

NOTES DESCRIPTIVES

INTRODUCTION
La carte de Pointe-des-Monts fait partie d'une série de 12 cartes de bathymétrie multifaisceaux qui forment une...

ACQUISITION DES DONNÉES DE BATHYMETRIE MULTIFAISCEAUX
Les données de bathymétrie multifaisceaux ont été acquises en 2006 et 2007 par le Service hydrographique...

PRÉSENTATION DES DONNÉES DE BATHYMETRIE MULTIFAISCEAUX
Les données de bathymétrie multifaisceaux compilées sur cette carte offrent une résolution horizontale de 10 m...

GÉOMORPHOLOGIE RÉGIONALE
L'estuaire du Saint-Laurent est un vaste encaissement occupé par une masse d'eau salée soumise à l'influence...

REMERCIEMENTS
Nous remercions les officiers et techniciens du NGCC Frederick G. Crowl ainsi que le personnel du Service hydrographique...

DESCRPTIVE NOTES
INTRODUCTION
The Pointe-des-Monts map is part of a 12 map series for the St. Lawrence River estuary that form a complete...

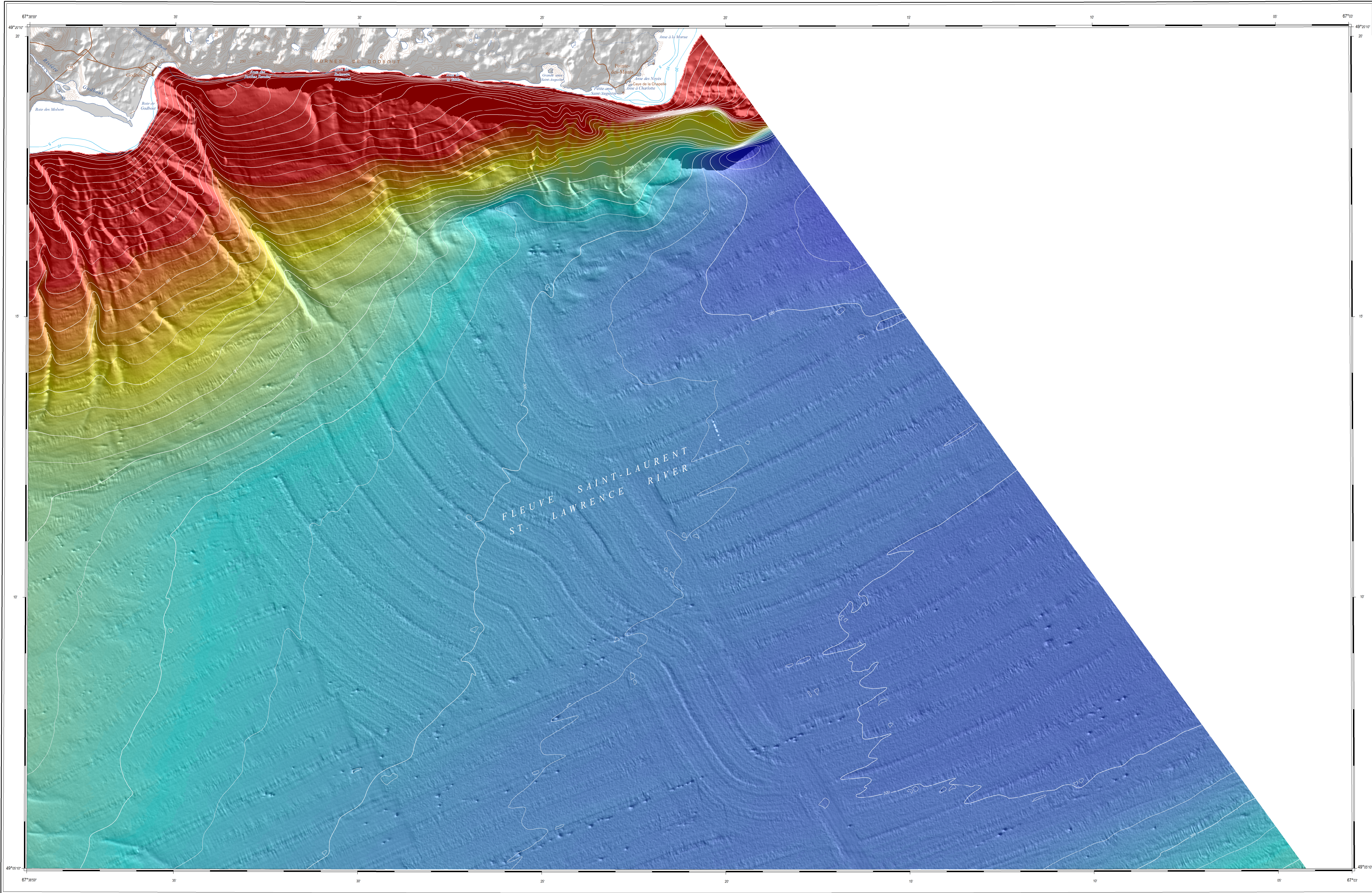
MULTIBEAM-BATHYMETRY DATA COLLECTION
Multibeam bathymetry data were collected in 2006 and 2007 by the Canadian Hydrographic Service...

MULTIBEAM-BATHYMETRY DATA DISPLAY
Multibeam bathymetry data shown on this map have been gridded at 10 m horizontal resolution. The gridded...

REGIONAL GEOMORPHOLOGY
The St. Lawrence River estuary is a funnel-shaped body of tide-influenced salt water that increases significantly...

ACKNOWLEDGMENTS
The authors thank the officers and crew of the CGCS Frederick G. Crowl as well as the personnel of the Canadian Hydrographic Service...

RÉFÉRENCES/RÉFÉRENCES
Bédard, A., 2008. Exploration 2007 du NGCC Matthew J. Lovel géologique régional, estuaire du Saint-Laurent...



NOTES À PROPOS DE LA CARTE, POINTE-DES-MONTS

La carte de Pointe-des-Monts couvre une partie du chenal Laurentien et de la marge nord-ouest de celui-ci. Dans la partie nord de la zone d'étude, le chenal Laurentien possède une largeur d'environ 30 km et...

Des dépressions morphologiques en forme de cratère (podmarks) constituent les éléments morphologiques prédominants sur le plancher du chenal Laurentien. Les podmarks possèdent généralement un diamètre inférieur à 300 m et un profondeur moindre de 5 m en apparence comme...

La partie occidentale de la carte, des lacs correspond à la partie la plus distale du chenal de détection sous-marin associée à la rivière Manicouagan possédant une signature morphologique...

MAP NOTES, POINTE-DES-MONTS

The Pointe-des-Monts map covers part of the Laurentian Channel and its northern margin.

In the northern part of the studied area, the Laurentian Channel is around 30 km wide and lies at depths between 240 m and 330 m. Recent sedimentation on the Laurentian Channel seafloor...

Crater-like depressions (podmarks) are the main morphological features on the Laurentian Channel seafloor. Podmarks are generally less than 300 m in diameter and 5 m in deep and occur as individual features, coalescing features or as linearly distributed features. The northern segment of the east-northeast-sloping podmark train, around 10 km long, is located in the southern part of the map. Within this area, a complete transition from podmarks with a flat morphology to podmarks with a steep morphology is observed (Pinet et al., 2008, 2010).

A major east-sloping escarpment marks the northern part of the map area. In detail, the escarpment consists of several well-defined steps that correspond to the Laurentian Channel seafloor. The Laurentian Channel seafloor shows the base of the escarpment to the Laurentian Channel. The average slope varies between approximately 1° to the west and 5° to the east.

Channels located in the northern part of the map area are easily identified as morphological features associated with submarine fans (Fig. 2). It indicates that they were efficient transport conduits for high intensity sediment-laden turbidity currents. As a hypothesis, channels may be associated with high intensity sediment-laden turbidity currents that correspond to the distal part of the submarine fan of the Wisconsinan in sheet, near the east-sloping escarpment.

In the southwestern part of the map area, lakes corresponding to the distal part of the submarine fan associated with the Manicouagan River form subtle geomorphological features that extend westward in the Pointe-à-la-Croix (Map 2165A) and Pointe-Manicouagan (Map 2167A) shaded relief maps.

Figure 1. Géologie des sédiments superficiels. Pour une version détaillée, voir Pinet et al. (2011).

Figure 1. Geology of surficial sediments. For a detailed version, see Pinet et al. (2011).

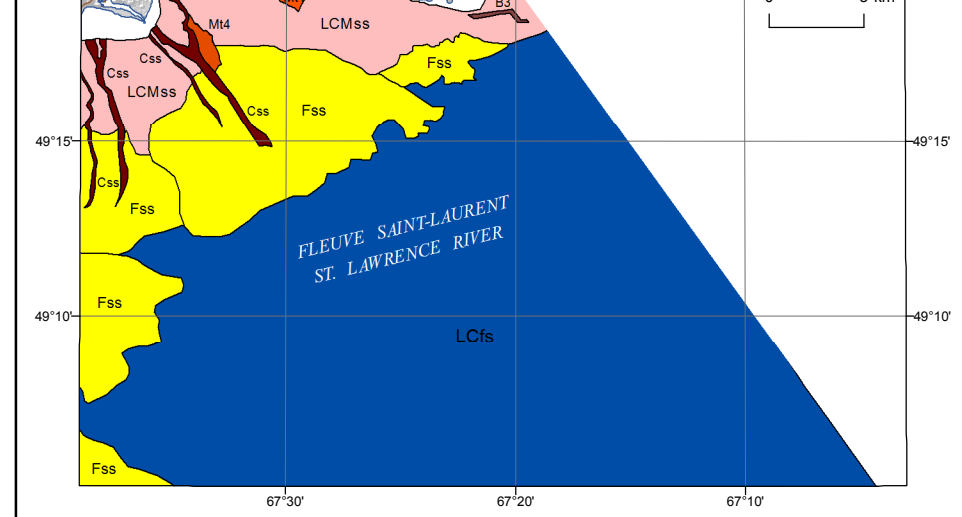


Figure 1. Géologie des sédiments superficiels. Pour une version détaillée, voir Pinet et al. (2011).

Figure 1. Geology of surficial sediments. For a detailed version, see Pinet et al. (2011).

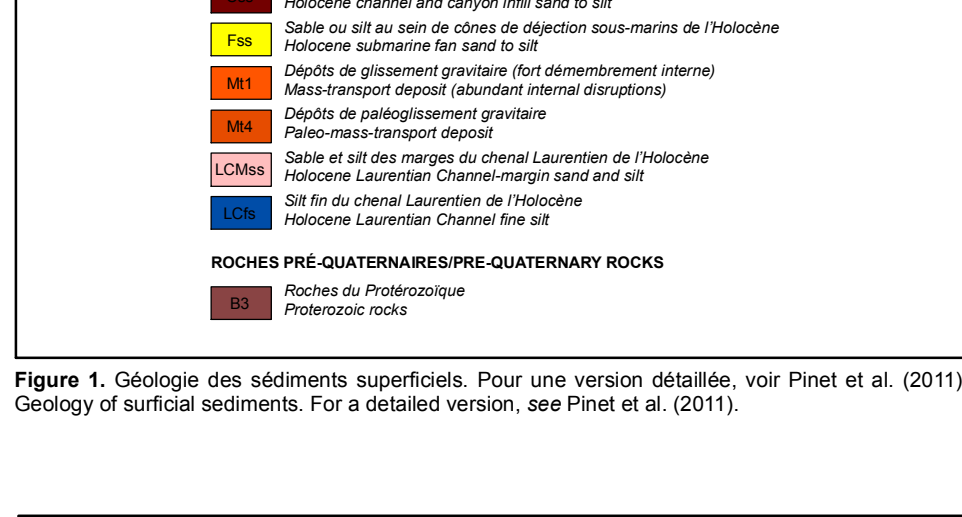


Figure 2. Vue en perspective (vue du nord) de l'escarpement d'orientation est-ouest formant la bordure nord de la zone d'étude. Les lacs situés au nord de Pointe-des-Monts, Québec, sont des lacs de détection sous-marins positionnés formés d'un déversement glaciaire. Perspective view toward the north of the east-sloping escarpment that forms the northern boundary of the St. Lawrence River estuary in the Pointe-des-Monts area and of channels and submarine fans possibly formed during the last deglaciation.

Figure 2. View in perspective (view from north) of the escarpment of orientation east-west forming the northern boundary of the study area. Lakes situated north of Pointe-des-Monts, Québec, are submarine detection lakes formed of a glacial outburst. Perspective view toward the north of the east-sloping escarpment that forms the northern boundary of the St. Lawrence River estuary in the Pointe-des-Monts area and of channels and submarine fans possibly formed during the last deglaciation.

CARTE/MAP 2170A

RELIEF OMBRÉ DU FOND MARIN/SHADED SEAFLOOR RELIEF

POINTE-DES-MONTS

QUEBEC/QUEBEC

Échelle 1:50 000/Scale 1:50 000

Unités: 1 0 1 2 3 4 Kilomètres / Units: 0 1 2 3 4 Kilometers

Projection Transverse universelle de Mercator / Système géodésique mondial (WGS 1984)

© La MapInfo et le Relief du fond de Canada 2011. Ce relief ne doit pas être utilisé sans le feu de navigation.

Détails sur l'acquisition de bathymétrie multifaisceaux sont disponibles chez Hayward et al. (2007) et Bédard et al. (2007)

Digital cartography by R. Bovin and N. Côté, Data Dissemination Division (DDD)

Authors: N. Pinet, A. Bédard, V. Braké, M. Duchesne, R. Côté, et S. Paquet

This map was produced by Natural Resource Canada in co-operation with Fisheries and Oceans Canada.

Multibeam bathymetry data collected by Canadian Hydrographic Service and Geographical Survey of Canada, 1997-2007

Digital bathymetric contours in metres supplied by Canadian Hydrographic Service and Geographical Survey of Canada (Quebec)

Magnetic declination 2011, 19°11'W, decreasing 9.3° annually

Elevations above mean sea level are expressed in metres (22 684) or feet (22 684)

Depth in metres below sea level

Any revisions or additional information known to the user would be welcomed by the Geographical Survey of Canada.

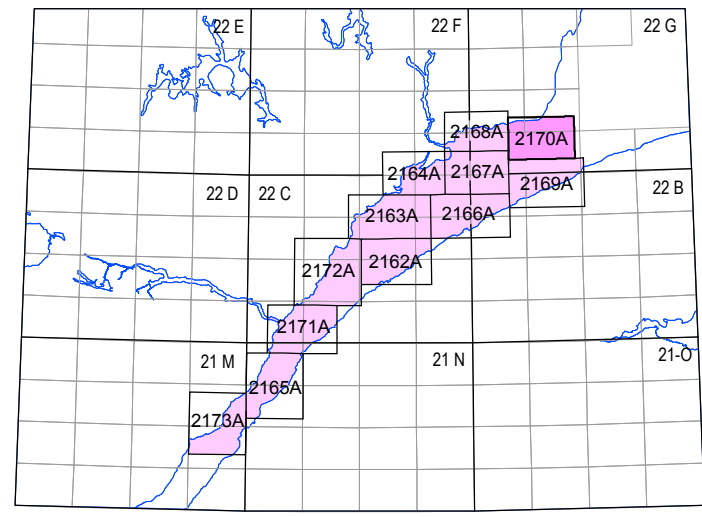
Digital base map (land area) from data compiled by Geomatics Canada, modified by DDD

Digital bathymetric contours in metres supplied by Canadian Hydrographic Service and Geographical Survey of Canada (Quebec)

Magnetic declination 2011, 19°11'W, decreasing 9.3° annually

Elevations above mean sea level are expressed in metres (22 684) or feet (22 684)

Depth in metres below sea level



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Notation bibliographique conseillée:

Pinet, N., Bédard, A., Braké, V., Duchesne, M., Côté, R., et Paquet, S., 2011. Shaded seafloor relief, Pointe-des-Monts, Québec/Relief ombré du fond marin, Pointe-des-Monts, Québec. Geological Survey of Canada, Map 2170A, échelle 1:50 000. doi:10.4095/282926

Recommended citation: Pinet, N., Bédard, A., Braké, V., Duchesne, M., Côté, R., et Paquet, S., 2011. Shaded seafloor relief, Pointe-des-Monts, Québec/Relief ombré du fond marin, Pointe-des-Monts, Québec. Geological Survey of Canada, Map 2170A, scale 1:50 000. doi:10.4095/282926