



DEPARTMENT OF THE ARMY
DETROIT DISTRICT, CORPS OF ENGINEERS
477 MICHIGAN AVENUE
DETROIT, MICHIGAN 48226

January 3, 2013

MEMORANDUM FOR: Shippers Transiting the Lower St. Marys River during January 2013

SUBJECT: Expected St. Marys River Daily Flows.

The January 2013 Lake Superior outflow has been set at 1,560 m³/s (55,090 cubic feet per second (cfs)), effective January 3, 2013. This is the prescribed outflow from Plan 1977-A.

During January, levels in the Lower St. Marys River, particularly in the Soo Harbor area below the Soo Locks, can be expected to fluctuate several inches. Natural factors such as wind (strength, direction and duration) and barometric pressure changes are significant factors contributing to these level fluctuations in the Lower St. Marys at this time as well as all Great Lakes connecting channels. Variations in hydropower plant outflows during January can also contribute to these fluctuations. Table 1 provides a schedule of the expected St. Marys River flows during January 2013.

Sustained weekend low "off-peak" flows are expected to result in U.S. Slip levels falling below the threshold elevation of 176.09 m (577.7 ft.) IGLD 1985. As a result, ponding by hydropower will NOT be permitted on weekend days and holidays during January. Expected hydropower flows are indicated in Table 1. Soo Harbor water level fluctuations due to variations in hydropower flows only, are expected to be on the order of +/- 10 cm (+/- 4 inches) from expected daily mean levels. As indicated above, natural factors can significantly increase the magnitude of these fluctuations. Water levels may drop during periods of reduced flows and rise again during periods of increased flows.

The hydropower operators (Cloverland Electric's hydro-facility, Brookfield Renewable Energy Group and U. S. Government) have been requested to notify USCG Vessel Traffic Service (VTS) and the Lockmaster at the Soo Locks Tower of any significant flow changes other than those indicated in Table 1.

It is suggested that USCG VTS and the Lockmaster at the Soo Locks be contacted by Shipmasters to find out what prevailing conditions are on the St. Marys River and in the vicinity of the Soo Locks prior to reaching the area. Information on conditions in the vicinity of the Soo Locks can be obtained by contacting the U.S. Coast Guard Vessel Traffic Center, call sign "Soo Traffic" by radiotelephone on VHF-FM Channel 12. Reference the 2009 U.S. Coast Pilot 6, 39th Edition, Chapter 12, "St. Marys River", "Vessel Traffic Service" Par. 25 through 30. The USACE Chief Lockmaster may be contacted at call sign "WUE-21" by radiotelephone on VHF-FM Channel 14.

Information Sources:

1. Rock Cut Gage: Rock Cut Gage is currently in service. Direct access to the Rock Cut Gage water level readings is available via telephone modem by dialing (301) 713-9596. After the call is answered enter the station number #6024.
2. Internet: Water level information is available by going to the U.S. Army Corps of Engineers, Hydraulics and Hydrology Home Page at the Internet address below and following the suggested pathways:

<http://www.lre.usace.army.mil/glhh>

- a) Hydraulics and Hydrology > Current Conditions.
- b) Weekly updates of expected weather, levels, outflows and channel conditions for the Great Lakes and connecting channels are provided each Thursday at:

<http://www.lre.usace.army.mil/glhh/weekly.htm>

<http://www.lre.usace.army.mil/greatlakes/hh/greatlakeswaterlevels/waterlevelforecasts/connectingchannelsforecasts/>

- c) Specifically for the NOAA PORTS system at the Soo Locks:

<http://tidesandcurrents.noaa.gov/ports.html>

- d) Historic and preliminary water level data is available at NOAA's CO-OPS (Center for Operational Oceanographic Products and Services) site at:

<http://tidesandcurrents.noaa.gov/products.html>

- e) Great Lakes Online, up to the minute water levels provided by NOAA

<http://www.glakesonline.nos.noaa.gov/>

- f) This memorandum is posted on the Internet at:

<http://www.lre.usace.army.mil/greatlakes/hh/newsandinformation/>

The POCs, should further information be required, are:

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TABLE 1 -- Expected St. Marys River Flows for the Period Jan 3-15

Weekday			
3 - 4, 7 - 11, 14 - 15	0:00 - 6:00	6:00 - 22:00	22:00 - 24:00
cms	1143	1773	1143
cfs	40,364	62,613	40,364
Weekend			
5, 6	0:00 - 8:00	8:00 - 22:00	22:00 - 24:00
cms	1143	1773	1143
cfs	40,364	62,613	40,364
Weekend			
12, 13	0:00 - 7:00	7:00 - 22:00	22:00 - 24:00
cms	1143	1773	1143
cfs	40,364	62,613	40,364

- (1) Units are as follows: cms = cubic meters per second, cfs = cubic feet per second.
- (2) Estimated flows may vary +/- 10 cms to 20 cms (400 cfs to 700 cfs) due to affects of weather influenced level fluctuations on the hydropower operations.
- (3) Flows may fluctuate due to natural conditions in the St. Marys River above and below the Soo Locks.
- (4) Note the time time periods are shown using a 24 hour clock.