Temp 37	8
18,900	-1,300	RUNE	12-01-04	1320	4.42	20,200	44	Air Temp 41	7
12,800	1,300	OMA	12-02-04	1055	9.47	14,100	37	Air Temp 41	10
24,500	-300	WVMO	12-02-04	1330	7.40	24,800			1
11,500	-700	SUX	12-03-04	1115	8.62	12,200	37	Air Temp 37	6
12,700	-300	DENE	12-03-04	1445	15.83	13,000	41	Air Temp 43	2
12,000	0	SUX	12-07-04	1055	8.60	12,000	39	Air Temp 39	0
13,400	700	DENE	12-07-04	1355	15.90	12,700	41	Air Temp 43	5
20,700	-1,000	STJ	12-08-04	1315	3.82	21,700	42	Air Temp 46	5
13,900	-1,000	OMA	12-09-04	1550	9.92	14,900	42	Air Temp 11	7
18,900	-1,200	NCNE	12-09-04	1325	5.0	20,100	42	Air Temp 49	6
20,100	-1,100	RUNE	12-09-04	1115	4.74	21,200	44	Air Temp 47	5
25,600	-1,300	WVMO	12-09-04	1045	7.66	26,900	43	Air Temp 51	5
23,300	-500	MKC	12-13-04	1400	5.46	23,800	43	Air Temp 38	2
13,100	100	SUX	12-17-04	1045	8.93	13,000	36	Air Temp 31	>0
14,300	100	DENE	12-17-04	1315	16.28	14,200	38	Air Temp 41	>0
13,800	-1,200	OMA	12-17-04	1130	9.90	15,000	37	Air Temp 46	9
17,400	-1,700	NCNE	12-17-04	1415	4.64	19,100	37	Air Temp 55	10
19,600	-1,500	RUNE	12-17-04	1130	4.61	21,100	38	Air Temp 54	8
19,800	-600	STJ	12-21-04	1230	3.53	20,400	35	Air Temp 30	3
21,900	-1,600	MKC	12-21-04	1130	5.08	23,500			7
14,000	100	SUX	12-30-04	1055	9.23	13,900	35	Air Temp 54	<1
14,400	-200	DENE	12-30-04	1340	16.32	14,600	37	Air Temp 64	1