

**International Lake Superior
Board of Control
Semi-Annual Progress Report to the
International Joint Commission
Covering the period September 16, 2008 to March 3, 2009**

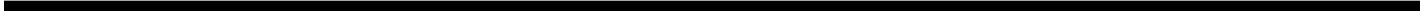


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Cover: Sea smoke billows off the St. Marys River near the Edison Sault Electric Company Plant. Photo by Jude McConkey. Courtesy the Sault Ste. Marie Evening News; January 16, 2009

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International Lake Superior Board of Control

United States
BG John W. Peabody, Member
Mr. John W. Kangas, Secretary



Canada
Mr. David Fay, Member
Mr. Rob Caldwell, Secretary

March 3, 2009

International Joint Commission
Washington, D.C.
Ottawa, Ontario

Commissioners:

This semi-annual report covers the Board's activities from September 16, 2008 to March 3, 2009.

1. Highlights

During the past six months, the water levels of lakes Superior and Michigan-Huron remained below average but were higher than comparable levels last year. The remaining Great Lakes water levels were also generally above or near their comparable levels last year.

The level of Lake Superior has been consistently below average since April of 1998, which is the longest sustained period of below-average monthly levels in the 1918-2007 period of record. The level of Lakes Michigan-Huron has been below average since January of 1999, the second longest period on record of consistently below average levels.

This period of sustained low lake levels and outflows continues to impact stakeholders in the upper Great Lakes region. Public and media attention continues in both the U.S. and Canada. The Board is aware of the detrimental effects of the low levels to navigation, hydropower, tourism, industrial and shoreline interests, but it appears that concerns have diminished as conditions get closer to average.

The Lake Superior outflows were as specified by Regulation Plan 1977-A. Since September, the monthly outflows from the lake have been between 75 and 96% of average. The Lake Superior net basin water supply was below average while that to the Lakes Michigan-Huron basin was above average over the September 2008 through February 2009 period.

Ponding by the hydropower entities was allowed during the entire reporting period.

2. Monitoring of Hydrologic Conditions

The Board continuously monitors the water levels of lakes Superior and Michigan-Huron, and the water levels and flows in the St. Marys River. The Regulation Representatives' monthly reports to

the Board provide hydrologic assessments and recommendations on the regulation of outflows from Lake Superior. These reports indicate the amount of water available for hydropower purposes, after the requirements for domestic use, navigation, and the fishery (St. Marys Rapids) were met.

Tables 1 and 2 list the recent monthly water levels, net basin supplies, and outflows for lakes Superior and Michigan-Huron, respectively. Figure 1 compares the monthly water levels for this period to long-term averages and extremes. Figure 2 shows the monthly precipitation over the lakes Superior and Michigan-Huron basins. Figure 3 shows the monthly net basin supplies for the basins.

Overall, precipitation over the Lake Superior basin was below average for the period from September 2008 through February 2009 at 97% of average for the period. September, November and December were above average, while October, January and February were below average. Except for January and February the net basin supplies, which are the net effect of precipitation, evaporation and runoff to the lake, were below average for the September through February period. The September through February net basin supply to Lake Superior was well below average and would be expected to be exceeded 76% of the time.

Lake Superior's water levels remained below average during the period. Levels were above chart datum (183.2 m or 601.1 ft) during the September through November period, falling below datum in December and remaining there through February. Monthly mean Lake Superior levels between September and February ranged from 17 cm (7 in) to 22 cm (9 in) below their long-term averages. On March 3, 2009, its level was 183.08 m (600.7 ft), which was 16 cm (6 in) below the long-term average and 7 cm (3 in) higher than a year ago. The level of Lake Superior has been consistently below average since April 1998, which is the longest sustained period of below average monthly levels in the 1918-2007 period of record.

Snow water equivalent values across the Lake Superior basin are similar to last year's conditions. Snow survey flights to determine the snow pack on the entire Lake Superior basin are planned for March 2009. Note that the correlation between SWE and lake level rise is limited.

Precipitation over the Lakes Michigan-Huron basin was 116% of average for the period. September, December and February were above average, while October, November and January were below average. As a whole, the September through February net basin supply to Lakes Michigan-Huron was above average and would be expected to be exceeded more than 24% of the time.

Monthly mean Lakes Michigan-Huron levels ranged from about 29 cm (11 inches) to 40 cm (16 in) below long-term averages from September to February. Water levels were above chart datum 176.0 m (577.5 ft.) in September and October falling below datum in mid-November where they remained until the end of December. On March 3, 2009 the level of Lakes Michigan-Huron was at 176.05 m (577.59 ft), 27 cm (11 in) below the long-term average and 29 cm (11 in) higher than a year ago. The level of Lakes Michigan-Huron has been below average since January 1999, the second longest sustained period of below-average monthly levels on record.

3. Regulation of the Outflow from Lake Superior

The outflows of Lake Superior were as specified by the Regulation Plan 1977-A from September through February. Lake Superior outflows were 85% of average during the September through February period ranging from 1,560 m³/s to 2,240 m³/s (55 to 79 tcf). Outflows were limited by Criteria (c) in September. October through February flows were as called for by Plan 1977-A with February being at the normal minimum of 1,560 m³/s.

The gate setting at the Compensating Works supplying the main portion of the St. Marys Rapids was at an equivalent one-half gate open, four gates set at 20 cm (8 inches), for the September through February period. Gate No. 1, which supplies water to the Fishery Remedial Works, remained set at 15 m³/s (530 cfs) throughout the period.

Brookfield Renewable Power's gate refurbishment program recommenced on June 19, 2008. Compensating Works Gates 7, 8, 9 and 10 were closed and Gates 12, 13, 14 and 15 were opened 20 cm (8 in) to maintain the one-half gate equivalent open setting and to accommodate safety considerations. On November 20, 2008 Gates 12, 13, 14 and 15 were closed and Gates 7, 8, 9 and 10 were raised to 20 cm (8 in) open. These are the gates that are normally used in order to give better flow distribution across the rapids area at the one-half gate equivalent setting. When the gate refurbishment program resumes in spring 2009 appropriate gate adjustments will again be made to accommodate the work and safety considerations.

Several scheduled and unexpected flow reductions were experienced at the three hydropower plants. All flow reductions were easily offset within each month. When units were taken off-line, water levels at the U.S. Slip gauge fell but quickly rose again as idled units were brought back on-line. No problems related to water levels were reported as a result of these variations. No ships were reported delayed due to the flow variations. Details are provided in Section 6.

4. Governing Conditions During the Reporting Period

The monthly mean levels of Lake Superior ranged between 183.10 m and 183.37 m (600.7 ft. and 601.6 ft.), within the limits of 182.76 m and 183.86 m (599.6 ft. and 603.2 ft.) specified in the Commission's Orders of Approval.

The daily mean water levels in the lower St. Marys River at the U.S. Slip Gauge downstream of the U.S. Lock varied between elevation 175.99 m and 176.70 m (577.4 ft and 579.7 ft.) from September 16 through March 3. Thus, the requirement for maintaining the level below 177.94 m (583.8 ft.) was satisfied. The daily mean U.S. Slip gauge level was below chart datum of 176.39 m (578.7 ft.) for 90 days of the reporting period.

5. Inspections and Repairs at the Compensating Works

Ongoing routine maintenance and inspections of the Compensating Works were undertaken in the past six months. The structure is generally in good condition.

On the Canadian side of the structure, Brookfield Renewable Power's major multi-year repainting and refurbishment program recommenced on June 19, with completion of 2008's two-gate phase on November 17. Dewatering structures had been installed at Gates 4 and 7. Blast cleaning and painting were carried out. Other activities included concrete repairs and steel armoring of the upstream noses of Piers 6 to 8. Work is expected to recommence in June 2009 focusing on Gates 6 and 8.

6. Repairs and Maintenance at the Hydropower Facilities

a. U.S. Government Hydropower Plant

As reported previously, the runner for Unit No. 10 was damaged by cavitation. Temporary repairs were made and the unit is operational and running while permanent repair plans are formulated. A time frame for permanent repairs will be set once funding for the repairs has been allocated.

During the September through February period units were taken off line at various times for a total of 165 hours to accommodate inspections and maintenance, due to tripping relays, to repair a leaking inspection door in the Unit 3A turbine pit and inspect the Unit 10 runner. Flow allocations were met during the reporting period. ESELCO's plant utilized all of the allocation that the government plant was unable to use.

b. Brookfield Renewable Power

A scheduled maintenance outage was undertaken on October 4 to facilitate the annual underwater cable inspection and maintenance for Lake Superior Power Ltd. A safety boom installed in the tailrace was also repaired at this time but was found to have broken again around March 1. Unit G3 was shut down on October 31 and November 1 for rotor crack inspection. Unit G1 was shut down from November 16 to 21 for welding repairs and repair to an expansion joint seal. Unit G2 was shut down on December 22 for correction of problems with the blade proportioning valve. Unit G1 was shut down on February 2 for breaker maintenance. During the reporting period all flow allocations were used.

Routine maintenance is scheduled for April 12 through May 28, 2009.

c. Edison Sault Electric Company

Routine maintenance was conducted during the reporting period. Work on the Headgate Pier was done starting in September and ending on November 12. Work in the power canal will continue for the next two to three years during the fall of each year. During the reporting period all flow allocations were utilized.

7. Flow Verification Measurements

No flow verification measurements were performed during the reporting period. The following update relates to previous measurements.

U.S. Government Hydropower Plant

August 2008 flow measurements determined that the plant discharges were being reported within acceptable limits. As a result, application of the 9% adjustment for under-reporting was discontinued at the beginning of November 2008. Power canal verification measurements will now be made on a five year cycle starting with the next five year periodic inspection in 2010. Recorded plant flows are now based on the System Control and Data Acquisition (SCADA) reports.

8. Water Usage in the St. Marys River

Table 3 (Table 4 in cubic feet per second) lists the distribution of outflows from Lake Superior for January 2008 through February 2009. Water uses are divided into four categories: domestic, navigation, fishery, and hydropower. According to the 1979 Supplementary Order, after the first three water requirements are satisfied, the remaining outflow is shared equally between the U.S. and Canada for hydropower purposes. Any remainder, beyond the flow capacity of the hydropower plants, is discharged through the Compensating Works into the St. Marys Rapids.

As shown in the tables, the monthly mean amounts of water used for domestic and industrial purposes ranged from 9 to 12 m³/s (318 to 424 cfs), or 0.5% to 0.6% of the total monthly outflow from September 2008 through February 2009.

The monthly flow through the U.S. and Canadian locks depends on traffic volume and varied from 2 to 14 m³/s (71 to 494 cfs). As a percentage of the total river flow, water allocated for navigation varied seasonally from as little as 0.1% (when the locks were closed for the winter) to about 0.6% of the total river flow in the busiest part of the reporting period.

The U.S. locks closed on January 15, 2009, as scheduled and will re-open on March 25, 2009. The Canadian lock closed early for the season on October 1, 2008 due to a malfunction of the lock gate closure system. It is expected to reopen May 15, 2009.

In accordance with the Commission's Orders to fulfill the fishery needs in the main rapids, a minimum gate setting of one-half gate open is required at all times at the Compensating Works. A setting equivalent to one-half gate open for the main rapids is maintained by having four gates partially open to supply the same quantity of water as one gate half open. This spreads the flow more evenly across the main rapids, and is thought to reduce potential damage from ice floes impacting the gates in the winter. In addition, a flow of at least 15 m³/s (530 cfs) is required in the Fishery Remedial Works (through Gate 1). The flow in the St. Marys Rapids, including that through the Fishery Remedial Works, ranged from 84 to 91 m³/s (2,970 to 3,210 cfs) between September 2008 and February 2009.

The hydropower plants used an average of 1,697 m³/s (59.9 tcf) from September 2008 through February 2009 for electric power production. The allocation for this period averaged 1,699 m³/s (60.0 tcf). Usages at each plant are shown in Tables 3 and 4.

9. Long Lac and Ogoki Diversions

Ontario Power Generation (OPG) continued to provide the Board with information on the operations of the Long Lac and Ogoki diversions. The Ogoki Diversion into Lake Nipigon (which flows into Lake Superior) averaged 128.5 m³/s (4,500 cfs) and the Long Lac Diversion averaged 32.9 m³/s (1,200 cfs) from September through February. Combined, these diversions were about 116 percent of average for the period 1944-2008.

Slots cut into Waboose Dam in late 2007 provide a minimum flow northward into the Ogoki River of approximately 2 m³/s to meet fisheries requirements. “Slot flow” (averaging 3.0 m³/s (110 cfs)) was passed after September 24 following a period of very wet weather, during which extra flow was spilled northward to prevent localized flooding.

Since 1999, a continuous flow of at least 2 m³/s (70 cfs) has been maintained during the summer (Victoria Day weekend through Labor Day weekend) from the north outlet of Long Lake (Kenogami Dam). This agreement (i.e., the Aguabason Water Management Plan) between OPG and the local First Nations provides water for environmental enhancement of the Kenogami River, and reduces the amount diverted to Lake Superior. In 2008, OPG replaced wooden stop logs with new steel logs, which greatly reduced leakage. The Ontario Ministry of Natural Resources now requires a minimum flow of 0.55 m³/s during the rest of the year and has extended the 2 m³/s minimum requirement from Labor Day weekend to the end of October (i.e., Saturday of Victoria Day weekend through Halloween). Since it is difficult to change the flow during the winter, the logs were set to spill 0.9 m³/s on November 6, with the expectation that as Long Lake falls to its lowest level come spring, the spillage rate will be at or above the 0.55 m³/s minimum. An average of 1.1 m³/s (40 cfs) was spilled from September through February.

10. Peaking and Ponding Operations at Hydropower Plants

Peaking and ponding operations are the within-day and day-to-day flow variations that enable the hydropower plants to better match their electricity production with demand. However, these variations cause the water levels in the St. Marys River downstream of the plants to fluctuate more than they otherwise would. The Commission has approved guidelines within which the Board may restrict peaking and ponding operations by the hydropower entities under certain conditions. Specifically, if the minimum level at the U.S. Slip gauge on the lower river is expected to be below the threshold level of 176.09 m as a result of ponding operations, then the power entities are required to pass peak flows for at least an 8-hour period each day to provide periods of relatively higher levels on the lower St. Marys River each day. The Board provides summaries of peaking and ponding in its semi-annual reports. The Commission’s guidelines are to be examined on a five year basis by the Board, starting with the last year of the International Upper Great Lakes Study or 2010, whichever comes first.

During the reporting period, the power entities undertook peaking and ponding operations under the supervision of the Board. From September 2008 through January 15, 2009 the weekend minimum levels at the U.S. Slip site were expected to be above the threshold level.

As a result, ponding by the hydropower companies was allowed on weekends and holidays. From January 16, 2009 through February 2009 levels were of no concern to navigation and ponding was permitted.

To continue to provide timely information on expected flow variations to the users, the Corps distributes monthly notices during the shipping season (March through January) on expected Lake Superior outflows, and a schedule of flow variations at the hydropower plants. No concerns related to peaking and ponding were reported to the Board during the period. While lake levels were higher than last year they continued to be below average presenting a continuing problem to shippers requiring light loading of vessels in many cases.

Figures 4a – 4f compare the hourly Lake Superior outflow and the hourly levels at U.S. Slip on the lower St. Marys River. U.S. Slip levels were higher than levels during the September through February period last year.

11. Annual Meeting with the Public and Public Information

The Board will hold its 2009 annual meeting with the public on June 4. The meeting will be held at the Walker Cisler Center at Lake Superior State University, Sault Ste. Marie, MI., with a call-in option for interested parties. The Board recognizes the need to coordinate its public communication activities with the International Upper Great Lakes Study Board to avoid possible confusion of the roles and responsibilities of the two Boards by stakeholders.

The Board continues to issue, at the beginning of each month, news releases informing the public about Lake Superior regulation and water level conditions. The Board provides monthly media releases and hydrologic update information to the Commission to maintain a Board web site. Content includes information on Board members and responsibilities as well as news releases, semi-annual reports, meeting minutes and hydrologic data summaries. In addition, in support of the Board and the Commission, the Detroit District Corps of Engineers maintains additional technical information on its own Board Web site.

12. Related Items of Interest

a. Lock Replacement at Sault Ste. Marie, Michigan

A new “Poe-sized” lock is proposed to replace the existing Davis and Sabin Locks at the Soo Locks complex at Sault Ste. Marie, MI. The purpose of this project is to provide for more efficient movement of waterborne commerce. The Water Resources Development Act of 2007 directs that construction of the new lock shall be at Federal expense.

In FY 2009 plans and specifications for the cofferdam construction package will be completed for a possible construction start if funds are appropriated by Congress. Additionally, the plans and specifications for the guide walls/channel excavation (dry) contract will be completed and ready for advertisement should funds be appropriated by Congress. Design efforts will continue on the other project features in an effort to have them ready for advertisement in FY 2010.

b. Great Lakes – St. Lawrence Seaway Study

Work is almost complete on the Supplemental Reconnaissance Report for the Great Lakes Navigation System Review. This Study is being finalized using information developed in a fall 2007 binational Great Lakes St. Lawrence Seaway Study. No expansion of locks or connecting channel size is being recommended.

The initial Great Lakes Navigation System Review was authorized in Section 456 of WRDA 1999, which directed the Corps, in consultation with the St. Lawrence Seaway Development Corporation, to review the feasibility of improving commercial navigation on the Great Lakes navigation system. An initial Reconnaissance Report was approved in 2003 as a basis for further study efforts to support a Federal decision to proceed with feasibility phase studies. A USACE-HQ mandated supplement to this report is being prepared to provide a baseline for the project conditions for the environment, engineering features and economic conditions of the system. Canada and the U.S. completed a bi-national report (Great Lakes St. Lawrence Seaway Study) in the fall of 2007 which focused on the system's locks, the majority of which are located on the St. Lawrence Seaway. This bi-national effort generated much of the required baseline data for the system, involving significant regional stakeholder participation, and is the basis of a decision to not proceed with any further efforts related to St. Lawrence Seaway system expansion.

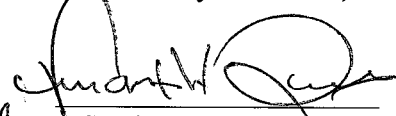
FY09 Continuing Resolution funds are being used to complete the supplemental reconnaissance effort, focusing on establishing baseline conditions for the balance of the system infrastructure, primarily federally maintained ports, including port structure (breakwaters, revetments, etc.) and channel (dredging/disposal) maintenance requirements. The supplemental reconnaissance report will provide the baseline maintenance requirements and economic factors necessary to plan for the optimal approach to meeting the navigation needs, and serve as the basis for a final determination as to the Federal interest in proceeding with any feasibility efforts. After Headquarters review the supplemental report will be shared with interested Federal and State entities, as well as the public, for their review prior to deciding if further studies are warranted.

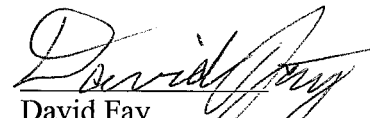
13. Board Membership and Meetings

There was no change in the Board membership during the reporting period.

The Board held a meeting on March 3, 2009 in Chicago, IL with the Canadian and Alternate United States members in attendance.

Respectfully submitted,


BG John W. Peabody
Member for United States


David Fay
Member for Canada

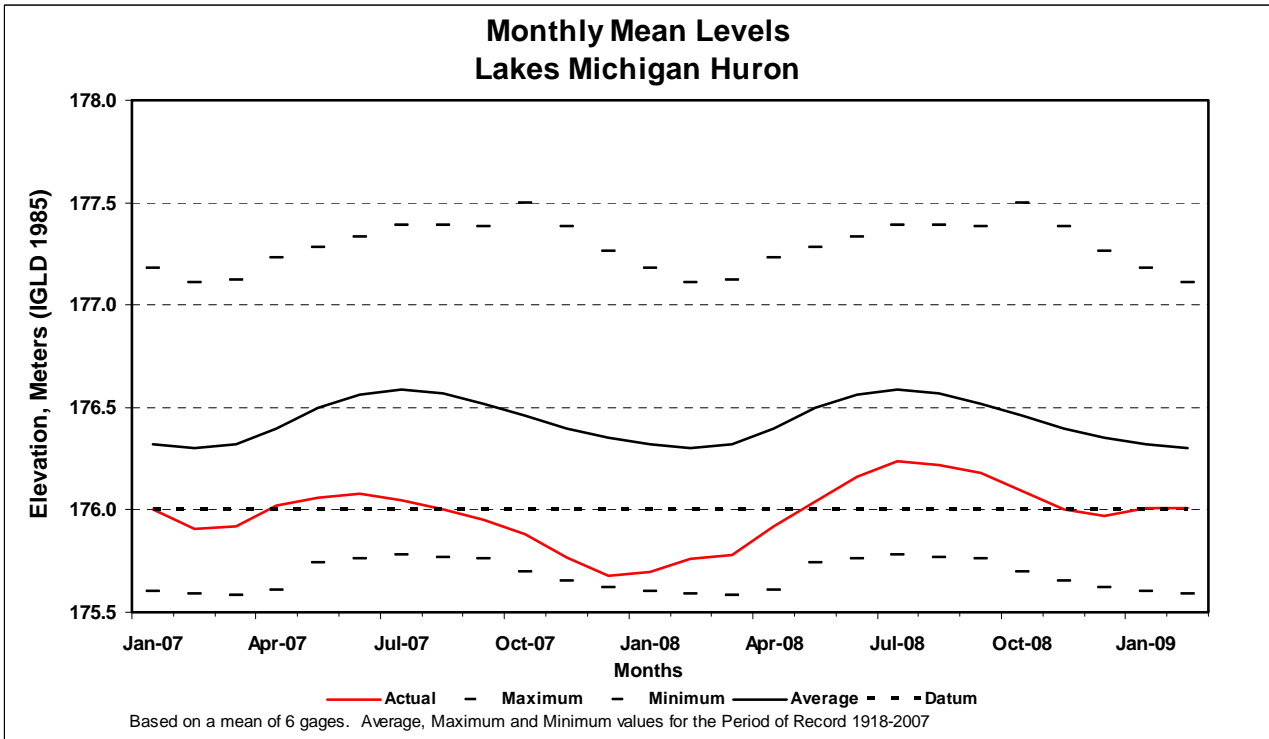
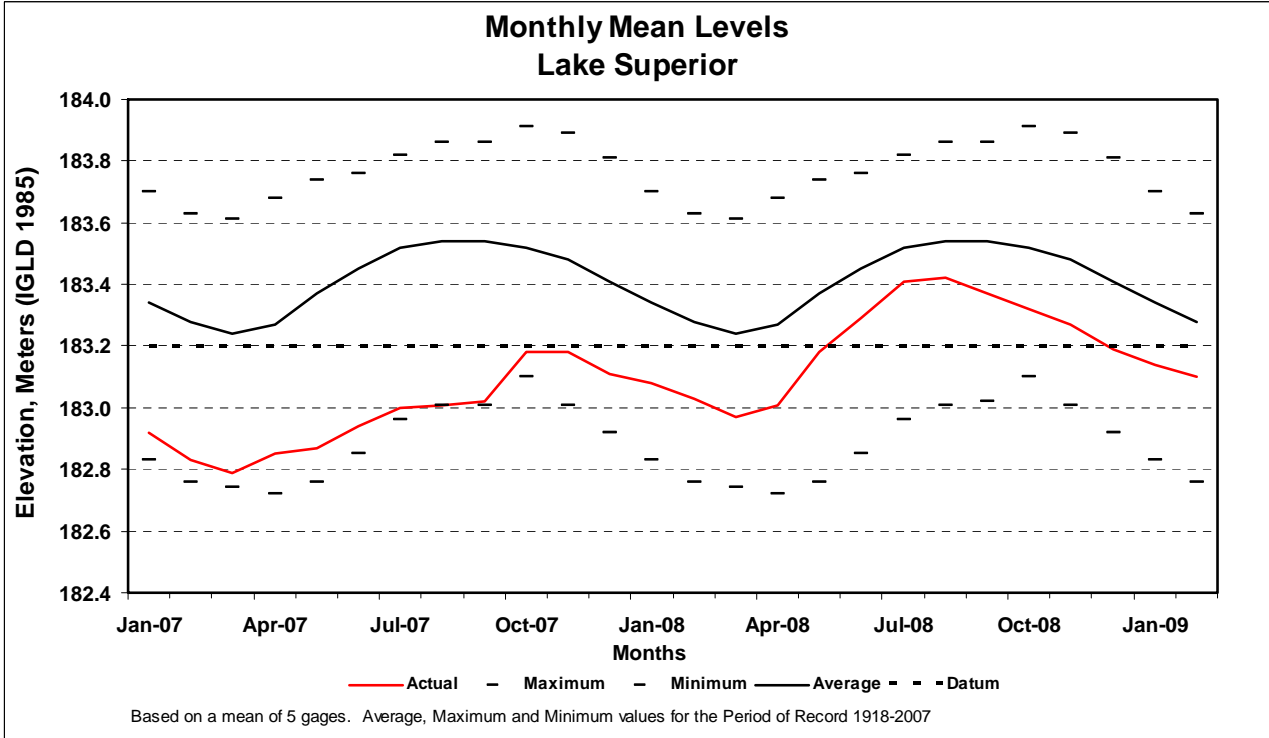


Figure 1

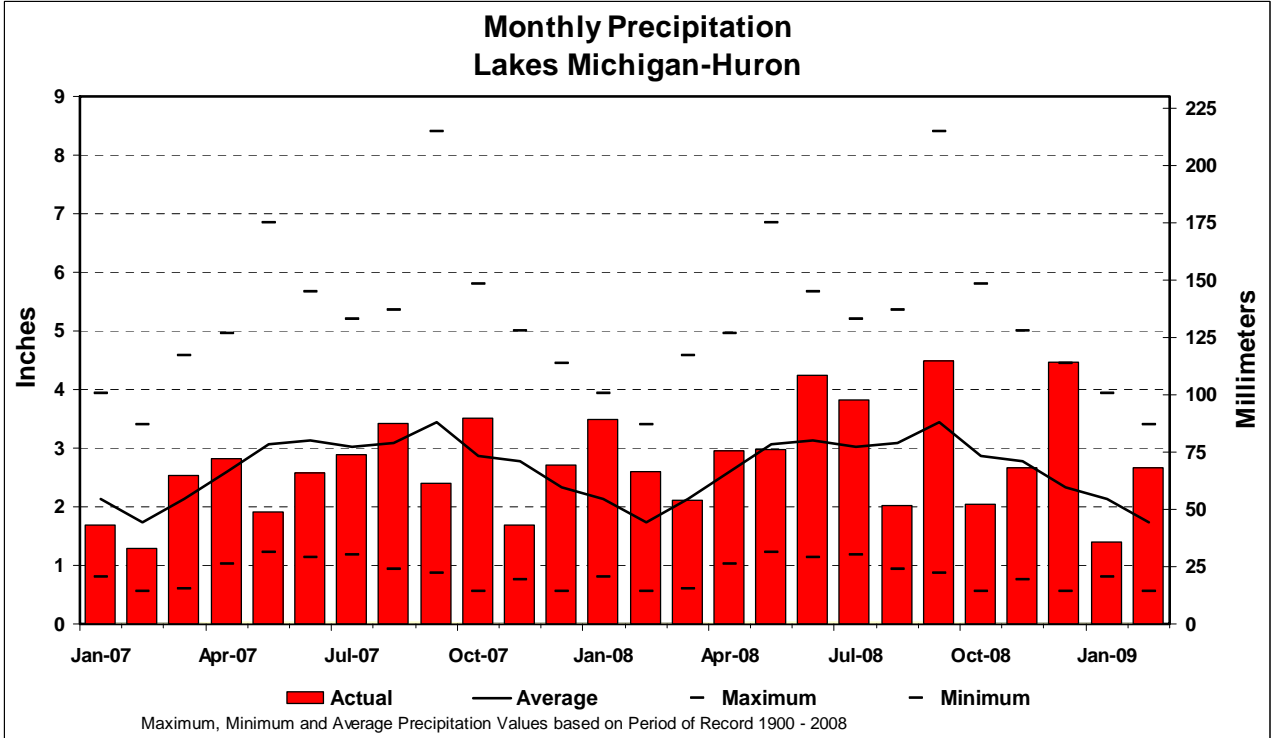
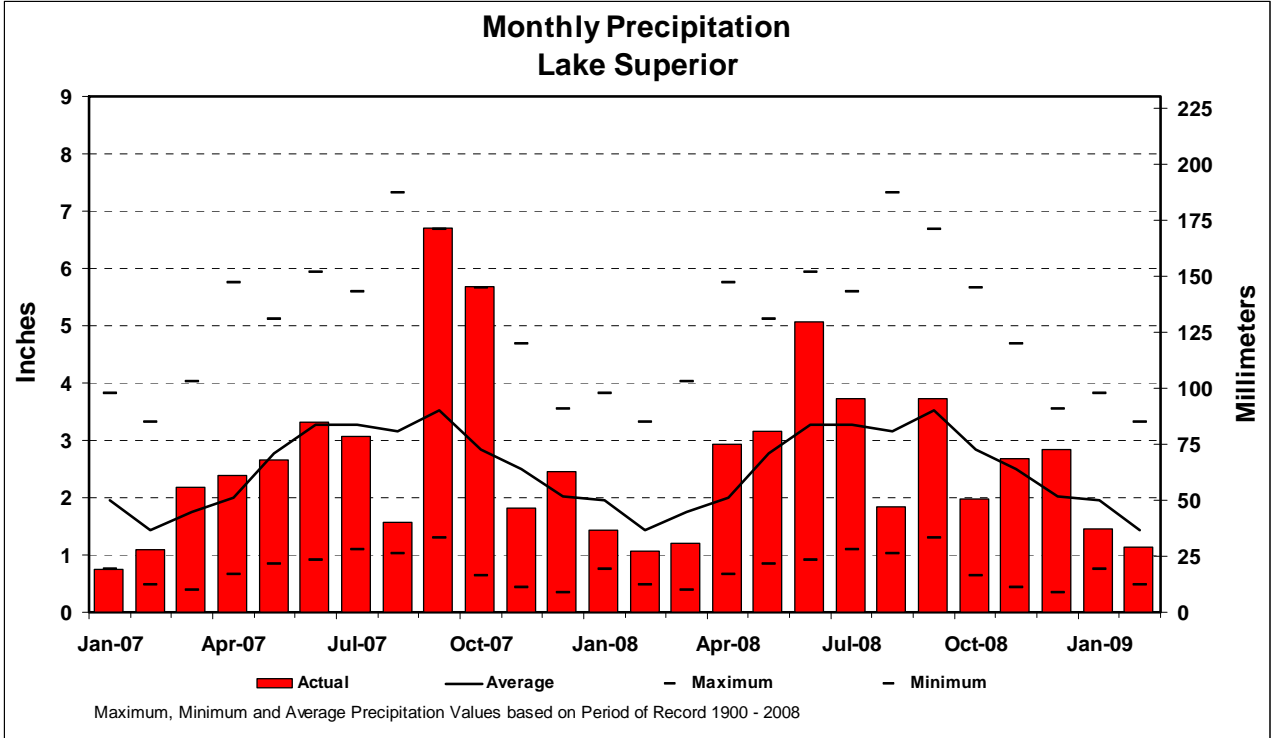
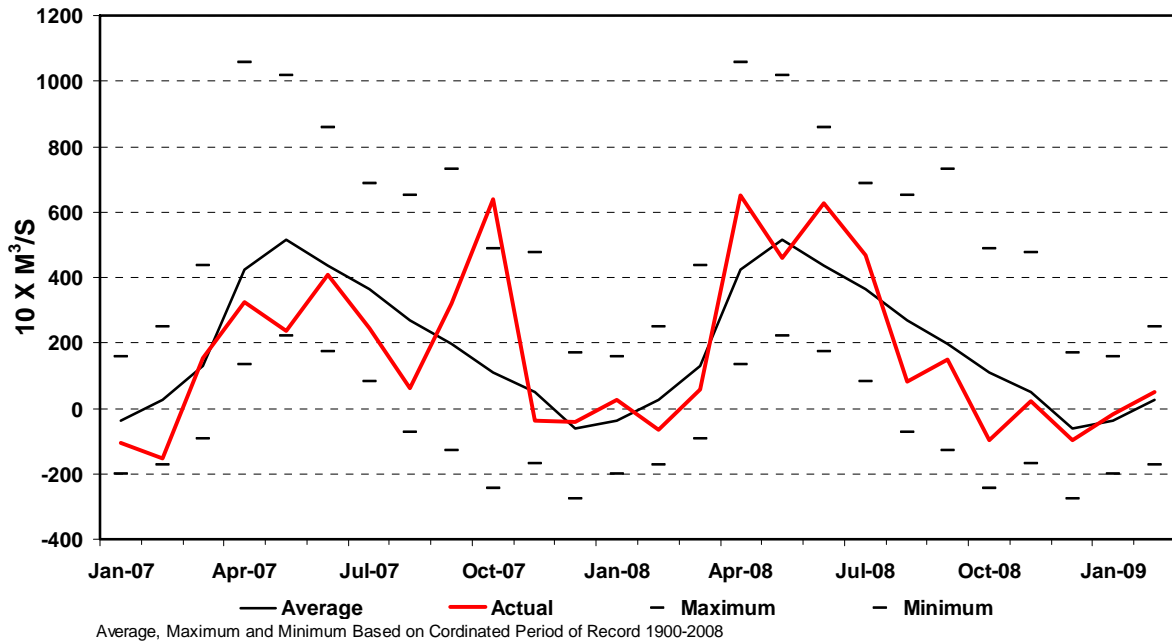


Figure 2

Monthly Net Basin Supplies Lake Superior



Monthly Net Basin Supplies Lakes Michigan-Huron

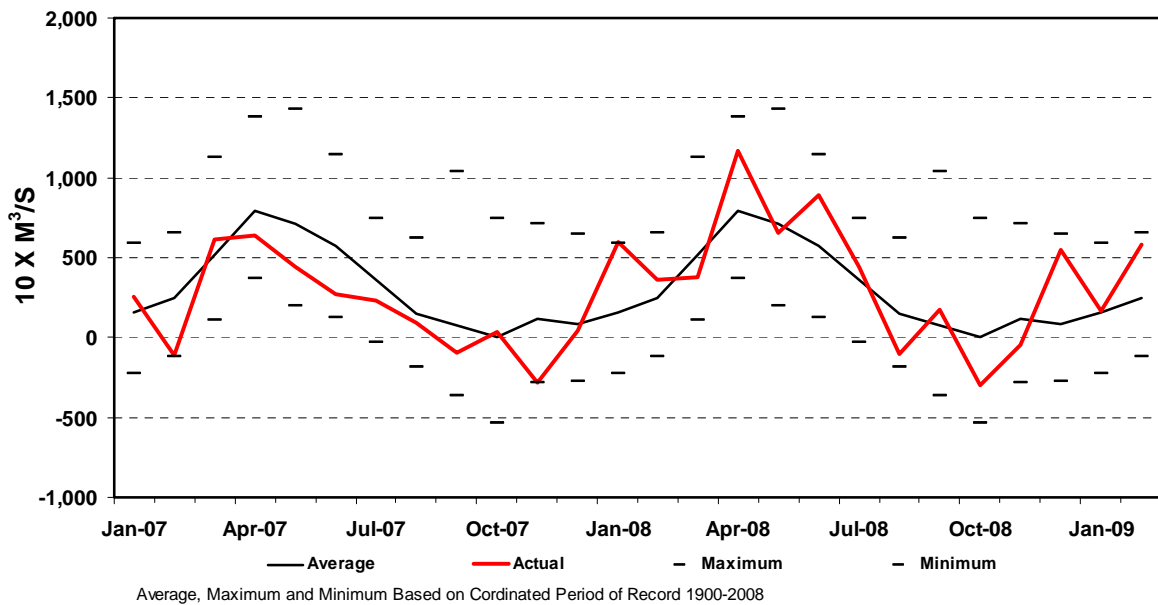
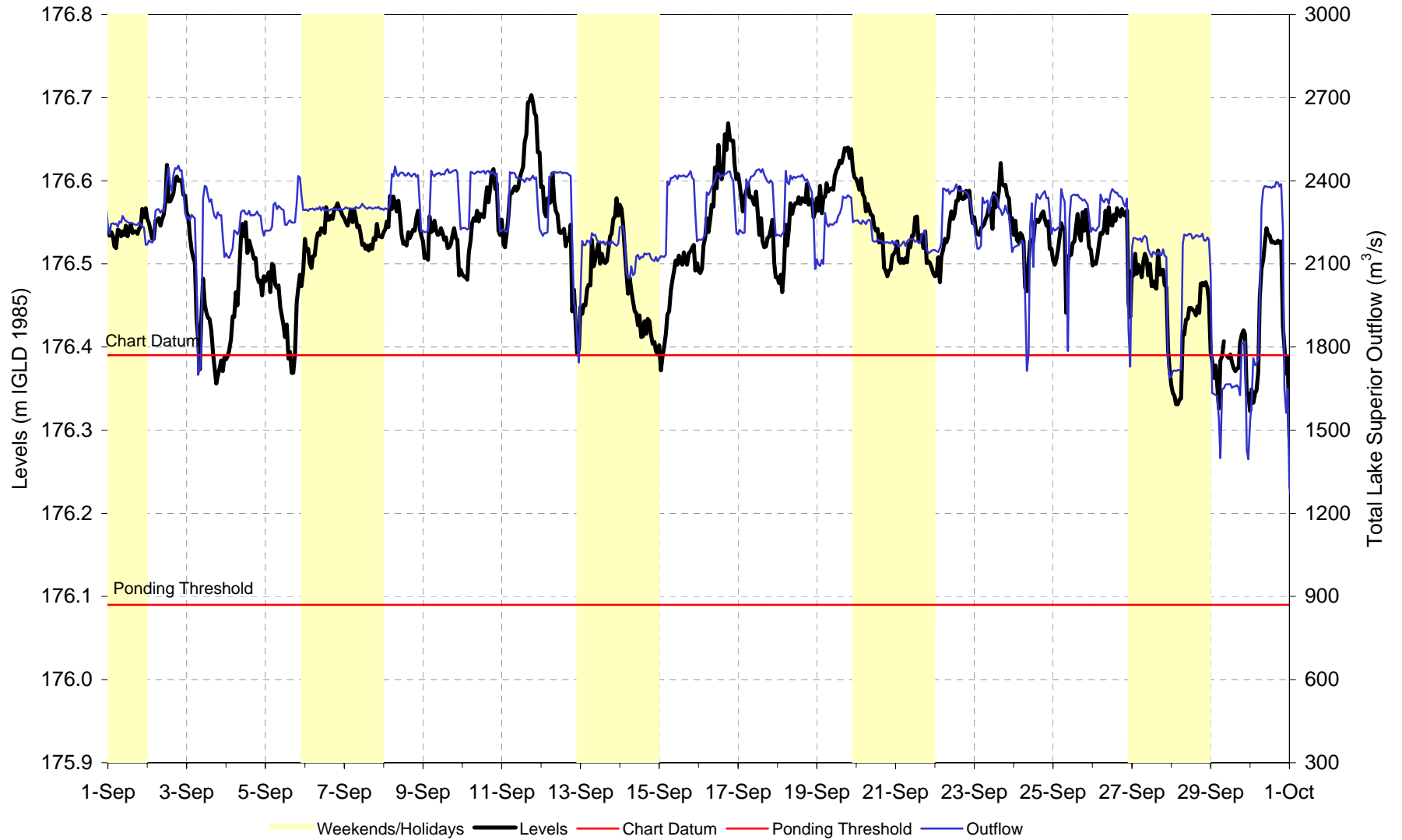
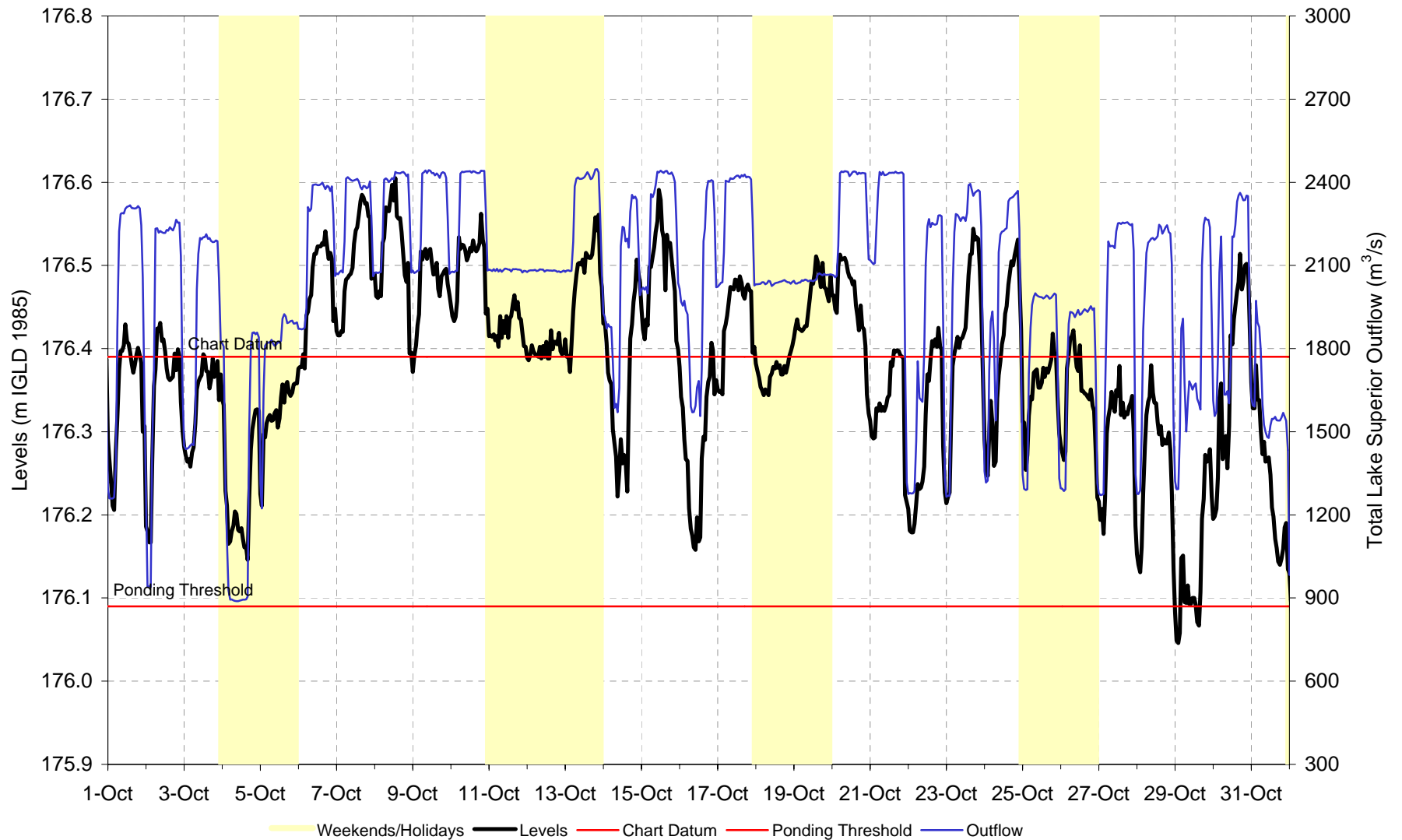


Figure 3

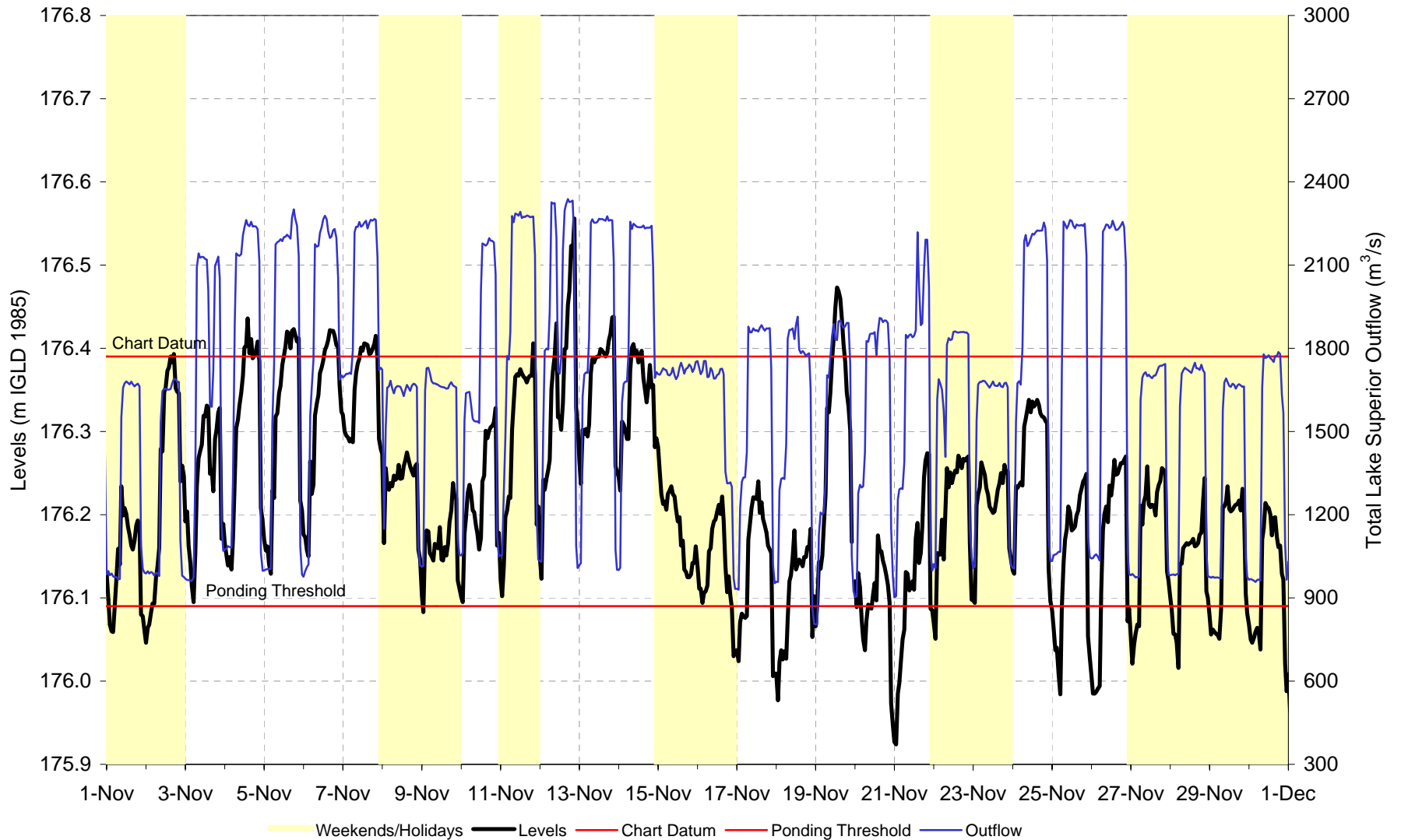
Hourly U.S. Slip Levels & Lake Superior Outflows
Figure 4a - September 2008



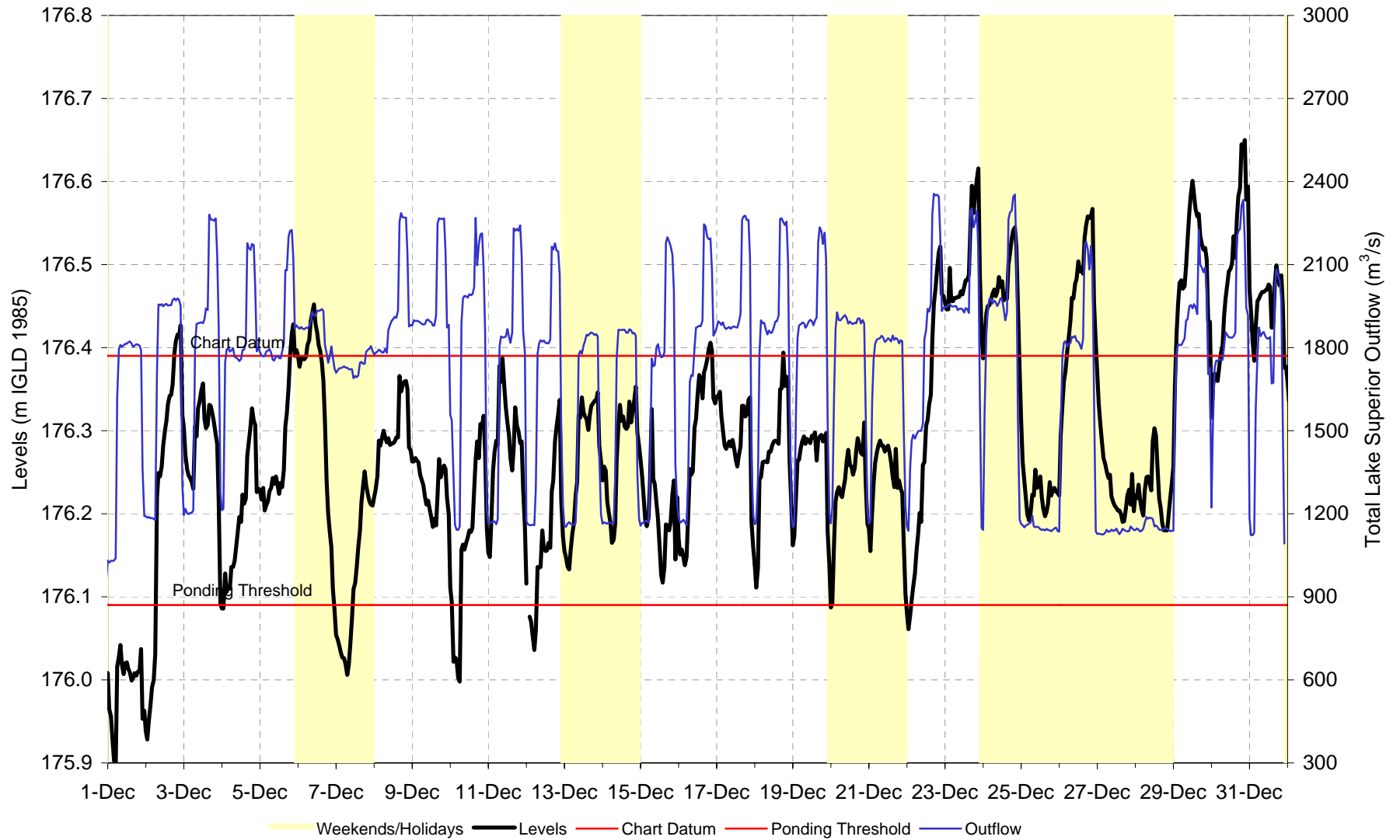
Hourly U.S. Slip Levels & Lake Superior Outflows
Figure 4b - October 2008



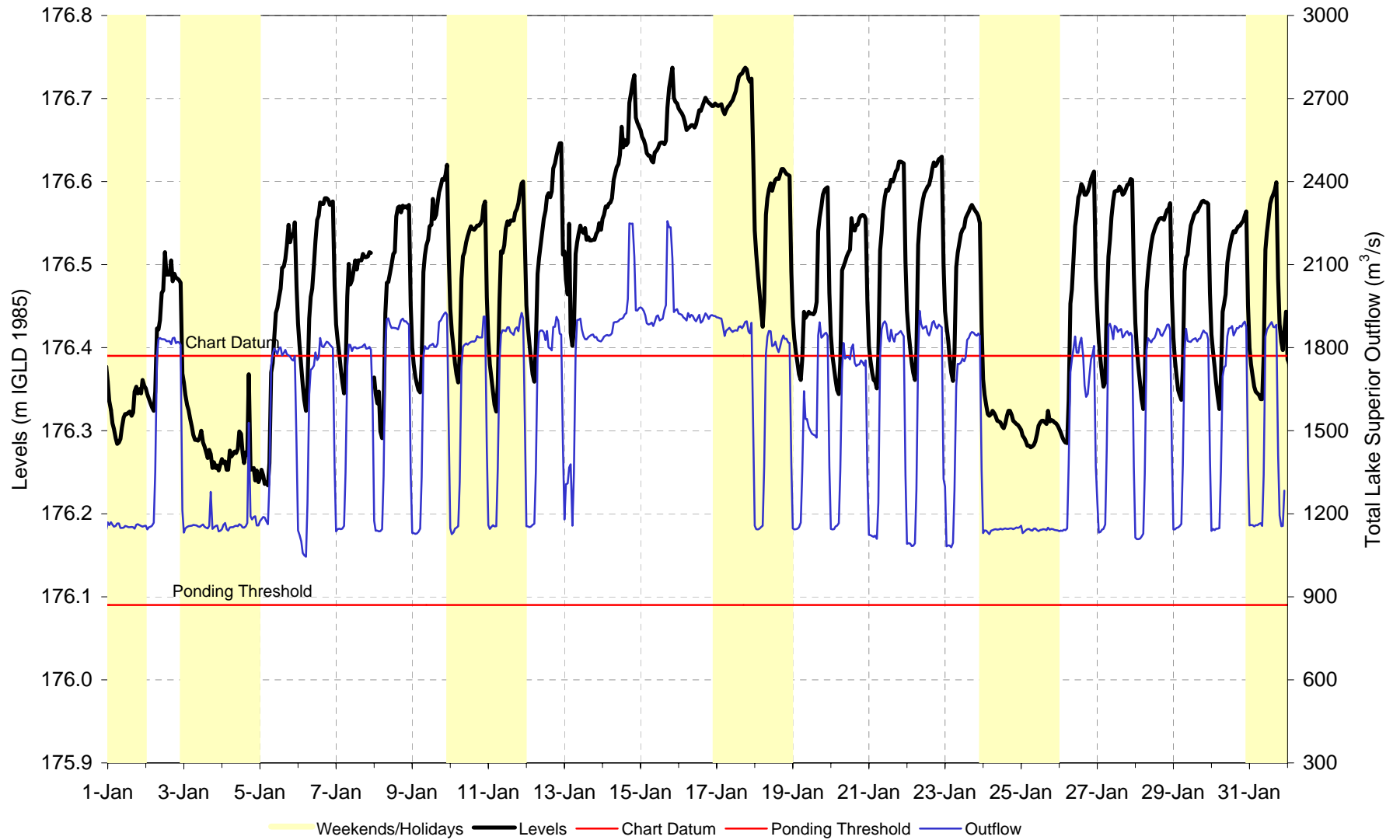
Hourly U.S. Slip Levels & Lake Superior Outflows
Figure 4c - November 2008



Hourly U.S. Slip Levels & Lake Superior Outflows
Figure 4d - December 2008



Hourly U.S. Slip Levels & Lake Superior Outflows
Figure 4e - January 2009



Hourly U.S. Slip Levels & Lake Superior Outflows
Figure 4f - February 2009

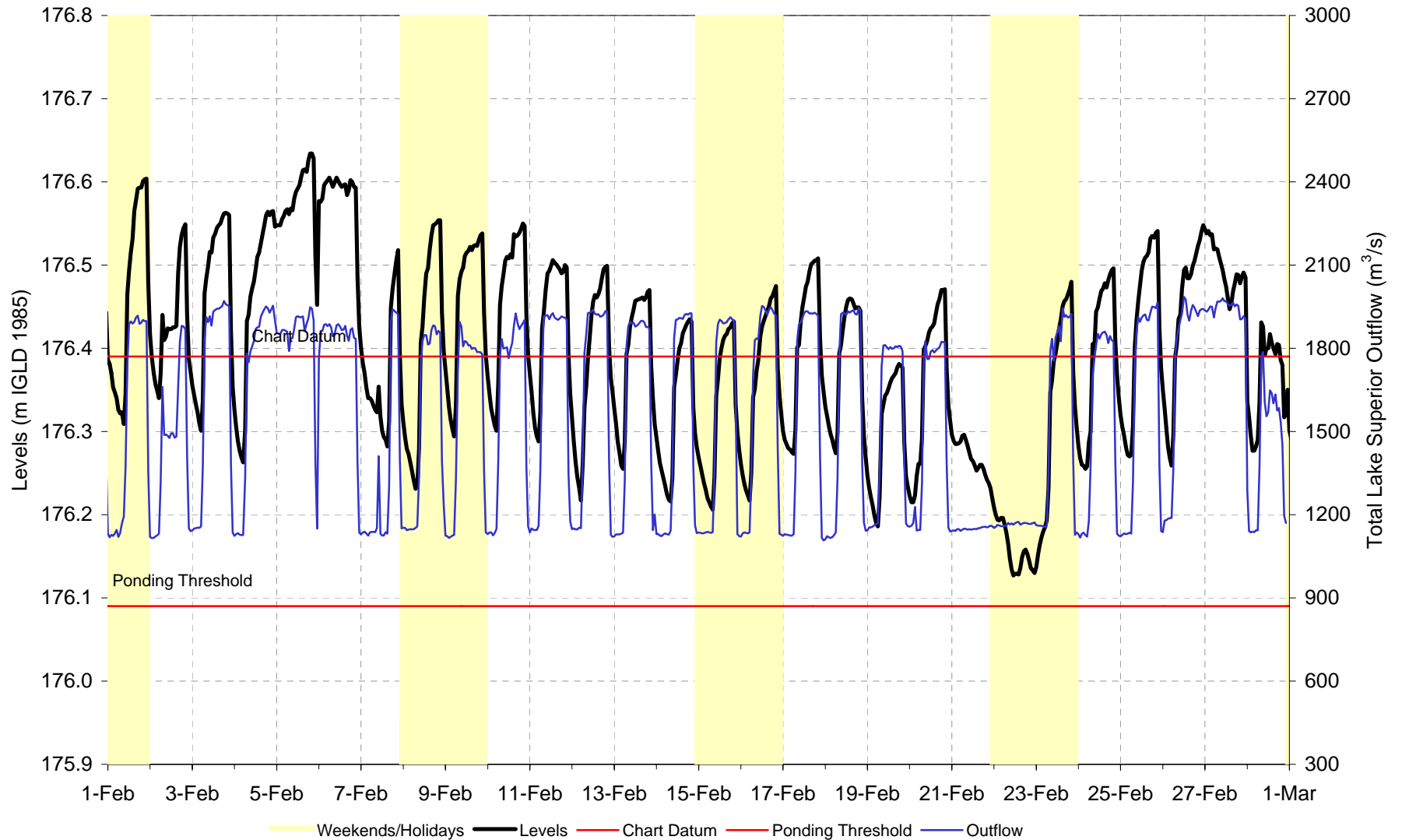


TABLE 1. 2007 - 2009 Lake Superior Hydrologic Factors

Month	Levels				Net Basin Supplies			Outflows		
	Monthly Mean Recorded ¹		Difference From Average ²		Monthly Mean Recorded		Exceedance Probability ³	Monthly Mean Recorded		Percent of
	Meters	Feet	Meters	Feet	m3/s	tcfs	(%)	m3/s	tcfs	Average ⁴
2008										
JAN	183.08	600.66	-0.26	-0.85	260	9	18	1,730	61	89
FEB	183.03	600.49	-0.25	-0.82	-660	-23	89	1,690	60	88
MAR	182.97	600.30	-0.27	-0.89	560	20	72	1,620	57	86
APR	183.01	600.43	-0.26	-0.85	6,520	230	7	1,590	56	82
MAY	183.18	600.98	-0.19	-0.62	4,600	162	62	1,710	60	81
JUN	183.29	601.35	-0.16	-0.52	6,270	221	11	2,070	73	94
JUL	183.41	601.74	-0.11	-0.36	4,660	165	19	2,230	79	98
AUG	183.42	601.77	-0.12	-0.39	820	29	94	2,440	86	103
SEP	183.37	601.61	-0.17	-0.56	1,510	53	60	2,240	79	96
OCT	183.32	601.44	-0.20	-0.66	-970	-34	94	2,040	72	90
NOV	183.27	601.28	-0.21	-0.69	210	7	57	1,680	59	75
DEC	183.19	601.02	-0.22	-0.72	-970	-34	65	1,720	61	84
2009										
JAN	183.14	600.85	-0.20	-0.66	-160	-6	36	1,570	55	81
FEB*	183.10	600.72	-0.18	-0.59	1120	40	14	1,560	55	82

Notes: m3/s = cubic meters per second

tcfs = 1,000 cubic per second

¹ Water Levels are a mean of five gauges on Lake Superior, IGLD 1985

² Average levels are for the period 1918-2007, based on a mean of five gauges. Differences computed as meters and then converted to feet.

³ Exceedance probabilities are based on 1900 - 2006.

⁴ Average flows are for the period 1900 - 2006.

* *Provisional estimates.*

TABLE 2. 2007 - 2009 Lakes Michigan-Huron Hydrologic Factors

Month	Levels				Net Basin Supplies			Outflows		
	Monthly Mean Recorded ¹		Difference From Average ²		Monthly Mean Recorded		Exceedance Probability ³	Monthly Mean Recorded		Percent of Average ⁴
	Meters	Feet	Meters	Feet	m3/s	tcfs	(%)	m3/s	tcfs	
2008										
JAN	175.70	576.44	-0.62	-2.03	6,010	212	<<1**	4,080	144	91
FEB	175.76	576.64	-0.54	-1.77	4,100	145	13	3,910	138	89
MAR	175.78	576.71	-0.54	-1.77	3,330	118	77	3,970	140	82
APR	175.92	577.17	-0.48	-1.57	11,660	412	7	4,230	149	83
MAY	176.04	577.56	-0.46	-1.51	6,510	230	59	4,560	161	86
JUN	176.16	577.95	-0.40	-1.31	8,950	316	6	4,680	165	86
JUL	176.24	578.22	-0.35	-1.15	4,450	157	28	4,800	170	87
AUG	176.22	578.15	-0.35	-1.15	-1,010	-36	94	4,910	173	89
SEP	176.18	578.02	-0.34	-1.12	1,740	61	28	4,780	169	88
OCT	176.09	577.72	-0.37	-1.21	-2,980	-105	95	4,780	169	89
NOV	176.00	577.43	-0.40	-1.31	-490	-17	78	4,670	165	87
DEC	175.97	577.33	-0.38	-1.25	5,470	193	<1	4,420	156	86
2009										
JAN	176.01	577.46	-0.31	-1.02	1670	59	46	4,040	143	90
FEB*	176.01	577.46	-0.29	-0.95	5810	205	2	4,150	147	94

Notes: m³/s = cubic meters per second

tcfs = 1,000 cubic per second

¹ Water Levels are a mean of six gauges on Lakes Michigan-Huron, IGLD 1985

² Average levels are for the period 1918-2007, based on a mean of six gauges. Differences computed as meters and then converted to feet.

³ Exceedance probabilities are based on 1900 - 2006.

⁴ Average flows are for the period 1900 - 2006.

* Provisional estimates.

** New record high net basin supply

TABLE 3
MONTHLY DISTRIBUTION OF LAKE SUPERIOR OUTFLOWS (Cubic Meters / Second)

Year and Month	POWER CANALS				NAVIGATION CANALS			DOMESTIC USAGE				Fishery	Total Lake Superior Outflow (m ³ /s)	
	U.S. Gov't Hydro	Edison Sault Electric	US Total	Brookfield Power	Total Power Canals	United States	Canada	Total Navigation Canals	Sault Ste. Marie US + CAN	Algoma Steel	St. Marys Paper	Total Domestic Usage		St. Marys Rapids
2008														
JAN	405	411	816	812	1,628	5.6	0.0	6	0.2	10.2	0.3	11	84	1,729
FEB	401	401	802	791	1,593	2.1	0.0	2	0.3	9.5	0.3	10	83	1,688
MAR	405	364	769	760	1,529	4.0	0.0	4	0.3	9.7	0.3	10	82	1,625
APR	373	371	744	741	1,485	10.8	0.0	11	0.3	10.0	0.3	11	83	1,590
MAY	395	406	801	801	1,602	12.7	0.4	13	0.4	10.2	0.3	11	85	1,711
JUN	402	582	984	978	1,962	13.5	1.3	15	0.4	9.8	0.3	10	85	2,072
JUL	405	659	1064	1052	2,116	14.4	2.0	16	0.4	9.2	0.3	10	85	2,227
AUG	409	722	1131	1112	2,243	14.3	2.0	16	0.4	11.1	0.3	12	167	2,438
SEP	405	661	1066	1061	2,127	13.2	1.0	14	0.3	11.4	0.3	12	89	2,242
OCT	410	555	965	963	1,928	11.7	0.0	12	0.3	10.4	0.3	11	84	2,035
NOV	405	384	789	783	1,572	9.6	0.0	10	0.4	9.4	0.3	10	85	1,677
DEC	407	403	810	812	1,622	7.6	0.0	8	0.4	8.1	0.3	9	85	1,724
2009														
JAN	396	340	736	741	1477	3.5	0.0	4	0.4	7.9	0.3	9	84	1574
FEB*	403	326	729	729	1458	2.0	0.0	2	0.4	8.7	0.3	9	91	1560

NOTE: (1) POWER CANALS COLUMNS INCLUDE FLOWS THROUGH POWER PLANTS AND SPILLWAYS.

(2) * Provisional.

TABLE 4
MONTHLY DISTRIBUTION OF LAKE SUPERIOR OUTFLOWS (Cubic Feet / Second)

Year and Month	POWER CANALS					NAVIGATION CANALS			DOMESTIC USAGE				Fishery	Total Lake
	U.S. Gov't Hydro	Edison Sault Electric	US Total	Brookfield Power	Total Power Canals	United States	Canada	Total Navigation Canals	Sault Ste. Marie US + CAN	Algoma Steel	St. Marys Paper	Total Domestic Usage	St. Marys Rapids	Superior Outflow (cfs)
2008														
JAN	14,300	14,500	28,800	28,700	57,500	198	0	198	7	360	11	378	2,970	61,000
FEB	14,200	14,200	28,400	27,900	56,300	74	0	74	11	335	11	357	2,930	59,700
MAR	14,300	12,900	27,200	26,800	54,000	141	0	141	11	343	11	365	2,900	57,400
APR	13,200	13,100	26,300	26,200	52,500	381	0	381	11	353	11	375	2,930	56,200
MAY	13,900	14,300	28,200	28,300	56,500	448	14	462	14	360	11	385	3,000	60,300
JUN	14,200	20,600	34,800	34,500	69,300	477	46	523	14	346	11	371	3,000	73,200
JUL	14,300	23,300	37,600	37,200	74,800	509	71	580	14	325	11	350	3,000	78,700
AUG	14,400	25,500	39,900	39,300	79,200	505	71	576	14	392	11	417	5,900	86,100
SEP	14,300	23,300	37,600	37,500	75,100	466	35	501	11	403	11	425	3,140	79,200
OCT	14,500	19,600	34,100	34,000	68,100	413	0	413	11	367	11	389	2,970	71,900
NOV	14,300	13,600	27,900	27,700	55,600	339	0	339	14	332	11	357	3,000	59,300
DEC	14,400	14,200	28,600	28,700	57,300	268	0	268	14	286	11	311	3,000	60,900
2009														
JAN	14,000	12,000	26,000	26,200	52,200	124	0	124	14	279	11	304	2,970	55,600
FEB*	14,200	11,500	25,700	25,700	51,400	71	0	71	14	307	11	332	3,210	55,000

- NOTE: (1) POWER CANALS COLUMNS INCLUDE FLOWS THROUGH POWER PLANTS AND SPILLWAYS
(2) Flows for individual users were originally coordinated in m3/s, and are converted here to U.S. customary units (cfs) and rounded to 3 significant figures.
(3) Total flow for each category and total Lake Superior flow in this table are computed from the individual flows in cfs.
(4) * *Provisional*