

FECN19 CWIS 311800

THIRTY DAY ICE FORECAST FOR THE GREAT LAKES FOR JANUARY ISSUED BY ENVIRONMENT CANADA ON 31 DECEMBER 2008.

THE NEXT SCHEDULED BULLETIN WILL BE ISSUED ON 15 JANUARY 2009.

Lake Superior

Below normal temperatures have been generally reported over Lake Superior during the second half of December. Ice conditions at the end of 2008 were close to normal.

Forecast ice conditions from January 01st to January 15th

Slightly above normal temperatures are expected over Lake Superior for the first week of the year. The temperatures will drop to below normal for the second week of January.

1. Thunder Bay – Thin and medium lake ice will further develop in Thunder Bay during the first week of the period. At mid-January consolidated medium and thick lake ice will cover most of the bay except for mobile thin and medium lake ice in the entrance east of Pie Island.
2. Nipigon and Black Bays – Consolidated with thick lake ice.
3. From Grand Marais to the entrance to Nipigon Bay – A narrow band of new and thin lake ice will develop during the first week of the period. The band will expand to about 10 to 15 miles offshore during the second week.
4. From Grand Marais to Duluth – A narrow band of new and thin lake ice will develop along the shore during the second week of the period. Consolidated medium and thick lake ice near Duluth.
5. Southern Lake Superior west of Keweenaw Peninsula – A 5 to 10 mile wide band of thin lake ice will gradually develop along the shore. The consolidated medium lake ice area near the Apostle Islands will expand.
6. Southern Lake Superior east of the Keweenaw Peninsula – Patchy new lake ice areas will be present during the first week of the period. A 5 mile wide band of new and thin lake will develop during the second week.
7. Whitefish Bay – New and thin lake ice will gradually develop during the first week of the period. At mid-January thin with some medium lake ice will be covering the bay.
8. From Whitefish Bay northwards to Michipicoten Bay – Mainly open water during the first week. A 5 to 10 mile wide band of new and thin lake ice will develop during the second week.
9. From Michipicoten Bay to the entrance to Nipigon Bay – Open water except for a narrow band of thin lake developing ice west of Marathon during the second week of the forecast period.
10. Elsewhere in Lake Superior – Ice free except open water along the shore.

Forecast ice conditions from January 16th to January 31st

Near to slightly below normal temperatures are expected.

1. Thunder Bay – Consolidated with thick lake ice except for mobile thin and medium lake ice in the entrance east of Pie Island.
2. Nipigon and Black Bays – Consolidated with thick lake ice.
3. From Grand Marais to the entrance to Nipigon Bay – A 10 to 15 mile wide band of thin lake ice will be present along the shore and north of Isle Royale.

4. From Grand Marais to Duluth – A narrow band of thin lake ice will be present. Consolidated thick lake ice near Duluth.
5. Southern Lake Superior west of the Keweenaw Peninsula – A 8 to 15 mile wide band of medium and thin lake ice will predominate along the shore. Consolidated thick lake ice around the Apostle Islands throughout the period.
6. Southern Lake Superior east of Keweenaw Peninsula – The band of ice will expand to about 6 to 10 miles offshore. Thin and medium lake ice will predominate inside the band.
7. Whitefish Bay – Will be covered with medium lake ice for most of the period. At the end of January the bay will become mostly consolidated with thick lake ice.
8. From Whitefish Bay to Michipicoten Bay – A 10 to 20 mile wide band of mostly thin lake ice new will be present.
9. From Michipicoten Bay to the entrance to Nipigon Bay – Patchy areas of new and thin lake ice south of Marathon. A 5 to 10 mile wide band of thin lake ice will exist west of Marathon.
10. Elsewhere in Lake Superior – Open water.

Lake Michigan

Below normal temperatures were generally observed during the second half of December over Lake Michigan. Ice conditions in Green Bay are about a week earlier than normal in terms of ice formation.

Forecast ice conditions from January 01st to January 15th

Near normal temperatures will prevail during the first week of the period. Below normal temperature are expected for the second week of January.

1. Green Bay – The consolidated area in southern Green Bay will expand to cover the southern half of the bay at mid-January. In the northern section new and thin lake ice will continue to develop during the first week of the period. At mid-January the northern section will be covered with mobile medium lake ice.
2. Northeastern Lake Michigan – Ice will further develop and at mid-January medium lake ice will predominate from Beaver Island northeastward to the Straits of Mackinac and in Little Traverse Bay. At that time thin lake ice will predominate in Grand Traverse Bay. A narrow band of consolidated medium lake ice will be present along sections of the shore.
3. Elsewhere in Lake Michigan – Open water along the shore and ice edge and ice free in the middle of the lake. Patchy new and thin lake ice will occasionally form along the shore.

Forecast ice conditions from January 16th to January 31st

Near normal temperatures are expected.

1. Green Bay – By the end of January most of the bay will be consolidated with thick lake ice.
2. Northern Lake Michigan – The area northeast of Beaver Island will be covered with medium and thick lake ice. The Strait of Mackinac and its approaches will become consolidated with thick lake ice during the last week of the month. Medium lake ice

will predominate in Little and Grand traverse Bay as well as along the shore north of Green Bay.

3. Elsewhere in Lake Michigan – A narrow band of new and thin lake ice will generally predominate along the western and southern shores. Otherwise open water except ice free in the central section.

Lake Huron and Georgian Bay

Below normal temperatures were generally reported during the last 2 weeks of December. Ice conditions are close to normal.

Forecast ice conditions from January 01st to January 15th

Near normal temperatures will prevail in the first week of January but colder than normal temperatures are expected for the second week.

1. North Channel – Thin lake ice will spread rapidly over the entire channel during the first week of the period. At mid-January consolidated medium and thick lake ice will predominate at both ends of the channel and along the northern shore. Mobile medium lake ice will predominate in the south central section.
2. St Mary's River – Consolidated with medium and thick lake ice.
3. South of Manitoulin Island westward to North-western Lake Huron – Isolated patches of new lake ice will develop during the first week. A narrow band of thin lake ice will develop during the second week.
4. North-western Lake Huron near the Straits of Mackinaw – Ice will continue to develop and at mid-January medium lake ice will predominate south and west of Bois Blanc Island. Thin lake ice will predominate north of Bois Blanc Island.
5. From north-western Lake Huron to Saginaw Bay – A narrow band of thin lake ice will gradually develop.
6. Saginaw Bay – The central section of the bay will consolidate during the first week of the period. At mid-January the bay will be consolidated with thick lake ice.
7. The southern and eastern shore of Lake Huron – A 3 to 6 mile wide band of thin lake ice will generally prevail during the period. In addition some medium lake will develop late in the period between Goderich and Sarnia.
8. Georgian Bay – A 6 to 12 miles band of thin lake ice will be present throughout the period. Consolidated medium lake ice in the shallow bays along the northeast shore.
9. Elsewhere in Lake Huron – Open water along the shore and ice edge and ice free in central Lake Huron.

Forecast ice conditions from January 16th to January 31st

Temperatures will be near normal for the entire area.

1. North Channel – Consolidated with thick lake ice.
2. St Mary's River – Consolidated and thick lake ice.
3. South of Manitoulin Island westward to North-western Lake Huron – A 3 to 6 mile wide band of thin lake ice will be present along the shore.
4. North-western Lake Huron near the Straits of Mackinaw – Consolidated medium and thick lake ice will prevail south and west of Bois Blanc Island into the Straits of

Mackinac. Thin and medium lake ice will be found north and within 5 miles east of Bois Blanc Island.

5. From north-western Lake Huron to Saginaw Bay – A 4 to 8 mile wide band of mostly thin lake ice will be present along the shore.
6. Saginaw Bay – Consolidated with thick lake ice.
7. The southern and eastern shore of Lake Huron – From Saginaw Bay to Sarnia a 3 to 5 mile wide band of thin lake ice will be found. Along the eastern shore a 4 to 8 mile wide band of mostly medium lake ice, with a narrow band of thick lake ice right along the shore, will be present
8. Georgian Bay – The ice will further expand and will cover most of the bay, including the entrance, except for the south-western section which will remain open water throughout the period. Thin and medium lake ice will predominate inside the pack as well as in the bays along the south-western shore.
9. Elsewhere in Lake Huron and Georgian Bay – Open water.

Lake Erie and Lake St. Clair

Temperatures have been below normal over the region during the second half of December. Ice conditions are a few days ahead of normal.

Forecast ice conditions from January 01st to January 15th

Temperatures will be near normal for the first week of 2009 but below normal for the second week.

1. Lake St Clair and the Western Basin – New and thin lake ice will spread over the rest of Lake St Clair and the Western Basin during the first week of the period. During the second week, Lake St Clair and the Western Basin will become covered with mostly medium lake ice. Consolidated areas will develop along the shores of Lake St Clair.
2. The rest of Lake Erie – Patchy areas of thin lake ice will develop along the northern shore and just east of the Western Basin during the first week of January. Ice will develop more rapidly during the second week and at mid-January an 8 to 15 mile wide band of thin lake ice will be found along the northern shore down to Buffalo and in the western section of the lake west of Cleveland. Otherwise open water or ice free conditions will prevail.

Forecast ice conditions from January 16th to January 31st

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

1. Lake St Clair and the Western Basin – At the end of January, Lake St Clair will be mainly consolidated with thick lake ice. At that time the Western Basin will be covered with medium and thick lake ice with some consolidated areas in its south-eastern section.
2. The rest of Lake Erie – Ice will gradually spread over the rest of the lake. At the end of the forecast period medium lake ice will be widespread in the lake except for consolidated thick lake ice near Buffalo. However thinner ice will generally be found right along the northern shore and just east of the western Basin. Offshore winds will occasionally develop coastal leads.

Lake Ontario

Near normal temperatures were generally reported over Lake Ontario during the last 2 weeks of December. Ice conditions are close to normal.

Forecast ice conditions from January 01st to January 15th

Near normal temperatures will prevail during the forecast period.

1. Northeastern Lake Ontario – Patches of new and thin lake ice will form along the shore during the first week of the period. Ice will develop more rapidly during the second week of January and at mid-month a 3 to 6 mile wide band of thin lake ice will be present from Prince Edward Point to Stony Island. Otherwise open water. .
2. Bay of Quinte – Consolidated with thin lake ice. The ice will reach the medium lake ice stage during the second week of the period.
3. St Lawrence River – New and thin lake ice will spread in the river during the first week of the month. The River will become consolidated with thin lake ice late in the forecast period.
4. Elsewhere in Lake Ontario – Ice free with open water near the shore. Patches of new lake ice will occasionally form near the shore.

Forecast ice conditions from January 16th to January 31st

Temperatures will be near normal for the second half of January.

1. Northeastern Lake Ontario – The band of ice along the northeast shore will expand slightly during the period. At the end of January thin and medium lake ice will predominate inside the band. Also a narrow band of new and thin lake ice will develop along the south-western shore of Prince Edward County
2. Bay of Quinte – Consolidated with thick lake ice at the end of the period.
3. St Lawrence River – Consolidated with medium and thick lake ice.
4. Elsewhere in Lake Ontario – Mostly open water with ice free in the central portion of the lake. Narrow bands of new and thin lake ice will occasionally form along the shore.

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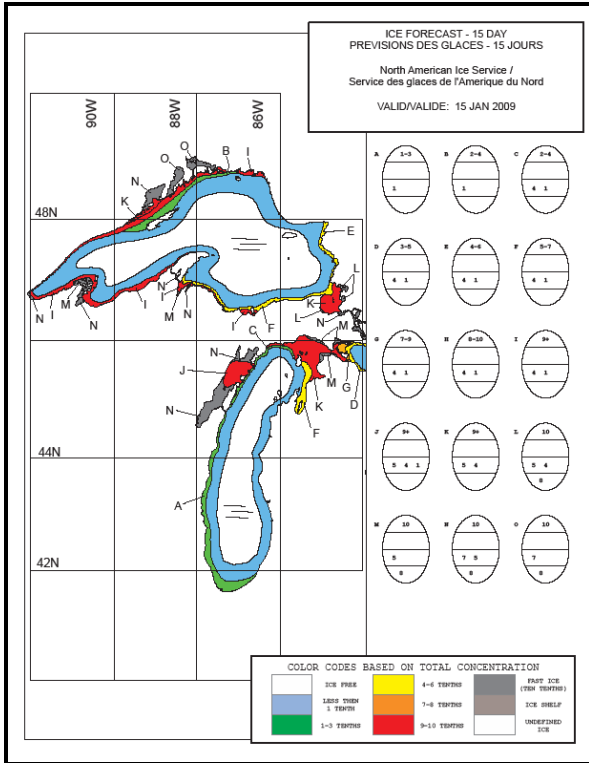


Figure 1: Ice forecast, western Great Lakes – 15 January 2009

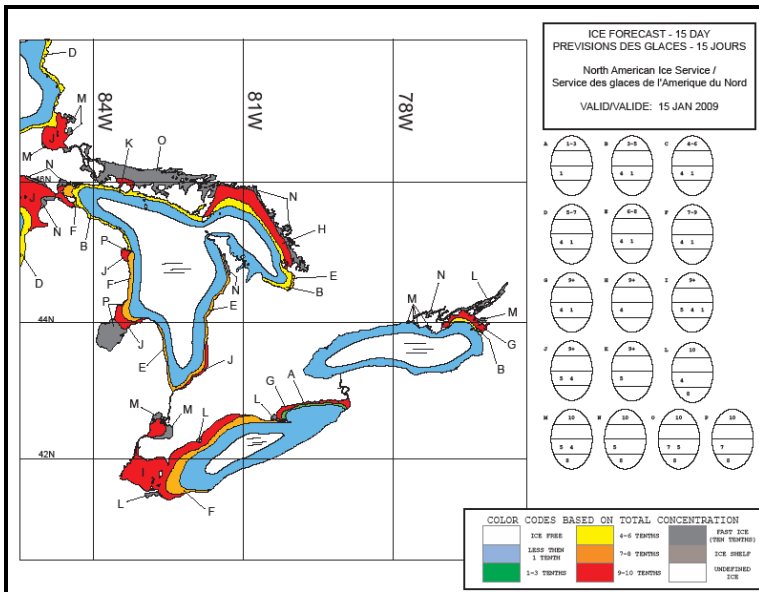


Figure 2: Ice forecast, Eastern Great Lakes – 15 January 2009

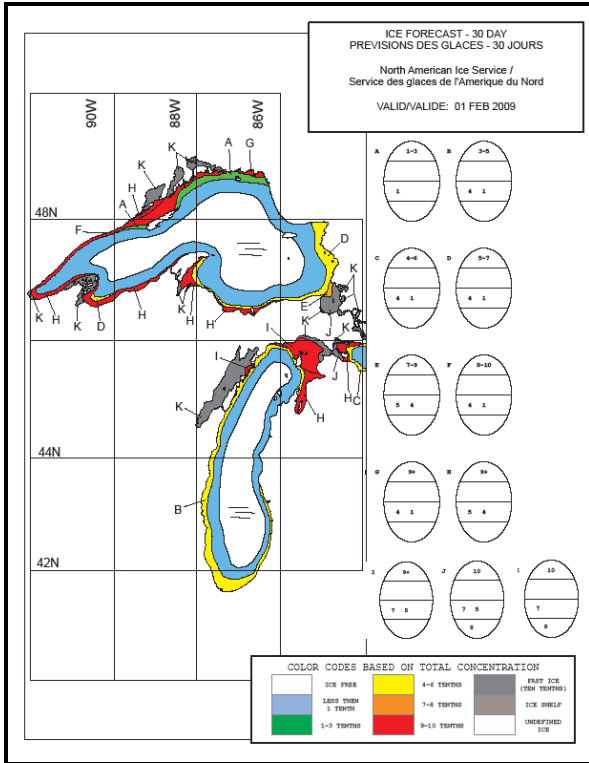


Figure 3: Ice forecast, Western Great Lakes – 01 February 2009

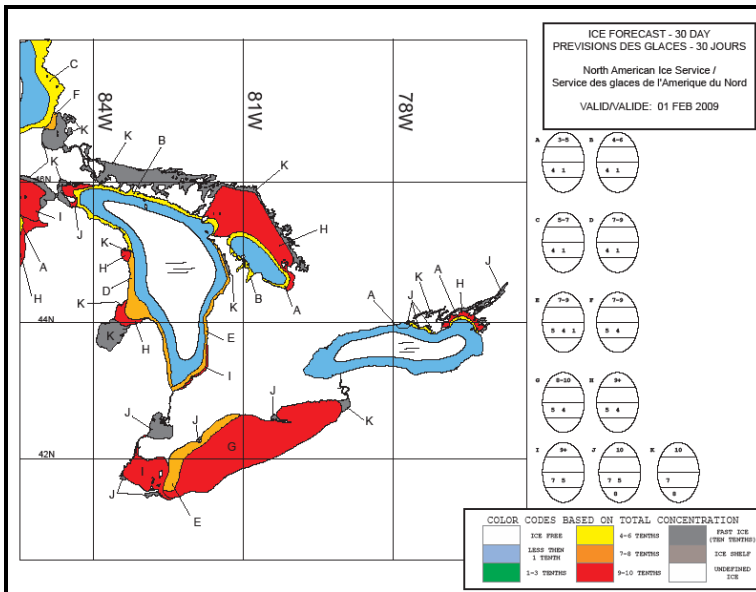


Figure 4: Ice forecast, Eastern Great Lakes – 01 February 2009