TABLE 3.1

Summary of Discharge Measurements
St. Marys River
Below the St. Marys Rapids
1867

Discharge Through Each Panel (cubic feet per second (cfs))

Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Jul 3					4,301			15,265						2,943		
Jul 5	432								12,151	9,392						
Jul 6										9,495		5,601				
Jul 8		2,168	5,062			5,588		15,263								
Jul 9		1,871		4,303	4,062		11,528		12,130		6,390					
Jul 11			4,996	4,576	5,570			14,747					5,672	2,834		
Jul 12					5,258							6,182		3,382	1,313	
Jul 13									10,573							
Jul 16				5,294		6,997		15,184								
Jul 17									12,027	8,276	5,505					
Jul 18												5,581	3,770	1,479		
Jul 19		1,923	4,028	4,188	3,321	6,706		14,744	10,816		6,116	3,758				
Jul 20												5,441	3,315	1,734	684	
Jul 22		2,310	4,184	4,137	4,624	9,074	11,325	15,500	11,760	8,377						331
Jul 23							10,735	14,059	12,592	7,850	7,570	6,958	5,044	2,143	1,186	
Jul 24		2,303	4,203	4,915	4,723	8,829	12,088	15,453								
Jul 25									13,119	8,770	7,237	6,984	3,694	2,006	852	524
Jul 26			4,121	3,198	3,986	6,711	11,686	13,773								
Jul 27	324	1,907	3,599													
Jul 29				4,876	5,530	9,076		17,276								
Jul 30						5,577			12,711	7,488	6,781	6,351	3,482			
Aug 2						8,431		15,776								
Aug 3									11,807							
Aug 5			3,626	4,806	4,366	6,855	11,203	15,391	11,943	8,096	6,735	6,159				
Mean	378	2,080	4,227	4,477	4,574	7,464	11,428	15,203	11,966	8,468	6,619	5,891	4,163	2,360	1,009	436

TABLE 3.2

Summary of Discharge Measurements
St. Marys River
Below the St. Marys Rapids
1943 Reduction of 1867 Measurements

Date	Time	Section Gage (Feet)	Discharge(TCFS) 1943
Jul 3	1314 - 1741	2.60	-
Jul 5	0858 - 1153	2.44	-
Jul 6	1445 - 1759	2.60	-
Jul 8	0835 - 1751	2.60	93.29
Jul 9	0814 - 1751	2.50	87.46
Jul 11	0826 - 1746	2.60	87.97
Jul 12	0816 - 1751	2.75	93.81
Jul 13	1410 - 1450	2.72	-
Jul 16	1449 - 1741	2.57	90.01
Jul 17	1345 - 1654	2.60	-
Jul 18	0956 - 1808	2.57	-
Jul 19	0942 - 1731	2.65	77.42
Jul 20	0937 - 1720	2.57	-
Jul 22	0843 - 1743	2.67	94.25
Jul 23	0839 - 1642	2.66	90.77
Jul 24	0948 - 1718	2.75	93.06
Jul 25	0830 - 1725	2.75	94.42
Jul 26	0845 - 1738	2.68	82.99
Jul 27	0821 - 1206	2.66	-
Jul 29	0907 - 1106	2.62	95.73
Jul 30	0907 - 1659	2.75	86.68
Aug 2	1059 - 1201	2.84	-
Aug 3	0942 - 1133	2.74	-
Aug 5	0837 - 1547	2.80	82.09
		Mean	89.28

TABLE 3.3

Summary of Discharge Measurements
St. Marys River
Bridge Section
1895 - 1896

Meas. No.	Date	Water Levels (Feet) South Abutment (M.T.N.Y.*)	Water Levels (Feet) S.W. Pier (1935 Datum, Adj.)	Discharge (TCFS)
1	Dec 24, 1895	601.20	601.74	63.9
2	Dec 24	601.14	601.68	65.0
3	Dec 26	601.77	602.32	73.5
4	Dec 26	601.74	602.30	75.6
5	Dec 27	601.60	602.15	72.2
6	Dec 27	601.86	602.42	76.2
7	Dec 30	601.69	602.25	74.3
8	Dec 30	602.03	602.59	79.3
9	Jan 2, 1896	602.05	602.61	79.9
10	Jan 2	601.89	602.45	76.4
11	Jan 4	601.30	601.85	65.4
12	Mar 16	600.77	601.30	60.6
13	Mar 16	601.07	601.61	63.8
14	Mar 24	600.66	601.19	58.7

* M.T.N.Y. = Mean Tide New York

TABLE 3.4

Summary of Discharge Measurements
St. Marys River
Spry Dock Section
1896

Meas. No.	Date	Water Levels (Feet) S. Abutment (M.T.N.Y.)	Gage No. 1 (1903 Datum)	Section (1903 Datum)	Discharge (TCFS)
1	Feb 8	601.25	601.66	583.00	69.7
2	Feb 10	601.15	601.55	582.85	66.8
3	Feb 10	601.19	601.60	582.86	67.4
4	Feb 10	601.25	601.66	582.88	67.4
5	Feb 12	601.27	601.68	583.18	68.2
6	Feb 12	601.19	601.60	583.14	69.8
7	Feb 12	601.11	601.51	583.07	65.4
8	Feb 13	601.34	601.74	583.01	68.4
9	Feb 13	601.35	601.75	583.03	71.4
10	Feb 14	601.42	601.82	583.15	72.2
11	Feb 15	601.42	601.83	583.19	71.3
12	Feb 15	601.54	601.94	583.23	75.0
13	Feb 17	601.08	601.48	582.78	64.7
14	Feb 17	600.92	601.33	582.74	60.5
15	Feb 18	601.34	601.74	582.95	67.6
16	Feb 18	601.41	601.81	583.02	70.4
17	Feb 18	601.42	601.82	583.19	70.9
18	Feb 19	601.55	601.95	583.25	69.9
19	Feb 19	601.65	602.05	583.30	77.1
20	Feb 20	601.45	601.85	583.07	69.5
21	Feb 21	601.21	601.61	583.05	68.6
22	Feb 21	601.20	601.60	583.12	68.6
23	Feb 24	601.30	601.70	583.02	69.2
24	Feb 25	601.04	601.44	582.81	64.9
25	Feb 25	600.68	601.08	582.66	60.5
26	Feb 27	601.10	601.50	582.83	65.9
27	Feb 28	601.41	601.82	583.08	70.6
28	Feb 28	601.64	602.05	583.17	74.4
29	Feb 28	601.30	601.70	583.11	69.5
30	Feb 28	601.37	601.78	583.06	68.7
31	Feb 29	601.28	601.68	583.01	69.3
32	Mar 2	601.47	601.88	582.96	71.8

TABLE 3.4
(Continued)

Summary of Discharge Measurements
St. Marys River
Spry Dock Section
1896

Meas. No.	Date	Water Levels (Feet) S. Abutment (M.T.N.Y.)	Gage No. 1 (1903 Datum)	Section (1903 Datum)	Discharge (TCFS)
33	Mar 2	601.46	601.86	582.98	72.2
34	Mar 3	601.28	601.68	582.80	70.8
35	Mar 4	601.14	601.54	582.70	65.9
36	Mar 5	601.08	601.48	582.56	62.7
37	Mar 5	600.86	601.26	582.52	60.3
38	Mar 5	600.90	601.30	582.47	61.5
39	Mar 6	600.90	601.30	582.45	61.0
40	Mar 7	601.43	601.84	582.84	68.4
41	Mar 9	601.09	601.50	582.76	67.4
42	Mar 10	601.10	601.50	582.73	67.2
43	Mar 10	601.13	601.53	582.72	68.8
44	Mar 11	601.11	601.52	582.68	64.5
45	Mar 11	601.26	601.66	582.74	68.6
46	Mar 12	601.23	601.63	582.61	66.9
47	Mar 12	601.43	601.83	582.69	72.0
48	Mar 13	601.10	601.51	582.64	66.0
49	Mar 13	601.29	601.69	582.70	65.4
50	Mar 14	601.16	601.56	582.67	64.9
51	Mar 14	601.20	601.60	582.72	65.8
52	Mar 16	601.15	601.55	582.61	66.1
53	Mar 23	601.10	601.50	582.55	65.0
54	Mar 23	601.18	601.58	582.69	68.8

TABLE 3.5

Summary of Discharge Measurements
St. Marys River
Spry Dock Section
1899

Meas. No.	Date	Water Levels (Feet, M.T.N.Y.) S. Abutment	Discharge (TCFS)
1	Feb 18	601.01	65.2
2	Feb 18	600.99	69.2
3	Feb 20	600.91	65.2
4	Feb 20	600.87	64.5
5	Feb 21	600.91	66.3
6	Feb 21	600.80	62.9
7	Mar 11	600.96	70.5
8	Mar 13	601.12	70.3
9	Mar 13	600.82	62.6
10	Mar 14	600.91	69.1
11	Mar 14	600.76	65.5
12	Mar 14	600.66	64.3
13	Mar 14	600.76	66.1
14	Mar 15	601.37	76.2
15	Mar 15	601.29	74.6
16	Mar 16	601.03	69.4
17	Mar 16	600.99	67.8
18	Mar 16	600.91	66.3
19	Mar 16	600.83	66.0
20	Mar 17	600.73	65.4
21	Mar 17	600.79	65.7
22	Mar 17	600.87	66.4
23	Mar 17	600.76	65.5
24	Mar 18	600.94	68.8
25	Mar 18	601.01	70.4
26	Mar 18	601.02	70.3
27	Mar 18	601.03	67.1
28	Mar 20	601.00	67.7
29	Mar 20	600.97	65.8
30	Mar 21	600.98	63.3
31	Mar 21	600.70	64.2
32	Mar 22	600.98	69.4
33	Mar 22	600.99	68.9

TABLE 3.5
(Continued)

Summary of Discharge Measurements
St. Marys River
Spry Dock Section
1899

Meas. No.	Date	Water Levels (Feet, M.T.N.Y.) S. Abutment	Discharge (TCFS)
34	Mar 22	601.03	69.4
35	Mar 22	601.04	68.3
36	Mar 23	601.06	69.3
37	Mar 24	601.00	68.0
38	Mar 24	600.98	67.2
39	Mar 24	600.93	66.6
40	Mar 24	601.38	70.0
41	Mar 25	601.34	74.8
42	Mar 25	600.99	67.2
43	Mar 25	600.94	67.2
44	Mar 27	600.93	67.9
45	Mar 27	600.96	68.2
46	Mar 28	600.94	67.4
47	Mar 28	601.06	68.8
48	Mar 29	601.06	69.0
49	Mar 29	601.05	69.1
50	Mar 30	601.03	69.4
51	Mar 30	600.96	67.6
52	Mar 31	600.96	68.5
53	Mar 31	600.93	67.2
54	Mar 31	600.93	65.3
55	Mar 31	600.88	66.3
56	Apr 1	600.89	67.5
57	Apr 1	600.98	68.7
58	Apr 1	601.02	67.8
59	Apr 1	601.03	67.5
60	Apr 3	601.02	67.5
61	Apr 3	600.97	66.7
62	Apr 4	600.91	66.0
63	Apr 4	600.82	67.1

TABLE 3.6

Summary of Discharge Measurements
St. Marys River
International Bridge Section
1899

Meas. No.	Date	Water Levels (Feet, M.T.N.Y.) S.W. Pier	Discharge (TCFS)
1	Dec 4	602.64	83.0
2	Dec 5	602.51	81.7
3	Dec 6	602.38	78.9
4	Dec 9	601.59	67.4
5	Dec 9	601.68	68.8
6	Dec 11	602.43	60.7
7	Dec 12	602.32	78.6
8	Dec 12	602.66	82.8
9	Dec 12	602.62	82.6
10	Dec 13	602.54	81.4
11	Dec 13	602.55	80.6
12	Dec 14	602.20	77.5
13	Dec 14	602.10	74.7
14	Dec 15	602.27	77.6
15	Dec 15	602.48	80.0
16	Dec 16	602.23	77.0
17	Dec 16	602.33	77.9
18	Dec 18	601.96	72.8
19	Dec 19	603.19	89.4
20	Dec 19	602.59	81.6
21	Dec 20	602.20	75.3
22	Dec 20	602.44	79.6
23	Dec 20	602.22	76.5
24	Dec 21	602.24	76.6
25	Dec 21	602.65	81.8
26	Dec 21	602.51	80.5
27	Dec 22	602.11	74.0
28	Dec 22	601.85	71.3
29	Dec 22	601.94	73.3
30	Dec 23	602.16	75.6
31	Dec 23	602.28	76.6
32	Dec 27	602.45	78.8
33	Dec 27	602.52	79.7

TABLE 3.7

Summary of Discharge Measurements
St. Marys River
International Bridge Section
1901

Meas. No.	Date	Water Levels (Feet, M.T.N.Y.) S.W. Pier	Pier No. 2	Discharge (TCFS)
1	Jul 12	602.07	601.07	70.3
2	Jul 13	602.15	601.12	75.5
3	Jul 15	602.15	601.12	76.4
4	Jul 16	602.32	601.22	81.1
5	Jul 17	602.42	601.28	76.9
6	Jul 18	602.34	601.23	78.4
7	Jul 18	602.27	601.19	77.9
8	Jul 20	602.37	601.25	76.1
9	Jul 20	602.49	601.32	78.3
10	Jul 22	602.55	601.35	76.3
11	Jul 23	602.44	601.29	79.6
12	Jul 24	602.46	601.30	79.4
13	Jul 25	602.22	601.16	76.4
14	Jul 26	602.25	601.18	75.6
15	Jul 27	602.06	601.06	73.6
16	Jul 29	602.27	601.19	76.8
17	Jul 30	602.49	601.32	78.6
18	Jul 31	602.71	601.44	81.5
19	Aug 1	602.53	601.34	76.2
20	Aug 2	602.35	601.24	74.8
21	Oct 24	602.44	601.29	69.2
22	Oct 26	602.83	601.50	70.4
23	Oct 28	602.30	601.21	65.3
24	Oct 29	601.74	600.86	56.7
25	Oct 29	601.94	600.99	60.6
26	Oct 30	602.04	601.05	60.3
27	Oct 30	602.14	601.11	63.2
28	Oct 31	602.42	601.28	65.4
29	Oct 31	602.06	601.06	60.9
30	Nov 1	603.01	601.59	74.3
31	Nov 1	602.60	601.38	69.8
32	Nov 2	602.02	601.04	62.5
33	Nov 4	602.56	601.36	70.5
34	Nov 5	602.14	601.11	62.8

TABLE 3.7
(Continued)

Summary of Discharge Measurements
St. Marys River
International Bridge Section
1901

Meas. No.	Date	Water Levels (Feet, M.T.N.Y.) S.W. Pier	Pier No. 2	Discharge (TCFS)
35	Nov 6	602.07	601.07	62.6
36	Nov 7	602.37	601.25	68.1
37	Nov 7	603.01	601.59	75.6
38	Nov 8	601.91	600.97	59.1
39	Nov 8	602.07	601.07	64.2
40	Nov 9	602.47	601.31	64.9
41	Nov 9	602.68	601.39	65.4
42	Nov 11	602.25	601.18	64.4
43	Nov 11	602.24	601.17	63.5
44	Nov 12	602.65	601.41	70.3
45	Nov 13	602.47	601.31	68.6
46	Nov 14	602.87	601.52	74.2
47	Nov 14	603.42	601.78	78.7
48	Nov 15	602.80	601.47	70.2
49	Nov 16	602.46	601.31	63.7
50	Nov 18	602.30	601.21	63.0
51	Nov 19	602.22	601.16	61.0
52	Nov 19	602.30	601.21	63.6
53	Nov 20	602.34	601.25	65.3
54	Nov 20	602.24	601.17	61.6
55	Nov 21	602.18	601.14	61.2
56	Nov 21	602.30	601.20	62.2
57	Nov 21	602.20	601.15	58.2
58	Nov 22	602.16	601.13	60.9
59	Nov 22	602.07	601.07	58.7
60	Nov 23	601.81	600.91	57.4
61	Nov 23	601.72	600.85	55.8
62	Nov 25	602.45	601.30	64.8
63	Nov 25	602.30	601.21	61.6
64	Nov 26	602.00	601.02	58.8

TABLE 3.8

Summary of Discharge Measurements
St. Marys River
International Bridge Section
1902

Meas. No.	Date	Water Levels (Feet, M.T.N.Y.) S.W. Pier	Pier No. 2	Discharge (TCFS)
1	Jul 31	602.52	601.08	73.8
2	Aug 1	602.40	601.03	71.9
3	Aug 1	602.25	600.96	69.6
4	Aug 1	602.32	600.99	69.6
5	Aug 1	602.30	600.98	69.4
6	Aug 2	602.25	600.96	69.0
7	Aug 2	602.10	600.90	66.6
8	Aug 4	602.52	601.08	73.7
9	Aug 4	602.05	600.88	66.2
10	Aug 4	602.05	600.88	65.2
11	Aug 5	602.42	601.04	71.5
12	Aug 5	602.58	601.10	73.2
13	Aug 5	602.42	601.04	71.8
14	Aug 5	602.20	600.94	68.2
15	Aug 6	602.38	601.02	71.0
16	Aug 6	602.52	601.08	73.1
17	Aug 6	602.35	601.01	70.4
18	Aug 6	602.32	600.99	69.7
19	Aug 7	602.25	600.96	68.3
20	Aug 7	602.30	600.98	68.9
21	Aug 7	602.30	600.98	69.3
22	Aug 7	602.10	600.90	66.2
23	Aug 8	602.68	601.14	75.6
24	Aug 8	602.68	601.14	75.2
25	Aug 8	602.48	601.06	71.7
26	Aug 8	602.45	601.05	71.1
27	Aug 9	602.08	600.89	66.7
28	Aug 9	602.22	600.95	68.8
29	Aug 11	602.60	601.11	73.2
30	Aug 11	602.80	601.18	76.5
31	Aug 11	602.50	601.07	70.1
32	Aug 11	602.75	601.16	74.2
33	Aug 12	602.22	600.95	68.4
34	Aug 12	602.22	600.95	68.2

TABLE 3.8
(Continued)

Summary of Discharge Measurements
St. Marys River
International Bridge Section
1902

Meas. No.	Date	Water Levels (Feet, M.T.N.Y.) S.W. Pier	Pier No. 2	Discharge (TCFS)
35	Aug 12	601.98	600.85	63.2
36	Aug 12	602.25	600.96	66.5
37	Aug 13	602.25	600.96	68.9
38	Aug 23	602.25	600.96	69.1
39	Aug 23	602.28	600.97	69.7
40	Aug 25	602.20	600.94	68.9
41	Aug 26	602.33	601.00	69.3
42	Aug 27	602.12	600.91	64.4
43	Aug 27	602.22	600.95	66.5
44	Sep 2	602.42	601.04	70.3
45	Sep 2	602.20	600.94	67.6
46	Sep 2	602.10	600.90	64.9
47	Sep 4	602.60	601.11	71.9
48	Sep 4	602.68	601.14	74.8
49	Sep 4	602.72	601.16	75.2
50	Sep 4	602.85	601.20	77.6
51	Sep 6	602.12	600.91	64.8
52	Sep 6	602.38	601.02	68.2
53	Sep 9	602.75	601.16	75.8
54	Sep 9	602.75	601.16	74.7
55	Sep 10	602.28	600.97	70.5
56	Sep 13	602.68	601.14	77.5
57	Sep 15	602.20	600.94	70.1
58	Sep 15	602.22	600.95	70.5
59	Sep 16	601.85	600.79	63.8
60	Sep 16	602.10	600.90	67.5
61	Sep 16	601.92	600.82	63.7
62	Sep 16	601.95	600.83	63.6
63	Sep 17	601.90	600.81	64.0
64	Sep 17	602.08	600.89	67.3
65	Sep 17	602.05	600.88	67.3
66	Sep 19	602.25	600.96	68.6
67	Sep 19	602.25	600.96	69.8

TABLE 3.8
(Continued)

Summary of Discharge Measurements
St. Marys River
International Bridge Section
1902

Meas. No.	Date	Water Levels (Feet, M.T.N.Y.) S.W. Pier	Pier No. 2	Discharge (TCFS)
68	Sep 20	602.10	600.90	66.8
69	Sep 20	602.32	600.90	71.6
70	Sep 20	602.10	600.90	67.3
71	Sep 20	602.15	600.92	68.5
72	Sep 22	602.33	601.00	71.8
73	Sep 22	602.30	600.98	71.3
74	Sep 22	602.38	601.02	71.9
75	Sep 22	602.22	600.95	69.8
76	Sep 23	602.45	601.05	74.0
77	Sep 23	602.28	600.97	71.7
78	Sep 23	602.38	601.02	71.8
79	Sep 23	602.50	601.07	74.6
80	Sep 24	601.96	600.84	64.2
81	Sep 24	602.00	600.86	65.6
82	Sep 24	602.20	600.94	68.2
83	Sep 24	602.20	600.94	67.8
84	Sep 25	601.98	600.85	67.2
85	Sep 25	601.90	600.81	65.6
86	Sep 25	602.05	600.88	65.3
87	Sep 25	601.95	600.83	63.0
88	Sep 26	602.18	600.93	66.7
89	Sep 26	601.95	600.83	62.6
90	Sep 26	602.02	600.87	64.0
91	Sep 26	602.02	600.87	64.2
92	Sep 27	602.18	600.93	66.2
93	Sep 27	601.92	600.82	61.5
94	Sep 27	601.92	600.82	62.3
95	Sep 27	602.28	600.97	67.0
96	Sep 29	602.25	600.96	66.2
97	Sep 29	602.25	600.96	66.2
98	Sep 29	602.15	600.92	66.0
99	Sep 29	602.12	600.91	65.8
100	Sep 30	602.52	601.08	70.0

TABLE 3.8
(Continued)

Summary of Discharge Measurements
St. Marys River
International Bridge Section
1902

Meas. No.	Date	Water Levels (Feet, M.T.N.Y.) S.W. Pier	Pier No. 2	Discharge (TCFS)
101	Sep 30	602.75	601.16	74.8
102	Sep 30	602.25	600.96	66.4
103	Sep 30	602.65	601.13	74.9
104	Oct 3	602.32	600.99	72.9
105	Oct 3	602.35	601.01	72.8
106	Oct 4	602.28	600.97	70.3
107	Oct 4	602.15	600.92	69.0
108	Oct 6	602.20	600.94	70.2
109	Oct 6	602.34	601.00	71.9
110	Oct 16	602.18	600.93	66.0
111	Oct 17	601.78	600.76	63.1
112	Oct 20	602.18	600.93	65.2
113	Oct 20	602.34	601.00	70.7
114	Oct 20	602.35	601.01	70.5
115	Oct 21	601.78	600.76	59.5
116	Oct 21	602.00	600.86	63.1
117	Oct 21	601.84	600.78	59.6
118	Oct 21	601.77	600.75	58.9
119	Oct 22	601.90	602.81	63.6
120	Oct 22	601.90	600.81	64.2
121	Oct 22	602.28	600.97	67.6
122	Oct 22	601.98	600.85	63.1
123	Oct 23	601.62	600.68	58.0
124	Oct 23	601.38	600.55	53.6
125	Oct 23	601.48	600.60	56.5
126	Oct 23	601.16	600.43	52.8
127	Oct 24	602.50	601.07	72.5
128	Oct 24	602.38	601.02	69.4
129	Oct 24	602.90	601.22	76.5
130	Oct 25	601.92	600.82	63.4
131	Oct 25	601.77	600.75	61.1
132	Oct 25	601.68	600.71	59.2
133	Oct 25	601.80	600.77	59.1

TABLE 3.8
(Continued)

Summary of Discharge Measurements
St. Marys River
International Bridge Section
1902

Meas. No.	Date	Water Levels (Feet, M.T.N.Y.) S.W. Pier	Pier No. 2	Discharge (TCFS)
134	Oct 27	602.18	600.93	67.4
135	Oct 27	602.20	600.94	68.5
136	Oct 27	602.38	601.02	68.4
137	Oct 27	602.30	600.98	68.9
138	Oct 28	602.28	600.97	68.7
139	Oct 28	602.18	600.93	66.0
140	Oct 28	602.52	601.08	72.0
141	Oct 28	602.42	601.04	70.5
142	Nov 7	602.00	600.86	63.7
143	Nov 8	602.08	600.89	65.9
144	Nov 8	601.80	600.78	60.4
145	Nov 8	602.25	600.96	69.3
146	Nov 8	601.78	600.76	61.1

TABLE 3.9

Summary of Discharge Measurements
St. Marys River
Brewery Section
1905

Meas. No.	Date	Water Levels (Feet, M.T.N.Y.) Below S.W. Pier	Section Locks	Discharge Gauge	(TCFS)
1	Feb 9	601.64	583.72	583.67	69.8
2	Feb 9	601.60	583.84	583.72	69.1
3	Feb 10	601.87	584.02	583.90	77.2
4	Feb 10	601.84	584.03	583.90	77.0
5	Feb 11	601.45	583.91	583.80	71.8
6	Feb 11	601.63	583.91	583.82	71.2
7	Feb 13	601.65	583.94	583.79	73.1
8	Feb 13	601.72	583.94	583.81	73.6
9	Feb 14	601.62	583.95	583.83	74.1
10	Feb 14	601.70	583.97	583.84	74.4
11	Feb 15	601.49	583.95	583.80	69.0
12	Feb 15	601.46	583.88	583.76	71.0
13	Feb 16	601.30	583.82	583.68	70.4
14	Feb 16	601.49	583.82	583.69	70.6
15	Feb 17	601.80	584.07	583.86	76.9
16	Feb 17	601.80	584.14	583.88	73.6
17	Feb 18	601.65	583.92	583.77	72.6
18	Feb 18	601.63	583.91	583.78	71.8
19	Feb 20	601.70	583.89	583.73	74.5
20	Feb 20	601.58	583.88	583.71	69.6
21	Feb 21	601.37	583.83	583.65	67.5
22	Feb 21	601.30	583.84	583.64	67.4
23	Feb 23	601.38	583.80	583.62	68.2
24	Feb 23	601.45	583.80	583.62	68.6
25	Feb 24	601.28	583.68	583.52	65.3
26	Feb 24	601.29	583.67	583.52	64.7
27	Feb 25	601.47	583.74	583.60	66.0
28	Feb 25	601.65	583.78	583.65	72.5
29	Feb 27	601.34	583.60	583.50	66.4
30	Feb 27	601.40	583.61	583.51	66.8
31	Feb 28	601.45	583.74	583.59	68.5
32	Feb 28	601.54	583.73	583.60	68.7
33	Mar 1	601.39	583.61	583.52	66.0

TABLE 3.9
(Continued)

Summary of Discharge Measurements
St. Marys River
Brewery Section
1905

Meas. No.	Date	Water Levels (Feet, M.T.N.Y.) Below S.W. Pier	Section Locks	Discharge Gauge	(TCFS)
34	Mar 1	601.40	583.65	583.52	68.3
35	Mar 2	601.42	583.48	583.48	66.4
36	Mar 2	601.23	583.41	583.42	63.9
37	Mar 3	601.46	583.55	583.54	68.2
38	Mar 3	601.24	583.50	583.49	65.2
39	Feb 6	601.40	583.50	583.51	66.4
40	Feb 6	601.35	583.50	583.50	68.1
41	Feb 8	601.53	583.48	583.51	69.4
42	Feb 8	601.55	583.59	583.58	70.7
43	Feb 10	601.44	583.55	583.54	68.4
44	Feb 10	601.58	583.62	583.62	69.4
45	Feb 13	601.47	583.42	583.44	67.1
46	Feb 13	601.37	583.47	583.46	67.3
47	Feb 14	601.35	583.45	583.46	67.4
48	Feb 14	601.46	583.48	583.50	67.8
49	Feb 15	601.30	583.42	583.42	66.6
50	Feb 15	601.38	583.44	583.44	67.8
51	Feb 16	601.44	583.49	583.51	68.2
52	Feb 16	601.44	583.50	583.53	68.9
53	Feb 17	601.38	583.47	583.44	69.6
54	Feb 17	601.18	583.43	583.43	64.7
55	Feb 20	601.38	583.43	583.80	70.8
56	Feb 20	601.20	583.42	584.02	67.6
57	Feb 21	601.36	583.42	583.83	68.3
58	Feb 21	601.42	583.44	583.88	70.7
59	Feb 22	601.22	583.39	583.94	66.8
60	Mar 22	601.23	583.41	584.00	67.5

TABLE 3.10

Summary of Discharge Measurements
St. Marys River
International Bridge Section
1909

Meas. No.	Date	Water Levels (Feet, 1903 Datum) S.W. Pier	Pier 2	Pier 9	Below Locks	Discharge (TCFS)
1	Sep 18	601.68	600.65	598.79	582.10	51.1
2	Sep 18	601.71	600.66	598.81	582.10	50.9
3	Sep 18	601.62	600.63	598.78	582.09	52.4
4	Sep 20	601.63	600.63	598.77	582.00	51.3
5	Sep 20	601.64	600.65	598.79	582.04	51.7
6	Sep 20	601.52	600.58	598.76	582.05	49.2
7	Sep 20	601.72	600.65	598.77	582.09	52.0
8	Sep 21	601.87	600.72	598.85	582.10	55.8
9	Sep 21	601.40	600.57	598.82	582.03	49.3
10	Sep 21	601.30	600.50	598.72	582.10	47.7
11	Sep 21	601.78	600.66	598.80	582.17	51.8
12	Sep 22	601.96	600.84	598.93	582.57	58.6
13	Sep 22	601.87	600.76	598.87	582.50	56.0
14	Sep 22	602.29	600.93	599.06	582.37	60.5
15	Sep 22	602.10	600.89	598.97	582.27	59.2
16	Sep 23	602.14	600.91	598.98	582.07	60.5
17	Sep 23	602.07	600.91	598.98	582.04	59.5
18	Sep 23	602.07	600.95	598.96	581.92	57.8
19	Sep 23	602.21	600.91	599.02	581.91	59.2
20	Sep 24	602.01	600.90	598.96	582.19	58.8
21	Sep 24	601.92	-	598.91	582.09	56.6
22	Sep 24	602.10	-	598.97	582.08	58.5
23	Sep 24	602.19	-	599.00	582.03	61.8
24	Sep 24	601.94	-	598.91	581.99	57.1
25	Sep 25	601.77	-	598.86	581.94	55.1
26	Sep 25	601.94	-	598.90	581.94	57.5
27	Sep 25	602.03	600.81	598.95	581.96	55.0
28	Sep 25	601.84	600.75	598.88	581.93	53.8
29	Sep 27	601.92	600.76	598.85	581.88	56.5
30	Sep 27	601.95	600.78	598.92	581.87	56.7

TABLE 3.11

Summary of Discharge Measurements
St. Marys River
Bingham Ave. Section
1909

Meas. No.	Date	Water Levels (Feet, 1903 Datum) Section Gauge	Discharge (TCFS)	Head on Turbines	CFS/KW*
1	Aug 19	596.83	12.29	14.48	1.394
2	Aug 19	596.75	12.32	14.44	1.398
3	Aug 19	596.80	12.18	14.50	1.355
4	Aug 19	596.80	12.26	14.45	1.365
5	Aug 19	596.78	12.36	14.46	1.383
6	Aug 19	596.76	12.30	14.46	1.383
7	Aug 19	596.76	12.14	14.43	1.364
8	Aug 19	596.71	12.24	14.50	1.373
9	Aug 20	596.63	12.00	14.33	1.382
10	Aug 20	596.48	11.94	14.21	1.362
11	Aug 20	596.47	12.17	14.12	1.370
12	Aug 20	596.48	12.12	14.12	1.364
13	Aug 20	596.55	13.78	14.22	-
14	Aug 20	596.55	13.86	14.30	-
15	Aug 20	596.53	12.24	14.31	1.380
16	Aug 20	596.54	12.29	14.27	1.363
17	Aug 20	596.56	13.72	14.22	-
18	Aug 20	596.56	13.76	14.23	-
19	Aug 21	596.16	12.08	13.93	1.374
20	Aug 21	596.11	12.14	13.95	1.387
21	Aug 21	596.11	12.14	13.97	1.387
22	Aug 21	596.21	12.16	13.98	1.391
23	Aug 21	596.19	12.24	13.98	1.415
24	Aug 21	596.19	12.25	13.95	1.423
25	Aug 21	596.21	12.04	13.96	1.364
26	Aug 21	596.10	12.14	13.91	1.402
27	Aug 21	596.14	12.03	13.93	1.397
28	Aug 21	596.24	12.18	13.98	1.408
29	Aug 21	596.37	12.06	14.09	1.392

* @ Michigan Lake Superior Power Company (now Edison Sault Electric Co.) powerhouse, with 35 turbines in operation.

TABLE 3.12

Summary of Discharge Measurements
St. Marys River
Float Section
1909

Meas. No.	Date	Water Levels (Feet, 1903 Datum) S.W. Pier	Section Gauge	Discharge (CFS)	Head on Turbine	CFS/KW*
1	Aug 24	601.00	600.80	1372	14.58	1.698
2	Aug 24	601.63	601.48	1332	15.01	1.617
3	Aug 24	602.38	602.25	1296	16.00	1.569
4	Aug 24	602.60	602.43	1212	16.36	1.586
5	Aug 24	601.51	601.38	1095	15.37	1.601
6	Aug 24	601.90	601.73	1179	15.73	1.549
7	Aug 24	602.11	601.89	1240	15.90	1.505
8	Aug 24	602.28	602.09	1192	16.12	1.564
9	Aug 24	602.36	602.19	1109	16.27	1.653
10	Aug 24	602.24	602.01	1056	16.17	1.630
11	Aug 24	602.17	601.97	1047	16.10	1.731
12	Aug 24	602.24	602.03	993	16.10	1.849
13	Aug 24	602.15	602.02	894	16.10	1.847
14	Aug 24	601.71	601.58	826	15.99	1.784
15	Aug 25	602.02	601.85	1049	16.26	1.566
16	Aug 25	601.62	601.56	1047	15.94	1.553
17	Aug 25	601.43	601.28	1040	15.66	1.509
18	Aug 25	601.42	601.23	1088	15.53	1.561
19	Aug 25	601.51	601.31	1120	15.56	1.614
20	Aug 25	601.64	601.41	1055	15.67	1.618
21	Aug 25	601.72	601.58	1032	15.79	1.904
22	Aug 25	601.89	601.61	1021	15.86	1.766
23	Aug 25	602.06	601.80	1065	15.99	1.802
24	Aug 25	602.30	602.04	1016	16.19	1.716
25	Aug 25	602.40	602.19	964	16.38	1.728
26	Aug 25	602.39	602.13	953	16.45	1.898
27	Aug 25	602.04	601.89	868	16.20	1.768
28	Aug 25	601.89	601.85	967	16.20	1.867
29	Aug 25	601.96	601.76	948	16.20	1.900
30	Aug 25	602.08	601.89	929	16.25	1.904
31	Aug 25	602.16	601.99	911	16.36	1.918
32	Aug 25	602.11	601.89	932	16.32	1.958

TABLE 3.12
(Continued)

Summary of Discharge Measurements
St. Marys River
Float Section
1909

Meas. No.	Date	Water Levels (Feet, 1903 Datum) S.W. Pier	Section Gauge	Discharge (CFS)	Head on Turbine	CFS/KW*
33	Aug 25	601.97	601.83	834	16.29	1.866
34	Aug 25	601.98	601.76	950	16.22	2.030
35	Aug 25	601.98	601.79	959	16.20	2.053
36	Aug 25	601.92	601.76	895	16.20	2.081
37	Aug 25	601.94	601.82	843	16.20	2.081

* @ Edison Sault Electric Co. powerhouse (now U.S. Government powerhouse).

TABLE 3.13

Summary of Discharge Measurements
St. Marys River
Bridge Section
1909

Meas. No.	Date	Water Levels (Feet, 1903 Datum) S.W. Pier	Section Gauge	Discharge (CFS)	Head on Turbine	CFS/KW*
1	Sep 16	601.71	601.62	1267	15.45	1.440
2	Sep 16	601.69	601.51	1287	15.40	1.497
3	Sep 16	601.84	601.70	1203	15.50	1.562
4	Sep 16	601.97	601.83	1167	15.70	1.655
5	Sep 18	601.63	601.52	983	15.40	1.214
6	Sep 20	601.72	601.56	1073	15.40	1.731
7	Sep 21	601.59	601.47	966	15.40	1.584
8	Sep 21	602.08	601.94	1261	15.45	1.854

* @ the Edison Sault Electric Co. powerhouse (now U.S. Government powerhouse).

TABLE 3.14

Summary of Discharge Measurements
St. Marys River
Lake Superior Corporation Section
1909

Meas. No.	Date	Water Levels (Feet, 1903 Datum) Section Gauge	Discharge (TCFS)	Head on Turbines	CFS/KW*
1	Sep 3	600.77	6549	-	-
2	Sep 3	600.86	6426	-	-
3	Sep 4	600.83	6594	18.50	1.576
4	Sep 4	600.99	6617	18.60	1.620
5	Sep 4	600.97	6594	18.55	1.653
6	Sep 4	601.07	6455	18.60	1.579
7	Sep 4	601.14	6421	18.50	1.719
8	Sep 4	601.14	6485	18.95	1.569
9	Sep 4	601.04	6461	18.95	1.726
10	Sep 4	600.89	6533	18.95	1.693
11	Sep 7	600.95	6609	18.65	1.679
12	Sep 7	600.95	6586	18.55	1.666
13	Sep 7	600.77	6582	18.45	1.704
14	Sep 7	600.74	6527	18.30	1.623
15	Sep 7	600.82	6385	18.35	1.743
16	Sep 7	600.92	6527	18.55	1.648
17	Sep 7	600.93	6468	18.60	1.638
18	Sep 7	600.63	6463	18.20	1.559
19	Sep 7	600.91	6468	18.40	1.556
20	Sep 7	601.91	6327	18.40	1.685

* @ Lake Superior Corp.'s Mill No. 2 with 10 turbines in use.

TABLE 3.15

Summary of Discharge Measurements
St. Marys River
Compensating Works
Standard Gate Setting Combinations
1927 - 1930

Date	No. of Gates Open*	Water Levels (Feet, 1903 Datum) Pier No. 4	S.W. Pier	Discharge (CFS)
** May 12, 1930	1	601.753	601.768	5,423
** May 12, 1930	1	601.706	601.731	5,333
May 21, 1930	1	601.532	601.552	5,199
Jun 6, 1930	1	602.215	602.235	5,505
Jun 6, 1930	1	602.176	602.199	5,329
** Jun 30, 1930	1	602.275	602.299	5,596
** Jun 30, 1930	1	602.511	602.535	5,705
** Jun 30, 1930	1	602.567	602.591	5,628
** Jun 30, 1930	1	602.239	602.263	5,531
May 15, 1930	2	602.074	602.101	11,729
May 15, 1930	2	601.889	602.01	11,690
** May 19, 1930	2	601.782	601.807	10,920
** May 20, 1930	2	601.691	601.730	10,900
** Jun 11, 1930	2	602.010	602.037	11,187
** Jun 11, 1930	2	602.071	602.097	11,354
Nov 19, 1927	3	601.80	601.81	15,838
Nov 21, 1927	3	601.69	601.70	15,373
Nov 21, 1927	3	601.65	601.69	15,405
Nov 21, 1927	3	601.81	601.82	15,776
Nov 21, 1927	3	601.94	601.95	16,291
Nov 21, 1927	3	601.65	601.66	15,394
Apr 19, 1928	3	601.45	601.49	14,933
Apr 19, 1928	3	601.33	601.37	14,685
Apr 19, 1928	3	601.20	601.24	14,329
Apr 20, 1928	3	601.17	601.21	14,344
Apr 20, 1928	3	601.03	601.07	14,061
Apr 20, 1928	3	600.99	601.03	13,965
Jun 13, 1929	3	602.04	602.07	16,932

* Refer to text for standard combinations of gate settings.
** Pitot tube observations.

TABLE 3.15
(Continued)

Summary of Discharge Measurements
St. Marys River
Compensating Works
Standard Gate Setting Combinations
1927 - 1930

Date	No. of Gates Open*	Water Levels (Feet, 1903 Datum) Pier No. 4	S.W. Pier	Discharge (CFS)
** May 22, 1930	3	601.599	601.634	15,565
** May 23, 1930	3	601.910	601.944	16,105
** Jun 10, 1930	3	602.003	602.036	16,836
** Jun 10, 1930	3	602.117	602.150	16,706
Jun 13,14, 1929	3	602.12	602.15	17,222
Jun 14, 1929	3	602.26	602.29	17,680
Jun 14, 1929	3	602.18	602.21	17,620
Jun 17, 1929	3	601.87	601.90	16,652
Jun 17, 1929	3	601.87	601.90	16,541
Aug 1, 1929	4	602.46	602.50	23,458
Aug 2, 1929	4	602.19	602.23	22,162
Aug 2, 1929	4	602.13	602.17	21,378
Aug 7, 1929	4	602.31	602.35	22,690
Aug 7, 1929	4	602.41	602.45	22,938
Aug 8, 1929	4	602.10	602.14	21,692
Aug 8, 1929	4	602.26	602.30	22,308
Mar 8,9,10,1927	5	600.20	600.27	17,905
Mar 9, 10, 1927	5	599.98	600.05	16,821
Mar 14,15, 1927	5	600.55	600.61	19,447
Mar 16,18, 1927	5	600.66	600.72	19,998
Mar 10,11, 1927	5	600.15	600.22	17,615
Mar 19,21, 1927	5	600.79	600.85	20,345
Mar 21,23, 1927	5	600.63	600.69	19,684
Oct 26, 1927	5	601.87	601.88	24,412
Oct 26, 1927	5	601.87	601.89	24,396
Oct 26, 1927	5	602.05	602.07	25,295
Oct 27, 1927	5	601.70	601.73	23,803

* Refer to text for standard combinations of gate settings.
** Pitot tube observations.

TABLE 3.15
(Continued)

Summary of Discharge Measurements
St. Marys River
Compensating Works
Standard Gate Setting Combinations
1927 - 1930

Date	No. of Gates Open*	Water Levels (Feet, 1903 Datum) Pier No. 4	S.W. Pier	Discharge (CFS)
Oct 26,28, 1927	5	602.04	602.06	25,668
Oct 27,28, 1927	5	601.93	601.95	25,029
Apr 5, 1928	5	600.11	601.18	21,603
Apr 5, 1928	5	600.98	601.05	20,670
Apr 7, 1928	5	601.11	601.18	21,620
Apr 9, 1928	5	601.17	601.22	22,167
Apr 9, 1928	5	601.16	601.21	22,066
Apr 9,10, 1928	5	600.95	601.01	20,768
Jul 9, 1929	5	602.43	602.47	27,823
Jul 10, 1929	5	602.27	602.31	27,149
Jul 10, 1929	5	602.32	602.36	27,129
Jul 11, 1929	5	602.12	602.16	25,989
Jul 11, 1929	5	602.13	602.20	25,818
Jul 11, 1929	5	602.16	602.20	26,167
Jul 12, 1929	5	602.10	602.14	25,706
Jul 12, 1929	5	602.08	602.07	25,627
Jul 13, 1929	5	601.99	601.92	25,129
Jul 15, 1929	6	602.17	602.22	30,352
Jul 15,16, 1929	6	602.27	602.32	31,262
Jul 16, 1929	6	602.19	602.24	31,076
Jul 16, 1929	6	602.33	602.38	31,310
Jul 17, 1929	6	602.22	602.27	30,797
Nov 5, 1927	9	602.15	602.21	38,996
Nov 5, 1927	9	602.33	602.39	40,444
Nov 7, 1927	9	601.80	601.86	36,414
Nov 7, 1927	9	601.79	601.85	36,284
Apr 13, 1928	9	601.13	601.20	31,200
Apr 12, 1928	9	601.21	601.28	31,952

* Refer to text for standard combinations of gate settings.

TABLE 3.15
(Continued)

Summary of Discharge Measurements
St. Marys River
Compensating Works
Standard Gate Setting Combinations
1927 - 1930

Date	No. of Gates Open*	Water Levels (Feet, 1903 Datum) Pier No. 4	S.W. Pier	Discharge (CFS)
Apr 14,16, 1928	9	600.97	601.04	29,568
Apr 16, 1928	9	600.90	600.97	29,795
Apr 16, 1928	9	600.94	601.01	30,193
Apr 17, 1928	9	600.97	601.04	30,070
Jul 18, 1929	9	602.49	602.54	41,954
Jul 19, 1929	9	602.37	602.43	40,794
Jul 19, 1929	9	602.16	602.24	40,119
Jul 22, 1929	9	602.12	602.18	39,266
Jul 23, 1929	9	602.37	602.43	41,064
Jul 23, 1929	9	602.34	602.40	40,765
Jul 24, 1929	9	602.20	602.26	39,301
Nov 9, 10, 1927	12	601.84	601.96	41,794
Nov ll, 1927	12	601.71	601.82	40,048
Nov 10, 11,1927	12	601.63	601.74	39,562
Nov 8, 10, 1927	12	601.61	601.72	39,545
Aug 27, 1928	12	602.00	602.11	42,757
Aug 28, 1928	12	602.41	602.51	45,966
Aug 28, 1928	12	602.66	602.76	48,924
Jul 25, 1929	12	602.19	602.30	45,644
Jul 26, 1929	12	601.99	602.10	43,702
Jul 26, 1929	12	601.99	602.10	43,485
Jul 29, 1929	12	602.26	602.37	45,902
Jul 30, 1929	12	602.07	602.18	44,432
Jul 31, 1929	12	602.40	602.51	46,585
Nov 1, 1927	16	601.39	601.52	43,268
Nov 2, 1927	16	602.07	602.20	51,407
Nov 2, 3, 1927	16	601.71	601.84	47,571
Nov 3, 1927	16	601.78	601.91	47,848

* Refer to text for standard combinations of gate settings.

TABLE 3.15
(Continued)

Summary of Discharge Measurements
St. Marys River
Compensating Works
Standard Gate Setting Combinations
1927 - 1930

Date	No. of Gates Open*	Water Levels (Feet, 1903 Datum) Pier No. 4	S.W. Pier	Discharge (CFS)
Apr 27, 1928	16	601.05	601.19	40,590
Apr 28, 1928	16	601.02	601.16	39,717
May 1, 1928	16	601.30	601.44	41,597
May 2, 3, 1928	16	600.99	601.13	39,317
Sep 5, 7, 1928	16	602.27	602.40	51,186
May 1, 1928	16	601.34	601.48	43,046
Sep 6, 1928	16	602.19	602.32	50,889
Sep 6, 1928	16	602.27	602.40	51,818
Sep 9, 1928	16	602.75	602.88	57,525
Oct 10, 1928	16	602.66	602.79	55,623
Oct 12, 1928	16	602.76	602.89	57,485
Oct 13, 1928	16	602.38	602.51	52,646

* Refer to text for standard combinations of gate settings.

TABLE 3.16

Summary of Discharge Measurements
St. Marys River
Compensating Works
Non-Standard Gate Settings
Using Pitot Tube
1930

Date	No. of Gates Open	Gates Open	Water Levels (Feet, 1903 Datum) Pier No. 4	S.W. Pier	Discharge (CFS)
Jun 4	1	1	601.93	601.95	5,218
Jun 4	1	1	602.08	602.11	5,251
Jun 4	1	2	601.77	601.80	5,147
Jun 4	1	2	602.06	602.08	5,275
Jun 4	1	3	602.03	602.05	5,182
Jun 4	1	3	601.70	601.72	4,963
Jun 4	1	4	601.92	601.94	5,148
Jun 4	1	4	602.11	602.13	5,248
Jun 3	1	5	601.83	601.85	6,003
Jun 3	1	5	601.56	601.59	5,954
Jun 3	1	6	601.76	601.78	5,870
Jun 3	1	6	601.78	601.80	5,837
Jun 2	1	7	601.79	601.81	5,702
Jun 2	1	7	601.98	602.00	5,780
May 27	1	8	602.42	602.44	6,273
May 27	1	8	601.84	601.86	5,878
May 28	1	10	601.10	602.12	5,324
May 27	1	10	601.02	602.05	5,330
May 29	1	11	601.19	602.22	5,568
May 29	1	11	601.01	602.03	5,398
May 29	1	12	601.30	602.32	5,583
May 29	1	12	601.14	602.16	5,328
May 31	1	13	601.80	601.82	5,113
May 31	1	13	601.98	602.00	5,332
May 31	1	14	601.98	602.00	5,351
May 31	1	14	602.01	602.03	5,290
Jun 2	1	15	601.64	601.66	5,115
Jun 2	1	15	601.65	601.67	5,172
Jun 2	1	16	601.94	601.96	5,235
Jun 2	1	16	601.87	601.89	5,175

TABLE 3.17

Summary of Discharge Measurements
St. Marys River
Compensating Works
Special (Non-Standard) Gate Setting Combinations
1928 - 1930

Date	No. of Gates Open	Gates Open	Water Levels (Feet, 1903 Datum) Pier No. 4	S.W. Pier	Discharge (CFS)
Jul 14, 1930	2	2-3	602.70	602.72	11,756
Jul 18, 1930	2	14-15	602.55	602.58	11,705
Jun 28, 1930	3	13-15	602.44	602.48	17,062
Jun 23, 1930	3	1-3	600.72	600.76	12,378
Aug 17, 1930	4	13-16	602.46	602.48	22,437
Aug 14, 1930	4	1-4	602.51	602.54	21,038
Aug 15, 1930	5	1-5	602.44	602.48	25,339
Jun 25, 1930	5	3-7	601.95	602.00	25,307
Jun 28, 1930	5	11-15	602.19	602.23	25,903
Jul 15, 1930	6	1-6	602.25	602.30	29,209
Jul 17, 1930	6	11-16	601.99	602.04	29,325
Jun 27, 1930	7	9-15	602.55	602.61	36,801
Jun 25, 1930	7	3-9	601.85	601.91	31,346
Jul 16, 1930	9	1-9	602.41	602.47	39,416
Jul 17, 1930	9	8-16	602.16	602.22	39,418
Jul 18, 1930	5	3-4,9-11	602.42	602.46	28,454
Sep 17, 18,1928	11	6-16	602.88	603.02	52,133
Sep 18, 1928	11	6-16	602.73	602.87	50,095
Sep 18, 1928	11	6-16	602.48	602.62	47,106
Sep 19, 1928	11	6-16	602.36	602.50	45,354
Sep 19, 1928	11	6-16	602.29	602.42	44,258

TABLE 3.18

Summary of Discharge Measurements
St. Marys River
Bingham Avenue Section
1935

Meas. No.	Date	Water Levels (Feet, 1903 Datum) Section	Discharge (TCFS)
1	Aug 5	600.06	29.8
2	Aug 6	599.56	29.3
3	Aug 6	599.69	29.8
4	Aug 7	599.96	30.3
5	Aug 7	599.98	30.5
6	Aug 7	599.79	30.1

TABLE 3.19

Summary of Discharge Measurements
St. Marys River
Edison Sault Tailrace Section
1935

Meas. No.	Date	Water Levels (Feet, 1903 Datum) Section	Discharge (TCFS)
1	Aug 8	581.65	3,935
2	Aug 8	581.62	3,855
3	Aug 9	581.69	3,704
4	Aug 9	581.62	3,638
5	Aug 10	581.15	3,445
6	Aug 10	581.17	3,535
7	Aug 10	581.16	3,576
8	Aug 10	581.08	3,194
9	Aug 10	581.11	3,319
10	Aug 10	581.12	3,182
11	Aug 10	581.10	3,226
12	Aug 12	581.11	3,003
13	Aug 12	581.15	3,310
14	Aug 12	581.23	3,331
15	Aug 12	581.24	3,518
16	Aug 12	581.21	3,295

TABLE 3.20

Summary of Discharge Measurements
St. Marys River
Canadian Power Canal Section
1935

Meas. No.	Date	Water Levels (Feet, 1903 Datum) Section	Discharge (TCFS)
1	Aug 13	601.6	24.6
2	Aug 13	601.4	24.8
3	Aug 13	601.5	24.2
4	Aug 14	601.5	23.8
5	Aug 16	601.4	24.5
6	Aug 19	601.2	23.2
7	Aug 19	601.3	24.2
8	Aug 19	601.3	23.9
9	Aug 19	601.5	23.8
10	Aug 19	601.5	23.6
11	Aug 19	601.4	23.7
12	Aug 19	601.4	23.8
13	Aug 19	601.5	23.6
14	Aug 19	601.4	23.1
15	Aug 20	601.4	23.5
16	Aug 20	601.2	23.2
17	Aug 20	601.1	23.2
18	Aug 20	601.4	23.4

TABLE 3.21

Summary of Discharge Measurements
St. Marys River
Little Rapids Section
1935

Meas. No.	Date	Water Levels (Feet, 1903 Datum*) Section	Discharge (TCFS)
1	Jun 18	580.19	62.5
2	Jun 18	580.26	64.2
3	Jun 18	580.30	63.2
4	Jun 20	580.43	64.4
5	Jun 20	580.44	62.4
6	Jun 20	580.46	63.4
7	Jun 21	580.42	64.5
8	Jun 21	580.45	64.1
9	Jun 21	580.49	64.6
10	Jun 21	580.52	63.6
11	Jun 21	580.46	64.4
12	Jun 22	580.29	64.2
13	Jun 22	580.27	60.5
14	Jun 22	580.36	62.9
15	Jun 22	580.38	64.5
16	Jun 24	580.27	63.5
17	Jun 24	580.30	62.0
18	Jun 24	580.34	62.4
19	Jun 24	580.35	61.6
20	Jun 25	580.32	58.3
21	Jun 25	580.42	61.1
22	Jun 25	580.42	62.1
23	Jun 25	580.42	60.5
24	Jun 26	580.39	61.7
25	Jun 26	580.45	64.4
26	Jun 26	580.42	63.1
27	Jun 26	580.41	63.2
28	Jun 26	580.39	61.3
29	Jun 27	580.48	62.9

* To convert 1903 Datum to IGLD 1955, subtract 1.36.

Note: Measurements 1 to 46 made with 8 gates open in Compensating Works.

TABLE 3.21
(Continued)

Summary of Discharge Measurements
St. Marys River
Little Rapids Section
1935

Meas. No.	Date	Water Levels (Feet, 1903 Datum*) Section	Discharge (TCFS)
30	Jun 27	580.48	63.7
31	Jun 27	580.47	63.2
32	Jun 27	580.47	62.9
33	Jun 27	580.46	60.9
34	Jun 28	580.49	64.1
35	Jun 28	580.50	64.6
36	Jul 1	580.04	55.3
37	Jul 1	580.00	54.0
38	Jul 1	580.00	55.4
39	Jul 1	579.97	55.2
40	Jul 2	580.14	60.0
41	Jul 2	580.24	60.9
42	Jul 2	580.29	62.3
43	Jul 2	580.29	61.5
44	Jul 2	580.34	61.6
45	Jul 2	580.37	62.6
46	Jul 3	580.42	60.8
47	Jul 23	579.80	51.8
48	Jul 23	579.79	49.4
49	Jul 23	579.81	51.8
50	Jul 24	579.86	52.0
51	Jul 24	579.87	53.4
52	Jul 24	579.89	52.5
53	Jul 24	579.90	51.3
54	Jul 25	579.96	52.6
55	Jul 25	579.98	52.2
56	Jul 25	579.97	53.2
57	Jul 25	579.97	53.5

* To convert 1903 Datum to IGLD 1955, subtract 1.36.

Note: Measurements 1 to 46 made with 8 gates open in Compensating Works.

TABLE 3.21
(Continued)

Summary of Discharge Measurements
St. Marys River
Little Rapids Section
1935

Meas. No.	Date	Water Levels (Feet, 1903 Datum*) Section	Discharge (TCFS)
58	Jul 29	580.91	72.0
59	Jul 29	580.88	70.2
60	Jul 29	580.92	72.3
61	Jul 29	580.97	70.7
62	Jul 30	580.91	68.2
63	Jul 30	581.06	70.4
64	Jul 30	581.09	71.1
65	Jul 30	581.14	73.1
66	Jul 30	581.12	72.0
67	Jul 31	581.01	71.5
68	Jul 31	580.99	71.5
69	Jul 31	580.99	73.6

* To convert 1903 Datum to IGLD 1955, subtract 1.36.

Note: Measurements 58 to 89 made with 12 gates open in Compensating Works.

TABLE 3.22

Summary of Discharge Measurements
St. Marys River
Garden River Section
1935

Meas. No.	Date	Garden River Inflow (TCFS)	Discharge* (TCFS)
1	Jul 10	0.182	31.6
2	Jul 10	32.1	-
3	Jul 10	32.3	-
4	Jul 10	32.2	-
5	Jul 11	31.9	-
6	Jul 11	32.1	-
7	Jul 12	32.5	-
8	Jul 15	32.4	-
9	Jul 17	31.3	-
10	Jul 22	0.096	22.8
11	Jul 22	24.1	-
12	Jul 22	23.4	-
13	Jul 22	23.0	-
14	Jul 22	22.6	-
15	Aug 1	0.114	34.6
16	Aug 1	35.1	-
17	Aug 1	34.8	-
18	Aug 2	32.6	-
19	Aug 2	33.6	-
20	Aug 2	33.7	-
21	Aug 2	33.5	-

Measurements 1 to 2 made with 8 gates open in Compensating Works
10 to 14 made with 3 gates open in Compensating Works
15 to 21 made with 12 gates open in Compensating Works

* Section discharge minus Garden River inflow

TABLE 3.23

Summary of Discharge Measurements
St. Marys River
Brush Point Section
1965

Meas. No.	Date	Time (EST)	Discharge (TCFS)
1	Jul 12	1108 - 1517	116.4
2	Jul 14	0930 - 1314	113.2
3	Jul 14	1315 - 1524	120.8
4	Jul 15	0859 - 1136	116.8
5	Jul 15	1143 - 1345	123.1
6	Jul 15	1346 - 1554	101.8
7	Jul 16	0905 - 1125	116.8
8	Jul 16	1127 - 1432	105.4
9	Jul 17	0944 - 1239	122.0
10	Jul 17	1247 - 1514	109.2
11	Jul 19	0915 - 1244	117.1
12	Jul 19	1250 - 1442	104.5
13	Jul 20	0857 - 1213	114.1
14	Jul 20	1215 - 1407	112.1
15	Jul 20	1409 - 1638	106.9
16	Jul 21	0841 - 1104	114.2
17	Jul 21	1122 - 1442	109.0
18	Jul 22	0908 - 1313	123.5
19	Jul 26	0916 - 1223	115.7
20	Jul 26	1234 - 1504	105.3
21	Jul 27	0858 - 1230	115.5
22	Jul 27	1247 - 1506	116.0
23	Jul 28	0931 - 1155	117.3
24	Jul 28	1204 - 1417	120.5
25	Jul 29	0903 - 1107	117.5
26	Jul 29	1109 - 1352	112.6
27	Jul 29	1357 - 1604	112.8
28	Jul 30	0848 - 1048	111.3
29	Jul 30	1050 - 1342	115.7
30	Jul 30	1347 - 1549	111.4

TABLE 3.24

Summary of Discharge Measurements
St. Marys River
Frechette Point Section
1965

Meas. No.	Date	Time (EST)	Discharge (TCFS)
1	Sep 15	1244 - 1444	90.5
2	Sep 15	1500 - 1617	94.2
3	Sep 17	0856 - 1026	85.8
4	Sep 17	1027 - 1139	83.7
5	Sep 17	1141 - 1309	86.6
6	Sep 17	1310 - 1416	85.9
7	Sep 20	1140 - 1256	82.3
8	Sep 20	1258 - 1425	81.6
9	Sep 22	0834 - 1011	80.1
10	Sep 22	1024 - 1141	81.0
11	Sep 22	1143 - 1323	81.6
12	Sep 22	1330 - 1441	76.9
13	Sep 24	0912 - 1041	82.2
14	Sep 24	1103 - 1219	82.6
15	Sep 24	1220 - 1350	79.2
16	Sep 24	1353 - 1502	85.4
17	Sep 27	0932 - 1107	74.4
18	Sep 27	1110 - 1249	74.5
19	Sep 27	1258 - 1406	74.1
20	Sep 27	1412 - 1542	74.8
21	Sep 29	0850 - 1018	77.7
22	Sep 29	1021 - 1131	80.3
23	Sep 29	1134 - 1254	79.9
24	Sep 29	1302 - 1431	75.9
25	Oct 1	0915 - 1033	86.4
26	Oct 1	1037 - 1200	83.2
27	Oct 1	1203 - 1309	81.4
28	Oct 1	1319 - 1438	84.7
29	Oct 4	0908 - 1025	79.6
30	Oct 4	1030 - 1159	83.4
31	Oct 4	1207 - 1338	81.1
32	Oct 4	1338 - 1505	82.7
33	Oct 6	0851 - 1031	76.8

TABLE 3.25

Summary of Discharge Measurements
St. Marys River
Garden River Section
1965

Meas. No.	Date	Time (EST)	Discharge (TCFS)
1	Sep 14	1023 - 1150	30.9
2	Sep 14	1153 - 1256	30.7
3	Sep 14	1302 - 1406	30.0
4	Sep 14	1408 - 1454	30.4
5	Sep 16	1007 - 1105	30.6
6	Sep 16	1107 - 1230	31.1
7	Sep 16	1234 - 1328	31.2
8	Sep 16	1330 - 1430	31.6
9	Sep 18	1326 - 1417	29.9
10	Sep 18	1420 - 1513	29.9
11	Sep 21	0933 - 1037	27.6
12	Sep 21	1041 - 1151	27.0
13	Sep 21	1154 - 1245	27.3
14	Sep 21	1248 - 1351	27.9
15	Sep 23	0927 - 1019	30.9
16	Sep 23	1023 - 1223	29.6
17	Sep 23	1227 - 1325	30.1
18	Sep 25	1017 - 1110	31.3
19	Sep 25	1113 - 1202	30.6
20	Sep 28	0935 - 1024	29.6
21	Sep 28	1026 - 1118	28.6
22	Sep 28	1120 - 1204	29.5
23	Sep 28	1208 - 1306	31.0
24	Sep 30	1426 - 1525	26.7
25	Oct 2	1003 - 1106	29.0
26	Oct 2	1112 - 1205	28.6
27	Oct 2	1215 - 1312	27.2
28	Oct 2	1316 - 1406	29.7
29	Oct 5	1003 - 1104	28.3
30	Oct 5	1112 - 1212	29.2
31	Oct 5	1217 - 1310	27.6
32	Oct 5	1314 - 1406	28.2

TABLE 3.26

Summary of Discharge Measurements
St. Marys River
West Neebish Channel Section
1965

Meas. No.	Date	Time (EST)	Discharge (TCFS)
1	Aug 20	0907 - 1049	30.9
2	Aug 20	1052 - 1204	30.5
3	Aug 20	1209 - 1311	31.1
4	Aug 20	1330 - 1442	30.9
5	Aug 21	1039 - 1207	32.6
6	Aug 21	1214 - 1336	31.1
7	Aug 21	1345 - 1456	29.6
8	Aug 24	0941 - 1058	33.4
9	Aug 24	1100 - 1157	34.7
10	Aug 24	1207 - 1314	34.1
11	Aug 24	1316 - 1418	32.2
12	Aug 24	1420 - 1514	31.0
13	Aug 26	0957 - 1103	32.6
14	Aug 26	1110 - 1217	34.2
15	Aug 26	1219 - 1310	34.2
16	Aug 26	1312 - 1423	33.4
17	Aug 28	0919 - 1104	33.5
18	Aug 28	1110 - 1212	34.5
19	Aug 28	1218 - 1332	36.7
20	Aug 28	1345 - 1437	35.2
21	Aug 31	0917 - 1031	28.0
22	Aug 31	1048 - 1206	29.0
23	Aug 31	1223 - 1338	33.1
24	Aug 31	1348 - 1451	34.6
25	Sep 2	0923 - 1015	32.5
26	Sep 2	1020 - 1129	32.2
27	Sep 2	1143 - 1235	31.4
28	Sep 2	1240 - 1337	30.0
29	Sep 2	1344 - 1506	30.0
30	Sep 4	0932 - 1028	30.2
31	Sep 4	1033 - 1136	31.1
32	Sep 4	1142 - 1213	30.9
33	Sep 4	1245 - 1342	30.8
34	Sep 7	0954 - 1046	30.5
35	Sep 7	1050 - 1150	32.9
36	Sep 7	1158 - 1250	31.6
37	Sep 7	1253 - 1350	33.2

TABLE 3.27

Summary of Discharge Measurements
St. Marys River
Middle Neebish Channel Section
1965

Meas. No.	Date	Time (EST)	Discharge (TCFS)
1	Aug 19	1020 - 1200	51.8
2	Aug 19	1204 - 1312	53.7
3	Aug 19	1322 - 1422	52.0
4	Aug 19	1425 - 1532	52.6
5	Aug 23	1016 - 1141	52.0
6	Aug 23	1148 - 1304	51.2
7	Aug 23	1306 - 1355	51.1
8	Aug 23	1355 - 1454	51.0
9	Aug 23	1505 - 1607	48.3
10	Aug 25	1011 - 1111	51.7
11	Aug 25	1113 - 1226	50.2
12	Aug 25	1226 - 1337	49.7
13	Aug 25	1343 - 1504	51.5
14	Aug 27	1002 - 1119	50.8
15	Aug 27	1122 - 1221	53.8
16	Aug 27	1222 - 1325	52.8
17	Aug 27	1329 - 1427	47.7
18	Aug 30	1000 - 1122	48.3
19	Aug 30	1127 - 1232	49.9
20	Aug 30	1238 - 1333	50.6
21	Aug 30	1350 - 1459	50.6
22	Sep 1	1010 - 1141	52.4
23	Sep 1	1153 - 1304	52.8
24	Sep 1	1312 - 1407	53.1
25	Sep 1	1422 - 1519	53.2
26	Sep 3	1033 - 1130	50.5
27	Sep 3	1139 - 1239	50.6
28	Sep 3	1242 - 1333	50.4
29	Sep 3	1336 - 1451	50.7
30	Sep 6	1040 - 1149	48.9
31	Sep 6	1202 - 1256	49.9
32	Sep 6	1300 - 1413	49.6
33	Sep 6	1416 - 1513	48.0
34	Sep 8	1050 - 1145	52.3
35	Sep 8	1150 - 1342	48.9
36	Sep 8	1356 - 1445	50.4
37	Sep 8	1448 - 1538	51.5

TABLE 3.28

Summary of Discharge Measurements
St. Marys River
U.S. Power Canal Section
1965

Meas. No.	Date	Time (EST)	Discharge (TCFS)
1	Sep 2	1018 - 1130	11.3
2	Sep 2	1136 - 1301	11.4
3	Sep 6	1041 - 1133	11.4
4	Sep 6	1134 - 1222	11.2
5	Sep 6	1225 - 1323	11.2
6	Sep 8	1044 - 1207	11.2
7	Sep 8	1209 - 1334	11.5
8	Sep 8	1337 - 1452	11.6
9	Sep 16	1341 - 1431	11.4
10	Sep 16	1432 - 1520	11.5

TABLE 3.29

Summary of Discharge Measurements
St. Marys River
Control Structure Section, U.S.
1969

Meas. No.	Date	Time (EST)	Water Levels (Feet, IGLD 1955) Section Gauge	Discharge (TCFS)
1	May 29	0835 - 1139	599.13	54.2
2	May 30	0855 - 1039	599.27	56.3
3	May 30	1240 - 1509	599.20	54.8
4	May 31	0756 - 1049	598.97	51.4
5	May 31	1137 - 1414	598.76	47.5
6	Jun 2	0742 - 1038	599.13	53.9
7	Jun 2	1108 - 1331	599.09	53.3
8	Jun 4	0735 - 1008	599.05	52.3
9	Jun 4	1034 - 1252	599.00	51.0
10	Jun 4	1338 - 1600	599.05	51.9

TABLE 3.30

Summary of Discharge Measurements
St. Marys River
Control Structure Section, Canada
1969

Meas. No.	Date	Time(EST)	Water Levels (Feet, IGLD 1955) Upper Soo	Discharge (TCFS) Section	U.S. Power Plant	Control Structure
1	May 29	0743 - 1104	600.65	65.9	12.8	53.1
2	May 30	0748 - 1031	600.81	66.1	12.8	53.3
3	May 30	1242 - 1625	600.65	64.2	12.9	51.3
4	May 31	0812 - 1111	600.42	65.6	12.8	52.8
5	May 31	1200 - 1458	600.04	60.4	12.7	47.7
6	Jun 2	0755 - 1039	600.63	65.3	12.7	52.6
7	Jun 2	1121 - 1359	600.49	64.6	12.7	51.9
8	Jun 3	0759 - 1059	600.76	67.6	12.8	54.8
9	Jun 3	1143 - 1429	600.76	68.4	12.8	55.6
10	Jun 4	0744 - 1026	600.46	64.4	12.7	51.7
11	Jun 4	1101 - 1340	600.41	63.5	12.7	50.8
12	Jun 4	1347 - 1610	600.50	65.3	12.7	52.6

TABLE 3.31

Summary of Discharge Measurements
St. Marys River
Frechette Point Section
1969

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Frechette Gauge	Discharge (TCFS)
1	Sep 18	580.30	72.9
2	Sep 19	580.23	71.5
3	Sep 19	580.30	71.2
4	Sep 20	580.26	71.2
5	Sep 20	580.35	69.4
6	Sep 22	580.33	70.4
7	Sep 22	580.35	70.5
8	Sep 23	580.39	76.5
9	Sep 23	580.22	74.7
10	Sep 24	580.12	74.6
11	Sep 24	580.15	73.3
12	Sep 24	580.12	75.7
13	Sep 25	580.23	71.8
14	Sep 25	580.19	73.6
15	Sep 25	580.19	70.9
16	Sep 26	580.43	68.5
17	Sep 26	580.45	70.8
18	Sep 26	580.34	75.6
19	Sep 27	580.17	72.0
20	Sep 27	580.17	70.7
21	Oct 16	579.80	51.0
22	Oct 16	579.73	53.4
23	Oct 17	579.66	49.6
24	Oct 17	579.80	51.2
25	Oct 18	579.98	50.9
26	Oct 18	579.92	55.1
27	Oct 20	579.78	55.3
28	Oct 20	579.73	54.4
29	Oct 21	579.41	53.1
30	Oct 21	579.60	46.8

TABLE 3.32

Summary of Discharge Measurements
St. Marys River
Garden River Section
1969

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Section Gauge	Discharge (TCFS)
1	Sep 18	580.15	27.4
2	Sep 19	580.12	26.7
3	Sep 19	580.14	28.0
4	Sep 20	580.17	27.4
5	Sep 20	580.18	27.1
6	Sep 22	580.25	27.1
7	Sep 22	580.18	26.3
8	Sep 23	580.35	28.6
9	Sep 23	580.26	27.5
10	Sep 24	580.01	27.6
11	Sep 24	580.04	28.8
12	Sep 24	580.03	27.8
13	Sep 25	580.05	26.2
14	Sep 25	580.07	28.2
15	Sep 25	580.09	27.3
16	Sep 26	580.30	27.1
17	Sep 26	580.36	28.1
18	Sep 26	580.34	27.7
19	Sep 27	580.08	27.6
20	Sep 27	580.11	28.3
21	Sep 27	580.06	27.6
22	Oct 16	579.74	19.0
23	Oct 16	579.72	20.6
24	Oct 17	579.65	18.9
25	Oct 17	579.78	20.9
26	Oct 18	580.01	21.3
27	Oct 18	580.07	18.9
28	Oct 20	579.78	20.3
29	Oct 20	579.71	19.1
30	Oct 20	579.70	20.4
31	Oct 21	579.39	19.1
32	Oct 21	579.40	18.3

TABLE 3.33

Summary of Discharge Measurements
St. Marys River
Middle Neebish Channel Section
1969

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Section Gauge	Discharge (TCFS)
1	Oct 2	582.51	42.3
2	Oct 2	582.44	48.9
3	Oct 3	582.38	32.3
4	Oct 3	582.36	33.5
5	Oct 4	582.29	32.6
6	Oct 4	582.30	30.6
7	Oct 6	582.34	30.5
8	Oct 6	582.45	30.5
9	Oct 7	582.56	24.7
10	Oct 7	582.64	30.4
11	Oct 8	582.43	34.2
12	Oct 8	582.36	35.0
13	Oct 9	582.64	29.3
14	Oct 9	582.78	27.8
15	Oct 11	582.36	39.5
16	Oct 11	582.00	43.1
17	Oct 13	582.37	34.0
18	Oct 13	582.11	38.7

TABLE 3.34

Summary of Discharge Measurements
St. Marys River
West Neebish Channel Section
1969

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Section Gauge	Discharge (TCFS)
1	Oct 2	579.58	23.0
2	Oct 2	579.57	26.1
3	Oct 2	579.49	28.3
4	Oct 2	579.30	28.8
5	Oct 3	579.44	19.1
6	Oct 3	579.49	17.3
7	Oct 3	579.41	19.9
8	Oct 3	579.39	18.5
9	Oct 4	579.38	21.4
10	Oct 4	579.35	18.5
11	Oct 4	579.34	18.4
12	Oct 4	579.34	18.4
13	Oct 6	579.41	20.2
14	Oct 6	579.45	18.1
15	Oct 6	579.56	15.5
16	Oct 6	579.52	17.3
17	Oct 7	579.48	14.5
18	Oct 7	579.56	12.7
19	Oct 7	579.68	13.6
20	Oct 7	579.65	18.6
21	Oct 8	579.46	23.0
22	Oct 8	579.40	21.6
23	Oct 8	579.43	18.9
24	Oct 8	579.26	21.2
25	Oct 9	579.65	15.4
26	Oct 9	579.67	16.9
27	Oct 9	579.78	16.5
28	Oct 9	579.86	14.8
29	Oct 10	579.72	17.7
30	Oct 10	579.74	20.2
31	Oct 10	579.61	22.4
32	Oct 10	579.60	19.4
33	Oct 11	579.58	23.5

TABLE 3.34
(Continued)

Summary of Discharge Measurements
St. Marys River
West Neebish Channel Section
1969

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Section Gauge	Discharge (TCFS)
34	Oct 11	579.32	27.1
35	Oct 11	579.17	26.6
36	Oct 11	578.99	29.1
37	Oct 13	579.50	23.6
38	Oct 13	579.39	24.1
39	Oct 13	579.33	22.8
40	Oct 13	579.25	24.1

TABLE 3.35

Summary of Discharge Measurements
St. Marys River
St. Joseph Channel
October 28, 1969

Section	Water Levels at Section (GSC Datum*)	Discharge (CFS)
Bamford Island	579.57	307
Ferry Channel	579.57	36,400
Munroe Island	579.57	2,620

* Geodetic Survey of Canada Datum

TABLE 3.36

Summary of Discharge Measurements
St. Marys River
St. Joseph Channels at Highway 548 Crossing

November 15, 1988 and August 4, 1989

Section	Date	E.S.T.	Water Level at Thessalon CHS Gauge (Feet, IGLD 1955)	Discharge (CFS)
Bamford Island	15 Nov. 1988	1350 - 1440	578.25	0
Ferry Crossing	15 Nov. 1988	1010 - 1200	578.22	8,511
Munroe Island	15 Nov. 1988	1450 - 1700	578.15	848
Bamford Island	4 Aug. 1989	0840 - 0930	578.44	441
Ferry Crossing	4 Aug. 1989	1040 - 1240	578.44	38,987
Munroe Island	4 Aug. 1989	1000 - 1110	578.44	3,708

TABLE 3.37
Summary of Discharge Measurements
St. Marys River
Lake Superior Compensating Works
1971

Discharge (TCFS)

Meas. No.	Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
1	Jul 26,27	5.5	4.3				4.5	6.0	5.5	4.7	4.7	5.0	4.1	3.7	3.4	3.8	3.8	59.0
2	Jul 29	6.3	5.2				5.6	7.5	5.0				6.0	6.3	4.2	4.1	4.2	54.4
3	Jul 30	6.5	6.5										6.1	6.9	4.8	5.1	4.4	40.2
4	Aug 3	6.8	6.5													7.0	6.5	26.8
5	Aug 4	3.5*	5.9													7.8	3.3*	20.5
6	Aug 4	3.4*	4.0*													3.8*	3.1*	14.3
7	Aug 4	3.7*	1.9**													2.0**	3.3*	10.9
8	Aug 5	3.7*															3.7*	7.4
9	Aug 5	2.0**															1.8**	3.8
10	Aug 5								2.2*	2.0**								4.1
11	Aug 6								4.0*	3.4*								7.4
12	Aug 6							2.0**	3.8*	3.2*	2.0**							11.1
13	Aug 6							4.0*	3.6*	3.3*	3.5*							14.5
14	Aug 6							3.6*	9.2	7.2	3.4*							26.5
15	Aug 7							7.7	7.7	6.4	4.8							26.5
16	Aug 7	5.5	6.1	4.5				7.0	6.6	5.6	3.3							38.4
17	Aug 10	5.0	6.8	4.5				6.1	6.1	4.8	3.4				7.5	5.4	5.0	54.6
18	Aug 12	4.3	4.3	4.2	4.8	5.2	5.2	5.3	4.2	4.3	2.3				5.4	4.2	3.8	57.6
19	Aug 14,16	3.6	3.8	3.8	4.1	4.2	4.3	3.9	4.1	3.8	3.7	3.9	3.9	3.4	3.3	3.5	3.8	61.0

* 1/2 gate open
** 1/4 gate open

TABLE 3.38

Daily Mean Water Levels
(Feet, IGLD 1955)
St. Marys River
Lake Superior Compensating Works
1971

Date	Gauge Upper Soo	Trailrace
Jul 21	600.95	599.26
Jul 22	601.03	599.33
Jul 23	600.96	599.31
Jul 24	600.96	599.31
Jul 25	600.88	599.22
Jul 26	601.22	599.13
Jul 27	600.98	598.70
Jul 28	601.02	598.43
Jul 29	601.13	598.25
Jul 30	601.22	598.09
Jul 31	601.17	597.80
Aug 1	601.11	597.74
Aug 2	601.29	597.67
Aug 3	601.41	597.41
Aug 4	601.44	597.09
Aug 5	601.43	596.70
Aug 6	601.35	596.70
Aug 7	601.32	597.27
Aug 8	601.20	598.02
Aug 9	601.11	598.16
Aug 10	601.11	598.49
Aug 11	601.32	598.95
Aug 12	601.05	599.22
Aug 13	600.98	599.25
Aug 14	601.07	599.39
Aug 15	600.98	599.32
Aug 16	600.95	599.29

TABLE 3.39

Summary of Discharge Measurements
St. Marys River
Frechette Point Section
Open Water
1971

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Frechette Section	Discharge (TCFS)
1	Dec 11	580.24	95.1
2	Dec 11	580.41	87.6
3	Dec 11	580.39	86.6
4	Dec 13	580.21	89.2
5	Dec 13	580.20	86.1
6	Dec 13	580.27	87.7
7	Dec 14	580.47	83.1
8	Dec 14	580.40	82.4
9	Dec 14	580.40	83.3

TABLE 3.40

Summary of Discharge Measurements
St. Marys River
Frechette Point Section
Ice Covered
1972

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Frechette Section	Discharge (TCFS)
1	Feb 4	579.84	50.5
2	Feb 4	579.91	50.8
3	Feb 4	579.95	51.6
4	Feb 7	580.12	46.7
5	Feb 7	580.12	47.5
6	Feb 7	580.19	49.0
7	Feb 7	580.19	48.9
8	Feb 7	580.19	49.3
9	Feb 8	580.23	48.7
10	Feb 8	580.22	48.4
11	Feb 8	580.23	49.0
12	Feb 8	580.23	49.4

TABLE 3.41

Summary of Discharge Measurements
St. Marys River
Garden River Section
Open Water
1971

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Section Gauge	Discharge (TCFS)
1	Dec 11	580.36	37.5
2	Dec 11	580.41	38.1
3	Dec 11	580.42	37.4
4	Dec 13	580.26	35.9
5	Dec 13	580.23	33.1
6	Dec 13	580.20	34.6
7	Dec 14	580.33	35.7
8	Dec 14	580.31	34.2
9	Dec 14	580.29	33.3
10	Dec 15	580.40	33.8

TABLE 3.42

Summary of Discharge Measurements
St. Marys River
Frechette Point Section
Ice Covered
1973

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Frechette Gauge	Discharge (TCFS)
1	Feb 17	580.46	43.4
2	Feb 17	580.46	43.6
3	Feb 17	580.46	43.8
4	Feb 19	580.49	42.0
5	Feb 19	580.49	43.9
6	Feb 19	580.49	44.2
7	Feb 19	580.49	44.1
8	Feb 20	580.31	42.6
9	Feb 20	580.35	44.2
10	Feb 20	580.41	44.1
11	Feb 20	580.36	43.9
12	Feb 20	580.31	45.0
13	Feb 20	580.29	45.6
14	Feb 21	580.46	42.9
15	Feb 21	580.46	44.6
16	Feb 21	580.49	45.2
17	Feb 21	580.39	47.3

TABLE 3.43

Summary of Discharge Measurements
St. Marys River
Garden River Section
Ice Covered
1973

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Section Gauge	Discharge (TCFS)
1	Feb 17	580.40	20.3
2	Feb 17	580.42	20.3
3	Feb 17	580.42	20.0
4	Feb 19	580.46	17.9
5	Feb 19	580.50	19.8
6	Feb 19	580.50	19.5
7	Feb 19	580.50	19.3
8	Feb 20	580.35	18.7
9	Feb 20	580.38	19.5
10	Feb 20	580.40	20.3
11	Feb 20	580.42	19.7
12	Feb 20	580.42	19.6
13	Feb 20	580.37	19.2
14	Feb 21	580.44	19.3
15	Feb 21	580.49	20.3
16	Feb 21	580.48	20.2

TABLE 3.44

Summary of Discharge Measurements
St. Marys River
Control Structure Section
1974

Date	Number of Gates	Meas. No.	Time of Measurement	Discharge (CFS)
June 13	2 gates open			
	Gate 8	1	0905 - 0955	5,406
		2	1005 - 1040	5,421
		3	1052 - 1140	5,465
	Gate 9	1	0908 - 1000	5,467
		2	1030 - 1130	5,516
Jun 13	1 gate open			
	Gate 9	1	1403 - 1440	5,278
		2	1450 - 1530	5,357
		3	1547 - 1620	5,527
Jun 14	3 gates open			
	Gate 8	1	0938 - 1100	6,078
		2	1115 - 1230	6,270
		3	1550 - 1650	6,297
	Gate 9	1	0940 - 1040	5,732
		2	1045 - 1130	5,664
		3	1600 - 1650	5,698
	Gate 10	1	0937 - 1035	5,226
		2	1045 - 1140	5,461
		3	1548 - 1643	5,371
Jun 15	4 gates open			
	Gate 7	1	0915 - 1030	5,462
		2	1310 - 1415	5,454
		3	1425 - 1550	5,483
	Gate 8	1	0925 - 1015	6,443
		2	1305 - 1355	6,424
		3	1410 - 1459	6,354
	Gate 9	1	0930 - 1150	5,669

TABLE 3.44
(Continued)

Summary of Discharge Measurements
St. Marys River
Control Structure Section
1974

Date	Number of Gates	Meas. No.	Time of Measurement	Discharge (CFS)
		2	1300 - 1410	5,558
		3	1425 - 1525	5,550
	Gate 10	1	0910 - 1030	4,162
		2	1302 - 1400	4,243
		3	1410 - 1500	4,170
Jun 17	4 gates open			
	Gate 7	1	0805 - 0930	5,586
		2	0930 - 1046	5,502
		3	1245 - 1346	5,486
		4	1400 - 1510	5,342
	Gate 8	1	0830 - 0935	6,365
		2	0945 - 1045	6,314
		3	1055 - 1155	6,351
		4	1400 - 1500	6,320
	Gate 9	1	0805 - 0905	5,604
		2	0925 - 1025	5,614
		3	1350 - 1500	5,618
		4	1510 - 1610	5,586
	Gate 10	1	0810 - 0900	4,292
		2	0930 - 1015	4,222
		3	1245 - 1325	4,031
		4	1415 - 1500	3,940
Jun 18	5 gates open			
	Gate 7	1	0909 - 1005	4,988
		2	1250 - 1340	4,701
		3	1415 - 1515	4,860
	Gate 8	1	0915 - 1015	5,659
		2	1300 - 1400	5,571
		3	1400 - 1500	5,634

TABLE 3.44
(Continued)

Summary of Discharge Measurements
St. Marys River
Control Structure Section
1974

Date	Number of Gates	Meas. No.	Time of Measurement	Discharge (CFS)
	Gate 9	1	0920 - 1005	5,680
		2	1345 - 1415	5,659
		3	1400 - 1500	5,626
	Gate 10	1	0912 - 1040	5,871
		2	1300 - 1405	5,662
		3	1445 - 1545	5,723
	Gate 11	1	1015 - 1100	4,210
		2	1300 - 1445	4,129
		3	1540 - 1620	4,150
Jun 19	6 gates open			
	Gate 6	1	0916 - 1000	5,220
		2	1230 - 1315	5,203
		3	1455 - 1545	5,238
	Gate 7	1	0920 - 1053	6,483
		2	1245 - 1400	6,400
		3	1437 - 1545	6,350
	Gate 8	1	0815 - 0900	6,223
		2	1310 - 1355	6,202
		3	1405 - 1530	6,188
	Gate 9	1	0815 - 0900	5,552
		2	1255 - 1355	5,580
		3	1510 - 1601	5,602
	Gate 10	1	0805 - 1030	5,344
		2	1243 - 1410	5,414
		3	1335 - 1623	5,332
	Gate 11	1	0805 - 0852	3,566
		2	1350 - 1436	3,459

TABLE 3.44
(Continued)

Summary of Discharge Measurements
St. Marys River
Control Structure Section
1974

Date	Number of Gates	Meas. No.	Time of Measurement	Discharge (CFS)
		3	1450 - 1537	3,353
Jun 20	7 gates open			
	Gate 6	1	0928 - 1014	5,187
		2	1458 - 1536	5,039
	Gate 7	1	1043 - 1140	6,504
		2	1344 - 1437	6,610
	Gate 8	1	1025 - 1110	6,422
		2	1455 - 1540	6,264
	Gate 9	1	1005 - 1130	5,897
		2	1415 - 1525	5,794
	Gate 10	1	1030 - 1120	6,058
		2	1405 - 1455	5,964
	Gate 11	1	1107 - 1147	5,300
		2	1355 - 1431	5,090
Jun 20	7 gates open			
	Gate 12	1	1002 - 1045	3,897
		2	1451 - 1530	3,956
Jun 21	8 gates open			
	Gate 5	1	0912 - 0950	4,728
		2	1206 - 1248	4,643
	Gate 6	1	0753 - 0850	6,202
		2	1318 - 1415	6,243
	Gate 7	1	0920 - 1010	6,206
		2	1215 - 1300	6,231

TABLE 3.44
(Continued)
Summary of Discharge Measurements
St. Marys River
Control Structure Section
1974

Date	Number of Gates	Meas. No.	Time of Measurement	Discharge (CFS)
	Gate 8	1	0800 - 0840	6,038
		2	1320 - 1405	6,035
	Gate 9	1	0755 - 0845	5,365
		2	1325 - 1415	5,324
	Gate 10	1	0915 - 1029	4,817
		2	1215 - 1302	5,495
	Gate 11	1	0919 - 1016	4,243
		2	1211 - 1250	4,171
	Gate 12	1	0802 - 0846	3,437
		2	1307 - 1410	3,598
Jun 22	8 gates open			
	Gate 5	1	0920 - 1000	4,998
		2	1230 - 1310	5,135
	Gate 6	1	0750 - 0850	6,110
		2	1340 - 1440	6,195
	Gate 7	1	0855 - 0940	6,204
		2	1225 - 1320	6,255
	Gate 8	1	0755 - 0840	6,079
		2	1350 - 1430	6,056
	Gate 9	1	0755 - 0845	5,392
		2	1350 - 1440	5,361
Jun 22	8 gates open			
	Gate 10	1	0910 - 1000	4,909
		2	1230 - 1320	5,537

TABLE 3.44
(Continued)

Summary of Discharge Measurements
St. Marys River
Control Structure Section
1974

Date	Number of Gates	Meas. No.	Time of Measurement	Discharge (CFS)
	Gate 11	1	0917 - 1015	4,176
		2	1221 - 1415	4,185
	Gate 12	1	0751 - 0840	3,505
		2	1459 - 1534	3,796
June 24	9 gates open			
	Gate 5	1	1155 - 1245	5,074
		2	1345 - 1440	5,016
	Gate 6	1	0925 - 1030	6,169
		2	1500 - 1600	6,465
	Gate 7	1	1110 - 1150	6,241
		2	1405 - 1455	6,260
	Gate 8	1	1005 - 1050	5,920
		2	1515 - 1605	5,812
	Gate 9	1	0945 - 0955	5,799
		2	1555 - 1640	5,821
	Gate 10	1	1020 - 1110	5,166
		2	1440 - 1530	5,125
	Gate 11	1	1140 - 1200	4,323
		2	1351 - 1515	4,270
	Gate 12	1	1030 - 1116	4,181
		2	1436 - 1515	4,134
	Gate 13	1	0931 - 0951	2,932
		2	1554 - 1630	2,932
Jun 25	9 gates open			
	Gate 5	1	0920 - 1000	4,966

TABLE 3.44
(Continued)

Summary of Discharge Measurements
St. Marys River
Control Structure Section
1974

Date	Number of Gates	Meas. No.	Time of Measurement	Discharge (CFS)
		2	1300 - 1330	4,987
	Gate 6	1	0800 - 0855	6,439
		2	1350 - 1450	6,515
June 25	9 gates open			
	Gate 7	1	0950 - 1035	6,158
		2	1230 - 1315	6,181
	Gate 8	1	0845 - 0930	5,747
		2	1335 - 1420	5,662
	Gate 9	1	0755 - 0830	5,747
		2	1425 - 1440	5,720
	Gate 10	1	0855 - 0945	4,962
		2	1310 - 1355	5,016
	Gate 11	1	1005 - 1030	4,274
		2	1226 - 1240	4,289
	Gate 12	1	0859 - 0943	4,134
		2	1335 - 1414	4,131
	Gate 13	1	0758 - 0825	2,990
		2	1446 - 1517	3,058
Jun 26	10 gates open			
	Gate 4	1	1055 - 1140	3,505
		2	1250 - 1330	3,373
	Gate 5	1	0950 - 1035	6,203
		2	1345 - 1430	6,160
	Gate 6	1	0835 - 0930	6,098

TABLE 3.44
(Continued)

Summary of Discharge Measurements
St. Marys River
Control Structure Section
1974

Date	Number of Gates	Meas. No.	Time of Measurement	Discharge (CFS)
		2	1445 - 1530	6,032
	Gate 7	1	1010 - 1055	5,836
		2	1300 - 1350	5,662
	Gate 8	1	0905 - 0950	5,543
		2	1410 - 1505	5,395
	Gate 9	1	0835 - 0855	4,705
		2	1510 - 1535	4,912
	Gate 10	1	0920 - 1005	4,337
		2	1400 - 1450	4,230
	Gate 11	1	1030 - 1059	4,115
		2	1300 - 1320	4,011
June 26	10 gates open			
	Gate 12	1	0935 - 1019	3,675
		2	1352 - 1437	3,734
	Gate 13	1	0835 - 0904	2,772
		2	1508 - 1538	2,788
Jun 27	10 gates open			
	Gate 4	1	1045 - 1140	3,390
		2	1220 - 1300	3,485
	Gate 5	1	0940 - 1030	5,900
		2	1325 - 1415	5,900
	Gate 6	1	0810 - 0905	5,951
		2	1435 - 1510	5,894
	Gate 7	1	0930 - 1010	5,637

TABLE 3.44
(Continued)

Summary of Discharge Measurements
St. Marys River
Control Structure Section
1974

Date	Number of Gates	Meas. No.	Time of Measurement	Discharge (CFS)
		2	1220 - 1300	5,541
	Gate 8	1	0830 - 0910	5,301
		2	1320 - 1400	5,272
	Gate 9	1	0805 - 0835	4,874
		2	1420 - 1445	4,793
	Gate 10	1	0855 - 0940	4,206
		2	1310 - 1355	4,039
	Gate 11	1	1005 - 1029	4,152
		2	1220 - 1245	4,351
	Gate 12	1	0907 - 0946	3,414
		2	1306 - 1353	3,603
	Gate 13	1	0804 - 0841	2,809
		2	1423 - 1552	2,815

TABLE 3.45

Summary of Discharge Measurements
St. Marys River
U.S. Power Canal Section
1975

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Section Gauge	S.W. Pier	U.S. Slip	Little Rapids	Frechette Point	Rock Cut	Discharge (TCFS)
1	Jun 18	600.95	601.13	581.29	581.30	580.94	580.44	11.9
2	Jun 18	600.94	600.86	581.29	581.34	580.98	580.53	12.6
3	Jun 19	601.01	601.26	581.28	581.32	580.90	580.35	13.0
4	Jun 19	601.14	601.17	581.26	581.27	580.89	580.38	12.3
5	Jun 19	601.15	601.34	581.20	581.33	580.88	580.37	11.4
6	Jun 20	600.88	601.14	581.29	581.30	580.98	580.40	13.1
7	Jun 20	600.97	600.93	581.27	581.31	580.98	580.48	11.4
8	Jun 20	601.07	601.17	581.29	581.30	580.95	580.40	10.9
9	Jun 25	601.07	601.26	581.32	581.41	581.05	580.53	12.2
10	Jun 25	600.84	601.00	581.28	581.35	580.99	580.46	11.9
11	Jun 26	600.98	601.17	581.24	581.34	581.01	580.54	13.2
12	Jun 26	600.97	601.10	581.28	581.35	581.01	580.47	11.8

TABLE 3.46

Summary of Discharge Measurements
St. Marys River
Fort Street Bridge Section
1975

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Section Gauge	S.W. Pier	U.S. Slip	Little Rapids	Frechette Point	Rock Cut	Discharge (TCFS)
1	Jun 18	599.17	601.02	581.29	581.33	580.96	580.54	30.4
2	Jun 18	598.76	601.34	581.30	581.33	580.91	580.35	30.3
3	Jun 19	599.18	601.14	581.26	581.28	580.89	580.38	30.5
4	Jun 19	599.17	601.23	581.20	581.34	580.89	580.42	31.1
5	Jun 19	599.12	601.23	581.30	581.31	580.98	580.38	31.2
6	Jun 20	599.19	600.96	581.27	581.30	580.98	580.47	30.4
7	Jun 20	598.95	601.20	581.28	581.30	580.95	580.40	31.0
8	Jun 20	599.10	601.20	581.08	580.95	581.31	581.29	30.9

TABLE 3.47

Summary of Discharge Measurements
St. Marys River
Upper Gate Section
1975

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Upper Soo	S.W. Pier	U.S. Slip	Little Rapids	Frechette Point	Rock Cut	Discharge (TCFS)
1	Jun 25	601.12	601.23	581.32	581.40	581.04	580.52	34.5
2	Jun 25	600.92	601.03	581.28	581.35	580.99	580.45	34.9
3	Jun 26	601.06	601.15	581.24	581.33	581.01	580.54	36.3
4	Jun 26	601.02	601.10	581.29	581.35	581.01	580.48	35.2

Summary of Discharge Measurements
St. Marys River - Canadian Power Canal
Upper Headrace Section
1975

Meas. No.	Date	Time (EST)	Water Levels (Feet, IGLD 1955) Section Gauge	Water Levels (Feet, IGLD 1955) Upper Soo	Discharge (TCFS)
1	Jun 18	1210 - 1354	599.62	600.86	18.3
2	Jun 18	1357 - 1534	599.31	600.86	18.3
3	Jun 19	0750 - 0946	599.62	601.07	18.2
4	Jun 19	0946 - 1136	599.59	601.12	18.3
5	Jun 19	1240 - 1429	599.79	601.22	18.4
6	Jun 19	1437 - 1632	599.57	600.96	18.1
7	Jun 20	0755 - 0942	599.70	601.11	18.8
8	Jun 20	0944 - 1125	599.24	600.83	18.8
9	Jun 20	1207 - 1350	599.54	601.06	18.9
10	Jun 20	1355 - 1550	599.39	600.93	18.6

TABLE 3.49

St. Marys River at Sault Ste. Marie
Canadian Power Diversion
Upper Headrace Section

Discharge Measurements Since 1943*

Meas. No.	Date	Discharge (CFS)
55	19 July 1943	23300
56	19 July 1943	23900
57	29 Sept 1944	23900
58	29 Sept 1944	24000
59	18 Aug 1948	27000
60	19 Aug 1948	26500
61	19 Aug 1948	26200
62	24 Aug 1948	26200
63	22 Sept 1949	25100
64	22 Sept 1949	25600
65	13 Sept 1950	29200
66	13 Sept 1950	28000
67	14 Sept 1950	29000
68	4 Oct 1951	28800
69	4 Oct 1951	27400
70	10 Oct 1951	28500
71	21 July 1952	28600
72	22 July 1952	28900
73	23 July 1952	27900
74	19 Oct 1955	27700
75	19 Oct 1955	27200
76	18 Sept 1956	23400
77	19 Sept 1956	23800
78	12 July 1957	23600
79	12 July 1957	23700
80	13 July 1957	22900
81	13 July 1957	23100
82	15 July 1957	15700
83	15 July 1957	15600
84	15 July 1957	15300
85	16 July 1957	25500
86	16 July 1957	24100
87	8 Sept 1957	15600
88	8 Sept 1957	15500

* Measurements prior to 1943 unavailable.

TABLE 3.49
(Continued)

St. Marys River at Sault Ste. Marie
Canadian Power Diversion
Upper Headrace Section

Discharge Measurements Since 1943*

Meas. No.	Date	Discharge (CFS)
89	9 Sept 1957	14400
90	9 Sept 1957	15200
91	10 Sept 1957	23900
92	10 Sept 1957	23200
93	18 Sept 1958	25300
94	18 Sept 1958	24700
95	19 Sept 1958	24800
96	22 Sept 1958	12400
97	5 Oct 1958	11400
98	5 Oct 1958	12600
99	6 Oct 1958	22200
100	17 Sept 1959	22900
101	18 Sept 1959	23600
102	18 Sept 1959	23100
103	20 Sept 1959	15400
104	23 Sept 1960	25300
105	23 Sept 1960	24400
106	23 Sept 1960	25300
107	28 Aug 1962	16000
108	29 Aug 1962	23800
109	29 Aug 1962	23400
110	1 Oct 1962	18100
111	2 Oct 1962	22100
112	7 Oct 1962	16200
113	8 Oct 1962	23400
114	8 Oct 1962	24000
115	6 June 1969	22700
116	6 June 1969	22900
117	6 June 1969	23200
118	6 June 1969	22700
119	18 June 1975	18200
120	18 June 1975	18300

*Measurements prior to 1943 unavailable.

TABLE 3.49
(Continued)

St. Marys River at Sault Ste. Marie
Canadian Power Diversion
Upper Headrace Section

Discharge Measurements Since 1943*

Meas. No.	Date	Discharge (CFS)
121	19 June 1975	18200
122	19 June 1975	18300
123	19 June 1975	18400
124	19 June 1975	18100
125	20 June 1975	18800
126	20 June 1975	18800
127	20 June 1975	18900
128	20 June 1975	18600

*Measurements prior to 1943 unavailable.

TABLE 3.50

Summary of Discharge Measurements
St. Marys River - Canadian Power Canal
Lower Headrace Section
1975

Meas. No.	Date	Time (EST)	Water Levels (Feet, IGLD 1955) Section Gauge	Upper Soo	Discharge (TCFS)
1	Jun 18	0831 - 1025	601.84	600.91	17.1
2	Jun 18	1210 - 1345	601.81	600.86	17.0
3	Jun 18	1345 - 1515	601.50	600.81	17.3
4	Jun 18	0750 - 1147	601.81	601.09	17.4
5	Jun 19	1234 - 1415	602.00	601.26	17.3
6	Jun 20	0940 - 1056	601.44	600.78	17.9
7	Jun 20	1205 - 1340	601.69	601.05	17.8

TABLE 3.51

Summary of Discharge Measurements
St. Marys River - Canadian Power Canal
Groundwood Mill Tailrace
(Bridge Section)
1975

Meas. No.	Date	Time (EST)	Water Levels (Feet, IGLD 1955) Section Gauge	Upper Soo	Discharge (TCFS)
1	Jun 18	0825 - 1011	579.85	600.91	1.219
2	Jun 18	1205 - 1342	579.80	600.86	1.233
3	Jun 18	1345 - 1527	579.85	600.79	1.295
4	Jun 19	0734 - 1115	579.85	601.09	1.251
5	Jun 19	1230 - 1353	579.80	601.30	1.364
6	Jun 20	0930 - 1054	579.87	600.78	1.209
7	Jun 20	1210 - 1343	579.89	601.06	1.288

TABLE 3.52

Summary of Discharge Measurements
St. Marys River at Sault Ste. Marie
Canadian Power Diversion
Groundwood Mill Tailrace
(Bridge Section)
1973-1975

Meas. No.	Date	Discharge (CFS)
1	22 August 1973	1450
2	22 August 1973	1430
3	22 August 1973	1380
4	22 August 1973	1460
5	18 June 1975	1220
6	18 June 1975	1230
7	18 June 1975	1300
8	19 June 1975	1250
9	19 June 1975	1360
10	20 June 1975	1210
11	20 June 1975	1290

TABLE 3.53

St. Marys River at Sault Ste. Marie
Canadian Power Diversion
Groundwood Mill Tailrace
(Cableway Section)

Discharge Measurements Since 1957*

Meas. No.	Date	Discharge (CFS)
94	8 Sept 1957	860
95	8 Sept 1957	730
96	19 Sept 1958	8440
97	20 Sept 1958	8370
98	22 Sept 1958	890
99	7 Oct 1958	8470
100	7 Oct 1958	8460
101	19 Sept 1959	7850
102	20 Sept 1959	1130
103	21 Sept 1959	8030
104	24 Sept 1960	7680
105	25 Sept 1960	1020
106	28 Aug 1962	690
107	30 Aug 1962	7940
108	1 Oct 1962	730
109	2 Oct 1962	7450
110	3 Oct 1962	7520
111	7 Oct 1963	890
112	9 Oct 1963	7040
113	9 Oct 1963	7030

* Records of measurements prior to 1957 not available.

TABLE 3.54

Summary of Discharge Measurements
St. Marys River
Frechette Point Section
1976

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Frechette	Garden River	Discharge (TCFS)
1	Feb 24	580.27	580.66	46.0
2	Feb 25	580.26	580.58	47.5
3	Feb 25	580.25	580.57	47.5
4	Feb 25	580.25	580.55	47.8
5	Feb 25	580.15	580.54	45.9
6	Feb 26	580.15	580.47	45.4
7	Feb 26	580.15	580.47	44.9
8	Feb 26	580.17	580.47	45.3
9	Feb 26	580.18	580.46	45.1
10	Feb 26	580.10	580.45	45.5
11	Feb 27	580.14	580.50	45.7
12	Feb 27	581.01	579.39	45.2

TABLE 3.55

Summary of Discharge Measurements
St. Marys River
Garden River Section
1976

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Frechette	Garden River	Discharge (TCFS)
1	Feb 26	580.16	580.46	25.1
2	Feb 27	580.13	580.49	24.8

TABLE 3.56

Summary of Discharge Measurements
St. Marys River
Frechette Point and Garden River Sections
1978

Meas.	Date	Water Levels (Feet, IGLD 1955) Section Gauge	Discharge (TCFS)
Frechette Point	Sep 6	579.95	89.7
Garden River	Sep 6	579.78	27.9

TABLE 3.57

Summary of Discharge Measurements
St. Marys River
Middle Neebish Channel Section
1978

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Section Gauge	Discharge (TCFS)
Simultaneous with Rock Cut Section			
1	Aug 14	579.27	51.9
2	Aug 15	579.17	52.3
3	Aug 16	579.29	46.1
4	Aug 16	579.26	50.4
Simultaneous with Field Point Section			
1	Aug 17	579.00	46.5
2	Aug 17	579.04	46.3
3	Aug 17	579.12	44.4
4	Aug 18	579.31	50.5
5	Aug 18	579.28	53.3
6	Aug 30	579.12	56.3
7	Aug 30	579.09	49.2

TABLE 3.58

Summary of Discharge Measurements
St. Marys River
Field Point Section
1978

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Section Gauge	Discharge (TCFS)
1	Aug 17	579.05	43.2
2	Aug 18	579.28	42.4
3	Aug 30	579.10	51.1

TABLE 3.59

Summary of Discharge Measurements
St. Marys River
Rock Cut Section
1978

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Section Gauge	Discharge (TCFS)
1	Aug 14	579.01	28.6
2	Aug 14	578.61	28.2
3	Aug 14	578.47	25.2
4	Aug 14	578.95	23.1
5	Aug 14	579.29	24.6
6	Aug 15	578.77	30.5
7	Aug 15	578.80	28.0
8	Aug 15	578.82	27.6
9	Aug 15	578.83	26.6
10	Aug 15	578.91	25.6
11	Aug 15	578.90	26.3
12	Aug 15	578.90	26.6
13	Aug 15	578.90	26.0
14	Aug 16	579.18	22.0
15	Aug 16	579.25	20.6
16	Aug 16	579.23	21.7
17	Aug 16	579.15	24.5
18	Aug 16	578.87	29.3
19	Aug 16	578.92	28.1
20	Aug 16	578.90	29.2

TABLE 3.60

Summary of Discharge Measurements
St. Marys River
Little Rapids Island Section
1978

Meas. No.	Date	Water Levels (Feet, IGLD 1955) Little Rapids	Discharge (TCFS)
1	Aug 25	579.87	4,267
2	Aug 25	579.87	4,443
3	Aug 25	579.87	5,448
4	Aug 25	579.87	2,724
5	Aug 25	579.87	3,511
6	Aug 25	579.87	3,656
7	Aug 25	579.87	4,873
8	Aug 25	579.87	4,372
9	Aug 25	579.87	3,799
10	Aug 25	579.87	4,300
11	Aug 25	579.87	4,229
12	Aug 25	579.87	4,216
13	Aug 25	579.87	3,010
14	Aug 25	579.87	3,081
15	Aug 25	579.87	3,584
16	Aug 25	579.87	3,368
17	Aug 25	579.87	4,086
18	Aug 25	579.87	4,730
19	Aug 25	579.87	4,157
20	Aug 25	579.87	4,659
21	Aug 25	579.87	5,160
22	Aug 25	579.87	3,368
23	Aug 25	579.87	4,203

TABLE 3.61

Summary of Discharge Measurements
St. Marys River
Frechette Point Section
Winter 1979

Meas. No.	Date	Time (EST)	Water Levels (Feet, IGLD 1955) Frechette	Discharge (TCFS)
1	Feb 27	1220 - 1650	579.59	51.9
2	Feb 27	1257 - 1800	579.59	51.7
3	Feb 28	0859 - 1448	579.67	51.6
4	Feb 28	0953 - 1421	579.68	51.1
5	Feb 28	1052 - 1508	579.68	52.5
6	Mar 1	0755 - 1052	579.58	52.3
7	Mar 1	1130 - 1356	579.61	54.2
8	Mar 2	0758 - 1131	579.57	49.3
9	Mar 2	0831 - 1228	579.58	49.7

TABLE 3.62

Summary of Discharge Measurements
St. Marys River
Garden River Section
Winter 1979

Meas. No.	Date	Time (EST)	Water Levels (Feet, IGLD 1955) Garden R.	Frechette	Discharge (TCFS)
1	Feb 26	0950 - 1151	579.47	579.51	24.9
2	Feb 26	1510 - 1710	579.45	579.51	24.7
3	Feb 27	0906 - 1240	579.48	579.58	26.8
4	Feb 27	1300 - 1619	579.51	579.60	26.3
5	Feb 28	0904 - 1155	579.55	579.68	24.6
6	Feb 28	1216 - 1506	579.46	579.67	25.4
7	Mar 1	0855 - 1200	579.46	579.59	25.9
8	Mar 1	1223 - 1550	579.46	579.62	26.1
9	Mar 2	0914 - 1246	579.45	579.58	25.1
10	Mar 2	1040 - 1335	579.44	579.58	25.1

TABLE 3.63

Summary of Discharge Measurements
St. Marys River
Middle Neebish Channel Section
1979

Meas. No.	Date	Discharge(TCFS)
1	Jun 21	46.6
2	Jun 21	41.7
3	Jun 23	46.2
4	Jun 23	50.7
5	Jun 23	48.4
6	Jun 26	36.4
7	Jun 27	44.4
8	Jun 27	46.4
9	Jun 27	44.1
10	Jun 28	37.8
11	Jun 28	40.2
12	Jun 28	39.1

TABLE 3.64

Summary of Discharge Measurements
St. Marys River
Field Point Section
1979

Meas. No.	Date	Discharge(TCFS)
1	Jun 21	57.6
2	Jun 23	55.7
3	Jun 23	62.0
4	Jun 26	42.6
5	Jun 27	49.6
6	Jun 27	53.0
7	Jun 28	37.7
8	Jun 28	37.7

TABLE 3.65

Summary of Discharge Measurements
St. Marys River
Garden River Section
1980

Meas. No.	Date	Time (EST)	Water Levels (Feet, IGLD 1955) Section Gauge	Discharge (TCFS)
1	Jul 23	1121 - 1302	579.96	21.5
2	Jul 23	1309 - 1421	579.98	21.5
3	Jul 24	0907 - 1023	580.12	22.3
4	Jul 24	1034 - 1152	580.13	22.0
5	Jul 24	1159 - 1306	580.16	23.1
6	Jul 24	1313 - 1423	580.17	22.2
7	Jul 28	0910 - 1026	580.05	21.5
8	Jul 28	1034 - 1150	580.06	21.9
9	Jul 28	1208 - 1312	580.06	21.5
10	Jul 29	0940 - 1027	580.09	21.5
11	Jul 29	1040 - 1148	580.09	20.9
12	Jul 29	1154 - 1309	580.09	22.3

TABLE 3.66

Summary of Discharge Measurements
St. Marys River
Frechette Point Section
1980

Meas. No.	Date	Time (EST)	Water Levels (Feet, IGLD 1955) Section Gauge	Discharge (TCFS)
1	Jul 23	0945 - 1140	580.10	57.6
2	Jul 23	1145 - 1334	580.06	54.8
3	Jul 23	1342 - 1504	580.08	54.5
4	Jul 24	0905 - 1043	580.29	52.9
5	Jul 24	1052 - 1242	580.26	54.3
6	Jul 24	1255 - 1420	580.26	53.9
7	Jul 24	1434 - 1610	580.30	55.1
8	Jul 28	1012 - 1145	580.21	57.0
9	Jul 28	1154 - 1330	580.18	52.6
10	Jul 28	1338 - 1417	580.19	53.4
11	Jul 29	0810 - 0945	580.21	54.6
12	Jul 29	1000 - 1200	580.19	54.9
13	Jul 29	1210 - 1400	580.14	56.8

TABLE 3.67

Summary of Discharge Measurements
St. Marys River
Rock Cut Section
1980

Meas. No.	Date	Discharge(TCFS)
1	Jul 23	22.0
2	Jul 23	23.3
3	Jul 23	21.5
4	Jul 23	20.5
5	Jul 23	19.2
6	Jul 24	20.0
7	Jul 24	19.8
8	Jul 24	21.3
9	Jul 24	21.6
10	Jul 24	19.6
11	Jul 28	24.9
12	Jul 28	20.4
13	Jul 29	23.0
14	Jul 29	23.7
15	Jul 29	25.9

TABLE 3.68

Summary of Moving-boat Discharge Measurements
St. Marys River
Frechette Point Section
1985

Meas. No.	Date	Time (EST)	Number of Crossings	Discharge(TCFS)
1	Oct 2	0935 - 1105	3	83.5
2	Oct 3	1040 - 1120	2	78.9
3	Oct 3	1505 - 1540	2	79.9

TABLE 3.69

Summary of Moving-boat Discharge Measurements
St. Marys River
Garden River Section
1985

Meas. No.	Date	Time (EST)	Number of Crossings	Discharge(TCFS)
1	Oct 2	1355 - 1510	6	35.1
2	Oct 3	0850 - 0930	3	33.7
3	Oct 3	1400 - 1420	2	33.8

TABLE 3.70

Summary of Moving-boat Discharge Measurements
St. Marys River
Frechette Point Section
1986

Meas. No.	Date	Time (EST)	Number of Crossings	Discharge(TCFS)
1	Sep 9	1625 - 1710	2	84.5
2	Sep 10	1140 - 1210	2	87.1
3	Sep 11	1000 - 1050	3	92.2

TABLE 3.71

Summary of Moving-boat Discharge Measurements
St. Marys River
Garden River Section
1986

Meas. No.	Date	Time (EST)	Number of Crossings	Discharge(TCFS)
1	Sep 9	1330 - 1405	3	38.7
2	Sep 10	1440 - 1520	3	35.4
3	Sep 11	0840 - 0900	2	35.7

TABLE 3.72

Summary of Discharge Measurements
St. Marys River
U.S. Power Canal Section
1987

Meas. No.	Date	Time (EST)	Water Levels (Feet,IGLD 1955) Section Gauge	Discharge (TCFS)
1	Oct 15	1350 - 1650	-	9.7
2	Oct 16	0902 - 1123	599.85	9.1
3	Oct 16	1138 - 1327	-	9.8
4	Oct 19	0833 - 1045	600.43	10.2
5	Oct 19	1056 - 1250	600.41	10.8
6	Oct 19	1256 - 1441	600.39	10.9

TABLE 3.73

Summary of Discharge Measurements
St. Marys River
Upper Gate Section
1987

Meas. No.	Date	Time (EST)	Water Levels (Feet,IGLD 1955) Section Gauge	Discharge (TCFS)
1	Oct 15	1156 - 1532	600.53	20.8
2	Oct 16	0926 - 1242	600.18	25.9
3	Oct 19	0902 - 1155	600.62	28.9
4	Oct 19	1208 - 1456	600.66	33.2
5	Oct 20	0839 - 1116	600.49	30.5
6	Oct 20	0910 - 1132	600.42	22.2
7	Oct 20	1140 - 1423	600.42	25.9
8	Oct 20	1132 - 1346	600.43	26.7
9	Oct 21	0815 - 1030	600.58	34.6
10	Oct 21	0827 - 1100	600.58	31.6
11	Oct 21	1037 - 1250	600.62	33.0
12	Oct 22	0825 - 1033	600.25	34.2
13	Oct 22	0903 - 1137	600.30	41.0
14	Oct 22	1040 - 1241	600.35	35.1
15	Oct 23	0745 - 0955	600.28	37.8
16	Oct 23	0819 - 1046	600.32	39.7
17	Oct 23	1003 - 1215	600.46	40.9
18	Oct 23	1051 - 1311	600.50	40.4

TABLE 3.74

Summary of Discharge Measurements
St. Marys River
Fishway Flow-Metering Section
1987

Meas. No.	Date	Time (EST)	Discharge (TCFS)
1	Oct 14	1415 - 1455	0.55
2	Oct 17	1102 - 1156	0.55

TABLE 3.75

Summary of Discharge Measurements
St. Marys River
Compensating Works
1989 Conventional Measurements

Meas. No.	Date	Time (EST)	Gates	Water Levels (Feet,IGLD1955) S.W. Pier	Discharge (TCFS)
1	Jul 25	1259-1422	9-10	600.62	11.6
2	Jul 25	1439-1550	9-10	600.74	11.7
3	Jul 26	0808-0928	9	600.47	7.0
4	Jul 26	0944-1115	9	600.63	6.8
5	Jul 26	1237-1411	9	600.61	6.9
6	Jul 26	1421-1625	9	600.55	8.2
7	Jul 27	1108-1240	1/2 of 9	600.72	5.2
8	Jul 27	1250-1445	1/2 of 9	600.73	6.0
9	Jul 28	0839-0953	8-10	600.68	20.4
10	Jul 28	0959-1114	8-10	600.86	19.8
11	Jul 28	1248-1411	8-10	600.78	21.6
12	Jul 28	1417-1545	8-10	600.82	22.2
13	Jul 29	0924-1047	7-10	600.75	27.8
14	Jul 29	1053-1208	7-10	600.79	26.3
15	Jul 29	1224-1333	7-10	600.94	22.0
16	Jul 31	0843-0951	7-11	600.58	29.5
17	Jul 31	0956-1104	7-11	600.50	30.8
18	Jul 31	1217-1331	7-11	600.57	30.2
19	Jul 31	1337-1449	7-11	600.54	30.8
20	Aug 1	0757-0926	6-11	600.68	36.3
21	Aug 1	0932-1040	6-11	600.85	37.4
22	Aug 1	1227-1342	6-11	600.65	36.9
23	Aug 1	1351-1502	6-11	600.58	35.9
24	Aug 2	1000-1115	6-12	600.85	42.8
25	Aug 2	1122-1230	6-12	600.75	41.9
26	Aug 2	1329-1438	6-12	600.51	42.0
27	Aug 3	0810-0917	5-12	600.41	45.3
28	Aug 3	0923-1039	5-12	600.66	46.5
29	Aug 3	1149-1258	5-12	600.58	45.8

TABLE 3.76

Summary of Discharge Measurements
St. Marys River
Compensating Works
1989 Moving-boat Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels (Feet, IGLD 1955) Upper Soo Gauge	Lower Soo Gauge	Discharge (TCFS)
1	Jul 25	1651-1704	2	600.69	579.56	12.4
2	Jul 25	1706-1716	2	600.75	579.63	12.4
3	Jul 25	1719-1729	2	600.79	579.59	12.9
4	Jul 26	0900-0913	1	600.52	579.66	7.5
5	Jul 26	0916-0937	1	600.66	579.59	7.9
6	Jul 26	0943-0957	1	600.75	579.63	7.4
7	Jul 26	0959-1010	1	600.79	579.66	7.5
8	Jul 26	1019-1031	1	600.75	579.63	7.4
9	Jul 26	1033-1044	1	600.69	579.66	7.4
10	Jul 26	1303-1314	1	600.69	579.76	8.2
11	Jul 26	1317-1326	1	600.72	579.79	7.5
12	Jul 26	1342-1403	1	600.52	579.79	7.0
13	Jul 26	1412-1435	1	600.46	579.79	7.3
14	Jul 26	1443-1506	1	600.56	579.79	7.3
15	Jul 26	1507-1530	1	600.62	579.79	7.7
16	Jul 26	1532-1554	1	600.62	579.82	7.1
17	Jul 26	1556-1612	1	600.66	579.82	7.7
18	Jul 27	1004-1013	.5	600.95	579.59	4.5
19	Jul 27	1015-1028	.5	601.02	579.63	4.4
20	Jul 27	1029-1047	.5	601.08	579.63	5.0
21	Jul 27	1049-1104	.5	600.95	579.66	5.1
22	Jul 27	1106-1125	.5	600.62	579.66	5.0
23	Jul 27	1129-1203	.5	600.43	579.59	4.6
24	Jul 27	1211-1242	.5	600.85	579.59	4.8
25	Jul 27	1244-1313	.5	600.85	579.56	4.7
26	Jul 27	1319-1344	.5	600.62	579.59	4.9
27	Jul 28	0935-0945	3	600.75	579.79	16.6
28	Jul 28	0948-1000	3	600.82	579.82	15.8
29	Jul 28	1003-1014	3	600.82	579.79	16.6
30	Jul 28	1047-1100	3	600.89	579.79	15.5
31	Jul 28	1107-1120	3	600.82	579.82	16.4
32	Jul 28	1349-1403	3	600.69	579.79	17.7
33	Jul 28	1406-1418	3	600.75	579.82	16.1
34	Jul 28	1456-1505	3	600.98	579.76	17.3

TABLE 3.76
(Continued)

Summary of Discharge Measurements
St. Marys River
Compensating Works
1989 Moving-boat Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels (Feet, IGLD 1955) Upper Soo Gauge	Lower Soo Gauge	Discharge (TCFS)
35	Jul 28	1507-1516	3	600.98	579.76	16.7
36	Jul 28	1536-1548	3	600.92	579.82	15.4
37	Jul 28	1553-1604	3	600.85	579.79	16.4
38	Jul 28	1608-1618	3	600.95	579.69	16.6
39	Jul 29	0911-0922	4	600.85	579.66	24.9
40	Jul 29	0929-0938	4	600.75	579.63	21.0
41	Jul 29	0947-0959	4	600.69	579.63	20.2
42	Jul 29	1002-1012	4	600.66	579.63	24.5
43	Jul 29	1016-1035	4	600.66	579.63	21.8
44	Jul 29	1039-1049	4	600.69	579.63	20.8
45	Jul 29	1051-1101	4	600.62	579.59	20.6
46	Jul 29	1104-1114	4	600.69	579.56	19.6
47	Jul 29	1303-1311	4	600.82	579.66	18.0
48	Jul 29	1321-1331	4	600.62	579.59	16.9
49	Jul 29	1333-1343	4	600.52	579.53	17.0
50	Jul 29	1347-1358	4	600.39	579.53	18.1
51	Jul 29	1359-1407	4	600.36	579.56	16.6
52	Jul 29	1411-1419	4	600.30	579.59	18.1
53	Aug 1	1034-1041	6	600.46	580.31	34.1
54	Aug 1	1045-1050	6	600.39	580.31	33.1
55	Aug 1	1053-1100	6	600.39	580.28	34.8
56	Aug 1	1101-1108	6	600.33	580.28	33.2
57	Aug 1	1228-1234	6	600.59	580.35	33.9
58	Aug 1	1240-1249	6	600.66	580.31	32.5
59	Aug 1	1250-1257	6	600.66	580.35	33.5
60	Aug 1	1259-1308	6	600.66	580.35	32.7
61	Aug 1	1309-1316	6	600.69	580.35	34.3
62	Aug 1	1318-1329	6	600.66	580.31	32.9
63	Aug 1	1402-1411	6	600.49	580.38	31.0
64	Aug 1	1412-1419	6	600.43	580.38	32.1
65	Aug 1	1421-1430	6	600.36	580.31	30.9
66	Aug 1	1432-1440	6	600.30	580.31	31.5
67	Aug 1	1443-1451	6	600.26	580.35	29.8

TABLE 3.76
(Continued)

Summary of Discharge Measurements
St. Marys River
Compensating Works
1989 Moving-boat Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels (Feet, IGLD 1955) Upper Soo Gauge	Lower Soo Gauge	Discharge (TCFS)
68	Aug 2	0940-0947	7	600.89	580.54	38.2
69	Aug 2	0949-0956	7	600.79	580.54	38.7
70	Aug 2	0957-1004	7	600.69	580.54	37.3
71	Aug 2	1019-1029	7	600.72	580.51	36.9
72	Aug 2	1033-1041	7	600.72	580.51	37.1
73	Aug 2	1043-1051	7	600.79	580.51	37.2
74	Aug 2	1053-1100	7	600.82	580.58	37.4
75	Aug 2	1425-1433	7	600.72	580.38	36.5
76	Aug 2	1449-1455	7	600.72	580.41	36.7
77	Aug 2	1459-1506	7	600.69	580.45	37.6
78	Aug 2	1506-1514	7	600.66	580.38	36.9
79	Aug 3	0909-0916	8	600.52	580.64	41.4
80	Aug 3	0917-0924	8	600.56	580.64	39.7
81	Aug 3	0928-0935	8	600.62	580.68	39.2
82	Aug 3	0938-0948	8	600.66	580.71	39.3
83	Aug 3	0950-0957	8	600.66	580.71	37.6
84	Aug 3	0959-1006	8	600.66	580.71	40.5
85	Aug 3	1011-1019	8	600.59	580.71	40.7
86	Aug 3	1022-1029	8	600.59	580.71	41.4

Table 3.77

Summary of Discharge Measurements
St. Marys River
Upper Gate Section
1990 Conventional Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels Feet, IGLD 1955 Upper Soo Gauge	Water Levels Feet, IGLD 1955 S.W. Pier Gauge	Discharge (TCFS)
1	Sep 13	1325-1715	12	599.77	599.69	45.5
2	Sep 14	0920-1355	11	600.57	600.44	50.5
3	Sep 15	0830-1145	7	600.45	600.36	41.1
4	Sep 15	1150-1447	7	600.04	600.23	37.9
5	Sep 17	0800-1117	8	600.15	600.29	45.5
6	Sep 17	1128-1436	8	600.04	600.19	46.4
7	Sep 18	0805-1107	10	599.92	599.97	46.1
8	Sep 18	1123-1530	10	599.85	599.98	41.7
9	Sep 19	0720-1225	9	600.07	600.23	47.9
10	Sep 20	0740-1130	6	600.06	600.15	36.1

Table 3.78

Summary of Discharge Measurements
St. Marys River
Lower Rapids Section
1990 Moving-boat Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels (Feet, IGLD 1955) S.W. Pier Gauge	Discharge TCFS
1	11 Sep 90	1532-1545	0.5	599.96	3.5
2	11 Sep 90	1546-1558	0.5	599.95	3.4
3	12 Sep 90	1246-1254	5	600.02	22.6
4	12 Sep 90	1255-1303	5	600.02	21.2
5	12 Sep 90	1304-1312	5	600.14	20.1
6	12 Sep 90	1312-1319	5	600.22	21.3
7	12 Sep 90	1320-1326	5	600.21	21.1
8	12 Sep 90	1327-1334	5	600.21	21.6
9	12 Sep 90	1335-1341	5	600.16	22.0
10	12 Sep 90	1349-1354	5	600.19	22.4
11	12 Sep 90	1356-1402	5	600.27	22.1
12	13 Sep 90	1504-1510	12	599.94	35.0
13	13 Sep 90	1511-1519	12	599.87	36.4
14	13 Sep 90	1520-1526	12	599.90	38.8
15	13 Sep 90	1532-1539	12	599.91	38.3
16	13 Sep 90	1541-1547	12	599.89	38.0
17	13 Sep 90	1548-1553	12	599.84	38.6
18	14 Sep 90	0833-0840	11	600.22	41.7
19	14 Sep 90	0841-0847	11	600.38	42.4
20	14 Sep 90	0847-0852	11	600.44	41.1
21	14 Sep 90	0853-0858	11	600.44	43.7
22	14 Sep 90	0859-0904	11	600.49	45.0
23	14 Sep 90	0905-0909	11	600.87	46.8
24	14 Sep 90	0910-0915	11	601.20	46.7
25	14 Sep 90	0916-0922	11	601.37	47.4
26	14 Sep 90	0922-0929	11	601.46	48.0
27	14 Sep 90	1438-1444	11	600.23	38.5
28	15 Sep 90	0944-0950	7	600.68	32.1
29	15 Sep 90	0950-0957	7	600.71	32.2
30	15 Sep 90	0958-1004	7	600.75	31.3

Table 3.78
(Continued)

Summary of Discharge Measurements
St. Marys River
Lower Rapids Section
1990 Moving-boat Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels (Feet, IGLD 1955) S.W. Pier Gauge	Discharge TCFS
31	15 Sep 90	1005-1012	7	600.79	32.6
32	15 Sep 90	1013-1018	7	600.82	31.7
33	15 Sep 90	1335-1346	7	599.95	30.0
34	15 Sep 90	1347-1353	7	599.91	29.4
35	15 Sep 90	1354-1400	7	599.88	28.8
36	15 Sep 90	1400-1408	7	599.95	28.5
37	15 Sep 90	1409-1416	7	600.13	28.5
38	15 Sep 90	1418-1424	7	600.18	28.1
39	15 Sep 90	1434-1439	7	600.29	30.8
40	15 Sep 90	1439-1444	7	600.36	31.9
41	15 Sep 90	1444-1449	7	600.45	31.8
42	15 Sep 90	1450-1456	7	600.53	31.0
43	17 Sep 90	0854-0904	8	600.37	37.7
44	17 Sep 90	0907-0912	8	600.40	35.4
45	17 Sep 90	0934-0939	8	600.28	38.2
46	17 Sep 90	0942-0947	8	600.28	36.9
47	17 Sep 90	0947-0952	8	600.29	36.4
48	17 Sep 90	0953-0959	8	600.31	36.2
49	17 Sep 90	1000-1006	8	600.34	36.1
50	17 Sep 90	1006-1012	8	600.37	37.4
51	17 Sep 90	1013-1018	8	600.39	36.5
52	17 Sep 90	1019-1024	8	600.33	37.1
53	17 Sep 90	1025-1029	8	600.29	39.0
54	17 Sep 90	1432-1436	8	599.97	36.4
55	17 Sep 90	1437-1443	8	600.00	35.5
56	17 Sep 90	1450-1454	8	600.08	35.0
57	17 Sep 90	1455-1459	8	600.11	35.3
58	17 Sep 90	1504-1510	8	600.17	36.8
59	17 Sep 90	1510-1515	8	600.19	35.6
60	17 Sep 90	1516-1520	8	600.20	36.1

Table 3.78
(Continued)

Summary of Discharge Measurements
St. Marys River
Lower Rapids Section
1990 Moving-boat Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels (Feet, IGLD 1955) S.W. Pier Gauge	Discharge TCFS
61	17 Sep 90	1521-1525	8	600.19	35.2
62	17 Sep 90	1526-1530	8	600.19	35.3
63	18 Sep 90	0955-1000	10	599.84	37.0
64	18 Sep 90	1001-1005	10	599.85	37.3
65	18 Sep 90	1006-1011	10	599.90	37.4
66	18 Sep 90	1012-1016	10	599.95	36.6
67	18 Sep 90	1017-1021	10	599.97	36.7
68	18 Sep 90	1022-1026	10	599.99	36.5
69	18 Sep 90	1027-1032	10	600.01	36.2
70	18 Sep 90	1033-1039	10	600.01	36.3
71	18 Sep 90	1040-1055	10	600.00	37.2
72	18 Sep 90	1055-1100	10	599.95	36.1
73	18 Sep 90	1310-1317	10	599.84	35.3
74	18 Sep 90	1317-1323	10	599.81	35.2
75	18 Sep 90	1324-1329	10	599.79	37.1
76	18 Sep 90	1330-1335	10	599.81	33.2
77	18 Sep 90	1336-1342	10	599.87	35.2
78	19 Sep 90	0786-0801	9	600.03	39.9
79	19 Sep 90	0807-0811	9	600.14	38.2
80	19 Sep 90	0811-0815	9	600.19	39.1
81	19 Sep 90	0816-0820	9	600.21	39.6
82	19 Sep 90	0821-0825	9	600.20	37.3
83	19 Sep 90	0826-0831	9	600.18	38.3
84	19 Sep 90	0831-0836	9	600.17	38.1
85	19 Sep 90	0837-0841	9	600.18	38.1
86	19 Sep 90	0842-0846	9	600.19	37.8
87	19 Sep 90	0847-0852	9	600.19	36.5
88	19 Sep 90	1011-1024	9	600.24	35.4
89	19 Sep 90	1025-1032	9	600.12	34.0
90	19 Sep 90	1032-1039	9	600.10	34.3

Table 3.78
(Continued)

Summary of Discharge Measurements
St. Marys River
Lower Rapids Section
1990 Moving-boat Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels (Feet, IGLD 1955) S.W. Pier Gauge	Discharge TCFS
91	19 Sep 90	1040-1046	9	600.12	35.4
92	19 Sep 90	1047-1053	9	600.10	34.1
93	19 Sep 90	1053-1059	9	600.07	34.8
94	19 Sep 90	1100-1104	9	600.06	36.0
95	19 Sep 90	1104-1108	9	600.07	36.5
96	19 Sep 90	1109-1113	9	600.08	35.1
97	19 Sep 90	1114-1118	9	600.10	35.9
98	19 Sep 90	1119-1123	9	600.14	36.6
99	20 Sep 90	0744-0751	6	600.19	30.0
100	20 Sep 90	0751-0757	6	600.16	28.2
101	20 Sep 90	0757-0805	6	600.12	27.2
102	20 Sep 90	0806-0811	6	600.10	27.4
103	20 Sep 90	0812-0817	6	600.09	26.7
104	20 Sep 90	0818-0823	6	600.10	26.6
105	20 Sep 90	0824-0829	6	600.10	26.2
106	20 Sep 90	0830-0835	6	600.10	26.2
107	20 Sep 90	0836-0841	6	600.11	25.6
108	20 Sep 90	0842-0848	6	600.11	25.5
109	20 Sep 90	0849-0854	6	600.12	25.8
110	20 Sep 90	1031-1036	6	600.10	24.4
111	20 Sep 90	1037-1042	6	600.07	25.2
112	20 Sep 90	1043-1048	6	600.04	25.1
113	20 Sep 90	1048-1054	6	600.04	24.8
114	23 Sep 90	1054-1100	6	600.06	24.1
115	20 Sep 90	1101-1106	6	600.04	25.6
116	20 Sep 90	1107-1112	6	600.02	25.2
117	20 Sep 90	1113-1118	6	600.00	24.5
118	23 Sep 90	1119-1124	6	600.56	25.5
119	20 Sep 90	1125-1130	6	599.90	25.1
120	20 Sep 90	1511-1518	6	599.94	24.5

Table 3.79

Summary of Discharge Measurements
St Marys River
Lower Rapids Section
1991 Conventional Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels Feet, IGLD 1955 Lower Soo Gauge	S.W. Pier Gauge	Discharge (TCFS)
1	14 Aug 91	0816-1125	1	579.50	600.51	6.2
2	14 Aug 91	1132-1350	1	579.55	600.66	6.5
3	14 Aug 91	1355-1554	1	579.56	600.55	6.5
4	15 Aug 91	0840-1040	2	579.66	600.44	11.3
5	15 Aug 91	1047-1242	2	579.75	600.40	10.8
6	15 Aug 91	1250-1503	2	579.75	600.59	10.9
7	16 Aug 91	0822-1040	3	579.89	600.37	16.3
8	16 Aug 91	1048-1410	3	579.96	600.20	16.0
9	16 Aug 91	1416-1620	3	579.97	600.43	16.5
10	17 Aug 91	0750-1105	4	580.17	600.75	21.9
11	17 Aug 91	1110-1255	4	580.17	600.66	21.1

Table 3.80

Summary of Discharge Measurements
St Marys River
Upper Gate Section
1991 Conventional Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels Feet, IGLD 1955 Upper Soo Gauge	Water Levels Feet, IGLD 1955 S.W. Pier Gauge	Discharge (TCFS)
1	20 Aug 91	0821-1145	13	600.11	600.22	48.5
2	20 Aug 91	1149-1534	13	600.09	600.23	47.8
3	21 Aug 91	0825-1159	16	600.04	600.18	53.1
4	21 Aug 91	1204-1534	16	599.90	600.10	57.8
5	22 Aug 91	0752-1156	15	600.37	600.52	56.1
6	22 Aug 91	1156-1518	15	600.23	600.39	57.7
7	23 Aug 91	0812-1137	14	600.15	600.32	50.2
8	23 Aug 91	1137-1459	14	600.10	600.24	49.8

Table 3.81

Summary of Discharge Measurements
St Marys River
Lower Rapids Section
1991 Moving-boat Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels (Feet, IGLD 1955) S.W. Pier Gauge	Discharge TCFS
1	14 Aug 91	1556-1607	1	600.49	5.0
2	14 Aug 91	1607-1622	1	600.57	4.4
3	14 Aug 91	1622-1632	1	600.60	5.5
4	15 Aug 91	1055-1104	2	600.33	10.3
5	15 Aug 91	1104-1115	2	600.41	10.0
6	15 Aug 91	1115-1126	2	600.36	10.0
7	15 Aug 91	1126-1136	2	600.39	10.0
8	15 Aug 91	1136-1150	2	600.41	10.3
9	15 Aug 91	1150-1200	2	600.40	10.4
10	15 Aug 91	1200-1210	2	600.38	10.2
11	15 Aug 91	1444-1455	2	600.44	10.4
12	15 Aug 91	1455-1505	2	600.61	10.0
13	15 Aug 91	1505-1515	2	600.77	11.3
14	16 Aug 91	1000-1008	3	600.66	14.9
15	16 Aug 91	1008-1016	3	600.70	14.7
16	16 Aug 91	1016-1024	3	600.70	14.5
17	16 Aug 91	1024-1036	3	600.66	14.4
18	16 Aug 91	1036-1045	3	600.61	14.5
19	16 Aug 91	1045-1054	3	600.54	14.7
20	16 Aug 91	1054-1101	3	600.43	14.4
21	16 Aug 91	1101-1114	3	600.41	14.8
22	16 Aug 91	1114-1123	3	600.42	14.3
23	16 Aug 91	1123-1138	3	600.30	14.0
24	16 Aug 91	1138-1157	3	600.20	13.5
25	16 Aug 91	1157-1208	3	599.68	14.0
26	16 Aug 91	1208-1219	3	600.03	13.7
27	16 Aug 91	1219-1228	3	600.19	14.2
28	16 Aug 91	1228-1238	3	600.20	14.6
29	17 Aug 91	0947-0954	4	600.84	21.5
30	17 Aug 91	0954-1004	4	600.82	20.6
31	17 Aug 91	1004-1013	4	600.74	20.1

Table 3.81
(Continued)

Summary of Discharge Measurements
St Marys River
Lower Rapids Section
1991 Moving-boat Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels (Feet, IGLD 1955) S.W. Pier Gauge	Discharge TCFS
32	17 Aug 91	1013-1021	4	600.65	19.9
33	17 Aug 91	1021-1032	4	600.57	19.4
34	17 Aug 91	1032-1041	4	600.57	19.3
35	17 Aug 91	1041-1050	4	600.60	19.5
36	17 Aug 91	1050-1059	4	600.62	19.8
37	17 Aug 91	1059-1109	4	600.62	19.4
38	17 Aug 91	1109-1120	4	600.64	19.5
39	17 Aug 91	1130-1139	4	600.76	19.9
40	17 Aug 91	1139-1148	4	600.74	19.6
41	17 Aug 91	1148-1158	4	600.68	19.3
42	17 Aug 91	1211-1220	4	600.57	19.8
43	17 Aug 91	1226-1235	4	600.55	20.0
44	20 Aug 91	0850-0908	13	600.23	44.5
45	20 Aug 91	0908-0921	13	600.36	45.3
46	20 Aug 91	0921-0927	13	600.25	47.2
47	20 Aug 91	0927-0936	13	600.17	42.7
48	20 Aug 91	0936-0952	13	600.21	43.2
49	20 Aug 91	0952-1004	13	600.26	44.1
50	20 Aug 91	1004-1011	13	600.27	49.2
51	20 Aug 91	1011-1019	13	600.26	44.8
52	20 Aug 91	1019-1026	13	600.22	43.1
53	20 Aug 91	1026-1035	13	600.18	43.0
54	20 Aug 91	1035-1044	13	600.17	46.2
55	20 Aug 91	1044-1053	13	600.16	44.2
56	20 Aug 91	1104-1112	13	600.15	43.3
57	20 Aug 91	1112-1120	13	600.14	44.8
58	20 Aug 91	1507-1515	13	600.05	39.3
59	20 Aug 91	1515-1522	13	600.08	40.8
60	20 Aug 91	1522-1530	13	600.09	41.9
61	20 Aug 91	1530-1550	13	600.15	41.2
62	21 Aug 91	1049-1055	16	600.31	51.6

Table 3.81
(Continued)

Summary of Discharge Measurements
St Marys River
Lower Rapids Section
1991 Moving-boat Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels (Feet, IGLD 1955) S.W. Pier Gauge	Discharge TCFS
63	21 Aug 91	1055-1102	16	600.35	46.7
64	21 Aug 91	1102-1110	16	600.29	46.0
65	21 Aug 91	1110-1118	16	600.18	47.6
66	21 Aug 91	1118-1127	16	600.18	45.2
67	21 Aug 91	1127-1135	16	600.20	47.7
68	21 Aug 91	1135-1143	16	600.25	46.4
69	21 Aug 91	1143-1150	16	600.28	49.4
70	21 Aug 91	1150-1159	16	600.31	47.4
71	21 Aug 91	1159-1205	16	600.33	47.6
72	21 Aug 91	1308-1317	16	600.30	47.6
73	21 Aug 91	1317-1324	16	600.24	45.6
74	21 Aug 91	1324-1331	16	600.18	47.3
75	21 Aug 91	1331-1340	16	600.17	46.6
76	22 Aug 91	0907-0913	15	600.43	59.5
77	22 Aug 91	0950-1006	15	600.50	46.9
78	22 Aug 91	1006-1015	15	600.58	50.3
79	22 Aug 91	1015-1024	15	600.63	47.9
80	22 Aug 91	1024-1045	15	600.64	51.1
81	22 Aug 91	1045-1059	15	600.59	48.6
82	22 Aug 91	1059-1110	15	600.65	46.4
83	22 Aug 91	1110-1120	15	600.64	47.1
84	22 Aug 91	1159-1206	15	600.44	50.2
85	22 Aug 91	1206-1212	15	600.42	50.8
86	22 Aug 91	1212-1220	15	600.40	49.8
87	22 Aug 91	1220-1228	15	600.38	47.9
88	22 Aug 91	1228-1237	15	600.36	46.6
89	22 Aug 91	1237-1247	15	600.30	47.0
90	22 Aug 91	1247-1255	15	600.31	47.7
91	22 Aug 91	1255-1303	15	600.41	46.8
92	22 Aug 91	1303-1311	15	600.46	45.9
93	22 Aug 91	1311-1320	15	600.48	46.2

Table 3.81
(Continued)

Summary of Discharge Measurements
St Marys River
Lower Rapids Section
1991 Moving-boat Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels (Feet, IGLD 1955) S.W. Pier Gauge	Discharge TCFS
94	22 Aug 91	1509-1517	15	600.29	50.1
95	22 Aug 91	1517-1525	15	600.29	53.4
96	22 Aug 91	1525-1534	15	600.27	48.9
97	22 Aug 91	1534-1541	15	600.27	49.2
98	22 Aug 91	1541-1549	15	600.25	49.7
99	22 Aug 91	1549-1555	15	600.25	49.6
100	23 Aug 91	0918-0926	14	600.17	42.2
101	23 Aug 91	0926-0932	14	600.19	39.9
102	23 Aug 91	0932-0945	14	600.19	41.6
103	23 Aug 91	0945-0955	14	600.15	42.3
104	23 Aug 91	1009-1015	14	600.23	41.1
105	23 Aug 91	1015-1022	14	600.34	42.5
106	23 Aug 91	1022-1037	14	600.35	43.2
107	23 Aug 91	1037-1051	14	600.34	43.5
108	23 Aug 91	1051-1058	14	600.21	43.7
109	23 Aug 91	1058-1105	14	600.20	42.5
110	23 Aug 91	1208-1217	14	600.17	40.0
111	23 Aug 91	1222-1233	14	600.01	42.4
112	23 Aug 91	1233-1240	14	599.94	42.2
113	23 Aug 91	1240-1246	14	599.93	42.0
114	23 Aug 91	1246-1253	14	599.95	41.6
115	23 Aug 91	1253-1302	14	600.02	41.8
116	23 Aug 91	1302-1310	14	600.06	43.2
117	23 Aug 91	1444-1450	14	600.23	42.7
118	23 Aug 91	1450-1504	14	600.21	43.0
119	23 Aug 91	1504-1511	14	600.15	40.4
120	23 Aug 91	1511-1518	14	600.13	40.4
121	23 Aug 91	1518-1525	14	600.10	40.6
122	23 Aug 91	1525-1531	14	600.06	41.8
123	23 Aug 91	1531-1538	14	600.09	40.1
124	23 Aug 91	1552-1600	14	600.17	40.5
125	23 Aug 91	1600-1610	14	600.17	41.2

Table 3.81
(Continued)

Summary of Discharge Measurements
St Marys River
Lower Rapids Section
1991 Moving-boat Measurements

Meas. No.	Date	Time (EST)	No. of Gates Open	Water Levels (Feet, IGLD 1955) S.W. Pier Gauge	Discharge TCFS
94	22 Aug 91	1509-1517	15	600.29	50.1
95	22 Aug 91	1517-1525	15	600.29	53.4
96	22 Aug 91	1525-1534	15	600.27	48.9
97	22 Aug 91	1534-1541	15	600.27	49.2
98	22 Aug 91	1541-1549	15	600.25	49.7
99	22 Aug 91	1549-1555	15	600.25	49.6
100	23 Aug 91	0918-0926	14	600.17	42.2
101	23 Aug 91	0926-0932	14	600.19	39.9
102	23 Aug 91	0932-0945	14	600.19	41.6
103	23 Aug 91	0945-0955	14	600.15	42.3
104	23 Aug 91	1009-1015	14	600.23	41.1
105	23 Aug 91	1015-1022	14	600.34	42.5
106	23 Aug 91	1022-1037	14	600.35	43.2
107	23 Aug 91	1037-1051	14	600.34	43.5
108	23 Aug 91	1051-1058	14	600.21	43.7
109	23 Aug 91	1058-1105	14	600.20	42.5
110	23 Aug 91	1208-1217	14	600.17	40.0
111	23 Aug 91	1222-1233	14	600.01	42.4
112	23 Aug 91	1233-1240	14	599.94	42.2
113	23 Aug 91	1240-1246	14	599.93	42.0
114	23 Aug 91	1246-1253	14	599.95	41.6
115	23 Aug 91	1253-1302	14	600.02	41.8
116	23 Aug 91	1302-1310	14	600.06	43.2
117	23 Aug 91	1444-1450	14	600.23	42.7
118	23 Aug 91	1450-1504	14	600.21	43.0
119	23 Aug 91	1504-1511	14	600.15	40.4
120	23 Aug 91	1511-1518	14	600.13	40.4
121	23 Aug 91	1518-1525	14	600.10	40.6
122	23 Aug 91	1525-1531	14	600.06	41.8
123	23 Aug 91	1531-1538	14	600.09	40.1
124	23 Aug 91	1552-1600	14	600.17	40.5
125	23 Aug 91	1600-1610	14	600.17	41.2