

When Is a Boundary Not Really a Boundary?

Some Reflections on Offshore Administrative Limits in Eastern Canada Based on the Recent Arbitration Between Newfoundland and Nova Scotia

By Sara Cockburn¹ and Dr. Sue Nichols, Department of Geodesy and Geomatics Engineering
University of New Brunswick

1. Introduction

Interdisciplinary research conducted in a GEOIDE funded project² at four Canadian universities over the last two years has demonstrated that, at least in Canada's offshore, administrative boundaries are turning out to be a more complex issue than originally thought. In fact, this research has very humbly concluded that it may be nearly impossible to completely describe the locations of all marine administrative boundaries - new situations can arise daily with new legislation, regulations, or policy, let alone interpretations of the courts. Additionally, these administrative boundaries do not necessarily reflect jurisdiction or ownership of marine resources.

This conclusion does not diminish the importance of including such boundaries in marine information systems or marine cadastres, nor does it preclude the need to clarify administrative boundaries when required. It simply means that surveyors, GIS managers, and marine administrators need to be more cognizant of the complexity and uncertainty in marine boundary delimitation.

The purpose of this paper is to highlight some of the issues through an overview of the recent arbitration between Nova Scotia and Newfoundland. The arbitration was to determine a boundary for sharing of revenues from hydrocarbon resources in the continental shelf. The line drawn by the Tribunal is a very specific line reflecting the legal, geographic, and technical factors of this particular issue. The review of the delimitation given here is based primarily on the decision of the Tribunal that was

announced on April 1, 2001, and not on the detailed transcripts of proceedings. No doubt, more extensive examination will be forthcoming as scholars analyze details, especially in light of other marine boundaries in Eastern Canada.

2. Administration, Jurisdiction, and Ownership in the Offshore

The University of New Brunswick (UNB) has conducted research on the technical and legal requirements for marine boundary delimitation and information systems. Actual system implementation by government agencies has been sporadic and mandate-specific. A common omission in marine information systems has been property rights and other legal interests in marine resources, in large part because these rights and interests are

either not appreciated or not well understood. Yet property rights and the rights of various levels of government to allocate, administer, and enforce rights are essential in planning and managing coastal resource use.

The concept of a multi-dimensional cadastre to incorporate these rights has been the focus of recent research at UNB. The objectives of the research include being able to visualize and communicate the relations between property rights and administration in a multi-dimensional context (See Figure 1). It also appears that government agencies are beginning to appreciate the need for more clarity in defining administrative and property boundaries, and a variety of related projects have been undertaken³. Some of the driving forces for this government interest have been aboriginal rights, as well as conflicts between environmental concerns and economic activities

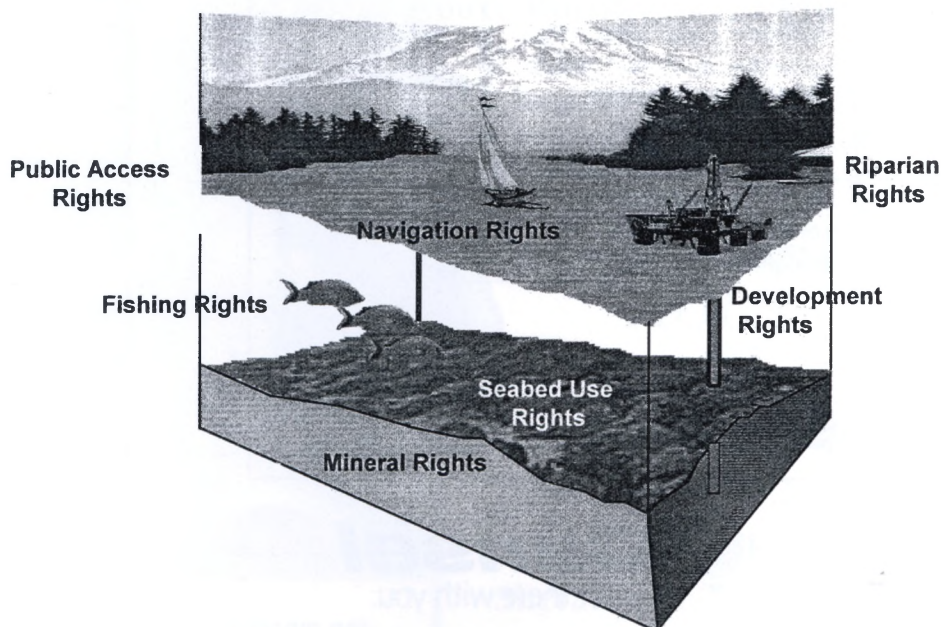


Figure 1 - Complexities within a Marine Parcel from Sutherland [2002]

(e.g., petroleum production and aquaculture).

Service New Brunswick, for example, has been interested in delimiting the provincial administrative boundaries in order to ensure availability of appropriate data to support the proposed provincial marine policy. UNB undertook this task and employed a multidisciplinary team to examine legal and technical aspects of the problem. The research uncovered a variety of boundaries that may exist, instead of a single line, and determined that a clearer understanding of the categories of rights a government may hold in the marine environment was needed.

In the case of the marine cadastre, governments may maintain three main types of rights. First, a government may hold legislative jurisdiction, which can be defined as "[t]he sphere of authority of a legislative body to enact laws and to conduct all business incidental to its law-making function."⁴ A branch or level of government may also have the right to administer the law. Administrative authority is defined by Black's Law Dictionary as "The power of an agency or its head to carry out the terms of the law creating the agency as well as to make regulations for the conduct of business before the agency; distinguishable from legislative authority to make laws."⁵ Thirdly, governments can also hold title to the seabed and subsurface, as well as the water column above them. These government rights can, in some senses, be thought of as the controlling force over all private and public rights in a nation's waters.⁶

These three categories form a broad legal framework within which most government rights in any marine cadastre may fit. A boundary may be associated with each of these rights separately or they may be coincident. For example, several administrative boundaries may exist where each boundary delineates one of a province's rights to administer federal oil and gas leases, or fisheries, or environmental laws. The boundary delineating a province's title to offshore

lands may be quite different, and a third set of boundaries may exist delineating areas within which a province may legislate regarding the various resources or activities that can be found in a marine environment.

With these distinctions in mind, UNB provided a set of lines in digital format using CARIS LOTS indicating what could possibly be maintained as the maximum extent of New Brunswick's administration offshore (e.g., centre lines of the Bay of Fundy, Northumberland Strait, etc.), recognizing that the federal government may have specific interests within this space. The project raised a number of critical issues for marine boundary delimitation in Canada, including the lack of complete reliable shoreline data.⁷ Another issue included what impact that the decision of the Special Tribunal for delimitation of the Nova Scotia-Newfoundland offshore mineral revenue-sharing boundary might have. This case is reviewed briefly below.

3. The Issues and How They Arose

The major issue before the Tribunal was the question of what line should represent the boundary for sharing offshore oil and gas revenues between the two provinces. In essence this is an administrative and not necessarily a jurisdictional boundary. The dispute arose from three main events described briefly below.

3.1 Delineation of an Inter-Provincial Boundary in 1964

With the possibilities foreseen of vast revenues to be gained from offshore oil and gas development, the four governments of the Atlantic Provinces created lines representing provincial ownership of mineral resources offshore and their division among the provinces as well as their claim against any federal offshore ownership in the area. The lines were delineated on a map and a document entitled *Notes re: Boundaries of Mineral Rights as between Maritime Provincial*

Boundaries. A Joint Statement issued by the Atlantic Premiers at this time stated that in the interest of this claim the boundaries described and depicted in the attached document and map were "the marine boundaries of the Provinces of Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland..."⁸ That same year Premier Smallwood "ordered that a plaque be placed on the seabed at the edge of the Newfoundland shelf, as if showing the boundaries of an area appertaining to the Province."⁹

A decision by the Supreme Court of Canada in 1967, however, upheld the federal view that "ownership of submarine mineral rights beyond the land territory and internal waters of the provinces was vested in Canada and that accordingly no question of existing provincial boundaries arose..."¹⁰ at least on the West Coast. The Atlantic Provinces then formed a Joint Mineral Resources Committee of the Atlantic Provinces, which prepared a more detailed description of the turning point co-ordinates in NAD 27 (based on some coastline surveys, existing maps and charts, and creation of equidistant lines between shores).¹¹ The Atlantic Premiers and the Vice-Premier of Quebec also agreed upon the map and accompanying delineation in 1972. The Communiqué of the meeting stated *inter alia*:

4. THE FIVE EASTERN PROVINCES ASSERT OWNERSHIP OF THE MINERAL RESOURCES IN THE SEABED OFF THE ATLANTIC COAST AND IN THE GULF OF SAINT LAWRENCE IN ACCORDANCE WITH THE AGREED BOUNDARIES.¹²

Prime Minister Trudeau, however, dismissed the request for a meeting to discuss these issues, saying "...I do not think that such a meeting could usefully be directed to the points concerning jurisdiction, ownership and administration as outlined in your telegram..."¹³

3.2 Atlantic Accords

During the 1970s there was much speculation on the value of offshore oil and gas development in Canada, especially as world oil prices began to rise dramatically. Newfoundland and Nova Scotia also saw the Atlantic resources as critical to future economic development. However, without clarity on whether these resources were under federal or provincial ownership, development was hindered. To break the stalemate, the Premier of Nova Scotia and Prime Minister of Canada signed the *Canada-Nova Scotia Agreement on Joint Management and Revenue Sharing*¹⁴ promising Nova Scotia a revenue stream from offshore production and allowing federal licensing and administration. All final determinations were vested in the federal government.

Newfoundland continued to claim exclusive jurisdiction; but when its case was heard by the Supreme Court of Canada in 1984 the Court ruled that, at least in the Hibernia area, Canada and not the province had the right to explore and exploit natural minerals and resources on the continental shelf.¹⁵ In 1987, Newfoundland finally entered into an accord with the federal government for revenue sharing and resource management schemes. This accord differed substantially from the Canada-Nova Scotia Agreement because Newfoundland maintained veto power over certain regulations and amendments had to be mutually agreed upon. However, the Accord cannot be used as a basis for any claim of legislative jurisdiction over any offshore area or the resources therein.¹⁶

The Management Boards set up under the Accords are responsible for administering oil and gas rights. In the area near the 1964 line there was some disagreement and uncertainty, due in part to the definition of co-ordinates and precise location of the line. In addition the settlement of the Canada-France boundary around St. Pierre and Miquelon Islands gave France a narrow passage, which included rights to the resources of the continental shelf.

By 1998-99 some exploration companies seemed to prefer investment in the French channel and thus the uncertainties in the Nova Scotia-Newfoundland line became a pressing public issue. Thus the Provinces and Federal Government agreed to submit the location of the revenue-sharing line to an independent tribunal.

4. The Decisions and Reasoning of the Tribunal

The arbitration consisted of two stages. The first considered the legal status of the 1964 agreement and therefore the line generated by the parties under that agreement. If the agreement was considered binding by the Tribunal, then there would be no need for a second stage to delimit the shared boundary.

4.1 Stage 1

However, in the first part of the arbitration, the Tribunal held that no boundary had been resolved between Nova Scotia and Newfoundland and Labrador despite the existence of the 1964 map and document. Their reasoning stemmed from the fact that on October 6, 1972, Newfoundland sought clarification from Nova Scotia "of the 'present demarcation' vis-à-vis Nova Scotia...",¹⁷ and attached a copy of the 1964 map with an alternative boundary dashed in. They held that Nova Scotia was from this point "put on notice that there was no agreement between the two provinces on the location of the southeasterly line."¹⁸

4.2 Stage 2

In the second part of the arbitration, the Tribunal's task was to arrive at and delimit the Nova Scotia-Newfoundland shared boundary. Nova Scotia continued to argue that sustained conduct on the part of Newfoundland made the 1964 agreement binding. However, the Tribunal further held that "there was no 'sufficiently clear, sustained and consistent' conduct on the part of Newfoundland and Labrador to justify holding that it accepted the line in the inner sector."¹⁹

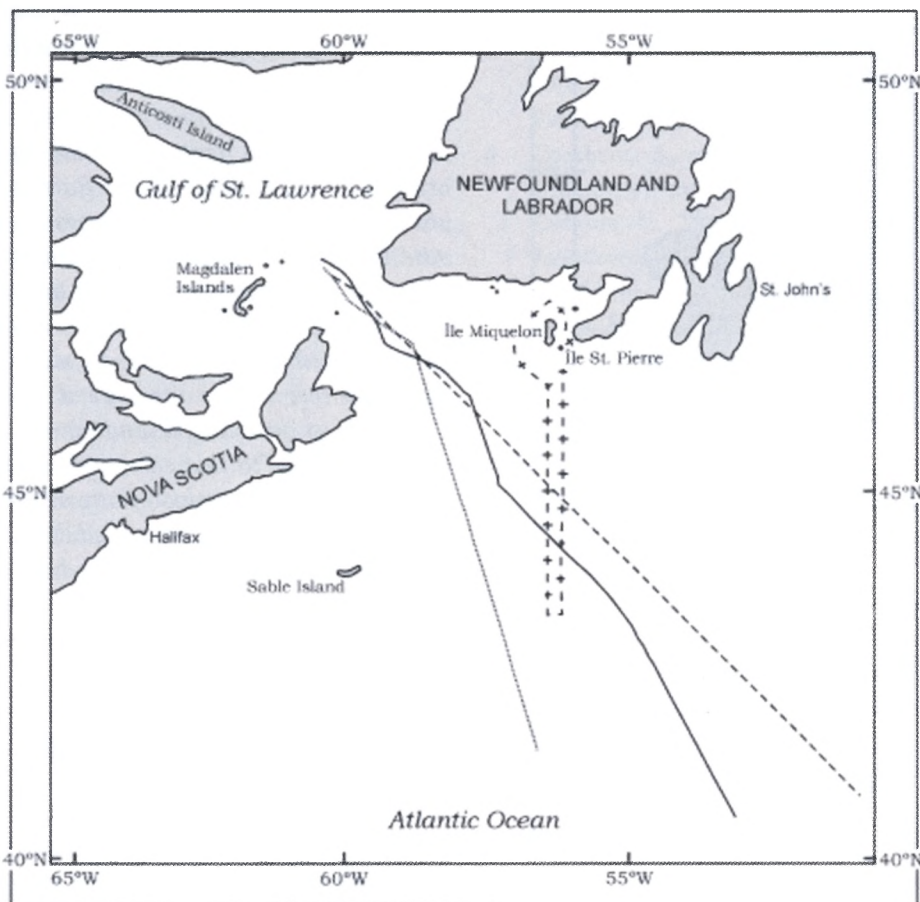
Also, as to the outer area (i.e., the area surrounding the Laurentian Sub-Basin), the Tribunal held that Newfoundland's practice in relation to the 1964 line in this area "does not sustain a claim of acquiescence, or support the view that the Parties regarded that line as equitable."²⁰

However, the main purpose of this stage was to delimit a line. The Tribunal held that the terms of the *Geneva Convention on the Continental Shelf* on boundary delineation applied, despite the fact that Nova Scotia and Newfoundland and Labrador were not sovereign entities. Pursuant to the terms of both of the Accords, as well as the Terms of Reference to be used by the Tribunal, the Tribunal applied "the principles of international law governing maritime boundary delimitation with such modification as the circumstances require... as if the parties were states subject to the same rights and obligations as the Government of Canada at all relevant times..."²¹ The Tribunal ruled that "As a party to the 1958 Geneva Convention without any reservation, Canada is subject to the rights and obligation it incorporates... So, too, under the Terms of Reference, are Nova Scotia and Newfoundland and Labrador."²²

From a surveying perspective the boundary delimitation issues included, but were not limited to,

- equidistance principles
- access to resources
- adjacent and opposite coasts
- proportionality of respective coastline length to the area claimed
- the status and weight given to offshore islands, including Sable Island.

In the final delimitation of the boundary, the Tribunal noted that it is now well settled that courts engaging in maritime delimitation may not take relative wealth or natural resources of the states involved into account. However, it held that access to the specific resources in question was one relevant factor in the delimitation



Nova Scotia claim	-----
Newfoundland and Labrador claim
Strict equidistance (between Nova Scotia and Newfoundland and Labrador)	—————
French Maritime Area as established in 1992	- · - · - · - · - · -

Figure 2: The Claims of the Parties [from www.boundary-dispute.ca]

process. In short, it held that "it is not the Tribunal's function to share out equitably any offshore resource, actual or hypothetical, irrespective of its location. On the other hand, the effect of a proposed line on the allocation of resources is, in the Tribunal's view, a matter it can properly take into account among other factors."²³

The Tribunal factored many geographic elements into its final delimitation. For example, since it was treating the parties as sovereign states it considered the Gulf of St. Lawrence as though it were an enclosed sea. It identified many relevant coasts, areas, and islands, including Fortune Bay in Newfoundland, the northeastern point of Cape Breton Island, and Scatarie

Island. The Tribunal also noted that "the coasts of Newfoundland and Cape Breton Island are essentially opposite, albeit receding, coasts...."²⁴ The Tribunal's distinction between what it termed "inner" and "outer" areas largely "corresponds to the transition between the area where the Parties' coasts are essentially opposite, and those (in the outer area) where they are, 'rather comparable to adjacent coasts....'" This geographic distinction has been used in international delimitations such as the US-Canada boundary in the Gulf of Maine to isolate areas (i.e., opposite coasts) where pure equidistance is more appropriate.

The provinces each arrived at relevant areas for the purposes of applying

a type of proportionality test. The legal arguments differed significantly, with the result that Newfoundland and Labrador's ratio of coastal lengths was more than 2:1 in its favour, whereas the Nova Scotia ratio of coastal lengths was 1:0.94 in Nova Scotia's favour. The Tribunal rejected both arguments and held that it would treat as "relevant any coast of either party which affects or might potentially affect the delimitation. This involves a practical judgment, not merely a geometrical concept..."²⁵ The Tribunal did not think it appropriate to even apply the proportionality test "of coastal lengths and maritime areas"²⁶ in this case.

As to offshore Islands, the Tribunal examined the circumstances of islands under debate separately. Only Sable Island will be considered here because of its drastic impact on the outcome. The Tribunal held Sable Island to be part of Nova Scotia for the purposes of the delimitation despite the fact that "exclusive federal ownership and jurisdiction...[was] established by the Constitution Act, 1867."²⁷ The Tribunal originally gave Sable Island half effect on the location of the equidistance line, as it considered full effect to have disproportionate results, especially given that Sable Island is uninhabited and small.

4.3 Final Delimitation

The Tribunal began by constructing provisional equidistance lines in three stages and then modified the line according to equitable principles or special circumstances as described in Section 4.2.²⁸ The first provisional boundary segment began at a closing line of the Gulf of St. Lawrence, and this line goes through a number of gradual turns in the inner portion to a line joining Scatarie Island and Lamaline Shag Rock near the coasts. The Tribunal then examined this line in light of the Parties' conduct. It determined that since Newfoundland had not raised any objections to this part of the line drawn in 1964, that the median line would hold but would be generalized over several turning points as a

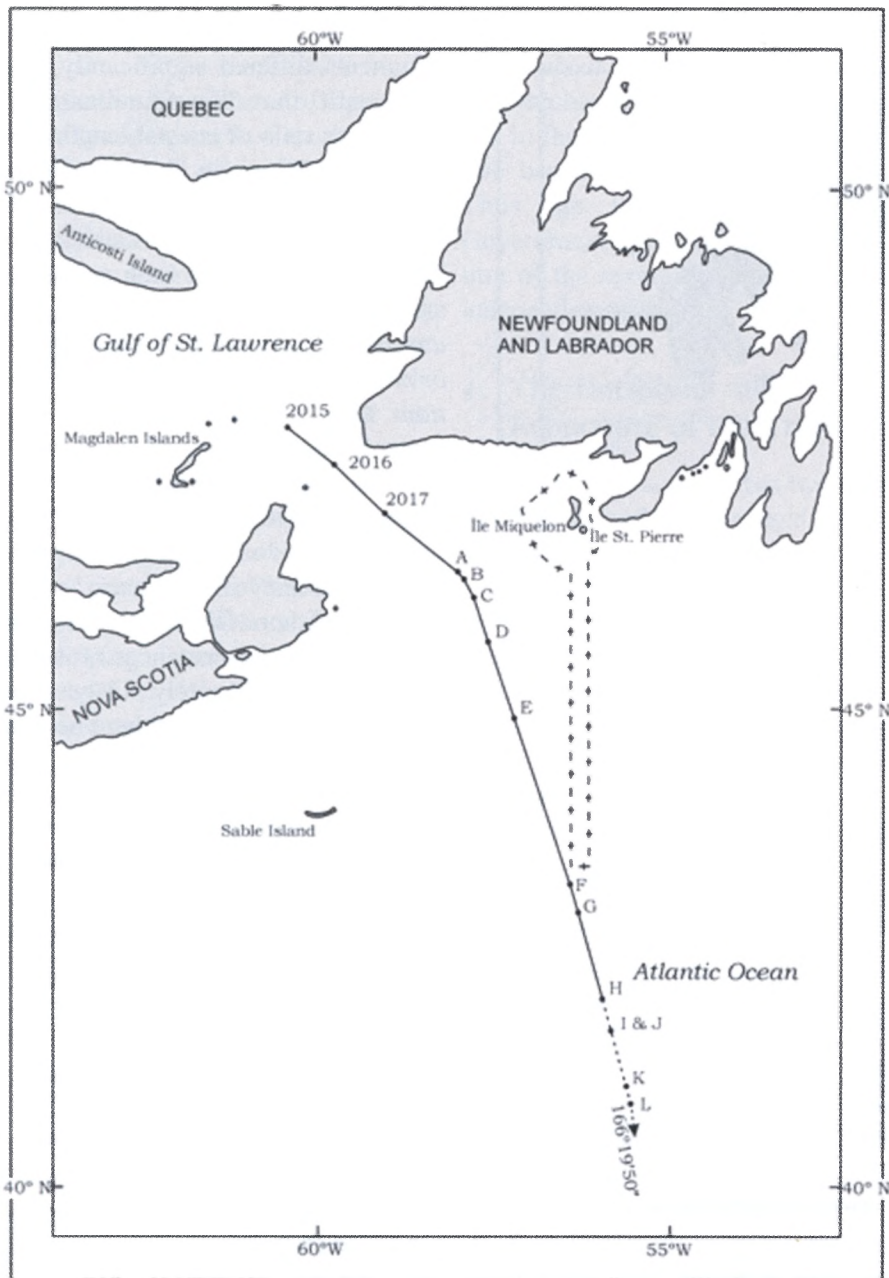


Figure 3: The Tribunal's Final Delimitation [from www.boundary-dispute.ca]

straight line for administrative convenience.²⁹

The second boundary segment was drawn from the end point of segment 1 and was "decided exclusively on grounds of the relevant coastal geography,"³⁰ as the conduct of the parties did not justify any departure from the provisional line in this area. The Tribunal modified the equidistance line for the specific geography including the effect to be given to Sable Island. Then it examined whether the adjusted line produced an inequitable result between the parties, and whether this line produced a cut-off effect on

the southwest coast of Newfoundland. In the final analysis, the Tribunal concluded that the effect of Sable Island should be further reduced to decrease this cut-off effect, and held that, in the end, Sable Island was to have no effect on the equidistant line at all.³¹

As to the last boundary segment, from Cabot Strait northwestward in the Gulf of St. Lawrence, the Tribunal decided as follows:

Northwestward of turning point 2016, a strict equidistance line between the adjacent coasts here concerned would terminate at a tri-

point with Quebec slightly to the north of turning point 2015. The difference between the two lines and the areas they divide is not significant, and the Tribunal, having regard to the conduct of the Parties in this sector, considers it appropriate to delimit this small, innermost area by a straight line joining turning points 2016 and 2015. The Tribunal emphasizes that its decision on this matter, as indeed the whole of its decision, is binding only on the Parties to this case and cannot prejudice the rights of any other parties that may be concerned.³²

5. Conclusions

Canada's administrative offshore boundaries have a multitude of uncertainties. Furthermore, there are numerous boundaries related to federal and provincial administration over specific activities or specific resources. These administrative boundaries do not necessarily delimit sovereignty, ownership, or jurisdiction. Thus the Nova Scotia-Newfoundland arbitration, for example, created a line for revenue sharing and administration of hydrocarbon rights. It said nothing about the fishery, environmental regulation in general, ownership of the bed or, for that matter, the extent of Canada Lands. All of these issues are still a matter for the courts or negotiation and will most likely only be resolved on a case-by-case basis.

Other inter-provincial marine administrative boundaries in Atlantic Canada may be based on some of the principles of the Newfoundland-Nova Scotia arbitration but each administrative limit will also depend on unique historical, geographical, legal, and other issues. In the Bay of Fundy, for example, there may be myriad administrative boundaries. Jurisdictional and ownership boundaries may depend on whether the bay is an historical bay, whether the centerline definition of Nova Scotia and New Brunswick territory in the 1700s established jurisdiction or ownership, and whether the

1964 "agreement" has any force between these two provinces.

Administrative boundaries create a challenge for surveyors and for those involved in creating spatial data infrastructures offshore. Maximum and minimum limits may exist, but in the 4-dimensional ocean space offshore where activities, resources, and coastlines move over time, many boundaries may never be solid lines isolating separate areas of territory. Surveyors and others therefore need to develop a more flexible view of the boundaries they seek in ocean spaces and the way in which information systems portray boundaries and resource rights. This will be the true challenge for developing a marine cadastre.



Footnotes

- 1 Sara Cockburn is a graduate student in Geodesy and Geomatics at the University of New Brunswick. She holds a Juris Doctor degree in law with concentrations in environmental and maritime law from Tulane University Law School in Louisiana.
- 2 This research was funded by the Geomatics for Informed Decisions (GEOIDE) National Centres of Excellence network. Project HSS55, under the Humanities and Social Sciences Stream. The team leader was Dr. Sue Nichols at UNB and the researchers included experts on governance, marine and water law, sociology, economics, and ocean mapping.
- 3 E.g., Sutherland, M. and S. Nichols [2002]. "Design of a Marine Boundary Database Architecture for the Bay of Fundy." Contract Report for the Canadian Hydrographic Service, Ottawa, March; Nichols, S., J. Dobbin, S Ng'ang'a, S. Cockburn, M. Sutherland, K. Cove, and T. Beran [2001]. "Roles and Responsibilities for Surveying in Offshore Canada Lands." Contract report for the Legal Surveys Division, Natural Resources Canada, October 1.
- 4 Black's Law Dictionary Fifth Edition, by Henry Campbell Black (5th Ed. By the Publisher's Editorial Staff), West Publishing Co., St. Paul, Minn. 1979.

- 5 Black's Law Dictionary Fifth Edition, by Henry Campbell Black (5th Ed. By the Publisher's Editorial Staff), West Publishing Co., St. Paul, Minn. 1979.
- 6 Cockburn, S. and S. Nichols (2002). "Effects of the Law on the Marine Cadastre: Title, Administration, Jurisdiction, and Canada's Outer Limit." Proceedings of the FIG Congress, Washington DC, USA, April 24, 2002.
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- 8 Arbitration Between Newfoundland and Labrador and Nova Scotia Concerning Portions of the Limits of Their Offshore Areas as Defined in the Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act and the Canada-Newfoundland Atlantic Accord Implementation Act: Award of the Tribunal in the Second Phase. Ottawa, March 26, 2002. P. 6. Retrieved from: <http://www.boundary-dispute.ca>, April 2002.
- 9 Gault, I. T., "Jurisdiction Over The Petroleum Resources of the Canadian Continental Shelf: The Emerging Picture." Alberta Law Review, Vol. XXIII, No. 1. [1985], p. 82.
- 10 Arbitration Between Newfoundland and Labrador and Nova Scotia. March 26, 2002. P. 6. This decision was *Reference re: Offshore Mineral Rights (British Columbia)*.
- 11 Some of the original computer calculations, maps, and notes were used as reference to create the New Brunswick maximum administration boundary in the GEOIDE project. See Sutherland, M, et al. (2002). "In search of New Brunswick's marine administrative boundaries." Accepted for presentation at the CIG-IPRS Joint Symposium on Geospatial Theory, Processing and Application, Ottawa, July 2002.
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- 13 Arbitration, Mar 26/02. P. 7.
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- Regulations. Retrieved from: <http://laws.justice.gc.ca/en/C-7.5/21662.html> August 2001.
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- 18 Arbitration, Mar 26/02. P. 7.
- 19 Arbitration, Mar 26/02. P. 24.
- 20 Arbitration, Mar 26/02. P. 25.
- 21 Arbitration, Mar 26/02. P. 13.
- 22 Arbitration, Mar 26/02. P. 18.
- 23 Arbitration, Mar 26/02. P. 26.
- 24 Arbitration, Mar 26/02. P. 28.
- 25 Arbitration, Mar 26/02. P. 30.
- 26 Arbitration, Mar 26/02. P. 31.
- 27 Arbitration, Mar 26/02. P. 33.
- 28 Arbitration, Mar 26/02. P. 34.
- 29 Arbitration, Mar 26/02. P. 35.
- 30 Arbitration, Mar 26/02. P. 36.
- 31 Arbitration, Mar 26/02. P. 37.
- 32 Arbitration, Mar 26/02. P. 37.

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Calendar of Events

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July 27th to 31st, 2002

**12th Int'l Conference of
Women Engineers & Scientists**
Ottawa, Ontario
www.icwes12.org

October 8th to 10th, 2002

**Hydro 2002 13th Biennial
Int'l Symposium of the
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