



Government
of Canada

Gouvernement
du Canada

Canada's Fisheries Management Measures: North Atlantic right whale (NARW) and Coastal and Marine Protected Areas

Fisheries and Oceans Canada

September 2022





Overview

- Sustainable Lobster Fisheries
- Right Whale Measures - Overview
 - Right Whale Detection in Canada
 - Adaptive Closure Protocols
 - Monitoring and Surveillance
 - Legislative and Regulatory Tools
 - Whalesafe Gear and Other Solutions
 - Marine Mammal Response Program
 - Engagement and Collaboration
- Marine and Coastal Protection in Canada





Sustainable Lobster Fishery

- The Canadian lobster fishery is divided into 41 lobster fishing areas (LFAs), and is most active in the Gulf of Maine, Bay of Fundy, Southern Gulf of St. Lawrence and coastal Nova Scotia.
- To support sustainable fisheries, the Government of Canada works closely with the lobster fishing industry to develop and update Integrated Fisheries Management Plans which reflect the management measures, and practices in place for various fisheries. These measures include those for the prevention of whale entanglement in fishing gear.
- 95% of the inshore lobster fisheries in Canada are certified by the Marine Stewardship Council
- The Government of Canada has worked closely with Indigenous and non-Indigenous harvesters in recent decades to develop an effective management regime that meets the unique needs of each lobster fishery and ensures the long-term sustainability of the resource.



NARW Overview

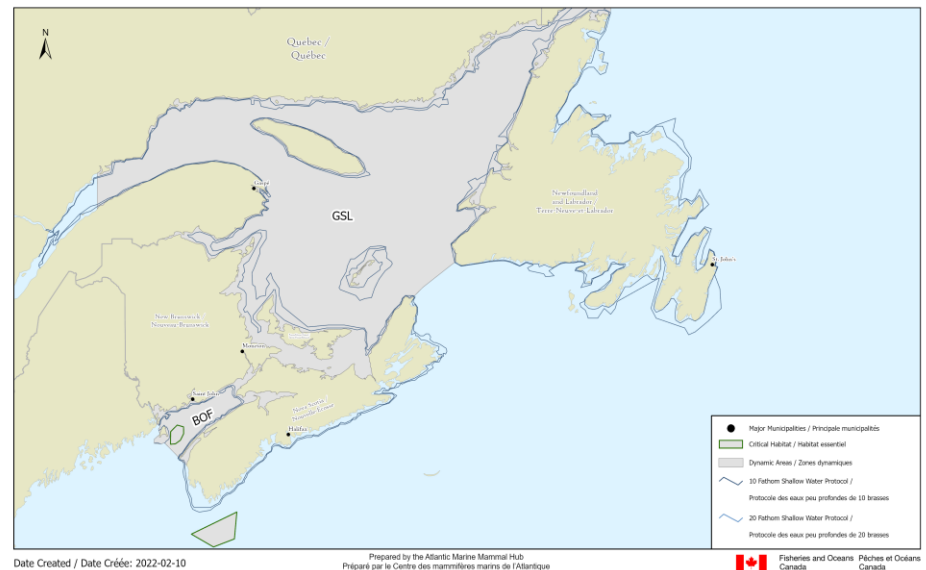
- The North Atlantic right whale (NARW) is listed as endangered under the Canadian federal *Species at Risk Act* (SARA).
 - SARA legally compels the government of Canada to take action to recover species.
 - Threats are primarily ship strikes and fixed gear fishing entanglements.
- Since the events in 2017, marking a significant change in the distribution of the population, Canada has implemented targeted and adaptive fisheries management measures focused on preventing fishing gear entanglement of NARW.
- Our strategy to protect right whales is supported by the \$167.4m Whale Initiative, announced in Canada's 2018 Federal Budget and is updated annually.
- There have been no reported NARW deaths in Canadian waters in 2020-22.
- **There have been no entanglements linked to Canadian snowcrab fishing gear in recent years, including since 2017 when Canada enhanced protection measures for right whales.**



Adaptive Closure Protocols

- A Dynamic Closure Protocol in the Gulf of St. Lawrence and Bay of Fundy, including the North Atlantic right whale critical habitat area in the Grand Manan and Roseway basins.
- A Season-long Closure Protocol (to November 15) in the Gulf of St. Lawrence.
- Shallow Water Protocol in waters shallower than 20 fathoms (where lobster fishing primarily occurs).
- Changes to open/close dates of fisheries to avoid whale presence.

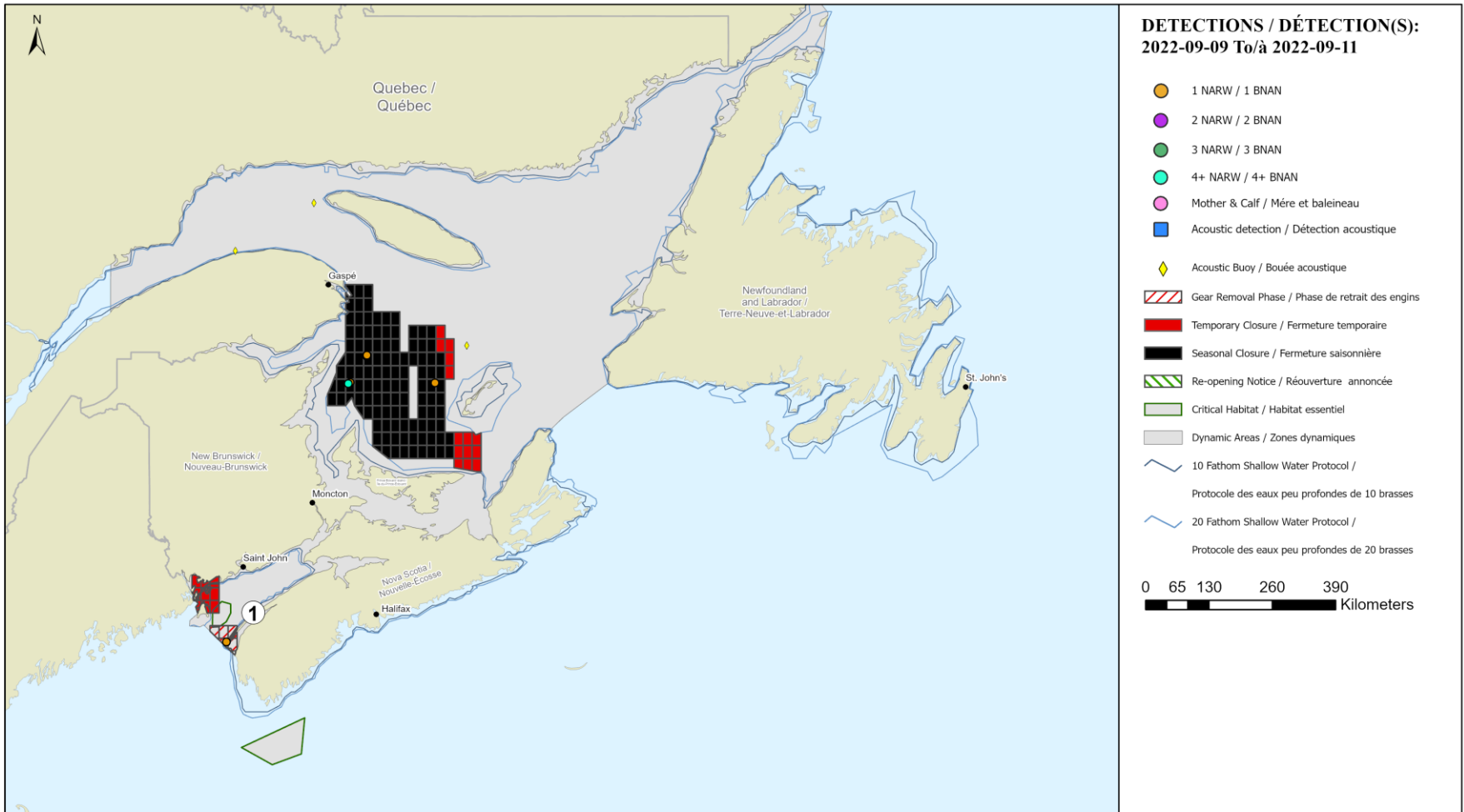
2022 NORTH ATLANTIC RIGHT WHALE MANAGEMENT MEASURES
MEASURES DE GESTION DE LA BALEINE NOIRSE DE L'ATLANTIQUE NORD 2022





Map of Closures, September 12, 2022

2022 NORTH ATLANTIC RIGHT WHALE CLOSURES FERMETURES POUR LA BALEINE NOIRE DE L'ATLANTIQUE NORD 2022





Closure and Sighting Stats, September 12, 2022

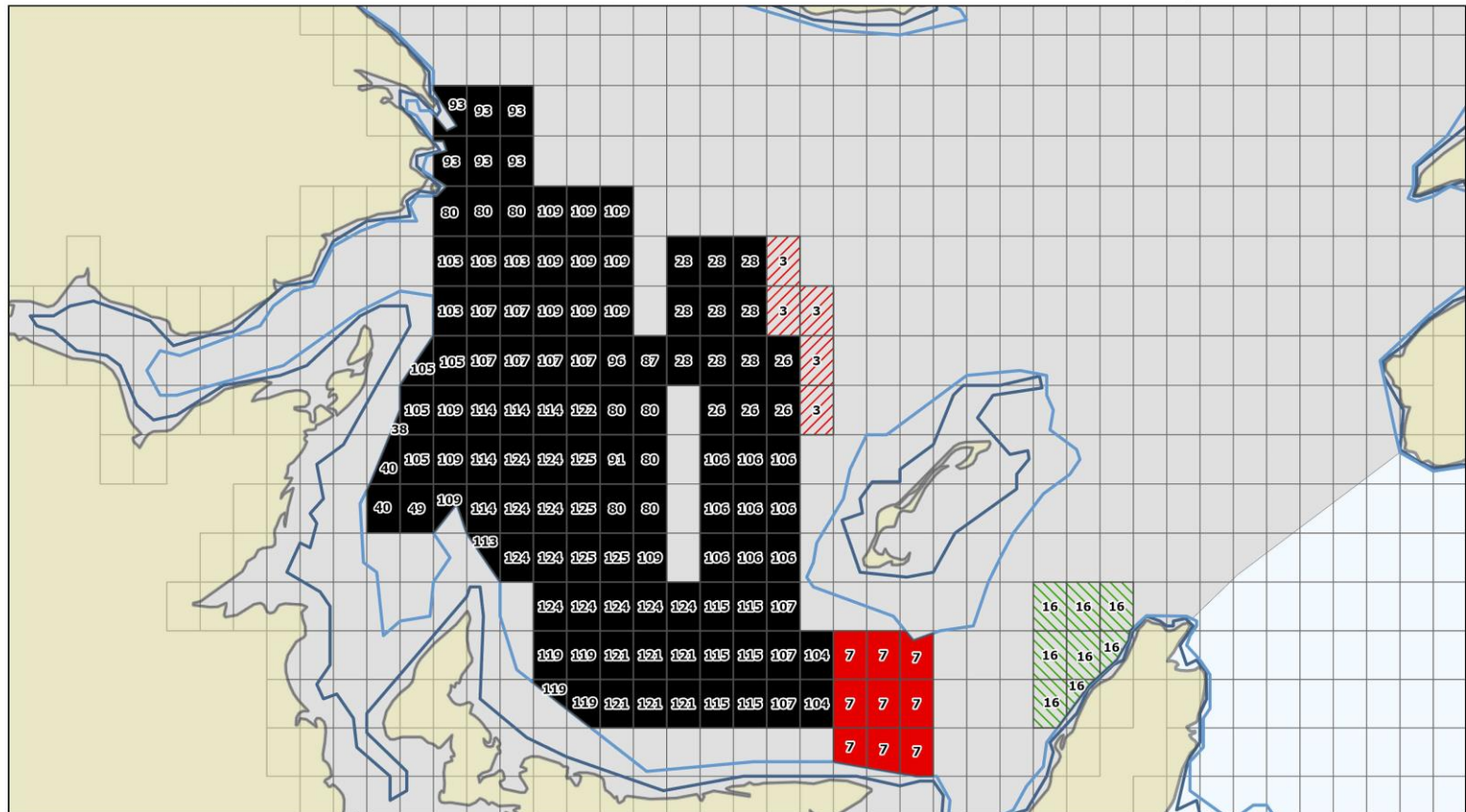
Full Grids		
	14	Quadrilatères entiers
Partial Grids		
	16	Parties de quadrilatères
Area Covered by Closure		
	5,866.15 km ²	Surface couvert par les fermetures
Seasonal Closures / Fermetures saisonnières		
Full Grids		
	102	Quadrilatères entiers
Partial Grids		
	11	Parties de quadrilatères
Area Covered by Closure		
	25,334.43 km ²	Surface couvert par les fermetures
Total Closures / Fermetures totales		
Full Grids		
	116	Quadrilatères entiers
Partial Grids		
	27	Parties de quadrilatères
Area Covered by Closure		
	31,200.58 km ²	Surface couvert par les fermetures
NARW sighted (Includes duplicates) / BNAN observes (y compris les observations double)		
Weekly reporting period (September 9-15)		
	11	Période hebdomadaire (9-15 septembre)
Total to date in 2022		
	1106	Nombre total de détections 2022



Number of Closure Days

*as of September 9, 2022

2022 NORTH ATLANTIC RIGHT WHALE CLOSURES - DAY COUNT
COMPTE DE JOURS - FERMETURES POUR LA BALEINE NOIRE DE L'ATLANTIQUE NORD 2022

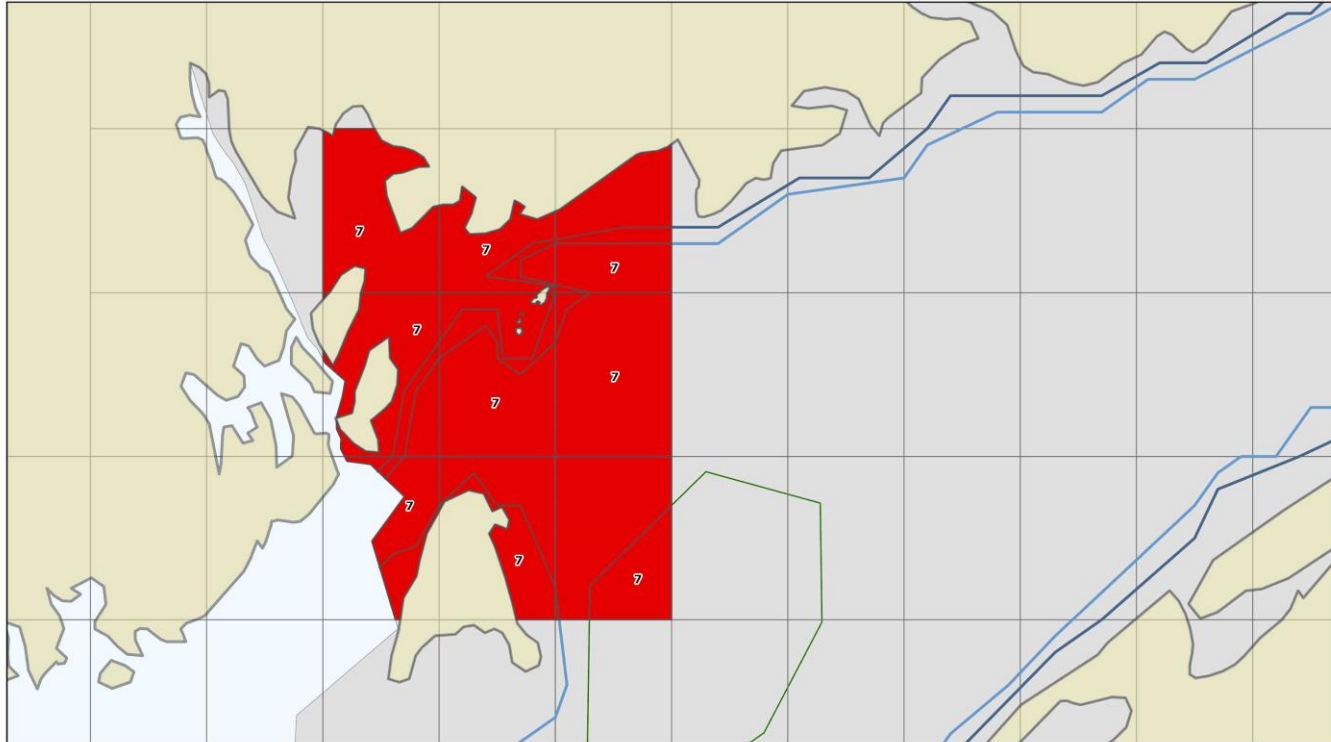




Number of Closure Days

*as of September 9, 2022

2022 NORTH ATLANTIC RIGHT WHALE CLOSURES - BAY OF FUNDY - DAY COUNT
COMTE DE JOURS - FERMETURES POUR LA BALEINE NOIRE DE L'ATLANTIQUE NORD - BAIE DE FUNDY 2022



Date created / Date créée: 2022-09-09

Prepared by the Atlantic Marine Mammal Hub
Préparé par le Centre d'expertise sur les mammifères marins de l'Atlantique



Monitoring & Real-time Detection



Three DFO Science platforms providing real-time NARW detections:

1. Targeted Aerial surveys (mid Apr-Nov)
 - *surveillance year-round for active fisheries
2. Targeted At-sea observations (early April – Nov)
 - *surveillance year-round for active fisheries
3. Acoustic detection
 - 8 Viking Buoys in GSL (May– Nov)
 - SLOCUM gliders (operated by partners)
 - sGSL (tech. issues)
 - Roseway Basin (Sept- Nov)

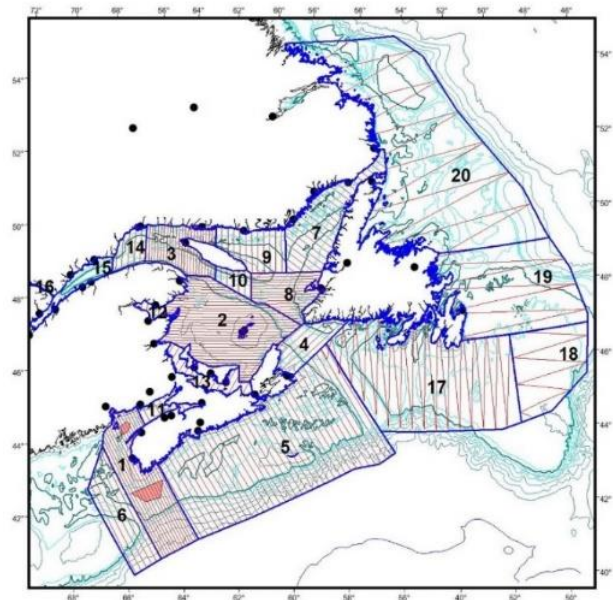
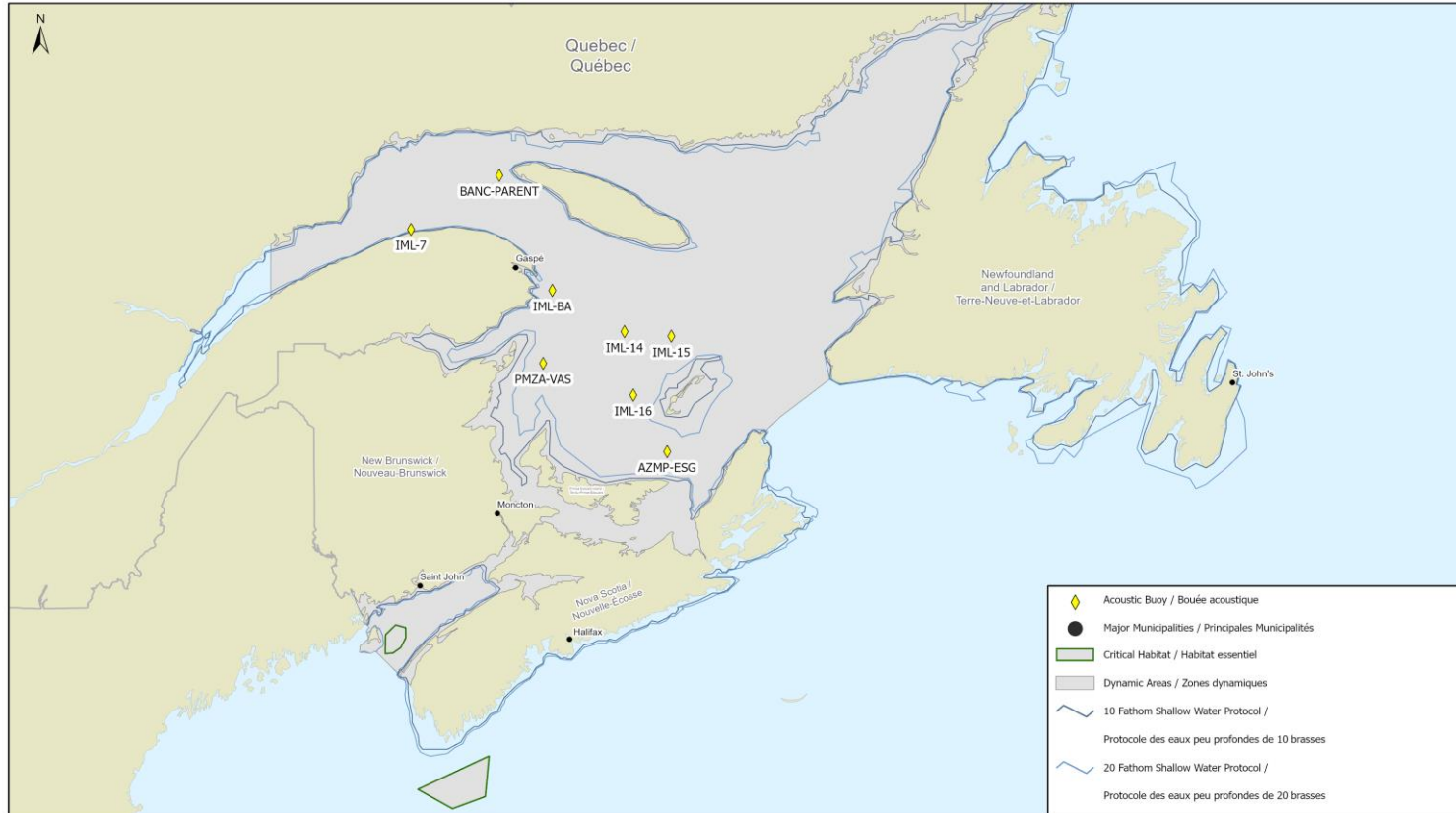


Figure provided by J.-F. Gosselin, DFO



2022 ACCOUSTIC BUOYS
2022 BOUÉES ACCOUSTIQUES



Date Created / Date Créée: 2022-08-31

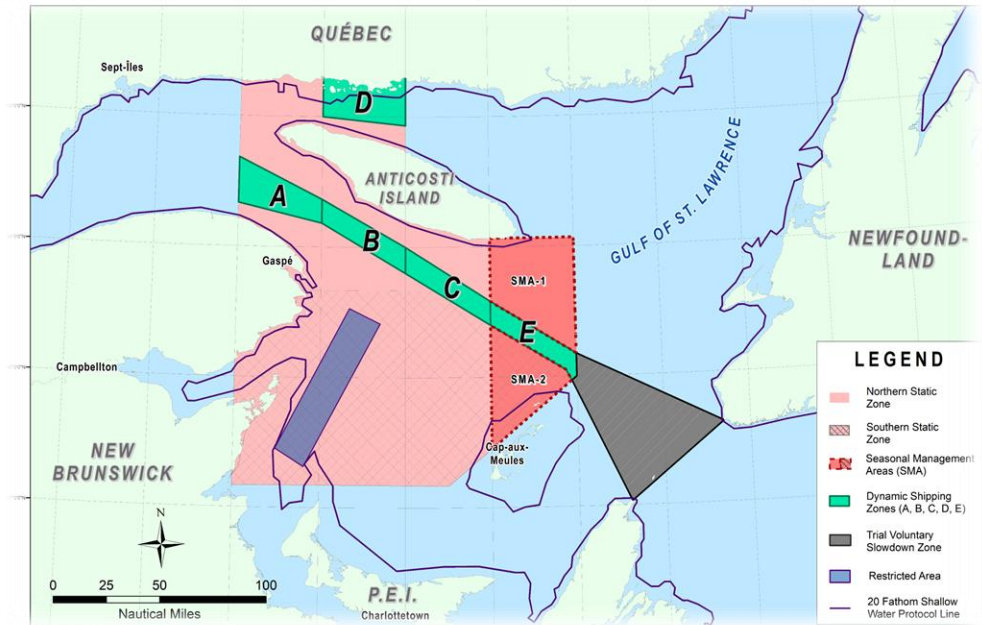
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Transport Canada's Measures

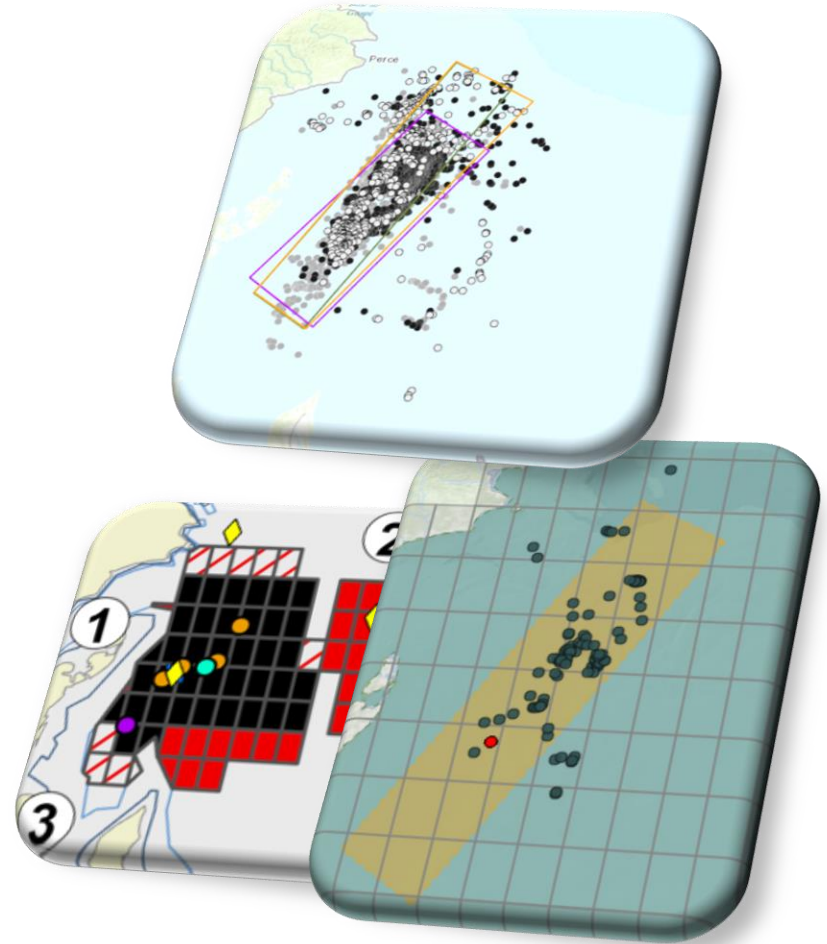
- Mandatory and voluntary speed restriction measures covering 72,000km² for vessel > 13 m
- Use of static and dynamic mandatory zones:
 - Static Zone: 10kn all season
 - Seasonal Management Area: 10kn at the beginning of the season or if NARW detected
 - Dynamic Shipping Zones (DSZ): 10kn speed restriction only when NARW detected (otherwise safe operational speed)
 - Restricted Area: To be avoided unless part of exception. Active when NARW aggregates for feeding and surface activities
- Voluntary slowdown trial (final year) in Cabot Strait in spring and fall





TC Mandatory Restricted Area

- Location/size predetermined by historical detections (4000 km²)
- Activation based on DFO's right whale fishing closure protocol
- Vessels required to avoid area, or reduce speed to 8 knots to travel through if among listed exceptions
- Lifted when dispersion of NARW out of the RA





TC Surveillance Platforms

- TC uses different platform for surveillance and monitoring of dynamic shipping zones and restricted area
 - NASP Airplanes (National Aerial Surveillance Program)
 - Gliders
 - RPAS (Remotely Piloted Aircraft System or drome)





Regulatory and Legislative Tools

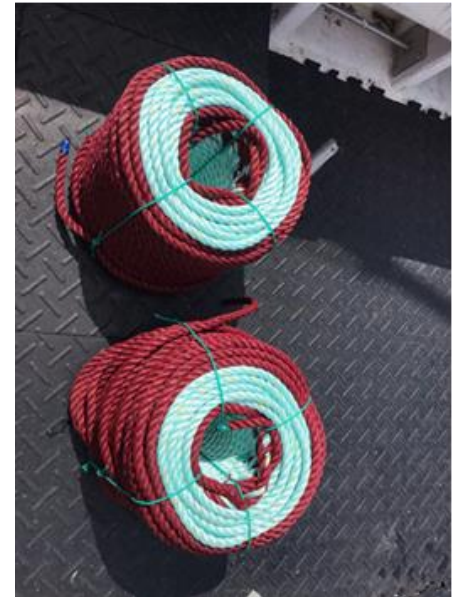
- Mandatory reporting for lost gear for all commercial fisheries since 2019.
- Mandatory reporting of interactions between vessels or fishing gear and marine mammals.
- Mandatory elimination of excess floating surface rope in all fixed gear fisheries - Conditions of Licence.
- Gear marking rules for all non-tended fixed gear fisheries in Atlantic Canada and Quebec that allows for the origin identification of lost gear.
- New provision in the *Fisheries Act* - authority to change the management of fisheries for conservation purposes on an emergency basis for 45 days.





"Whalesafe" & Other Gear Solutions

- Canada Hosted an International Gear Innovation Summit in Halifax, N.S, February 11-12, 2020 to facilitate discussion on innovative gear modifications.
- All non-tended, fixed gear fisheries in Atlantic Canada and Quebec, including crab and lobster fisheries, are required to use lower breaking strength gear by 2023.
- Whalesafe Gear Adoption Fund: \$20M fund supports whale safe gear trials and development (2021-23)





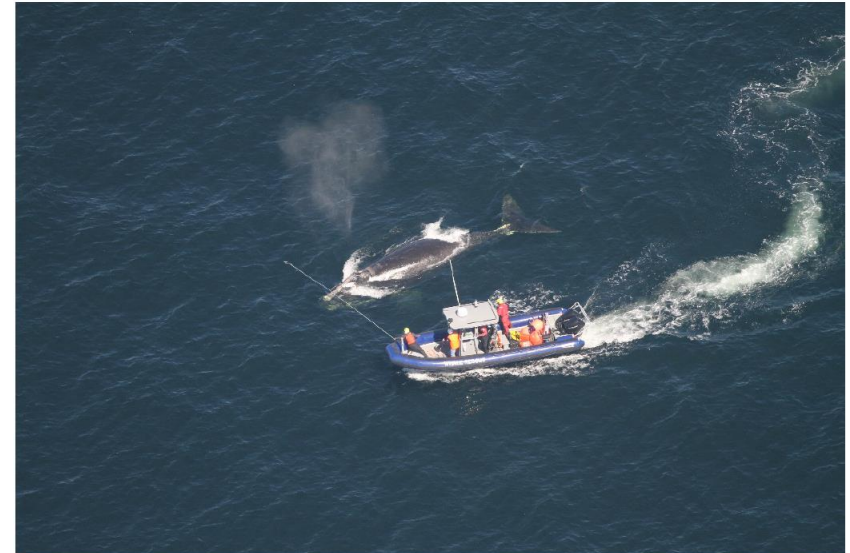
Ghost Gear Retrieval

- In January 2020, DFO launched the Ghost Gear Fund, to support third-party led projects under four pillars: ghost gear retrieval, technologies to prevent or mitigate ghost gear, responsible disposal, and international leadership.
- Recent studies indicate that ghost fishing gear may make up to 70% of all macro-plastics in the ocean by weight.
- This program is supported by \$16.7M in Government of Canada investments.
- From July 2020 to July 2022:
 - 7, 560 units of gear retrieved *excludes rope*
 - 155 km of rope retrieved
 - A total of 1,303 tonnes of ALDFG removed from Canadian waters
 - 891 retrieval trips have taken place on the East and West Coast
- Fishing Gear Reporting System, allowing harvesters to conveniently report their lost gear through their smart device at any location



Marine Mammal Response Program (MMRP)

- Fisheries and Oceans Canada is responsible for assisting marine mammals and sea turtles in distress under the umbrella of the Marine Mammal Response Program (MMRP).
 - Collaboration with non-governmental organizations
 - Retrieved gear analysis informs mitigation strategies.
- \$1 million annually to support Canadian response experts and \$4.5 million to build Canada's response capacity on all three coasts.



CWRT on rescue in the Gulf of St. Lawrence with two apprentices on board (Photo Alison Ogilvy NEFSC/DFO)



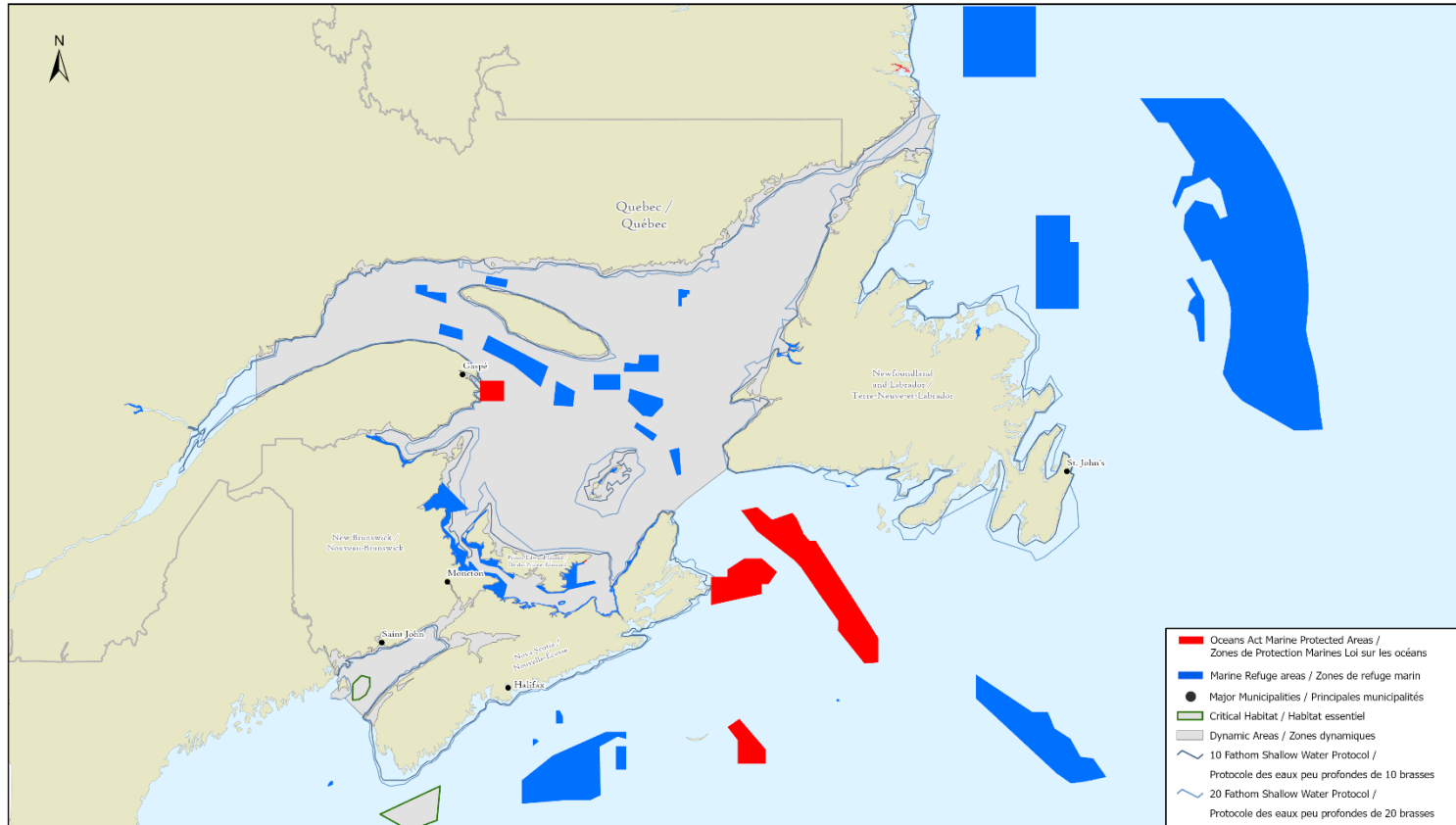
Marine and Coastal Area Protection

- The Government of Canada has committed to increasing protection of Canada's marine and coastal areas to 25 per cent by 2025, working towards a 30 per cent target by 2030.
- As of August 1, 2019, Canada surpassed its goal of protecting 10% coast and marine areas, 793,906 km² or 13.81% protection. This includes:
 - Total area protected = 793,906 km²
 - 14 Marine Protected Areas (MPAs) under the Oceans Act (~350,000 km²);
 - 3 National Marine Conservation Areas (112,745 km²);
 - 1 marine National Wildlife Area (11,546 km²); and,
 - 59 marine refuges (283,365 km²).
- Atlantic Canada protected areas covers **152,234 km²**, or 2.65% of Canada's oceans.
- These sites provide protection to sensitive benthic features like corals and sponges, but also other benthic and pelagic species, seabirds, marine mammals, etc.
- All protected areas under the strategy are designed to protect and conserve biodiversity, e.g. conservation habitat and multiple, such as corals, whales, etc.



Marine and Coastal Area Protection

MARINE REFUGES REFUGES MARINS



Date Created / Date Créée: 2021-09-02

Prepared by the Atlantic Marine Mammal Hub
Préparé par le Centre des mammifères marins de l'Atlantique





Engagement and Collaboration

- A NARW Technical Working Group for fishermen, right whale specialists, and department officials to discuss measures.
- Annual NARW Roundtable (now the Advisory Committee) with Canadian fishing industry, engos and academics.
- Ongoing collaboration through bilateral meetings with the U.S. at various levels of government to ensure the species is adequately protected throughout its range.
- Attendance and presentations at foreign fishery industry meetings, e.g., Norway, France, Sweden.
- Attendance and presentations at the Society for Marine Mammology Biennial Conference.
- Provision of information to third party fishery assessments, e.g., SeafoodWatch, WWF
- FAO engagement for the development of the “Fishing Operations: Guidelines to prevent and reduce bycatch of marine mammals in capture fisheries” (2021).
 - Canadian measures, such as dynamic closures, were identified as an example of what can be done to prevent the bycatch of marine mammals.



Questions/Discussion

