

FECN19 CWIS 041800

THIRTY DAY ICE FORECAST FOR THE GREAT LAKES FOR JANUARY ISSUED BY  
THE NORTH AMERICAN ICE SERVICE ON 04 JANUARY 2008.  
THE NEXT SCHEDULED BULLETIN WILL BE ISSUED ON 16 JANUARY 2008.

### **Lake Superior**

Temperatures have generally been well above normal over the last 2 weeks of December. As a result ice conditions are now close to its normal extent.

Forecast ice conditions from January 4<sup>th</sup> to January 15<sup>th</sup>.

Above to well above normal temperatures are generally expected over the Lake Superior area for most of the forecast period. Temperatures will drop to near normal values towards mid-month.

1. Thunder Bay – Much of the new and thin lake ice will melt during the next 4 to 7 days. New and thin lake ice will redevelop during the last week of the forecast period and will be covering most of the bay at mid-month.
2. Nipigon and Black Bays – Consolidated with thick and medium lake ice.
3. From Grand Marais to the entrance to Nipigon Bay – A few patches of new lake ice will form during the second week of January.
4. From Grand Marais to Duluth – Mainly open water.
5. Southern Lake Superior west of Keweenaw Peninsula – Much of the ice will melt during the next 5 to 7 days. A narrow band of new and thin lake ice will redevelop late in the period.
6. Southern Lake Superior east of the Keweenaw Peninsula – Open water except for a narrow band of new and thin lake ice developing late in the period.
7. Whitefish Bay – Much of the new lake ice will melt early in the period. New and thin lake ice will redevelop along the shore during the last part of the forecast period.
8. From Whitefish Bay northwards to Michipicoten Bay – Mainly open water will prevail during the period except for a narrow band of new and thin lake ice forming late in the period.
9. From Michipicoten Bay to the entrance to Nipigon Bay – Mainly open water. However a narrow band of new and thin lake ice will develop along the shore west of Marathon late in the period.
10. Elsewhere in Lake Superior – Open water to ice free.

Forecast ice conditions from January 15<sup>th</sup> to January 31<sup>st</sup>.

Temperatures will be near normal over the area.

1. Thunder Bay – The ice will continue to thicken during the period. By the end of January, most of Thunder Bay will be consolidated with medium and thick lake ice. However the south central section of the bay will remain mobile.
2. Nipigon and Black Bays – Consolidated with thick lake ice.
3. From Grand Marais to the entrance to Nipigon Bay – A 8 to 15 mile wide band of thin lake ice will develop.
4. From Grand Marais to Duluth – A narrow band of new and thin lake ice will develop along the shore.

5. Southern Lake Superior west of the Keweenaw Peninsula – The band of ice along the shore will expand to about 10 to 15 miles offshore and be composed of mostly thin lake ice at the end of the month. The ice around the Apostle Islands will consolidate during the last week of the month.
6. Southern Lake Superior east of Keweenaw Peninsula – A 3 to 7 mile wide band of new and thin lake ice will be present throughout the period.
7. Whitefish Bay – New and thin lake ice will gradually spread over the rest of Whitefish Bay during the first week of the period. At the end of January thin and medium lake ice will predominate in the bay. At that time consolidated medium lake ice will be present in the smaller bays.
8. From Whitefish Bay to Michipicoten Bay – A 10 to 20 mile wide band of new and thin lake ice will gradually form along the shore.
9. From Michipicoten Bay to the entrance to Nipigon Bay – A 10 mile wide band of thin lake ice will prevail west of Marathon. Otherwise mainly open water except patches of new and thin lake ice forming along the shore.
10. Elsewhere in Lake Superior – Open water to ice free.

### **Lake Michigan**

Above to well above normal temperatures were observed during the second half of December over Lake Michigan. Ice conditions in Green Bay are a few days ahead of normal.

Forecast ice conditions from January 4<sup>th</sup> to January 15<sup>th</sup>.

Temperatures are expected to stay above to well above normal for most of the period. However temperatures will drop to near normal values towards mid-January.

1. Green Bay – Most of the new and thin lake ice will melt during the next 5 to 7 days. New and thin lake ice will redevelop during the last week of the forecast period and will be covering most of the bay at mid-month. The Little and Big Bay de Noc will remain consolidated throughout the period.
2. Northeastern Lake Michigan – The ice currently there will melt early in the period. New lake ice will begin to redevelop near the entrance to the Straits of Mackinaw and along the northern shore towards the end of the period.
3. Elsewhere in Lake Michigan – Mostly ice free with open water near the shore and ice edge.

Forecast ice conditions from January 15<sup>th</sup> to January 31<sup>st</sup>.

Temperatures will be near normal over the area.

1. Green Bay – At the end of January most of Green Bay will be consolidated with medium and thick lake ice except in the central section where ice will be thinner and remain mobile. The consolidated ice in the Little and Big Bay de Noc will thicken and reach the thick lake ice stage before the end of the month.
2. Northern Lake Michigan – New and thin lake ice will spread rapidly westward to reach Beaver Island by the end of the first week of the period. At the end of January thin with some medium lake ice will predominate east of Beaver Island while new and thin lake ice predominates within 10 miles southwest of Beaver Island. Areas of

consolidated thin and medium lake ice will form along the shore near the Straits of Mackinaw.

3. Elsewhere in Lake Michigan – Narrow bands of new and thin lake ice will form right along the shore. Otherwise open water except ice free in the central section.

### **Lake Huron and Georgian Bay**

Reported temperatures were above normal during the second half of December. Ice conditions are close to normal in terms of freeze-up.

Forecast ice conditions from January 4<sup>th</sup> to January 15<sup>th</sup>.

Above to well above normal temperatures are generally expected for the first half of January except for a return to near normal values towards mid-month.

1. North Channel – Little change expected over the next 5 to 7 days. New and thin lake ice will further develop late in the period to cover most of the channel at mid-month. Some consolidated ice will form in the eastern and western portions of the channel.
2. St Mary's River – Most of the new lake ice will melt during the weekend. New and thin lake ice will reform during the second week of the forecast period. Otherwise the river will remain consolidated with medium lake ice.
3. South of Manitoulin Island westward to North-western Lake Huron – Mainly open water except for patches of new lake ice developing along the shore late in the period.
4. North-western Lake Huron near the Straits of Mackinaw – New lake ice will develop late in the period.
5. From north-western Lake Huron to Saginaw Bay – Open water except for a narrow band of new lake ice forming late in the period.
6. Saginaw Bay – Most of the ice will melt during the first half of the period. New and thin lake ice will redevelop late in the period covering most of the bay at mid-month. Consolidated thin lake ice will persist right along the shore.
7. The southern and eastern shore of Lake Huron – Mostly open water conditions will prevail except for narrow bands of new and thin lake ice forming late in the period.
8. Georgian Bay – Most of the mobile ice will melt during the next 5 to 7 days. A narrow band of new and thin lake ice will redevelop late in the period. Consolidated thin lake ice will persist in shallow bays.
9. Elsewhere in Lake Huron – Open water along the shore or ice edges and ice free in central Lake Huron and in the south-western portion of Georgian Bay.

Forecast ice conditions from January 15<sup>th</sup> to January 31<sup>st</sup>.

Temperatures will be near normal for the entire area.

1. North Channel – Most of the North Channel will be consolidated with medium and thick lake ice by the end of January.
2. St Mary's River – Consolidated with thick lake ice.
3. South of Manitoulin Island westward to North-western Lake Huron – A 4 to 8 mile wide band of new and thin lake ice will develop.
4. North-western Lake Huron near the Straits of Mackinaw – New and thin lake will rapidly spread west of Bois Blanc Island early in the period. During the second week of the

period the area from south of Bois Blanc Island to the Straits of Mackinac as well as parts of the northern shore will become consolidated with thin lake ice.

5. From north-western Lake Huron to Saginaw Bay – The band of new and thin lake ice will expand to about 5 to 10 miles offshore during the period.
6. Saginaw Bay – Will become consolidated with medium lake ice during the last week of the month.
7. The southern and eastern shore of Lake Huron – A narrow band of mostly thin lake ice will predominate along the shore.
8. Georgian Bay – Ice will develop rapidly and at the end of January thin and medium lake ice will be covering most of the bay except for open water persisting in the south-western third.
9. Elsewhere in Lake Huron and Georgian Bay – Open water except ice free in the central section.

### **Lake Erie and Lake St. Clair**

Over the last 2 weeks of December temperatures were above normal over the region. Ice conditions are now a few days behind normal.

Forecast ice conditions from January 4<sup>th</sup> to January 15<sup>th</sup>.

Temperatures will be above to well above normal during the first half of January.

1. Lake St Clair and the Western Basin – Ice currently in these areas will melt during the next few days and give way to open water conditions. Some new lake ice will redevelop along the shore late in the period.
2. The rest of Lake Erie – Thin lake ice will persist in Long Point and in Sandusky bays. Otherwise open water to ice free conditions will prevail.

Forecast ice conditions from January 15<sup>th</sup> to January 31<sup>st</sup>.

Temperatures will be near normal for the last two weeks of January.

1. Lake St Clair and the Western Basin – New and thin lake ice will gradually spread over Lake St Clair and the Western Basin during the period. At the end of January mainly thin lake ice will predominate over the area.
2. The rest of Lake Erie – New and thin lake ice will develop along parts of the shore and just east of the Western Basin during the first week of the period. Ice will then continue to develop and at the end of January thin and new lake ice cover most of the lake west of Long Point Bay. East of Long Point Bay open water will predominate except for new and thin lake ice developing along the shore and near Buffalo.

### **Lake Ontario**

Reported temperatures were above normal over the lake during the past two weeks. Ice conditions are now close to normal.

Forecast ice conditions from January 4<sup>th</sup> to January 15<sup>th</sup>.

Temperatures will be above to well above normal during the period.

1. Northeastern Lake Ontario – Open water or ice free except for patches of new lake ice forming along the shore late in the period.
2. Bay of Quinte – Consolidated with thin lake ice.
3. St Lawrence River – Becoming open water early in the period. New and thin lake ice to redevelop late in the period.
4. Elsewhere in Lake Ontario – Ice free with open water near the shore.

Forecast ice conditions from January 15<sup>th</sup> to January 31<sup>st</sup>.

Temperatures will be near normal for the last two weeks of January.

1. Northeastern Lake Ontario – New and thin lake ice will develop during the last week of the period along the shore between Prince Edward Point and Stony Island. At that time a narrow band of new lake ice will develop along the coastal area of Prince Edward County.
2. Bay of Quinte – Consolidated thick lake ice.
3. St Lawrence River – Ice will further develop and at the end of January the river will be consolidated with thin lake ice.
4. Elsewhere in Lake Ontario – Mostly open water with ice free in the central portion of the lake. Patches of new lake ice will develop along parts of the shore during the second week of the month.

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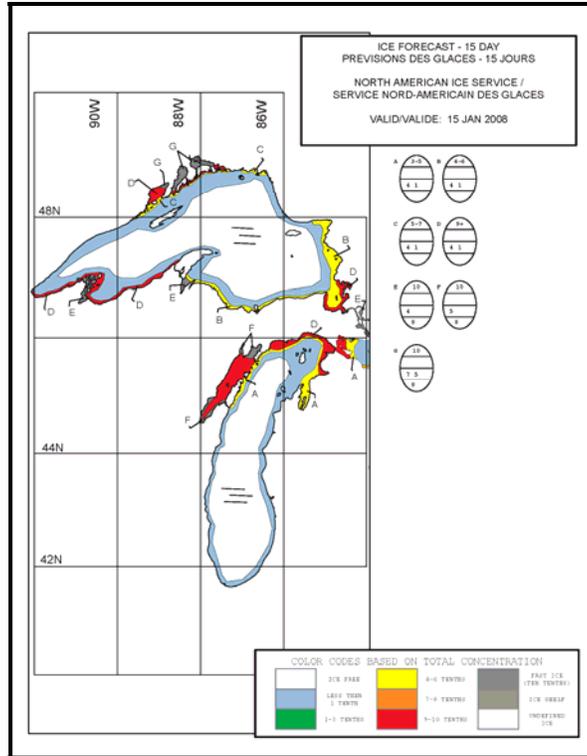


Figure 1: Ice forecast, Western Great lakes – 15 January – 2008

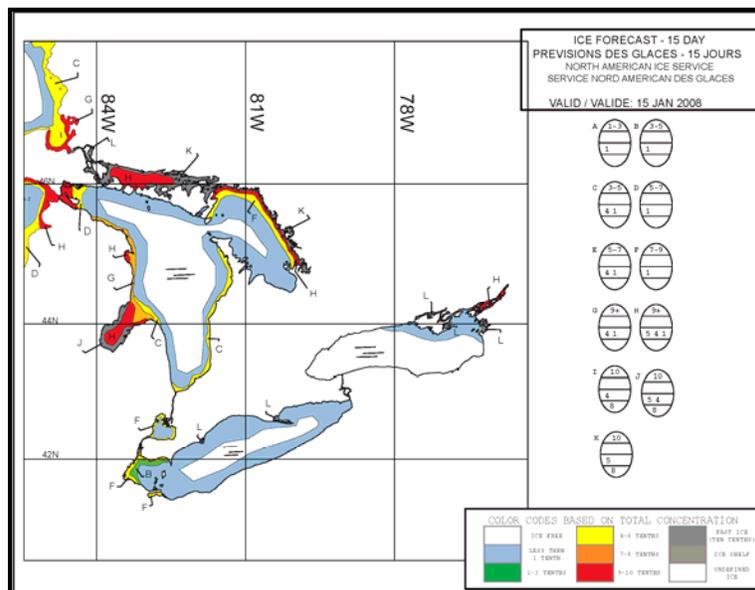


Figure 2: Ice forecast, Eastern Great Lakes 15 January – 2008

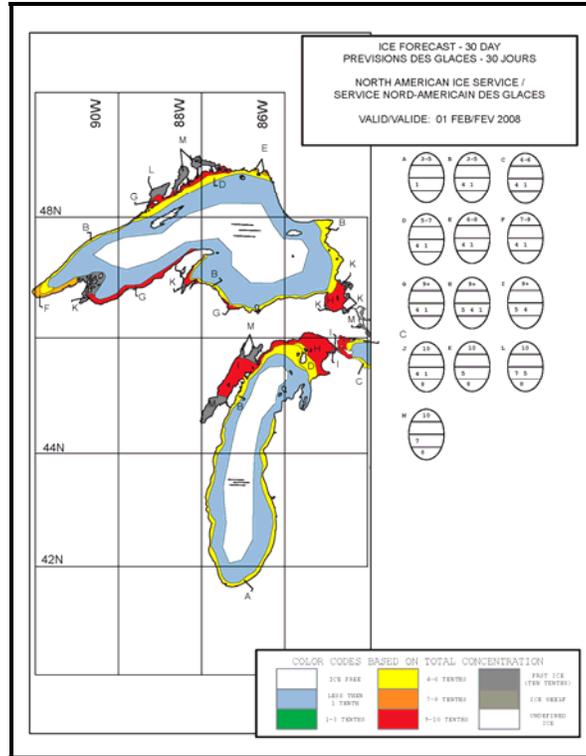


Figure 3: Ice forecast, Western Great lakes – 01 February 2008

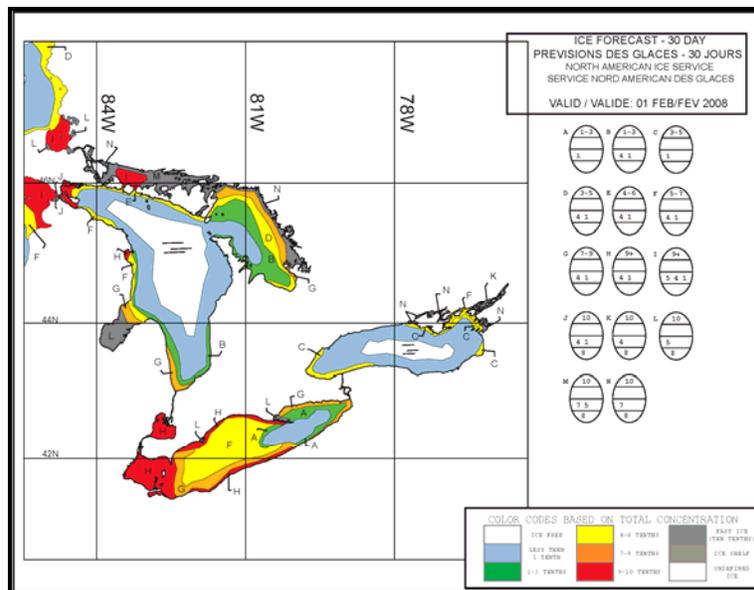


Figure 4: Ice forecast, Eastern Great Lakes – 01 February 2008