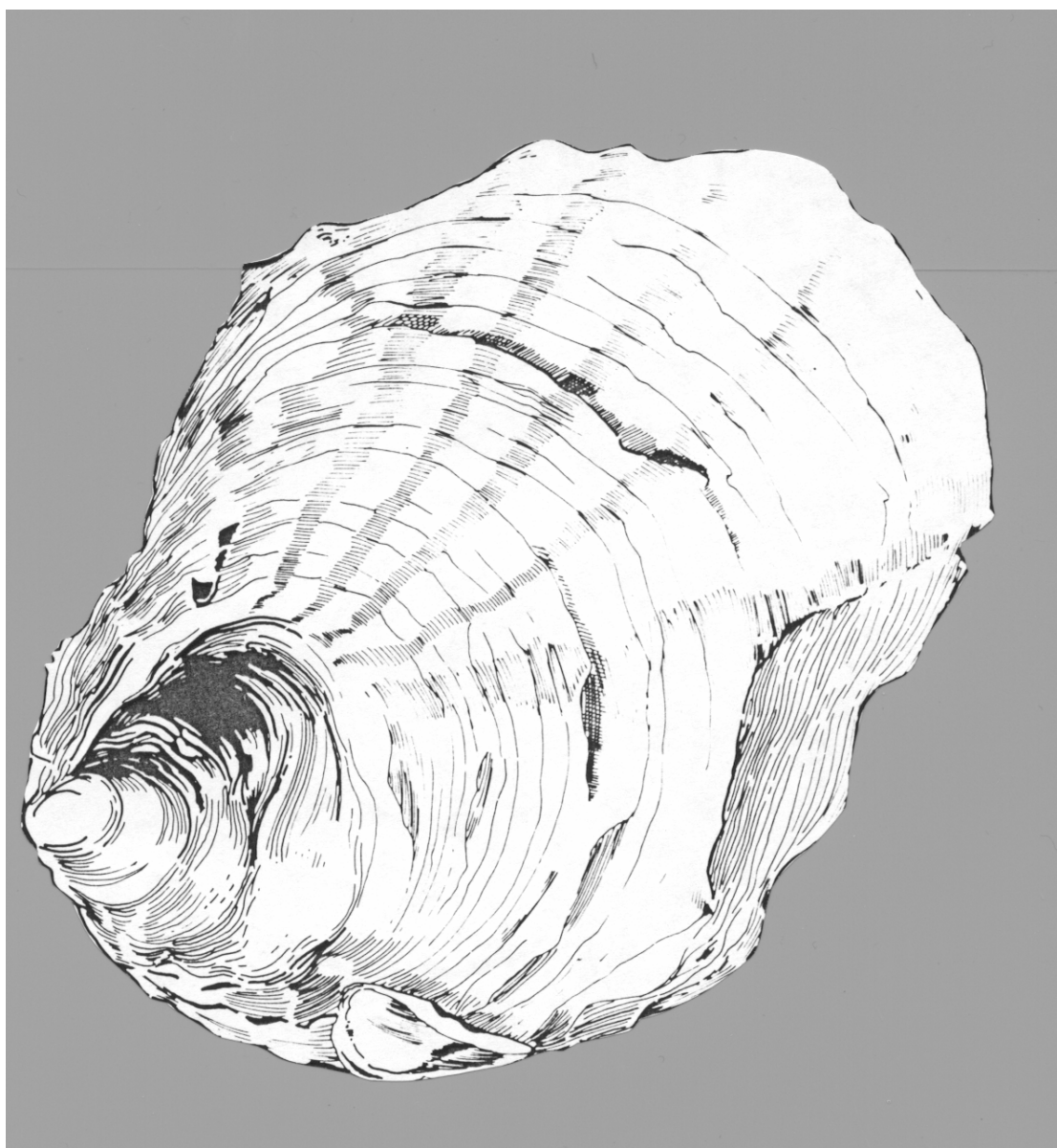


**INTEGRATED COMMERCIAL OYSTER FISHERY
MANAGEMENT PLAN**

**EASTERN NEW BRUNSWICK AREA
GULF REGION**



2001-2006

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Eastern New Brunswick Area 2001-2006

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GLOSSARY

Approved area¹: The classification of a shellfish growing area which has been approved by the shellfish control authority for growing or harvesting shellfish for direct marketing without depuration. This classification is determined through a sanitary survey of the water conducted by the shellfish control authority. An approved shellfish growing area may temporarily be made a closed area when a public health emergency is declared, resulting for instance from a hurricane or flooding.

Canadian Food Inspection Agency (CFIA): Responsible for shellfish sanitation and regulations governing the processing, shipping and exporting of shellfish.

Closed area (contaminated area)¹: A growing area where the harvesting of shellfish is temporarily or permanently not permitted, except by special licence for specific purposes.

Coastal fisher: Designates a fisher who is not a member of a core enterprise and who holds at least one key non-vessel-based commercial fishing licence. In the Eastern New Brunswick Area, key non-vessel-based commercial licences are for the following species: clams (bar clams, bay quahogs, and soft-shell clams), eel, gaspereau, oyster and smelt.

Commercial fishery: Harvesting of commercial-size oysters for immediate marketing.

Conditionally approved area¹: The classification of a shellfish growing area determined by the shellfish control authority to meet approved area criteria for a predictable period. The period is conditional upon meeting established performance standards specified in a memorandum of understanding signed by the parties concerned. A conditionally approved area is temporarily closed by the shellfish control authority when it no longer meets the approved growing area criteria.

Contaminated fishery: Activity governed by the *Management of Contaminated Fisheries Regulations* which requires prior approval of a decontamination plan before a contaminated shellfish fishing licence can be issued.

Core enterprise: Means a fishing unit composed of a fisher (head of enterprise), one or more registered vessel(s) and the licences he holds, and which has been designated as such in 1996 under the following criteria:

For Bonafide fishers: who have Bonafide fisher status and hold a key fishing licence (snow crab, Category A lobster, groundfish (all gear other than handline), scallop, tuna or herring).

For non- Bonafide fishers: who hold two key fishing licences (shrimp, snow crab, Category A lobster and ITQ groundfish only) or who hold one key fishing licence, have fished for a full season and have made landings with a value of at least \$25,000 under their own licences, for two years between 1993, 1994 and 1995.

Decontamination: For oysters, the process consists in placing contaminated oysters in an area of clean water for a minimum of 14 days at a temperature over 5°C. Other methods such as plant depuration may be accepted, subject to approval by the Canadian Food Inspection Agency and Environment Canada.

Ecosystem: Basic ecological unit formed by the natural environment and the organisms, animals and plants that live there.

Environment Canada: Responsible for monitoring water quality and for classifying shellfish harvesting areas in three categories: approved area, conditionally approved area, contaminated area.

Fisheries and Oceans: Regulates shellfish harvesting and sees to the enforcement of the *Management of Contaminated Fisheries Regulations*.

Picking: Collection of oysters of all sizes with hand tools in areas other than public beds for transfer to leased areas. This fishery has been prohibited since 1996.

Integrated Fisheries Management Plans: Designed to improve the conservation and sustainable use of fisheries resources. The plans include provisions on resource conservation and management requirements and on the fishery's scientific needs, as well as conservation and protection measures. The plans encourage increased participation by all stakeholders and an approach that integrates the various DFO sectors. Integrated fisheries management plans give rise to certain modes of co-management which ensure transparency, establish all allocations between sectors and fleets, provide relevant information in context, and ensure that clients and stakeholders are consulted on the comprehensive strategies and objectives for management of each fishery.

Lease¹: A defined geographic area in a marine environment described by a federal or provincial agency and approved by the Competent Authority (Shellfish Control Agency or provincial equivalent) for the purposes of culturing, harvesting and/or relaying (exploratory or commercial) of bivalve molluscs. This definition includes all leases, licences of occupation or permits issued to an individual, group or company by the Competent Authority.

Leased area (private flat or oyster lease): Site granted by the N.B. Department of Agriculture, Fisheries and Aquaculture (NBDAFA) for the culture and marketing of oysters. Requires no commercial oyster fishing licence.

Oyster farmer: Leaseholder of an aquaculture site (private flat, leased area) who is involved in marketing oysters. The aquaculture site or lease is a defined geographic area in a marine environment described by a federal or provincial agency and approved by the Competent Authority. The site may be used for culturing, harvesting and/or relaying oysters. This definition includes all leases, licences of occupation or permits issued to an individual, group or company by the Competent Authority.

Relaying: process whereby oysters harvested in a bacteriologically contaminated area are transferred to clean waters to be purified before marketing.

Seed stock: Small oysters measuring from 15 to 50 mm which either are from natural harvested spat or were grown in a breeding pond, used for suspension or bottom culture and sometimes to develop public beds.

Spat: After the eggs have been released and fertilized, they become oyster larvae which rise to the surface of the water where they feed in suspension. They drift there with the currents for three weeks before transforming into spat, whereupon they fall to the bottom, attach there, and grow into mature oysters.

Spat collection: Process whereby oyster farmers harvest seed stock during spatting, either naturally on deposits of shells or artificially on cultch (cement-coated plastic Chinese hat, coated washers, mix of oyster and scallop shells) suspended in the water column. The collected spat (<25 mm) are separated from the cultch for subsequent grow-out, either on the bottom or in pots.

Watershed: Geographic concept designating a territory whose land is drained by any one body of water, such as a bay (Caraquet Bay watershed) or a river (Aboujagane River watershed), and which includes groundwater, surface water and wetlands.

(1) Manuel of operations – *Canadien Shellfish Sanitation Program* (Department of Fisheries and Oceans and Environment Canada)

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Eastern New Brunswick Area
2001-2006**

INTRODUCTION

This management plan concerns the commercial oyster fishery (*Crassostrea virginica*) in the Eastern New Brunswick Area within statistical districts 63 to 80 (Appendix 1) and covers the period of 2001 to 2006 inclusive. Its objectives are sustainable development through a precautionary and ecosystem-based approach, as well as integrated co-management in the spirit of the *Oceans Act* and associated DFO policies.

This plan is designed for joint implementation with an annual update in which specific management measures concerned with harvesting – in particular fishing areas, seasons and catch limits - can be adjusted to suit conservation imperatives.

BACKGROUND

New Brunswick oysters have been harvested for over a century. Before public oyster beds were decimated by Malpeque disease in the 1950s, landings regularly exceeded 1,000 t per year, reaching a record level of 3,594 t in 1949.

Following the ravages of Malpeque disease, landings hit a historical low of only 2.7 t in 1960. Thanks to massive seeding of oysters resistant to the disease in the late 1950s and early 1960s, certain growing areas were able to recover. Landings since 1960 show an upward trend, although short-term fluctuations are very substantial. Some of this increase is attributable to the development of farming starting in the early seventies.

From 1985 to 1989, total landings recorded for New Brunswick stood at approximately 670 t annually for an average landed value of \$1,150,000 per year. Since 1990, landings for N.B. have accounted for 25% of Atlantic landings, as shown in the following table. These landings include catches by commercial fishers as well as by holders of oyster leases. It should be noted that no landings are reported for the provinces of Newfoundland and Quebec, as the northern limit of American oyster reproduction is Caraquet Bay.

Table 1: Atlantic landings, 1990-1998

	N.B.		N.S.		P.É.I.		Quebec		Nfld.	
	mt	\$000	mt	\$000	mt	\$000	mt	\$000	mt	\$000
1990	792	1382	72	114	1774	3489	0	0	1	2
1991	685	1426	33	58	1182	1832	0	0	0	0
1992	530	1048	30	41	1179	2062	0	0	0	0
1993	363	828	23	29	1204	2227	0	0	0	0
1994	576	1305	113	199	2039	3275	0	0	0	0
1995	603	1264	89	203	1620	3097	0	0	0	0
1996	599	1222	65	135	1468	2664	0	0	0	0
1997	350	783	82	173	1285	3093	0	0	0	0
1998	505	1348	220	451	2399	5240	0	0	0	0

In the Maritimes, American oysters are harvested both from natural or public beds or growing areas and from private leased areas. Tidal waters not occupied by leased areas constitute the public area where public oyster beds are to be found. These growing areas are a resource owned by the community.

Although many species are now farmed, commercial aquaculture began in the 1950s when the main species of interest were trout and oysters. The oyster farming sector is an important sphere of activity for Eastern New Brunswick. Under a memorandum of understanding signed in 1989 between the governments of Canada and New Brunswick (Appendix 2), the administration of aquaculture leases became a provincial responsibility. Since that time, the province has passed an Aquaculture Act and implemented policies and regulations, and is currently preparing a development strategy for oyster farming.

According to data from the Department of Agriculture, Fisheries and Aquaculture, a total of 2,355 hectares are leased, of which 747 hectares are unused, and there are some 600 oyster leases on the east coast of New Brunswick (Appendix 3). The oyster farming industry reports landings of 120 to 160 tonnes of oysters annually.

The recently created Office of the Commissioner for Aquaculture Development, which has a direct link to the Office of the Minister of Fisheries and Oceans, is mandated to assemble all appropriate federal resources, direct the necessary regulatory reforms, and work with the provinces to develop a dynamic aquaculture industry that is sensitive to environmental concerns. The Commissioner, whose office is in Ottawa,

champions the aquaculture industry to the federal administration. He is also responsible for implementation of the Federal Aquaculture Development Strategy (1995).

To meet the concerns of oyster farmers who became subject to a new jurisdiction that differentiated them from commercial oyster fishermen and called into question the traditional relationship between these two user groups as well as the relevance to oyster farmers of the current regulations governing the commercial fishery on public beds, the Commissioner's Office undertook a legislative review of aquaculture. The main objective was to identify and, where appropriate, to remove the legal/regulatory constraints on aquaculture development, to establish an appropriate legal framework and to eliminate all overlapping or duplication. The end result should be a modern legal framework that is specifically focussed on aquaculture and flexible enough to allow the sector to continue its rapid growth in the years to come. This work is still ongoing.

In 1995, the Government of Canada gave official sanction to the Federal Aquaculture Development Strategy, assigning DFO responsibility for aquaculture.

At the very beginning of the year 2000, the Gulf Region defined the roles it ought to assume with regard to aquaculture. The priorities established include:

- representation in the development of national programs
- establishment of a policy for the Region
- continuity with the user groups
- the co-operation of the provinces, and
- improvement of service to regulatory programs.

Held on February 19th and 20th 2001, the Gulf Region Strategic Planning Workshop on Molluscan Aquaculture gathered over 80 participants from industry, federal and provincial governments, academics, First Nations and other stakeholders involved in molluscan aquaculture. The goal of the Workshop was to strengthen the Gulf Region's leadership role in support of a sustainable molluscan aquaculture industry in the southern Gulf of St. Lawrence.

1. OVERVIEW OF THE FISHERY

1.1 Participants

In 2000 there were 1,593 oyster licence holders in the Eastern N.B. Area, 58% of whom were coastal fishers, and nearly 53% of these fishers held an oyster licence only.

The following table shows the licence distribution between core fishers and coastal fishers by statistical district.

Table 2: Number of core and coastal fishing licences by statistical district

Statistical district	Coastal licences	Core licences	Other licences	Total licences
63	1	1		2
64	1	1		2
65	130	57		187
66	128	139		267
67	72	25	1	98
68	23	30		53
70	171	85		256
71	19	4		23
73	263	119		382
75	30	105	1	136
76	21	28		49
77	49	28		77
78	4	7		11
80	18	32		50
Total	930	661	2	1593

The following tables profile the coastal fishing licence holders by statistical district and the number of licences held by these coastal fishers.

Table 3: Profile of coastal licence holders by statistical district

Statistical district	Licences		Total
	Oyster only	Oyster and other licence(s)	
63	0	1	1
64	1	0	1
65	97	33	130
66	96	32	128
67	54	18	72
68	5	18	23
70	88	83	171
71	1	18	19
73	105	158	263
75	15	15	30
76	5	16	21
77	16	33	49
78	1	3	4
80	6	12	18
Total	490	440	930

Table 4: Number of licences other than oyster held by coastal fishers

Oyster licence only	Oyster & 1 other licence	Oyster & 2 other licences	Oyster & 3 other licences	Oyster & 4 other licences	Oyster & 5 other licences	Oyster & 6 other licences	Total
490	277	101	25	26	8	3	930

The 1,593 licences issued in 2000 represent a decrease of 372 licences compared with 1990.

Table 5: Number of licences issued from 1990 to 2000

Year	Number of licences	Year	Number of licences
1990	1965	1996	1952
1991	1801	1997	1855
1992	1571	1998	1802
1993	1733	1999	1754
1994	2022	2000	1593
1995	2178		

Aboriginal fishery

The First Nations hold 23 licences: 9 for Big Cove First Nation, 7 for Burnt Church First Nation, 3 for Eel Ground First Nation, 2 for Indian Island First Nation and 2 for the New Brunswick Aboriginal Peoples Council. Twenty-one of these licences have been bought back from commercial fishers and two are from the DFO reserve. These 23 licences are not recorded in the tables above.

1.2 Classification of fishing areas

The following excerpts on the classifications of growing areas are taken from the Manual of Operations for the *Canadian Shellfish Sanitation Program* (Department of Fisheries and Oceans and Environment Canada).

"In order to reduce the potential health risks associated with consuming bivalve molluscan shellfish and to protect public health, it is necessary that the water quality in shellfish growing areas be surveyed and that actual and potential sources of pollution be identified. Following such surveys, the growing areas are classified as to their suitability for the harvesting of shellfish according to accepted water quality criteria and general sanitary conditions in the growing area.

Pollution of shellfish growing areas can occur from a variety of sources and under many different conditions. Generally, pollution sources are divided into two broad categories: point and non-point. A point source of pollution is a source of pollution entering the receiving water at discrete, measurable locations. Examples include sewage treatment plants, pulp mills, food processing plants, sewage lift station overflows, etc. Non-point source pollution refers to contamination from sources related to the activities of man and to natural processes in the watershed which are diffuse or dispersed. Such sources do not enter at discrete, identifiable locations and are difficult to measure or define. Furfari (1979) has described eight types of non-point source pollution which may affect shellfish growing areas. These include urban runoff, agricultural runoff, animal faecal pollution, sewage discharges from boats, wildlife faecal matter, dredging operations, mining (e.g. leaching) and silviculture practices.

Both point and non-point pollution sources can release chemical and/or microbiological contaminants of public health concern.

Three classifications are used in the Canadian Shellfish Sanitation Program: "Approved", "Conditionally Approved" and "Closed". Each classification is related to the bacteriological quality of the growing waters, the actual and potential sources of pollution and, to some extent, the shellfish resource utilization of the area.

Approved growing areas (public beds): Areas not contaminated with faecal material, poisonous or deleterious substances or marine biotoxins. Some 1600 commercial oyster fishing licences are issued here annually: 42% to core fishers and 58% to coastal fishers. Almost all landings are from public beds on the Acadian Peninsula (Caraquet Bay, Lamèque and Miscou islands), Miramichi Bay (Neguac, Portage Island, Oak Point, Point aux Carr, Hay Island, Bay-du-Vin Island, Egg Island, Baie Ste-Anne), and Northumberland Strait (Richibucto, Buctouche and Cocagne rivers).

Conditionally approved areas: The problem posed by management of the “conditionally approved” areas is one of the many constraints on the development and sustainable exploitation of shellfish in the many rivers and bays of New Brunswick’s east coast. These areas, whose classification is established by Regional Shellfish Growing Area Survey and Classification Committees under the Canadian Shellfish Sanitation Program, are approved for shellfish harvesting under certain conditions and at specific times of year which are specified in MOUs.

A conditionally approved area is designated if, during those times when harvesting is permitted, the area meets all of the requirements of an “approved” area and if the conditions which preclude harvesting in areas designated “conditionally approved” are easily identified by routine measurement and reporting and are predictable and/or controllable.¹

Appendix 4 contains a copy of a memorandum of understanding.

In the Eastern New Brunswick Area, the Regional Shellfish Growing Area Survey and Classification Committees have designated ten conditionally approved areas, particularly in locations where there is commercial fishing: 2 in Caraquet Bay, 1 on Egg Island in Miramichi Bay, 3 on Richibucto River, 2 on Buctouche River and 1 in Buctouche Harbour, and 1 on Cocagne River.

In the early 1990s, the fishers and aquaculturists in these areas asked that sufficient resources be allocated for the management of these areas. GTA Consultants Inc. of Shediac was therefore retained by DFO to produce a

report detailing their problems and identifying a program for the conditional opening of each area. The guiding principles as well as the description and specific problems of each bed in question are presented in part 1.4 of the present document.

Conditionally approved areas remain closed until the industry pays the sampling costs and submits acceptable harvesting plans to DFO which demonstrate that the area can permit the harvesting and marketing of shellfish. The private laboratories conducting the analyses necessary to open the conditional areas must hold a letter of accreditation from the Canadian Food Inspection Agency or the Department of the Environment.

Closed (contaminated) areas: Closed areas are designated by Environment Canada when the level of contamination does not permit fishing for human consumption without there first being a decontamination process. With a contaminated shellfish fishing licence, oysters can be harvested by rake; in the case of Miramichi, dredging is also permitted when the resource is situated too deep to be harvested by hand tools.

Any opening must first be given approval by the Canadian Food Inspection Agency. When an area is closed, local leaseholders must procure a contaminated shellfish fishing licence in order to access their sites, and must submit an acceptable decontamination plan in order to market their oysters.

The decontamination plans submitted by the industry must demonstrate monitoring and control of those persons who will have access to this fishery and must include publication and signage costs.

Appendix 5 presents the *Management of Contaminated Fisheries Regulations* Enforcement and Compliance Policy. Appendix 6 presents a copy of an application for approval of an oyster decontamination plan. Appendix 7 is a sample of a licence to fish contaminated oysters with hand tools, and Appendix 8 a sample of a licence to fish contaminated oysters in Miramichi Bay by dredging.

The following table lists the number of licences issued in contaminated areas.

Table 6: Number of licences issued in contaminated areas

Contaminated area	Gear	1996	1997	1998	1999	2000
Lamèque Bay	rake	3	6	8	5	3
Shippagan Harbour	rake	4	7	6	5	2
Lamèque Island	rake		1	2	1	1
Grande Batture, Ste. Cécile	rake		1			
Shippagan Bay	rake		1			
Tracadie Bay	rake	1	4	4	2	2
Caraquet Harbour	rake	5	7	8	6	3
Tabusintac River	rake	1	6	10	9	6
St-Simon Bay	rake	1	2	6	3	2
Caraquet Bay	rake	2	4	3	5	3
Pokemouche River	rake	2	2	6	4	1
Miramichi Bay	dredge	38	21	32	31	22
Miramichi Bay	rake	9	64	53	22	17
Black River	rake		5	3	6	5
Bay-du-Vin River	rake		4	3	3	4
Shediac River	rake	2	1	4	5	
St. Nicholas River	rake	1	1	8		
Scoudouc River	rake	1	1	4		
Lac des Boudreau	rake	1	1	1	2	
St. Charles River	rake			1		
Buctouche Harbour	rake			1		
Cocagne Harbour	rake					

Appendix 9 details the contaminated areas where oyster harvesting is permitted.

1.3 Oyster fishing and marketing activities

In addition to the commercial fishery and the fishery in approved, conditionally approved and closed areas, there are a number of other oyster fishing and marketing activities in the Eastern N.B. Area.

Dredging: Dredge (or drag) fishing is practised and authorized only on the Miramichi River. This fishery has two seasons and two areas: the summer season, in the contaminated area, permitted from June 1st to July 15th; and the fall season, in open water (Appendix 10), permitted for the Grand Dune Bed (lasting 5 days in late October) and Point aux Carr Bed (lasting 5 days in early November). This fishery has been operational for many years because of the depth of the water (6 feet and over) and the fact that the oysters are inaccessible by hand raking.

The summer fishery is regulated by a decontamination plan, identification of relaying areas, use of a single dredge, and a compulsory activity report. During the summer fishery, two helpers who do not hold commercial oyster fishing licences and a maximum of two other persons who do hold such a licence but must be registered as commercial fisher, can be named on the licence. All fishing activities must take place in the presence of the licence holder. Catches are then transferred to relaying areas.

The fall fishery is regulated by use of a single dredge, two separate dredging areas, exclusion of leased areas, a shortened season, one daily trip, a maximum daily catch of 400 lb, dockside monitoring and the compulsory log book.

Raking: Rake fishing takes place in a number of contaminated areas on the east coast. The description of the authorized areas is in Appendix 9. The fishing season is from May 1 to July 31.

Cocktail oysters: A policy that has received the approval of the two levels of government is the product of a pilot project in New Brunswick for the marketing in the United States of oysters under 3 inches. In the absence of concrete results on account of a lack of available markets, the aquaculturists then requested permission to market in Canada.

The program applies to private leaseholders who may, upon obtaining an order issued for that purpose, market oysters of any size at any time. The aquaculturists must sell their oysters through federally registered plants which must submit to controls on the origin, quantity and packaging of the product. Program participants may not hold commercial oyster fishing licences or contaminated oyster fishing licences.

Aquaculturists may join the program whenever they choose, but once they are members they have to withdraw from all commercial fishing operations.

Some 20 aquaculturists are participating in the cocktail oyster marketing program; a copy of the policy may be found in Appendix 11.

Picking: The picking of small oysters had been permitted for many years along the coasts at a distance predetermined by fishery officers. This activity applied to oysters “going to waste” that had been driven on shore by ice and bad weather and that might not survive if not harvested and relocated on harvesters’ leases to facilitate growth. Over the years, however, this activity was transformed into a disguised commercial

fishery where harvesters sought commercial-size oysters only and ventured to do so on the edge of public beds. This activity grew in magnitude, and control became increasingly difficult. It was for this reason that picking was prohibited in the Eastern New Brunswick Area in 1996. Since then, certain places where harvesting used to be practised have become public growing areas where there is a commercial fishery.

Spat collection: Only a private leaseholder may obtain a spat collection permit. The permit indicates the exact location where collection will take place, the period of collection and the method used. One must hold a contaminated shellfish fishing licence to collect spat in a contaminated area.

A copy of a spat collection permit may be found in Appendix 12.

1.4 Guiding principles, description and specific problems of conditionally approved growing areas

Over the last few years, DFO management of conditionally approved areas has been influenced by the following factors:

- increased concern about tort liability;
- fewer resources available to manage these areas;
- increased surveillance by environmental protection services, resulting in an increase in the number of conditionally approved areas;
- growth of the aquaculture industry and increased pressure for year-round access to sites.

According to a study done in 1993 by GTA Consultants Inc. of Shediac, management of conditionally approved areas must be based on the following four principles (excerpt from: GTA Consultants Inc, 1993):

- 1) Recognition that the needs of aquaculturists are not necessarily the same as those of commercial fishers. For aquaculture to develop in New Brunswick, aquaculturists need year-round access to their sites and permission to sell their products year-round, depending on market demand. At the same time, aquaculturists need to take increasing responsibility to ensure that their product is safe. Paying for tests and playing a role in the management of a conditionally approved area must be increasingly seen as the "cost of doing business" for aquaculturists in New Brunswick.

- 2) Recognition that aquaculture will have a hard time developing in the province if the commercial molluscan shellfish fishery remains as it has been historically, that is, a fishery carried out by hundreds of people who are largely unlicensed and who sell much of their product "underground".
- 3) Recognition that the commercial oyster fishery is an important contributor to local economies. Conditionally approved areas should be kept open as much as possible during the season provided for in the management plan.
- 4) Conditionally approved areas should be off limits to tourists for the harvesting of clams and quahogs. The industry cannot afford to have these areas managed for the benefit of those whose livelihood does not depend on it.

The following five sectors have been analysed by GTA Consultants Inc. of Shediac:

Caraquet Bay

Caraquet Bay, one of the most important oyster-producing areas in the Maritimes, has a long history of being classified as a conditionally approved area. A Memorandum of Understanding is presently in place, the signatories being DFO, the Canadian Food Inspection Agency, Environment Canada, the New Brunswick Department of Agriculture, Fisheries and Aquaculture, the Peat Research and Development Centre, and the oyster fishers of Caraquet Bay.

When the conditionally approved area was declared closed until September 1, 1992, leaseholders within this area were denied access to their sites for traditional activities such as restocking by means of relaying or handpicking. Only leaseholders with registered processing plants could, under a summer marketing permit, move oysters from the conditionally approved area to a depuration site outside the area. These processors estimate that this practice increased their operating costs by 10%.

DFO managers in Tracadie-Sheila have asked Environment Canada to reclassify this area to exclude the portion containing private leases (this would be conditional on acceptable water quality survey results) or, as a second option, to divide the conditionally approved area into two sub-areas, one containing the public oyster bed and the other the private leases. The sub-area containing the public bed is managed by DFO under

the existing MOU, and the sub-area containing leased areas is managed under a new MOU signed with aquaculturists.

Egg Island

The public oyster beds around Egg Island in Miramichi Bay are considered among the most productive in Atlantic Canada. However, because of faecal contamination from the island's large seabird population, part of the area around the island is closed permanently and the northeastern section is conditionally approved for the oyster season provided for in the management plan.

The conditionally approved area extends 100 metres offshore from the mean high water mark. Fishers and one buyer have raised concerns about the lack of demarcation between the closed and conditionally approved areas, which could result in potentially contaminated oysters reaching the market.

This situation is being closely monitored, given the intense activity and the importance of production here.

Richibucto River

Richibucto River has been classified as a conditionally approved area since 1992. This recommendation was made after oysters that caused an epidemic of food poisoning in Quebec in the fall of 1991 were eventually traced to the Chapel Point/Mill Creek area of the Upper Richibucto River. An MOU is in place, and the opening of the area is conditional upon the proper functioning of the local sewage treatment systems.

Environment Canada has recommended a second conditionally approved area slightly farther up the river, conditional upon the proper functioning of the sewage collection and treatment system in Big Cove.

A third conditionally approved area was established in 2001. The area is located in the portion of the Richibucto Harbour and Northwest Branch of the Richibucto River. A memorandum of understanding can be signed with all concerned parties and the area would be open to molluscs fishery.

The molluscan shellfish resource in Richibucto River is less developed than that at Buctouche and Caraquet, although about 25 fishers harvest oysters there on public beds within the conditionally approved area.

Buctouche Harbour and River

Buctouche Harbour and River have also long been classified as conditionally approved. There are in effect two areas here: one on Buctouche River known as Bois Joli, where oysters are not fished and which is closed when a certain amount of rain has fallen in 24 and 48 hours, and the second the harbour, including a portion of the Little Buctouche River, which is closed when a certain amount of rain has fallen in 24 and 48 hours, or if there is a discharge of untreated sewage from the sewage collection and treatment system for the town of Buctouche.

Buctouche Harbour and Bay are widely recognized as a principal oyster-growing area in New Brunswick. Since 1970, the main user of this resource has been the Coopérative des producteurs d'huîtres de la baie de Buctouche Ltée, which in 1992 had 92 members. The co-op's members have traditionally engaged in such activities as relaying oysters from closed areas or handpicking oysters, which was permitted until 1996 for the restocking of leased areas.

The traditional winter fishery, practised in February, was halted by Environment Canada, but reopened in February 2000 under an MOU which states that the results of preliminary microbiological analyses of samples taken show that the bacteriological condition of the area meets the bacteriological criteria for an approved area, and which provides for water and oyster samples to be taken each week, especially after heavy rainfall or major snow melt.

Cocagne River

Cocagne River is conditionally approved for the harvesting of oysters between mid-February and March 31. Sources of contamination include the septic tank systems of cottages along the river, agricultural operations and fish plants.

Cocagne River is not considered a major source of molluscan shellfish in eastern New Brunswick. Some 15 oyster licences are issued there annually. Most of the oysters are sold locally, and not necessarily through buyers.

1.5 Location of the fishery

There are three main beds or growing areas in the Eastern New Brunswick Area (Appendix 13) (the following is from the *Plan de gestion des bancs publics d'huître au Nouveau-Brunswick* [New Brunswick public oyster beds management plan], Biorex Atlantique, 1991).

Acadian Peninsula beds:

Caraquet Bay in northeastern New Brunswick is 3.5 km wide, 8 km long on the north shore and 23 km long on the south shore, including Caraquet harbour and channel; it opens into Chaleur Bay in the southern Gulf of St. Lawrence. Two rivers, the Rivière du Nord and the Caraquet, empty into Caraquet Bay, giving it a watershed of 420 square km.

The bay includes the islands of Caraquet (uninhabited but subject to a development plan) and Pokesudie (inhabited); on its edges are the town of Caraquet, the villages of Maisonnette, Bertrand and Bas-Caraquet, and three local services districts (Village-des-Poirier, Dugas and Pokesudie – unincorporated areas managed by the Department of Municipalities, Culture and Housing). Its riparian population is 15,000.

A large dune transects and influences the Bay. A breach has been made in it, possibly because of the disused Maisonnette wharf, and could be disturbing the present equilibrium of the Bay.

Human activity along the two rivers and around the Bay has resulted in the bacteriological contamination of the rivers and their mouths and of a significant segment of the Bay's shorewater. The majority of the large stocks of oysters, clams, quahogs and other molluscs in the Bay has also been contaminated.

Caraquet Bay is the northern limit of reproduction of the American oyster (oysters around Lamèque and Miscou islands can grow but not reproduce there; they are deposited in these waters as spat by the action of the currents). Despite this seeming precariousness, Caraquet Bay has always produced oysters which have supplied the local population first of all, and for the last century markets in Quebec City, Montreal, Toronto and elsewhere as well. Over the years these oysters and those fished elsewhere on the Acadian Peninsula have earned themselves a special market niche, as they are of excellent quality; they are known on the markets as "*la caraquette*".

The Bay's main oyster bed, situated at the rivers' mouths, was commercially fished at one time; in the early 1950s 325 tonnes were landed there annually. Then Malpeque disease decimated most Maritime oyster stocks; as part of government efforts to replant them, public beds were reseeded with oysters resistant to the disease (133 t on the Caraquet bed) and farming sites were granted on the edges of the public beds. As a

result, a few hundred leases were offered by lot to coastal fishers in Caraquet Bay. Following the consolidation of some of these, there are now just over 100 leases today, mainly concentrated on each side of the Bay on the boundary with the main public bed.

The reseeded bore fruit and the public bed began to produce, yielding landings that reached 610 tonnes in 1975. Since then, for reasons that remain uncertain (those most often mentioned are overfishing and the high sedimentation level on the bed, attributed to the felling of trees along the rivers and peat harvesting), the yield of the public bed has dropped; landings have fluctuated considerably, and in recent years have stood at around 100 tonnes annually.

The number of fishers on the main bed has fallen from 400 to around 100. It is noteworthy that the majority of the fishers active on the main public bed in recent years have been residents of Lamèque Island, which is some 50 km from the Bay. The secondary beds, located along the south shore and around Pokesudie Island, have progressively been producing more. Some 60 local fishers are involved in this fishery.

There are few oyster-growing sites presently active in Caraquet Bay. Three or four farmers are seriously engaged in the business; one of them appears to be successful, thanks to vertical integration of his activities to include the purchasing and marketing of oysters from the public bed and elsewhere. These farmers and some others elsewhere in N.B. also use the Bay as a spat collection site.

Approximately 30 of the Bay lots are vacant; most of the others are still being leased but are inactive, or subjected to strictly small-scale activities. The New Brunswick Department of Agriculture, Fisheries and Aquaculture, which administers the province's aquaculture leases under a memorandum of understanding with DFO, is reviewing the possibility of offering vacant lots to certain of the Bay's commercial fishers who would like to engage in small-scale farming by making an initial investment and putting in the time they have available between their commercial fishing

seasons. Some of these activities could eventually lead to major operations. This type of project is entirely consistent with the integrated management model.

Pollution, which in the early seventies included pollution from farm run-off (including a hog farm) along the Caraquet River, contaminated the

entire public bed at that time, as well as some of the more productive culture sites. The importance of this oyster resource led the federal authorities to classify the portion of the contaminated area containing the public bed and leases as a conditionally approved area.

Thanks to the work of the Caraquet Bay sustainable development committee, which is financed by the Government of New Brunswick's Environmental Trust Fund and composed of citizen-users of the bay and government representatives, a new classification of the Bay's waters was ratified in 1996.

In fact, the committee's work in reducing faecal coliform pollution in the Bay resulted in an 80% reduction of the conditionally approved area; consequently all the aquaculture sites and 75% of the public oyster bed are now open.

What is left of the conditional area is divided into two parts: one at the mouth of the Caraquet River, which covers about 25% of the public oyster bed; and a strip 300 m wide and 3 km long on the south shore of the Bay, which contains large quantities of clams.

A conditionally approved area can be commercially fished when bacteriological analysis results for shellfish and water samples in the area show that contamination has not exceeded the tolerated level. But rainfall of 25 mm in 24 hours or 38 mm in 48 hours, or a failure of the sewage collection and treatment system, will cause the area to be closed for at least five days, and further sample analyses are required before it can be reopened.

Federal inspectors carried out the tasks required to manage conditionally approved areas (sample taking and microbiological analysis) until 1995. At that time the federal government withdrew from these functions, while allowing users who wished to assume the costs to maintain this mode of management by having the work done by accredited independent third

parties. Memorandums of understanding have to be signed with all parties involved.

The Caraquet Bay sustainable development committee ended its mandate by asking the K.C. Irving Chair for sustainable development at the Université de Moncton to lay the foundations for an environmental management plan for the Bay. The Chair's report lists the elements of

such a plan, proposes the establishment of an environmental management committee, and describes the tasks to be carried out.

Miramichi Bay beds:

The Miramichi area has relatively intensive oyster farming which depends to a very large extent on the relay fishery and picking (until 1996). As the natural beds in the Neguac area are decimated, this area depends for recruitment on beds located in the contaminated areas of the Miramichi estuary.

The oyster fishers in the Neguac area exploit four public growing areas. Two beds in relatively shallow water along Neguac Dune and Portage Island are worked by the commercial fishery with hand tools. Two other relatively deep-water beds (5 to 7 metres) above Oak Point (Grand Dune) and Point aux Carr are exploited by the commercial fishery using dredges. These two beds are in open water and are worked in the fall for a period of two weeks. Finally, the beds in the contaminated area of the Miramichi estuary are dredged in summer for relaying to private leases in the Neguac area.

The private leases are mainly located along the coast, by the village of Neguac and around Hay Island.

About 50 contaminated oyster licences are issued annually for the six-week summer fishery in deep waters of the Miramichi. Of these 50 licence holders, 19 use hand tools. Most of these license holders are lobster fishers who engage in this fishery after the lobster season. These fishers, plus the five or six dredge fishers who do not have lobster licences, catch about 80% of all contaminated oysters.

In the Baie Sainte-Anne area, the oyster harvest is the fishery that has the greatest economic importance. For a few years now, the main landings of New Brunswick oysters have been made in this area. Unlike the other areas, however, oyster farming is very underdeveloped here.

The most productive beds are around Egg Island and along the south shore of Bay-du-Vin Island.

The contaminated areas closed to fishing are on Eel and Bay-du-Vin rivers and around Egg Island.

The few oyster leases in the area are mainly located between Gardiner Point and the village of Hardwicke. These private leases have been in existence for many decades.

Northumberland Strait beds:

Oyster fishing in Buctouche Bay is almost exclusively dominated by the activities of the Coopérative des producteurs d'huîtres de Buctouche which operates leased areas supplied by a relay fishery. The substantial picking activity has been banned since 1996.

The main public oyster beds are on the Buctouche River. There are also smaller beds on Little Buctouche River, in Fond-de-la-Baie and along Buctouche Dune.

The leased areas of the Coopérative des producteurs d'huîtres de la baie de Buctouche cover over 70 hectares at the mouth of the Buctouche and Little Buctouche rivers.

Buctouche Bay is one of the best spat collection sites in New Brunswick. The spat collection areas are located in the centre of the bay.

The upriver section of the rivers emptying into the bay is closed to commercial fishing because of bacterial contamination. Further downriver are the conditionally approved areas. All of the co-operative's oyster leases are in one or the other of these areas. The principal relay fishing area is on Buctouche River upstream from the Highway 11 bridge.

1.6 Fishing seasons

Fishing seasons are established under the *Maritime Provinces Fishery Regulations* and are modified by order or licence condition as required and upon consultation with the members of the advisory committee. The number of days fished per week and fishing effort are related to the type of boat and wind intensity.

1.7 Fishing methods

The regulations permit the fishing of oysters in a public oyster bed using tongs and hand rakes that operate without mechanical assistance. Dredging is permitted under a scientific licence issued under section 52 of the *Fishery (General) Regulations*.

Fishers use rakes on sloping bottoms reaching depths up to 7.6 m (25 feet). The rakes have long handles and long, slightly curved teeth. Sometimes a shallow bag of wire netting is attached to the back of the head.

The tongs are also hand operated. They consist of two long-handled rakes hinged about one third of the distance up from the heads, and may have a basket of wire netting on the back of one or both heads. They are used on level bottoms in depths up to 5.4 m (18 feet).

The dredge (or drag) is used to fish for oysters at greater depths. It resembles a large rake-head backed with a bag and attached to a strong rope in place of a handle. It is towed over the bottom by a powered boat and hoisted by a mechanical or motor-driven device. Its maximum size, measured on the outside, is 31" wide by 26" deep. Only one dredge is allowed per licence.

1.8 Landings, value and market

The statistical data for the last ten years cover landings of leaseholders and the commercial fishery reported by purchase receipts. These landings are underestimated and do not necessarily reflect the actual situation.

For example, the Caraquet Bay sustainable development committee estimated fishing activities on the main public bed of Caraquet Bay in 1995. The technical committee conducted two or three observations per week on the water, and had the collaboration of five or six fishers in estimating oyster landings. The activities took place from October 2 to 26, 1995. Boats as well as participants were counted daily. On the basis of these observations, landings were estimated to be twice the number reported.

The introduction of a log book in 2001 should make it possible to better define the magnitude of the commercial fishery.

Table 7: Total landings (commercial fishery and private leases)

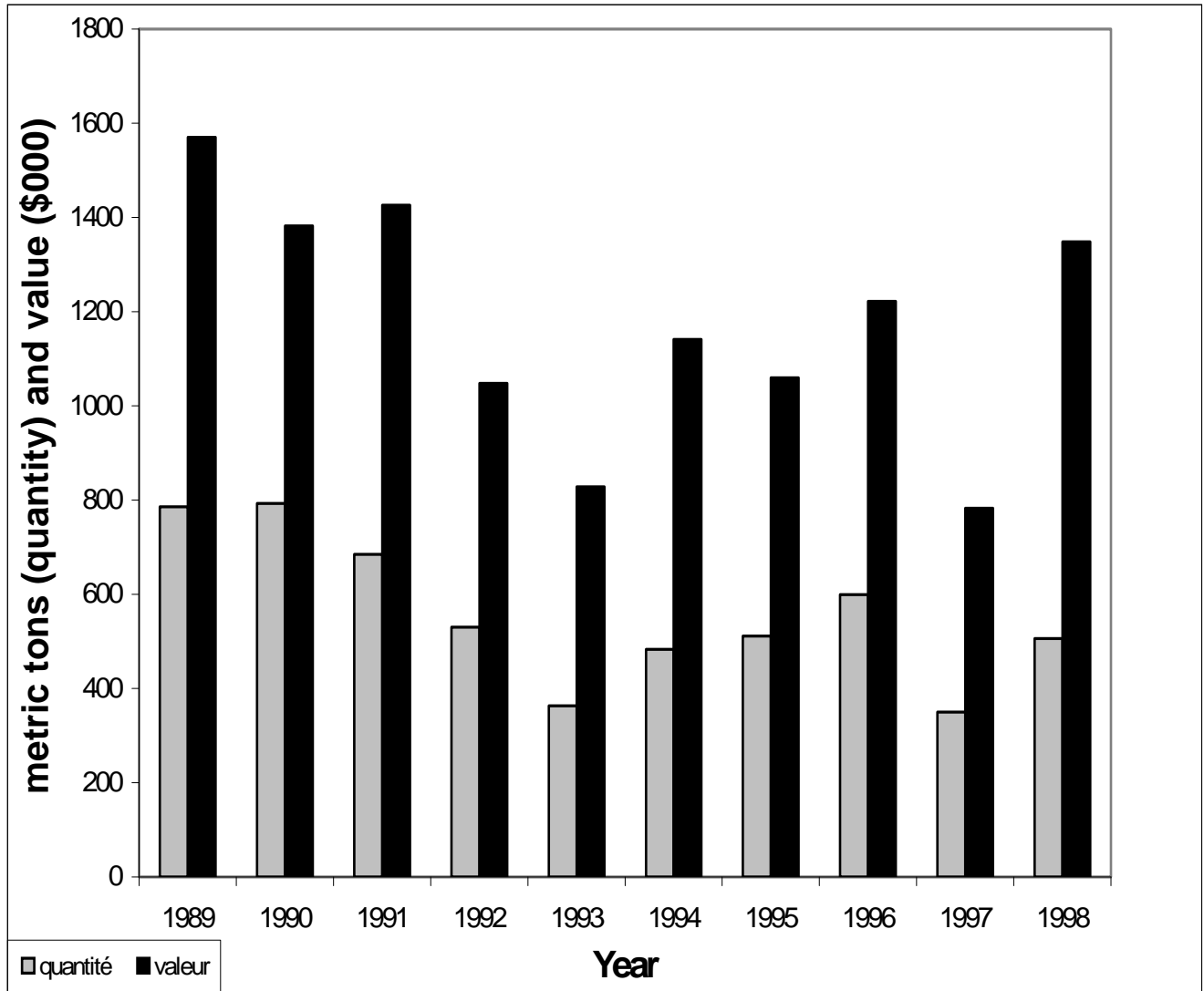


Table 8: Landings and landed value by statistical district

STAT DIST	MT	\$	MT	\$	MT	\$	MT	\$	MT	\$	MT	\$
		(000)		(000)		(000)		(000)		(000)		(000)
	1993	1993	1994	1994	1995	1995	1996	1996	1997	1997	1998	1998
63	0	0	5	14	0	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	1	2	0	0
65	61	150	57	141	74	170	100	217	39	89	42	108
66	10	26	14	32	19	46	19	43	6	15	7	17
67	21	38	23	51	23	44	24	53	20	50	14	36
68	0	0	8	21	4	8	0	0	3	7	0	0
70	110	283	136	364	164	371	200	445	100	269	125	347
71	0	0	1	3	4	9	1	2	8	18	4	11
73	81	163	190	412	187	339	228	405	162	312	280	745
75	0	1	4	8	5	11	2	5	0	1	0	0
76	8	16	9	17	4	9	7	18	0	0	18	48
77	68	140	33	72	25	51	16	29	8	14	12	25
78	0	1	1	1	1	1	1	3	1	1	0	1
80	3	8	2	5	1	1	1	2	2	5	4	10
Total	363	828	483	1141	511	1060	599	1222	350	783	506	1348

Of these landings, landings of oysters from leases, according statistics from the lease operation forms, are around 200 t per year. Hence the official statistics largely underestimate landings from the commercial fishery on public beds.

Although landings of contaminated oysters are included in the statistical data, it is interesting to note that approximately 400,000 lb of contaminated oysters are fished annually in authorized contaminated areas, chiefly in the Miramichi area.

Except for the Miramichi area where contaminated oysters are fished in deeper waters using dredges and hand tools, only a few fishers fish contaminated oysters using hand tools. Daily landings are between 50 and 150 lb for a duration of about 20 days in a two-month period.

1.9 Advisory process

The composition of the advisory committee on the commercial oyster fishery for Eastern New Brunswick is as follows:

- Locals 1 and 10 of the Maritime Fishermen's Union: commercial fishers and/or commercial fishers who are also leaseholders

Miscou (1 representative), Tracadie-Sheila/Neguac/Miramichi Bay (1 representative) and one MFU official, locals 1 and 10 ;

- Local 2 of the Maritime Fishermen's Union: commercial fishers and/or commercial fishers who are also leaseholders for the areas of Baie Ste-Anne (1 representative), Richibucto/Buctouche (1 representative), Cocagne (1 representative), Cap Pelé/Port Elgin (1 representative) and one MFU official, local 2 ;
- the Coopérative des producteurs d'huîtres de la Baie de Buctouche Ltée (1 representative) ;
- the Caraquet Bay oyster fishermen's association (1 representative);
- le regroupement des pêcheurs d'huîtres de la Baie de Caraquet (1 representative) ;
- the First Nations and New Brunswick Aboriginal Peoples Council (1 representative each) ;
- 2 representatives of the New Brunswick Department of Agriculture, Fisheries and Aquaculture ;
- 1 representative of a relay and dredge fisher ;
- 1 representative of Partenariat pour la gestion intégrée du bassin versant de la Baie de Caraquet ;
- 1 representative of the New Brunswick Fish Packers Association ;
- 2 representatives of the Canadian Food Inspection Agency;
- 1 representative of the Miramichi River Environmental Assessment Committee;
- 1 representative each of Resource Management and Conservation and Protection, Eastern Area Office, Tracadie-Sheila ; and,
- 1 molluscs biologist, Moncton Regional Office.

After consulting the users of their respective areas, the representatives designated by their peers or by fishermen's organizations such as the Maritime Fishermen's Union who sit on the oyster fishery advisory committee inform the committee of the status of the fishery in their area, offer recommendations for management of the fishery and propose modifications to the regulations and policy. They inform the Department of existing problems or conflicts that require the Department's intervention. They are the link between all the fishers and users of the resource, the various watershed management committees and the federal and provincial governments. Hence the recommendations submitted to the Department are reached by consensus rather than by vote.

1.10 Management method

The fishery is managed by the limited number of fishing licences, seasons, size and fishing method, commercial fishery licensing policy for the Gulf Region (Appendix 14), memorandums of understanding, regulations governing the commercial oyster fishery in the Eastern N.B Area (Appendix 15), and the *Management of Contaminated Fisheries Regulations* (Appendix 16).

2. STOCK STATUS REPORT

2.1 **Biology, environment and habitat** (from *Underwater World - The American Oyster*, published by the Communications Directorate, DFO)

Oysters (*Crassostrea virginica*) are sea animals that lack a backbone. They are scientifically classed as molluscs, a word from the Latin meaning soft. Protecting their soft bodies is a hard shell made up of two valves which are joined by a hinge and held together by a strong muscle.

Generally speaking, the shell of the American oyster is thick and has a rough, sculptured appearance. Its colour varies but is mainly a mixture of brown, gray, green and white shades. The inside is a dull white and smooth to the touch, except for the prominent dark scar of the adductor muscle.

The two valves of the oyster differ in shape. The lower is cupped to accommodate the body, while the upper is flat and acts like a lid. Together they make an air- and water-tight seal. A large adductor muscle, attached to both valves at a point slightly off centre, controls their opening and closing. While the power of the adductor muscle varies with the size and condition of the oyster, it takes a pull of over 9 kg (20 lb), suddenly applied, to open the shell of a 7.5 to 10 cm (3 to 4 inch) American oyster in good condition.

There is no way of telling male oysters from females by examining their shells. While oysters have separate sexes, they may change sex one or more times during their life span.

Oysters grow by feeding on plankton – microscopic plants and animals present in the water. In the Maritimes, the American oyster's growth period is from May to late November with a recess in July for spawning. It takes a Gulf of St. Lawrence oyster from four to seven years to reach the legal market length of 76 mm (3 inches), while oysters grown in the warm waters of the Gulf of Mexico may take only two years to reach the same size. However, it is noteworthy that Canadian, slow-grown oysters tend to be of excellent quality.

The shape and outer appearance of an oyster's shell reflect the conditions under which it has grown. Crowding produces shell distortions. On muddy bottoms and on overcrowded reefs, oysters assume a vertical position and the shells grow long and narrow. On hard, clean bottoms

where there is no overcrowding, the shells grow round, strong and deeply cupped, producing oysters of first-rate quality. Similarly, oysters on a hard substratum have harder shells than oysters found on a soft substratum.

American oysters range from the West Indies and the Gulf of Mexico to the Gulf of St. Lawrence. Canadian waters are their northernmost outpost. At these latitudes, oyster areas are restricted to the warm, shallow bays and estuaries of the southwestern Gulf of St. Lawrence.

Prince Edward Island is the leading oyster-producing province of Canada, followed by New Brunswick. The beds of Prince Edward Island's Malpeque Bay and Summerside Harbour, combined with those of Caraquet Bay in northern New Brunswick, account for about two thirds of Canada's total east coast oyster harvest.

The separate sexes of the American oyster ripen in early summer. When the water warms above a minimum temperature of 20°C, they release eggs and sperm into the water. The spawn is not released all at once, but at intervals over a period of four to six weeks. During the spawning season, a single female, by clapping her shells gently, will puff out many millions of buoyant eggs and a male will release an even greater number of sperm.

Fertilization takes place in the open water and cell division begins. The fertilized egg develops into a microscopic larva. Within 24 hours it forms a shell and develops a swimming and feeding organ consisting of a disc covered with vibrating hairs which can be thrust out and withdrawn at will, allowing free movement. For about three weeks, the little larva swims and drifts in the tidal currents. The mortality rate is very high, and only a small fraction – i.e. one per cent - of the young larvae reaches the next stage of development.

When its length reaches about 300 microns, or the size of a grain of pepper, each larva extends a probing foot and seeks a place of attachment. Once it finds a suitable, clean, hard surface, the foot gland ejects a tiny pool of cement-like adhesive. The little oyster then turns on its left side, cements itself to the object, and remains there immobile for the rest of its life. Material to which oysters attach is called cultch. The process of becoming cemented to the cultch is termed setting or spatting, and the young oyster after setting is called seed or spat. Oyster larvae will attach themselves to many types of cultch, but seem to prefer mollusc shells and materials which contain chalky substances.

Except in the earliest stage of their development, oysters lack power of locomotion. They are found lying motionless on the floor of brackish bays, coves and estuaries, usually attached to rocks or other hard, submerged objects, sometimes in great clusters.

2.2 Species interaction (from *Underwater World – The American Oyster*, published by the Communications Directorate, DFO)

Maritime oysters – both juvenile and adult – are preyed upon by rock crabs and starfish, and their shell is invaded by boring sponges and mud worms. The eggs and larvae are also consumed by many of the larger animals feeding on the plankton community, including their own parents.

Adverse environmental conditions such as freshets or sudden overflowings of streams, prolonged exposure to freezing temperatures at low tide, heavy silt or marine plant growth (which can smother oysters), as well as many types of industrial and domestic pollution, can all result in high oyster mortality.

In addition to life forms that prey on oysters, there are those which compete with them for available space and food, causing a reduction in their numbers and impairment of their quality. Mussels, for example, are their chief competitor in Maritime waters.

2.3 Stock assessment

An assessment of the Caraquet Bay beds was done in 1999, following up assessments conducted in 1974, 1979 and 1988. The preliminary results of the 1999 follow-up show that the oyster population of the Caraquet Bay public bed is approaching a critical state similar to that of the 1960s after the Malpeque disease. Similar assessments have been conducted in Miramichi Bay.

2.4 Research

Two research projects have been carried out: an evaluation of the contribution of oyster stocks to the health of coastal ecosystems, and a study on the effect of handpicking on oyster productivity in Caraquet Bay.

A list of scientific and technical studies appears in Appendix 17.

2.5 Outlook for the 2001 season

Preliminary results of the assessment of the Caraquet Bay oyster population suggest stable landings of the commercial resource with low recruitment.

Subject to approval of the necessary funding and community support, the Science Branch has developed four research projects:

- habitat improvement through desilting and upgrading of natural reefs by depositing shells to improve the condition of the sea floor;
- rotating (location) and seasonal (spring) exploratory fishery by establishing a control zone. Consultation with and the collaboration of fishers will be critical in pursuing this objective;
- study of the impact of harvesting and its effects on the sustainability of the resource; and
- study of the interaction between aquaculture and natural oyster beds. To improve the health of the bays, increasing the filter-feeder biomass should reduce sedimentation and ensure better water quality.

3. LONG-TERM MANAGEMENT OBJECTIVES

The long-term management objectives for the Eastern New Brunswick Area in the commercial oyster fishery are as follows:

- with regard to Science
 - offer opinions to the communities on the impact of various management systems and stock improvement methods
- with regard to Statistics
 - use of a mandatory log book in 2001 will make it possible to obtain better information on actual landings in the commercial fishery
- with regard to Resource Management
 - document and quantify fishing efforts for each main growing area
 - study an alternative mode of management in the form of a pilot project for Caraquet Bay to determine the benefits of a spring fishing season
 - set up a working group with all stakeholders to take stock of the oyster situation in Caraquet Bay
- with regard to Conservation and Protection
 - quantify the activities of fishery officers
- with regard to Habitat Management
 - identify instances of disruption, deterioration and destruction of oyster habitat
 - classify and release to the watershed management committees the number of cases of damaged habitat, project referrals, permits, and restored habitat
 - consider oyster habitat in evaluating referred system projects
 - promote environmental stewardship
- with regard to the Oceans group
 - foster the development of integrated resource management mechanisms, i.e. an ongoing, transparent decision-making process developed by the parties concerned so as to integrate the planning and implementation of activities and policies affecting the oceans of Canada
 - direct and co-ordinate, with the assistance of concerned groups, the establishment of Marine Protected Areas (MPAs) so as to grant

- develop and introduce, in consultation with the groups concerned, Marine Environmental Quality (MEQ) criteria for estuaries and coastal waters.
- with regard to Aboriginal Fisheries
 - continue to allow Aboriginal groups who request it justified access to the oyster fishery for food, social and ceremonial purposes, after ensuring that resource conservation and protection measures are in place
 - facilitate access by Aboriginal groups to the commercial oyster fishery in the context of negotiated agreements
 - incorporate in the plan, after consultation with the stakeholders, the management measures following from the Supreme Court decision in the Marshall case.

4. CONSERVATION-BASED MANAGEMENT MEASURES AND HARVESTING PLANS

4.1 Conservation and sustainable fishing

- Promote and ensure the conservation and protection of the species while optimizing fishing effort
- Collect timely and accurate data essential for stock assessment using the mandatory log book
- Ensure optimum use of the resource among commercial user groups, Aboriginal people and farmers by maintaining the inventory of landings
- Promote the guiding principle of *no net loss* of habitat production capacity

4.2 Commercial fishery

- The Eastern New Brunswick Area is presently directing its oyster management efforts toward protection and development of the public beds.

4.3 Aboriginal fishery

- Allow Aboriginal groups who request it justified access to the oyster fishery for food, social and ceremonial purposes, after ensuring that resource conservation and protection measures are in place.
- As part of the Department's general strategy to increase Aboriginal participation in commercial fisheries, commercial oyster licences, preferably obtained under a voluntary withdrawal program, are retained and will be reissued to Aboriginal bands. The management measures following from the Supreme Court decision in the Marshall case will be incorporated in the plan, after consultation with the stakeholders.

4.4 Exploratory fishery

- No exploratory fishing is permitted.

4.5 Recreational fishery

- No recreational fishing is permitted.

4.6 Aquaculture

- Strengthen the Gulf Region's leadership role
- Support a sustainable molluscan aquaculture industry

4.7 Oyster habitat

- As a filtering mollusc, the oyster can concentrate contaminants present in its environment. Efforts must be made to correct and anticipate sources of bacterial pollution in order to make more growing areas available for sustainable harvesting. Sedimentation can degrade oyster habitat and contribute to inferior quality, thus compromising its marketing and affecting spat survival.

5. CURRENT MANAGEMENT PROBLEMS

5.1 Landing reports

Issue:

It is very important for the Science Branch and managers to have reports on all actual landings, so that this fishery can be managed on the basis of actual fishing effort. There still seems to be a deficiency with regard to landing reports.

Approach:

A generic log book will be mandatory for the 2001 fishing season (Appendix 18). The licence condition issued for the 2001 season will require the log book to be returned no later than December 1.

For Caraquet Bay, three landing points are identified in the conditions of licence. If it continues to be difficult to control landings, these may reduced this requirement to a single landing point.

5.2 Landings reported to DFO are oysters from public beds and leased areas

Issue:

For purposes of managing the commercial oyster fishery, DFO statistics record landings from both public and private beds. In order to better manage this commercial fishery, landings from public beds and leased areas should be counted separately.

Approach:

The New Brunswick Department of Agriculture, Fisheries and Aquaculture will have to enforce the regulations governing the obtaining of aquaculturists' records. The statistical data can then be corrected so as to subtract leased production from total landings.

5.3 Economic basis of fishing seasons

Issue:

Traditionally, the oyster fishing season has been the most important marketing period and the period when oysters are of superior quality. In northern New Brunswick, a fall season allows for the accommodation of lobster fishers. A spring season would stir up the grounds before spawning; once spawning was over, the spat would not be disturbed again until the fishery the following spring, ensuring a higher survival rate.

Changing the fishing season would thus be to the disadvantage of commercial fishers, for as marketing is done in the fall, fishers will have to sell either to registered plants or to aquaculturists. The result could be a marketing monopoly in the aquaculturists' favour.

A spring season would ensure a higher spat survival rate and thus contribute to a more abundant resource. For fishers who hold oyster licences only, it would make their work profitable and allow for better management of landings. In the case of a complementary fishery to secure the minimum number of weeks to qualify for employment insurance, a spring fishery would exclude these fishers from the fishery.

Approach:

An in-depth study on fishers holding commercial oyster licences only and fishers using the resource for extra income must be initiated before a change of season is decided.

5.4 Sale of illegal-size oysters

Issue:

Certain fishers are reported as selling oysters of all sizes. Small oysters are placed in bags which are temporarily deposited on the bottom to await collection, whereupon they are sold on the black market.

There are fears that a grower marketing cocktail oysters may also market small oysters from the public bed when that bed is opened.

Approach:

First of all, control of landing points and increased monitoring should minimize this problem.

Second, regulations establish the minimum size to 76 mm (3 inches) except for oyster farmers in the cocktail oyster program. Regulations will be enforced by Fishery Officers.

5.5 Transport of oysters under legal size to leased areas

Issue:

The proximity of the private leased areas and public beds facilitates the transport of oysters under legal size from the latter to the former.

Leaseholders are taking advantage of the closure of the public bed to fish there.

Approach:

This practice is against section 58 of the *Maritime Provinces Fishery Regulations*. Regulations will be enforced by Fishery Officers.

5.6 Ban on diving for oysters

Issue:

Fishing oysters by diving is prohibited but is permitted on leases.

Approach:

Regulations will be enforced by Fishery Officers.

5.7 Picking ban

Issue:

The object of a picking-directed fishery is to permit aquaculturists an extra source of income. These oysters are harvested from areas where they would not survive on account of tides, ice or currents. It is difficult to define such areas, for they generally vary from year to year at the whim of nature. The density of the oysters found is generally such that reproduction and adirected fishery are not possible. This activity has been prohibited for several years mainly because it is not possible to control such fishing, as the regulatory tools do not allow for it.

Approach:

Picking is tedious to control and does not get the Fishery Officers' support.

5.8 Progressive contamination of the oyster environment and status of the resource

Issue:

The oyster is a filter feeder that is essential to the health of the waters where oysters are found. Users of this resource are worried about its status and the progressive contamination of the oyster fishing areas.

Approach:

The prevention and protection work done by integrated coastal management zones and watershed management committees can detect and identify sources of bacterial contamination. Legislation exists for point sources but is not always enforced. As for non-point sources, the situation could be improved by better environmental practices in using the territory. Watershed user awareness and co-operation could be encouraged.

5.9 Co-ordination of commercial fishing and aquaculture activities

Issue:

There is no co-ordination between commercial fishing activities and aquaculture.

Approach:

Apart from spat collection and oyster harvesting, which require permits, and the order identifying farmers participating in the cocktail oyster program, the activities of aquaculturists are managed by the provincial Department of Agriculture, Fisheries and Aquaculture.

5.10 Spat collection in Buctouche Bay

Issue:

Buctouche fishers object to spat collection by non-resident fishers.

Approach:

Fishers should be made aware of the real impact of this practice on natural stocks.

5.11 Spat collection in Miramichi River

Issue:

Following a pilot project on the Miramichi River in 1999, spat collection is reported to be commercially viable in that river. Fishers are asking that collection permits be issued.

Approach:

An access policy must be introduced and the collection area defined before permits are issued.

5.12 Oyster mortality by peat moss operations

Issue:

Peat moss operations might be responsible for oyster mortality. When the winds are strong, the peat moss particules deposit in estuaries, mix with water and are carried by currents. These particules might appear on oyster beds. The peat moss strangles the oyster or prevents them from feeding, bringing death to the animal.

Approach:

We do not know exactly the impact of this operation on oyster beds. The peat moss industry is aware that peat moss particules travel with the winds. The Industry have developped methods and work practices aimed at reducing the level of dust moved by vaccumer, have located peat moss stacks behing naturel windbreak and participates to environment committees. Better management might be achieved by coordinating land-based activities to reduce the impact on aquatic activities.

6. DETAILED MANAGEMENT MEASURES PROPOSED FOR 2001

6.1 Fishing seasons

Commercial fishery on uncontaminated public beds:

- All public beds except those indicated below: seven (7) weeks starting the last Monday in September.
- Caraquet Bay west of a straight line drawn from Pointe à Brideau near Caraquet wharf to Pointe de Maisonnette: five (5) weeks starting the last Monday in September.
- Shemogue Harbour inside a straight line drawn from Petit Cap west of the harbour to Shemogue Head east of the harbour: three (3) weeks starting the last Monday in September.
- Deep waters of Miramichi Bay (dredge fishing on Grand Dune and Point aux Carr beds, subject to dockside monitoring and a daily catch limit of 400 lb): last week of October and first week of November.

Commercial fishery on contaminated public beds:

- All public beds where there is already contaminated oyster fishing (fishing is not permitted on beds where there has been no previous activity), excepting those indicated below: from May 1 to July 31.
- Dredging of contaminated oysters in Miramichi Bay inside a straight line drawn from Oak Point to Point aux Carr: from June 1 to July 15.
- Oyster fishing in the conditionally approved area on the Cocagne River: from February 15 to March 31, subject to requirements and closures provided for in a memorandum of understanding to be signed by all parties concerned.

Marketing season in leased areas:

- from September 1st to March 31st
- Cocktail Oyster Program: from January 1st to December 31st
- All other leased areas: September 1st to March 31st

6.2 Minimum sizes

Commercial fishery on public beds (contaminated and uncontaminated waters) and on leased oyster areas whose leaseholders are not participants in the Cocktail Oyster Program: three (3) inches (76 mm)

Commercial fishery on leased oyster areas whose leaseholders are participants in the Cocktail Oyster Program: no minimum size.

6.3 Logbook

The logbook will be mandatory in 2001 and must be returned to the Department no later than December 1 of each year. A sample logbook is presented in Appendix 18.

6.4 Relay of contaminated oyster fishery

Other than in the Miramichi Bay contaminated area and upon approval of a decontamination plan (contaminated oysters must be relayed to a site located in clean water for a minimum of 30 days), a contaminated oyster licence is issued to a holder of a commercial oyster fishing licence, in which other fishers may be named. The fishers named must also be holders of commercial oyster fishing licences and registered as commercial fishers. The forms for submitting a decontamination plan are available from Licensing Service Centres. There will be no fishing in contaminated areas where there has been no fishery previously.

6.4 Contaminated deep-water dredge oyster fishery in the contaminated area of Miramichi Bay

Upon approval of a decontamination plan (contaminated oysters must be relayed to a site located in clean water for a minimum of 30 days), a contaminated oyster fishing licence to dredge for oysters in deep water (over six feet) is issued to a limited number of fishers. A maximum of four other fishers may be named in this licence, two of whom are not required to hold commercial oyster fishing licences, although all four must be registered as commercial fishers. The forms for submitting a decontamination plan are available from Licensing Service Centres. To obtain a licence to decontaminate dredged oysters, the applicant must meet the following requirements:

- a) have held this licence in 2000;
hold a commercial oyster fishing licence and be registered as a commercial fisherman;
- or**
- b) be registered as a commercial fisherman;
hold a commercial oyster fishing licence valid for the waters adjacent to the county of Northumberland;
have a residence adjacent to the waters of the county of Northumberland;
hold a lease in waters adjacent to the county of Northumberland.

6.5 Cocktail Oyster Program

This is a program whereby oyster leaseholders who so request and who meet the requirements can market oysters of any size at any time. They must thereby give up any commercial oyster licence they may hold. The requirements for participation include marketing the oysters through a federally registered plant and tagging the product as a cultured product. The leaseholder and plant must also keep records on the origin and quantity (number) of the oysters marketed as part of the program.

6.6 Spat collection

A permit (free of charge) is required to collect oyster spat. The permit holder must also have a private bed. The collection permit must identify the exact location where the spat will be collected, the period of collection and the method used. A contaminated shellfish fishing licence is required to collect spat in a contaminated area.

6.7 Landings

When fishing for oysters in that part of Caraquet Bay west of a straight line from Pointe à Brideau near Caraquet Wharf to Maisonnette Point, oysters must landed at one of the following sites:

- 1) at the landing stage located near no. 11 Highway Bridge spanning Caraquet River;
- 2) on the north shore of the Caraquet Bay located in from of the Village-des-Poiriers Road;
- or**
- 3) at Caraquet Wharf.

7. CONSERVATION AND PROTECTION PROGRAM AND STRATEGIES FOR 2001

Monitoring of the oyster fishery has been maintained for many years, and no new effort is contemplated under the current program.

With the new management methods such as partnerships and co-management agreements, as discussed as part of the Oceans Strategy and the planned amendments to the *Fisheries Act*, co-operative agreements with users could become the tool for improving oyster conservation and protection.

8. RESPONSIBILITIES OF THE INDUSTRY

The fishers are showing increasing interest in the method of managing the oyster fishery, and are interested in evaluating and proposing new management measures. The fishermen's associations should play a more important role in the management of this fishery. They should form a group for the conservation and management of the oyster fishery, thereby becoming a partner in co-management. Consultations would be conducted by the group, with meetings chaired by the Industry, and DFO would address management issues directly with the group.

In addition, so as to support the principle of the *Oceans Act*, the partners involved in such a group will have to represent the coastal communities, fishing industry, non-governmental organizations, environmental groups, Aboriginal peoples, oyster farmers, provincial governments, federal departments, universities, and finally all potential users of the resource and its habitat.

9. ROLES AND RESPONSIBILITIES OF THE DEPARTMENT OF FISHERIES AND OCEANS

- Fisheries Management
 - direct and consolidate consultations with the various divisions of DFO in order to develop management options
 - responsible for consultations with the Industry and the provincial government
 - responsible for management before, during and after the season
 - responsible for licensing
- Habitat Management
 - evaluate potential impacts on habitat of project referrals and major projects
 - assist local groups with watercourse rehabilitation
 - assist watershed management committees and Industry with best practices and guidelines for fish habitat protection
 - offer advice on fishways
- Science
 - responsible for scientific opinions on stock status
 - identify species conservation concerns
 - provide opinions on the relevance of management options to encourage species conservation
 - specify the information necessary to facilitate recommended adjustments during and after the season
- Science – Other
 - provide opinions on water quality
 - provide opinions on contaminants
 - help determine causes of fish mortality
 - provide opinions during evaluation of major projects
 - provide information on the location of essential habitats
- Aboriginal Affairs
 - ensure follow-up for DFO's relations with Aboriginal peoples; food, social and ceremonial fisheries; and DFO consultations, policies and programs
 - has trustee responsibility to respect treaty decisions rendered by the courts

- Conservation and Protection
 - ensure follow-up, control and monitoring of regulatory programs that require fishery officers to be deployed on land, sea and air
 - the division's activities aim to comply with legislative policies, plans and programs related to conservation and protection of the fisheries resources of Canada
 - responsible for initiating applications to change regulations that are necessary to support DFO management plans and programs

- Oceans
 - encourage the development and implementation of an Oceans Strategy that will allow Canada to give shape to its vision of management of estuarine, coastal and marine ecosystems. This strategy must ensure the sanitation, safety and prosperity of the oceans for the benefit of the Canadians of today and tomorrow.

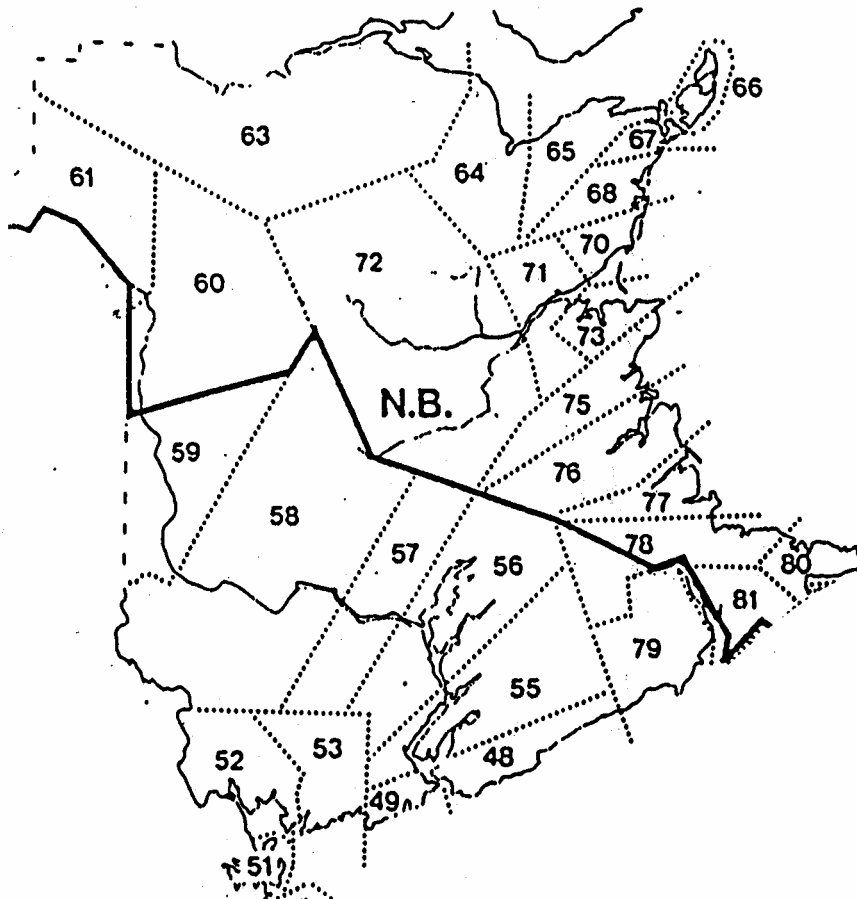
This strategy encourages application of the guiding principles of the *Oceans Act*, namely:

- conservation, which under an ecosystem-based approach is of fundamental importance for safeguarding the biological diversity and productivity of the marine environment
- prevention, that is, erring on the side of caution when fishing, so as to protect these resources and preserve the marine environment
- sustainable development, that is, development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

This strategy will be implemented in collaboration with the other federal departments and agencies, provincial and territorial governments, Aboriginal organizations, coastal communities and other stakeholders.

- Communications
 - provide advice on communication strategies for management plans

APPENDIX 1: MAP AND DESCRIPTION OF STATISTICAL DISTRICTS



- 63: Restigouche county
- 64: from the Restigouche county line to Bass River (incl.)
- 65: from Bass River (excl.) to Pokesudie Island (incl.)
- 66: Lamèque and Miscou islands
- 67: from Shippagan to Pokemouche Gully (incl.)
- 68: from Pokemouche Gully (excl.) to the Northumberland county line
- 70: from the Northumberland county line to Grand Dune Island (incl.)
- 71: from Grand Dune Island to Morrisey Bridge on the north side of Miramichi River and from Morrisey Bridge to Point aux Carr (incl.) on the south side
- 73: from Point aux Carr (excl.) to the Kent county line
- 75: from the Kent county line to the south side of St-Louis River (incl.)
- 76: from the south side of St-Louis River (excl.) to Chockpish River
- 77: from the south side of Chockpish River to the Westmorland county line
- 78: from the Westmorland county line to Bas Cap Pelé (incl.)
- 80: from Bas Cap Pelé (excl.) to the N.B./N.S. border

APPENDIX 2

CANADA - NEW BRUNSWICK MEMORANDUM OF UNDERSTANDING AQUACULTURE DEVELOPMENT

THIS AGREEMENT made this 22nd day of April, 1989

BETWEEN : HER MAJESTY THE QUEEN in Right of Canada, as
represented by the Minister of Fisheries and Oceans,
(« Canada »)

OF THE FIRST PART;

AND : The Government of New Brunswick, as represented
by the Acting Minister of Fisheries and Aquaculture (« New Brunswick »)

OF THE SECOND PART.

WHEREAS Canada and New Brunswick wish to establish a mutual regime for the orderly development and growth of aquaculture in New Brunswick;

AND WHEREAS both Canada and New Brunswick are interested in identifying their respective roles relating to the aquaculture industry;

Notwithstanding anything in this Agreement, Canada or New Brunswick may take measures deemed necessary to protect matters within its jurisdiction.

Now this Agreement witnesses that the Parties, without prejudice to their respective constitutional and legislative authority, hereby agree :

ARTICLE I

DEFINITIONS

That in this Agreement :

« Aquaculture » means the cultivation of aquatic flora and fauna, but does not include activities which the Parties agree to exempt.

« Aquaculture facility » means premises where a licensed aquaculture operation is to be carried on or is carried on but does not include fish processing facilities.

« Ministers » means the Minister of Fisheries and Oceans for Canada and the Minister of Fisheries and Aquaculture for New Brunswick.

ARTICLE II

GENERA AND SPECIES

That this Agreement extends to the aquatic flora and fauna currently, or which may be, husbanded or cultured in New Brunswick as agreed by the Parties. This Agreement does not constitute approval for the collection or capture of natural or wildstocks for seed, brood or other aquaculture purposes of any species.

ARTICLE III

JOINT INSTITUTIONAL ARRANGEMENTS

1. That Canada and New Brunswick agree to establish a Canada – New Brunswick Aquaculture Management Committee to advise on the implementation of this Agreement.

2. That the Canada – New Brunswick Aquaculture Management Committee :
 - a) Shall meet as required but not less than annually;
 - b) Shall advise the signatories to this Agreement about the progress and effectiveness of aquaculture programs and make appropriate recommendations to their governments in an annual report concerning the implementation of this Agreement;
 - c) May establish sub-committees or other bodies as required, and direct all associated activities;
 - d) shall facilitate inter-agency coordination and the involvement of concerned persons as necessary to ensure the successful implementation of this Agreement.

3. That the Canada – New Brunswick Aquaculture Management Committee consist of the following members :
 - a) The Director General, Gulf Region, shall be the officer designated on behalf of Canada to represent that part of New Brunswick designated as the Gulf Region of the Department of Fisheries and Oceans.
 - b) The Director General, Scotia-Fundy Region, shall be the officer designated on behalf of Canada to represent that part of New Brunswick designated as the Scotia-Fundy Region of the Department of Fisheries and Oceans.
 - c) The Deputy Minister, and the Assistant Deputy Minister of Operations and Services, New Brunswick Department of Fisheries and Aquaculture, shall represent New Brunswick as the officers designated to implement this agreement on behalf of New Brunswick.

4. That the chairmanship of the Canada – New Brunswick Aquaculture Management Committee, including all sub-committees or other bodies, be the joint responsibility of both Parties.

5. Canada and New Brunswick will establish mechanisms for ongoing dialogue with the aquaculture industry in a form and with terms of reference as agreed by the Canada – New Brunswick Aquaculture Management Committee.

ARTICLE IV

ACTIVITIES AND STRATEGIES

Canada and New Brunswick agree to the following arrangement :

1. Economic Development

- 1.1 Both parties shall review public investment proposals on the basis of mutually agreed aquaculture development objectives.

2. Research and Development

- 2.1 Canada shall continue to carry out and sponsor scientific research and development, that is to say, the acquisition, adaptation and transfer of technology and scientific information relative to aquaculture, including but not restricted to such fields as fish diseases, nutrition and diet formulations, genetics and stock selection, aquaculture ecology, the biology of cultured species and the optimization of biological systems.
- 2.2 New Brunswick shall continue to carry out applied aquaculture research, industry development and technology transfer through specific programs and services, including but not restricted to such fields as intra-provincial fish health monitoring and fish movements, disease diagnosis, disease prevention and control for protection of cultured stocks, nutrition trials, genetics and broodstock development.
- 2.3 Both parties will cooperate in the prioritization of research and development programs as well as on the exchange of information and data, and will make the results freely available to each other.

3. Education and training

- 3.1 New Brunswick shall continue its lead responsibility in the fostering and encouragement of aquaculture education and training.

4. Licensing and Leasing

- 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.
- 4.2 All aquaculture licence and lease applications in New Brunswick shall be referred to Canada for comment.
- 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 Canada may agree. In replacing the licences formally issued by Canada, New Brunswick will undertake to honour the general purposes and conditions of those licences.
- 4.4 Existing aquaculture leases issued by Canada over federal properties shall continue to be administered by Canada.
- 4.5 Both Parties shall co-operate in the establishment of aquaculture site allocation criteria.

5. Administration

- 5.1 New Brunswick shall undertake the administration of licences and leases of aquaculture facilities and operations, and the ongoing inspection of aquaculture facilities and operation

5.2 Both Parties shall work on a long-term development plan for aquaculture.

6. Compliance

6.1 Both Parties shall conduct periodic inspections of aquaculture facilities to determine compliance with their respective Acts, regulations and guidelines and will provide the other with results of those inspections. Nothing in this Agreement shall affect the duties of the Parties with regard to fish plant inspections.

6.2 To the extent possible, both Parties will develop and enforce parallel standards particularly for fish health, genetics and fish movements.

6.3 Canada, through appropriate fish health protection regulations, shall continue its role in the monitoring, diagnosis, prevention and control of fish diseases in cultured and wild stocks and shall maintain a National Registry of Fish Diseases as the data centre for the documentation and dissemination of information on fish diseases in Canada.

6.4 New Brunswick, through appropriate legislation and regulations, shall continue its intra-provincial role in extension education and in the monitoring, detection, prevention, control and eradication of fish diseases in cultured stocks.

7. Stock

7.1 To facilitate the exchange and supply of cultured stock, Canada shall develop and maintain a National Registry of important aquaculture stocks, whether indigenous to the province concerned or not, to include information about each stock's performance characteristics, ancestry and related facts.

7.2 Canada will consult with New Brunswick on the importation/exportation aspects of aquaculture stocks of importance to the Province.

8. Aquaculture Statistics

8.1 New Brunswick shall coordinate the collection of aquaculture data, in a mutually agreed form, relevant to production, distributions, sales, imports and exports of the provincial aquaculture industry on an annual basis. These statistics will be compiled and published annually in a provincial report.

8.2 Canada shall cooperate with New Brunswick in the compilation of aquaculture statistics and will use this database in its preparation of a national aquaculture statistics annual report.

9. Removal of Impediments

9.1 Both Parties shall endeavour to remove or alter any of their respective legislative or administrative enactments that would impede the implementation of this Agreement.

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.

10. National Coordination

10.1 Both Parties shall co-operate with other provinces through national meetings or other arrangements to review plans and prospects for aquaculture development in Canada and to promote a coordinated approach to orderly development, marketing and research.

ARTICLE V

TERM AND AMENDMENT OF THE AGREEMENT

1. That this Agreement shall come into force on signing both Parties.
2. That this Agreement, to be known as the « Canada New-Brunswick Memorandum of Understanding on Aquaculture Development » may be amended on mutual agreement, confirmed by an exchange of letters between Ministers, specifying the amendments and the effective date for such amendments.
3. That notice of a proposal by either Party to amend this Agreement shall be submitted in writing to the other Party, who shall respond within three months. Failure to respond within the three months shall be deemed to be a rejection of the amendment proposal.

ARTICLE VI

TERMINATION OF AGREEMENT

1. That either Party may terminate this agreement upon the expiration of one year's written notice to the other Party.
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.

IN WITNESS WHEREOF, the Honorable Tom Siddon, Minister of Fisheries and Oceans, has hereunto set his hand on behalf of Canada, and the Honourable Aldéa Landry, Acting Minister of Fisheries and Aquaculture has hereunto set her hand on behalf of New Brunswick.

Signed on behalf of Canada by
the Honorable Tom Siddon,
Minister of Fisheries and Oceans

Honorable Tom Siddon

Witness

Signed on behalf of New Brunswick
by the Honorable Aldéa Landry,
Acting Minister of Fisheries
and Aquaculture

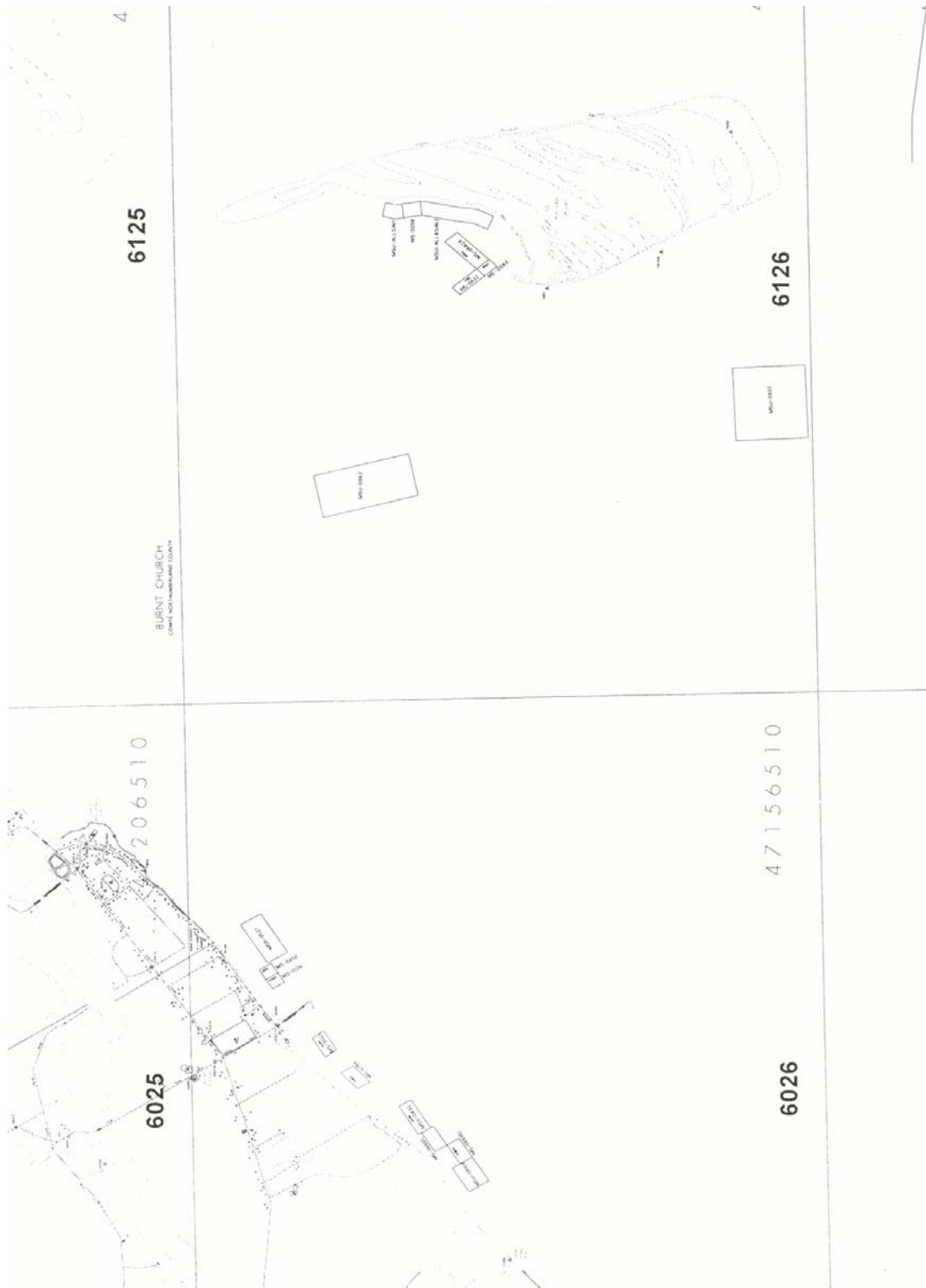
Honorable Aldéa Landry

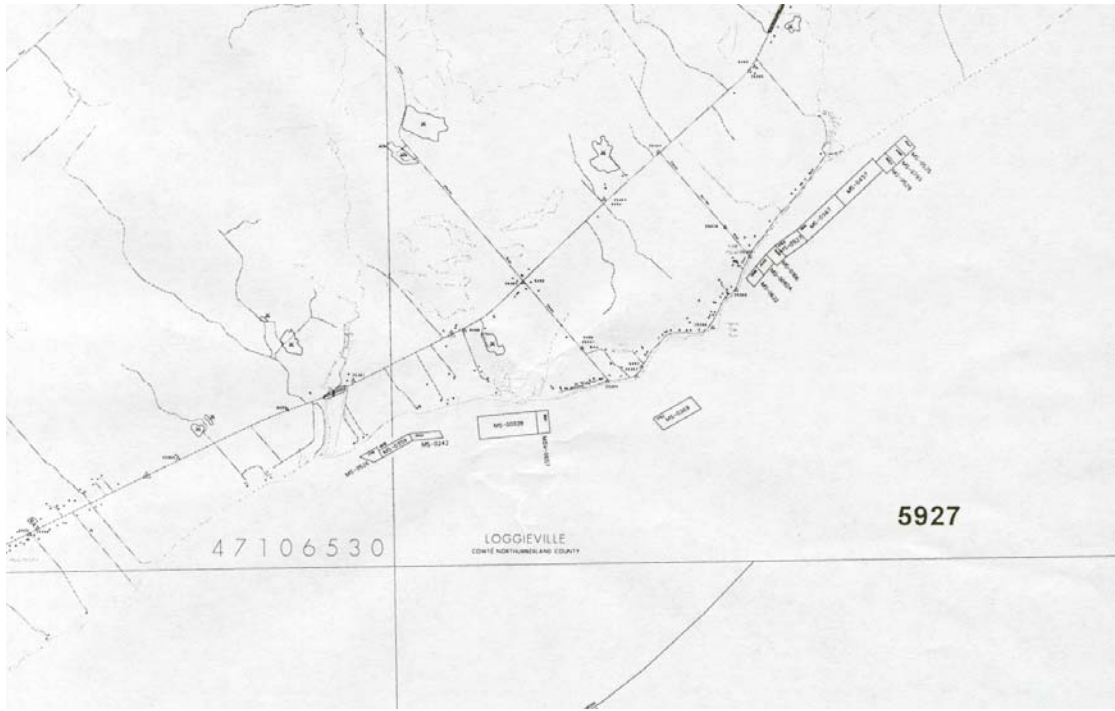
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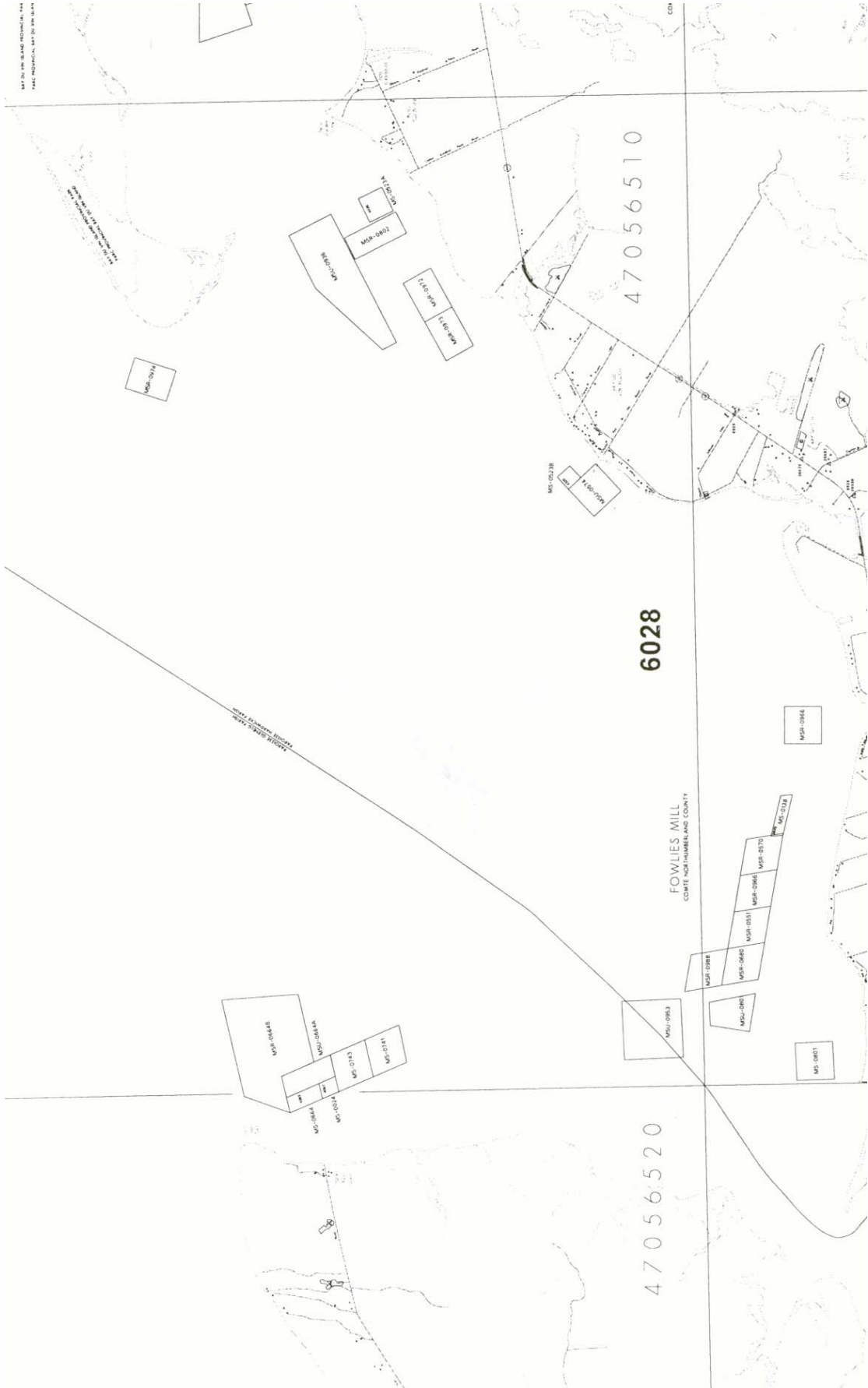
APPENDIX 3: MAPS LOCATING LEASED AREAS IN THE MAIN BEDS

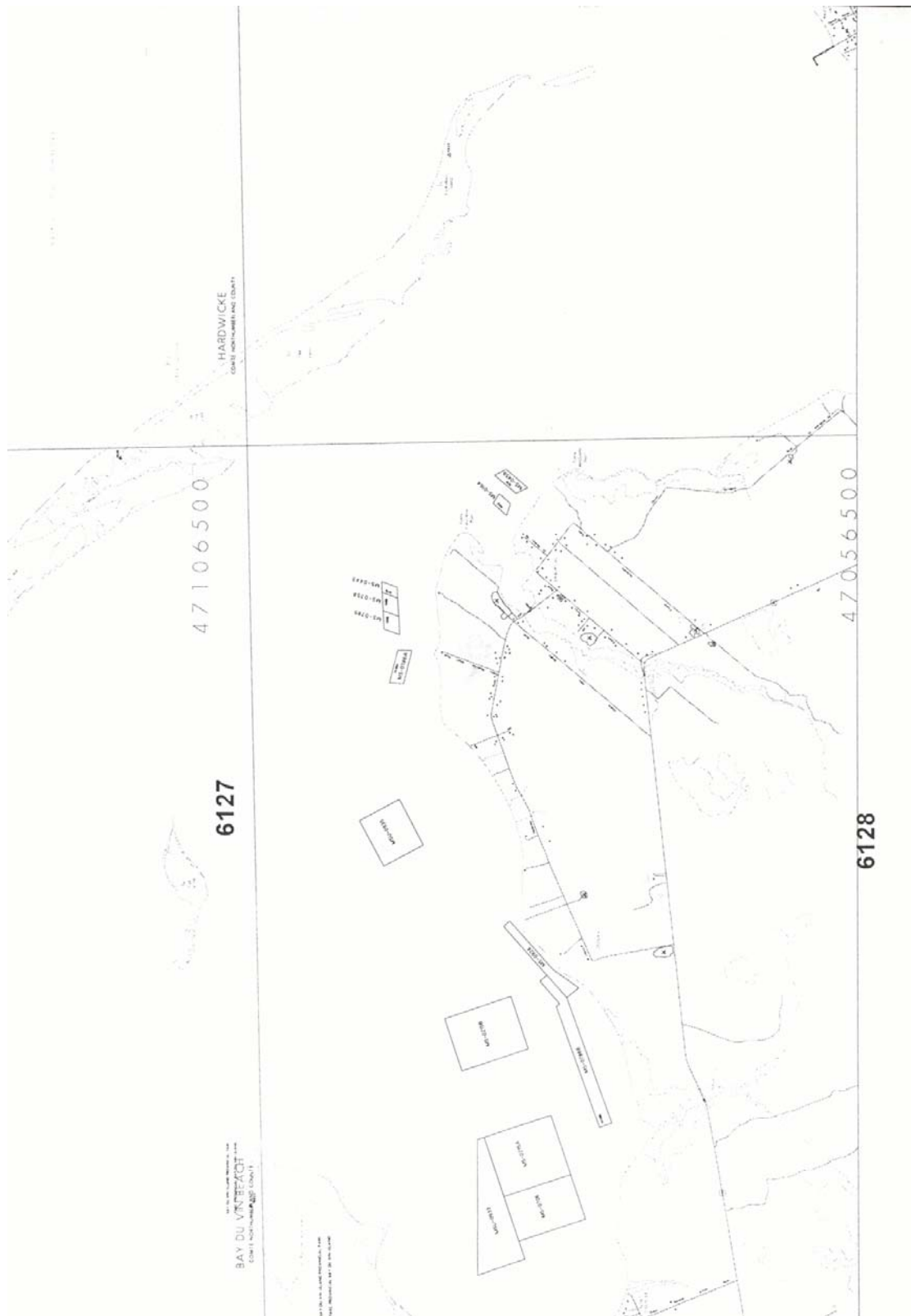


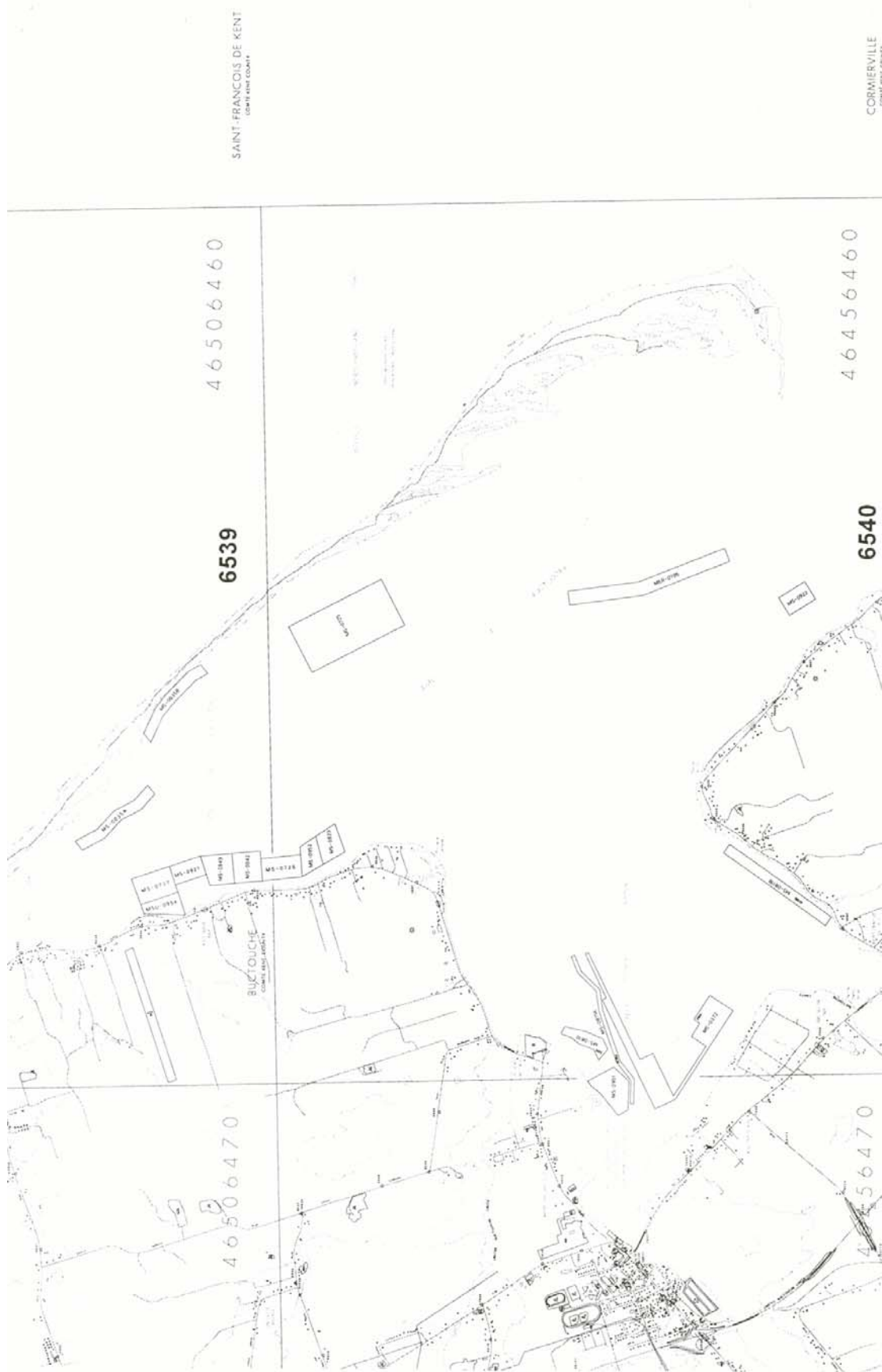














**APPENDIX 4: MEMORANDUM OF UNDERSTANDING FOR
CONDITIONALLY APPROVED AREAS**

MEMORANDUM OF UNDERSTANDING

FOR THE MANAGEMENT OF THE CONDITIONALLY APPROVED
SHELLFISH HARVEST AREA AND THE HARVESTING OF
MOLLUSCS AT:

_____, **N.B.**
NB _____

BETWEEN THE:

- DEPARTMENT OF FISHERIES AND OCEANS (DFO)
- CANADIAN FOOD INSPECTION AGENCY (CFIA)
- ENVIRONMENT CANADA (EC)
- NEW BRUNSWICK DEPARTMENT OF ENVIRONMENT AND
LOCAL GOVERNMENTS (NBDELG)
- NEW BRUNSWICK DEPARTMENT OF AGRICULTURE,
FISHERIES AND AQUACULTURE (NBDAFA)
- VILLAGE OF _____, NEW BRUNSWICK

2001

1. BACKGROUND

Shellfish growing areas that are subject to intermittent microbiological pollution may be classified as conditionally approved. This classification may be used when the suitability of an area for harvesting shellfish for direct marketing is affected by a predictable pollution event. The sanitary quality of the water may be affected by such events as seasonal population, non-point source pollution, i.e. caused by a heavy rainfall, sporadic use of a dock or harbour facility, or a malfunction at a municipal waste water collection treatment facility. Sanitary surveys must show that the area will meet the requirements of an approved area under normal conditions and that factors determining the acceptability of such an area are not so complex as to preclude a reasonable management approach. A formal Memorandum of Understanding (MOU) and an annual report to the Atlantic Shellfish Area Classification Committee are required for the conditional classification. **If the performance standards can not be met, the area will immediately be closed to shellfish harvesting by prohibition order.**

2. AREA DESCRIPTION

This Memorandum of Understanding shall deal specifically with the harvesting of molluscs in the following conditionally approved area:

That portion of _____, _____ County, New Brunswick, inside a straight line drawn from grid reference _____ to grid reference _____ and from grid reference _____ to grid reference _____. (Refer to Figure #1).

3. OPENING/CLOSURE CRITERIA

3.1 The conditionally approved shellfish harvest area herein described shall remain closed to the harvesting of molluscs until the results of preliminary sampling indicate compliance with bacteriological requirements of an approved shellfish harvesting area and the Village of - _____ indicates its compliance with item 5.6 of this document.

3.2 Subsequent to the initial opening of the conditionally approved area by prohibition order as per conditions of item 3.1 of this document:

3.2.1 the area described shall be closed to the harvesting of molluscs when an accidental discharge of untreated sewage from the sewage collection and treatment systems for the Village of _____ is reported, when changes in the operation of these systems which are deemed to be a risk to the water quality of the described conditionally

approved area are planned or undertaken (see Annex 2), or when monthly sampling indicates unacceptable high fecal coliform counts.

3.2.2 the potential impact area will remain close to the harvesting of molluscs until the results of two consecutive water and mollusc samples collected from each sites at least seven days after the end of the spill are meeting the bacteriological criteria of an approved shellfish harvesting area.

3.3 a) the median or geometric mean faecal coliform Most Probable Number (MPN) of the **water** samples must not exceed 14/100 mL.

and

(b) the faecal coliform Most Probable Number (MPN) of the **molluscan shellstock** samples must not exceed 230/100g .

4. DURATION OF THE MEMORANDUM OF AGREEMENT

This Memorandum of Understanding shall expire on December 31st 2001 .

5. AREA OF RESPONSIBILITY

In this Memorandum of Understanding, the parties named below agree to perform the listed functions.

5.1 DEPARTMENT OF FISHERIES AND OCEANS

With respect to Section 3 of the *Management of Contaminated Fisheries Regulations* pertaining to the portion of the _____ which is designated as conditionally approved, the Department of Fisheries and Oceans agrees to:

- 5.1.1 upon recommendation from CFIA and/or Environment Canada, take the appropriate measures to close the designated area with the occurrence of the specified closure criterias as stipulated in Section 3 of this Memorandum of Understanding and to communicate a closure of the conditionally approved area, to affected persons/groups by:
 - a) issuing a prohibition order;
 - b) publishing the prohibition order;
 - c) posting signs of the closure; and
 - d) notifying the District Supervisor, Canadian Food Inspection Agency (CFIA) Jean Gauvin, the Head, Shellfish Program Section, Environment Canada , Amar Menon, and the Director of the Aquarium and Marine Center, New Brunswick Department of Agriculture, Fisheries and Aquaculture, Robert Rioux.

- 5.1.2 routinely patrol the affected area, described in Section 2,

- 5.1.3 revoke prohibition orders and remove warning signs from the area when the area once again meets the bacteriological criteria as stipulated in Section 3.3

- 5.1.4 provide an annual report compiling all the activities provided by all parties in the Management Plan to the Atlantic Shellfish Area Classification Committee, and propose recommendations for changes to this Memorandum of Understanding if any are necessary. This report must be submitted no later than February 28th 2002.

R.M. Boucher
Area Director, Eastern New Brunswick
Department of Fisheries and Oceans

Date

5.2 THE CANADIAN FOOD INSPECTION AGENCY AGREES TO:

- 5.2.1** recommends to DFO Area Director, Eastern New Brunswick the opening of the conditionally approved area described in Section 2, when results of the pre-season samples of molluscs indicate that bacteriological results meet the standards stipulated in Section 3.3.
- 5.2.2** recommends to DFO Area Director, Eastern New Brunswick the closure of the conditionally approved area as described in Section 2, when the bacteriological results of the samples taken at the sampling sites exceed the standards indicated in Section 3.3.
- 5.2.3** to provide bacteriological analysis of the samples of molluscs taken at the site and brought to the C.F.I.A. laboratory at Moncton for analysis under conditions indicated in this Memorandum of Understanding. The samples taken at the site described in Figure 2 will consist of molluscs in the shell. The sampling frequencies will be:
- a) two pre-season sample of molluscs (two consecutive days) which are found to be acceptable as per section 3.3; and
 - b) subsequently, one sample of molluscs at each site will be taken every month during the open season.
- 5.2.4** to submit pre-season and monthly sample results to Head, Shellfish Program Section, Environment Canada, and the Director, Aquarium and Marine Center, New Brunswick Department of Agriculture, Fisheries and Aquaculture, and DFO Area Director, Eastern New Brunswick.
- 5.2.5** to provide training and regular evaluation of the work of the approved NBDFAFA sampler appointed in this memorandum. The Assistant Deputy Minister of the New Brunswick Department of Agriculture, Fisheries and Aquaculture shall be advised immediately of any non-compliance actions by the N.B. Provincial sampler. Failure by the NBAFA to make the necessary corrections immediately, will result in the closure of the area.
- 5.2.6** assess the independent laboratory named in Annex 3 with respect to compliance with Canadian Shellfish Sanitation Program procedures and advise the DFO Area Director, Eastern New Brunswick in case of non-compliance.
- 5.2.7** maintain records of sampling information and bacteriological results.

5.2.8 provide an annual report of the activities undertaken by the Canadian Food Inspection Agency as described in 5.2.1 to 5.2.8 to DFO Area Director, Eastern New Brunswick for submission to the Atlantic Shellfish Area Classification Committee, and propose recommendations for changes to this Memorandum of Understanding if any are necessary. This report must be submitted no later than February 28th 2002.

Jean Gauvin
Coastal New Brunswick
Canadian Food Inspection Agency

Date

**5.3 ENVIRONMENT CANADA, ENVIRONMENTAL PROTECTION BRANCH,
AGREES TO:**

- 5.3.1** recommends to DFO Area Director, Eastern New Brunswick the opening of the conditionally approved area described in Section 2, when results of the pre-season samples of water indicate that bacteriological results meet the standards stipulated in Section 3.3.
- 5.3.2** recommends to DFO Area Director, Eastern New Brunswick the closure of the conditionally approved area as described in Section 2, when the bacteriological results of the samples taken at the sampling sites exceed the standards indicated in Section 3.3.
- 5.3.3** to provide bacteriological analysis of the samples of water taken at the site and brought to the Environment Canada laboratory at Moncton for analysis under conditions indicated in this Memorandum of Understanding. The samples taken at the site described in Figure 2 will consist of overlay water. The sampling frequencies will be:
- a) two pre-season sample of overlay water (two consecutive days) which are found to be acceptable as per section 3.3; and
 - b) subsequently, one sample of overlay water at each site will be taken every month during the open season.
- 5.3.4** to submit pre-season and monthly sample results to the Supervisor, Canadian Food Inspection Agency, the Director of Aquarium and Marine Center, New Brunswick Department of Agriculture, Fisheries and Aquaculture, and DFO Area Director, Eastern New Brunswick.
- 5.3.5** to provide training and regular evaluation of the work of the approved NBDAFA sampler appointed in this memorandum. The Assistant Deputy Minister of the New Brunswick Department of Agriculture, Fisheries and Aquaculture shall be advised immediately of any non-compliance actions by the N.B. Provincial sampler. Failure by the NBAFA to make the necessary corrections immediately, will result in the closure of the area.
- 5.3.6** assess the independent laboratory named in Annex 3 with respect to compliance with Canadian Shellfish Sanitation Program procedures and advise the DFO Area Director, Eastern New Brunswick in case of non-compliance.
- 5.3.7** maintain records of sampling information and bacteriological results.

- 5.3.8** receive information from the DFO Area Director, Eastern New Brunswick pertaining to changes in status of the described conditionally approved area as they occur.
- 5.3.9** conduct an annual sanitary review of the area, described in Section 2, including an evaluation of all existing and probable sources of contamination to confirm that environmental conditions have not changed and that the classification is still valid.
- 5.3.10** conduct a complete re-evaluation of the conditionally approved area every three years and to make recommendations as per the classification of the area and closure criteria.
- 5.3.11** conduct investigations in order to locate the source of pollution and make appropriate recommendations when the bacteriological results of samples indicate unacceptable conditions for continued harvesting of the area and that these unacceptable conditions are not related to any items listed in Section 3 of this Memorandum of Understanding. The area will be closed until such time as the results of this investigation have been forwarded to D.F.O. Area Director, Eastern New Brunswick and that the bacteriological standards are acceptable.
- 5.3.12** advise CFIA when the sewage release have been terminated, in order that the molluscs sampling can be undertaken.
- 5.3.13** provide an annual report on classification status to the Atlantic Shellfish Area Classification Committee, and propose recommendations for changes to this Memorandum of Understanding if any are necessary. This report must be submitted no later than February 28th 2002.

Roger Percy
A/Manager, Toxics Management Division
Environment Canada, Dartmouth, N.S.

Date

5.4 THE NEW BRUNSWICK DEPARTMENT OF THE ENVIRONMENT AND LOCAL GOVERNMENTS AGREES TO:

- 5.4.1** immediately notify one representative of each agency and department listed in Annex I to this memorandum, of any changes in operations at the Village of _____ sewage collection and treatment facilities which are likely to alter the normal effluent loading or location of discharge in or in proximity of the area described in Section 2 of this document.
- 5.4.2** ensure that complete records of collection treatment plant operations are routinely maintained.
- 5.4.3** ensure that the final effluent quality at the Village of _____ sewage treatment plants are within the limits of their Certificate of Approval.
- 5.4.4** advise Environment Canada, CFIA and DFO when the sewage release has been terminated.
- 5.4.5** provide an annual report of the activities undertaken by New Brunswick Department of the Environment and Local Governments as described in 5.4.1 to 5.4.5 to DFO Area Director, Eastern New Brunswick and Environment Canada, and propose recommendations for changes to this Memorandum of Understanding if any are necessary. This report must be submitted no later than February 28th 2002.

Nabil Elhadi
Assitant Deputy Minister
Environmental Management Division
New Brunswick Department of the Environment and Local Governments

Date

5.5 THE NEW BRUNSWICK DEPARTMENT OF AGRICULTURE, FISHERIES AND AQUACULTURE (NBDAFA) AGREES TO:

- 5.5.1** to provide overlay water and molluscs for analysis under conditions indicated in this Memorandum of Understanding. The samples taken at the five sites described in Figure 2 will consist of:
- a) overlay water; and
 - b) molluscs in the shell
- Sampling frequencies will be:
- a) two pre-season sample of both water and molluscs which are found to be acceptable as per section 3.3;
 - b) subsequently, one sample of each will be taken every month during the open season; and,
 - c) post closure sampling for re-opening following a sewage incident (two samples after seven days for two consecutive days)
- 5.5.2** identify the name of the NBDAFA employee who will be responsible for taking samples at the sampling sites in Figure 2 attached to this agreement by sending a facsimile to Jean Gauvin of the Canadian Food Inspection Agency and Robert Robichaud, Environment Canada.
- 5.5.3** handle and transport the overlay water samples taken from the sampling sites to the Environment Canada Laboratory in Moncton, and the molluscs samples to the CFIA Laboratory in Moncton as per the procedures described in Annex 2B of the Canadian Shellfish Sanitation Program manual.
- 5.5.4** provide all the required sampling materials and equipment needed for the taking and the transportation of the samples.
- 5.5.5** maintain a record of all samples taken, and of all the bacterial results completed.
- 5.5.6** provide an annual report of the activities undertaken by the New Brunswick Department of Agriculture, Fisheries and Aquaculture as described in 5.5.1 to 5.5.6 to the Canadian Food Inspection Agency, Jean Gauvin, and Environment Canada, Amar Manon and recommend changes to this Memorandum of Understanding if any are necessary. This report must be submitted no later than February 28th 2002.

Roland Cormier
Assistant Deputy Minister
New Brunswick Department of Agriculture, Fisheries and Aquaculture

Date

5.6 THE VILLAGE OF _____ AGREES TO:

- 5.6.1** have in place and maintain an alert system by which accidental untreated sewage discharges are immediately noticed, therefore allowing corrective action to be initiated without delay.
- 5.6.2** immediately notify the New Brunswick Department of Environment and Local Governments representative André Chenard or his alternate of any planned (e.g. proposed maintenance work) or unplanned changes in operations of the Village of _____'s sewage collection and treatment facility (e.g. untreated sewage discharge). This notification will be by direct call and by telecopier. After working hours (08h00 – 16h30, Monday to Friday), on weekends and holidays, immediately notify the Canadian Coast Guard at 1-800-565-1633.
- 5.6.3** maintain up-to-date records of the operations and maintenance of the sewage collection and treatment facilities as per the requirements of Certificate of Approval to operate issued by the New Brunswick Department of Environment and Local Governments.
- 5.6.4** in case of an equipment failure in the collection and/or treatment facilities that results in the discharge of untreated sewage, provide a report as per condition E (Annex 4) of the Approval to operate issued by the New Brunswick Department of the Environment & Local Government.
- 5.6.5** pay all costs associated with the sampling and bacteriological analyses when a closure is the result of the discharge of untreated sewage.
- 5.6.6** provide an annual report of the activities undertaken by the Village of _____ as described in sections 5.6.1 to 5.6.6 to New Brunswick Department of the Environment and Local Governments. Propose recommendations for changes to this Memorandum of Agreement if any are necessary. This report must be submitted no later than February 28th 2002.

Mayor
Village of

Date

ANNUAL REPORTING

The Atlantic Shellfish Area Classification Committee will review a report submitted by DFO combining the information received from the DFO Area Director, Eastern New Brunswick, the Canadian Food Inspection Agency, Environment Canada, the New Brunswick Department of Environment and Local Governments. This report shall be on a calendar year basis and shall serve to evaluate the conditionally approved area in April of each year. It shall include a review of all data relating to the operation of sewage treatment and collection systems, monitoring of water and shellfish quality at locations shown in Figure 2, duration of closures and re-opening dates and a written report on the performance of the management plan.

7. AMENDMENT AND TERMINATION

The undersigned parties hereby agree with the contents of this Memorandum of Understanding are committed to its objective. If at any time in the future any one party fail to fulfill the requirements as set forth herein, the Memorandum of Understanding becomes void, the conditionally approved area is closed to shellfish harvesting by prohibition order, and the Atlantic Shellfish Area Classification Committee shall make the decision whether the document's objectives can be met. If the objective cannot be attained, recommendations will be made to reclassify the area as closed to shellfish harvesting. This agreement may be amended at any time subject to the approval of the other parties by giving sixty days notice to the Atlantic Shellfish Area Classification Committee.

ANNEX 1: CONTACT PERSONS

DEPARTMEN/ AGENCY	NAME	ADDRESS	TELEPHONE/ FAX
Department of Fisheries and Oceans	Martin Sirois	Regulation Officer Moncton, NB	506-851-7798 off. 506-851-2504 fax 506-866-3791 cell 506-532-3561 home
	Rhéal Boucher	Area Director Tracadie-Sheila, NB	506-395-7702 off. 506-395- 7739 fax
	Ernest Ferguson	Habitat Coordinator Tracadie-Sheila, NB	506-395- 7700 off. 506-395-3809 fax
Canadian Food Inspection Agency	Nicole Bouchard Steeves	Recall Coordinator Moncton, NB	506-851-3761 off. 506-381-7683 cell 506-851-2801 fax
	Almas Chiasson	District Supervisor Shippagan, NB	506-336-6417 off. 506-336-7126 cell 506-336-6467 fax
	Jean Gauvin	A/Inspection Manager Shédiac, NB	506-533-5301 off. 506-866-1056 cell 506-533-5104 fax
Environment Canada	Emergency Officer	Dartmouth, NS	902-426-6200 off.
	Amar Manon	Head, Shellfish Program Dartmouth, NS	902-426-9003 off. 902-476-2758 cell 902-426-3897 fax
	George D. Lindsay	Provincial Manager Environment Protection Branch Fredericton, NB	506-452-3286 off. 506-452-3003 fax
NB Dept. of Agriculture, Fisheries and Aquaculture	Robert Rioux	Director, Aquarium and Marine Center Shippagan, NB	506-336-3160 off. 506-336-7529 cell 506-336-4804 home
	Yvon Chiasson	Director, Commercial Fisheries Fredericton, NB	506-453-2252 off. 506-470-6425 cell 506-457-5523 home
	Kim Lipsett	Director of Aquaculture Fredericton, NB	506-457-6924 off. 506-453-5210 fax 506-461-6218 cell

NB Dept. of Environment and Local Governments	André Chenard	Fredericton, NB	506-453-7945 off. 506-457-2390 fax
	Serge Thériault	Fredericton, NB	506-453-2036 off. 506-457-2390 fax
	Judy Carr	Fredericton, NB	506-453-3824 off. 506-457-2390 fax
	Tim LeBlanc	Fredericton, NB	506-444-5194 off. 506-457-2390 fax

Village of	Administrator	, NB	
After Hours, Weekends and Holidays	Canadian Coast Guard		1-800-565-1633

**ANNEX 2: PROTOCOL FOR CLOSING AND REOPENING OF SHELLFISH AREA
AFFECTING BY SEWAGE SPILL**

- A notification system must be in place for the Town of _____ to advise the representatives of shellfish control agencies (DFO, EC, CFIA and NBDELG) in the event there is a planned or accidental discharge of untreated sewage from the municipality collection and wastewater treatment facility into a shellfish harvesting area.
- Upon notification of the spill during normal working hours, EC will advise DFO if there is a need to implement a closure in the affected area.
- If the spill occurs outside normal working hours, DFO should immediately close the affected shellfish harvesting area until further notice from EC, CFIA and NBDELG.
- EC will advise DFO if there is a need to recind or modify the size of the closure based on more detail information on the spill provided by the reporting agency.
- To reopen the area, two consecutive days of sampling for water and molluscs should be conducted at each sites no earlier than 7 days after the termination of the spill.
- CFIA and EC will advise DFO to reopen the area when the bacteriological quality of the water and shellstock in the area are satisfactory.

ANNEX 3: CERTIFIED LABORATORIES

Peat Research and Development Centre, Shippagan, N.B.

Jean-Yves Daigle, Director – 506-336-9719

506-336-0302 fax.

Centre de Recherche sur les Aliments, Moncton, N.B.

Lita Vilallon, Director – 506-858-4284

506-858-4540 fax.

Canadian Food Inspection Agency, Moncton, N.B.

Edmond Arsenault, Head, Bioassay Section 506-851-6564

506-851-3315 fax.

Environment Canada, Moncton, N.B.

Guy Brun, Senior Chemist, Environmental Quality Section 506-851-2366

506-851-6608 fax.

ANNEX 4 : CONDITION “E” OF THE APPROVAL TO OPERATE

E. ENVIRONMENTAL EMERGENCY REPORTING SYSTEM

The **Owner**, operator or any person in charge of the Facility shall **immediately** notify the Department where:

- a) **there has been, or is likely to be, an unauthorized release of solid, liquid or gaseous material including wastewater, petroleum or hazardous materials to the environment,**

or

- b) where a violation of the Water Quality Regulation or any Approval issued thereunder, is of such a magnitude or period that there is concern for the health or safety of the general public, or there could be significant harm to the environment.

**During normal business hours, contact the:
(506) 453-7945
and ask for one of the following contacts:
Judy Carr
André Chenard
Serge Thériault
Tim LeBlanc**

After hours, or when there is no answer at the Regional Office or if the above mentioned contacts are not available, contact the:

**Canadian Coast Guard
1-800-565-1633**

All notifications shall include:

- a) a description of the source, including the name of the Owner or operator;
b) the nature, extent, duration and environmental impact of the release;
c) the cause or suspected cause of the release; and
d) any remedial action taken or to be taken to prevent the recurrence of the release.

A written report describing the event and including the above mentioned information shall be forwarded to NBDOE & LG by fax, (506) 453-2390, as soon as possible following the event.

FIGURE 1 – MAP

FIGURE 2 : SAMPLING STATIONS

**APPENDIX 5:
MANAGEMENT OF CONTAMINATED FISHERIES REGULATIONS
(OYSTERS) ENFORCEMENT AND COMPLIANCE POLICY
FOR EASTERN NEW BRUNSWICK**

1. GLOSSARY

FISHER: Any person (fisher, helper, relayer, leaseholder) who fishes for oysters in a contaminated area.

DECONTAMINATION PLAN: Survey of all the information required under this policy to guarantee to the Minister that the oysters will be decontaminated without being killed.

NATURAL RELAYING: The transfer of oysters from a contaminated area to an approved area for natural biological cleansing using the ambient environment as a treatment system.

2. PARAMETERS

This document sets forth the policies and procedures governing authorization to fish for oysters in contaminated areas for purposes of purification. It explains the basic requirements to obtain a contaminated shellfish fishing licence while adhering to certain control measures. The area's Licensing Service Centres are responsible for issuing contaminated fishing licences for these areas.

When contaminated fishing licences are issued for the relaying of oysters, care must be taken to limit their number in order that adequate sanitary control may be exercised.

When the decontamination takes place in a depuration bed installed on land, the establishment must hold a federal registration certificate pursuant to the *Fish Inspection Act* and the decontamination must be effected in compliance with the *Canadian Shellfish Sanitation Program* and, if the oysters are exported to the United States, the *National Shellfish Sanitation Program*.

This document contains no policies or procedures for the protection or maintenance of resource levels or for controlling the number of fishers. Those matters are addressed in the licensing policies.

3. REFERENCE DOCUMENTS

The *Management of Contaminated Fisheries Regulations*, established pursuant to the *Fisheries Act*, the *Fish Inspection Regulations*, established pursuant to the *Fish Inspection Act*, and the *Canadian Shellfish Sanitation Program* are the reference documents used for this policy.

4. DESIGNATION OF CONTAMINATED FISHING AREAS

The Department of Fisheries and Oceans (DFO), in consultation with Environment Canada (EC) and the Canadian Food Inspection Agency (CFIA), designates certain areas where oyster fishing is permitted for purposes of controlled purification. The waters where oysters grow in these contaminated areas are analysed. Their median faecal coliform MPN must be less than 88/100 ml, and not more than 10 per cent of the samples may exceed an MPN level of 260/100 ml.

In addition, the areas concerned must not be close by:

- D) discharges of municipal or hospital sewage or other sources of pollution. Should there be a failure of any sewage treatment system in the area, officers of the DFO Conservation and Protection Division must be notified immediately. Oyster fishing in this area will then be prohibited. The length of the closure is determined by DFO, after consultation with Environment Canada and the Canadian Food Inspection Agency (CFIA);
- II) sources of toxins causing PSP (paralytic shellfish poisoning) and/or ASP (amnesic shellfish poisoning). If historical data indicate the possibility of an upsurge of the phytoplankton responsible for these toxins, fishing for controlled purification purposes may not be permitted. Scientific opinions will be required;
- III) sources of chemical contaminants (heavy metals and pesticides). Most of these contaminants are not destroyed during decontamination by relaying.

5a. APPROVAL OF DEPURATION BEDS

The Department of Fisheries and Oceans, in consultation with Environment Canada and the Canadian Food Inspection Agency (CFIA), designates certain areas where oysters can be transferred for controlled purification. The median or geometric mean faecal coliform Most Probable Number (MPN) of the water must not exceed 14 per 100 ml, and not more than 10 per cent of the samples must exceed a faecal coliform MPN of 43 per 100 ml, according to the results of a five-tube water test.

The water must also meet the following criteria:

- minimum oxygen content of 5 ppm;
- salinity at least equal to the salinity of the area where the bivalves were harvested;
- turbidity less than 20 units Jackson turbidity;
- temperature adequate to permit oysters to feed normally; relaying must not be carried out when water temperature is below 5°C.

In the absence of these conditions, if one still wishes to have the site in question approved for relaying, bacteriological analysis results must be submitted which demonstrate that, in the past, oysters in this area have been systematically purified.

These depuration beds must be at least 200 m from any open fishing area, so as to avoid cross-contamination and harmful effects on other oyster-related activities.

For interprovincial shipments for relaying purposes, the licence holder must obtain authorization from the Introductions and Transfers Committee and the district office of the Canadian Food Inspection Agency in the province controlling the receiving waters before shipment is made.

5b. GUIDELINES FOR IDENTIFYING DEPURATION BEDS

Depuration beds shall be identified by orange buoys at each corner of the site (lease for species to be decontaminated authorized by appropriate provincial agency or site approved by DFO) where oysters can be placed for purification. The lease number or licence number must be displayed on these buoys.

6. DURATION OF DEPURATION

Relayed oysters must be kept in approved relay beds for at least 30 consecutive days. After depuration, the bacteriological quality of the oysters must be such that no more than 230 faecal coliform are detected per 100g of meat.

7a. LICENCE TO FISH IN A CONTAMINATED AREA

Pursuant to section 4 of the *Management of Contaminated Fisheries Regulations*, the Minister may issue to any applicant who submits a decontamination plan acceptable to the Department and who pays the applicable fee a licence authorizing that person and any other person named in the licence to fish in the designated contaminated area. The licence holder must therefore apply for approval of a decontamination plan (Schedule A) and, upon approval of the plan, pay the fee of \$100 for the licence plus an extra fee of \$20 for each person named in the licence other than the licence holder.

All purified product must be marketed through registered processing establishments which comply with all provisions of federal and provincial regulations, or may be marketed through a distributor within the province where authorized by provincial regulations.

Any person whose name appears on a licence (\$20) may fish oysters only on the condition that the said person complies with the decontamination plan in which his/her name appears, **AND ONLY IN THE PRESENCE OF THE LICENCE HOLDER.**

7b. SPAT COLLECTION PERMITS FOR CONTAMINATED AREAS

No fee is charged for this permit, which is issued pursuant to section 4 of the *Fisheries Act*. Applications must be approved by Environment Canada before the permit is issued by a Licensing Service Centre.

8. DECONTAMINATION PLAN

Pursuant to section 4 of the *Management of Contaminated Fisheries Regulations*, persons wishing to obtain a licence to fish oysters for food purposes must submit a decontamination plan to the Minister.

In their decontamination plan, applicants must provide the following information:

- a written description of the contaminated area(s) where the oysters will be fished. This description must include grid references (using the Universal Transverse Mercator grid as established in the National Topographic System, scale of 1:50,000, published by the Department of Energy, Mines and Resources), a description on maps of the Shellfish Growing Area Classification Index prepared by Environment Canada which can be consulted at DFO offices, or a description by the provincial authority responsible for the lease
- a written description of the approved areas where the contaminated oysters are to be purified, including grid references (as above) or a descriptive lease number with the maps
- the name of the licence holder
- the names of all person who will be named in the licence
- the duration of the relaying activities
- a description of the fishing method
- the estimated quantity of oysters to be fished

9. RECORDS

Pursuant to section 61 of the *Fisheries Act*, the licence holder must keep records, which are to be provided to any DFO employee at the request of the Conservation and Protection Branch. These records must include the following information:

- the date when the contaminated oysters were fished;
- the source of the contaminated oysters;
- the quantity of oysters harvested in the contaminated area;
- the date the oysters were relayed to an approved bed;
- identification of the approved area;

- the quantity of oysters thus relayed;
- the date oysters were harvested in the approved area;
- the name of the purchaser, date of purchase and quantity purchased.

These records may also include the results of microbiological analyses or other tests performed on each lot of relayed oysters, before and after the depuration period. The licence holder must also submit proof that the weekly decontamination plan has been respected and that harvesting of the relayed oysters was not permitted within 30 days of the relaying.

THE LICENCE HOLDER MUST RETAIN THESE RECORDS FOR A MINIMUM PERIOD OF ONE YEAR FROM THE DATE OF HARVESTING. The licence holder is legally bound to the preceding pursuant to section 61 of the *Fisheries Act*.

10. FISHING METHOD

The Department of Fisheries and Oceans approves the fishing method and ensures that it will not cause increased contamination. In addition, the Habitat Management Division (DFO) determines whether it is advisable to control the activities to ensure that the fishing method is not detrimental to the environment or to any other fishery.

11. NOTICE OF INTENTION TO FISH

Holders of a contaminated shellfish fishing licence shall notify the Licensing Service Centre of any change to their decontamination plan at least one week in advance. This notice may modify the areas or parts of areas to be harvested, the fishing period, fisher's name, etc. DFO reserves the right to limit at any time the number of areas harvested and the number of harvesters.

**APPENDIX 6: APPLICATION FOR APPROVAL OF AN OYSTER
DECONTAMINATION PLAN**

SCHEDULE A

**APPLICATION FOR APPROVAL OF AN OYSTER DECONTAMINATION PLAN
PURSUANT TO THE MANAGEMENT OF CONTAMINATED FISHERIES
REGULATIONS**

The following information must be provided by an applicant* for a licence to harvest contaminated oysters (**oysters over three (3) inches in length**) for food purposes. (***APPLICANT: Excepting in cases where the contaminated oysters are from a private leased area located in a contaminated area, the applicant must hold a commercial oyster fishing licence and be registered as a commercial fisher. For applications other than those concerned with the contaminated oyster dredge fishery in deep waters of Miramichi Bay, the applicant must hold an aquaculture lease in a body of water that is not contaminated or have permission to use an aquaculture lease in a body of water that is not contaminated, or have a designated decontamination site approved by Fisheries and Oceans. For applications concerned with the contaminated oyster dredge fishery in deep waters of Miramichi Bay, only fishers who had a licence to engage in this fishery in 1998 and holders of a commercial oyster fishing licence valid for waters of Northumberland County who reside adjacent to Northumberland County waters and who also hold an oyster lease situated in waters adjacent to Northumberland County will be eligible to apply.**

1. Written description of the contaminated area where fishing is to be conducted: (a copy of the map indicating the contaminated fishing area must be attached to this application)

(**Note to applicant:** The Shellfish Growing Area Classification Index (Oysters) maps are prepared by Environment Canada; they can be obtained by contacting a Fisheries and Oceans office).

2. Written description of approved areas where the contaminated oysters are to be purified:

a) Registration number of leased area to be used for decontamination purposes and attached map describing the area: _____

b) Description of a non-lease site and attached map specifically describing the proposed decontamination area: _____

3. Information on the applicant:

a) Name and address of applicant:

b) Fisherman Identification Number (FIN) of applicant:

c) Name and number of vessel to be used:

_____ VRN: _____

DECONTAMINATION PLAN APPLICATION (continued)

4. Names and fisherman identification numbers (FIN) (except where the oysters are from a private leased area located in a contaminated area) of all persons (fishers required to hold commercial oyster fishing licences and be registered as commercial fishermen, except if the oysters are from a private leased area located in a contaminated area) whom the applicant intends to name on his/her contaminated shellfish fishing licence (if applicant is applying to fish with a dredge in deep waters of Miramichi Bay, two helpers may be named in the licence who need not hold a commercial oyster fishing licence, and a maximum of two other persons may be named in the licence who must hold such a licence):

_____	FIN: _____
_____	FIN: _____
_____	FIN: _____
_____	FIN: _____
_____	Helper FIN _____
_____	Helper FIN _____

5. Duration of activities related to decontamination (from _____ to _____, except for deep waters of Miramichi Bay, from _____ to _____) :

6. Description of fishing method (please check):

By hand
 Rake
 Tongs
 Dredge *

* Deep waters (6 feet) of Miramichi Bay, west of a line between Oak Point and Point aux Carr, from _____ to _____, or in a private leased area located in a contaminated area.

7. Quantity of oysters to be fished: (estimate): _____

_____	_____
APPLICANT'S SIGNATURE	DATE

_____	_____
SIGNATURE OF DFO OFFICER APPROVING THE APPLICATION	DATE

NB: Applicants must forward their duly completed and signed application to the Licensing Service Centres in Richibucto (P.O. Box 340, Richibucto, NB E0A 2M0 - Telephone: (506) 523-8237; fax: 523-8257) or Tracadie-Sheila (P.O. Box 3420, Main Station, Tracadie-Sheila, NB E1X 1G5 - Telephone: (506) 395-7727/7730; fax: 395-7746).

**APPENDIX 7: APPLICATION FOR LICENCE TO FISH
CONTAMINATED OYSTERS WITH HAND TOOLS**

LICENCE NO. RGPPC-ENB- -
Licence to Fish Contaminated Oysters (*Crassostrea virginica*)
in MIRAMICHI BAY (dredge)
issued pursuant to the
MANAGEMENT OF CONTAMINATED FISHERIES REGULATIONS

1. Pursuant to section 4 of the *Management of Contaminated Fisheries Regulations*, permission is hereby granted to _____, FIN: _____, using the vessel _____, VRN: _____ and **SUBJECT TO THE CONDITIONS OF THIS LICENCE**, to fish oysters in the following contaminated oyster fishing areas:

These contaminated areas are in conformity with article 4 of the *Management of Contaminated Fisheries Regulations Enforcement and Compliance Policy for the Eastern NB Area* (see copy attached).

2. Oysters fished under this licence must be decontaminated by being relayed to depuration beds located in the area described below and delimited by the following grid references (include maps), or bearing the following lease numbers:

These depuration beds are in conformity with article 5 of the *Management of Contaminated Fisheries Regulations Enforcement and Compliance Policy for the Eastern NB Area*.

2. All fishing of contaminated oysters and relaying of these oysters to depuration beds must take place between _____ and _____ only.
4. Licence holders shall notify the Licensing Service Centre of any change to their decontamination plan at least one week in advance. This notice may modify the areas or parts of areas to be harvested, the fishing period, the persons named in the licence, etc. DFO reserves the right to limit at any time the number of areas harvested and the number of harvesters.
5. Depuration beds shall be identified by orange buoys at each corner of each site. The lease number or licence number must be displayed on these buoys.
6. In order that they may be decontaminated, the oysters shall remain in the approved depuration beds for at least 30 consecutive days, in conformity with article 6 of the *Management of Contaminated Fisheries Regulations Enforcement and Compliance Policy for the Eastern NB Area*. After depuration, the bacteriological quality of the oysters must be such that no more than 230 faecal coliform are detected per 100g of meat.

LICENCE NO. RGPPC-ENB- -

7. The following persons may participate, **IN THE PRESENCE OF THE LICENCE HOLDER ONLY**, in the fishing and relaying activities described in this licence (**except in cases where the contaminated oysters are from a private leased area located in a contaminated area, the persons named below must hold a commercial oyster fishing licence**):

_____	Helper	FIN:
_____	Helper	FIN:
_____		FIN:
_____		FIN:

8. The persons named above and the holder of this licence are responsible, when in possession of contaminated oysters, for ensuring that the said oysters are not used for food purposes and are immediately transferred by the shortest possible route to the depuration bed. In cases where the contaminated oysters are transferred by land, the said transfer must be by the shortest possible route and each container of contaminated oysters must bear a label containing the following information: (a) identification of the contents as contaminated oysters; (b) the site where the contaminated oysters were harvested; and (c) the date they were harvested.
9. Fishing methods authorized under this licence: **BY HAND, WITH HAND TOOLS, OR BY RAKE.**
10. A copy of this licence shall be carried at all times by the licence holder and the persons named in the licence while engaged in any activity to which it relates, and shall be produced for inspection on the demand of a fishery officer.
11. A report on activities conducted under this licence shall be completed using the attached form and sent **NO LATER THAN AUGUST 15** _____ to the attention of _____, Chief, Resource Management, P.O. Box 3420, Tracadie-Sheila, N.B., E1X 1G5. **Non-compliance with this condition constitutes a violation of the licence conditions and may result in legal procedures.**
12. Records containing the information described in article 9 of the *Management of Contaminated Fisheries Regulations Enforcement and Compliance Policy for the Eastern New Brunswick Area* shall be completed and retained for a period of one (1) year by the holder of this licence. At the request of a fishery officer, these records shall be submitted to an identified DFO employee designated pursuant to section 61 of the *Fisheries Act*.
13. Non-compliance with any requirement of the *Management of Contaminated Fisheries Regulations Enforcement and Compliance Policy for the Eastern New Brunswick Area* constitutes a violation of the licence conditions and may result in legal procedures. All decisions of the Department are final.
14. This licence is valid from _____ to _____ inclusive.
15. The minimum size of the oysters you are permitted to fish, transport or have in your possession is **76 mm (3 inches)**.
16. Renewal of this licence must be approved by the Department of Fisheries and Oceans.

APPENDIX 8: APPLICATION FOR LICENCE TO FISH CONTAMINATED OYSTERS IN MIRAMICHI BAY USING A DREDGE

LICENCE NO. RGPPC-ENB- -
Licence to fish contaminated oysters (*Crassostrea virginica*)
in MIRAMICHI BAY (drag)
issued pursuant to the
MANAGEMENT OF CONTAMINATED FISHERIES REGULATIONS

1. Pursuant to section 4 of the *Management of Contaminated Fisheries Regulations*, permission is hereby granted to _____, FIN: _____, using the vessel _____, VRN: _____ and **SUBJECT TO THE CONDITIONS OF THIS LICENCE**, to fish contaminated oysters **BY HAND, WITH HAND TOOLS OR BY RAKE** in the waters of Miramichi Bay between a line drawn from Oak Point to Point aux Carr and another line drawn between Gordon Point wharf and St Andrews Point wharf (see map in Schedule A attached), and **BY DREDGE** in waters of the portion of Miramichi Bay described above that are more than six (6) feet deep (see Schedule A attached for the points indicating the 6-foot line and the map illustrating that line).

These contaminated areas are in conformity with article 4 of the *Management of Contaminated Fisheries Regulations Enforcement and Compliance Policy for the Eastern NB Area* (see copy attached).

2. Oysters fished under this licence must be decontaminated by being relayed to depuration beds located in the area described below and delimited by the following grid references (include maps) or bearing the following lease numbers:

These depuration beds are in conformity with article 5 of the *Management of Contaminated Fisheries Regulations Enforcement and Compliance Policy for the Eastern NB Area*.

3. When dredge fishing, all fishing of contaminated oysters and relaying of these oysters to depuration beds must take place between _____ **and** _____ only. When fishing by hand, with hand tools or by rake, all fishing and relaying activities must take place between _____.
4. Licence holders shall notify the Licensing Service Centre of any change to their decontamination plan at least one week in advance. This notice may modify the areas or parts of areas to be harvested, the fishing period, the persons named in the licence, etc. DFO reserves the right to limit at any time the number of areas harvested and the number of harvesters.
5. Depuration beds shall be identified by orange buoys at each corner of each site. The lease number or licence number must be displayed on these buoys.
6. In order that they may be decontaminated, the oysters shall remain in the approved depuration beds for at least 30 consecutive days, in conformity with article 6 of the *Management of Contaminated Fisheries Regulations Enforcement and Compliance Policy for the Eastern NB Area*. After depuration, the bacteriological quality of the oysters must be such that no more than 230 faecal coliform are detected per 100g of meat.

LICENCE NO. RGPPC-ENB- -

7. The following persons may participate, **IN THE PRESENCE OF THE LICENCE HOLDER ONLY**, in the fishing and relaying activities described in this licence (**when fishing with a dredge, two helpers may be named in the licence who need not hold a commercial oyster fishing licence, and a maximum of two other persons may be named in the licence but must hold a such a licence; when fishing by hand, with hand tools or by rake, all persons fishing with you must be named in this licence and must hold a commercial oyster fishing licence**):

_____	Helper	FIN:
_____	Helper	FIN:
_____		FIN:
_____		FIN:

8. The persons named above and the holder of this licence are responsible, when in possession of contaminated oysters, for ensuring that the said oysters are not used for food purposes and are immediately transferred by the shortest possible route to the depuration bed. In cases where the contaminated oysters are transferred by land, the said transfer must be by the shortest possible route and each container of contaminated oysters must bear a label containing the following information: (a) identification of the contents as contaminated oysters; (b) the site where the contaminated oysters were harvested; and (c) the date they were harvested.
9. Fishing method authorized under this licence: **When fishing with a dredge, use of one (1) drag only per vessel is permitted. No other drag is permitted on board that vessel. The drag must have dimensions not wider than thirty-one (31) inches (outside measurement) and a depth not exceeding twenty-six (26) inches (outside measurement). You may also fish for oysters by hand, with hand tools or by rake.**
10. A copy of this licence shall be carried at all times by the licence holder and the persons named in the licence while engaged in any activity to which it relates, and shall be produced for inspection on the demand of a fishery officer.
11. A report on activities conducted under this licence shall be completed using the attached form and sent **NO LATER THAN AUGUST 15 _____** to the attention of _____, Chief, Resource Management, P.O. Box 3420, Tracadie-Sheila, N.B., E1X 1G5. **Non-compliance with this condition constitutes a violation of the licence conditions and may result in legal procedures.**
12. Records containing the information described in article 9 of the *Management of Contaminated Fisheries Regulations Enforcement and Compliance Policy for the Eastern New Brunswick Area* shall be completed and retained for a period of one (1) year by the holder of this licence. At the request of a fishery officer, these records shall be submitted to an identified DFO employee designated pursuant to section 61 of the *Fisheries Act*.
13. Non-compliance with any requirement of the *Management of Contaminated Fisheries Regulations Enforcement and Compliance Policy for the Eastern New Brunswick Area* constitutes a violation of the licence conditions and may result in legal procedures. All decisions of the Department are final.
14. This licence is valid from _____ to _____ inclusive.
15. The minimum size of the oysters you are permitted to fish, transport or have in your possession is **76 mm (3 inches)**.

LICENCE NO. RGPPC-ENB- -

16. Renewal of this licence must be approved by the Department of Fisheries and Oceans.
17. Non-compliance with any requirement of this licence constitutes a violation of the licence conditions and may result in legal procedures.

DECLARATION OF LICENCE HOLDER

I hereby undertake to comply with the conditions of the *Management of Contaminated Fisheries Regulations* (as at July 26, 1990), as described in the *Management of Contaminated Fisheries Regulations Enforcement and Compliance Policy for the Eastern New Brunswick Area*.

Licence Holder

Date

Departmental Officer

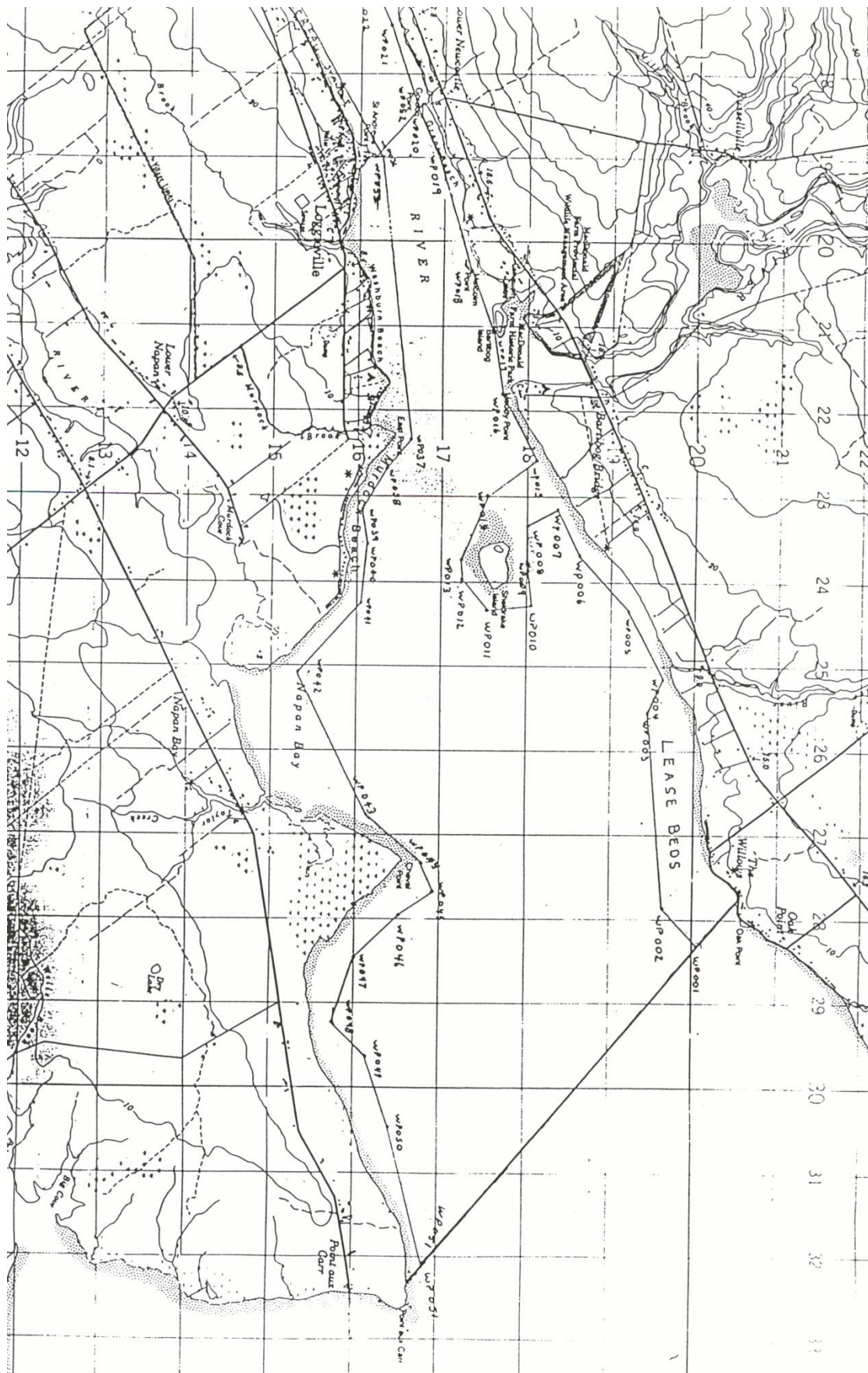
Date

ANNEX A / ANNEXE A

(example only)

ON MAP SUR CARTE	L.L North Shore L.L. Côte nord			UTM UTM	ON MAP SUR CARTE	L.L South Shore L.L. Côte sud			UTM UTM				
WP 001	47° 06'	720" N	5220095	65° 15'	760" W	328343	WP 053	47° 04'	169" N	5216199	65° 23'	056" W	318990
WP 002	47° 06'	490" N	5219682	65° 16'	139" W	327852	WP 036	47° 04'	514" N	5216283	65° 23'	062" W	318986
WP 003	47° 06'	341" N	5219473	65° 17'	947" W	325556	WP 037	47° 04'	761" N	5216640	65° 20'	403" W	322363
WP 004	47° 06'	416" N	5219624	65° 18'	251" W	325177	WP 038	47° 04'	602" N	5216334	65° 20'	143" W	322684
WP 005	47° 06'	199" N	5219246	65° 18'	906" W	324336	WP 039	47° 04'	469" N	5216074	65° 19'	757" W	323165
WP 006	47° 05'	856" N	5218380	65° 19'	429" W	323656	WP 040	47° 04'	505" N	5216129	65° 19'	465" W	323536
WP 007	47° 05'	713" N	5218380	65° 19'	803" W	323175	WP 041	47° 04'	481" N	5216063	65° 18'	886" W	324268
WP 008	47° 05'	516" N	5218009	65° 19'	649" W	323359	WP 042	47° 04'	098" N	5215328	65° 18'	212" W	325091
WP 009	47° 05'	527" N	5218018	65° 19'	335" W	323757	WP 043	47° 04'	554" N	5216125	65° 16'	905" W	326778
WP 010	47° 05'	557" N	5218058	65° 18'	913" W	324292	WP 044	47° 04'	923" N	5216792	65° 16'	451" W	327372
WP 011	47° 05'	295" N	5217570	65° 18'	863" W	324340	WP 045	47° 05'	005" N	5216936	65° 16'	229" W	327657
WP 012	47° 05'	133" N	5217281	65° 19'	152" W	323967	WP 04	47° 04'	910" N	5216756	65° 16'	151" W	327750
WP 013	47° 05'	120" N	5217265	65° 19'	354" W	323710	WP 046	47° 04'	798" N	5216544	65° 15'	989" W	327950
WP 014	47° 05'	264" N	5217552	65° 19'	922" W	323000	WP 047	47° 04'	516" N	5216006	65° 15'	558" W	328480
WP 015	47° 05'	566" N	5218124	65° 20'	258" W	322591	WP 048	47° 04'	410" N	5215787	65° 14'	942" W	329253
WP 016	47° 05'	330" N	5217710	65° 20'	873" W	321800	WP 049	47° 04'	613" N	5216151	65° 14'	659" W	329623

WP 017	47°	05'	262" N	5217606	WP 050	47°	04'	772" N	5216423
	65°	21'	430" W	321092		65°	14'	004" W	330460
WP 018	47°	05'	127" N	5217378	WP 051	47°	05'	032" N	5216856
	65°	22'	025" W	320332		65°	12'	663" W	332170
WP 019	47°	04'	878" N	5216959					
	65°	23'	106" W	318950					
WP 020	47°	04'	742" N	5216720					
	65°	23'	448" W	318510					
WP 052	47°	04'	745" N	5216730					
	65°	23'	543" W	318390					



APPENDIX 9: CONTAMINATED AREAS WHERE HARVESTING OF CONTAMINATED OYSTERS IS PERMITTED

- A. Lamèque Bay within a line drawn from grid reference 7509 9529 to grid reference 7620 9297, with the exception of Jean-Marie Brook within a line drawn from grid reference 7590 9507 to grid reference 7583 9525 and with the exception of the portion of shoreline and waters of Lamèque Bay within a radius of 450 metres of grid reference 7600 9420. Refer to map Caraquet 21P/15, 16 and 22A/1 and 2.
- B. Shippagan Harbour between a line drawn from grid reference 7100 9059 at Pointe à Bernache to grid reference 7269 9044 at Pointe à Peinture and a line drawn from grid reference 7340 8775 at Pointe Sauvage to grid reference 7378 8931 at Pointe aux Caribous. Refer to maps Tracadie 21P/10 and Caraquet 21P/15, 16 and 22 A/1 and 2.
- C. The shore of Lamèque Island (Campbells Point) within a line drawn from grid reference 8250 0265, 50 metres offshore, to grid reference 8255 0265, to grid reference 8245 0225, to grid reference 8225 0200, to shore at grid reference 8220 0200. Refer to map Caraquet 21P/15, 16 & 22A/1, 2.
- D. Waters of Grande Batture, near St. Cécile, within a line drawn from grid reference 7480 0200 to grid reference 7470 0205 to grid reference 7489 0230 to grid reference 7495 0222. Refer to map Caraquet 21/P15, 16 & 22A/1, 2.
- E. The portion of Shippagan Bay along the shore starting at high tide, 30 metres offshore, between grid reference 7269 9044 and grid reference 7473 9200. Refer to map Caraquet 21P/15, 16 & 22A/1, 2.
- F. Tracadie Bay and all waters emptying into the bay between a line drawn from grid reference 5728 6636 on McGraws Point to grid reference 5940 6629 on Tracadie Beach and a line drawn from grid reference 5885 6350 to grid reference 5885 6350 and a line drawn from grid reference 5878 6260 to grid reference 5895 6258. Refer to map Tracadie 21P/10.
- G. Caraquet Harbour within a line drawn from grid reference 5875 9600 to grid reference 6110 9675 and to grid reference 6125 9645 near Bas-Caraquet. Refer to map Caraquet 21P/15, 16 & 22A/1, 2.
- H. Tabusintac River within a line drawn from the Highway 11 bridge at grid reference 4815 4402 to grid reference 4810 4382.
- I. The waters of St-Simon Bay at a place known as Petit Passe within a line drawn from grid reference 6550 9525 on Pokesudie Island to grid reference 6520 9551 on Petite Ile, to the Highway 11 bridge at grid reference 6500 9580 and to grid reference 6512 9580. Refer to map Caraquet 21P/15, 16 & 22/A1,2.

- J. The foreshore and tidal waters of Caraquet Bay, 304.8 metres offshore from grid reference 5200 9495 to grid reference 5750 9550. Refer to maps Caraquet 21P/15, 16 & 22/A1,2 and Grande-Anse 21P/14.
- K. Pokemouche River including South Branch Pokemouche River and its tributaries within a line drawn from grid reference 6106 8310 to grid reference 6057 8272 on Pointe de Pré. Refer to map Tracadie 21P/10.
- L. Waters of Miramichi Bay between a line from Oak Point to Point aux Carr and another line from Gordon Point wharf to St. Andrews Point wharf.
- M. Waters of Black River and its tributaries within a line drawn from grid reference 3185 1122 to grid reference 3200 1110. Refer to map Chatham 21P/3.
- N. Waters of Bay-du-Vin River and its tributaries within a line drawn from grid reference 3757 1073 to grid reference 3742 1070. Refer to map Chatham 21P/3.
- O. Waters of Shediac River, Gallants Brook and Batemans Brook within a line drawn from grid reference 7895 2612 to grid reference 7940 2535. Refer to map 21-1/7, 21-1/2.
- P. Waters of St. Nicholas River south of a line drawn from grid reference 5243 6207 to grid reference 5354 6207 as indicated on map 21-I-10, NB5-030/4.
- Q. Scoudouc River upstream from the Highway 15 bridge. Refer to map 21-1/7, 21-1/2, NB-010/2.
- R. Shediac Bay and Lac des Boudreau inside a line drawn from grid reference 8410 2154, at the western extremity of Parlee beach, seaward to grid reference 8410 2185, thence to grid reference 8784 2149, and thence shoreward to grid reference 8775 2111 on Cap Bimet. Refer to maps Moncton 21-I/2 and Port Elgin 21-I/1.
- S. St. Charles River (Aldouane River) inside a line drawn from grid reference 5440 7610 to grid reference 5392 7555. Refer to map Richibucto 21-I/10.
- T. The portion of Buctouche Harbour, Kent County, New Brunswick, including the Buctouche, Little Buctouche and Black rivers, upstream from a line drawn from Jérôme Point at grid reference 7162 4945 to Dixon Point at grid reference 7196 4699. Refer to map Buctouche 21/17.
- U. The portion of Cocagne Harbour within a line drawn from grid reference 7585 3470 to grid reference 7677 3217 on Jim Longs Cape and to grid reference 7485 3135 to grid reference 7450 3185. Refer to map Buctouche 21/1-7.

APPENDIX 10: EXPERIMENTAL LICENCE TO FISH OYSTERS IN OPEN WATER USING A DRAG

PERMIS EXPÉRIMENTAL DE PÊCHE COMMERCIALE DES OYSTERS

EXPERIMENTAL COMMERCIAL OYSTER FISHING LICENCE

LICENCE NO. / No. du permis

Pursuant to Section 52 of the Fishery General Regulations, permission is hereby granted to _____, FIN: _____, using the vessel _____, VRN: _____ to engage in experimental fishing for oysters, subject to the following conditions:

While fishing under this licence, the requirements outlined in the following schedule will apply: HU-01-. The schedule must be attached to the licence.

1. The use of one drag only per vessel will be permitted. No other drag may be on board that vessel at any time;
2. The drag mentioned in item no. 1 must have dimensions not wider than 31 inches (outside measurement) and a depth not exceeding 26 inches (outside measurement);
3. The first area of dragging will be permitted on both sides of the Miramichi River channel (Grand Dune Bed), beginning at a point West of Whites Brook on the north side of the Miramichi River at coordinates (47° 07.09' N, 65° 15.57' W - Point "A" on attached map) as indicated by a fluorescent orange buoy set by a fishery officer, thence in a SSE direction, to a point at coordinates (47° 06.36' N, 65° 14.43' W - Point "D") as indicated by a fluorescent orange buoy set by a fishery officer, thence in a NE direction to a point at coordinates (47° 08.00' N, 65° 10.70' W - Point "C") as indicated by a fluorescent orange buoy set

En vertu de l'article 52 des Règlements de pêche (Disposition générales), une permission est accordée à _____, NIP: _____, avec le bateau _____, NEB: _____ à pratiquer la pêche des huîtres, sous réserve des conditions suivantes:

Durant la période d'application du présent permis, les exigences contenues dans l'annexe suivante s'appliquera: HU-01-. L'annexe doit être joint au permis.

1. L'utilisation d'une drague seulement par bateau, sera permise. Aucune autre drague ne sera permise à bord dudit bateau;
2. La drague mentionnée à l'item no. 1 devra avoir des dimensions ne dépassant pas 31 pouces de largeur (mesure extérieure) et ayant une profondeur ne dépassant pas 26 pouces (mesure extérieure);
3. Le premier secteur de dragage sera autorisé des deux côtés du chenal de la Rivière Miramichi (Banc de Grand Dune) débutant à un point situé à l'ouest du ruisseau Whites du côté nord de la rivière Miramichi aux coordonnées (47° 07.09' N, 65° 15.57' O - Point "A" sur la carte ci-jointe) tel qu'indiqué par la bouée orange fluorescente placée par un agent des pêches, de là dans une direction SSE à un point aux coordonnées (47° 06.36' N, 65° 14.43' O - Point "D") tel qu'indiqué par la bouée orange fluorescente placée par un agent des pêches, de là dans une direction NE à un point aux coordonnées (47° 08.00' N, 65° 10.70' O - Point "C")

by a fishery officer, thence to a NW direction to a point at coordinates (47° 08.20' N, 65° 12.75' W - Point "A") as indicated by a fluorescent orange buoy set by a fishery officer, thence to the first point at coordinates (47° 07.09' N, 65° 15.57' W - Point "A") (see attached map);

The second area of dragging will be permitted south of the Miramichi River's channel (Point aux Carr bed), beginning at coordinates (47° 06.36' N, 65° 14.43' W - Point "D") as indicated by a fluorescent orange buoy set by a fishery officer, thence to a SE direction to a point at coordinates (47° 04.95' N, 65° 11.67' W - Point "E"), as indicated by a fluorescent orange buoy set by a fishery officer, thence to a SW direction to a point at coordinates (47° 04.69' N, 65° 11.78' W - Point "F"), as indicated by a fluorescent orange buoy set by a fishery officer, thence to an Eastern direction to a point at coordinates (47° 04.87' N, 65° 10.50' W - Point "G"), as indicated by a fluorescent orange buoy set by a fishery officer, thence to a NE direction to a point at coordinates (47° 08.00' N, 65° 10.70' W - Point "C") as indicated by a fluorescent orange buoy set by a fishery officer, thence to a NW direction to a point at coordinates (47° 06.36' N, 65° 14.43' O - Point "D"). See the attached map;

tel qu'indiqué par la bouée orange fluorescente placée par un agent des pêches, de là dans une direction NO à un point aux coordonnées (47° 08.20' N, 65° 12.75' O - Point " A ") tel qu'indiqué par la bouée orange fluorescente placée par un agent des pêches, de là jusqu'au premier point aux coordonnées (47° 07.09' N, 65° 15.57' O - Point " A "),(voir carte ci-jointe);

Le deuxième secteur de dragage sera autorisé au sud du chenal de la rivière Miramichi (banc de Point aux Carr), à partir des coordonnées (47° 06.36' N, 65° 14.43' O - Point " D ") tel qu'indiqué par une bouée orange fluorescente placée par un agent des pêches, de là, dans une direction SE à un point aux coordonnées (47° 04.95' N, 65° 11.67' O - Point " E "), tel qu'indiqué par une bouée orange fluorescente placée par un agent des pêches, de là, dans une direction SO à un point aux coordonnées (47° 04.69' N, 65° 11.78' O -Point " F "), tel qu'indiqué par une bouée orange fluorescente placée par un agent des pêches, de là, dans une direction Est à un point aux coordonnées (47° 04.87' N, 65° 10.50' O - Point " G "), tel qu'indiqué par une bouée orange fluorescente placée par un agent des pêches, de là, dans un direction NE à un point aux coordonnées (47° 08.00' N, 65° 10.70' O - Point " C "), tel qu'indiqué par une bouée orange fluorescente placée par un agent des pêches, de là, dans un direction NO à un point aux coordonnées (47° 06.36' N, 65° 14.43' O - Point " D "). Voir la carte ci-jointe;

- | | |
|---|--|
| 4. Private leases are excluded from fishing; | 4. Les secteurs amodiés d'huîtres sont exclus à la pêche; |
| 5. The fishing period for Grand Dune Bed as described in the first paragraph of item 3, will start on Monday, October __, 200_ and end on Saturday, October __, 200_ both days inclusive. The fishing period for Point aux Carr Bed as described in the | 5. La période de pêche pour le banc Grand Dune tel que décrit au premier paragraphe de l'item 3, débutera lundi le __ octobre 200_ et prendra fin samedi le __ octobre 200_. (ces deux jours inclus). La période de pêche pour le banc Point aux Carr, tel |

second paragraph of item 3, will start on Monday, October __, 200_, and end on Saturday, November __, 200_, both days inclusive.

que décrit au deuxième paragraphe de l'item 3, débutera lundi le __ octobre 200_ et prendra fin samedi le __ novembre 200_ (ces deux jours inclus);

- | | |
|---|---|
| 6. One fishing trip per day, to be started and completed between 7:00 a.m. and 5:00 p.m., is allowed and the daily oyster catch limit allowed on board your boat and for sale will be 400 (four hundred) pounds ; | 6. Un voyage de pêche par jour, qui doit débuté et se terminer entre 7h et 17h, est autorisé et la prise maximale quotidienne qu'il vous est autorisée d'avoir à bord de votre bateau et de vendre sera de 400 (quatre cents) livres ; |
| 7. You are not permitted to have any other oysters on board during the dragging operation unless they are taken from the immediate area mentioned in these conditions; | 7. Aucune huître ne sera permise à bord du bateau à moins que celle-ci provient du secteur immédiat mentionné dans ces conditions; |
| 8. This exploratory licence is non-renewable and cannot be issued as a replacement licence. | 8. Ce permis de pêche exploratoire ne peut être renouvelé ni émis comme permis de remplacement. |
| 9. This exploratory licence is valid for the period of October __, 200_ to November __, 200_. This licence may be subjected to legal procedures, for non-compliance with the conditions described herein. This licence is also subject to Variations Orders that may be issued from time to time. | 9. Ce permis de pêche exploratoire est valable du __ octobre 200_ au __ novembre 200_. L'inobservation de n'importe laquelle des conditions énumérées dans le présent permis peut entraîner des poursuites judiciaires. De plus, ce permis est assujetti aux ordonnances de modification qui peuvent être émises au besoin. |

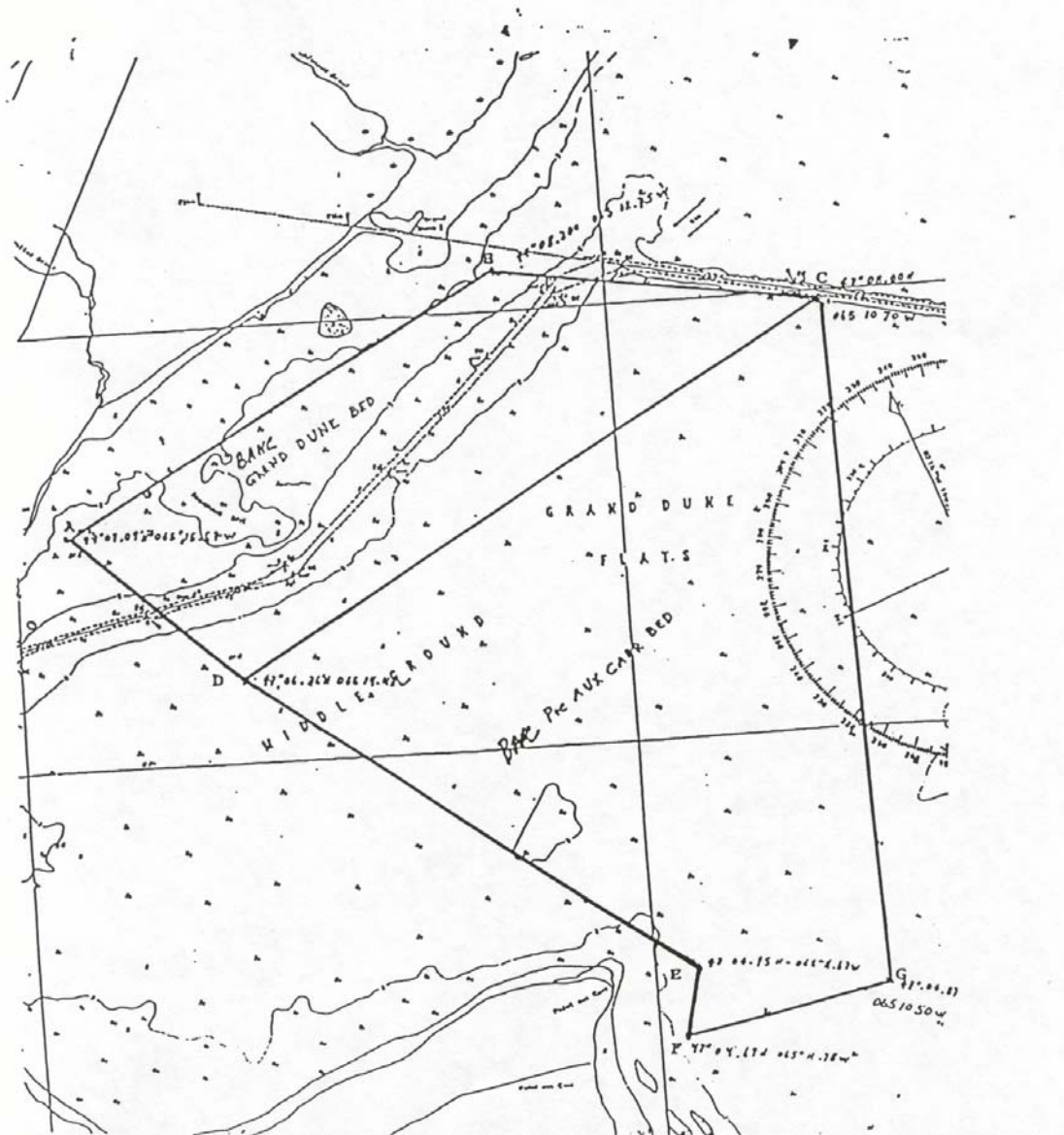
Signature (Fisherman/Pêcheur)

Signature (Authorized
Officer/Agent autorisé)

Date

(MAP - CARTE)

- (A) 47 07 09 N 065 15 57 W
- (B) 47 08 20 N 065 12 75 W
- (C) 47 08 00 N 065 10 70 W
- (D) 47 06 36 N 065 14 43 W
- (E) 47 04 95 N 065 11 67 W
- (F) 47 04 69 N 065 11 78 W
- (G) 47 04 87 N 065 10 50 W



SCHEDULE HU-01- DOCKSIDE MONITORING

- (A) The following information shall be communicated when at sea through a call to a local monitoring company recognized by the Department of Fisheries and Oceans (DFO), at least three (3) hours before arrival at the wharf, or any shorter period which may be arranged with the local monitoring company. This information must be provided when you are operating or fishing under this Schedule and when you enter a harbour for any reason.
- Estimated time of arrival at landing port;
 - Name of vessel;
 - Vessel Registration Number;
 - Landing port and site; and
 - If available, the time of landing.
- (B) The landing may only be made (a) after you have received permission from a weighmaster (dockside observer) who will monitor the landing of fish and verify the weight and species of the fish. In addition, you may be asked to have your catches sampled by a weighmaster (dockside observer) designated under section 39 of the Fishery (General) Regulations to conduct biological analyses and take samples.
- (C) When you are fishing at sea, you are required to keep a true and up-to-date report of your fishing activities and catches in the attached document entitled Log Book. The Log Book must be completed at the end of each day and before entering the harbour. In addition, you must forward a copy of the duly completed document(s) to the Licensing Service Centre, Department of Fisheries and Oceans, P.O. Box 3420, Main Station, Tracadie-Sheila, NB, E1X 1G5, prior to November __, 200_.
- (D) You are authorized to land your catches at the Burnt Church or Neguac wharves only.

THIS SCHEDULE IS PART OF YOUR LICENCE AND MUST BE ATTACHED TO YOUR COMMERCIAL FISHING LICENCE.

LOG BOOK/JOURNAL DE BORD

GRAND DUNE OYSTER BED/SECTEUR D'HUÎTRES DE GRAND DUNE

NB: You must provide a copy of this completed log book to the Licensing Service Centre, Department of Fisheries and Oceans, P.O. Box 3420, Main Station, Tracadie-Sheila, NB, E1X 1G5 prior to November __, 200__. / Vous devez faire parvenir une copie de ce journal de bord dûment rempli au Centre de délivrance des licences, Ministère des Pêches et des Océans, C.P. 3420, Succ. Bureau Chef, Tracadie-Sheila, NB, E1X 1G5, avant le __ novembre 200__.

DATE	HOURS OF DRAGGING/ HEURES DE DRAGAGE	# OF POUNDS ESTIMATED/ NO. DE LIVRES ESTIMÉES	# OF POUNDS WEIGHED/NO. DE LIVRES PESÉES	Weighmaster's Signature / Signature de l'observateur
__ Oct. 200__				
__ Oct. 200__				
__ Oct. 200__				
__ Oct. 200__				
__ Oct. 200__				
__ Oct. 200__				

 Fisherman's Signature/
 Signature du pêcheur

 FIN/NIP

LOG BOOK/JOURNAL DE BORD

POINT AUX CARR OYSTER BED/SECTEUR D'HUÎTRES DE POINT AUX CARR

NB: You must provide a copy of this completed log book to the Licensing Service Centre, Department of Fisheries and Oceans, P.O. Box 3420, Main Station, Tracadie-Sheila, NB, E1X 1G5 prior to November __, 200__. / Vous devez faire parvenir une copie de ce journal de bord dûment rempli au Centre de délivrance des licences, Ministère des Pêches et des Océans, C.P. 3420, Succ. Bureau Chef, Tracadie-Sheila, NB, E1X 1G5, avant le __ novembre 200__.

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__ Nov. 200__				
__ Nov. 200__				
__ Nov. 200__				
__ Nov. 200__				
__ Nov. 200__				
__ Nov. 200__				

Fisherman's Signature/
Signature du pêcheur

FIN/NIP

APPENDIX 11 COCKTAIL OYSTER MARKETING POLICY

POLICY RESPECTING THE HARVEST AND MARKETING OF “COCKTAIL” OYSTERS BY LICENSED AQUACULTURISTS IN NEW BRUNSWICK, NOVA SCOTIA AND PRINCE EDWARD ISLAND

INTRODUCTION

This policy was developed as a result of requests from aquaculturists¹ in New Brunswick and Nova Scotia to be permitted to harvest and market undersized "cocktail" oysters² from licensed shellfish leases. This policy was developed by the Department of Fisheries and Oceans (DFO) in consultation with the provinces involved. This policy takes into consideration health and safety concerns, enforcement requirements to ensure protection of commercial oyster fisheries and the need to harmonize implementation among the three provinces and the various areas within DFO's Maritimes Region. In New Brunswick, DFO and the province conducted a pilot project that permitted the harvest and marketing of cocktail oysters from selected oyster leases under strict guidelines during 1993 and 1994. This policy draws heavily on the experience gained in this pilot project.

POLICY

The policy applies in New Brunswick, Nova Scotia and Prince Edward Island unless otherwise indicated.

- 1) **The harvest and marketing of cocktail oysters will be permitted** from selected, licensed shellfish leases under variation orders issued by DFO. A variation order will permit the harvest and subsequent marketing of oysters of any size from a specific site during the periods specified in the order. All rules governing the program will be articulated in both an attachment to the variation order and the provincial (or federal) Aquaculture Lease Agreement of the proponent.
- 2) The marketing of cocktail oysters will be subject to the health and safety requirements of the *Fish Inspection Act* and Regulations.
- 3) All cocktail oysters must be processed in provincially licensed and registered plants when marketed in the province of origin. If being exported outside the province of origin, cocktail oysters must be processed in federally registered plants that have valid Quality Management Programs (QMP).
- 4) Licensees for the "Cocktail" Oyster Program will be selected based on the following criteria:
 - a) Only those aquaculturists not holding commercial oyster licences or licences issued under the **Management of Contaminated Fisheries Regulations** (e.g., public bed relay or harvesting permits) will be eligible. Submission of a written application to the program will signify a proponent's desire to terminate any commercial licences if and when he/she is accepted into the program.

Note: This criterion also applies to any helpers who will be engaged in the program.

b) Aquaculturists engaged in this program will be permitted to hold oyster replanting licences under Section 29 of the Maritime Provinces Fishery Regulations only under strict guidelines administered by the DFO Area Office. These licences **cannot** be valid during the period that the harvesting and marketing of cocktail oysters is permitted.

c) Only those aquaculturists who comply with the terms and conditions set out in federal and provincial fisheries legislation and policy will be eligible.

Note: If there are any inconsistencies between federal and provincial legislation or policy relating to this program, federal legislation or policy will prevail.

d) Only those aquaculturists who can establish that they are the holders of licensed and surveyed shellfish leases will be eligible.

Note: This is necessary to ensure that the fishing of cocktail oysters is conducted on private leases and not on public oyster beds. Developmental leases recognized by provincial leasing authorities are eligible for this program. The local variation order requires that geographic co-ordinates (grid references or latitude and longitude) be available for all points of the lease to properly describe the site. These must be available from the leasing authority.

IMPLEMENTATION

- 1) a) Cocktail oysters being shipped to market **must** be contained in appropriately sized containers and tagged so they will be tamper-proof while en route to buyers. A record of product and amount **must** accompany all shipments and be maintained by the processor in a format that can be audited by the authorities. The units or volume of all transactions (sales and purchases) must be in a uniform measure and recorded so that they can be audited against growers' sales records to the processors.
 - b) Under the program, the same uniform measure (units or volume) records of all shipments and sales to processors must be maintained by the aquaculturist in a format that can be audited by the authorities.
- 2) Any aquaculturist who fails to abide by the conditions of this policy or the terms and conditions of any federal or provincial licence or lease respecting the harvest and marketing of cocktail oysters will have their variation orders immediately revoked. This will result in the termination of the harvesting and marketing of cocktail oysters under this policy.
- 3) Any aquaculturist who accepts oysters less than 76 mm long onto their site, except in accordance with this policy, will have their variation orders immediately revoked.
- 4) Any aquaculturist who violates any provision of this policy or the conditions of any federal or provincial licence or lease may be subject to the loss or suspension of their provincial or federal shellfish licence or lease.
- 5) Any processor who fails to abide by the conditions of this policy or the terms and conditions of any federal or provincial licence or lease respecting the harvest and marketing of cocktail oysters will have their variation orders immediately revoked. This will result in the termination of the harvesting and marketing of cocktail oysters under this policy.
- 6) The licensing authorities will carry out an immediate review if a processor is suspected of violating any provision of this policy or the conditions of any federal or provincial

- 7) Processors who must "hold" oysters outside of their physical processing facility on open water shellfish leases **must**, as part of the program, identify the licensed and surveyed leases that will be used only for holding cocktail oyster product. Other species may be held on the same lease, but must be identified in the application for the program.
Note: No other oysters originating from the public or leasehold commercial fishery can be placed or held on the leases identified as part of the program.

GENERAL PROCEDURES

- 1) Any oyster aquaculturists desiring to become involved in the "Cocktail" Oyster Program must request permission to harvest and market cocktail oysters from the DFO Regional Aquaculture Co-ordination Office in Halifax or Moncton by submitting a completed and signed application. In their applications, aquaculturists must be prepared to identify all the information requested as part of the application, including the federally or provincially registered plant that will be processing or exporting the oysters.
- 2) DFO will investigate, review and vet the request to determine whether applicants meet the criteria for inclusion in the program.
- 3) After a thorough review of the application with the provinces, the DFO Regional Aquaculture Co-ordination Office will inform applicants, in writing, whether they meet the criteria established in this policy.
- 4) The provinces **must recommend** approval of applications for DFO to issue a variation order permitting cocktail oysters to be harvested from the specific lease and processed through the appropriate facility.
- 5) The following information must be provided with the application for a variation order: (a) the name of the aquaculturist; (b) the location of the lease (must include either grid references or latitude and longitude for all points of the lease); (c) the period requested to harvest cocktail oysters; (d) the source of the seed that will be used by the aquaculturist as part of the program; (e) the name of the processing facility that will be shipping the product to the buyers/market; (f) a list of all staff (helpers) who will be engaged or employed by the applicant; (g) copies of the tamper-proof containers and labels that will be used by the aquaculturist and buyer; and (h) a copy of the records and accounting procedure that will be used by the aquaculturist and the purchaser to document the product from harvest site to market.
- 6) Current lists of participants **must** be maintained by DFO and made available to those fishery officers and inspection officers involved with the enforcement of this policy and program.
- 7) Oyster aquaculturists participating in the "Cocktail" Oyster Program must grow their own oysters from spat³ or seed³ that is either collected on site or at off site areas which are defined for spat collection in order to avoid user-group conflicts, if required. They can also be purchased from a duly registered seed and spat supplier.⁴ Aquaculturists must be prepared to specify, with supporting documentation, how and where they intend to procure seed and spat for grow-out, and to maintain an inventory.

DEFINITIONS

1. Aquaculturists - holders of a shellfish lease in the provinces of New Brunswick, Nova Scotia or Prince Edward Island who grow their own oysters from spat or seed collected on site or off site, or purchased from a registered seed supplier or hatchery.
2. “Cocktail’ oysters - oysters less than 76 mm (3 inches) long.
3. Seed or spat oysters - oysters less than 51 mm (2 inches) long. For seed oysters purchased as part of this program that are longer than 51 mm, aquaculturists will require permission from DFO before any sales transaction or the movement of the seed between vendor and purchaser.
4. Suppliers of seed for the program must be registered with DFO and provincial authorities as seed/spat vendors, and must clearly identify their seed-holding sites or leases involved in the program. Hatcheries supplying seed for the program must hold a certificate of registration issued by their province.

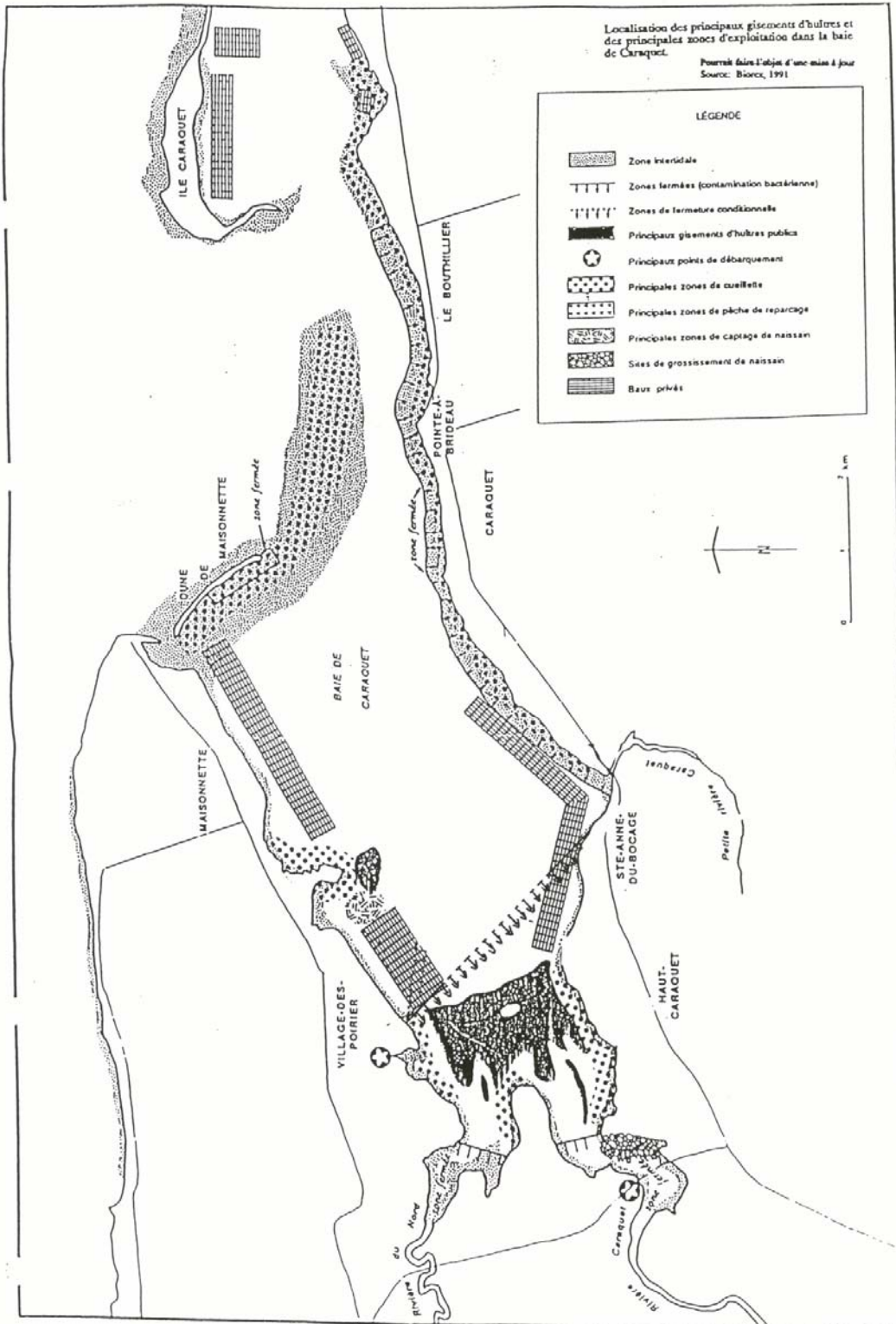
APPENDIX 12: SPAT COLLECTION PERMIT

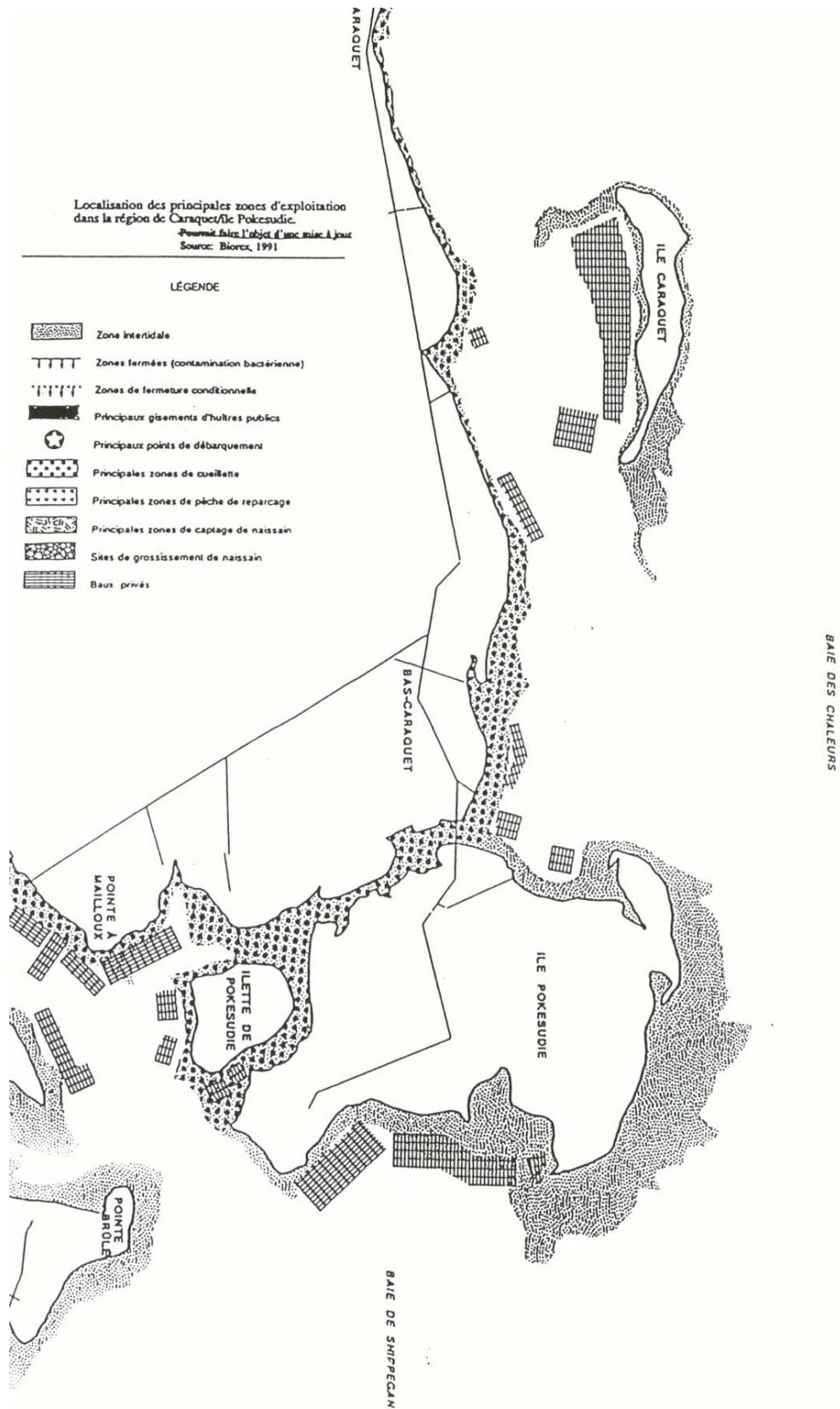


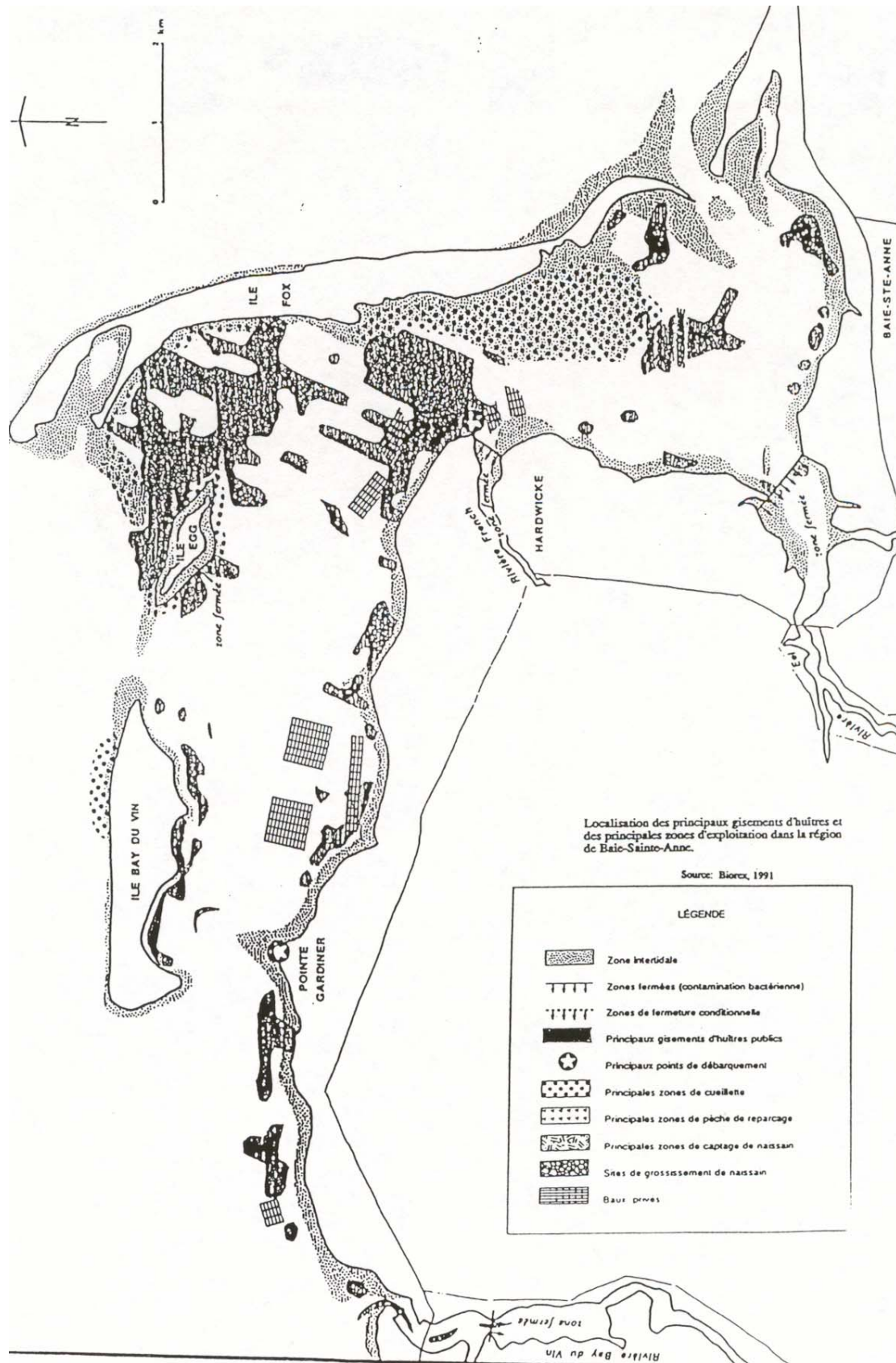
Fisheries and Oceans / Pêches et Océans Canada
 Gulf Fisheries Management Region / Région de gestion des pêches du Golfe
 Eastern NB Area / Secteur Est du NB

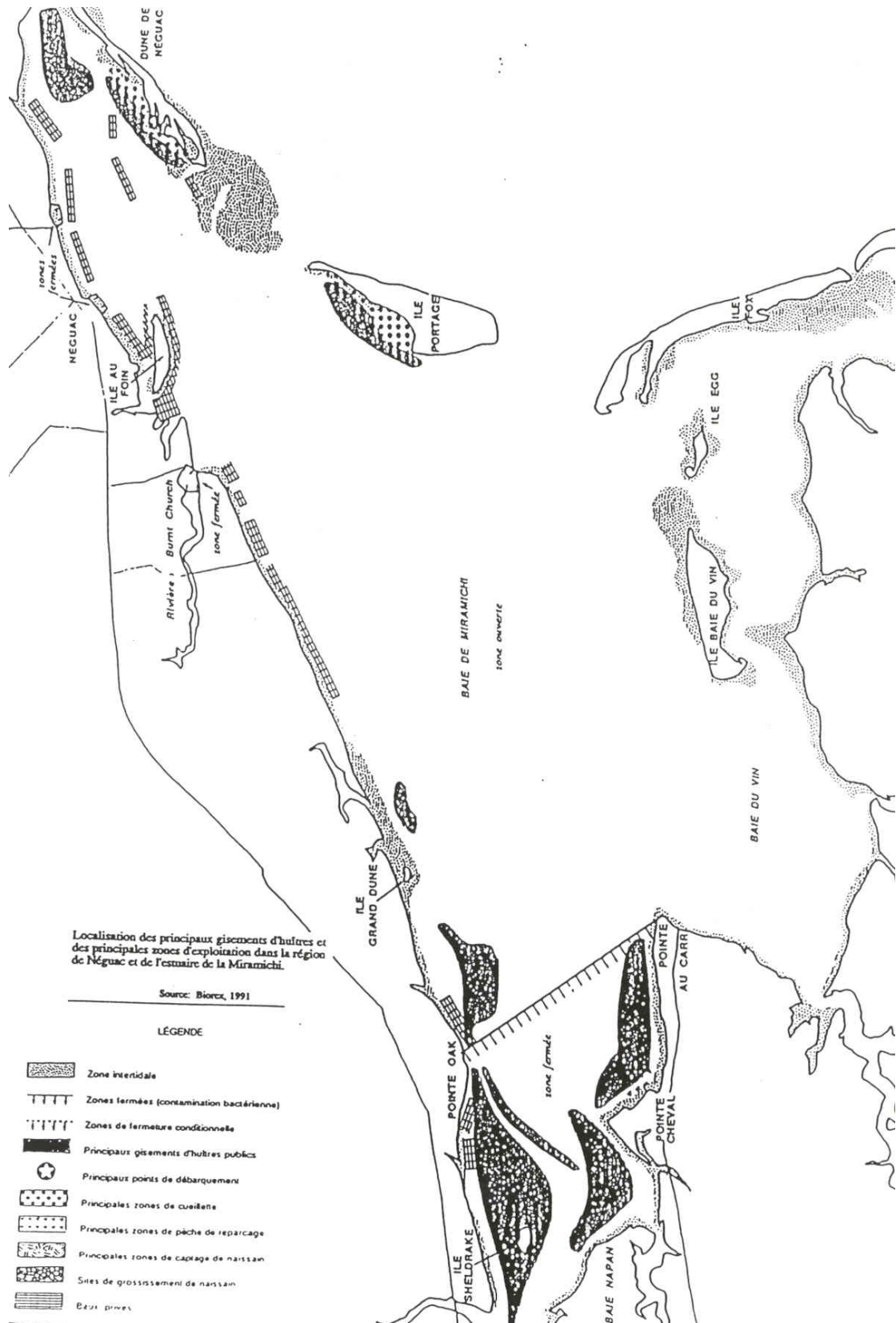
PERMIS No.00-_____ POUR LA COLLECTE DE NAISSAINS	SPAT COLLECTION LICENCE No.00-_____
1. En vertu de l'article 52 du <i>Règlement de pêche (général)</i> , _____ est par la présente autorisé(e) à pêcher des naissains de _____ en vue de les transplanter dans un milieu favorisant leur croissance, leur condition ou leur accessibilité.	1. Pursuant to Section 52 of the <i>Fishery (General) Regulations</i> , permission is hereby granted to _____ to fish _____ spat for the purpose of relocating them to improve their growth, condition or accessibility.
2. Méthode autorisée pour la collecte: _____	2. Authorized spat collection method: _____
3. Nombre d'unités de collecteurs à être utilisé: _____	3. Number of collector units to be used: _____
4. Emplacement où les activités de collecte se dérouleront: _____ _____ _____ _____ _____ _____	4. Location where spat collection activities will be held: _____ _____ _____ _____ _____ _____
5. Numéro(s) d'identification du(des) bail(baux) où seront transplantés les naissains: _____ _____	5. Identification number(s) of lease(s) where spat will be relocated: _____ _____
6. Le présent permis est valide du _____ au _____, 19____.	6. This licence is valid from _____ to _____, 19____.

APPENDIX 13: MAPS OF MAIN GROWING AREAS









APPENDIX 14: COMMERCIAL OYSTER FISHERY LICENSING POLICY FOR THE GULF REGION

- No new commercial oyster fishing licence may be issued.
- Replacement licences may be issued:
from coastal and core fishers to other coastal or core fishers and to certain new entrants (all licences must be replaced).
- To qualify as a new entrant and obtain a replacement oyster fishing licence, an individual must:
 1. have fished commercially for at least five weeks in each of the last two years;
 2. have been registered as a commercial fisherman in each of the last two years;
 3. be recognized in the local community as a commercial fisherman.
- When a replacement licence is issued, the conditions of the replacement licence shall be the same as the conditions of the licence replaced.

APPENDIX 15: REGULATIONS GOVERNING THE COMMERCIAL OYSTER FISHERY IN THE EASTERN NEW BRUNSWICK AREA

The following sections are from various provincial and federal regulations and are subject to change without notice.

The Department of Fisheries and Oceans assumes no responsibility for the accuracy or reliability of the material reproduced from legislative documents within federal jurisdiction that is appended to this plan. These documents have been prepared for convenience of reference only and have no official sanction. For all purposes of interpreting and applying the law, readers should consult:

- (a) the Acts as passed by Parliament, which are published in the "Assented to" Acts version, Part III of the Canada Gazette and the annual Statutes of Canada, and
- (b) the regulations, as registered by the Clerk of the Privy Council and published in Part II of the Canada Gazette.

- No person shall fish for or catch or retain any fish unless the person is authorized to do so under the authority of a licence issued for the purpose, the person holds a fisher's registration card, and where a vessel is used in fishing, a vessel registration card has been issued in respect of that vessel. (s. 4(1), *Maritime Provinces Fishery Regulations*)
- Every holder of a licence or fisher's registration card shall carry it at all times while engaged in any activity to which it relates and shall produce it on the demand of a fishery officer or fishery guardian. (s. 11, *Fishery (General) Regulations*)
- The operator of a vessel in respect of which a vessel registration card has been issued shall have the vessel registration card and the licence authorizing the use of the vessel on board the vessel whenever the vessel is engaged as a fishing vessel and shall produce them on the demand of a fishery officer or fishery guardian. (s. 12, *Fishery (General) Regulations*)
- No person shall operate or cause to be operated a registered vessel on which the vessel registration number is not displayed in accordance with the requirements. (s. 26, *Fishery (General) Regulations*)
- No person carrying out any activity under the authority of a licence shall contravene or fail to comply with any condition of the licence. (s. 22(7), *Fishery (General) Regulations*)
- No person shall fish for oysters in a public oyster-fishing area, except with tongs and rakes that are operated by hand without mechanical assistance. (s. 56(b) *Maritime Provinces Fishery Regulations*)
- No person shall fish for oysters from sunset to sunrise from Monday to Saturday and all day Sunday. (s. 57, *Maritime Provinces Fishery Regulations*)

- No person shall catch and retain or possess an oyster that is less than 76 mm. in length (s. 58, *Maritime Provinces Fishery Regulations*). (There is no minimum size for commercial fishing on private oyster leases whose leaseholders are participants in the Cocktail Oyster Program.)

**APPENDIX 16: MANAGEMENT OF CONTAMINATED FISHERIES
REGULATIONS**

FISHERIES ACT

**Management of Contaminated Fisheries Regulations
(SOR/90-351)**

P.C. 1990-1121 14 June, 1990

His Excellency the Governor General in Council, on the recommendation of the Minister of Fisheries and Oceans, pursuant to sections 8 and 43 of the Fisheries Act, is pleased hereby to revoke the Sanitary Control of Shellfish Fisheries Regulations, C.R.C., c. 832, and to make the annexed Regulations respecting the management of contaminated fisheries, in substitution therefor, effective October 1, 1990.

**REGULATIONS RESPECTING THE MANAGEMENT OF CONTAMINATED
FISHERIES**

SHORT TITLE

1. These Regulations may be cited as the *Management of Contaminated Fisheries Regulations*.

INTERPRETATION

2. In these Regulations,

"contaminated", with respect to fish, means fish in or on which bacteria, toxins, chemical compounds or other substances are present to a degree that may constitute a danger to public health; (*contaminÉ*)

"Regional Director General" means the Director General of the Department of Fisheries and Oceans for the Pacific Region, the Central and Arctic Region, the Quebec Region, the Gulf Region, the Scotia-Fundy Region or the Newfoundland Region. (*directeur gÉnÉral rÉgional*)

PROHIBITION ORDER

3. (1) Where a Regional Director General has reason to believe that fish of any species in any area are contaminated, the Regional Director General may issue an order prohibiting fishing in that area for that species.

(2) Notwithstanding any other regulations made under the *Fisheries Act*, where a Regional Director General issues an order under subsection (1) in respect of an area, no person shall, in that area, fish for or catch and retain any species of fish specified in the order unless

(a) the person is the holder of a licence issued under subsection 4(1) and is carrying that licence; or

(b) the person is named in a licence issued under subsection 4(1) and is carrying a copy of that licence.

LICENCE

4. (1) Subject to subsection (2), on application and payment by a person of the appropriate fee set out in the table to this subsection, the Minister may issue the person a licence authorizing the person and any other person named in the licence to fish in any area in respect of which an order is issued under subsection 3(1), for any species specified in that order.

TABLE

Item	Column I Licence	Column II Fee
1.	Fish for the purpose of scientific investigation	\$100
2.	Fish for food purposes	\$100, plus \$20 for each person named in the licence other than the holder of the licence
3.	Fish for the purpose of obtaining bait	\$100

(2) Where a person wishes to obtain a licence to fish for food purposes, the person shall submit to the Minister a decontamination plan that satisfies the Minister that the fish will be decontaminated before being used for human consumption. SOR/94-652, s. 1.

5. No person who catches and retains

(a) fish under a licence to fish for the purpose of scientific investigation shall use the fish for any purpose other than scientific investigation;

(b) fish under a licence to fish for food purposes shall handle the fish except in accordance with the decontamination plan submitted under subsection 4(2) in connection with the licence; or

(c) fish under a licence to fish for the purpose of obtaining bait shall use the fish for any purpose other than bait. SOR/94-652, s. 2.

APPENDIX 17: SCIENTIFIC AND TECHNICAL PROJECTS

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en préparation:

Ouellette,C., A. D. Boghen, S.C.Courtenay and A. St-Hilaire et al. (in prep...2001).
Influence of peat substrate on the distribution and behavior patterns of the sand
shrimp Crangon septemspinosus under experimental conditions.

Ouellette,C., S.C.Courtenay, A. D. Boghen and A. St-Hilaire et al. (in prep...2001).
Influence of peat substrate on an estuarine ecosystem using the sand shrimp Crangon
septemspinosus as a bioindicator.

S.C.Courtenay et al.. (in prep...2001). Influence of peat substrate on finfish and
bivavles population in an estuarine ecosystem.....

APPENDIX 19: MANAGEMENT PLAN EVALUATION CRITERIA

The criteria in evaluating the management plan are:

1. actual landing data obtained for the commercial fishery
2. clientele satisfaction achieved
3. harvesting level maintained
4. industry feedback
5. prompt decision making
6. communications with the industry
7. intergovernmental relations
8. level of acceptance and compliance with management plan

APPENDIX 20: CONSERVATION AND PROTECTION PLAN EVALUATION CRITERIA

The conservation and protection plan evaluation criteria quantify the activities of fishery officers in the following regards:

1. number of vessel inspections at wharf / landing site
2. number of vessel boardings at sea
3. number of fishing gear inspections at sea
4. number of fishing gear inspections at wharf / landing site
5. number of patrols of closed areas
6. number of monitorings dockside or at the water's edge
7. number of offences
8. number of warnings
9. number of investigations
10. number of surveillances
11. number of boat patrols / number of hours at sea
12. number of joint patrols
13. number of hours of intervention by fishery officers
14. costs in wages, overtime, operations and maintenance

APPENDIX 21: NOTICE TO FISHERS

TERMS OF 2001-2006 MANAGEMENT PLAN FOR OYSTER FISHERY – EASTERN NEW BRUNSWICK AREA

TRACADIE-SHEILA - The Department of Fisheries and Oceans today released the integrated oyster fishery management plan for the Eastern New Brunswick Area. This five-year management plan covers oyster fishing in the coastal and inland waters of New Brunswick for the period of 2001 to 2006. It is to be implemented jointly with the annual update, in which certain management measures such as areas, fishing seasons and catch limits may be adjusted to on the basis of conservation standards.

The integrated management plan has an ecosystem-based approach, in accordance with the new *Oceans Act*. The plan lists thirteen issues relevant to management of this resource. Starting in 2001, a log book will be mandatory; this should allow for better management, since the statistics gathered will be more complete.

In the Eastern NB Area there are 1593 holders of commercial oyster fishing licences, who use hand tools and dredges. According to reported statistics, from 1993 to 1998 nearly 3,000 metric tons of oysters were landed, at a landed value of approximately \$5.5 million.

Oyster fishers, their representatives and other groups sit on the Oyster Fishery Advisory Committee for the Eastern N.B Area. The integrated management plan released today is the product of the committee's deliberations on the conservation and long-term sustainability of this fisheries resource.

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