

FECN19 CWIS 051800

THIRTY DAY ICE FORECAST FOR THE GREAT LAKES FOR JANUARY ISSUED BY  
THE NORTH AMERICAN ICE SERVICE ON 5 JANUARY 2011.  
THE NEXT SCHEDULED BULLETIN WILL BE ISSUED ON 19 JANUARY 2011.

### **Lake Superior**

Above normal temperatures were reported over Lake Superior from mid-December to early January.

Forecast ice conditions from January 5<sup>th</sup> to January 15<sup>th</sup>.

Slightly below normal temperatures are forecast for the period.

1. Thunder Bay – Loose areas of new lake ice exist within 5 miles of the shore. Additionally, a few small areas of consolidated thin and medium lake ice are present around the bay. Ice will continue to develop and more consolidated thin and medium lake ice will form along the coast during the second week of January. At mid-month, thin and medium lake ice will cover most of Thunder Bay.
2. Nipigon and Black Bays – Consolidated with medium lake ice. The ice will continue to thicken and will reach the thick lake ice stage around mid month.
3. From Grand Marais to the entrance to Nipigon Bay – Open water.
4. From Grand Marais to Duluth – Open water except for new and thin lake ice near Duluth. Very close pack medium lake ice will be found near Duluth around mid-month.
5. Southern Lake Superior west of Keweenaw Peninsula – Open water except for loose areas of new lake ice along portions of the shore. Consolidated thin and medium lake ice in Chequamegon Bay. At mid-month a 5 to 10 mile wide band of thin lake ice will be found along the shore from the Keweenaw Peninsula to near Duluth. Additionally, consolidated thin and medium lake ice will be present around the Apostle Islands. Also around mid-month, very close pack medium lake ice will exist in the approaches to Duluth.
6. Southern Lake Superior east of the Keweenaw Peninsula – Open water. A narrow band of new lake ice will form along the shore during the period.
7. Whitefish Bay – Mainly open water except patchy areas of thin and medium lake ice along the shore and in the bays along the eastern shore. More new and thin lake ice will develop along the shore and loose areas of new lake ice will appear in the middle of the bay in the second week of January.
8. From Whitefish Bay northwards to Michipicoten Bay – Open water.
9. From Michipicoten Bay to the entrance to Nipigon Bay – Open water.
10. Elsewhere in Lake Superior – Open water to ice free.

Forecast ice conditions from January 16<sup>th</sup> to January 31<sup>st</sup>.

Near normal temperatures are expected during the second half of January.

1. Thunder Bay – In the last week of January, Thunder Bay will be covered with consolidated medium lake ice except for a small area of mobile thin lake ice in the entrance to the bay.
2. Nipigon and Black Bays – Consolidated with thick lake ice.

3. From Grand Marais Minnesota to the entrance to Nipigon Bay – A narrow band of new and thin lake ice will be present along the shore. Towards the end of the month, open drift to close pack thin lake ice will develop between Thunder Bay and Isle Royale.
4. From Grand Marais to Duluth – Generally open water. Very close pack medium lake ice will predominate near Duluth.
5. Southern Lake Superior west of the Keweenaw Peninsula – A 5 to 10 mile wide band of thin lake ice will prevail along the shore and will thicken to medium lake ice towards the end of the month. Consolidated medium lake ice will be found around the Apostle Islands and in Chequamegon Bay.
6. Southern Lake Superior east of Keweenaw Peninsula – A narrow band of new and thin lake ice will be found along the shore.
7. Whitefish Bay – Early in the period, open drift new lake ice will be found in the entrance to the bay. Close to very close pack thin and medium lake ice will be present within 5 miles of the shore while the bays along the eastern shore will be consolidated with medium lake ice. Near the end of the month, Whitefish Bay will be covered with very close pack medium lake.
8. From Whitefish Bay to Michipicoten Bay – Open water. A narrow band of new lake ice will form near the shore during the period.
9. From Michipicoten Bay to the entrance to Nipigon Bay – Open water except for loose areas of new lake ice present along the northern shore of the lake.
10. Elsewhere in Lake Superior – Open water to ice free.

### **Lake Michigan**

Slightly above to above normal temperatures were reported over Lake Michigan from mid-December to early January.

Forecast ice conditions from January 5<sup>th</sup> to January 15<sup>th</sup>.

Slightly below normal temperatures are forecast for the first half of January.

1. Green Bay – Ice will continue to develop and very close pack thin and medium lake ice will cover most of Green Bay in the second week of January. The southern third of Green Bay and the Bays De Noc will be covered with consolidated medium lake ice.
2. Northeastern Lake Michigan – New and thin lake ice will continue to develop near the shore and in the Straits of Mackinac. In the second week of January very close pack thin and medium lake ice will be present east of Beaver Island and in the Straits of Mackinac.
3. Elsewhere in Lake Michigan – Ice free except for areas of new lake ice along portions of the shore.

Forecast ice conditions from January 16<sup>th</sup> to January 31<sup>st</sup>.

Near normal temperatures are expected.

1. Green Bay – In the third week of January the Bays De Noc and most of Green Bay, except of the upper third of the bay, will be consolidated with medium lake ice. Mobile medium and thin lake ice will be present in the upper third of Green Bay.

2. Northeastern Lake Michigan – Very close pack thin and medium lake ice will be present from Beaver Island to the Straits of Mackinac and along the northern shore of the lake early in the period. In the last week of the month, mostly medium lake ice will be found east of Beaver Island. At that time, the Straits of Mackinac will consolidate with medium and thick lake ice.
3. Elsewhere in Lake Michigan – Ice free except for areas of new and thin lake ice along portions of the shore.

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

Reported temperatures were near normal during the second half of December and above normal in the first few days of January.

Forecast ice conditions from January 5<sup>th</sup> to January 15<sup>th</sup>.

Slightly below normal temperatures are expected for the first half of January.

1. North Channel – Ice will continue to develop and thin and medium lake ice will cover most of the North Channel at the end of the second week of January. At that time, the western and eastern ends of the channel will be consolidated with medium lake ice.
2. St Mary's River – Consolidated with medium lake ice.
3. South of Manitoulin Island westward to North-western Lake Huron – Mainly open water. Areas of new lake ice will be present at times along the shore.
4. North-western Lake Huron near the Straits of Mackinac – Ice will continue to develop during the period. At the end of the second week of January very close pack thin and medium lake ice will be found west of Bois Blanc Island and in the Straits of Mackinac.
5. From north-western Lake Huron to Saginaw Bay – A narrow band of new and thin lake ice will be present along the shore south of Thunder Bay. Patchy new lake ice will be found at times along the shore north of Thunder Bay.
6. Saginaw Bay – At mid-January most of Saginaw Bay will be consolidated with medium lake ice except for mobile thin and medium lake ice in the northern third of the bay.
7. The southern and eastern shore of Lake Huron – Narrow bands of new and thin lake ice will redevelop along the shore.
8. Georgian Bay – Consolidated thin lake ice along the eastern and northern shores will thicken to medium lake ice in the second week of January. New lake ice will redevelop and by mid-month a 10 to 20 mile wide band of new and thin lake ice will be found along the eastern and northern shores. Patchy areas of new lake ice will form at times along the southwest coast of the bay. Otherwise open water will prevail in Georgian Bay.
9. Elsewhere in Lake Huron – Open water along the shore and ice edges and ice free in central Lake Huron.

Forecast ice conditions from January 16<sup>th</sup> to January 31<sup>st</sup>.

Near normal temperatures are expected over the northern half of Lake Huron and below normal temperatures are forecast for the south.

1. North Channel – Becoming entirely consolidated with medium lake ice in the third week of January.
2. St Mary's River – Consolidated with medium lake ice. Some thick lake ice will be present by the end of the month.
3. South of Manitoulin Island westward to North-western Lake Huron – A narrow band of new and thin lake ice will be present along the shore.
4. North-western Lake Huron near the Straits of Mackinac – Very close pack thin and medium lake ice will be present west of Bois Blanc Island and in the Straits of Mackinac early in the period. In the last week of the month, mostly medium lake ice will be found west of Bois Blanc Island. At that time, the Straits of Mackinac will consolidate with medium and thick lake ice.
5. From north-western Lake Huron to Saginaw Bay – A 10 to 20 miles wide band of new and thin lake ice will be present along the shore.
6. Saginaw Bay – Most to the bay will be consolidated with thick lake ice in the last week of the month except for mobile thin and medium lake ice in the northern third of the bay.
7. The southern and eastern shore of Lake Huron – A 10 mile wide band of thin and medium lake ice will be present along the shore. Loose areas of new and thin lake ice will be present farther offshore.
8. Georgian Bay – A 25 to 35 mile wide band of thin and medium lake ice will be found along the eastern and northern shores. Fast ice along the eastern and northern shores will thicken to thick lake ice in the last week of the month. Patchy areas of new lake ice will be found along the southwest coast of the bay.
9. Elsewhere in Lake Huron – Open water to ice free.

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

Temperatures were generally below normal for the second half of December but rose to above normal towards the end of the month and in early January.

Forecast ice conditions from January 5<sup>th</sup> to January 15<sup>th</sup>.

Temperatures will be below normal during the first half of January.

1. Lake St Clair and the Western Basin – They will be generally covered with thin lake ice during the period. Near the end of the second week of January, ice will thicken to medium lake ice in Lake St Clair and west of Pelee Island. At that time, the eastern half of Lake St Clair will consolidate with medium lake ice.
2. The rest of Lake Erie – Consolidated thin lake ice will thicken to medium lake ice in Sandusky Bay in the second week of January. At that time, consolidated medium lake ice will also be found in Long Point Bay. Open drift to close pack new and thin lake ice will generally be present in the lake west of Cleveland and bands of new and thin lake ice will exist around the shores of the lake. Otherwise open water will prevail.

Forecast ice conditions from January 16<sup>th</sup> to January 31<sup>st</sup>.

Temperatures will be below normal in the second half of January.

1. Lake St Clair and the Western Basin – Covered with medium lake ice. The eastern half of Lake St Clair will be consolidated. Near the end of the third week of January, ice will thicken to the thick lake ice stage in Lake St Clair and in the eastern portion of the Western Basin.
2. The rest of Lake Erie – Early in the period, most of the lake will be covered with thin and medium lake ice, except for open water areas in the southern half of the lake in Eastern Lake Erie. Consolidated medium lake ice will be present near Buffalo. Near the end of the third week of the month, most of Lake Erie will be covered with thin and medium lake ice. Consolidated thick lake ice will be found near Buffalo.

## **Lake Ontario**

Below normal temperatures were reported over Lake Ontario during the second half of December but temperatures rose to above normal towards the end of the month and in the first few days of January.

Forecast ice conditions from January 5<sup>th</sup> to January 15<sup>th</sup>.

Below normal temperatures will prevail during the first half of January.

1. Northeastern Lake Ontario – Patches of new lake ice will be present at times in the northeastern end of the lake. A narrow area of thin lake ice will develop along the shore near mid-month. Otherwise open water to ice free.
2. Bay of Quinte – Consolidated thin lake ice will reach the medium stage near mid-month.
3. St Lawrence River – Patches of new lake ice. It will become covered with thin lake ice near mid-month.
4. Elsewhere in Lake Ontario – Ice free with open water near the shore.

Forecast ice conditions from January 16<sup>th</sup> to January 31<sup>st</sup>.

Temperatures will be below normal in the second half of January.

1. Northeastern Lake Ontario – A 5 mile wide band of thin lake ice will be found from Prince Edward Point to Stony Island. Consolidated medium lake ice will be present in the shallower bays.
2. Bay of Quinte – Consolidated medium lake ice.
3. St Lawrence River – Consolidated medium lake ice.
4. Elsewhere in Lake Ontario – Mostly open water with ice free in the central portion of the lake. Narrow bands of new lake ice will be found at times along the southern shore.
5. END

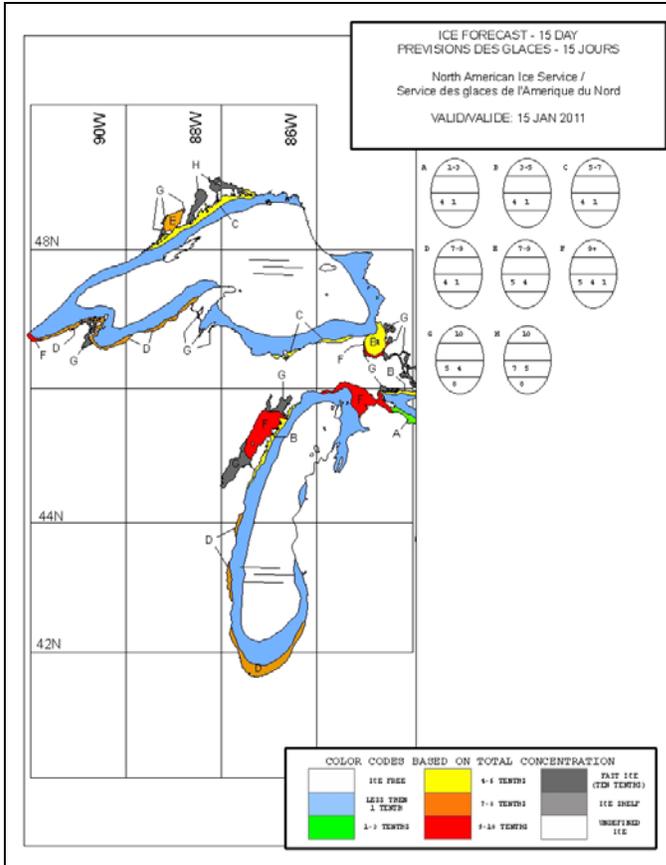


Figure 1: Ice forecast, western Great Lakes – 15 January 2011

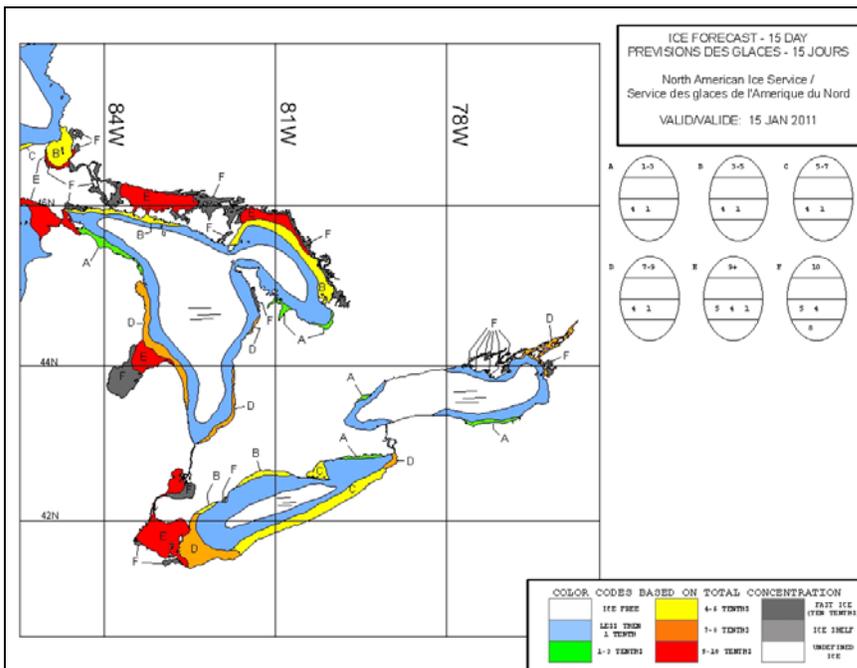


Figure 2: Ice forecast, Eastern Great Lakes – 15 January 2011

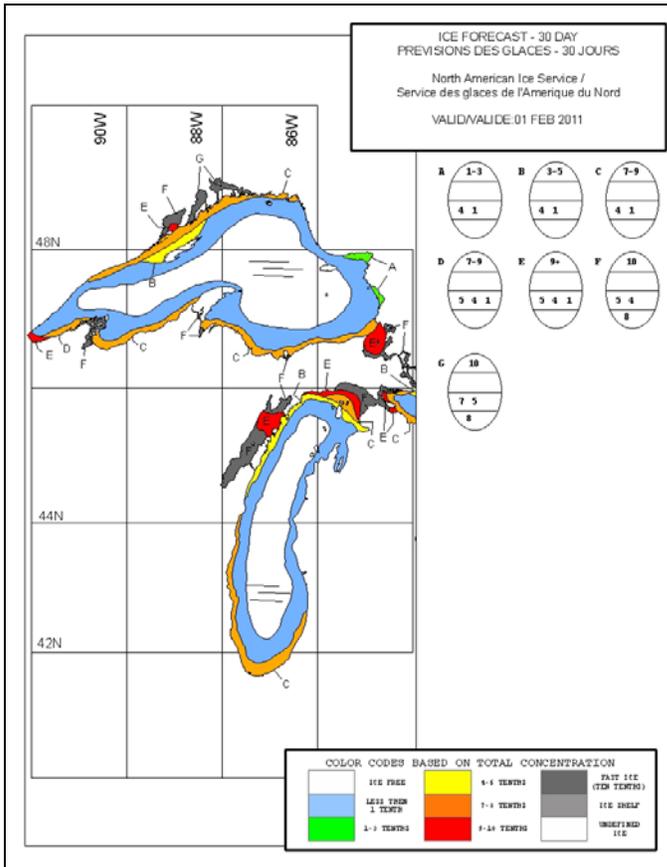


Figure 3: Ice forecast, Western Great Lakes – 1 February 2011

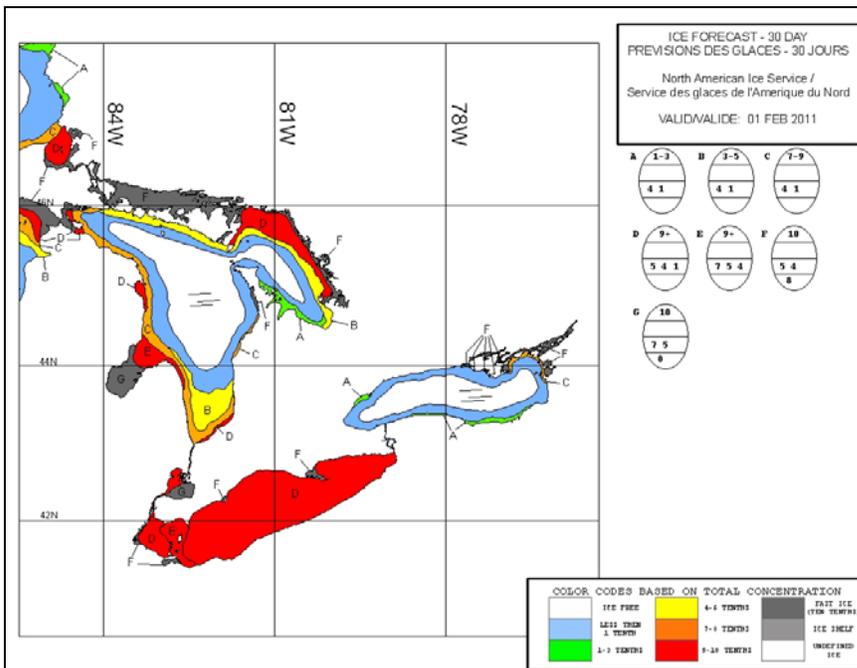


Figure 4: Ice forecast, Eastern Great Lakes – 1 February 2011