

**Seasonal Outlook  
Great Lakes  
Winter 2017-2018**



**Issued by the North American Ice Service**

**1 December 2017**

## **Lake Superior**

### **Winter temperature and ice forecasts.**

Above average air temperatures are forecast from December 2017 to February 2018.

Below normal ice coverage is expected.

### **Thunder Bay.**

Outlook for December...

December 15-22: 1-3 tenths of new and thin lake ice along the western and northeastern shores.

December 23-31: 4-6 tenths of new and thin lake ice along the shore.

Outlook for January...

January 1-15: 7-8 tenths of new and thin lake ice except consolidated thin lake ice along the western and northeastern shores.

January 16-31: 9-10 tenths of thin and medium lake ice except consolidated medium lake ice along the western and northeastern shores.

Outlook for February...

February 1-28: 9-10 tenths of medium and thick lake ice except consolidated thick lake ice along the shores.

### **Nipigon and Black Bays.**

Outlook for December...

December 10-20: 4-6 tenths of new and thin lake ice over northern Black Bay and western Nipigon Bay.

December 21-31: 9-10 tenths of thin and medium lake ice over Black Bay and western Nipigon Bay.

Outlook for January...

January 1-15: Consolidated medium lake ice over Black Bay and western Nipigon Bay. 4-6 tenths of new and thin lake ice over eastern Nipigon Bay.

January 16-31: Consolidated thick lake ice over Black Bay and western Nipigon Bay. 7-8 tenths of new and thin lake ice over eastern Nipigon Bay.

Outlook for February...

February 1-28: Consolidated with thick lake ice.

### **From Grand Marais Minnesota to the entrance to Nipigon Bay.**

Outlook for December...

December 10-31: Open water.

Outlook for January...

January 1-20: 1-3 tenths of new and thin lake ice.

January 21-31: 4-6 tenths of new and thin lake ice.

Outlook for February...

February 1-28: 4-6 tenths of thin and medium lake ice along the shore and extending to the northern shore of Isle Royale.

### **From Grand Marais to Duluth.**

Outlook for December...

December 25-31: Open water.

Outlook for January...

January 1-31: Open water except 1-3 tenths of new and thin lake ice near Duluth

near the end of the month.

Outlook for February...

February 1-28: Open water except 4-6 tenths of new and thin lake ice near Duluth.

### **Southern Lake Superior west of Keweenaw Peninsula.**

Outlook for December...

December 10-20: Open water except 7-8 tenths of new and thin lake ice in Chequamegon Bay.

December 21-31: Open water except isolated areas of 1-3 tenths of new and thin lake ice along the shore. 9-10 tenths of thin and medium lake ice in Chequamegon Bay.

Outlook for January...

January 1-7: 1-3 tenths of new and thin lake ice along the shore except consolidated medium lake ice in Chequamegon Bay.

January 8-21: 7-8 tenths of new and thin lake ice within 20 nautical miles of the shore except consolidated medium lake ice in Chequamegon Bay.

January 22-31: 9-10 tenths of new and thin lake ice within 25 nautical miles of the shore except consolidated thick lake ice in Chequamegon Bay.

Outlook for February...

February 1-14: 9-10 tenths of new and thin lake ice within 25 nautical miles of the shore except consolidated thick lake ice in Chequamegon Bay and the Apostle Islands.

February 15-28: 9-10 tenths of new and thin lake ice within 30 nautical miles of the shore except consolidated thick lake ice in Chequamegon Bay and the Apostle Islands.

### **Southern Lake Superior east of the Keweenaw Peninsula.**

Outlook for December...

December 15-31: Open water.

Outlook for January...

January 1-31: 1-3 tenths of new and thin lake ice along the shore except consolidated thin and medium lake ice in sheltered bays.

Outlook for February...

February 1-14: 4-6 tenths of new and thin lake ice along the southern shore and east of the Keweenaw Peninsula. Consolidated medium lake ice in sheltered bays.

February 15-28: 7-8 tenths of new and thin lake ice within 20 nautical miles of the southern shore and east of the Keweenaw Peninsula. Consolidated thick lake ice in sheltered bays.

### **Whitefish Bay.**

Outlook for December...

December 15-31: Open water except 7-8 tenths of new and thin lake ice in sheltered bays.

Outlook for January...

January 1-20: Open water except 1-3 tenths of new and thin lake ice along the shore. Consolidated thin lake ice in sheltered bays.

January 21-31: 4-6 tenths of new and thin lake ice except consolidated medium lake ice in sheltered bays.

Outlook for February...

February 1-14: 4-6 tenths of new and thin lake ice except 7-8 tenths of thin and medium lake ice over the southeastern section. Consolidated medium lake ice in sheltered bays.

February 15-28: 7-8 tenths of new and thin lake ice except 9 to 10 tenths of medium lake ice over the southeastern section. Consolidated thick lake ice in sheltered bays.

**From Whitefish Bay northwards to Michipicoten Bay.**

Outlook for December...

December 20-31: Open water.

Outlook for January...

January 1-31: Open water except isolated patches of new and thin lake ice along the shore.

Outlook for February...

February 1-10: Open water except 1-3 tenths of new and thin lake ice along the shore south of Michipicoten Bay.

February 11-28: Open water except 4-6 tenths of thin and medium lake ice along the shore south of Michipicoten Bay.

**From Michipicoten Bay to the entrance to Nipigon Bay.**

Outlook for December...

December 15-31: Ice free.

Outlook for January...

January 1-31: Open water except isolated patches of new lake ice along the shore.

Outlook for February...

February 1-28: Open water except isolated patches of new lake ice along the shore.

**Elsewhere in Lake Superior.**

Outlook for December...

December 15-31: Ice free.

Outlook for January...

January 1-31: Ice free to open water.

Outlook for February...

February 1-28: Ice free to open water.

**Lake Michigan.**

**Winter temperature and ice forecasts.**

Above normal temperatures are expected from December to February. Below normal ice conditions are forecast.

**Green Bay.**

Outlook for December...

December 10-21: Open water except 4-6 tenths of new and thin lake ice over the southern section and in the Bays de Noc.

December 22-31: Open water except 9-10 tenths of thin and medium lake ice

Seasonal Outlook - Great Lakes - Winter 2017-2018

over the southern section. Consolidated medium and thin lake ice in the Bays de Noc.

Outlook for January...

January 1-7: Open water except 9-10 tenths of thin and medium lake ice over the southern section. Consolidated medium and thin lake ice in the Bays de Noc.

January 8-21: 4-6 tenths of new and thin lake ice except 9-10 tenths of thin and medium lake ice over the southern and northern sections. Consolidated medium lake ice over the extreme southern section and in the Bays de Noc.

January 22-31: 9-10 tenths of thin and medium lake ice except consolidated medium lake ice over the southern and northern sections.

Outlook for February...

February 1-20: 9-10 tenths of thin and medium lake ice except consolidated medium lake ice over the southern and northern sections.

February 21-28: 9-10 tenths of thin and medium lake ice except consolidated thick lake ice over the southern and northern sections.

**Northeastern Lake Michigan.**

Outlook for December...

December 15-31: Open water except patches of new and thin lake ice along the northern shore.

Outlook for January...

January 1-10: Open water except 4-6 tenths of new and thin lake ice along the northern shore.

January 11-31: Open water except 9-10 tenths of new and thin lake ice from Beaver Island and northeastward to the shore.

Outlook for February...

February 1-14: Open water except 9-10 tenths of new and thin lake ice from Beaver Island and northeastward to the shore. Consolidated thin lake ice along the northeastern shore and in the Straits of Mackinac.

February 15-28: Open water except 9-10 tenths of thin and medium lake ice from Beaver Island and northeastward to the shore. Consolidated medium lake ice along the northeastern shore and in the Straits of Mackinac.

**Elsewhere in Lake Michigan.**

Outlook for December...

December 15-31: Ice free except isolated patches of new and thin lake ice along the southern and western shores.

Outlook for January...

January 1-31: Open water except isolated areas of 1-3 tenths of new and thin lake ice along the southern and western shores.

Outlook for February...

February 1-28: Open water except isolated areas of 4-6 tenths of new and thin lake ice along the shores.

**Lake Huron and Georgian Bay.**

**Winter temperature and ice forecasts.**

Above normal temperatures are expected over Lake Huron and Georgian Bay from December to February. Below normal ice conditions are forecast.

**North Channel.**

Outlook for December...

December 15-31: Open water except isolated patches of new and thin lake ice in sheltered bays.

Outlook for January...

January 1-15: Open water except 7-8 tenths of new and thin lake ice in the eastern and western sections.

January 16-31: 9-10 tenths of new and thin lake ice except consolidated thin and medium lake ice in the eastern and western sections.

Outlook for February...

February 1-28: Consolidated with medium and thick lake ice. 9-10 tenths of medium lake ice over the south-central section.

**St Mary's River.**

Outlook for December...

December 15-25: 1-3 tenths of new and thin lake ice.

December 25-31: 9-10 tenths of thin lake ice.

Outlook for January...

January 1-15: 9-10 tenths of thin and medium lake ice.

January 16-31: Consolidated medium lake ice.

Outlook for February...

February 1-28: Consolidated with medium and thick lake ice.

**South of Manitoulin Island westward to North-western Lake Huron.**

Outlook for December...

December 15-31: Open water except 1-3 tenths of new and thin lake ice in the northwestern section.

Outlook for January...

January 1-15: Open water except 4-6 tenths of new and thin lake ice in the northwestern section.

January 16-31: Open water except 7-8 tenths of new and thin lake ice in the northwestern section. Consolidated thin lake ice along the northwestern shore.

Outlook for February...

February 1-10: Open water except 7-8 tenths of new and thin lake ice in the northwestern section. Consolidated medium lake ice along the northwestern shore.

February 11-28: 1-3 tenths of new and thin lake ice except 9-10 tenths of new and thin lake ice in the northwestern section. Consolidated medium and thick lake ice along the northwestern shore.

**North-western Lake Huron near the Straits of Mackinac.**

Outlook for December...

December 15-31: Open water.

Outlook for January...

January 1-20: 4-6 tenths of new and thin lake ice.

January 21-31: 7-8 tenths of new and thin lake ice except consolidated thin lake ice south of Bois Blanc Island.

Outlook for February...

February 1-14: 9-10 tenths of new and thin lake ice except consolidated medium lake ice south of Bois Blanc Island.

February 15-28: Consolidated medium lake ice.

### **From north-western Lake Huron to Saginaw Bay.**

Outlook for December...

December 15-31: Open water except isolated patches of new and thin lake ice along the shore.

Outlook for January...

January 1-7: Open water except patches of new and thin lake ice along the shore.

January 8-31: 1-3 tenths of new and thin lake ice except 4-6 tenths of thin lake ice near Alpena.

Outlook for February...

February 1-7: 1-3 tenths of new and thin lake ice except 7-8 tenths of thin lake ice south of Alpena.

February 8-28: 4-6 tenths of new and thin lake ice except 9-10 tenths of thin and medium lake ice from Alpena and southward.

### **Saginaw Bay.**

Outlook for December...

December 15-25: 4-6 tenths of new and thin lake ice.

December 25-31: 9-10 tenths of new and thin lake ice.

Outlook for January...

January 1-15: 9-10 tenths of thin and medium lake ice.

January 16-31: 9-10 tenths of medium lake ice except consolidated medium lake ice along the shores.

Outlook for February...

February 1-28: Consolidated medium and thick lake ice.

### **The southern and eastern shore of Lake Huron.**

Outlook for December...

December 15-31: Open water except isolated patches of new and thin lake ice along the shore.

Outlook for January...

January 1-15: Open water except 1-3 tenths of new and thin lake ice along the southern shore. 7-8 tenths of new and thin lake ice along the Bruce Peninsula.

January 16-31: 4-6 tenths of new and thin lake ice along the shore except consolidated medium lake ice along the Bruce Peninsula.

Outlook for February...

February 1-14: 4-6 tenths of new and thin lake ice along the shore except consolidated medium lake ice along the Bruce Peninsula.

February 15-28: 4-6 tenths of new and thin lake ice along the shore except 9-10 tenths of thin and medium lake ice along the southeastern shores. Consolidated medium lake ice along the Bruce Peninsula.

### **Georgian Bay.**

Outlook for December...

December 15-31: Open water except 7-8 tenths of new and thin lake ice along the northeastern shore.

Outlook for January...

January 1-10: Open water except 9-10 tenths of new and thin lake ice along the northeastern shore. Consolidated thin lake ice in sheltered bays.

January 11-31: Open water except 9-10 tenths of new and thin lake ice extending up to 20 nautical miles from the northeastern shore. Consolidated thin and medium lake ice in sheltered bays.

Outlook for February...

February 1-14: Open water except 9-10 tenths of thin and medium lake ice extending up to 25 nautical miles from the northeastern shore. Consolidated medium lake ice in sheltered bays.

February 15-28: Open water except 9-10 tenths of medium lake ice extending up to 30 nautical miles from the northeastern shore. Consolidated medium and thick lake ice in sheltered bays.

**Elsewhere in Lake Huron.**

Outlook for December...

December 15-31: Ice free.

Outlook for January...

January 1-31: Open water to ice free.

Outlook for February...

February 1-28: Open water to ice free.

**Lake Erie and Lake St. Clair**

**Winter temperature and ice forecasts.**

Above normal temperatures are expected from December to February. Below normal ice conditions are forecast.

**Lake St Clair and the Western Basin.**

Outlook for December...

December 10-20: 1-3 tenths of new and thin lake ice.

December 21-31: 7-8 tenths of new and thin lake ice.

Outlook for January...

January 1-15: 9-10 tenths of new and thin lake ice. Consolidated thin lake ice in sheltered bays.

January 16-31: 9-10 tenths of thin and medium lake ice except consolidated medium lake ice over northeastern Lake St. Clair.

Outlook for February...

February 1-10: 9-10 tenths of thin and medium lake ice except consolidated medium lake ice over northeastern Lake St. Clair.

February 11-28: 7-8 tenths of thin and medium lake ice. Consolidated medium lake ice along the northeastern shore of Lake St. Clair.

**The rest of Lake Erie.**

Outlook for December...

December 10-31: Open water except 4-6 tenths of new and thin lake ice in Long Point Bay.

Outlook for January...

January 1-7: Open water except 7-8 tenths of new and thin lake ice in Long Point



Bay.

January 8-31: Open water except 4-6 tenths of new and thin lake ice along sections of the shore. 9-10 tenths of thin lake ice in Long Point Bay and near Buffalo.

Outlook for February...

February 1-14: 4-6 tenths of new and thin lake ice along the shores except 9-10 tenths of thin and medium lake ice over the central and western sections.

Consolidated medium lake ice in Long Point Bay.

February 15-28: 7-8 tenths of thin and medium lake ice.

## **Lake Ontario.**

### **Winter temperature and ice forecasts.**

Above normal temperatures are expected from December to February. Below normal ice conditions are forecast.

### **Northeastern Lake Ontario.**

Outlook for December...

December 15-31: Open water except 7-8 tenths of new and thin lake ice in sheltered bays.

Outlook for January...

January 1-20: Open water except 9-10 tenths of new and thin lake ice in sheltered bays.

January 21-31: Open water except 4-6 tenths of new and thin lake ice over the northeastern section. Consolidated thin lake ice in sheltered bays.

Outlook for February...

February 1-14: Open water except 7-8 tenths of new and thin lake ice over the northeastern section. Consolidated medium lake ice in sheltered bays.

February 15-28: Open water except 4-6 tenths of thin lake ice over the northeastern section. Consolidated medium lake ice in sheltered bays.

### **Bay of Quinte.**

Outlook for December...

December 10-20: Open water except 1-3 tenths of new and thin lake ice.

December 21-31: 9-10 tenths of new and thin lake ice.

Outlook for January...

January 1-31: Consolidated with thin and medium lake ice.

Outlook for February...

February 1-28: Consolidated with medium and thick lake ice.

### **Elsewhere in Lake Ontario.**

Outlook for December...

December 15-31: Ice free to open water.

Outlook for January...

January 1-31: Open water except isolated patches of new and thin lake ice along the shores.

Outlook for February...

February 1-28: Open water except 1-3 tenths of new and thin lake ice along the southeastern shore.

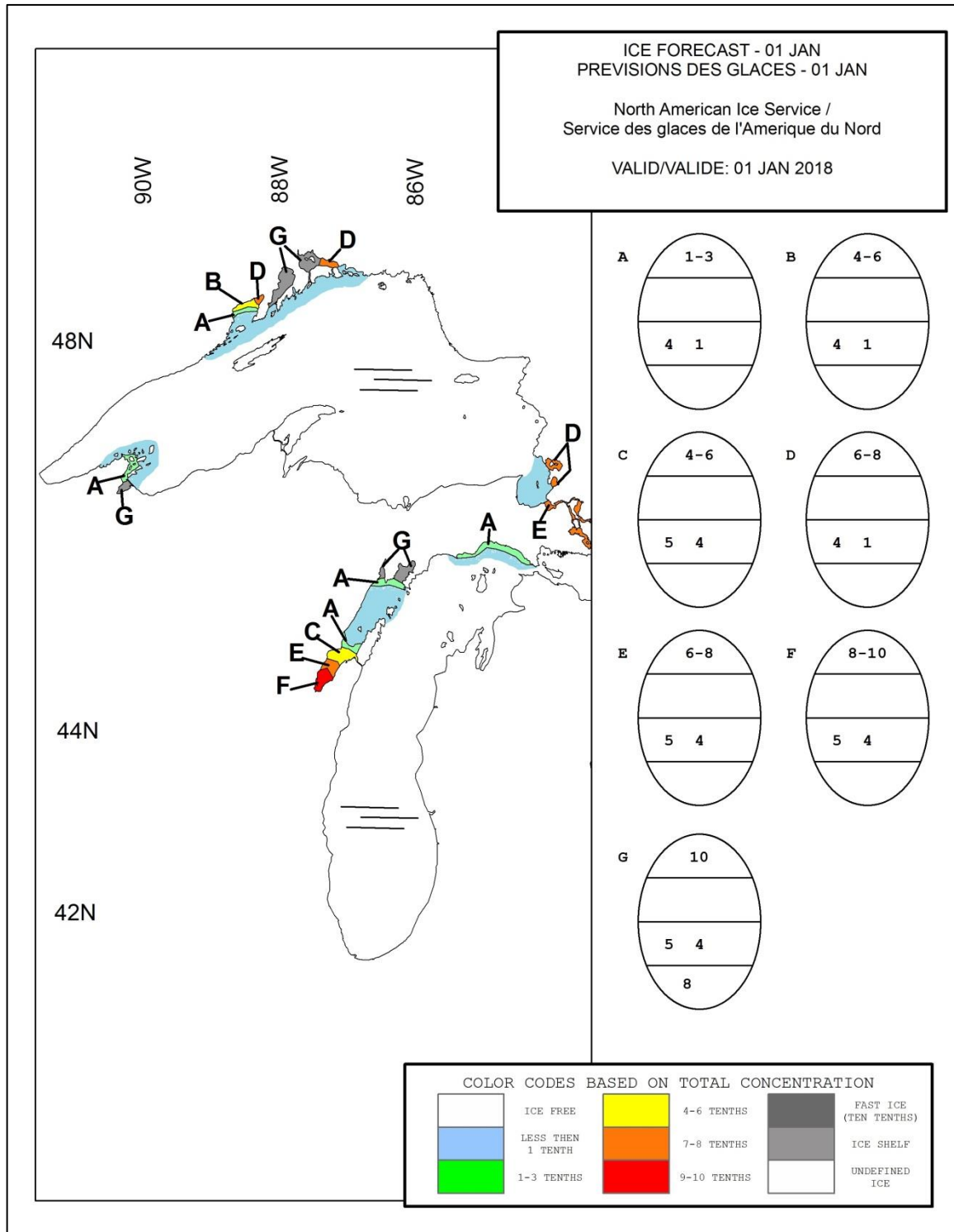


Figure 1: Expected ice conditions – western Great Lakes – 1 January 2018

Seasonal Outlook – Great Lakes – Winter 2017-2018

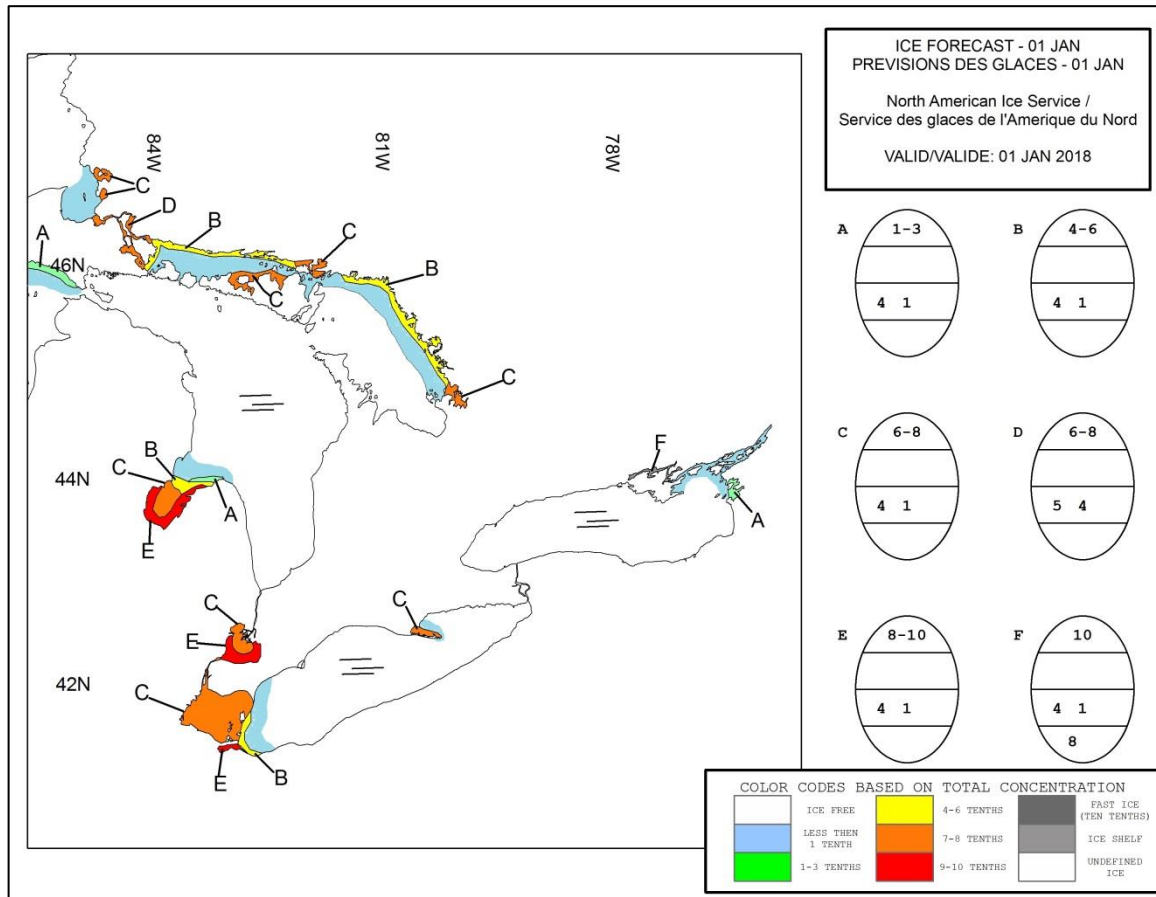


Figure 2: Expected ice conditions – eastern Great Lakes – 1 January 2018

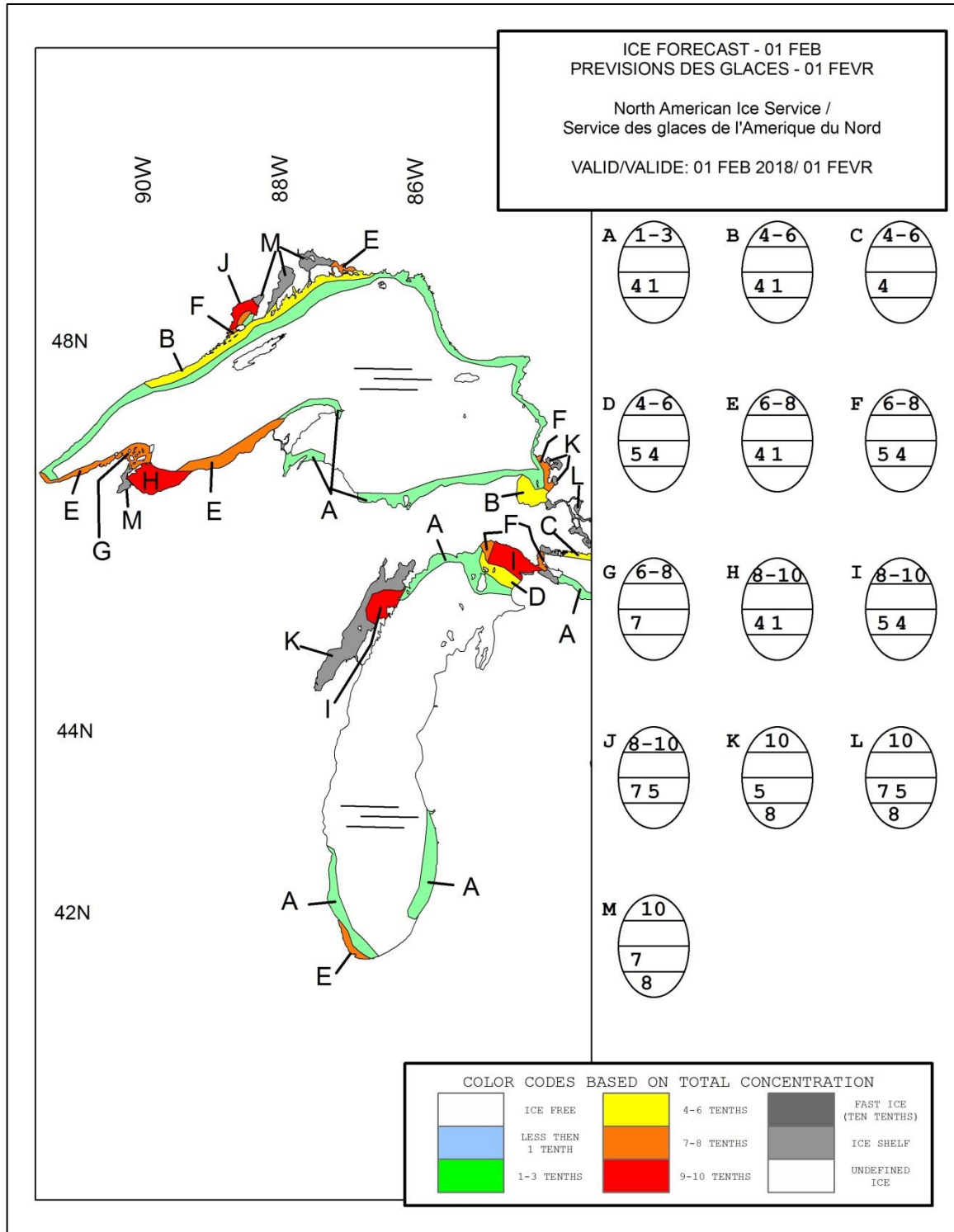


Figure 3: Expected ice conditions – western Great Lakes – 1 February 2018

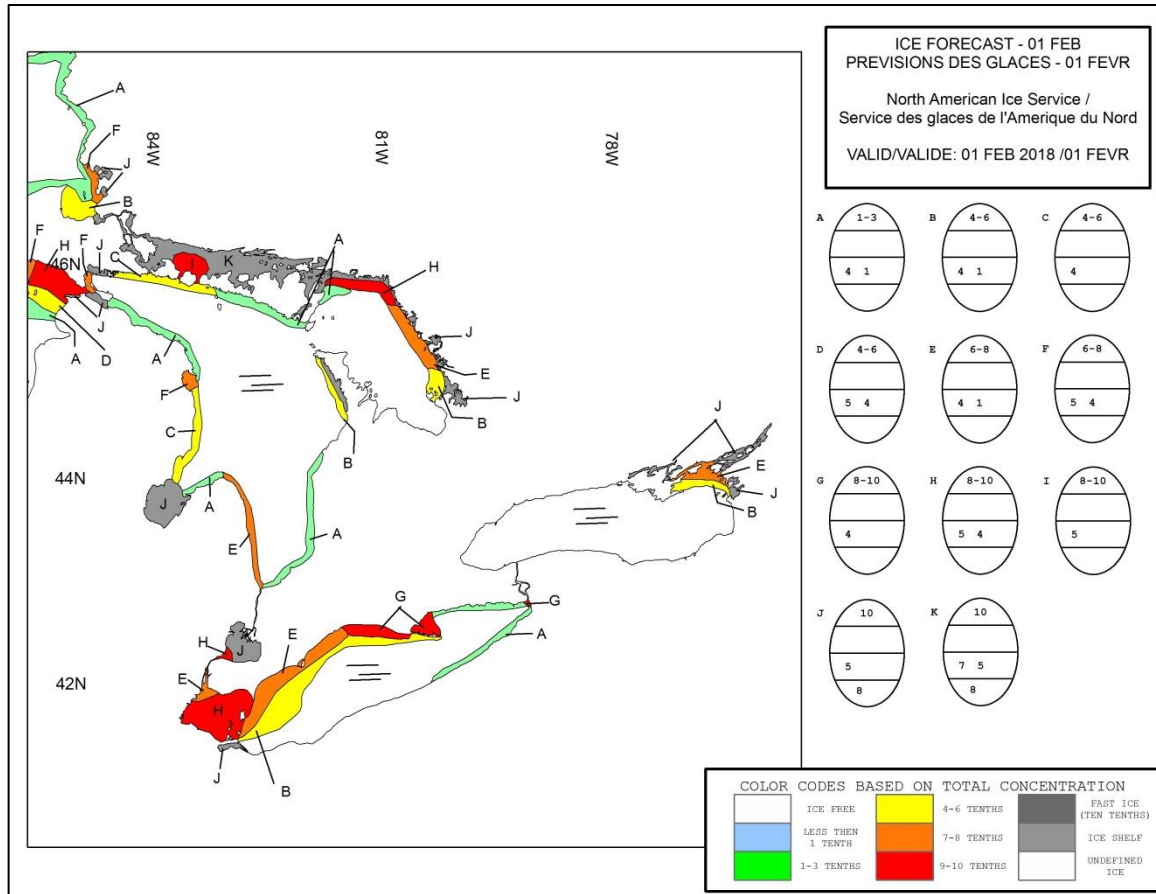


Figure 4: Expected ice conditions – eastern Great Lakes – 1 February 2018

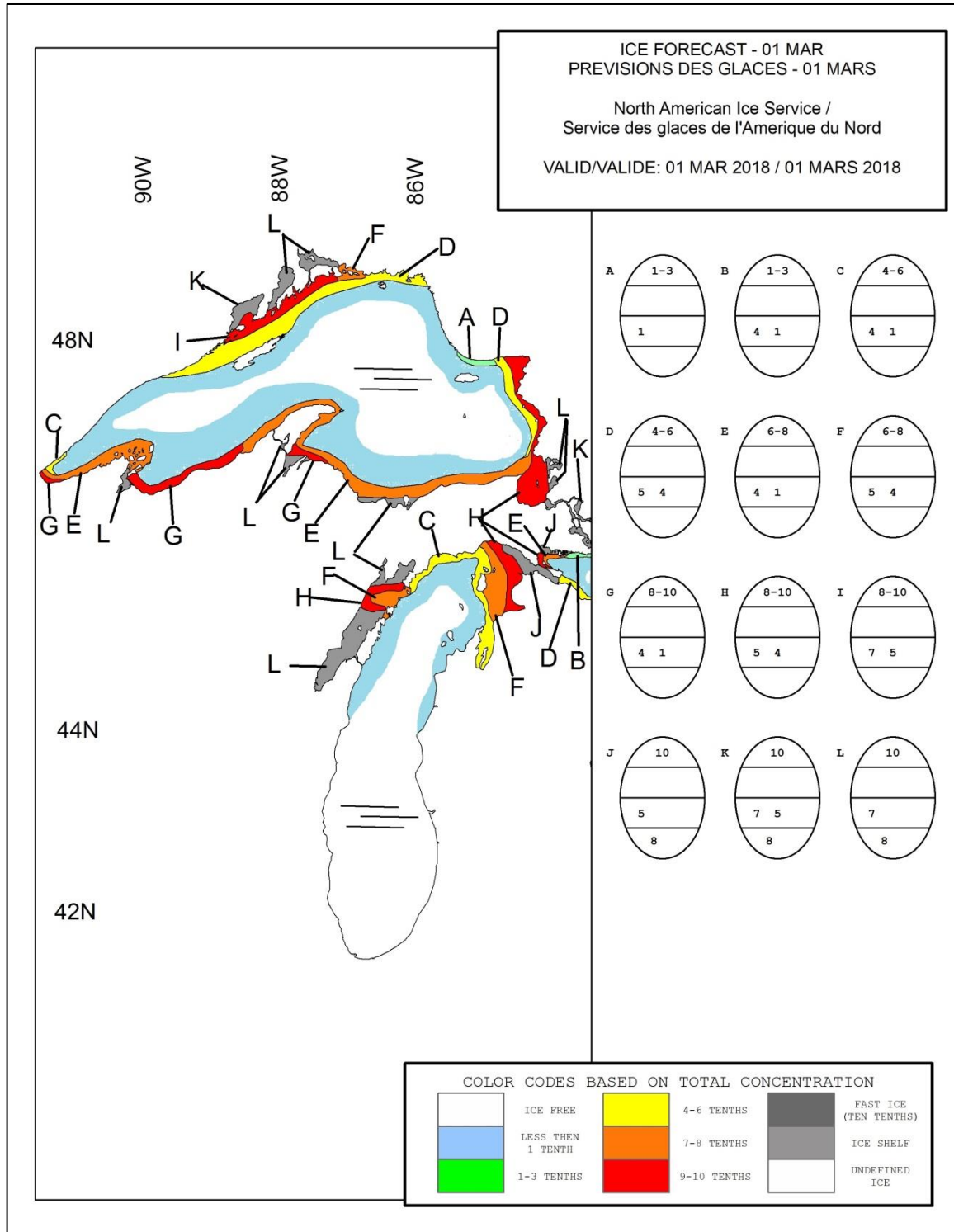


Figure 5: Expected ice conditions – western Great Lakes – 1 March 2018

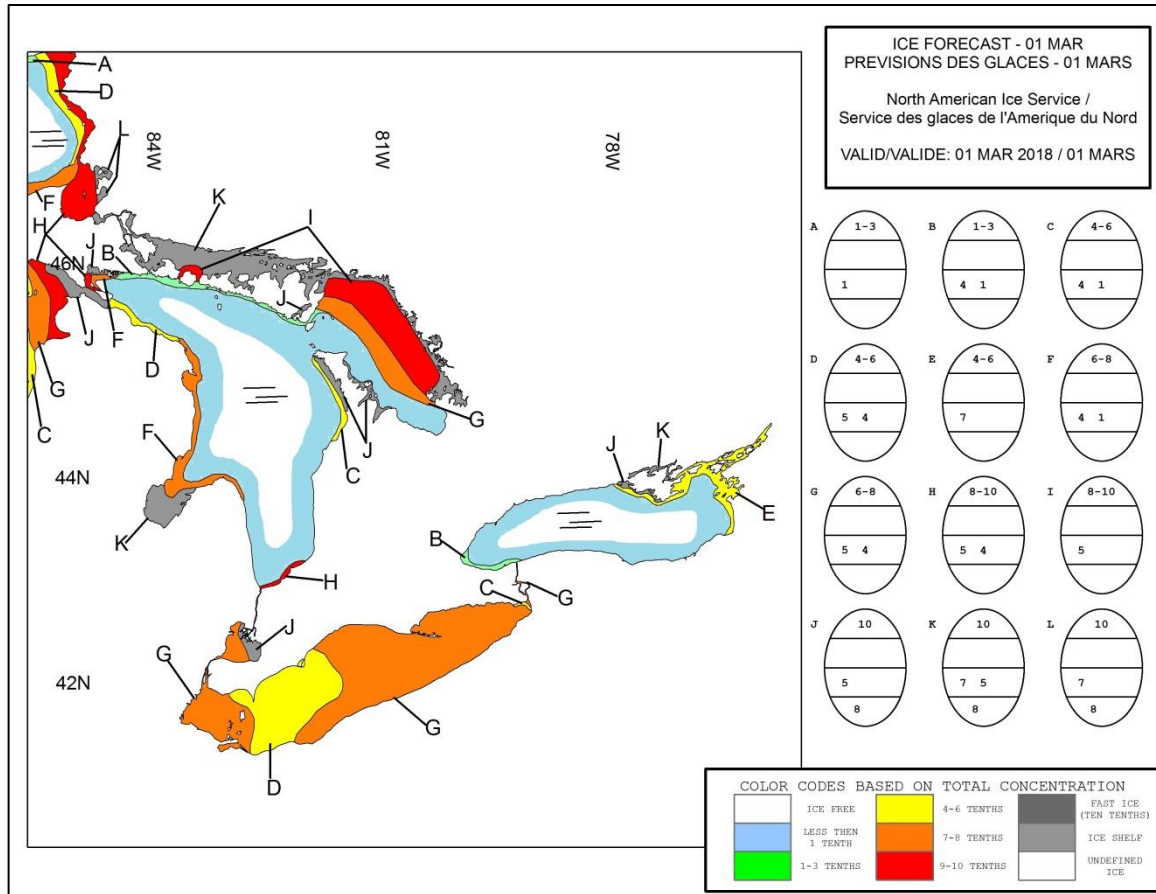


Figure 6: Expected ice conditions – eastern Great Lakes – 1 March 2018