REAL PROPERTY ISSUES IN THE MARINE AQUACULTURE INDUSTRY IN NEW BRUNSWICK

SUE NICHOLS
IAN EDWARDS
JIM DOBBIN
KATALIN KOMJATHY
SUE HANHAM

October 2001
REAL PROPERTY ISSUES IN THE MARINE AQUACULTURE INDUSTRY IN NEW BRUNSWICK

Sue Nichols
Ian Edwards
Jim Dobbin
Katalin Komjathy
Sue Hanham

Department of Geodesy and Geomatics Engineering
University of New Brunswick
P.O. Box 4400
Fredericton, N.B.
Canada
E3B 5A3

October 2001
PREFACE

In order to make our extensive series of technical reports more readily available, we have scanned the old master copies and produced electronic versions in Portable Document Format. The quality of the images varies depending on the quality of the originals. The images have not been converted to searchable text.
PREFACE

This report was prepared under contract for the New Brunswick Department of Fisheries and Aquaculture. The research was carried out in 1997 at the University of New Brunswick, Fredericton, Canada, under the leadership of Professor Sue Nichols.

As with any copyrighted material, permission to reprint or quote extensively from this report must be received from the authors. The citation to this work should appear as follows:

Acknowledgements

The authors would like to thank for the Department of Fisheries and Aquaculture for recognising the need for this research and providing the funds.

Bob Sweeney Aquaculture Development Officer at the Department of Fisheries and Aquaculture assisted the authors throughout the study with logistics and field experience, as well as his knowledge of the aquaculture industry. Helen Lacroix, Bob Dupuis Aquaculture Development Officers and Russel Henry Registrar of Aquaculture also provided valuable insight and feedback that helped this research follow a direction that would benefit the public most. We would like to extend our sincere gratitude to them.

The writers would also like to acknowledge the assistance of undergraduate student Pilippe J. Breau.

We feel that it is necessary to mention that the views expressed in this report are those of the authors and should not be considered as the opinion of the provincial government.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table of Contents</td>
<td>iii</td>
</tr>
<tr>
<td>1. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Aquaculture and Property Rights: The Problem</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Interested Parties in Aquaculture Development and Their Concerns</td>
<td>2</td>
</tr>
<tr>
<td>1.3 The Importance of Clear Legislation</td>
<td>3</td>
</tr>
<tr>
<td>1.4 Research Objectives</td>
<td>4</td>
</tr>
<tr>
<td>2. Jurisdictional Issues</td>
<td>6</td>
</tr>
<tr>
<td>2.1 International Issues</td>
<td>6</td>
</tr>
<tr>
<td>2.1.1 International Agreements</td>
<td>6</td>
</tr>
<tr>
<td>2.1.2 International Boundaries</td>
<td>8</td>
</tr>
<tr>
<td>2.2 National and Provincial Jurisdictionial Issues</td>
<td>9</td>
</tr>
<tr>
<td>2.2.1 Constitutional Jurisdiction</td>
<td>9</td>
</tr>
<tr>
<td>2.2.2 Canada - New Brunswick MOU on Aquaculture Development</td>
<td>15</td>
</tr>
<tr>
<td>2.3 The Oceans Act</td>
<td>20</td>
</tr>
<tr>
<td>2.4 New Brunswick's Coastal Zone Policy</td>
<td>21</td>
</tr>
<tr>
<td>2.5 Aboriginal Rights and Issues</td>
<td>23</td>
</tr>
<tr>
<td>3. Responsibilities of Stake Holders</td>
<td>27</td>
</tr>
<tr>
<td>3.1 Review Process for Maritime Aquaculture Licences and Leases</td>
<td>27</td>
</tr>
<tr>
<td>3.2 Information Management</td>
<td>34</td>
</tr>
<tr>
<td>3.2.1 Provincial - Federal Interdepartmental Communications</td>
<td>34</td>
</tr>
<tr>
<td>3.2.2 Document Tracking</td>
<td>35</td>
</tr>
<tr>
<td>3.2.3 Geographic Information Systems</td>
<td>36</td>
</tr>
<tr>
<td>3.2.4 DFA Positioning Systems</td>
<td>37</td>
</tr>
</tbody>
</table>
4. The Rights of the Principal Players

4.1 Introduction

4.2 The Legislative Model

4.2.1 The Act and the Regulations

4.2.1.1 Designated aquaculture land

4.2.1.2 The aquaculture licence

4.2.1.3 The aquaculture occupation permit

4.2.1.4 The aquaculture lease

4.2.2 Related Materials Adopted by the Department of Fisheries and Aquaculture

4.3 Issues That Arise from the Model

4.3.1 Interpretation of the Model

4.3.2 Interaction With Other Legislation

4.3.2.1 The Registry Act

4.3.2.2 The Personal Property Security Act and the proposed Land Security Act

4.3.3 Time Limits for Approvals Under the Navigable Waters Protection Act

4.3.4 Insurance

4.3.4.1 Public liability insurance

4.3.4.2 Crops loss insurance

4.4 Other Aquaculture - like Activities

4.4.1 Rockweed Harvesting

4.4.2 "Clam Tents"

4.4.3 Chinese Hat Spat Collectors

4.4.4 Winterizing Oyster Sites
5. Rights of Others

5.1 Who Are Others

5.2 Navigators Near or Over the Aquaculture Site

5.2.1 The Public Right to Navigate at Common Law

5.2.2 The Public Right to Navigate as Affected by Statute

5.2.3 The Public Right of Floating

5.3 Fishers Near or Over an Aquaculture Site

5.4 Owners and Users of the Foreshore in the Vicinity of the Aquaculture Site

5.5 Owners of Upland in the Vicinity of Aquaculture Sites

5.5.1 Property Rights

5.5.2 Riparian Rights

5.5.2.1 The right to access

5.5.2.2 The right of flow

5.5.2.3 The right to quality

5.5.3 Other Rights of Upland Owners

5.6 Other Aquaculturists

5.7 Involvement of the Provincial Crown in the Types of Disputes Outlined Above

6. Conclusions and Recommendations

6.1 Conclusions

6.1.1 Jurisdiction

6.1.2 Rights of the Aquaculturists and Others

6.1.3 Information Management

6.1.4 Survey Requirements

6.1.5 Leasing Process

6.2 Recommendations

6.2.1 Make Appropriate Amendments

6.2.2 Streamline Application Processes

6.2.3 Resolve Transition Site Issues

6.2.4 Monitor New Aquaculture Ventures

6.2.5 Develop an Information Management Policy
6.2.6 Improve Staff Awareness and Understanding of Property Issues... 71
6.2.7 Improve Awareness and Understanding of Property Issues........ 72

References................................................................. 73

Legislation Cited.......................................................... 75

Cases Cited................................................................. 76

Interviews................................................................. 77

Appendices............................................................... 78
Appendix "A" - Commercial Aquaculture Licence
Appendix "B" - Aquaculture Occupation Permit
Appendix "C" - Aquaculture Lease
Appendix "D" - List of the One Line Clauses Contained in the Lease
    Form and the Longer Versions of Them
Appendix "E" - Acknowledgement of Security Interest
1. INTRODUCTION

1.1 Aquaculture and Property Rights: The Problem

The aquaculture industry in New Brunswick has been a major focus of economic growth since the mid 1980s. It is now worth approximately 120 million dollars per year and the Government of New Brunswick is committed to ensuring that this industry remains viable and expands. Figure 1.1 and 1.2 illustrate the industry growth and significance.

Regulation of the aquaculture industry in New Brunswick has gone through many stages before it reached its present state:

- Private leases and licences have been granted on the North Shore for several decades;
- In 1978 the first aquaculture site was established in Deer Island for testing Atlantic salmon and rainbow trout;
- In September 1986 the Government of New Brunswick decreed a moratorium on aquaculture development to protect the industry from over expansion and to establish a relevant regulating system;¹
- The Aquaculture Act² was enacted in December 1988. This Act was proclaimed and come into force on September 3, 1991;
- The Governments of Canada and New Brunswick instituted a Memorandum of Understanding on Aquaculture Development;³
- In November 1989 the Canada - New Brunswick Cooperation Agreement on Fisheries and Aquaculture Development was established;⁴
- The Aquaculture Regulations⁵ were filed on September 11, 1991.

The Department of Fisheries and Aquaculture (DFA) manages the application, licensing, and leasing processes for aquaculture sites. When aquaculture was mainly a cottage industry, primarily on the North Shore of the Province, there were few considerations as to the rights, responsibilities and liabilities of the parties involved.

But with growth of the industry comes a host of new problems, such as:

- environmental protection and sustainability of the industry;
- security of investments;
- liability and remedies for losses;
- compliance with federal and provincial policies and legislation;
- increasing conflicts with public and private rights;
- aboriginal rights.

All of these issues have, at their heart, concerns related to property rights: their creation, ownership security, and economic value. If the industry is to remain viable, it is essential for DFA to know:

- what property rights have been granted?
- what rights of others have been or could be affected by aquaculture activities?
- how do the rights of others affect the aquaculturists' rights?

These issues exist in an environment of various policies, legislation, and initiatives at the federal, provincial level, and sometimes local level.

It is the purpose of this research to identify what the property rights issues are related to aquaculture and to make recommendations to DFA for improvements on managing those property rights.

1.2 Interested Parties in Aquaculture Development and Their Concerns

When entrepreneurs decide to venture into the area of growing aquatic plants or animals, one of the first steps is to secure a marine growout site for their exclusive use. Considering that most of the designated aquatic lands are common property or Crown Land, other parties as listed below may also have interests in those areas.

- **Aquaculturists** require exclusive rights for the use of water column in the leased area that would prohibit others from adversely affecting their investment;

- Security of the tenure for the operation is also a basic requirement from the investors' point of view;

- **Federal, provincial and sometimes municipal levels of government** are responsible for regulating the industry's development in the form of legislation and policies;

- **Traditional fishers** earn their livelihood by exploiting the wild stock. Any action taken by others that might affect their operation can anticipate significant
opposition. Aquaculture can alter the navigability of waterways as well as may represent environmental concerns to the wild stock;

- On the community side waterfront property owners are worried about the decline in the property values, interference with riparian rights, possible environmental impacts, and the alteration of view by building cages close to the coastal line;

- The issue of aesthetics may also affect the tourist industry and recreational users in general. Recreational users such as divers, yachters, sport fishers may be affected by the question of navigability;

- First Nations also have to be considered as parties interested in the management and use of coastal resources.

1.3 The Importance of Clear Legislation

To accommodate these diverse and often conflicting interests there is a need for a clear legal framework. Owen explains the definite need for legislation in the sphere of aquaculture as follows:

At common law, coastal waters and the seabed are part of the public domain, and the public has the right to use these waters for navigation, recreation, and fishing. No one person has the right to exclusive use but must conduct himself or herself in a reasonable manner, consistent with others' rights to the same enjoyment. The needs of the aquaculturist for exclusive use or semi-exclusive use of a water column or sea bottom would not be protected at common law. Thus, for aquaculturists to receive the degree of protection they need to conduct their activities, legislation is required. Legislation would also clarify the rights and responsibilities of conflicting interests in the coastal waters. Ambiguity in the absence of legislation might discourage the risk-conscious investor and could also invite time-consuming and expensive litigation.

Other important aspects of legislation relate to the question of environmental safety. The legislation addressing this question have to include the needs of aquaculturists as well as the other users of coastal resources. First, it has to address the aquaculturists' concern about diseases and about maintaining a pollution free environment. Secondly, coastal communities are concerned about employment and the benefits of a healthy aquaculture industry, but the possible environmental, economic, and social costs must also be considered. An investigation sponsored by the David Suzuki Foundation recently concentrated on the aquaculture industry's ecological and social sustainability in British Columbia.

It is not the purpose of this report to address the environmental and social issues. However, it should be pointed out that many of these concerns can be managed through security, clarity, enforcement, and management of property rights and responsibilities.


1.4 Research Objectives

This research was conducted for DFA to examine the property rights and management of those rights related to aquaculture in New Brunswick. Specifically, the research addressed the following issues:

- what property rights are being conveyed by the Province for aquaculture?
- what obligations and liabilities does the lessee have?
- what prescriptive, riparian, and public rights are affected?
- what peripheral legislation impacts on aquaculture leases?
- what overlaps and conflicts exist in the legislation?
- what associated jurisdictional issues are there?
- what are the roles and responsibilities of the Department of Fisheries and Aquaculture in aquaculture leases?

The focus of the research was on marine rather than inland aquaculture and on identifying issues without necessarily resolving them. This report presents the findings of the study team based on legal research, literature reviews, and interviews. Where appropriate, recommendations are made in the text and these are summarized in Chapter 6.

Chapter 2 of the report reviews the complicated area of provincial/federal jurisdiction and also addresses some of the recent issues such as coastal zone management policies and aboriginal title. In Chapter 3, the roles and responsibilities of DFA, and in particular the licensing and leasing process, is assessed. Chapter 4 critiques the legislative environment and Chapter 5 provides an analysis of property law issues concerning public and private rights along the coast.
Real Property Issues in the Marine Aquaculture Industry in New Brunswick

Figure 1.1: Value of Aquaculture Production in New Brunswick

Figure 1.2: New Brunswick's Share of Canadian Aquaculture Production in 1994 by Tonnage

8 Source: Department of Fisheries and Aquaculture, N.B.
9 Source: Department of Fisheries and Aquaculture, N.B.
2. JURISDICTIONAL ISSUES

The aquaculture industry in New Brunswick challenges many traditional jurisdictional theories of governance in Canada. The Province is geographically situated with interprovincial, national and international boundaries which lead to a wide array of jurisdictional concerns. This is complicated further when consideration is given to aboriginal rights and interests. The following sections summarize the relevant jurisdictional issues as they relate to the aquaculture industry in New Brunswick.

2.1 International Issues

Attention must be given to international agreements and treaties that have been entered into or that are being considered by the Government of Canada.

This is especially so where these agreements deal exclusively with migratory species used in sea ranching operations, such as Atlantic and Pacific salmons, which have little regard for the limits of national jurisdiction recognized by international law. Consideration must also be given to the physical location of international boundaries such as those that exist between New Brunswick and Maine.

2.1.1 International Agreements

The Third United Nations Convention On The Law Of The Sea (UNCLOS III) is noteworthy with respect to the aquaculture industry. Canada has signed the Treaty but it has not been ratified by Parliament. This agreement formalizes an international agreement on the limits of the territorial sea, the contiguous zone, the exclusive economic zone and the continental shelf. Figure 2.1, presents a graphical representation of the above zones. Associated with each zone are certain responsibilities and rights of the contiguous state. Canada declared a 12 nautical mile (NM) territorial sea over which it exercises complete sovereignty in 1991. The Oceans Act recently proclaimed by the Government of Canada again declares the Territorial Seas of Canada to be a part of Canada. In this Act the Territorial Sea was defined as follows:

... the territorial sea of Canada consists of a belt of sea that has as its inner limit the baselines described in section 5 and as its outer limit

(a) subject to paragraph (b), the line every point of which is a distance of 12 nautical miles from the nearest point of the baselines; ...

---

3 Canadian Laws Offshore Application Act , S.C. (1990) c. 44.
5 Ibid., Section 4.
The Convention for the Conservation of Salmon in the North Atlantic Ocean must also be considered when dealing with aquaculture in New Brunswick. This agreement in Article 2(2) states that, “Within areas of fisheries jurisdiction of coastal states, fishing of salmon is prohibited beyond the 12 nautical miles from the baselines from which the breath of the territorial sea is measured ...”. Canada and the United States of America fall under the North American Regional Commission of the Convention which has its geographic boundaries defined as “Maritime waters within areas of fisheries jurisdiction of coastal States off the east coast of North America.” In addition to controlling the fishing of salmon, the functions of the North American Commission are:

- To provide a forum for consultation and co-operation between members;
- To propose regulatory measures for salmon fisheries under the jurisdiction of members;
- To make recommendations concerning research.

“In 1948 Canada and the United States entered into a bilateral agreement designed “to improve the sanitary practices prevailing in the shellfish industries” of the two countries”. Under this agreement both parties have the right to inspect the other’s growing sites and shellfish handling facilities. A certification of compliance is issued to shellfish shippers once all parties involved are convinced that the recommended practices are being adhered to.

Figure 2.1: Zones of Delimitation

7 Ibid., Article 7.
2.1.2 International Boundaries

The westerly boundary of New Brunswick establishes an international limit between Canada and the United States. For the most part this boundary has been well defined throughout history. However, a portion of the boundary "between the boundary terminus in the Grand Manan Channel to the northeast, and Point A of the International Court of Justice dividing line to the southwest, there is a gap of about 45 miles in which the boundary between the two countries has yet to be determined."10 This area is graphically depicted in Figure 2.2. The International Court of Justice dividing line in the Gulf of Maine area was set by the Court in 1984 and is defined under the provisions of a Special Agreement.11 Included in this Special Agreement was a provision "having the final boundary defined in terms of geographic coordinates rather than as a line drawn on a chart."12

![Figure 2.2 Boundary Claims - Bay of Fundy](image)


Information received from the New Brunswick DFA\textsuperscript{14} indicates a growing interest in aquaculture sites further offshore in the Bay of Fundy Region.

\begin{quote}
Given the uncertainty in the international boundary in the Machias Seal Island region, care must be exercised to ensure any leases issued in the area are within the most pessimistic limits of the international boundary.
\end{quote}

Care must also be given to site separation distances between aquaculture sites located on both sides of the international boundary. In the New Brunswick Aquaculture Regulations the minimum site separation distance between finfish aquaculture sites has been established to be 300 metres\textsuperscript{15}

\begin{quote}
It is recommended that DFA give consideration to the minimum site separation distances of neighboring states when issuing leases near jurisdictional boundaries.
\end{quote}

\section*{2.2 National and Provincial Jurisdictional Issues}

Within jurisdictional issues related to marine aquaculture, the division of powers between the federal and provincial governments is crucial. The Constitution Act, 1867\textsuperscript{16} and the Constitution Act of 1982\textsuperscript{17} are the primary sources of legislation that relate to these matters. It should be noted that since “all legislative powers have been conferred through a combination of federal and provincial powers, then aquaculture must be considered under one of the listed headings.”\textsuperscript{18} The following sections summarize the distribution of powers between the federal and provincial governments. An overview of the Canada - New Brunswick Memorandum of Understanding on Aquaculture Development\textsuperscript{19} will also be presented. The impact the various levels of jurisdiction have on individuals involved in the aquaculture industry is presented in Section 2.2.2.

\subsection*{2.2.1 Constitutional Jurisdiction}

In Canada, legislative authority is divided between the federal and provincial governments primarily by the British North American Act 1867, now referred to as the Constitution Act 1867.\textsuperscript{20} Sections 91 and 92 of the Act allocate the powers of both governments with

\textsuperscript{14} Sweeney, R.H. (1996). Personal Communication. Aquaculture Development Officer, Department of Fisheries and Aquaculture, N.B.
\textsuperscript{15} New Brunswick Regulation 91-158 under the Aquaculture Act (O.C. 91-806), (1991) Section 26 (a).
\textsuperscript{16} Constitution Act, (1867), (The British North America Act, 1867), 30 & 31 Victoria, c.3 (U.K.).
\textsuperscript{17} Constitution Act, (1982) c.11 (U.K.).
\textsuperscript{19} Canada - New Brunswick Memorandum of Understanding on Aquaculture Development, 22 April, 1989.
\textsuperscript{20} Supra, note 16 and 17.
Real Property Issues in the Marine Aquaculture Industry in New Brunswick

respect to Matters that come under the Act. Aquaculture is not specifically mentioned anywhere in the Act and therefore who has jurisdiction is open to interpretation by the Courts.

However this may be a moot point considering the existing Memorandum of Understanding\textsuperscript{21} between the Government of Canada and the Government of New Brunswick with respect to Aquaculture Development. Co-operation of this nature promotes the growth of the aquaculture industry through a strategic management plan and it is in keeping with the collaborative management structure detailed in the \textit{Oceans Act} \textsuperscript{22} as

The Minister, in collaboration with other ministers ... shall lead and facilitate the development and implementation of a national strategy for the management of estuarine, coastal and marine ecosystems in the waters that form part of Canada or in which Canada has sovereign rights under international law.

Co-operation between governments is commendable; however, should an action be taken by an injured party the courts may well refer back to the actual division of powers outlined in the \textit{Constitution Act 1867} to decide on matters of law.

Presented below are segments from the \textit{Constitution Act of 1867} that are relevant to the division of legislative authority with respect to the aquaculture industry:\textsuperscript{23}

\textbf{II. UNION}

7. The Provinces of Nova Scotia and New Brunswick shall have the same limits as at the passing of this Act ...

\textbf{VI. DISTRIBUTION OF LEGISLATIVE POWERS}

Powers of the Parliament

91. It shall be lawful for the Queen, by and with the advice and consent of Senate and House of Commons, to make Laws for the Peace, Order and good Government of Canada in relation to all Matters not coming within the Classes of Subjects by this Act assigned to the Legislatures of the Provinces;....

\hspace{1cm} 9. Beacons, Buoys, Lighthouses, and Sable Island.
\hspace{1cm} 10. Navigation and Shipping.
\hspace{1cm} 12. Sea Coast and Inland Fisheries....

Exclusive Powers of Provincial Legislatures

92. In each Province the Legislature may exclusively make Laws in relation to Matters coming within the Classes of Subjects next herein-after enumerated; that is to say,...

\hspace{1cm} 8. Municipal Institutions in the Province.
\hspace{1cm} 13. Property and Civil Rights in the Province.
\hspace{1cm} 16. Generally all Matters of a merely local or private Nature in the Province.

\textsuperscript{21} Supra, note 19.
\textsuperscript{23} \textit{Constitution Act}, (1867), \textit{(The British North America Act, 1867)}, 30 & 31 Victoria, c.3 (U.K.).
B. H. Wildsmith and Campney & Murphy conclude that s. 91(12) and s. 92(13) are the areas of most concern with respect to overlapping jurisdictional powers in the aquaculture industry. Section 92 (8) is mentioned above and will be discussed in Section 2.4.

Section 91(9) gives the federal government powers over buoys and beacons. In acting under this authority the federal government, through the Regulations Respecting Works in Navigable Waters, established that "No person shall build or place a work in a navigable water unless all lights, buoys and other marks required in the approval are installed and maintained to the satisfaction of the Minister." Section 3 of the Navigable Waters Protection Act defines work to include "...any structure, device or thing, ..., that may interfere with navigation." It should be noted that buoys deployed on aquaculture sites as per the request of the Canadian Coast Guard are to alert navigators of works that may interfere with safe navigation. These buoys are generally yellow and are not to be confused with the white marker buoys set to demarcate leasehold areas as per the instructions of DFA.

“Section 91 (10) of the British North America Act, 1867, gives the Dominion exclusive power to legislate respecting Navigation and Shipping”. G.V. La Forest in quoting from several court cases in Canada states:

The power under section 91(10) includes the power to regulate, protect and prohibit, if so desired, the public right of navigation... Here it suffices to say that in England the public has from time immemorial had the right to navigate navigable waters, whether on the open seas or on tidal streams. This public right exists in Canada and in some provinces at least, has been judicially construed to apply to all waters that are de facto navigable, whether tidal or not.

The federal government in exercising its rights can disallow works, as defined in the Navigable Waters Protection Act, that may interfere with navigation. Many of the structures or devices employed in the aquaculture industry, such as cages, tables, long lines, etc., fall within the definition of works and are as such subject to the approval under the Act. The proceedings generally accepted in the aquaculture industry is to acquire a licence and lease from the provincial government which is subject to the approval of the Canadian Coast Guard which has the authority to enforce the Navigable Waters Protection Act. It should be noted that oyster tables that are temporarily moved to areas other than aquaculture leases would also be considered "works" and be subject to approval under the Navigable Waters Protection Act.

Section 7 of the Constitution Act, 1867 declares that New Brunswick shall have the same limits on the enactment of the Act as it had prior to the Act. The exact extent of the limits of New Brunswick at the time of Confederation is a matter of historic research. The New Brunswick boundaries become important in deciding what is the area where the

29 Ibid., p. 29.
government of New Brunswick can enforce laws with respect to property and civil rights, as per Section 92(13). H.W. Hickman, Q.C.,\textsuperscript{30} while researching the boundaries of New Brunswick stated:

The Province of New Brunswick on its creation was described in the letters patent of June 18, 1784, as follows:

"The tract of Country bounded by the Gulph of St. Lawrence on the East, the Province of Quebec on the North; the Territories of the United States on the West, and the Bay of Fundy on the South; should be erected into a Government under the Name of New Brunswick."

In the Royal Commission to Sir Thomas Carleton of August 24, 1786, it was altered to read as follows:

"Our Province of New Brunswick bounded on the westward by the Mouth of the River Saint Croix by the said River to its Source and by a line drawn due North from thence to the Southern Boundary of our province of Quebec to the Northward by the said boundary as far as the Western Extremity of the Bay des Chaleurs to the Eastward by the said Bay and the Gulph of Saint Lawrence to the Bay called Bay Verte to the South by a line in the center of the Bay of Fundy from the River Saint Croix aforesaid to the Mouth of the Musquat River by the said River to its source, and from thence by a due East line across the Isthmus into the Bay Verte to join the Eastern line above described including all islands within six Leagues of the Coast with all the Rights, Members and Appurtenances whatsoever thereunto belonging."

By the Treaty of Ashburton in 1842, which settled and defined the bounds of the United States of America and the Province of New Brunswick, it was agreed and declared that the line of boundary be as follows:

"Beginning at the monument at the source of the River Saint Croix, as designated and agreed to by the commissioners under the fifth article of the Treaty of 1794, between the Governments of Great Britain and the United States: thence north, following the exploring line run and marked by the surveyors of the two Governments in the years 1817 and 1818, under the fifth article of the Treaty of Ghent, to its intersection with the River Saint John, and to the middle of the channel thereof; thence up the middle of the main channel of the said River Saint John to the mouth of the River Saint Francis; thence up the middle of the channel of the said River Saint Francis, and of the lakes through which it flows, to the outlet of the Lake Pohenagamook; thence southwesterly, in a straight line, to a point on the northwest branch of the River Saint John, which point shall be ten miles distant from the main branch of the Saint John, in a straight line and in the nearest direction; but if the said point shall be found to be less than seven miles from the nearest point of the summit or crest of the highland that divide those rivers which empty themselves into the River Saint Lawrence, from those which fall into the River John, then the said points shall be made to recede down the said northwest branch of the River Saint John to a point seven miles in a straight line from the said summit or crest; thence in a straight line, in a source about south, eight degrees west to the point where the parallel of latitude of 46-25' north intersects the southwest branch of the Saint John; thence southerly by the said branch to the source thereof in the highlands at the Metjarmette Portage; thence down along the said highland which divide the waters which empty themselves into the River St. Lawrence, from those which fall into the Atlantic Ocean, to the head of Hall's Stream; thence down the

middle of said stream, till the line thus run intersects the old line of boundary surveyed and marked by Valentine and Collins, previously to the year 1774, as the 45th degree of north latitude, and which has been known and understood to be the line of actual division between the States of New York and Vermont on one side, and the British Province of Canada on the other; and from said point of intersection west along the said dividing line, as heretofore known and understood, to the Iroquois or Saint Lawrence River."

"In 1851 following a dispute between the Provinces of New Brunswick and Canada, the Imperial Parliament passed a statute settling the northern boundary of the Province of New Brunswick. Under that statute New Brunswick now includes the southern half of the Bay of Chaleurs as can be seen from the following portion of the boundary:

Thence down the centre of the stream of the Restigouche to its mouth in the Bay of Chaleurs; and thence through the middle of that Bay to the Gulph of Saint Lawrence; the islands in the said Rivers Mistouche and Restigouche to the mouth of the latter river at Dalhousie being given to New Brunswick."

The boundary line between New Brunswick and Nova Scotia is described in C.S.N.B. (1903) at page LXII, as follows:

"Commencing at the mouth of Missiquash river in Cumberland Bay, and thence following the several courses of said river to a post near Black Island; thence north fifty-four degrees twenty-five minutes east, crossing the south end of Black Island, two hundred and eighty-eight chains, to the northerly angle of Trenholm Island; thence north thirty-seven degrees east eighty-five chains and eighty-two links, to a post; thence north seventy-six degrees east forty-six chains and twenty links, to the portage; thence south sixty-five degrees forty-five minutes east three hundred and ninety-four chains and forty links, to Tidnish Bridge; thence following the several courses of Tidnish River along its northern upland ban to its mouth; thence following the northwesterly channel to the deep waters of the Bay Verte."

In 1859 New Brunswick passed An Act relating to the Boundary Line between the Provinces of New Brunswick and Nova Scotia.31 A second Act of this nature was passed in 1862 entitled An Act to explain an Act entitled An Act relating to the Boundary Line between the Provinces of New Brunswick and Nova Scotia.32 These Acts did not deal with marine or ocean boundaries so they are of little concern in relation to subject at hand. However, in 1853 New Brunswick passed An Act relating to the Coast Fisheries, and for the prevention of Illicit Trade33 in which reference was made to a three marine mile limit on the sea coast. Canada in 1868 passed An Act respecting Fishing by Foreign Vessels34 whereby it mentioned limits of three marine miles off any coast, bays, creeks or harbours whatever, of Canada.

With the recognition of the three mile concept before and after Confederation by both the federal and provincial governments, it may be argued that New Brunswick as a colony did have a three mile coastal zone before Confederation. As such it still maintains the same by

---

31 An Act relating to the Boundary Line between the Provinces of New Brunswick and Nova Scotia. (1859) c. 9.
32 An Act to explain an Act entitled An Act relating to the Boundary Line between the Provinces of New Brunswick and Nova Scotia. (1862) c. 32.
33 An Act relating to the Coast Fisheries, and for the prevention of Illicit Trade, (1853) c. 69.
34 An Act respecting Fishing by Foreign Vessels (1868) c. 61.
virtue of section 7 of the *Constitution Act, 1867*. B.H. Wildsmith\(^35\) in quoting a document from a legal advisor to the British Crown presented the following in support of the colonies having a claim to the three marine mile coastal zone;

In 1869, William Forsyth summarized the extent of colonial jurisdiction:

> "The jurisdiction of colonial legislature extends to three miles from the shore. In an opinion given by the Law Officers of the Crown - Sir J. Harding, Queen Advocate; Sir A.E. Cockburn, Attorney General; and Sir R. Bethell, Solicitor General - with reference to British Guiana, Feb. 1855, they said: "We conceive that the colonial legislation cannot legally exercise its jurisdiction beyond its territorial limits - three miles from the shore ..."

The implications of this are substantial in that it may be argued that if New Brunswick did not have these coastal lands at the time of Confederation it would not now be in a position to administer property rights in the same. For example, the coastal lands may be considered Canada Lands as defined under the *Canada Lands Surveys Act*:\(^36\)

... (b) any lands under water belonging to Her Majesty in right of Canada or in respect of any rights in which the Government of Canada has powers to dispose.

If the coastal zone around New Brunswick (Northeast Coast and the Bay of Fundy) was to be considered Canada Lands then the Canada Lands property rights and survey systems would be employed to administer these lands. The Survey General of Canada would have to issue survey instructions and confirm all survey returns. Plans would be registered in the Canada Lands Surveys Registry and generally surveys would be conducted by Canada Lands Surveyors. In fact, according to the *Government Organization Act, 1966*\(^37\) the control and management of all federal government lands except those under control of another department come under the control of the Department of Public Works.\(^38\)

This research has not been able to find any direct reference to a federal act whereby the coastal lands in and around the province of New Brunswick have been assigned to the Department of Fisheries and Oceans for administration purposes. Therefore, these lands may fall under the administration of the Department of Public Works, Canada. However, Section 7(1) of the federal *Fisheries Act*\(^39\) states:

7(1) Subject to subsection (2), the Minister may, in his absolute discretion, wherever the exclusive right of fishing does not already exist by law, issue or authorize to be issued leases and licences for fisheries or fishing, wherever situated and carried on.

This gives the Minister of Fisheries and Oceans authority to grant exclusive rights in fishery activities. Section 23 of the *Fisheries Act*\(^40\) presents the general prohibitions with respect to limiting fishing within leased areas.


\(^{38}\) MacLeod, A.M. CLS., OLS., *Government Departments from 1867 to 1996, Responsibilities for administering interest of concern to Legal Surveys Division*, July 1996, Legal Surveys Division, Geomatics Canada, Earth Sciences sector, Natural Resources Canada.


Real Property Issues in the Marine Aquaculture Industry in New Brunswick

23. No one shall fish for, take, catch or kill fish in any water, along any beach or within any fishery described in any lease or licence, or place, use, draw or set therein any fishing gear or apparatus, except by permission of the occupant under the lease or licence for the time being, or shall disturb or injure any such fishery.

Additional information with respect to a person's right to fish in or near on aquaculture site is presented in Section 5.3.

Section 5 in An Act to amend the Fisheries Act defines fishery as:

...“fishery” includes the area, locality, place or station in or on which a pound, seine, net, weir or other fishing appliances used, set, placed or located, and the area, tract or stretch of water in or from which fish may be taken by the said pound, seine, net weir, or other fishing appliance, and also the pound seine, net weir, or other fishing appliance used in connection therewith.

In Soleiko v. Canada the judge states,

It seems clear from the lease given by the federal Department of Fisheries that it was made for the purpose of raising oysters and other molluscs, and that the sector covered by the lease would only be used for that purpose. In my opinion this concept of nuisance in the law governing neighboring occupancy applies not only to a riparian owner or someone who has an ownership right, but to wrongful relations between neighbours, whether simple tenants or, as here, beneficiaries of the right to engage in “the raising of oysters or other molluscs”.

It is evident from the above referenced section of the Fishery Act that the federal government did have, and may still have, legislative authority to issue exclusive rights in aquaculture leases. Therefore, it is assumed that by way of the Memorandum of Understanding, Article IV, (Section 4.1) the provincial government has acquired the same legislative authority to issue leases as per Section 25(1) of the Aquaculture Act.

The exclusive right to the fishery meaning a person alone has the right to fish in a particular area, may still be subject to conditions in a lease or licence. For example, a person may have exclusive right to a site by way of an aquaculture lease, but this site is still subject to federal environmental laws.

*It is recommended that DFA examine how the lease terms could be strengthened to ensure an exclusive fishery (also see 5.3).*

2.2.2 Canada - New Brunswick MOU on Aquaculture Development

From the foregoing discussion it can be easily seen how an industry, such as aquaculture, can become consumed by bureaucratic red tape in solving jurisdictional issues. Some issues can be resolved by extensive historic research of the respective legislation while others may rely on the precedents established in provincial and federal courts. Still others may not have clear dividing lines and remain unresolved for extended periods of time.

41 An Act to amend the Fisheries Act, Chapter 35 (1st Supp.), (1985), c. 31.
B.H. Wildsmith's concern in this regard was expressed in one short sentence as presented below:

Aquaculture is unlikely to develop into a major food industry in Canada without a high degree of federal-provincial teamwork.43

V. La Forest similarly stated that:

... federal-provincial co-operation will on many occasions be required for the full and rational development of water resources.44

The Canada - New Brunswick Memorandum of Understanding on Aquaculture Development, hereinafter refer to as MOU, was agreed to on 22 April, 1989 by Her Majesty The Queen in right of Canada, as represented by the Minister of Fisheries and Oceans, Canada and the Government of New Brunswick, as represented by the Acting Minister of Fisheries and Aquaculture. The purpose of the MOU, among other things, is to, “establish a mutual regime for the orderly development and growth of aquaculture in New Brunswick”.45

In reviewing the MOU several concerns became evident, some of which are of a minor nature while others deal with more serious matters. These concerns are presented below and are cross referenced to appropriate articles and sections in the MOU.

Concern 1  Definition of Aquaculture - Article I

The definition of aquaculture presented in Article I46 in the MOU differs from that presented in The Aquaculture Act.47 This may lead to confusion in the industry and present problems for government departments responsible for the MOU and the Act. In fact, the definition of aquaculture in the MOU is ambiguous in that it makes reference to activities not covered by the MOU, without defining such activities.

It is recommended that DFA review all documents with respect to aquaculture and make any necessary amendments in wording to ensure uniformity.

Concern 2  Licensing and Leasing - Article IV, Section 4.1

Section 4.1 states,

4.1 New Brunswick shall license and lease all types of aquaculture facilities and operations in accordance with its legislation and regulations, and in accordance with relevant federal legislation.48

46 Ibid., Article I.
Even if New Brunswick claimed to the middle of the Bay of Fundy and could prove ownership of a three mile coastal zone it is still possible that aquaculture activities could take place outside these regions off the northeast coast of the province. As such, the New Brunswick government would be regulating activities on Canada Lands, with one such regulation being that a survey must be performed by a New Brunswick Land Surveyor.\textsuperscript{49} It is possible that the said New Brunswick Land Surveyors would be acting outside their jurisdiction and thereby possibly voiding any liability insurance they may carry. They may also be convicted of an offence under the \textit{Canada Lands Surveys Act}. Further to the above the surveying of marine aquaculture leases is not strictly within the bounds of traditional land surveying activities and may not fit the wording that exists in the Canadian Council of Land Surveys group insurance policy, of which the majority of New Brunswick Land Surveyors are members.

\begin{center}
\textbf{It is recommended that DFA consult with the Association of New Brunswick Land Surveyors to ensure the proper wording is in the insurance policy.}
\end{center}

\begin{center}
\textbf{It is recommended that DFA consult with the Survey General of Canada Lands, Natural Resources Canada, to ensure that jurisdictional issues with respect to surveys are accounted for.}
\end{center}

\textbf{Concern 3} Licensing and Leasing - Article IV, Section 4.3

Section 4.3 states,

\begin{quote}
4.3 Existing aquaculture leases issued by Canada shall remain valid until the expiry date therein set out or until such other time as New Brunswick and may agree. In replacing the licence formally issued by Canada, New Brunswick will undertake to honor the general purpose and conditions of those licences.\textsuperscript{50}
\end{quote}

Many of the traditional oyster leases (some of which date back to 1940's) along the northeast coast are very small (less than 1 hectare) in comparison to the finfish leases (20 hectares) in the Bay of Fundy. Figure 2.3 graphically depicts the size and layout of these leases and shows how they are grouped together in clusters. Personal interviews with B. Dupuis\textsuperscript{51} revealed that the intention of the government was to enhance the oyster industry following the Malpeague disease, by issuing as many leases as possible. In fact, the oyster seed was even supplied by the Department of Fisheries and Oceans.

The current policy of DFA is to hold leases as they expire without renewal, so they can be joined onto neighbouring leases or amalgamated to form one large lease that will provide economics of scale for a viable commercial activity.\textsuperscript{52} This policy is possibly contrary to the general purpose and conditions of the previous lease structure and may therefore be in contravention of the MOU.

\textsuperscript{50} Canada - New Brunswick Memorandum of Understanding on Aquaculture Development, 22 April, 1989.
\textsuperscript{51} Dupuis, B. (1996). Personal Communication. Department of Fisheries and Aquaculture, N.B.
\textsuperscript{52} Ibid.
It is recommended that DFA discuss the policy of holding expired leases with the Department of Fisheries and Oceans to reduce the potential for misunderstanding in the MOU.

Concern 4  Termination of Agreement, Article VI, Section 2

Section 2 states,

2. In the event that this Agreement is terminated, the licences or leases issued during this Agreement remain valid for one year, or until their date of expiry.53

The above text is ambiguous in that it may be taken to mean that the licence/lease will terminate within one year or at the expiry date, whichever comes first; or, that the lease/licence will not terminate for at least one year or for such a longer period of time as dictated by the expiry date. The advantages or disadvantages of either scenario can be developed at some length and it is beyond the scope of this project. The possibility of questions in this regard will surely have a negative impact on any security of tenure a lease holder may require, or that a bank may require before allocating funds to finance an aquaculture activity.

It is recommended that DFA amend the wording in Article VI, Section 2 to provide a clear understanding of its intention.

Apart from the above, the authors of and the signatories to the MOU are to be commended. This is especially so with respect to Article IV, Section 9.2, which states,

9.2 Where a Court of competent jurisdiction finds a particular regulation to be ultra vires the powers of Canada or New Brunswick and neither government intends to appeal the decision or the appeal process has been exhausted, the government that has jurisdiction for the matter shall consider forthwith the passing of substantially similar regulations to replace the ones declared ultra vires by the Court.54

"Since it is established that all legislative powers have been conferred through the combination of federal and provincial powers, ..."55 then it would be reasonable to expect that any matter that arose in the aquaculture industry could ultimately be taken care of either by direct legislation or via legislation enacted as a result of Section 9.2 as presented above.

54 Ibid.
Figure 2.3: Typical Aquaculture Sites - Northeast Coast\textsuperscript{56}

\textsuperscript{56} Source: Department of Fisheries and Aquaculture, N.B.
2.3 The Oceans Act

The Oceans Act, in force on January 31, 1997, is divided into three parts. Presented below is a summary of each part as presented in a prelude to the Act:

Part I of this enactment recognizes Canada’s jurisdiction over its ocean areas through the declaration of an exclusive economic zone and a contiguous zone in accordance with the United Nations Convention on the Law of the Sea. It also incorporates provisions of the Canadian Laws Offshore Application Act and the Territorial Sea and Fishing Zones Act.

Part II provides for the development and implementation of a national Oceans Mapping Strategy bases on the sustainable development and integrated management of oceans and coastal activities and resources.

Part III provides for the consolidation and clarification of federal responsibilities for managing Canada’s oceans.58

Previous sections in this report dealing with jurisdictional issues have referenced appropriate sections of Part I the Oceans Act. Part II of the Act dealing with Management Strategy provides the Minister of Fisheries and Oceans with a directive to

... lead and facilitate the development and implementation of a national strategy for the management of estuarine, coastal and marine ecosystems in waters that form part of Canada or in which Canada has sovereign rights under international law.59

The national strategy is to be based on the following principles as outlined in Section 30 of the Act:

(a) sustainable development, that is, development that meets the needs of the present without compromising the ability of future generation to meet their own needs;

(b) the integrated management of activities in estuaries, coastal waters and marine waters that form part of Canada or in which Canada has sovereign rights under international law; and

(c) the precautionary approach, that is, erring on the side of caution.60

During interviews with Fisheries and Oceans officials, they stressed the federal Department’s emphasis on a collaborative approach in the development and implementation of management strategies. Section 32 of the Oceans Act, among other things, gives the Minister authority to:

(i) establish advisory or management bodies and appoint or designate, as appropriate, members of those bodies,
(ii) recognize established advisory or management bodies; and ...  

for the implementation of integrated management plans. In New Brunswick the Aquaculture Interagency Review Group or the Aquaculture Site Evaluation Committee would certainly be key players in the advisory bodies reference above.

Part III of the *Oceans Act* details the powers, duties and functions of the Minister of Fisheries and Oceans with respect to:

- Coast Guard Services;
- Marine Sciences;
- Fees;
- Conditional Amendments;
- Repeals;
- Related Amendments.

These matters, although important to the aquaculture industry, are beyond the scope of this report and as such will not be elaborated on further.

### 2.4 New Brunswick's Coastal Zone Policy

In 1993, the New Brunswick Commission on Land Use and Rural Environment (CLURE) recommended that the Province develop minimum standards for the management and development of coastal lands. The Province accepted this recommendation and in 1996 the Department of Municipalities, Culture, and Housing began circulating a draft proposal for a coastal land use policy. The primary purposes of the policy are to protect coastal features and enhance public access and use of coastal lands. Coastal features are defined as:

...beaches, dunes, salt marshes, dyked lands, intertidal areas and formerly designated cultural heritage features or environmentally significant areas.

and coastal lands are defined as: "...those lands which extend 500 meters [sic] landward from natural coastal features." Of significance is the rather vague definition of an intertidal area:

...a coastal environment occurring in the area between the limit of the higher high water mean tide and the lower low water mean tide.

---


64 Ibid., p. 8.

65 Ibid., p. 8.

66 Ibid., p. 15.
At the least this may apply to special environmentally sensitive areas; at the greatest it would include all foreshore lands along the coast.

This Draft Policy has the following impacts on the use and development of coastal lands that are directly relevant to aquaculture development:

1.1 No development or undertaking, including but not limited to infilling, removal, mining, destruction, dredging, or drainage, shall occur within 30 meters [sic] of a coastal feature.

1.2 All development or undertakings within 500 meters of a coastal feature shall be subject to a Development Review...

1.5 Industrial development shall be located no closer than 500 meters of a coastal feature unless industrial parks designated by the Department of Economic Development and Tourism.

1.6 All relevant government departments shall assist municipalities, rural communities, and non-incorporated areas in including and enhancing coastal zone management...

There was much discussion in the fall of 1996 between the Department of Municipalities, Culture, and Housing and the Association of New Brunswick Land Surveyors over the boundaries specified in the policy, the tidal datums referred to, and the manner in which the datums and boundaries can be unambiguously defined. The main issue is that the limit for measuring setbacks and zones does not conform to the coastal property boundary and is being defined by biological and geological features. Such boundaries have been the subject of extensive litigation in the United States for decades.

The policy is intended to apply only to new developments. Furthermore, aquaculture activities may not be affected by the provisions of the policy under the following exemptions:

3.6 a development or undertaking on or within 30 meters of a coastal feature that is directly associated with an industrial development and for which a coastal location is necessary, provided the proponent has received approval from the Minister of the Environment or his/her designate and all additional approvals and permits required by regulation or by-law from the appropriate levels of government.

3.7 a development or undertaking on or within 30 meters of a coastal feature that is directly associated with a development or undertaking on Crown Land, provided the proponent has received approval from the Minister of Natural Resources and Energy or his/her designate and all additional approvals and permits required by regulation or by-law from the appropriate levels of government.

The issues for DFA include the following:

• Precisely which areas along the coast will be affected by the policy?
• How will applications for new aquaculture leases and activities be viewed under this policy?

67 Ibid., p. 13.
• How will renewals be viewed?
• Will the exemptions, for example as activities on Crown Lands, be sufficient to give DFA authority to continue issuing leases?
• Will the conditions of the lease and licences have to be modified to meet new provincial guidelines?
• Will activities on the foreshore, such as placement of anchors, be limited to any further extent under this policy?
• Specifically, what will be the status of rockweed harvesting under this new policy?

Also, although the intent of this policy is to limit inland activities, there is a new interdepartmental committee considering a marine coastal policy. It is essential that DFA and the aquaculture community not only be represented on this committee but also the committee should address the issues related to jurisdiction, property rights, and boundaries.

It is therefore recommended that DFA investigate further the potential impact of the proposed Coastal Land Use Policy and any future Marine Land Use Policy to ensure that aquaculture interests are considered and that regulations (including those involving property rights, public rights, datums, boundaries, and limits) can be sufficiently well defined to provide unambiguous definition and delimitation of aquaculture interests.

Furthermore, it is recommended that DFA develop a GIS capability and relevant data sets to ensure that aquaculture information is available for policy making and for examining the current and potential impact of aquaculture activities on coastal and marine environments.

2.5 Aboriginal Rights and Interests

This section considers the general property issues for Canada's aboriginal peoples (First Nations, Metis and Inuit) with regard to aquaculture, and specifically what aboriginal interests the Mi'kmaq and Maliseet First Nations Bands of New Brunswick may have in the foreshore, seabed and fishery. The common law doctrine of aboriginal title and rights are explored as background.

Consideration of these principles is important given Canada's aboriginal peoples' cultural and spiritual links to land, waters and management of resources. The common law doctrine of aboriginal title may provide a basis for Canada's aboriginal
peoples to assert a claim to the sebed, foreshore and usufructuary rights in these areas. The assumption that aboriginal title can extend to the foreshore and to the seabed can be justified at two levels: from the legal analysis and from the aboriginal point of view.

Aboriginal title recognizes the legal continuity of aboriginal property rights upon the Crown’s acquisition of sovereignty over their territory. The basic principle is that the Crown assumes the underlying title to the new territory but respects the existing rights of the aboriginal inhabitants. That is, a change in sovereign does not legally displace pre-existing aboriginal property rights. Aboriginal title stems from the occupation and use of lands and waters exercised by aboriginal peoples prior to European settlement and prior to the Crown’s acquisition of sovereignty. It is recognized that the rights and interests of aboriginal inhabitants are a burden on the Crown’s ultimate title. In effect there is a dual system of tenure. Aboriginal title has been judicially recognized in the United States, New Zealand, Australia and Canada.

The Canadian courts have characterized aboriginal title in a number of ways: "a personal and usufructuary right", a mere burden on the Crown's proprietary estate, a right to "occupy the lands and enjoy the fruits of the soil, forest, and of the rivers and streams", a sui generis - unique property right, and "one manifestation of the doctrine of aboriginal rights". Aboriginal rights include rights to land and to resources, which have cultural, social, religious, linguistic and political dimensions. Aboriginal rights can exist independently of aboriginal title. Aboriginal rights to land can amount to full ownership and use of land to the exclusion of others, or it can be restricted to land rights that are less than full ownership, such as use rights. The latter aboriginal rights are not based on the ownership of the land.

The 1990 case R v Sparrow concerned aboriginal tidal fishing rights. The Supreme Court of Canada outlined five characteristics of an aboriginal right to fish for food, social and ceremonial purposes. This right has priority over all other fishery, but is subject to certain overriding considerations, such as conservation of the resource. The Court also considered the meaning of section 35 of the Constitution Act 1982, which recognized and affirmed "the existing aboriginal and treaty rights of the aboriginal peoples of Canada." The Court held that this phrase should be interpreted flexibly so as to permit the evolution of these rights over time with the changing needs, customs and lifestyles of the aboriginal peoples. Existing rights were not frozen in the pre-1982 state, but are simply those which have never been extinguished.

70 Usufruct meaning "the right to reap the fruits of something belonging to another, without wasting or destroying the subject over which one has that right." Dukelow, D.A., and B. Nuse (1991). The Dictionary of Canadian Law. Carswell, Toronto.
71 Calder et al v Attorney-General of British Columbia (1973), 34 DLR (3d) 145 at 198-9 (SCC); Amodu Tijani v Southern Nigeria (Secretary), [1921] 2 AC 399 (PC).
72 St Catherine's Milling and Lumber Company (1889) 14 App Cas 46 (PC).
73 St Catherine's Milling and Lumber Company (1889) 14 App Cas 46 (PC).
Aboriginal property rights continue to exist until extinguished. Extinction can be through voluntary relinquishment by the aboriginal owners, by sale or cession to the Crown. Extinction can also be by statute or by abandonment. The intention to extinguish must be clear and plain, and can be partial or complete. *Calder*\(^{78}\) established that if legislation did not extinguish the titular aboriginal ownership, this did not necessarily affect those aboriginal rights not amounting to a full claim to ownership of the land. Thus an aboriginal right to fish may still exist. *Sparrow*\(^ {79}\) expressed a distinction between statutory extinguishment and regulation of aboriginal title. Legislation that merely regulates aboriginal title rights cannot be treated as implying the extinguishment of aboriginal title rights.

Aboriginal rights are a concept distinct from treaty rights since the former is based on original occupancy and use rather than an agreement between aboriginal and non-aboriginal. Aboriginal rights co-exist along with treaty rights. The treaties in the Maritimes have been viewed as establishing a relationship of peace and friendship with the British Crown, and not ceding land or rights.

The Crown has a fiduciary duty to protect the interests of aboriginal people, including aboriginal title and rights. The Canadian courts recognised the fiduciary duty of the Crown can continue beyond the extinguishment of aboriginal title.\(^ {80}\) Any breach of duty is subject to compensation. Legislation, such as the new *Oceans Act*\(^ {81}\), explicitly note that the Act does not affect any aboriginal interests that may exist.

The assumption that aboriginal title and rights can extend offshore is contemplated in the Inuvaluit Final Agreement (IFA). The IFA, in its broad extinguishment of all aboriginal claims, rights, title and interests to land and water in the Northwest Territories and the Yukon Territory makes reference to offshore areas and marine waters. Thus, it is contemplated that aboriginal title applies to marine waters. To arbitrarily exclude the foreshore and seabed from aboriginal title implies a compartmentalization of values that are foreign to aboriginal peoples. The First Nations think and talk of land as a whole, not something which is divided into sections by units of measurement. The coastal area is a whole and indivisible area, not separated into beds, waters, high and low water marks.

At the most, an aboriginal Band may have title to the foreshore and/or seabed and thereby have exclusive rights. This maybe through an unextinguished aboriginal title right or a Crown grant. There maybe only partial extinguishment of aboriginal title whereby a Band continues to have usufructuary rights to the foreshore and/or seabed despite another party holding title to the bed. At the least, an aboriginal Band has neither possession or use of the bed or water column.

The Royal Commission on Aboriginal Peoples believes that aboriginal people are entitled to a reasonable share of commercial fishing allocation. The Commission also believes that aboriginal people should also play an active role in fisheries jurisdiction and management.\(^ {82}\) In 1992 the Department of Fisheries and Oceans launched the Aboriginal Fisheries Strategy (AFS). The AFS is a seven year program, applicable where DFO

---

\(^{78}\) Supra note 71.

\(^{79}\) Supra note 77.


\(^{82}\) Royal Commission on Aboriginal Peoples, Report of the Royal Commission on Aboriginal Peoples (Ottawa, 1996) at 563.
manage the fishery and where land claims settlements have not already put a fisheries management regime in place. Under the AFS, the department enters into agreements with aboriginal groups to integrate aboriginal people into the management of the fishery, provide economic benefits, and establish and provide allocations of fish. Access to fisheries and integration into the management of the fishery resource for aboriginal claimants are important components of most land claim settlements.

It is recommended that DFA monitor the progress of aboriginal title and rights in Canada and the land claims process in New Brunswick for any potential impact on aquaculture.
3. RESPONSIBILITIES OF STAKEHOLDERS

Stakeholders in the aquaculture industry in New Brunswick have certain responsibilities with respect to each other, to the general public and generally to the environment. The industry, currently worth approximately 120 million dollars annually, must provide a delicate balance between the commercial activity (bottom line) and environmentally sensitive issues. This chapter of the report will examine the various responsibilities associated with an aquaculture industry in New Brunswick. An evaluation of the aquaculture licensing and leasing process, a mechanism that can take up to 36 months to complete, will be conducted and several suggestions will be made as to how the process can be streamlined in the future. Property management will be discussed and a review of the DFA’s in-house information management systems will be presented.

3.1 Review Process for Marine Aquaculture Licences and Leases

Aquaculture in New Brunswick is primarily regulated under the *Aquaculture Act*¹ and the *Aquaculture Regulations*² as developed by the Department of Fisheries and Aquaculture (DFA). However, many other government departments, both federal and provincial, become involved in the review process, each of which have certain criteria that must be met before a licence or lease is issued. Figure 3.1 presents a schematic of the inter-relationships between the various players with major milestones in the process being numbered from one to nine. Throughout this section reference should be given to this figure and where appropriate realistic time lines will be presented.

**Phase 1**

The review process begins with an application being received at one of the three regional DFA offices.³ Information generally contained in the application consists of the following:

- applicant information;
- purpose of application;
- general location information;
- stock identification;
- proposed facilities to be located on site.

---

² *New Brunswick Regulation 91-158, under the Aquaculture Act (O.C. 91-806)*, (1991)
³ Department of Fisheries and Aquaculture Regional Offices are located at Shippagan, Bouctouche and St. George, New Brunswick, Mailing address, phone and fax numbers can be obtained from DFA at 506-453-2253.
Figure 3.1: Review Process

In the Fundy Region the application form must also be accompanied by a site development plan, drawn to scale by a professional land surveyor or engineer. In Regions 1 and 2 (Northeast Coast) this plan is normally prepared by DFA staff, to help reduce the cost to the potential aquaculturist. However, in so doing, DFA subject themselves to the liabilities that go with the plan with respect to proper positioning, proper identification of upland owners and for the resources required to produce the document. Also all applicable fees must be paid. It should be noted that the application form states that all applications must be accompanied by a site development plan whereas section 6(4) of the regulations states:

6(4) A person who is applying for a private aquaculture licence is exempt from the application of paragraph 6(3)(b).

Where this Section 6(3)b says that a person applying for an aquaculture licence must provide.

6(3)(b) subject to subsection (4), a site development plan in relation to a proposed aquaculture site; and ...

Also section 25(4) of the *Aquaculture Act* states:

24(4) The Minister shall not issue an aquaculture lease unless the applicant for the lease has provided, to the satisfaction of the Minister, a certificate of survey of the land to be conveyed by the lease.

However, discussions with the Registrar have indicated that no private marine aquaculture licences are being issued in New Brunswick.

Once the documentation is in place, a pre-site development evaluation is then conducted by the regional staff to “ascertain the area’s general characteristics and its potential for aquaculture development.” An environmental assessment, of sorts, is also conducted by DFA to report on items such as currents, bottom type, potential conflicts, fauna, flora, and to obtain a videotape featuring the seafloor, etc. This information once submitted to the regional office is then summarized and forwarded to the Registrar. *(Time line - 5 months)*.

**Phase 2**

The Registrar, on behalf of the Minister, then initiates the public notification and interagency review processes. This involves several steps as described below:

**Step 1 Site Development Plan Filed**

Once the site development plan is signed on behalf of the Minister it is filed at the regional office of DFA where the proposed aquaculture site is to be located.

---

10 Ibid., S. 24(5)(a).
Step 2 Shorefront Owner Notification
Shorefront owners, identified on the site development plan, are notified of their right to submit written comments with respect to the location of the proposed aquaculture site within a specified period of time.\textsuperscript{11}

Step 3 Applicant Notification
The applicants are notified to give public notice of their intent to develop or alter a marine aquaculture site.\textsuperscript{12} Prior to public notice DFA is responsible for marking the proposed site corners as indicated on the site development plan. The applicant is responsible for the supply of standard anchors, buoys, etc. These marking will remain in place for a period of 120 days or until the pre-site evaluation is complete, whichever is longer. DFA or the applicant under the direction of DFA officials, is also responsible for the removal of the markings at the end of the prescribed time period.

\begin{center}
\textit{It is recommended that DFA review this practice of marking site corners on behalf of applicants. DFA may be subject to damages if a mistake were to occur during this process or if a navigator were to incur damages to a craft as a result of the buoys.}
\end{center}

Once the site is demarcated, the applicant then arranges for public notification in two local newspapers for a period of two weeks. A time period of thirty days, from the first publication, is provided for the public to make written submissions to the Minister.

Step 4 Interagency Review
The Registrar also sends all applications for an interagency review. Participants in the review process\textsuperscript{13} consist of both federal and provincial stakeholder departments and Atlantic Canada Opportunities Agency.

\begin{center}
\textit{It is recommended that DFA establish a matrix of responsibilities for all participants in the interagency review process. This will let each person know what others are doing and will assist any new DFA officials who may become involved in this growing industry.}
\end{center}

If for some reason there is an adjustment made to the proposed site boundaries such that the site corners are changed by more than ten metres from the published coordinates on the site development plan, the applicant must resubmit a new set of site development plans.\textsuperscript{14} (Cumulative time line - 11 months).

\begin{flushright}
\textsuperscript{11} Ibid., S. 24(5)(b).
\textsuperscript{12} Ibid., S. 24(5)(c).
\textsuperscript{14} Ibid., Section 2.4.
\end{flushright}
Real Property Issues in the Marine Aquaculture Industry in New Brunswick

It is recommended that DFA review the ten metre tolerance stated above. If consideration is given to a map scale of 1:2000, then ten metres on the ground is only 5 mm at scale. With the inherent inaccuracies of producing maps and the distortion introduced as a result of copying, this tolerance may be unrealistic.

Phase 3

Following the closing date for comments from the general public and on receipt of the comments from the various government agencies, all applications are forwarded to the Aquaculture Site Evaluation Committee (ASEC). This committee reviews all comments and may either request additional information from the applicant or make recommendations with respect to the application to the Minister of Fisheries and Aquaculture. The applicant is also made aware of the Committee's decision and is given thirty days to make an appeal if the recommendation is negative. It is understood that the recommendations of ASEC follow that natural chain of command up to the Minister's desk. It should be noted that many of the federal and provincial departments represented on the ASEC are also involved in the interagency review. (Cumulative time line - 22 months).

It is recommended that DFA consider amalgamating the Interagency Review Group with the ASEC, seeing that many of the same departments are involved in both.

It is recommended that the Minister of Fisheries and Aquaculture consider allocating the authority to approve an application based on the ASCE recommendations to someone in DFA. In so doing the Minister need only become involved if appeals are being made. This should help expedite the review process.

The above recommendation will not affect the property right issue, because no rights have been transferred at this point. It will however speed up the review process and thereby assist in the orderly and efficient development of the aquaculture industry.

Phase 4

The Minister of Fisheries and Aquaculture has the final decision as to whether or not an aquaculture lease is to be issued. If a site is approved the applicant is notified of the same and is given ninety days to accept the Minister's offer. If the site application is rejected the applicant has no other mechanism to acquire the lease.

An Occupation Permit and Aquaculture Licence is issued if the applicant accepts the Minister's offer. The permit is issued by the Minister of Fisheries and Aquaculture under
the authority of the subsection 2 (1), Crown Lands and Forest Act, with the approval of the Minister of Natural Resources and Lands. The applicant is advised to proceed with getting a legal boundary survey of the site completed by a registered New Brunswick Land Surveyor. In so doing the surveyor will receive instructions from DFA and demarcate the corners as per the published coordinates on the site development plan. Among other conditions attached to the permit the applicant must commence operations within a twelve month period.

It should be noted that at this point in time the applicant generally approaches financial institutions to acquire financing to commence operations. The banks do lend money based on the letter of acceptance and the occupation permit even though the permit is not transferable. (Cumulative time line - 28 months).

Phase 5

Prior to any aquaculture operations the applicant must ensure that the boundary survey (Plan of Aquaculture Survey) is completed and registered with The Crowns Lands Branch of the Department of Natural Resources and Energy. Also pre-development baseline data on site conditions must be collected and filed with DFA.

Once the Plan of Aquaculture Survey is registered, arrangements are made to have administration and control of the lands described in the said survey transferred to the Minister of Fisheries and Aquaculture. This process is accomplished by an Order in Council under the authority of the Executive Council Act. (Cumulative time line - 30 months).

Phase 6

Finally before an Aquaculture Lease can be issued the land in question must be designated as "aquaculture land" as per subsection 24(1) of the Aquaculture Act. Formal lease documents, in accordance with the Standard Forms and Conveyances Act are then prepared and executed under the signature of the Minister and Registrar of the Department of Fisheries and Aquaculture. It should be noted that by this point in time the growers are generally into their second season without the security of a structured lease. (Cumulative time line - 33 months).

---

16 Executive Council Act, R.S.N.B. Paragraph 3(3)(a).
It is recommended that DFA investigate mechanisms whereby aquaculturists will receive greater security during the application process.

It is recommended that DFA investigate the necessity of having lands designated as aquaculture lands before a lease can be issued.

It is recommended that DFA investigate the possibility of having aquaculture leases issued under the Department of Natural Resources and Energy. This would expedite and remove redundancy from the administrative process.

Aquaculturists and lending institutes will have improved security of tenure if the above recommendations are implemented. This way the lease would be issued in a shorter time frame, thereby reducing the time the aquaculturist is in operation with only an occupation permit. The lending institute would have improved security by the same argument.

Phase 7

Once the lease is issued the grower is required to have a “Surveyor’s Aquaculture Site Report” completed by a New Brunswick Land Surveyor. This report details the placement of structures on the site and must be filed with DFA within 120 days of the date of aquaculture lease. A similar report must also be completed each time there is a change in or additions to the equipment placed on the site. The lessee is also permitted, with the approval of the DFA, to sub-lease their aquaculture site provided the new lessee is prepared to be govern by the conditions of the original lease.

Section 39 of the Aquaculture Act19 states:

39. The Registrar shall maintain copies and records of aquaculture licences, aquaculture leases and aquaculture occupation permits, and such other documents as the Minister may require.

There is nothing in the Aquaculture Act, or the Regulations under the Act, that requires the Registrar or the Lessee to register an aquaculture lease or permit in the public registry for the province. However, many of the commercial leases are registered in the County Registry closest to the aquaculture site. But the majority of small aquaculture leases issued along the northeast coast of the province are not registered. These leases are filed with DFA and are not readily available to the public or financial institutions for notification purposes.

It is recommended that DFA investigate the consequences of not having all leases and permits registered in public registration system.

3.2 Information Management

This section of the report will outline several information management issues that became evident during the research phase of this project. Property information arrangements in DFA have been examined to determine ways in which security of tenure can be increased and potential liabilities of DFA can be decreased. Note, however, that this is not the result of a rigorous information requirements evaluation.

How well information about property rights is managed has a direct impact on how secure those interests are. If the information system is poor, then the property rights system will be subject to errors, delays, uncertainties, and disputes. More specifically, improved information management can affect security of tenure in matters such as the following:

- **reliability** - To be able to rely on the property information, it must be accurate and up-to-date. There must be access to correct information on all of the various interests affecting an aquaculture site and this information must be kept current. This involves quality control, standards for up-dating, and appropriate indices and record management systems. The aquaculturist, the lenders, and DFA currently rely on the licence and lease information. Should they?

- **expediency and timeliness** - If there are delays in the processes for creating and securing aquacultural interests, then the uncertainties about those interests increase. For example, currently the aquaculturist may invest and operate for up to one year before being issued a lease that provides security for that investment. Also after rights have been granted, various notifications required by lenders and others must be provided by DFA. Delays could cause liability.

- **completeness** - The information on each site (and for every site) should reflect the complete set of rights and restrictions affecting that property. In aquaculture this may sometimes involve the ability to integrate property information with information on environmental conditions, for example, enabling DFA to respond quickly to any potential concerns that may affect the security or exercise of the rights.

- **public notification** - For property rights to be secure against any conflicting claims, there must be public notice of these rights. Registration is the process by which this notification is given. The priority in which various interests are registered may also affect their status. Will filing in DFA records provide the same security as may be claimed through the Registry of Deeds or other formal registration system?

3.2.1 Provincial - Federal Interdepartmental Communications

The application process summarized above lists many of the various government departments and agencies involved in evaluating aquaculture sites before permits/leases and

---

licences are issued. During the interagency review, information on a particular site is sent to a minimum of eight government departments, four of which are federal, for comments on suitability. These departments report back to the DFA coordinator who then prepares a summary of comments for the ASEC, a committee comprised of six different government departments, two of which are federal. The ASEC can either recommend approval or rejection of the site, or ask the applicant for additional information, with a site recommendation to follow at a later date.

A review of available documentation on the application process did not indicate a two way communication process. For example, during the interagency review Public Works Canada may raise concerns about a particular site. It is understood that these concerns are expressed to the ASEC but there are no requirements for the committee to address the concerns. In addition, there are no requirements for DFA to inform the various government departments involved in the process of the final outcome of a site evaluation.

The above situation would not be as critical if it were mandatory to have all site leases registered in a public registration system. Since this is not the case, more bi-directional communication could strengthen the review process.

It is recommended that DFA take steps to ensure that all participants involved in the application process are made aware of the final decisions.

3.2.2 Document Tracking

As stated in Section 3.1, the Registrar is responsible for maintaining all relevant information with respect to an aquaculture site. It is envisioned, given the rather complex application process, the requirement for detailed surveys, the need for environmental baseline information, and the need to exchange information among various departments, that the amount of documentation on any one site must be quite extensive. This is complicated further by the need to maintain annual site information on environmental conditions, sales, yields, lease payments, etc.

At present this information is maintained in a traditional filing system, cross referenced to a unique file number assigned to each application. The progress of an application or an active lease at any point in time is generally monitored by DFA staff, who often rely on their memories to answer questions with respect to particular sites or the industry in general.

While this traditional approach to information management may currently meet the needs of the industry there will without doubt be problems in the future. For example, what if one of the senior persons at DFA becomes ill or moves out of the province; or what if the Minister suddenly needed to know the number of square metres of land currently involved in the aquaculture industry in the Bay of Fundy; or what if the accounting department needed to produce a year to date statement of all accounts related to a particular species in the aquaculture industry; what if DFA had to quickly distribute sensitive environmental information to all participants in a given region? It is doubtful if the current filing system can respond to what if scenarios such as these without considerable time and resource allocation.
It is recommended that DFA develop a document management system that can respond to a dynamic aquaculture industry, without the need to rely on people's memories.

3.2.3 Geographic Information Systems

Presented below are the results of a quick review of the geographic information systems (GIS) currently available at DFA. The comments are arranged in point form to show the reader the complexity of the situation.

- Main System is a CARIS GIS, UNIX platform, operated at the Fredericton Office. The person operating the system has been allocated the task along with other regular duties;
- CARIS GIS for Windows is currently available at the regional office in Shippagan;
- Current Data structure has unique feature codes and user numbers for each entity type - this will make grouping data types during queries very difficult;
- Topology is not being maintained on all graphic files;
- Graphic files are not being keep current;
- Graphic files are not linked to any standard data base;
- Digital hydrographic charts are not being employed to assist in site evaluation;
- GIS is not being used in sensitivity mapping;
- The system has not had any custom queries or functionality built in to assist in information retrieval;
- Systems are not linked between offices to ensure current information is available to all users.

As indicated above there appears to be a rudimentary approach to the management of spatially referenced data. There also appears to be very few people in the department that have the necessary skill sets to design and operate a multi-purpose GIS application.

It is recommended that DFA have a needs assessment done on information management in general. Included in the assessment should be provisions to examine the requirements of the Department with respect spatially referenced data.

It is recommended that DFA personnel undertake training activities to realize the full potential of the GIS they have in-house.
3.2.4 DFA Positioning Systems

DFA personnel employ positioning systems in the following activities:

- Positioning of marker buoys during aquaculture site evaluation process;
- Collecting baseline environmental information;
- Assisting in positioning structures on aquaculture sites;
- Re-establishing aquaculture site boundaries;
- Ensuring all structures are within site boundaries during compliance inspections.

Present equipment (and possible accuracies) consist of

- hand held Global Positioning Systems (GPS) (+/- 20 m);
- differential GPS equipment (+/- 1m);
- single beam echo sounder;
- magnetic compass.

Typically DFA personnel manually input site coordinates in their positioning equipment and then conduct on-site activities. This does not facilitate graphic references to assist personnel in their duties, such as ensuring minimum site separation. It does not lend itself to the documentation of activities as they occur in the field. Currently personnel document activities in daily journals that may be subject to human error.

An alternative to the above positioning and data collection procedure would be to employ an integrated navigation and positioning system. Advantages of such a system would include:

- real time positioning accuracies in the range of one metre anywhere in the province without the need of special base stations;
- real time depth measurements time tagged and stored with associated horizontal positions;
- real time heading sensor input thereby giving the flexibility to account for vessel offsets;
- ability to track submerged vehicles or equipment during on-site investigations;
- ability to use digital charts of the operation area in day to day activities;
- ability to have current lease holdings, etc. on screen real time in the field.

It is recommended that DFA acquire an integrated positioning system.

It is recommended that DFA provide training opportunities for field personnel in the areas of coordinate systems, positioning equipment and navigation systems.
4. THE RIGHTS OF THE PRINCIPAL PLAYERS

4.1 Introduction

This section will examine the rights and obligations of the principal players in the aquaculture industry in the Province of New Brunswick as defined by the model for the industry adopted by the Provincial government. These principal players are the Province, the aquaculturists and the various lenders who assist the aquaculturists with funding. This section will particularly focus on the positions of these players as defined by the property rights contemplated under the model.

This section assumes that the Province of New Brunswick has the legislative authority necessary under the Constitution to pass the laws that it has passed. It also assumes that where ownership of property rights is vested in the Crown, it is the Provincial Crown that owns the rights. These constitutional issues are discussed in detail in Chapter 2.

4.2 The Legislative Model

The model described below has been adopted recently by legislation in the Province of New Brunswick. There are existing aquaculture sites which were authorized under earlier provincial or federal laws. The model includes transitional provisions which are designed to capture these sites as their approvals or licences expire. The transitional provisions have not been examined in depth here.

4.2.1 The Act and the Regulations

The aquaculture industry in New Brunswick is governed by the Aquaculture Act\(^1\) hereinafter referred to as “the Act.” The Act creates the administrative framework within which the aquaculture industry in New Brunswick functions. The Act is administered by the Minister (and thus DFA) of Fisheries and Aquaculture. Hereafter, references to “the Minister” and “DFA” will be to the Minister and Department of Fisheries and Aquaculture, (DFA) respectively.

The Act authorizes the Minister to adopt a variety of regulations. To date, only one general regulation under the Act has been adopted. That regulation is cited as the General Regulations - Aquaculture Act\(^2\) and is hereinafter referred to as “the Regulations.”

The model created by the Act and the Regulations is based on the following components:

- designated aquaculture land;
- the aquaculture licence;
- the aquaculture occupation permit;
- the aquaculture lease.

As these components are critical to an understanding of the model, each will be examined in
detail.

4.2.1.1 Designated aquaculture land

Designated Aquaculture Land is defined by the Act\(^3\) as meaning "...land under the
administration and control of the Minister that has been designated by the Minister under
Section 24 as aquaculture land." Thus, the land will be owned by the Provincial Crown.
Section 24 simply gives the Minister the authority to "...designate land that is under the
Minister’s administration and control as aquaculture land.”

Designation of a potential aquaculture site as designated aquaculture land is a critical first
step in the process of issuing an aquaculture lease. The Act limits the Minister’s authority to
issue aquaculture licences to land that has been designated as aquaculture land “...unless
the applicant is the owner or lessee of the aquaculture site and has a right to occupy the
site.”\(^4\) It is expected that such an exception will be rare, especially in tidal waters where
there are few instances where the Crown does not own the bed of the body of water in
question. This exception may come into play in non-tidal, non-navigable bodies of water
where private ownership of the bed is common or in cases where the aquaculture is shore
based (e.g. rockweed).

The decision to designate land as designated aquaculture land is based on input from the
public and from an Aquaculture Site Evaluation Committee (the “ASEC”). Every
application for an aquaculture licence for a specific site must be publicly advertised and the
public has the opportunity to voice any objections to the proposed site. The ASEC is set up
under the Act to review proposed sites and advise the Minister concerning their suitability
for aquaculture.

Designation of land as designated aquaculture land has no impact on the rights of others in,
on or over that land.

4.2.1.2 The aquaculture licence

The aquaculture licence is the primary mechanism under the Act to control aquaculture
activities. The Act provides that “A person who does not hold an aquaculture licence shall
not carry on aquaculture.”\(^5\) The Regulations create three types of aquaculture licences - a
commercial licence, a private licence and an institutional licence.\(^6\) The focus below will be
on the commercial type of licence.

Most aquaculture licences are directly related to individual sites that have been designated as
aquaculture land and where the aquaculture is to be carried on.\(^7\) The licence must specify
the species and strains of crops that may be produced by the aquaculturist.\(^8\) Once issued by
the Registrar, an aquaculture licence may only be assigned or transferred with the prior

\(^3\) Supra, note 1, S. 1 (1).
\(^4\) Supra, note 1, S. 14 (1).
\(^5\) Supra, note 1, S. 4.
\(^6\) Supra, note 1, S. 6 (1).
\(^7\) Supra note 1, Ss 14 (2) and (3).
\(^8\) Supra note 1, S. 16 (1).
written consent of the Registrar. The term of the licence is limited on issuance to the period of time during which the licensee has a right to occupy the site in question or to a maximum of twenty years. The Act and the Regulations contemplate that a licensee must make regular reports to DFA, that DFA will regularly inspect the site and that violations of the requirements set out by DFA may result in the loss of the aquaculture licence.

A typical commercial aquaculture licence is included Appendix “A”. The licence requires that the licensee “cooperate with and/or undertake environmental monitoring of the operation as directed by the Registrar of Aquaculture.” It also provides that staff or the agents of DFA be permitted to have access to the “licensed operation and associated facilities” as may be required from time to time.

The licence also provides as follows:

The licensee will save harmless the Minister or agents from any legal action associated with the performance of duties under the provisions of the Aquaculture Act (Chap. A-9.2, RSNB 1988) [sic] and the General Regulation - Aquaculture Act (NBR, 91-158).

4.2.1.3 The aquaculture occupation permit

The aquaculture occupation permit grants limited rights to an aquaculture site. The occupation permit will typically be issued with an aquaculture licence and will authorize the aquaculturist to use the site pending the completion of the requirements for an aquaculture lease to be issued.

Specific provisions under the Act related to aquaculture occupation permits are as follows:

S. 26 (1) Upon application the Minister may, in accordance with the regulations, issue an aquaculture occupation permit authorizing a person to occupy and use specified designated aquaculture land.

S. 26 (2) The Minister may, in addition to any terms, covenants and conditions established by or in accordance with the regulations, make an aquaculture occupation permit subject to such terms, covenants and conditions as the Minister considers appropriate.

S. 26 (3) An aquaculture occupation permit

(a) shall be for a period not exceeding three years,

(b) shall be at a rent fixed by or in accordance with the regulations, whether before or after the issuance of the permit, or, where there is no applicable regulation, at a rent fixed by the Minister having regard to the occupational and use value of similar land on the open market, and

(c) shall be subject to terms, covenants and conditions established by or in accordance with the regulations,

9 Supra note 1, S. 13.
10 Supra note 1, S. 15 (1) and 15 (2).
whether before or after the issuance of the permit, and to
the terms, covenants and conditions imposed by the
Minister under subsection (2), and

(d) is not assignable or transferable.

S. 26 (4) The Minister shall not issue an aquaculture occupation permit unless
the applicant for the permit has given public notice of the application
in accordance with the regulations.

DFA has provided a form for an aquaculture occupation permit and that document is
attached as Appendix "B" in this report. The only provision of the document that should be
addressed is the statement that the Permit is issued under the authority of the *Crown Lands
and Forests Act*. In fact, S. 26 of the *Aquaculture Act* is clearly sufficient authority for
the Minister to issue the Permit. The reasons for the reference in the Occupation Permit to
the *Crown Lands and Forests Act* are not clear.

4.2.1.4 The aquaculture lease

The aquaculture lease is the primary document under which the aquaculture licensee is
authorized to occupy an aquaculture site. Except for sites located on privately owned land
(either non-tidal, non-navigable water or onshore sites) the bed of the body of water in
question will be owned by the Crown. The aquaculture lease is the vehicle under which the
ownership rights of the Crown are transferred to the aquaculturist.

The most important provisions of the Act related to the aquaculture lease are as follows:

S. 2 Nothing in this Act or the regulations authorizes any interference
with the navigation of navigable waters.

S. 25 (1) Upon application the Minister may, in accordance with the
regulations, lease designated aquaculture land for the purposes of
aquaculture.

S. 25 (2) The Minister may, in addition to any terms, covenants and conditions
established by or in accordance with the regulations, make an
aquaculture lease subject to such terms, covenants and conditions as
the Minister considers appropriate.

S. 25 (3) An aquaculture lease

(a) shall be for a period not exceeding twenty years,

(b) shall be at a rent fixed by or in accordance with the
regulations, whether before or after the issuance of the
lease, or, where there is no applicable regulation, at a
rent fixed by the Minister having regard to the rental
value of similar land on the open market,

(c) shall be subject to the terms, covenants and conditions
established by or in accordance with the regulations,
whether before or after the issuance of the lease, and to
the terms, covenants and conditions imposed by the
Minister under subsection (2), and

---

(d) may be assigned or transferred with the prior written consent of the Minister.

S. 25 (3.1) The Minister shall not issue an aquaculture lease unless the applicant for the lease has given public notice of the application in accordance with the regulations.

S. 25 (4) The Minister shall not issue an aquaculture lease unless the applicant for the lease has provided, to the satisfaction of the Minister, a certificate of survey of the land to be covered by the lease.

S. 25 (5) Subject to subsections (6) and (7), an aquaculture lease conveys the right to exclusive use of the land covered by the lease.

S. 25 (6) An aquaculture lease does not convey a right to any mines or minerals in, on or under the land.

S. 25 (7) An aquaculture lease may make provision for access through and over the land by adjacent landowners.

These sections will be more fully discussed below. A form of aquaculture lease that DFA uses for finfish sites is appended hereto as Appendix “C”. The following comments relate to that form of lease.

The lease form complies with the *Standard Forms of Conveyances Act*12 and the *Leases Regulation*13 passed under that Act. Accordingly, the form of lease is standardized. The first page contains the important information as to the parties, facts concerning the lease such as the term, the dates of commencement and termination, the rent and how it is to be paid. The first page also contains the “magic words” which serve to convey the leasehold interest from the Crown to the lessee. In addition, the premises to be leased are described by reference to a schedule. The first page also incorporates by reference two Schedules of covenants and conditions to which the lease is subject. Schedule “B” is a list of one line covenants or conditions. The legislation provides that these one line phrases have the same meaning as a longer clause. A list of the one line clauses contained in the lease form and the longer versions of them is attached hereto as Appendix “D.” Finally, a set of covenants and conditions applicable to aquaculture leases is set out as Schedule “C.”

The Act provides that an aquaculture lease conveys the right to the exclusive use of the land covered by the lease, except that it does not convey any rights to mines or minerals and that it may be subject to provisions for access through and over the land by adjacent landowners. “Land” is a defined term in the Act and it “includes land covered by water and the water column superjacent to land.”14

The Act and the Regulations require that the applicant for an Aquaculture Lease provide DFA with a plan of the site prepared by a New Brunswick Land Surveyor. The Association of New Brunswick Land Surveyors adopted appropriate standards for the survey of aquaculture sites at its January 1997 Annual Meeting. These standards are essentially as set out in draft form in Appendix “B” of the "Application Guide - Marine Aquaculture".15

---

13 *Leases Regulation*, N.B. Reg 83-132.
14 Supra, note 1, S. 25.

42
The following comments apply to the lease document:

**Concern 1** Legislation Conflict

Clause 27 and Clause 46 in Schedule “B” conflict with each other and conflict with Clause 11 of Schedule “C” in the time periods provided that rent may go unpaid, that the lessor may be in breach of any covenant, or that the demised premises remain vacant before the lessor may re-enter and/or the lease may be terminated.

*It is recommended that DFA review Schedules “B” and “C” of the aquaculture lease and eliminate the conflict between Clauses 27 and 46 in Schedule B and Clause 11 of Schedule C.*

**Concern 2** Subdivision of the Lease

Clause 21 of Schedule “C” is poorly worded. The Clause provides as follows:

> 21. The lessee is entitled to make limited use of Parcel Shown on Plan Number as described in Schedule “A” for the purpose of supporting mooring lines and anchors, the said parcel being a restrictive use area subject to the limitations set forth in paragraphs 26(d) and 26(e) of the General Regulation - Aquaculture Act and further being subject to public use, egress and regres at all times.

This is the only instance in the Act, Regulations and other documents where the notion of restrictive use area is mentioned. The purpose of the reference to paragraphs 26(d) and (e) is unclear. Paragraphs (d) and (e) are not markedly different in thrust from paragraphs 26(a), (b) and (c). It is possible that Clause 21 is attempting to bring Section 25(7) of the Act into play. Section 25(5) provides that [subject to subsections (6) and (7)] an aquaculture lease “conveys the right to the exclusive use of the land covered by the lease.” Subsection (6) deals with mines and minerals and is not applicable here. Subsection (7) provides that:

> 25(7) An aquaculture lease may make provision for access through and over the land by adjacent landowners.

Thus, any limitation on the lessees exclusive use must fall under this provision (and the general provision of Section 2 that the Act and Regulations do not affect the right of navigation.) The relationship between Section 25(7) and Clause 21 of Schedule “C” is not clear.

*It is recommended that DFA review the concept of attempting to restrict specific uses on specific parts of the lease site. The Act does not contemplate that a site may be "sub-divided" with different activities permitted on each part. If this designation of areas within the lease for specific uses is departmental policy, then the Act should be amended to permit subdivision of the lease.*
4.2.2 Related Materials Adopted by DFA of Fisheries and Aquaculture

Based on the Act and the Regulations, DFA has adopted or published some related documents. The following of those will be reviewed here:

- The Application Guide - Marine Aquaculture\textsuperscript{16}
- The Acknowledgement of Security Interest\textsuperscript{17}

4.2.2.1 The Application Guide - Marine Aquaculture

The Application Guide - Marine Aquaculture\textsuperscript{18} is published by DFA to provide information and assistance to the industry. The document explains some provisions of the Act and the Regulations and provides a guide for prospective aquaculturists so that they can apply for Aquaculture Licences, Occupation Permits and Leases.

The document is generally clear and to the point. There are some instances where it could be improved however.

Section 1.7 suggests that there must be a separation of 45 metres from an aquaculture site and the mean low water mark. This provision is not contained in the Act or Regulations. If it is Departmental policy, as shown on plans of survey for the Bay of Fundy, this restriction should be indicated in the Act or Regulations. In addition, recent plans of survey show the leased site having subdivided areas (as noted in Section 4.2.1.4 above) and that one area includes the foreshore (between ordinary or mean high water and low water). It should be clear in the Act or Regulations whether the lease or the aquaculture facilities should be 45 metres seaward of the mean low water line (or other boundary).

Furthermore, examples of plans of survey indicate that the datum being used in surveying the 45 metre offset is the Lower Low Water Ordinary Spring Tides. This is not the same as the mean low water mark and results in the site location being further seaward than if mean low water mark was used. However, it is also recognizes that appropriate tidal data is not available in New Brunswick to aid the surveyor in establishing a mean low water line.

\textbf{It is therefore recommended that DFA clarify the status of the 45 metre setback and which low water boundary definition should be used to measure this setback. DFA should also discuss this boundary definition with the Association of New Brunswick Land Surveyors.}

4.2.2.2 Acknowledgement of Security Interest

One of the main concerns of lenders who may wish to become involved in lending to aquaculturists is the potential difficulty in realizing on the security should the loan fall into default. As noted above, aquaculture licences and aquaculture leases may not be assigned

\textsuperscript{16} Supra, note 15.
\textsuperscript{17} Department of Fisheries and Aquaculture, N.B. "Acknowledgement of Security Interest".
\textsuperscript{18} Supra, note 15.
without the consent of the Minister. Thus, if a lender wished to take over a site where the aquaculturist had defaulted under a loan from the lender, the lender is not assured that it may do so. Because of these real concerns, DFA has adopted the policy of issuing Acknowledgement of Security Interests to lenders who request them. The form of the Acknowledgement is attached hereto as Appendix “E”. The document confirms that DFA will not allow any transfers or surrenders of ownership of the subject licence or lease unless the financial institution agrees. The acknowledgement further provides that if the lender exercises its rights under the security documents, including receivership or bankruptcy proceedings, DFA will allow the lender “all of the same rights and privileges afforded the present site licensee/lessee, subject to the lender’s compliance with all applicable terms and conditions relative to the subject licence and lease.”

DFA indicates that the Acknowledgement of Security Interest document was developed at the request of the financial institutions involved in lending to the aquaculture industry. The Acknowledgement replaced two more complicated and detailed Non-Disturbance Agreements that had apparently been developed in conjunction with The Canadian Bankers Association. The Acknowledgement was developed in conjunction with local lenders, including Farm Credit Corporation. The document is issued following receipt by DFA of a copy of a security document charging an aquaculture lease and licence in favour of the lender. By virtue of the document, DFA:

- agrees to add the copy of the security document in the relevant file maintained by the Registrar under S. 39 of the Act.
- “commit(s) that any changes proposed for transfer or surrender of ownership of (the licence or lease) will require the written agreement of both parties involved (i.e. the aquaculturist and the lender) before any such change will be considered by the Minister.”
- provides that subject to due notification of the Minister by the lender exercising rights under security agreements with the licensee/lessee, in the event of a receivership or bankruptcy proceedings, the Minister agrees to allow the lender all of the same rights and privileges afforded the present site licensee/lessee, subject to the lender’s compliance with all applicable terms and conditions relative to the subject licence and lease.

DFA has taken on obligations under the Acknowledgement. It is therefore critical that there be some mechanism within DFA to ensure that these obligations can be met. If these obligations are not met, DFA is leaving itself open to claims from a lender who suffers some loss.

It is recommended that DFA establish an appropriate filing system or registry so that obligations taken on under the Acknowledgement of Security Interests can be met.

---

19 Supra, note 17.
22 Department of Fisheries and Aquaculture, N.B., “Non-Disturbance Agreement”.

---
4.3 Issues That Arise from the Model

This section will review the impact of a wide range of issues that arise from the legislative model set out above.

4.3.1 Interpretation of the Model

For most of the potential conflicts that might arise out of the model, it is impossible to offer any opinion about how a Court might rule. Any obvious conflicts between the documents have been noted above and the resolution of those conflicts will no doubt depend on the exact situation which presents itself to a Court.

As noted above, the Act provides that the terms of an aquaculture licence, a lease and occupation permit are subject to "the terms and conditions established by, or in accordance with the regulations, whether before or after the issuance, renewal or amendment..." of the licence,23 lease24 or occupation permit25. This power of amendment following issue or grant of a licence, lease or occupation permit should allow DFA to deal with any adverse Court rulings related to interpretation of these documents in a retroactive fashion.

4.3.2 Interaction With Other Legislation

The model is also affected by existing and proposed legislation in New Brunswick.

4.3.2.1 The Registry Act

Lessees and lenders will wish to register their documents under the Registry Act26 to obtain the protection afforded under that Act. There is some question of whether or not the documents relating to offshore sites may be registered under the Registry Act. That Act provides that "All instruments may be registered in the registry office for the county where the lands lie..."27 Some questions remain, however, as to the extent of each county.

The Territorial Divisions Act28 defines each county and for coastal counties the Act does not explicitly include lands under water. For example, Charlotte County is defined as being bounded "South by the Bay of Fundy." Under the Interpretation Act29

... whenever any county or parish is bounded by sea, bay, gulf or river, its side lines shall extend into such sea, bay, gulf or river to the boundary of the Province or of the adjoining parish or county.

Thus the jurisdiction of the Registries Act appears to extend to the Provincial boundaries and the only question is where those limits are.

23 Supra, note 1, S. 12.
24 Supra, note 1, S. 25 (3) (c).
25 Supra, note I, S. 26 (3) (c).
27 Ibid., S. 19 (1).
29 Interpretation Act
The New Brunswick Geographic Information Corporation (NBGIC) is responsible for the management of the registry system and it has directed the Registrars of Deeds to register documents related to offshore sites so long as they border on the county in question. This accommodation does not address the question of whether the documents should be registered or if the protection under the *Registry Act* is thereby valid. The only way to address this question is to amend the legislation.

It would also be appropriate to examine the other aspects of the *Registry Act* (and *Land Titles Act*) which may conflict with the intent of the *Aquaculture Act*. For example, the *Registry Act* requires that plans presented for registration be approved under the mechanisms of the *Community Planning Act*. Such requirements should not apply to the aquaculture model.

**It is recommended that DFA and NBGIC examine the Registry Act, the Territorial Divisions Act, and the Community Planning Act to ensure that any required amendments to allow registration of aquaculture interests can be made. Specifically the Registry Act should be amended to allow registration of aquaculture lease plans in the registries without the planning requirements that apply onshore.**

4.3.2.2 The Personal Property Security Act and the Proposed Land Security Act

The *Personal Property Security Act* (the “PPSA”) deals with security interests in chattels. The *Land Security Act* (the “LSA”) is proposed legislation which, if adopted as proposed, will affect how security interests in land (including leasehold interests) will be structured and registered.

The *Aquaculture Act* provides that:

> All aquaculture produce of the species and strains specified in an aquaculture licence, while contained within the boundaries of the aquaculture site, are the exclusive personal property of the licensee until sold, traded, transferred or otherwise disposed of by the licensee.

This provision addresses an issue discussed in the literature for some time - under what circumstances a person could own a property interest in “wild” animals? The common law has always been uncomfortable with the ownership of wild animals. This section makes it clear that aquaculture produce (a defined term under the Act meaning “aquatic plants and animals raised or being raised by aquaculture”) is the personal property of the licensee. However, the Act and the Regulations place serious restrictions on the ability of the aquaculturist to move or otherwise deal with aquaculture produce.

---

31 Supra, note 26.
34 Supra, note 1, S. 16 (5).
The PPSA dictates the forms and procedures in creating and perfecting a security interest in chattels. Since the PPSA is designed as a province wide system, the difficulty inherent in the Registry Act as to which County to register documents in will not be an issue. However, it is not clear that the PPSA will apply to chattels located in offshore sites because they may not be located within the province. (See Section 2.2.)

The proposed LSA deals with consensual financing on the security of land, including leasehold interests. The question of whether offshore aquaculture sites are covered by the LSA is not clear. The definition of land under the proposed Act retains the concepts of division of territory in the Province as found in the Registry Act. Thus, it is unclear whether or not the LSA will apply to security interests in offshore sites.

A current policy of NBGIC raises another concern. NBGIC’s current policy is that it will only property map offshore aquaculture lease sites and assign them a Property Identifier Number (“PID”) when DFA notifies NBGIC that it has issued a lease. DFA has followed this practice with finfish sites in the Bay of Fundy, but apparently not with shellfish sites as yet. Under the proposed LSA, a security interest will not be enforceable until it has attached. The security interest cannot attach until the debtor has signed a security agreement that contains:

(i) a description of the collateral by parcel identifier;
(ii) a statement that a security interest is taken in all of the debtor’s present and after-acquired land, or
(iii) a statement that a security interest is taken is all of the debtor’s present and after-acquired land except specific land that is described by parcel identifier.

By far the most common of these possibilities is the first one, that is, the debtor and the secured party will wish to encumber only the aquaculture site. In these circumstances, if NBGIC has not issued a PID, the security interest cannot attach and therefore cannot be enforced.

It is recommended that DFA review with NBGIC the Personal Property Securities Act and the proposed Land Securities Act to consider the effect of assets located offshore. This includes the need to ensure that all aquaculture leases can be included in the property mapping and assigned a parcel identifier (PID).

4.3.3 Time Limits for Approvals Under the Navigable Waters Protection Act

The Act allows aquaculture licences and leases to have terms of up to twenty years. Although the requirement is not explicitly set out in the Act or Regulations, DFA requires that an applicant for an aquaculture licence have exemption or approval under the Navigable Waters Protection Act.
Waters Protection Act\(^{41}\) (the “NWPA”). The Regulations under the NWPA\(^{42}\) provide that approval for aquaculture and fish rearing facilities lasts for five years. There is no mechanism for DFA to monitor lapses of approval under the NWPA or for confirming that the holder of an aquaculture licence or lease has applied to renew approval under the NWPA. This concern is tempered somewhat by the fact that most of the aquaculture sites in the Province are exempted from the approval requirements of the NWPA by the Minister in charge of that Act under S. 5 (2).\(^{43}\)

\[
\text{It is recommended that the Aquaculture Regulations be amended to explicitly state that approval or exemption from the Navigable Waters Protection Act is required for offshore sites. DFA also should develop a system of record keeping or registry that allows the lapse of an NWPA approval to be identified by DFA.}
\]

4.3.4 Insurance

4.3.4.1 Public liability insurance

The draft form of aquaculture leases requires that the lessee obtain and maintain public liability insurance.\(^{44}\) Such policies are not unusual in any way and need no specific comment.

Surprisingly, the lease does not require the lessee to file proof that the required insurance is in place. A typical clause from a commercial lease provides as follows:

\[
\begin{align*}
\text{Liability Insurance} - \text{to provide the Landlord with a certificate of liability insurance covering the Tenant in respect of the Premises and its operations in them to the extent of not less than $} & \hfill \\
\text{inclusive of all injuries or death to persons and damage to property of others arising from any one occurrence.}
\end{align*}
\]

It would be prudent for DFA to require a lessee to file a certificate with them as contemplated by the above clause.

\[
\text{It is recommended that the licensee should be required to file proof of liability insurance with DFA.}
\]

4.3.4.2 Crop loss insurance

Crop loss insurance is designed to insure the aquaculturist (and the lender) should the crop being raised suffer high mortality or escape. Because of the risks inherent in the industry,

\(^{41}\) Supra, note 15, S. 1.7.
\(^{42}\) Regulations under the Navigable Waters Protection Act, C.R.C. 1232.
\(^{43}\) Supra, note 37.
\(^{44}\) see Appendix “C”, S. 23 of schedule “B” and S. 5 of Schedule “C”.
most aquaculturists carry such insurance. In addition, lenders generally require such policies when they lend to aquaculturists. Aside from the high cost of the insurance, the system seems adequate for the needs of the parties.

4.4 Other Aquaculture-like Activities

There are other activities sanctioned by the Province of New Brunswick that have similar characteristics to aquaculture as discussed above.

4.4.1 Rockweed Harvesting

Rockweed is a near-shore aquatic plant that has many uses. The Federal and New Brunswick Governments have entered into a primary agreement45 and sub-agreements that set up the framework for managing a rockweed harvest under a joint licensing program. Under the scheme, the Provincial government is responsible for creating a situation where a licensee has an exclusive right to harvest rockweed in a defined area for commercial purposes.

The structure used to deliver this exclusive right is an Occupation Permit under S. 26 of the Crown Lands and Forests Act46 issued to the harvester by the Minister of Fisheries and Aquaculture. The lands involved typically are defined as a strip of land “lying between the ordinary high water mark and a line, being a rectangular distance of 50 metres on the seaward side of and parallel to the extreme low water mark.”

It is not clear what efforts DFA will make to determine whether any rights to any of the land which is included in the Occupation Permits have been previously granted. For example, it is possible that some Crown Grants in the area were granted to mean low tide, not mean high tide. It might also be that other rights to the bed of the water had been granted by the Crown. In such cases, the Province would be attempting to grant to the rockweed harvester rights that the Province does not have to grant.

It is recommended that DFA put in place a mechanism to ensure that the rockweed harvesting licences do not conflict with the rights of owners of the foreshore nor others with interests in the foreshore.

4.4.2 “Clam Tents”

Clam tents are mesh netting staked to the foreshore. Research is suggesting that under these clam tents, the population of clams is far higher than where no tent is placed.47 By staking clam tents to the foreshore, individual aquaculturists are effectively appropriating that

45 Canada - New Brunswick Memorandum of Understanding on Rockweed (Ascophyllum Nodosum) Management and Development.
section of the foreshore to themselves. The foreshore is generally owned by the Provincial
Crown and members of the public at large have certain rights to it. (See Section 5.4.) Any
support of the practice by DFA runs the risk of seeming to condone such an appropriation
of the foreshore by an individual. There is no statutory authority for such activities by
DFA. It is also clear that such activities will interfere with the rights of upland owners to
access to deep water.

It is recommended that the whole issue of clam tents aquaculture be reviewed as structures on the foreshore do
conflict with the rights to the foreshore of the upland owners and the public.

4.4.3 Chinese Hat Spat Collectors

Chinese hat spat collectors are devices used to collect naturally occurring oyster spat from
the waters of the Gulf of St. Lawrence. The spat attaches itself to the collectors and grows
there until the owner removes the device from the water and washes the oysters off. The
oysters are then generally bagged, placed on tables, and placed in the water on or near the
seabed to continue their growth cycle.

These chinese hat spat collectors are deployed on a yearly bases at optimal locations in the
bays and inlets along the northeast coast of New Brunswick. The deployment method
entails the construction of long weir like structures (fences) from which hundreds of
collectors are suspended in the water column. The collectors are located in clusters,
meaning that they are normally grouped together on one side of a bay or another to
maximize yield potential. The actual location of the clusters can change from year to year or
even within a season if the owner can justify the work and cost of relocation with more
yield.

The activity of placing chinese hat spat collectors, or collectors in general, is considered a
method of traditional fishery and as such it is licensed by the Department of Fisheries and
Oceans, Canada. There is no doubt that within the cluster location the right of navigation
becomes a concern. Navigation is, at best, obscured or completely obliterated during the
collection season. However, given the cluster nature of the collection structures, safe
passage is generally obtainable by navigating around the cluster locations.48 Section 5.2
presents more detail on the public right to navigation.

Riparian access becomes a second concern with respect to the placement of clusters of spat
collectors. It is conceivable that whole sections of shoreline may become inaccessible
during the collection season, a situation which could lead to a claim nuisance on behalf of
the upland owner. Section 5.3 presents more detail on the rights of up land owners in
relation to aquaculture activities.

4.4.4 Winterizing Oyster Sites

Oyster cultivation activities normally take place near the foreshore in water depths of less

48 Sweeney, R.H., and H. Lacroix (1996), Personal Communication. Department of Fisheries and
Aquaculture N.B., Aquaculture and Marine Center, Shippagan, N.B., December.
than ten metres. The oysters are placed in mesh bags and suspended in the water column by table like structures. During the winter months it becomes necessary for growers to relocate their produce to deeper water sites to avoid possible damages resulting from ice. In so doing the growers give up the security of their leases and becomes subject to an array of activities associated with navigable waters.

Research has shown that investments in oyster growing activities as compared to a salmon growing activities are considerably less. However, any investment is worthwhile and should be offered as much protection as possible, even if this means the offering of dual leases to the oyster growers. Alternatively DFA could designate sections of land as aquaculture land along the northeast coast as winter drop areas in an attempt to offer some level of protection for those people involved in oyster growing activities.

| It is recommended that DFA review the concept of dual leases for oyster growers or investigate the advantages of designating winter drop sites to protect an oyster growers produce during the winter months. |
5. RIGHTS OF OTHERS

5.1 Who Are Others?

The rights of other individuals may be affected by the aquaculture model defined in the previous chapter. The potential conflicts between the rights of the aquaculturist and the rights of the following will be examined:

- those who wish to navigate near or over the aquaculture site;
- those who wish to fish near or over the aquaculture site;
- owners and users of the foreshore near the aquaculture site;
- owners of upland near the aquaculture site;
- other aquaculturists.

Figure 5.1 provides an overview of the various interests in coastal lands that are discussed in this chapter. Note, however, that the federal/provincial jurisdictional limits shown are not definitive and that different limits may exist on different parts of the coast (e.g., public harbours vs. general coast).

![Figure 5.1: Overview of coastal interests](image)

5.2 Navigators Near or Over the Aquaculture Site

5.2.1 The Public Right to Navigate at Common Law

At common law in New Brunswick the public has the right to navigate over waters that are tidal. The question of whether or not the public has a right to navigate on navigable but non-tidal waters is not so easily answered. For the balance of this discussion, it will be assumed that the public does have a right to navigate in the waters in question. If they do not, no potential conflict exists with aquaculture sites on those waters.

At common law, the public’s right to navigate is a greater right than any rights owned by the owners of the bed of the water and anyone claiming under them, such as a lessee. Therefore, at common law, in a dispute between an aquaculturist occupying an aquaculture site and a member of the public who wishes to navigate over the site, the right to navigate will be superior. However, navigators must act reasonably in the exercise of their rights.

Not all artificial structures in the water will constitute an interference with navigation which will be actionable. Instead, the Courts have stated that for an action to be maintained, the interference complained of must be substantial enough to constitute a public nuisance. The application of this concept to aquaculture facilities has yet to be made clear by the Courts.

When the right to navigate is interfered with, the remedy available must be considered. When a public right is interfered with to the extent that the interference is a public nuisance, the remedy that may be pursued is a public one - that is, the Attorney General of the federal or a provincial government will commence either a criminal or civil action against the offender. An individual member of the public will only be permitted to take action personally against the offender if that member of the public can establish that they have suffered special damage - that is, some damage beyond that suffered by the public at large. An example of special damage might be where a ship has been prevented from navigating to a port where it had intended to deliver goods and had suffered additional expense and/or delay in having to find an alternate port.

5.2.2 The Public Right to Navigate as Affected by Statute

Common law rights may be altered by a statute passed by the level of government (either federal of provincial) that has the power to regulate such matters. Under the Canadian Constitution, the power to pass laws to regulate navigation and shipping is vested in the federal government. Thus, a provincial government does not have the power to enact a statute that would eliminate the public right to navigate. The Aquaculture Act (hereinafter...

---

2 Robertson v. Steadman (1876) 16 N.B.R. 612.
3 Rowe v. Titus (1849) 6 N.B.R. 326.
4 Watson v. Patterson (1903) 2 N.B. Eq. 488.
6 Watson v. Toronto Gas-light and Water Co. (1847), 4 U.C.Q.B. 158.
7 Ibid.
referred to as “the Act”) specifically acknowledges this fact in Section 2 which provides that:

Nothing in this Act or the regulations authorizes any interference with the navigation of navigable waters.⁹

In addition, the form of aquaculture leases currently used provides that:

The covenant of quiet enjoyment referred to in lessee’s covenant number 28 in Schedule “B” hereof is subject to the right of public navigation, if any, on or over the premises.¹⁰

Thus, the power to alter the common law rights related to navigation is vested in the federal government. The federal government has enacted one primary piece of legislation that affects the right to navigate - the Navigable Waters Protection Act¹¹ ("the NWPA"). The NWPA has been discussed in a very limited fashion in Chapter 4.

DFA has taken the position that no aquaculture licence will be approved unless the proposal has been exempted or approved under the NWPA, although neither the Act nor the regulations explicitly require NWPA approval.

In the context of construction or placement of aquaculture cages or facilities, the NWPA provides that no work will be constructed in navigable waters unless the plans and other details of the work to be constructed have been submitted to the Minister of Transport as represented by the Canadian Coast Guard¹². If the Minister is of the opinion that the work (except in the case of a bridge, boom, dam or causeway) does not interfere substantially with navigation, the work may be exempted from the requirements of the NWPA¹³. Most of the offshore aquaculture sites which have been examined under the NWPA process have been exempted under this section.

If the site does not qualify for an exemption as noted above, the Minister reviews the plans of the proposed work and either approves or rejects the proposal. Conditions may be attached to the approval. As for approval granted for the construction of aquaculture facilities, the applicable Regulations¹⁴ provide that such approval is effective for a five-year period. The thrust of the approval process is to minimize the negative effects of works on navigation. At the end of the five year period of approval, the owner must reapply for approval.¹⁵

It is important to consider the effect of the exemption, or the approval process described above, on the public’s right to navigate. The NWPA does not explicitly provide that exemption or approval will in any way affect the public’s right to navigate near the approved work. It seems clear that exemption or approval therefore cannot affect the public’s right to navigate.¹⁶ However, if challenged, the aquaculturist would be able to argue that exemption or approval of plans for a site would tend to show that when constructed, it would not interfere with navigation to such an extent as to constitute a

¹⁰ See Appendix "C" at Schedule C, Section 7.
¹² Ibid., S. 5 (1) (a).
¹³ Ibid., S. 5 (2).
¹⁴ Regulations Respecting Works in Navigable Waters, C.R.C. c.1232, S. 3 (1) and the Schedule thereto.
¹⁵ Ibid., S. 11(1).
¹⁶ Supra, note 5, pp. 251-252 and the cases cited therein.
public nuisance. How a Court might receive such an argument remains to be seen.

Based on the above, if members of the public have suffered some special damage as a result of an interference with their right to navigate by some aquaculture site, they could maintain an action for damages. If the action was successful, the court could order that the work be removed even if the works on that site had received approval under the NWPA. If there was no individual who had suffered some special damage, but merely a similar interference with each member’s rights, then no individual could commence an action. Instead, individuals could lobby the Attorney General of the Province or of Canada to take proceedings against the aquaculturist. From a practical point of view, it seems unlikely that either Attorney General would be interested in commencing such an action given that the work had received Federal approval under the NWPA and was undertaken under a Provincially issued aquaculture licence and lease.

It is recommended that DFA discuss with the federal government whether the Navigable Waters Protection Act could be strengthened to make approved activities under that Act override the public right of navigation in the designated lease area.

5.2.3 The Public Right of Floating

The public right of floating is closely associated with the right to navigation. The right of floating deals with the transportation of logs and other property on navigable and floatable bodies of water. A floatable stream is one that does not meet the test of navigability, but is capable of being used by individuals to float their materials from one location to another.

The right is founded in the right to navigate but the common law has developed some important distinctions. The most important of these is that, in contrast to the right to navigate, the right to float is not paramount to the rights of the owner of the bed but concurrent with them. So, for example, the New Brunswick Courts have held that an owner of the bed who wishes to construct a dam on a floatable stream must provide some means by which the floater may pass the dam as, for example, a sluiceway.

It seems safe to conclude that the aquaculture industry will only affect the public’s right to float at inshore sites. Thus, if an aquaculturist proposed to construct a site on a non-navigable stream, DFA must ensure that the development does not effectively eliminate with the right to float.

17 Supra, note 5, pp. 191-195.
18 Reg. V. Robertson (1882) 6 S.C.R. 52.
20 Roy v. Fraser (1903) 36 N.B.R. 113.
5.3 Fishers Near or Over an Aquaculture Site

Another public right over water that may conflict with aquaculture is the right to fish. At common law in New Brunswick, the public has a right to fish in all tidal waters. The better authority is that the right to fish does not extend to non-tidal.21 The Crown is not able to grant any individual an exclusive right to fish in tidal waters because of limitations placed on the Crown's power under the Magna Charta.22

From an aquaculture perspective, conflicts are presently occurring between the aquaculturist and fishers. Scallop draggers, for instance, have learned that the area under finfish aquaculture cages is typically rich in scallops. The draggers apparently back their vessels up very close to the cages and drop their drags. This practice evidently causes distress to the fish in the cages.

There are three main issues here:

- do other fishers have a right to fish on the lease site?
- can the aquaculturist be given exclusive rights to fish on the lease site and thus prevent entry by other fishers?
- can exclusive rights to fishing be acquired through prescription?

Concern 1: Public Rights of Fishing

In general, DFA has tried to avoid conflicts between aquaculture leases and traditional fishers by evaluating each proposed aquaculture site against the level of traditional fishery is carried on in the vicinity. The Application Guide - Marine Aquaculture provides "...sites competing for areas traditionally supporting a significant capture fishery will not likely receive approval."23

Much of the above discussion about the right to navigate has application here. Similar provisions apply regarding the remedies available if the right to fish is interfered with. If the interference is general in nature, then the only remedy available is for the federal or provincial Attorney General to commence an action to deal with the interference. No individual will be permitted to maintain an action unless they have suffered some special damage.24 Thus, it would appear that if some member of the public can establish that they have suffered some special damage because their right to fish has been interfered with by an aquaculture site, they could maintain an action to have the interference stopped. If the interference is only general in nature, the federal or provincial Attorney General would have to be convinced to commence the action. As with the discussion of interference with the right to navigate above, this seems unlikely. Even though no explicit approval has been given by the federal government, the federal Department of Fisheries and Oceans is involved in the approval process undertaken before an aquaculture licence is issued.

21 Supra, note 5, p. 196 and the cases cited therein.
22 See the discussions of the applicability of the provisions of the Magna Charta in La Forest supra, note 5, p. 196 and 198.
Concern 2: Exclusive Fishery

Donnelly v. Vroom is a 1909 Nova Scotia case involving public rights of fishing on a foreshore that had been granted to the upland owner with a right of fishing. The trial Court found that:

unless a several fishery in tidal waters was in being before Magna Charta it cannot be established by subsequent grant. In view of the date of settlement of the Province there could be no appropriation of a several fishery in tidal waters by the Crown or by a private person so as to admit of an effectual grant thereof by the Crown.\textsuperscript{25}

The decision was upheld on appeal and the Court established two criteria for determining an exclusive right of fishing:

- proof of a user exercising a separate and distinct right of fishing to the exclusion of all others (i.e., a right capable of separate conveyance);
- proof that the origin of the right was not modern.\textsuperscript{26}

If, however, the Province has the jurisdictional power to make legislation affecting public fishing, then the provisions of the Aquaculture Act could be sufficient to define a distinct right of exclusive fishing within the aquaculture lease site and override the common law.

In Section 2.2.1 above, it was noted that the federal government has been issuing leases that include an exclusive right to fish by the aquaculturist. Section 25 of the provincial Aquaculture Act also attempts to grant exclusive rights:

\begin{itemize}
  \item 25(5) Subject to subsections (6) and (7), an aquaculture lease conveys the right to the exclusive use of the land covered by the lease
  \item 25(6) An aquaculture lease does not convey a right to any mines or minerals in, or under the land.
  \item 25(7) An aquaculture lease may make provision for access through and over the land by adjacent landowners.\textsuperscript{27}
\end{itemize}

where "land" is defined in the Act as including "land covered by water and the water column superadjacent to it."\textsuperscript{28}

Although it would appear that the intent of this Section is to include the granting of an exclusive fishery, the wording is not as explicit as in the federal leases [See Section 2.2.1]. Also note from the discussion above, a fisher would have to show special damage to take an action against the aquaculturist barring fishing within the lease site. In most cases, therefore, the issue would probably become a problem of how an exclusive right can be enforced on site.

\textsuperscript{25} Donnelly v. Vroom (1907) 40 N.S.R. 585 at 585; Donnelly v. Vroom (1909) 42 N.S.R. 327.
\textsuperscript{26} Ibid., p. 585.
\textsuperscript{28} Ibid., S. 1(1).
It is recommended that DFA amend the Aquaculture Act to make the exclusive right of fishing in the lease site explicit.

Concern 3: Rights through Prescription

Individuals may be able to claim that they have some exclusive right to fish in some particular location based on long, exclusive usage. For example, if a lobster fisher had traditionally set lobster traps in a specific location, there may be an argument that the fisher has acquired some exclusive right to continue to do so through prescription. The better view at common law is that it is not possible to acquire an exclusive right to fish (at least by conventional means) by prescription. It may be possible to establish a prescriptive or even adverse possession claim where the fishing involves some direct contact with the bottom, as for example, weir fishing. Thus, where potential aquaculture sites conflict with such types of fishery, the Department should exercise caution so that such potential claims are not interfered with.

5.4 Owners and Users of the Foreshore in the Vicinity of the Aquaculture Site

The foreshore (or shore) is the land surface between the high water and the low water marks. The presumption is that the foreshore is owned by the Provincial Crown except in such areas where the federal government carries the responsibility for the area as in public harbours. In addition, there will be examples where the Provincial Crown has granted the ownership of or other lesser rights to the foreshore to a private individual.

Common law provides that the public has limited rights to use the foreshore incidental to the exercise of the public rights to fish and to bathe. There may be conflicts between a licensed aquaculturist operating under a valid licence and lease and the owner and users of the foreshore.

The Aquaculture Act does not explicitly provide that an aquaculture licence and/or lease gives any rights to the foreshore to the aquaculturist. In fact, the thrust of the Act and the Regulations is to maintain a buffer between aquaculture sites and the foreshore. The regulations make the following specific provisions related to the physical relationship between the site and the foreshore, depending on the type of aquaculture being carried on:

### Finfish sites:
- The equipment must be located such that there is a minimum water depth of 8 metres below the gear.
- The equipment must not be placed so as to "deny a riparian owner of an adjacent property access to the mean low water mark."
- All submerged anchors, mooring lines or other aquaculture equipment on the site must "maintain a minimum water depth of 2 metres at mean low tide."

29 Ibid.
31 Reg. v. Lord, (1864) 1 P.E.I. 245.
Crustacean sites:
- The lessee must be the riparian owner of the adjacent property and must have a certified copy of a registered document conveying the riparian rights to the adjacent property. (Note: It is uncertain how a document could convey riparian rights since these rights "run with the land", i.e., are inseparable from the upland parcel.)

Mollusc Sites:
- The equipment is not placed so as to "deny a riparian owner of an adjacent property access to the mean low water mark." 32

These clauses are obviously aimed at minimizing conflicts between aquaculture sites and others including navigators, users of the foreshore and owners of the upland. Unfortunately, they are poorly worded and the result is unclear. For example, the requirement that the placement of equipment not deny a riparian owner access to the low water mark confirms a ban on equipment placed on the foreshore but does not address the riparian owners right of access to deep water for the purposes of navigation. This topic is discussed below. The clause requiring a minimum depth of water over submerged gear at low water seems to be an attempt to limit interference with navigation.

The Application Guide - Marine Aquaculture, published by DFA indicates that:

The boundaries of new aquaculture sites must be at least 45 metres from the mean low water mark unless the proponent is the shorefront owner or has a lease for the property. 33

This provision seems Departmental policy, as it is not found in the Regulations. It should also be made clear that all portions of the aquaculture site should be 45 metres from low water.

As noted in Section 4.2.3.1, it is apparent that some confusion exists in the model as to what level of low water should be used as a reference. The above cited provision refers to "mean low water" while plans being prepared for the Department refer to "lower low water ordinary spring tide."

It is recommended that the policy with regard to separation of the aquaculture lease from the foreshore must be clarified. In particular, any policy on separation should be reflected in the Regulations and the confusion in datum references should be clarified (also see Section 4.2.3.1).

Besides these provisions, the draft lease 34 provides that:

The adjacent shoreline extending from the ordinary high water mark to the lower low water ordinary spring tide must be kept free and clear of any equipment and/or debris associated with the operation to allow for public use, for public use and access at all times. [sic]

32 Supra, note 9, S. 26, 27, and 28.
33 Supra, note 23, S. 1.7.
34 See appendix C at Schedule "C", Clause 3.
Thus, the model is making an effort (if a confusing one) to deny the aquaculturist any rights to the foreshore.

The most probable cause of conflict between aquaculture and owners and users of the foreshore will be placement of debris or anchors or other equipment by the aquaculturist on the foreshore. Since the model discussed above prohibits such activities, the issue is one of enforcement.

One situation where interference with the foreshore occurs involves the experimentation with “tents” over the foreshore to encourage growth of clams (also see Section 4.4.2). Although such activities do not fall under the Act, they are currently being supported, at least in the experimental stage, by DFA. The process involves staking down netting (called “tents”) over part of the foreshore. Evidence now suggests that this encourages the natural growth of clams under the tents. Such a practice clearly involves an interference with rights of the owner of the foreshore (typically the provincial Crown) and with the public’s right to use the foreshore.

It is recommended that the rules with regard to limiting interference with the foreshore should be enforced by DFA to protect the rights of other owners and users of the foreshore.

DFA should also seek clarification on the question of whether or not anchors and lines can be attached to the foreshore.

Furthermore, the issue of clam tents needs to be addressed in the light of its interference with the rights of riparian owners and the public (also see Section 4.4.2).

5.5 Owners of Upland in the Vicinity of Aquaculture Sites

5.5.1 Property Rights

The practice of aquaculture may conflict with the rights and expectations of owners of upland property near the aquaculture site. Although outwardly benign, the operation of aquaculture sites may have a negative impact on upland owners by being sources of noise, smell or visual pollution. In addition, material escaping from the site may have negative impact on the quality of water. This section will deal with the potential conflict between the rights of an upland owner and those of the aquaculturist.

One source of conflict between the aquaculturist and the owner of upland involves the placement of debris or anchors or other gear associated with the aquaculture site on an upland property. Such interference with the rights of the upland owner clearly would leave the aquaculturist open to a trespass action by the upland owner. As noted when discussing the rights of the owners and users of the foreshore, the Act, the Regulations and the lease

quite clearly do not give the aquaculturist any right to interfere with the rights of the upland owner. In fact, they contain provisions explicitly banning such activity. One unanswered question is: what is the role of DFA in enforcing these rules?

One situation where the upland owner’s rights may be affected relates to the requirements established by the standards adopted for the survey of the sites. The standards require that “permanent and recoverable control points” be established so that the boundaries of an aquaculture lease site may be readily reestablished. These control points must be situated on upland property. Often, the land surveyor will wish to set two control points in a range so that any point lining up with that range may be easily reestablished by an aquaculturist. Placement of these survey control points and the subsequent occupation of them by the land surveyor may constitute a trespass on the property of the upland owner unless permission is obtained, especially if any cutting is required to establish pairs of range points. The Act to Incorporate the Association of New Brunswick Land Surveyors may resolve this potential conflict in favour of the aquaculturist. Section 38 of that Act allows land surveyors to enter and pass over any property of any person while engaged in the performance of their duties.

It is recommended that the rules with regard to limiting interference with the foreshore should be enforced by DFA to protect the rights of upland owners to the foreshore. (also see Section 5.4)

In particular, DFA should investigate making some provision in the Act or Regulations to forfeit gear that is found offsite.

It is also recommended that DFA, together with the Association of New Brunswick Land Surveyors, address the question of placement of control points on the upland for establishing and re-establishing lease boundaries offshore. A policy should be developed as to when the surveyor should obtain permission from the upland owner, especially if ranges are established and lines must be cut through vegetation.

5.5.2 Riparian Rights

Real property that borders on water is known as riparian property. Ownership of riparian property brings with it a series of rights termed riparian rights. These rights are incidental to the ownership of riparian property and are they are usually not mentioned in the deed or the conveyance of the riparian property. Riparian rights are common law rights that have developed in the common law courts over the centuries.

Riparian rights have been classified as follows:38

- rights to access to the water;
- rights of drainage;
- rights relating to the flow of water;
- rights relating to the quality of water (pollution);
- rights relating to use of water; and
- rights to accretion.

For the purposes of discussion of possible conflicts with aquaculture, only rights related to access, flow and quality need be examined.

5.5.2.1 The right of access

The owner of riparian property has the right of access to the water for the purposes of navigation.39 The right of access for navigation purposes includes a right to cross the foreshore40 and shallow waters41 to get to deeper water.

The question of what access to deep water a riparian owner may claim has been dealt with as follows:42

The riparian owner’s right of access exists in a direct line from every point along the whole frontage of his land on the water. It is, therefore, no answer to an action for damages for obstruction of the right that the owner can get to and from the water from another part of his land.

Thus, any interference with a riparian owner’s right of access by an aquaculture site is a possible cause of action at common law against the individual causing the interference.

The question of separation of aquaculture sites from the shore has been discussed above and similar considerations apply here. The aim of the model is clearly to prevent interference with access from arising. The public notification process also addresses this question. Any riparian owners who feel that a proposed site will interfere with their access will have a forum to express those views. No doubt, DFA will take such expressions of concern seriously and act accordingly.

The developing experimentation with “tents” over the foreshore to encourage growth of clams has been discussed above (5.4 and 4.2.3.1). Besides impacting on the owners and users of the foreshore, this process will clearly be an interference with the access rights of the upland owner.

38 Supra, note 5, p. 201.
39 Smith v. Grieve (1899) 8 Nfld. L.R. 278.
40 Byron v. Stimpson (1878) 17 N.B.R. 697
41 Stover v. Lavoia (1906) 8 O.W.R. 398.
42 LaForest, supra note 3 at page 202 and the cases cited therein.
As given in Sections 5.4 and 4.2.3.1, there is a need to separate the aquaculture lease from the foreshore. Also given that the riparian owner has a right to access water deep enough for navigation, the 45 metre separation of the site from the shore may not always be sufficient.

It is recommended that DFA make a general statement about this right of access in the regulations where a 45 metre is a minimum limit.

5.5.2.2 The right of flow

The riparian right related to flow has been described in the following terms:43

[A riparian owner is] entitled to have the water flow down to his land as it has been accustomed to flow, substantially undiminished in quantity and quality, subject to the rights of other riparian owners to use the water, and to the public rights of navigation and floating.

... The various riparian rights relating to the flow of water may conveniently be classified as follows:

(a) the rights to have the water flow in its natural course;
(b) rights preventing the permanent extraction of water from the stream;
(c) rights preventing the alteration of the flow to property downstream;
(d) the right to have the water leave one’s land in its accustomed manner.

The right of flow is clearly primarily concerned with water flow in rivers and streams rather than offshore. In reviewing an application for an aquaculture site in a river or stream, or where an onshore site is designed to take water from a nearby river or stream, the Department should consider the potential impact on the flow rights of downstream riparian owners.

5.5.2.3 The right to quality

The possibility of pollution coming from aquaculture sites is obviously a serious concern to the industry and the Department. Contamination has a number of potential victims, including other aquaculturists, owners and users of the foreshore and riparian owners. A riparian owner will have standard remedies available should pollution occur (see the discussion of nuisance below) but, in addition, a claim for interference with the riparian right to quality would be available.

5.5.3 Other Rights of Upland Owners

The principal remedy available to any owner of real property whose enjoyment of their property is interfered with is the common law right to take a nuisance action. At its

43 Supra, note 5, p. 206.
simplest, where owners or occupiers of real property use their property in a way that results in a lessening of enjoyment by an owner of nearby real property, the damaged owner has the right to take an action in nuisance for damages and abatement of the offending activity. It is no defense to a nuisance action that the activity complained of has been approved of by the appropriate level of government or that it meets all environmental or other regulatory requirements. The Courts have made the following comments on the law of nuisance:

The essence of the tort of nuisance is interference with the enjoyment of land. That interference need not be accompanied by negligence. (...) The most carefully designed industrial plant operated with the greatest care may well be or cause a nuisance if, for example, effluent, smoke, fumes or noise invade the right of enjoyment of neighbouring landowners to an unreasonable degree. (...) The rationale for the law of nuisance in modern times is the provision of a means of reconciling certain conflicting interests in connection with the use of land, even where the conflict does not result from negligent conduct. Nuisance protects against the unreasonable invasion of interests in land.

It is impossible to predict what activities carried on by an aquaculturist may lead to a nuisance suit against them. Parallel experiences with farming show that there is a large potential for conflict. The provincial government has addressed the conflict between farming and residential uses by adopting “right to farm” legislation. The Agricultural Operations Practices Act protects agricultural operations from actions in nuisance for any odour, noise or dust if the operation is being carried out in compliance with applicable land use control laws, the Health Act and the Clean Environment Act. It may be argued that aquaculture might be added to the list of activities defined as agricultural activities and thus, insulate aquaculture from nuisance actions related to odour, noise or dust.

It is recommended that DFA investigate whether or not aquaculture sites can or should be afforded protection of the Agricultural Operations Practices Act or similar legislation.

5.6 Other Aquaculturists

The major potential source of conflicts between nearby aquaculturists is the possibility of contaminants escaping from one site and causing damage to the aquaculture crop growing in another. Such contamination might be from traditional pollutants or from disease. The primary approach of DFA to mitigate these concerns is to attempt to ensure minimum separation distances between aquaculture sites. The Regulations set targets for finfish and crustacean sites of 300 metres of separation from other sites. Mollusc sites are often closely packed. In these types of operation, disease and pollution are of limited concern to the aquaculturists.

The principal remedy available to an aquaculturist when damage is done to aquacultural produce by contaminants from offsite is a nuisance action. One case has already been decided in New Brunswick that supports the right of an aquaculturist to maintain a nuisance

44 Royal Anne Hotel Co. Ltd. v. Village of Ashcroft (1979) 95 D.L.R. (3d) 756 in the British Columbia Court of Appeal - quotation is from the headnote.
action. *Soleiko v. Canada*[^46] involved an aquaculturist raising mussels under an oyster lease issued by the Federal Department of Fisheries in Neguac Bay. The aquaculturist complained that the dumping of dredging spoils carried out by the Federal Department of Public Works damaged his crop of mussels. The defense argued that the plaintiff could not maintain an action in nuisance because it was merely a lessee under a lease for the purposes of raising mussels. The Court rejected that argument saying:

> In my opinion, this concept of nuisance in the law governing neighbouring occupancy applies not only to a riparian owner or someone who has an ownership right, but to wrongful relations between neighbours, whether simply tenants or, as here, beneficiaries of the right to engage in the raising of oysters of other mollusks.

It is certain that there will be escapes of contaminants or disease and that disputes will arise between aquaculturists. It is not clear how isolated DFA will be from those disputes. The damaged party may argue that the enforcement by DFA of the provisions in the Act and Regulations which are aimed at eliminating pollution has not been sufficient. Refer to the discussion of the immunity of the Crown below.

### 5.7 Involvement of the Provincial Crown in the Types of Disputes Outlined Above

Where an aquaculturist becomes involved in a dispute with a member of one of the groups discussed above, the Province may be named as a defendant. The Act and the documents adopted by DFA attempt to eliminate the possibility of liability being assigned to it.

The Act provides:[^47]

> No action for damages lies against the Province, the Minister, a person designated to act on behalf of the Minister, the Registrar, an inspector, an advisory committee or a member of an advisory committee with respect to anything done or purported to be done, or in respect to anything omitted, under this Act or the regulations.

The draft lease also contains provisions that limit the liability of the Crown.[^48]

It is not clear how a Court will deal with these clauses and the resolution of any dispute will depend on the particular fact situation.


[^47]: Supra, note 27, s. 41.

6. CONCLUSIONS AND RECOMMENDATIONS

The primary purpose of this project was to take an objective look at the marine aquaculture industry in New Brunswick to identify issues of concern in relation to property rights. The intention of this document is not to raise alarms or to criticize the existing system of legislature or procedures that DFA have developed. In fact, New Brunswick can be considered as one of the leaders in Canada with respect to regulations and procedures to assist in the growth of an aquaculture industry. However, being a leader carries with it a certain element of risk. Regulations, policies, etc. have to be written and tested against time to ascertain if they are serving the best interest of the industry. DFA, through this report, is currently at the stage of evaluating the processes it has put in place to administer the aquaculture industry.

6.1 Conclusions

Throughout this document many issues have been raised concerning the marine aquaculture industry in New Brunswick. Some of these were significant, dealing with jurisdiction, property rights, security of tenure and information management. Others were of a more minor nature dealing with issues of house keeping, such as reviewing documentation to ensure consistency with the Act. Presented below is a summary of the major issues identified in the report.

6.1.1 Jurisdiction

From an international perspective the aquaculture industry must be aware of boundaries that exist between Canada and the United States. This is especially so in the area of Machias Seal Island where the international boundary remains unsettled. Attention must also be given to international agreements that Canada has become involved in such as The Convention for the Conservation of Salmon in the North Atlantic Ocean or The Third United Nations Convention On The Law Of The Sea.

Nationally, legislative authority in the coastal zones around the Province was identified as a major jurisdictional issue. An investigation of relevant legislation and court ruling have left this issue unresolved. Nevertheless, research indicates that New Brunswick does have strong arguments with respect to jurisdiction to the middle of the Bay of Fundy. It is also evident that New Brunswick has a case in relation to a three nautical mile coastal zone along the northeast coast of the Province. With the Canada - New Brunswick Memorandum of Understanding on Aquaculture Development this issue was reduced in importance by assigning New Brunswick administrative responsibility for the aquaculture industry.

Another related topic under jurisdiction is the need to be sensitive to aboriginal concerns before aquaculture leases are issued.

From a provincial perspective jurisdictional concerns became apparent with respect to the public registration of aquaculture leases. The Registry Act establishes registry offices to register property transactions within the respective counties. However, many aquaculture leases fall outside the described areas of shoreline counties. Whether or not the county registrar should even accept the documents being registered becomes an issue.
Attention must also be given to the coastal zone management policies that are currently being developed in the province. The proposed land use policy sets aside a 500 metre upland restrictive zone where any new activity must be approved by development officers. The marine policy will deal with issues related to a similar zone on the seaward side of the high water line.

6.1.2 Rights of the Aquaculturists and Others

The right of aquaculturists to protect their investment by exercising exclusive rights within an aquaculture site has been a troublesome question in the aquaculture industry for some time. A review of the federal *Fisheries Act* has shown that it is illegal for any person to fish or disturb a fishery within the limits of a lease area without the permission of the lessee. At common law the courts have also held that by virtue of a lease issued under the federal *Fisheries Act* the lessee does acquire certain exclusive rights within the leasehold area and does have a right to commence actions of nuisance against other parties. The New Brunswick *Aquaculture Act* also conveys exclusive rights to the lessee, subject to conditions concerning the rights of adjacent land owners and mines and minerals.

From the above it would appear that the question of exclusivity has been well defined, although provisions of the *Aquaculture Act* could be strengthened. But in each of the Acts cited above there are provisions for the right to safe navigation. This leads to the question of exclusive rights and their affect on navigation open to the interpretation of the Courts. The status of the public right to fish is also an area that is not clear against the current legislation. The Magna Charta places limitations on the government's ability to grant exclusive rights to fish in tidal waters, even though the legislation referenced above clearly attempts to do so.

As mentioned above, the aquaculturists have the right to commence actions of nuisance against other parties due to the exclusive rights acquired in their leases. Generally, such is not the case for the public at large. In order for a citizen to commence an action against an aquaculturist they must show that they have personally suffered damages as a result of interference with their right to fish. Apart from this the only other alternative the public may have is to convince the Attorney General to commence an action on behalf of the public.

A special issue along the coast is the rights of riparian owners. Riparian rights, as established at common law, are attached to upland tenure and are not separable from the land. A review of this issue has clearly shown that riparian owners do have rights with respect to the waters adjacent to their properties. DFA has attempted to address this issue by leaving a forty-five metre buffer between the usable portion of an aquaculture site and the low water mark. However, recent research with respect to clam tents, rockweed harvesting and subdivided leases, has reopened this issue and will most likely be the subject of debate in the future.

6.1.3 Information Management

Information demands on DFA have grown in parallel with an industry that has increased by approximately 375%, to value of one hundred and twenty million dollars annually, in the last ten years. Information demands stem from the need for interdepartmental communications, intergovernmental communications, public notification processes, environmental reviews, registration and filing of survey documents, licensing and leasing procedures. DFA has acquired several Geographic Information Systems and different database management systems to assist in managing spatially referenced and other
information types. However, DFA's move into the information age has for the most part been reactive and as such there now needs to be a strategic plan. Presently, instances arise where employees have to recall historic site specific information and apply it to current situations. This is not a desirable situation and may well lead to poor decision making or, at worst litigation if a bona fide person or lending institute suffers damages as a result of actions or nonactions taken by DFA.

6.1.4 Survey Requirements

Survey instructions issued by DFA differ depending on which management region of the province an aquaculture site is situated. In the Fundy Region a New Brunswick Land Surveyor (NBLS) must be called to demarcate site corners. However, along the northeast coast, Regions 1 & 2, DFA staff become more involved in the process, at times completely conducting the surveys themselves. Apparently the cost of having the surveys conducted by New Brunswick Land Surveyors is high in relation to the value of the aquaculture site. This difference in procedure is only apparent in an appendix to the Application Guide and is not referenced in the Aquaculture Act or the Regulations under the Act.

The above concept of assisting the north shore aquaculturists is very noble, however, DFA is subjecting itself to a greater level of liability then necessary. There is also the potential that DFA employees may be acting in contravention of the New Brunswick Land Surveyors Act, where exclusive rights and responsibilities for land surveying within the province rest with the New Brunswick Land Surveyors Association. In addition to the above, the DFA employees conducting the surveys are the same people reviewing the returns of other surveyors, which at times may conflict with their own work. They are also the same people responsible for inspecting the aquaculture sites to ensure all structures are within the site boundaries. In both these situations this is generally an unacceptable practice in that there is potential for a conflict of interest to occur.

6.1.5 Leasing Process

To acquire an aquaculture lease in the Province of New Brunswick takes approximately three years from the date when the application was first made. The existing process is currently under review by DFA and there is considerable uncertainty with respect to security of tenure especially on the northeast coast. Questions such as:

- who has responsibility for registration;
- is there a requirement for legal land surveys;
- is there a need for compulsory registration;
- does the existing system meet its obligations with respect to public notification, and so on remain to be answered.

These questions become more complicated when consideration is given to the cost that aquaculturists might incur if they are to be given the full protection and security of tenure that is normally associated with land holdings. This is especially so along the northeast coast where many of the leases are small private holdings that have small monetary worth in comparison to the cost of legal fees and survey costs that may evolve.
There are also issues with respect to which government department should actually issue an aquaculture lease. For example the Department of Natural Resources and Energy already have mechanisms in place to administer the issuing of leases and the collection of fees with respect to the same. Is it therefore necessary for DFA to duplicate these systems and in so doing prolong the application process?

6.2 Recommendations

Specific recommendations have been given throughout this report. This final section summarizes the actions recommended to address the primary issues raised above.

6.2.1 Make Appropriate Amendments

It is recommended that DFA investigate each of the conflicts and deficiencies in legislation and guidelines that have been identified in this report to determine what, if any, amendments to legislation or guidelines should be made. Specific attention should be given to:

- making explicit mention of exclusive rights to fishing in lease documents;
- resolving uncertainties in boundary definitions;
- making the Application guidelines and regulations consistent;
- including provisions for private leases;
- resolving inconsistencies with other legislation, such as the Registry Act, Personal Property Securities Act, Community Planning Act, Navigable Waters Protection Act, and Crown Lands Act.
- monitoring potential implications of the proposed Land Securities Act and Coastal Zone Management legislation;
- including aquaculture under right to farm legislation to prevent nuisance suits.

6.2.2 Streamline Application Processes

It is recommended that DFA continue to review its procedures and policies regarding the application, licensing, and leasing processes to:

- streamline the process wherever possible and thus reduce the time frame;
- ensure that aquaculturists and lenders have security of tenure when required;
- improve communication between DFA and other organizations through effective notification and information management procedures;
- ensure that there are no conflicts of interest in the duties of DFA staff with regard to the production of development plans, site locations, and boundary delimitation;
- resolve any ambiguities or inconsistencies as identified in this report.
6.2.3 Resolve Transition Site Issues

It is recommended that DFA specifically address the issues related to those leases and licences issued before the current Act and Regulations came into force to ensure that:

- the guidelines and legislation include these sites;
- the unique requirements for these "transitional" sites are understood;
- appropriate mechanisms (e.g., survey, registration) are designed and implemented to meet these requirements.

6.2.4 Monitor New Aquaculture Ventures

It is further recommended that DFA investigate the property rights and information issues related to new forms of aquaculture including rockweed harvesting and cultivation and clam cultivation.

6.2.5 Develop an Information Management Policy

To provide the security of tenure required to support and expand the aquaculture industry in New Brunswick and to ensure that the industry is in compliance with the law and government policies, it is recommended that DFA develop a strategic plan for information management. Specifically, DFA should conduct an evaluation of:

- current information handling procedures and capabilities;
- current and potential information management requirements;
- alternative strategies for improving information management including, but not limited to:
  - document, application, and lease tracking;
  - registration of aquaculture interests;
  - geographical information system upgrading;
  - co-operative arrangements with other agencies such as the Department of Natural Resources and Energy and the New Brunswick Geographic Information Corporation.

6.2.6 Improve Staff Awareness and Understanding of Property Issues

It is essential that DFA staff be familiar with property rights issues to ensure that appropriate procedures are taken and in order to assist clients and the public. It is therefore recommended that DFA develop an appropriate in-house training program to ensure that staff are aware of the potential impacts and alternatives related to property rights in aquaculture.
6.2.7 Improve Awareness and Understanding of Property Issues

It is recommended that DFA ensure that property issues are considered whenever coastal activities or government policies affect the aquaculture industry, coastal property owners, or the general public. Specifically, DFA should:

- assist the aquaculture industry in understanding the issues involved through seminars and information dissemination;
- monitor and address new issues as they develop, such as aboriginal rights;
- provide appropriate information to the general public, lenders, traditional fishers, and navigators;
- ensure that initiatives in the coastal zone by other government departments are consistent with aquaculture property rights arrangements.

Until recently, the industry has been able to address property and jurisdiction issues on an ad hoc basis. This has allowed the fledgling industry to be minimally constrained by law and enforcement.

But if the industry is to be sustained and if there is to be sufficient security to stimulate further growth, then the Province needs to provide an adequate property framework. New Brunswick now has the opportunity to develop a strong property rights model for aquaculture, supported by appropriate information management procedures. To protect the rights of the industry and other users of the coastal regions the issues raised in this report need to be addressed.
REFERENCES


Canada - New Brunswick Memorandum of Understanding on Rockweed (Ascophyllum Nodosum) Management and Development.


Department of Fisheries and Aquaculture, N.B. "Acknowledgement of Security Interest."


Department of Fisheries and Aquaculture, N.B., (1991), Aquaculture Site Surveys.


MacLeod, A.M. CLS., OLS., *Government Departments from 1867 to 1996, Responsibilities for administering interest of concern to Legal Surveys Division,* July 1996, Legal Surveys Division, Geomatics Canada, Earth Sciences sector, Natural Resources Canada.


LEGISLATION CITED


New Brunswick Regulation 91-158 under the Aquaculture Act (O.C. 91-806), (1991) Section 26 (a).


An Act relating to the Boundary Line between the Provinces of New Brunswick and Nova Scotia, (1859) c. 9.

An Act to explain an Act entitled An Act relating to the Boundary Line between the Provinces of New Brunswick and Nova Scotia, (1862) c. 32.

Constitution Act, (1867), (The British North America Act, 1867), 30 & 31 Victoria, c. 3 (U.K.).


An Act relating to the Coast Fisheries, and for the prevention of Illicit Trade, (1853) c. 69.

An Act respecting Fishing by Foreign Vessels, (1868) c. 61.


Leases Regulation, N.B. Reg 83-132.


Regulations Respecting the Works in Navigable Waters, (1978) C.R.C. c. 1232, s. 3 (1).


CASES CITED

Amodu Tijani v Southern Nigeria (Secretary), (1921) 2 AC 399 (PC) at 407.


Calder et al v Attorney-General of British Columbia (1973) 34 DLR (3d) 145 at 198-9 (SCC).


R v Sparrow (1990) 1 SCR 1075 (SCC).

Reg. v. Lord, (1864) 1 P.E.I. 245.

Reg. V. Robertson (1882) 6 S.C.R. 52.

Robertson v. Steadman (1876) 16 N.B.R. 612.


Roy v. Fraser (1903) 36 N.B.R. 113.

Rowe v. Titus (1849) 6 N.B.R. 326.


Smith v. Grieve (1899) 8 Nfld. L.R. 278.

St Catherine's Milling and Lumber Company (1889) 14 App Cas 46 (PC).

Stover v. Lavoia (1906) 8 O.W.R. 398.


Watson v. Patterson (1903) 2 N.B. Eq. 488.


INTERVIEWS


Dupuis, B. (1996). Department of Fisheries and Aquaculture, N.B.

Henry, R.R. (1997). Registrar, Department of Fisheries and Aquaculture, N.B.


Sweeney, R.H. (1996). Aquaculture Development Officer, Department of Fisheries and Aquaculture, N.B.
Appendix "A"

Commercial Aquaculture Licence
COMMERCIAL AQUACULTURE LICENCE

New Brunswick

Licence #: 1725-20-  

Expire date: 

This COMMERCIAL AQUACULTURE LICENCE is hereby issued under the authority of subsection 6(1) of the AQUACULTURE ACT (Chap. A-9.2, RSNB 1988) to:

for Marine Aquaculture Site # ___ at ____________________ for the cultivation of finfish. This licence is subject to the provisions of the AQUACULTURE ACT (Chap. A-9.2, RSNB 1988), the GENERAL REGULATION - AQUACULTURE ACT (NBR 91-158) along with any amendments thereto and, pursuant to subsection 11(1) of the AQUACULTURE ACT (Chap. A-9.2, RSNB 1988), the terms and conditions set forth in Schedule "A" annexed hereto.

Issued this ___ day of _____ 19__.

__________________________
R. Russell Henry
REGISTRAR OF AQUACULTURE

DEPARTMENT OF FISHERIES AND AQUACULTURE, PO BOX 6000, FREDERICTON, NB, E3B 5H1
Tel: (506) 453-2253 Fax: (506) 453-2100
SCHEDULE A
OPERATING TERMS AND CONDITIONS
COMMERCIAL AQUACULTURE LICENCE
Marine Aquaculture Site / Finfish Culture
Licence #: 1725-20

1. This Commercial Aquaculture Licence is issued in the name of ______________________
   herein referred to as the "licensee".

2. The licensee is hereby authorized to conduct aquaculture on Marine Aquaculture Site
   #___ as shown on the attached plan for the purpose of finfish culture.

3. This licence expires on ____.

4. The Department of Fisheries and Aquaculture must be notified immediately of any
   changes in the corporate Board of Directors.

5. The licensee will save harmless the Minister or agents from any legal action associated
   with the performance of duties under the provisions of the Aquaculture Act (Chap. A-

6. The species of finfish approved for cultivation are ____________________________

7. The maximum stocking density is 18 kg/m3 with the total holding unit capacity not to
   exceed __cubic metres.

8. The maximum number of fish, including all year classes, to be on site at any one time
   must not exceed _______ fish.

9. The licensee will co-operate with and/or undertake environmental monitoring of the
   operation as directed by the Registrar of Aquaculture.

10. Access to the licensed operation and associated facilities will be permitted to staff of
    the Department of Fisheries and Aquaculture or any of its agents as may be required
    from time to time.
Appendix "B"

Aquaculture Occupation Permit
This AQUACULTURE OCCUPATION PERMIT is hereby issued under the authority of subsection 26(1) of the AQUACULTURE ACT to:

for the occupation and use of Marine Aquaculture Site # _____ at __________________________ .

This permit is subject to the provisions of the AQUACULTURE ACT (Chap. A-9.2, RSNB 1988), the GENERAL REGULATION - AQUACULTURE ACT (NBR 91-158) along with any amendments thereto and, pursuant to subsection 26(2) of the AQUACULTURE ACT (Chap. A-9.2, RSNB 1988), the terms and conditions set forth in Schedule "A" annexed hereto.

Issued this ___ day of _____ 19__

________________________________________

Bernard Thériault
MINISTER OF FISHERIES AND AQUACULTURE
1. This Aquaculture Occupation Permit may not be transferred or assigned in any manner and is hereby issued in the name of ______________________ herein referred to as the "permittee".

2. The permittee is hereby authorized to occupy and use the aquaculture land identified as Marine Aquaculture Site #____ which is more particularly shown on the attached plan.

3. This permit expires on

4. The Department of Fisheries and Aquaculture must be notified immediately of any changes in the corporate Board of Directors.

5. The permittee will save harmless the Minister from any legal action associated with the performance of duties under the provisions of the Aquaculture Act (Chap. A-9.2, RSNB 1988) and the General Regulation - Aquaculture Act (NBR 91-158).

6. Access to the site and associated improvements will be permitted to staff of the Department of Fisheries and Aquaculture or any of its’ agents as may be required from time to time.

7. The permittee must mark all improvements on the site in accordance with the requirements of the Canadian Coast Guard.

8. All site corners and boundaries must be marked in accordance with the requirements of the Canadian Coast Guard.

9. All holding units, structures and equipment associated with the aquaculture operation must be contained wholly within the boundaries of the site.

10. Mooring lines may be placed within the boundaries of Parcel ___ providing that they are weighted to maintain a minimum water depth, at mean low tide, of 2.0 metres.

11. The adjacent shoreline extending from the mean high water mark to the mean low water mark must be kept free and clear of any equipment and/or debris associated with the aquaculture operation to allow for public use, egress and regress at all times.

12. The permittee must take occupation and use the site for aquaculture purposes, including the cultivation of finfish authorized under the Commercial Aquaculture Licence, within twelve (12) months of the issuance date, otherwise the permit will be forfeited and cancelled.

13. A rental fee of $100.00 must be paid by the permittee each year to the Minister before the first day of April.
Appendix "C"

Aquaculture Lease
LEASE


The parties to this lease are:

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF NEW BRUNSWICK as represented by the Minister of Fisheries and Aquaculture maintaining an office at the City of Fredericton, New Brunswick, the "lessor"

and

, a body corporate having its registered office in , the "lessee"

The recitals and other documents attached hereto as Schedule "D" form part of this lease.

The lessor leases to the lessee the premises described in Schedule "A" attached hereto on the following conditions:

Duration : years (or such shorter duration as may be provided for by the terms thereof)
Date of Commencement :
Date of Termination :
Rent : As per Schedule "C" attached hereto
Payments : Annually in advance
Payment Date : 1st day of April in each year
Place of Payment : Department of Fisheries and Aquaculture
P.O. Box 6000, Fredericton, NB, E3B 5H1

This lease contains the covenants and conditions which are set out in :

(a) The Lease Regulation - Standard Forms of Conveyances Act and as set out in Schedule "B" attached hereto.
(b) Schedule "C" attached hereto.

Dated on _______________, 19__

SIGNED, SEALED AND DELIVERED in the presence of

Witness

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF NEW BRUNSWICK, as represented by the Minister of Fisheries and Aquaculture

Witness

R. Russell Henry
Minister's designate
SCHEDULE "A"

All that certain Lot, Piece or Parcel of Land situate, lying and being in the Parish of , County of and in the Province of New Brunswick and being more particularly a portion of Submerged Crown Land, situate in , said lot being described as follows:

Being all that Lot shown as Marine Aquaculture Site # on a plan of survey entitled "Return of Survey of Aquaculture Site No. , prepared by , said plan dated and filed in the records of the Minister of Natural Resources and Energy on under number .

The above described Fishash Aquaculture Site # MF- containing hectares, more or less, now on file in the records of the Minister of Fisheries and Aquaculture.

Reserving to the Crown as represented by the Minister of Natural Resources and Energy, all Coals, also all Gold, Silver and other Mines and Minerals.
11. The lessee shall pay rent.
12. The lessee shall maintain the premises in good repair.
13. The lessee shall permit the lessor to inspect the premises.
15. The lessee shall use the demised lands for agreed purposes only.
16. The lessee shall not assign or sublet without the lessor's consent.
17. The lessee shall comply with all laws.
18. The lessee shall deliver vacant possession upon termination of the lease.
19. The lessee shall permit the lessor to show the premises to purchasers.
20. The lessee shall pay public utilities.
22. The lessee shall pay occupancy taxes.
23. The lessee shall provide public liability insurance.
25. The lessee shall conduct his business in a reputable manner.
26. On breach of any covenant the lessor may recover all costs from the lessee as rent.
27. The lessor may re-enter the premises on the insolvency of the lessee.
28. The lessor promises to the lessee quiet enjoyment of the demised lands.
30.1 The lessee shall pay real property taxes.
32. The lessee may remove fixtures.
33. The lessee has an insurable interest in improvements made by him.
36. Where the lessee holds over the tenancy is monthly.
38. The lessor is not responsible for injury to person or property upon the premises unless due to negligence of the lessor.
39. The lessee may install signs with the lessor's consent.
41. Condonation, excuse or overlooking of any default does not operate as a waiver.
46. The lessor may re-enter the premises upon non-payment of rent or other breach.
The premises may be continued by the lessor upon any of the following events:

11. The premises may be continued by the lessor upon any of the following events:

   a. The premises have been erected or improved by the lessor or
   b. The premises have been erected or improved by the lessee and the improvements are not the lessor's property and are not removed from the premises.

   10. The premises are not occupied by the lessee or an occupant of the premises for the purpose of the premises.

   9. The premises do not contain the area of the premises for the purposes for the premises.

   8. The lessor does not contain the area of the premises for the purposes for the premises.

   7. The lessor does not contain the area of the premises for the purposes for the premises.

   6. The lessor does not contain the area of the premises for the purposes for the premises.

   5. The premises are not occupied by any other person.

   4. The premises are not occupied by any other person.

   3. The premises are not occupied by any other person.

   2. The premises are not occupied by any other person.

   1. The premises are not occupied by any other person.
e. the lessee's licence to maintain a commercial aquaculture site is revoked or
cancelled under the authority of Section 21 of the Aquaculture Act, Acts

12. The Lessor is not responsible for providing or maintaining access to the demised
lands.

13. The Lessor is under no duty to repair.

14. Notices and changes pursuant to this lease shall be in writing.

15. The lessee shall give notice of a change in address within sixty days of an actual
change of address.

16. Unless otherwise prescribed by the lessor, notices and correspondence to the lessee
may be delivered personally to any office of the lessor, or may be sent by prepaid
registered mail to the lessor at:

Department of Fisheries and Aquaculture
Aquaculture Division
P.O. Box 6000
Fredericton, New Brunswick
E3B 5H1

17. Notices to the lessee may be delivered personally to the lessee or may be sent by
prepaid registered mail to the lessee at:

18. Notices and correspondence sent by prepaid registered mail to the prescribed
addresses of the lessor or the lessee shall be deemed received on the seventh day
following the day of mailing.

19. The lessee may require a resurvey at any time, at the lessee's expense, if for any
reason the lessor considers it necessary. The costs will be borne by the lessee under
penalty of cancellation of the lease.

20. The lessee is entitled to make full use of Parcel shown on Plan Number as
described in Schedule "A" for the purpose of conducting aquaculture.

21. The lessee is entitled to make limited use of Parcel shown on Plan Number as
described in Schedule "A" for the purpose of supporting mooring lines and anchors,
the said parcel being a restrictive use area subject to the limitations set forth in
paragraphs 26(d) and 26(e) of the General Regulation - Aquaculture Act and
further being subject to public use, egress and regress at all times.

22. All holding units, structures and equipment, including but not limited to cages,
anchors, moorings and barges, associated with the aquaculture operation must be
contained wholly within the boundaries of the site.
SCHEDULE "D"

Whereas by Order in council 93-366 made on April 29, 1993 the Lieutenant-Governor in Council did transfer to the Minister of Fisheries and Aquaculture all rights, powers, duties, functions, responsibilities or authority vested in or imposed on the Minister of Natural Resources and Energy under the Oyster Fisheries Act including the administration and control of all Finfish site leases issued by Canada.

And whereas under the authority of Subsection 24(1) of the Aquaculture Act, Acts of New Brunswick, 1988, chapter A-9.2, as amended, the lands described in Schedule "A" were designated on November 3, 1993 as aquaculture land and are hereby identify as Marine Aquaculture site #MF-.

And whereas the lessor has duly determined under Section 25 of the Aquaculture Act, Acts of New Brunswick, 1988, chapter A-9.2, as amended, to lease the premises described in Schedule "A" to the lessee for the purposes of aquaculture for the cultivation of Finfish.
PROVINCE OF NEW BRUNSWICK
COUNTY OF YORK

I, ______________________ of the City of Fredericton, in the County
of York, and Province of New Brunswick, MAKE OATH AND SAY:

1. THAT the within Instrument was executed in my presence by R. Russell Henry,
who has been duly authorized by the Minister of Fisheries and Aquaculture for New
Brunswick to lease designated aquaculture land on his behalf pursuant to a "Notice of
Designation Under the Aquaculture Act" dated the 24th day of October 1994.
2. THAT the signature of R. Russell Henry set and subscribed to the said Instrument
as that of the Minister's designate of Fisheries and Aquaculture, is the signature of the said
R. Russell Henry.
3. THAT the signature of R. Russell Henry was subscribed thereto in my presence on
the ___ day of ________.

SWORN TO at the City of Fredericton, in
the County of York and Province of New
Brunswick this ___ day of
___, 19__

BEFORE ME:

Commissioner of Oaths
PROVINCE OF NEW BRUNSWICK
COUNTY OF ________________

I, ________________, of the City of ________________ in the Province of New Brunswick, MAKE OATH AND SAY:

1. That I am the ________________ of ________________ and have personal knowledge of the matters and things herein deposed to and have authority to make this Affidavit on behalf of the said Corporation.

2. That ________________ is the authorized signing officer to execute documents in the name and on behalf of the said Corporation.

3. That the signature "______________" affixed to the foregoing instrument is the signature of ________________ of the said Corporation and is in the proper handwriting of me this deponent as ________________ of the said Corporation.

4. That the seal affixed to the said instrument is the corporate seal of ________________ and was so affixed by order of the said Corporation for the purposes of the execution of the said instrument.

5. The said instrument was so executed by the said Corporation on the ___ day of ________________, as and for its act and deed for the uses and purposes therein expressed and contained.

SWORN TO BEFORE ME at the City of ________________, in the County of ________________ and Province of New Brunswick this ___ day of ________________, 19__.


Commissioner of Oaths
Appendix "D"

List of the One Line Clauses
Contained in the Lease Form
and the Longer Versions of Them
11. The lessee shall pay rent.

11. The lessee covenants with the lessor that the lessee shall for the duration of this lease pay to the lessor the rent hereby reserved on the days and in the manner herein set out without any deduction whatsoever.

12. The lessee shall maintain the premises in good repair.

12. The lessee covenants with the lessor that the lessee shall for the duration of this lease maintain the demised premises in good and sufficient order and repair to the satisfaction of the lessor, reasonable wear and tear and damage by fire, lightning, tempest and the like excepted.

13. The lessee shall permit the lessor to inspect the premises.

13. The lessee covenants with the lessor that the lessee shall permit the lessor, his servants, agents and employees at all reasonable times for the duration of this lease to enter upon the demised premises for the purpose of inspecting the state of repair or making such repairs as the lessor may from time to time consider necessary.

15. The lessee shall use the premises for agreed purposes only.

15. The lessee covenants with the lessor that the lessee shall use the demised premises only for the purpose or purposes agreed upon by the lessor and lessee.

16. The lessee shall not assign or sublet without consent.

16. The lessee covenants with the lessor that the lessee shall not, without the written consent of the lessor, which consent shall not be unreasonably withheld, assign, transfer, sublet or otherwise by any act or deed cause or permit the demised premises or any part thereof to be assigned, transferred or sublet unto any person or persons whomsoever.

17. The lessee shall comply with all laws.

17. The lessee covenants with the lessor that the lessee shall promptly comply with and conform to the requirements of every federal and provincial statute, rule, regulation and ordinance, and every municipal by-law, rule, regulation, order and ordinance at any time or from time to time in force affecting the use or occupation of the demised premises or any part thereof by the lessee.
<table>
<thead>
<tr>
<th>Clause</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.</td>
<td>The lessee shall deliver vacant possession upon termination.</td>
</tr>
<tr>
<td>19.</td>
<td>The lessee shall permit the lessor to show the premises to purchasers.</td>
</tr>
<tr>
<td>20.</td>
<td>The lessee shall pay public utilities.</td>
</tr>
<tr>
<td>22.</td>
<td>The lessee shall pay occupancy taxes.</td>
</tr>
<tr>
<td>23.</td>
<td>The lessee shall provide public liability insurance.</td>
</tr>
<tr>
<td>25.</td>
<td>The lessee shall conduct his business in a reputable manner.</td>
</tr>
</tbody>
</table>

The lessee covenants with the lessor that the lessee shall upon the expiration or other sooner determination of this lease peaceably deliver to the lessor vacant possession of the demised premises in the condition in which the lessee is by this lease required to maintain the demised premises.

The lessee covenants with the lessor that the lessee shall permit the lessor, his servants, agents and employees at reasonable times and after reasonable notice to enter the demised premises for the purpose of showing it to prospective tenants and purchasers.

The lessee covenants with the lessor that the lessee shall pay as they become due all charges for public utilities including electricity, gas, water, telephone and all other services provided by any public utility in connection with the occupancy of the demised premises.

The lessee covenants with the lessor that the lessee shall pay for the duration of this lease all taxes, rates, levies and assessments charged against the demised premises in connection with the lessee's use and occupation thereof.

The lessee covenants with the lessor that the lessee shall at his own expense take out and keep in force public liability and property damage insurance in the names of the lessor and the lessee for injury, death or property damage occurring in, or arising in connection with the operation of, the demised premises, with all inclusive coverage.

The lessee covenants with the lessor that the lessee shall conduct his business in and use the whole of the demised premises in a reputable manner; a business practice by the lessee whether through advertising, selling procedures or otherwise which in the opinion of the lessor may harm the business or reputation of the lessor or reflect unfavourably on the lessor or other tenants of premises in
26. On breach of any covenant the lessor may recover all costs from the lessee as rent.

26. In the event that the lessee is in default of payment of any amount required by this lease to be paid by him, the lessor may pay such amount on his behalf and recover that amount together with his reasonable expenses from the lessee as rent, with all remedies incidental thereto as if that amount and expenses were included in the rent hereby reserved.

27. The lessor may re-enter on default.

27. In the event that

a) the rent or additional rent hereby reserved, or any part thereof, is unpaid for ten days after any of the days on which it ought to have been paid, although no formal demand therefor has been made,

b) the lessee is in breach of any covenant, agreement or proviso herein contained or implied on the part of the lessee to be made, observed or performed, unless the lessor waives such breach,

c) the demised premises, without the written consent of the lessor, become and remain vacant or not used for ten days while they are suitable for use by the lessee,

d) the demised premises are occupied by a person other than the lessee without the prior written consent of the lessor,

e) the rights of the lessee under this lease are at any time seized or taken in execution or attachment by any creditor of the lessee, or

f) the lessee makes an assignment for the benefit of creditors, becomes bankrupt or insolvent, or takes the benefit of any statute that may be in force for bankrupt or insolvent debtors, then the current month's rent, including additional rent, and the next three months' rent, including additional rent, immediately become
<table>
<thead>
<tr>
<th>Clause</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>28.</td>
<td>The lessor promises quiet enjoyment.</td>
</tr>
<tr>
<td>28.</td>
<td>The lessor covenants with the lessee that the lessee, paying the rent hereby reserved and performing the covenants on his part to be performed, shall and may peaceably possess and enjoy the demised premises for the duration of this lease without any interruption or disturbance from the lessor or any person lawfully claiming under him.</td>
</tr>
<tr>
<td>30.1</td>
<td>The lessee shall pay real property taxes.</td>
</tr>
<tr>
<td>30.1</td>
<td>The lessee covenants with the lessor that the lessee shall pay for the duration of this lease all taxes, rates duties and assessments whatsoever, whether municipal, provincial, federal or otherwise, now charged or hereafter to be charged upon the demised premises or upon the lessor on account thereof, except municipal taxes for local improvements.</td>
</tr>
<tr>
<td>32.</td>
<td>The lessee may remove fixtures.</td>
</tr>
<tr>
<td>32.</td>
<td>The lessee may at or prior to the termination of this lease, take, remove and carry away from the demised premises all fixtures, fittings, plant, machinery, utensils, shelving, counters, safes or other articles placed in or on the premises in the nature of trade or tenants' fixtures or other articles belonging to or brought upon the premises by the lessee, but the lessee shall in such removal do no damage to the premises or shall make good any damage which he may occasion thereto.</td>
</tr>
<tr>
<td>33.</td>
<td>The lessee has an insurable interest in improvements made by him.</td>
</tr>
<tr>
<td>33.</td>
<td>For the duration of this lease or any renewal thereof the lessee has an insurable interest in any alterations, additions and improvements that may be made by the lessee in and to the demised premises, and the lessee is entitled to due and payable and, in the manner prescribed by law, the lease and term shall, at the option of the lessor, become forfeited and void and the lessor may enter into and upon the demised premises, or any part thereof in the name of the whole, by force or otherwise as he may see fit, to have again, repossess and enjoy, as of its former estate, anything herein contained to the contrary notwithstanding.</td>
</tr>
</tbody>
</table>
36. Where the lessee holds over the tenancy is monthly.

In the event that the lessee holds over beyond the duration of this lease or the renewal thereof with or without the consent of the lessor and without any further written agreement, the tenancy resulting shall be a monthly tenancy only, at a monthly rental equivalent to the amount paid per month during the last month of the term hereby granted or the renewal thereof and subject to termination at the election of the lessor or lessee upon one month's notice in writing and subject also to the terms, conditions and covenants herein set out.

38. The lessor is not responsible for injury to person or property upon the premises unless due to the negligence of the lessor.

The lessor shall not in any event whatsoever be liable or responsible in any way for any personal injury or death that may be suffered or sustained by the lessee or any employee of the lessee or any other person who may be upon the demised premises or for any loss of or damage or injury to any property belonging to the lessee or to his employees or to any other person while such property is on the demised premises, unless due to the negligence of the lessor, his employees, agents or licensees.

39. The lessee may install signs with consent.

Subject to the lessor's approval, which approval shall not be unreasonably withheld, the lessee may install in, upon or about the demised premises any signs or advertising material which shall remain the property of the lessee and which the lessee may remove regardless of the degree or affixation upon expiration or termination of this lease of any renewal thereof provided that the lessee shall make good any damage caused to the demises premises by such installation and removal.

41. Condonation, excuse or overlooking of any default does not operate as waiver.

Any condoning, excusing or overlooking by the lessor of any default, breach or non-observance by
46. The lessor may re-enter the premises upon non-payment of rent or other breach.

46. If and whenever the rent hereby reserved is not paid by the lessee and remains unpaid for a period of fifteen (15) days after any of the days upon which the same ought to have been paid, and whether or not any formal or other demand has been made therefor, or if the lessee is in breach of or in default under any of the lessee's covenants, conditions or agreements contained in this lease and such breach or default continues for fifteen (15) days after written notice thereof has been given by the lessor to the lessee without the lessee proceeding promptly and diligently to remedy such breach or default, then in any such case the lessor shall have the right to terminate this lease and, upon the exercise of such right, the lessor may terminate this lease and re-enter into and upon and take possession of and enjoy the demised premises, or any part thereof, in the name of the whole, as of the lessor's former estate.

the lessee at any time or times in respect of any covenant, proviso or condition herein contained shall not operate as a waiver of the lessor's rights hereunder in respect of any continuing or subsequent default, breach or non-observance, nor so as to defeat or affect in any way the rights of the lessor.
Appendix "E"

Acknowledgement of Security Interest
ACKNOWLEDGEMENT OF SECURITY INTEREST

File No. MF-

Dear Sir/Madam:

RE: (The Lender)
     (The Lessee)

The New Brunswick Department of Fisheries and Aquaculture acknowledge receipt of copies of your security documents relative to financial arrangements between and hereinafter referred to as "parties". These copies will be added to our files relative to the respective site noted in the security documents.

In accordance with our acknowledgement of the subject security interest, we commit that any changes proposed for transfer or surrender of ownership of the subject Commercial Aquaculture License and/or Aquaculture Lease will require the written agreement of both parties involved before any such change will be considered by the Minister of Fisheries and Aquaculture.

Notwithstanding the above, subject to due notification of the Minister by the lender exercising rights under security agreements with the licensee/lessee, in the event of a receivership or bankruptcy proceedings, the Minister agrees to allow the lender all the same rights and privileges afforded the present site licensee/lessee, subject to the lender's compliance with all applicable terms and conditions relative to the subject license and lease.

We acknowledge receipt of this security interest subject to:

1) The Department remains committed under the Aquaculture Act and Regulation to enforce all matters relative to any Commercial Aquaculture Lease or Commercial Aquaculture License, including but not restricted to matters relative to fish health, numbers of fish on site and or adherence by the licensee/lessee to all other conditions relative to the license/lease with the Minister. On these matters we will deal directly with the licensee/lessee;

2) Our acknowledgement does not constitute a representation as to the validity or enforceability of the security provided, nor does it constitute registry of the security whether or not registration is available through other venues;
3) Our acknowledgement does not waive any of the terms and conditions required of the licensee/lessee relative to issuance of the relevant license or lease.

Yours truly,

R. Russell Henry
Registrar of Aquaculture

c. Bob Sweeney