

Musquash Estuary Marine Protected Area

Gulf of Maine Council
27 May 2026



Credit: Erica Stuart

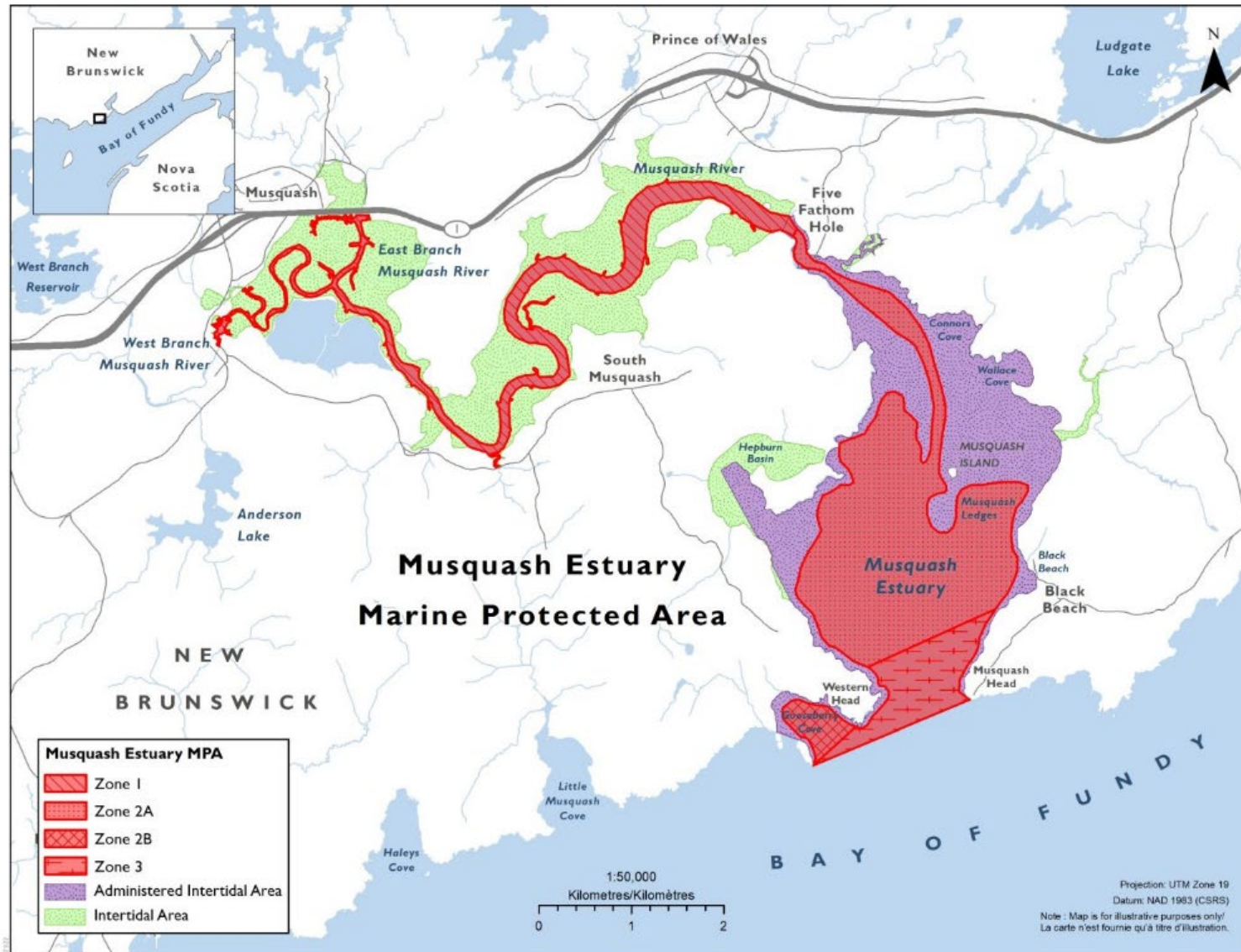
Musquash Estuary MPA



Credit: ACAP-SJ

- Largest ecologically intact estuary in the Bay of Fundy
- >10 distinct habitat types
- Strong local support for conservation coalesced in 1998, incl. negotiated support by fishing industry

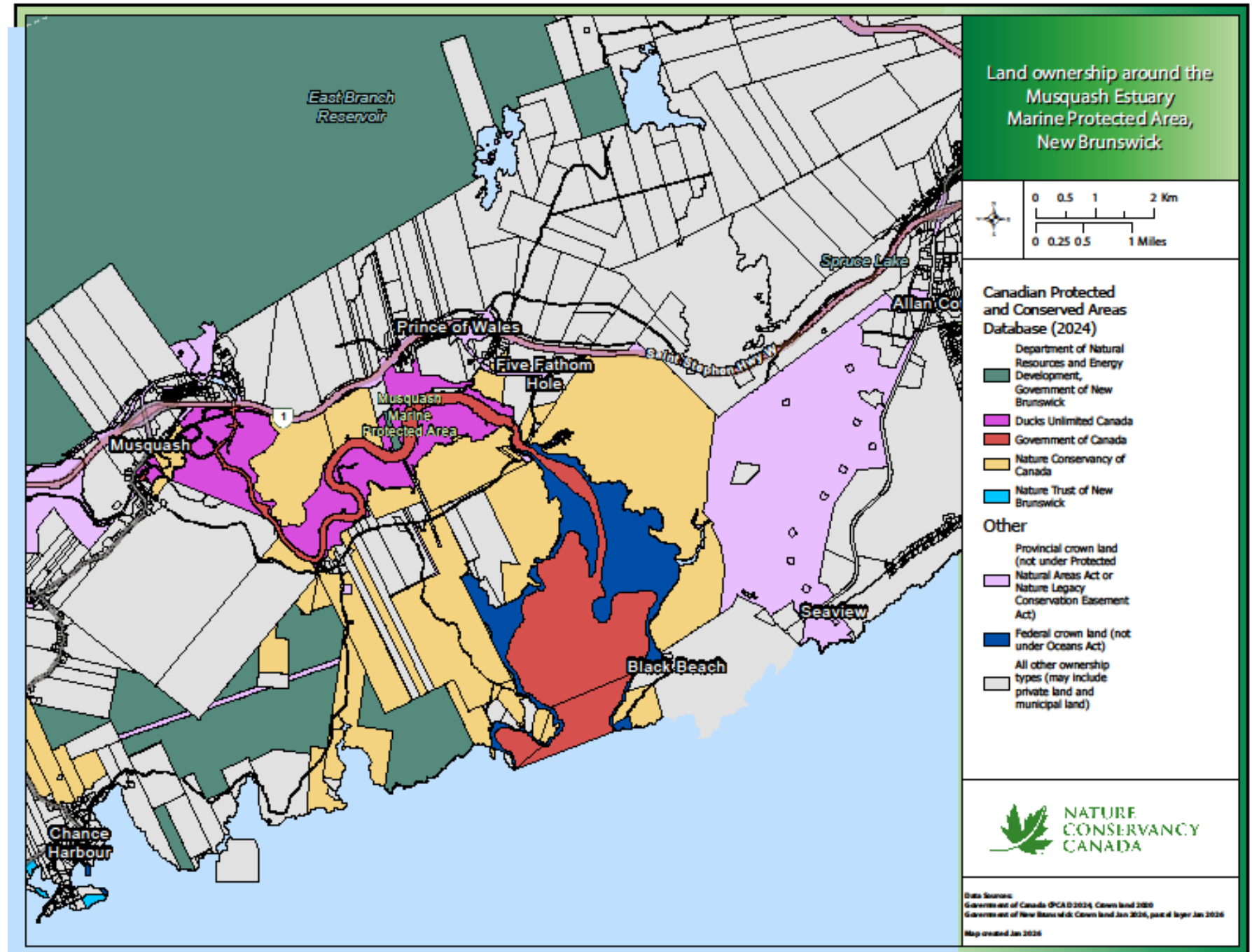
Musquash Estuary MPA



- Musquash Estuary MPA established 2006
- Four Zones and Administered Intertidal Area
- **Conservation mosaic:** bordering terrestrial conservation areas

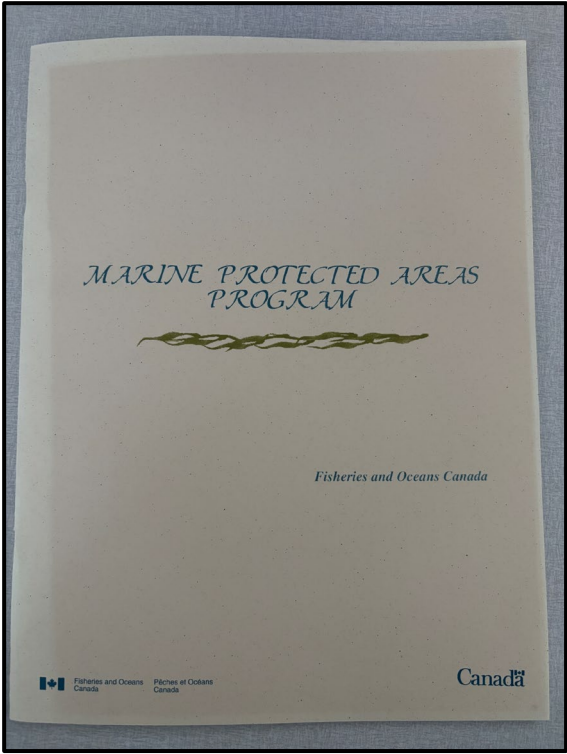
Conservation Mosaic

>80% of surrounding land held in terrestrial conservation areas



Oceans Act and MPA Policy

1998





CANADA

CONSOLIDATION

Oceans Act

S.C. 1996, c. 31

CODIFICATION

Loi sur les océans

L.C. 1996, ch. 31

1996



CANADA

CONSOLIDATION

Musquash Estuary Marine Protected Area Regulations

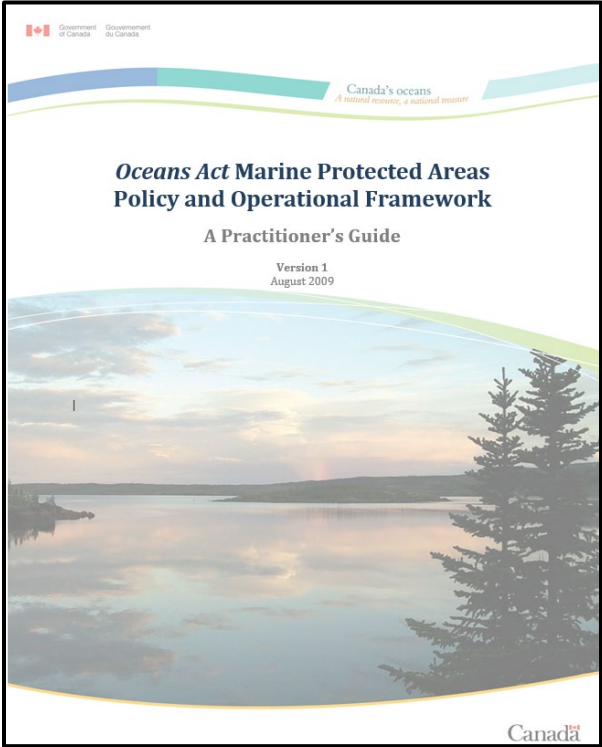
SOR/2006-364

CODIFICATION

Règlement sur la zone de protection marine de l'estuaire Musquash

DORS/2006-364

2009

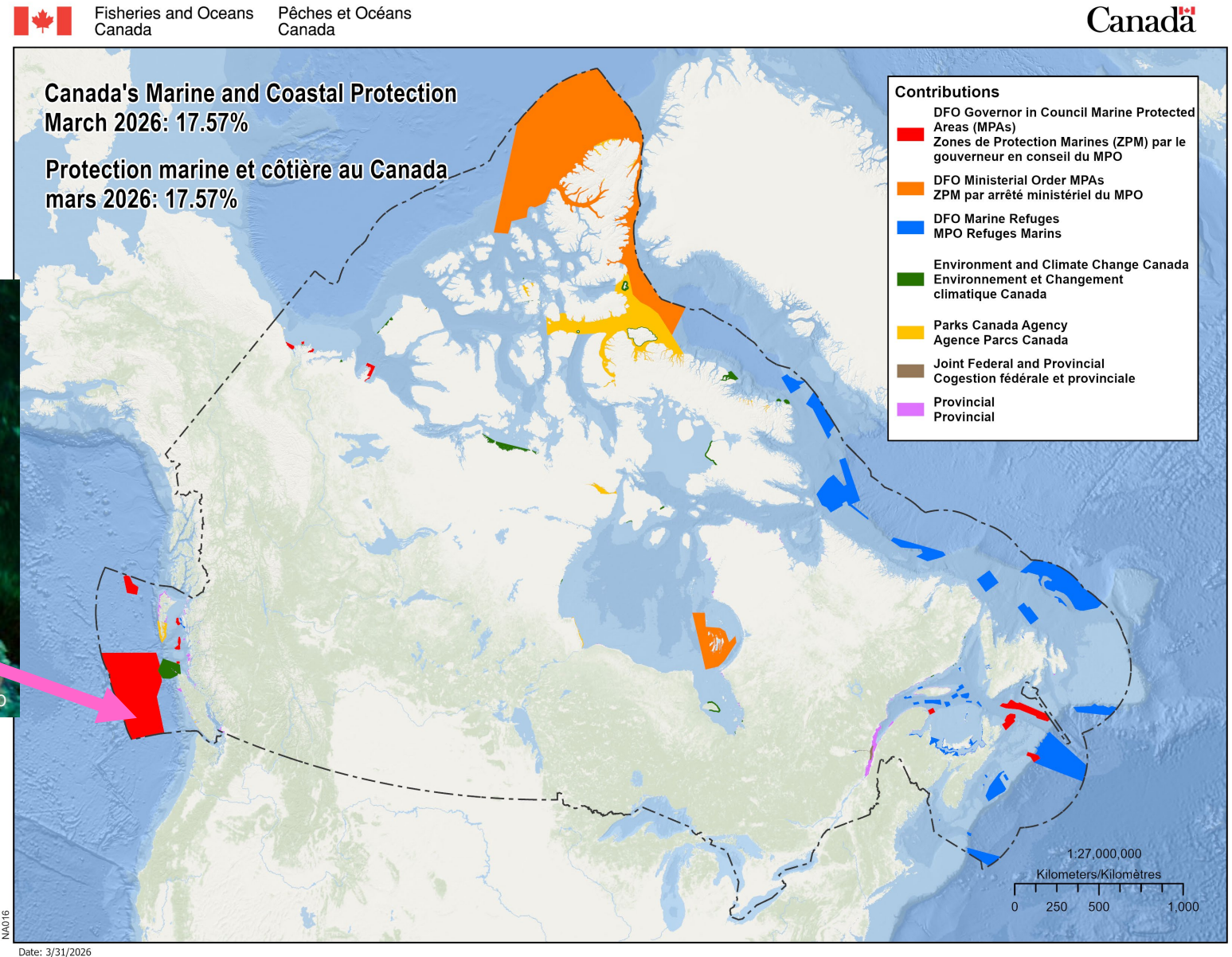


MPAs in Canada



Credit: DFO

2003



Canada's Marine and Coastal Protection
March 2026: 17.57%

Protection marine et côtière au Canada
mars 2026: 17.57%

Contributions

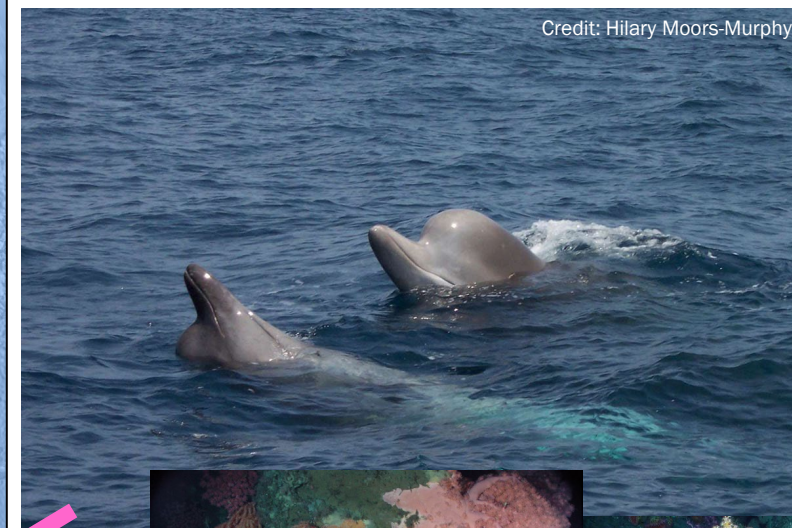
-  DFO Governor in Council Marine Protected Areas (MPAs)
Zones de Protection Marines (ZPM) par le gouverneur en conseil du MPO
-  DFO Ministerial Order MPAs
ZPM par arrêté ministériel du MPO
-  DFO Marine Refuges
MPO Refuges Marins
-  Environment and Climate Change Canada
Environnement et Changement climatique Canada
-  Parks Canada Agency
Agence Parcs Canada
-  Joint Federal and Provincial
Cogestion fédérale et provinciale
-  Provincial
Provincial

1:27,000,000
Kilometers/Kilomètres
0 250 500 1,000

NA016

Date: 3/31/2026

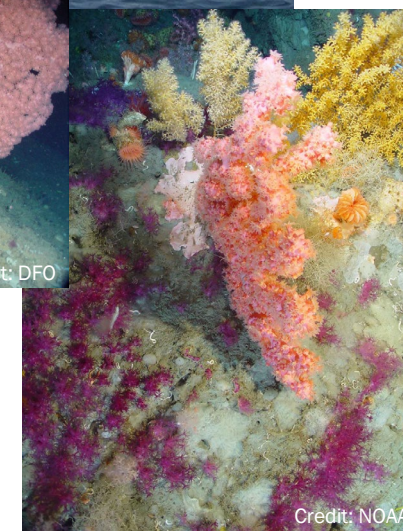
MPAs in Canada



Credit: Hilary Moors-Murphy



Credit: DFO



Credit: NOAA

2004



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Canada

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MPAs in Canada



Credit: Todd Fowler

2005

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2005



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MPAs in Canada

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Credit: Souris and Area Branch of PEI Wildlife Federation



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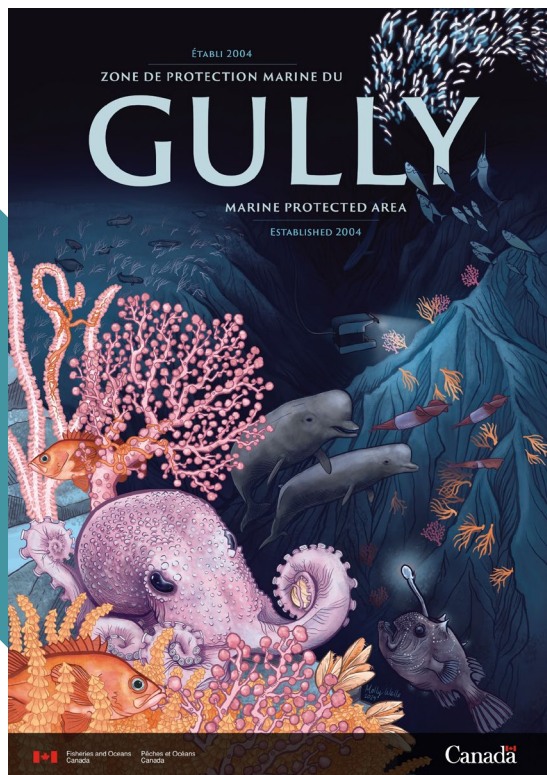
Kilometers/Kilomètres
0 250 500 1,000

MPAs in Canada



Credit: DFO IMRP

2006



Musquash Estuary MPA Advisory Committee

TERMS OF REFERENCE MUSQUASH MARINE PROTECTED AREA ADVISORY COMMITTEE Updated January 2014

INTRODUCTION & BACKGROUND

Musquash coastal area is unique among estuaries in the Bay of Fundy, given its large size relatively undisturbed condition. Studies have identified it as one of the last ecologically intact estuaries in a region where approximately 85% of wetland areas have been modified by human activities. It remains an area of high biological productivity with a variety of coastal habitats, and is an outstanding example of a fully functioning estuary and salt marsh complex. The MPA must be consistent with the Regulations and the conservation objectives established in the Management Plan.

February 8, 2000, DFO announced Musquash as a Marine Protected Area (MPA) Area of Interest under Canada's *Oceans Act*. Since 1998, the Musquash MPA Planning Group provided a means of gathering community viewpoints and proposals for the future management of Musquash Estuary. The *Musquash Estuary Advisory Committee*, consisting of federal and provincial agencies, First Nations organizations, industry, environmental organizations, and community interests, was established in 2002 to assist Fisheries and Oceans Canada (DFO) with the MPA establishment process. DFO sought advice and direction from that interim body during the assessment and design stages. The group also functioned as the primary forum for consultation on the regulatory proposal. After designation, the interim committee continued to advise DFO on implementation and operational procedures. These Terms of Reference were developed in collaboration with the interim committee to formally establish a permanent Musquash MPA Advisory Committee.

COMMITTEE NAME

Official title: Musquash Marine Protected Area Advisory Committee
Working name: Musquash Advisory Committee
Abbreviation: MAC

For the purposes of these Terms of Reference, the Musquash MPA Advisory Committee may be referred to simply as the "Committee".

ESTABLISHMENT & LEGAL AUTHORITY

Section 32 of the *Oceans Act* provides the Minister of Fisheries and Oceans with the authority to establish, designate or recognize advisory bodies. The Musquash Advisory Committee is established under this section of the *Act* to advise DFO on the protection and management of the Musquash MPA. The region of interest to the Committee corresponds with the geographic limits described in the Musquash Estuary Marine Protected Area Regulations (SOR 2006-354). The Committee does not have legal or delegated powers nor does it replace the regulatory mandate or decision making authority of existing government bodies. Ultimate responsibility for the MPA lies with the Minister of Fisheries and Oceans as mandated by legislation.



Credit: DFO

- Government of New Brunswick, Department of Agriculture, Aquaculture, and Fisheries
- Government of New Brunswick, Department of Natural Resources and Energy Development
- Wolastoqey Nation in New Brunswick
- Conservation Council of New Brunswick
- Eastern Charlotte Waterways
- Nature Conservancy of Canada
- Explore Lorneville Inc.
- Friends of Musquash
- Mount Allison University
- Municipality of Fundy Shores

Musquash Estuary MPA Advisory Committee



Credit: DFO

- Atlantic Coastal Action Program (ACAP) Saint John
- Ducks Unlimited Canada
- Maliseet Nation Conservation Council
- Canadian Wildlife Service, Environment and Climate Change Canada
- Friends of Musquash
- DFO Science
- DFO Conservation and Protection
- Coastal Link Trail
- Canadian Parks and Wilderness Society New Brunswick Chapter
- University of New Brunswick
- Fundy North Fishermen's Association

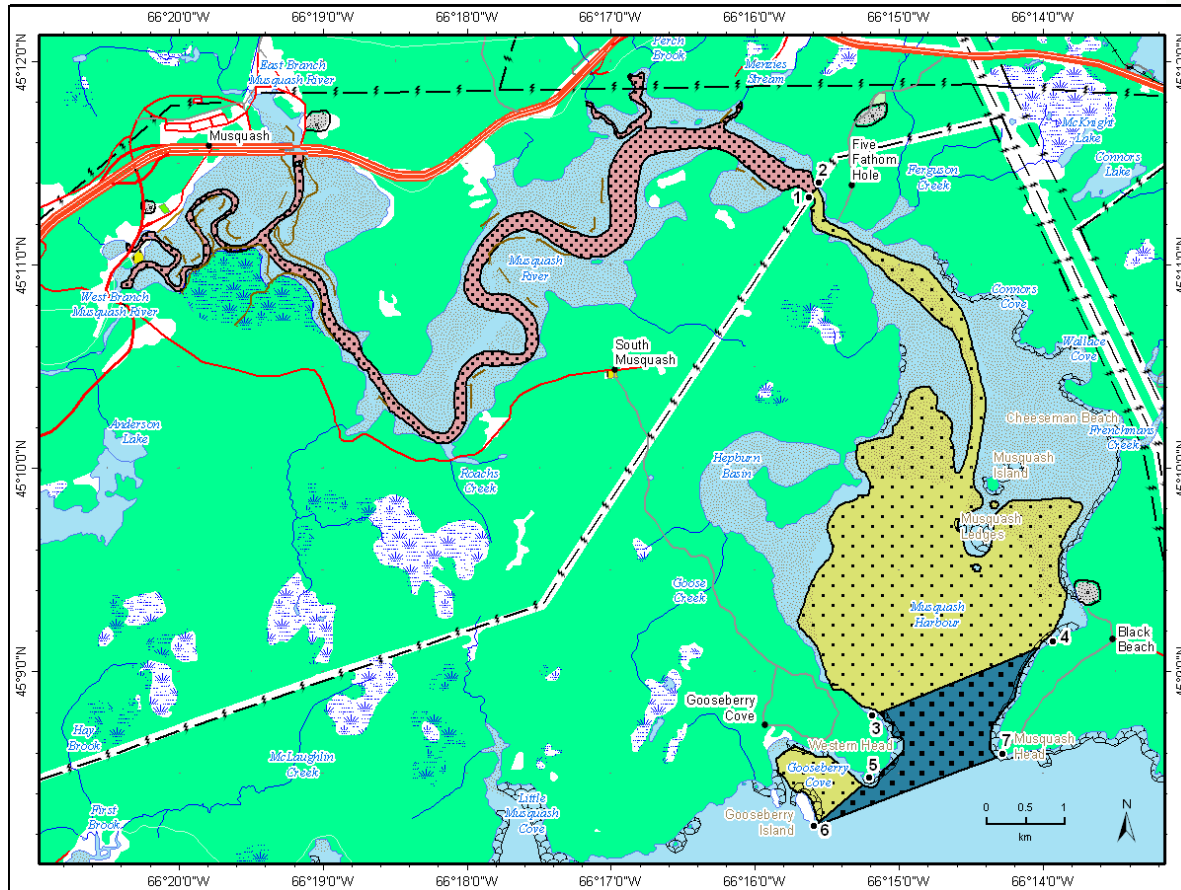
Collapsed culvert restoration



Credit: ECW

- Collapsed culvert identified at MAC meeting
- Options analysis report commissioned by DFO and completed by Eastern Charlotte Waterways
- Validation with Advisory Committee
- Property owner identified

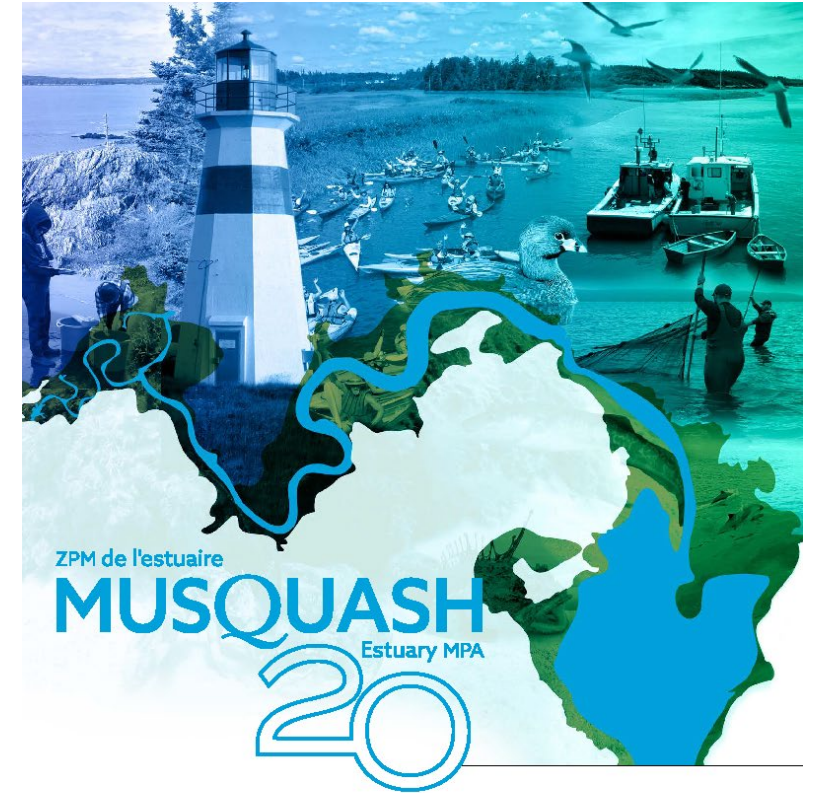
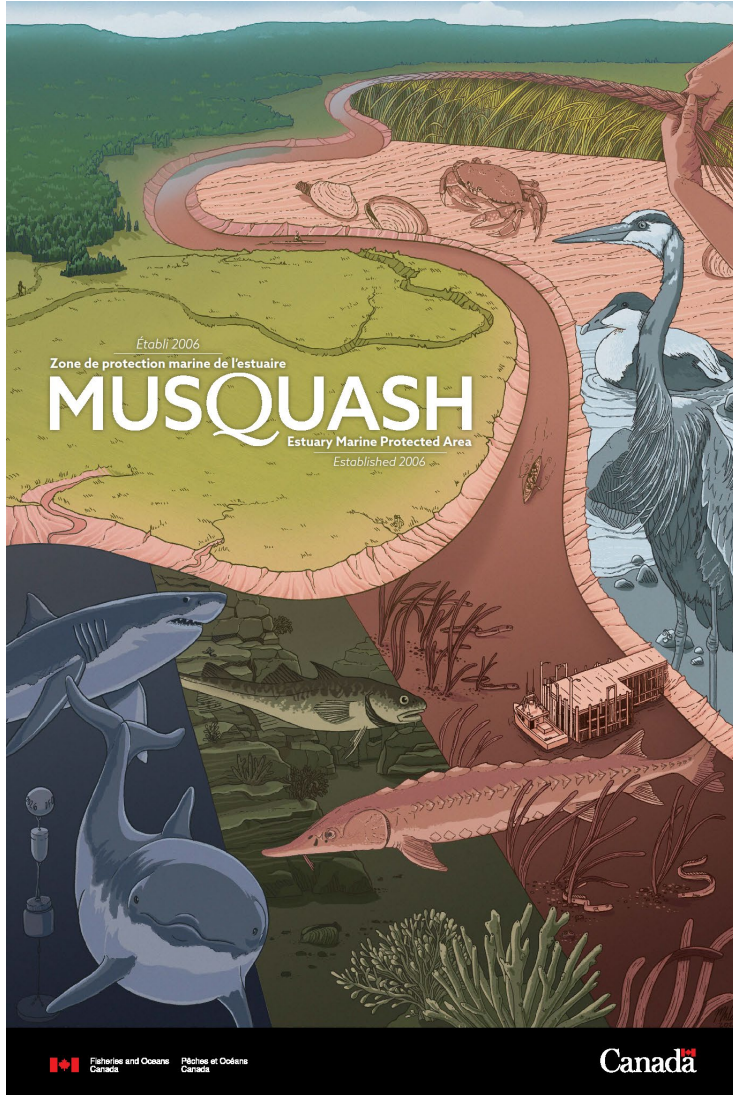
20th anniversary



 CANADA	
CONSOLIDATION	CODIFICATION
Musquash Estuary Marine Protected Area Regulations	Règlement sur la zone de protection marine de l'estuaire Musquash
SOR/2006-354	DORS/2006-354

2006

20th anniversary



Musquash Estuary Marine Protected Area (MPA) turns 20 in December 2026 and the tides of celebration will roll in all year long! Scan the QR code and check back often for new events as we celebrate the MPA throughout 2026.



La zone de protection marine (ZPM) de l'estuaire Musquash fêtera ses 20 ans en décembre 2026, et les marées de célébration déferleront tout au long de l'année! Scannez le code QR et revenez souvent pour découvrir de nouveaux événements tout au long de 2026.



20th anniversary



Black Beach Education Day – Musquash MPA 20th Anniversary Kick-off

Ocean Week Fundy

June 13th 1:00 PM – 5:00 PM
SAINT JOHN, NEW BRUNSWICK

The Musquash MPA is turning 20 this year and you are invited to join the celebration! Join us at Black Beach on Saturday, June 13th from 1-5, for a full day of family friendly activities. Featured activities include:

- **1:00 – 5:00 pm** – Activity booths and games hosted by local nature clubs on the beach.



Credit: Aiden Isbill



Credit: Bryden Bone

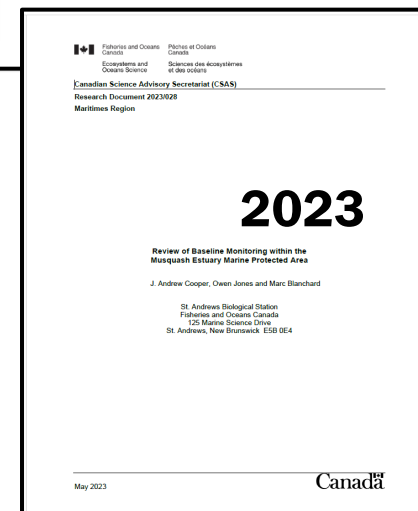
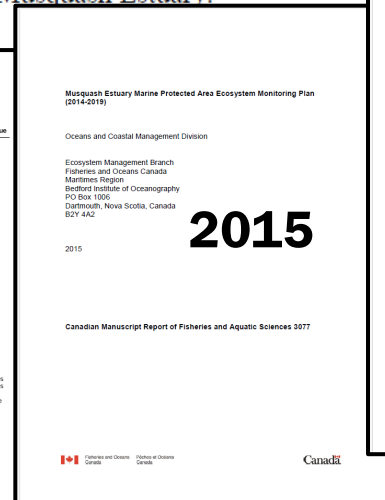
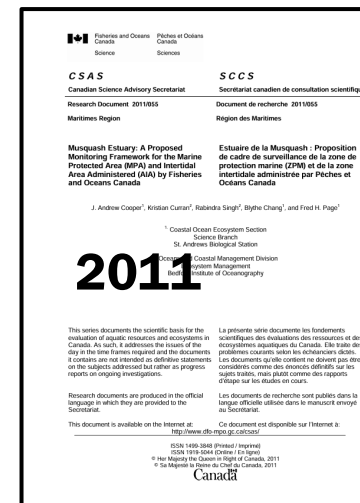
Monitoring plan



Figure 2: Map showing burial grounds



Fig. 2.5. Distribution of mudflat and cobble-mud ecotypes in Musquash Estuary.

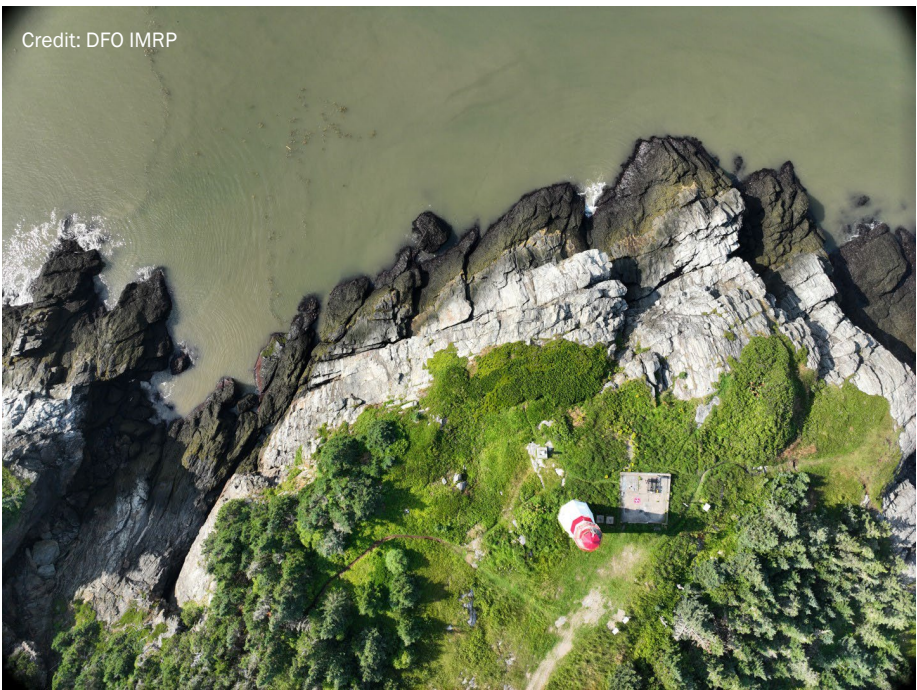


Activity plan process



- Enshrined in the *Musquash Estuary MPA Regulations*
- Requirement to submit an activity plan for any **scientific, educational, archeological, commercial tourism, or habitat restoration** activity within the MPA
- Must be approved by the Minister if it is determined that the activity is not likely to damage or destroy the habitat of a living marine organism, while considering cumulative effects

Credit: DFO IMRP



Credit: Kaleb Zelman

Research and collaboration



Credit: Nick Jeffery

What do we know after 20 years?

- Coastal MPAs need friends
- Smaller site $\neq$ less complex or less impactful
- Musquash Estuary MPA exists within larger conservation network planning context; it can serve as a model for successful collaboration on coastal conservation measures.



Credit: Ryan Stanley

An aerial photograph of a wide, winding river with a muddy brown color, flowing through a vast, green landscape. The river meanders through the center of the frame, surrounded by lush green vegetation and marshy areas. In the background, a dense forest of tall trees stretches across the horizon, and a body of water is visible in the distance under a cloudy sky. The text 'Thank you' is overlaid in the center-right of the image, with a green horizontal line underneath it.

Thank you