Georges Bank--Common Ground Or Continued Battleground--Comparative Marine Resource Management and Environmental Assessment in the United States and Canada

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The controversies between the United States and Canada concerning boundaries, fish, and transboundary environmental effects of energy development are only the most recent in two centuries of conflicts in the Gulf of Maine-Georges Bank region. Current environmental problems, however, seem to be straining the normally congenial relations between the two countries. As an initial step in assessing management options for the area, this Article presents a comparative analysis of environmental assessment and the marine fisheries management and outer continental shelf development regimes of the United States and Canada. Finally, prospects for the future of cooperative management attempts and initial recommendations are addressed.

INTRODUCTION

The Gulf of Maine-Georges Bank region is an area of great economic importance for both the United States and Canadian fishing industries and may be the site of major oil and gas reserves. In 1977 the problems of competitive fishing and conflicting continental shelf
claims in the region were exacerbated by the extension of overlapping 200-mile fishing zones by both countries. After negotiations to delineate a boundary failed, the dispute was submitted to a Special Chamber of the International Court of Justice (ICJ). The Special Chamber was asked to establish a single maritime boundary to serve as both a continental shelf boundary for oil development and as a water column boundary for fisheries management. Attorneys, scholars, and scientists from both the United States and Canada spent several years compiling evidence and developing arguments concerning the location of the offshore boundary between the two countries in the Gulf of Maine-Georges Bank region. Every aspect of the area's geographic, geological, geomorphological, zoological, and economic history was intensively studied. On October 12, 1984, the Special Chamber of the ICJ reported its decision on the boundary line, but the resource management problems that precipitated the dispute persist.

Drawing a line on the water is but a starting point in resolving the conflicts that have arisen in the Gulf of Maine-Georges Bank area. An established jurisdictional line between the two countries addresses only the fundamental question of sovereignty over certain ocean areas. A boundary line does not and cannot address the most important issues: 1) management of transboundary resources; and 2) transboundary effects of resource development. Arguably, transboundary resources, such as fisheries or frontier oil reserves, can be most efficiently exploited or conserved through joint management. Unfortunately, no mechanisms for joint management currently ex-

2. Canada first issued permits for oil exploration on Georges Bank in 1964. The claim to jurisdiction was based on an equidistance boundary delimitation through the Gulf of Maine and Georges Bank. The United States did not formally protest the issuance of permits or the boundary claim until late 1969. In 1970, the two countries began negotiations on delimitation of a continental shelf boundary, but no progress had been made by the time the 200 mile fishery jurisdiction extensions were imminent. See generally Swan, supra note 1; Feldman & Colson, The Maritime Boundaries of the United States, 75 Am. J. Int'l L. 729, 754-53 (1981); Canadian Dep't of External Affairs, Press Release, Canada's View on the Gulf of Maine/Georges Bank Boundary Line (June 10, 1977) [hereinafter cited as Canadian Press Release].


5. Boundary Treaty, supra note 4, art. 2.

In areas of semi-enclosed seas such as the Gulf of Maine and Canada's Bay of Fundy, even clearly local ocean and coastal management decisions can have transnational environmental and economic effects that should be considered. A study of the options for management in the area is needed.

The Gulf of Maine delimitation case may have compounded management problems by placing the two countries in an adversarial position. On the other hand, a by-product of the case, the compilation of scientific and economic data for the Gulf of Maine-Georges Bank area, is of great potential value for management in the future. Seldom have managers or negotiators had access to such an exhaustive data base to guide decisionmaking. This unusual opportunity should not be lost.

A first step toward a reasoned management approach for the area must include a comparative legal analysis of each country's current resource management regime to determine the possible mechanisms for, or impediments to, future management schemes. This Article examines the United States and Canadian legal frameworks for marine resource management in the area of the Bay of Fundy, Gulf of Maine, and Georges Bank. The analysis focuses on fisheries management, outer continental shelf (OCS) development, and environmental assessment.

**BACKGROUND**

Since the end of the American Revolution, marine boundaries in the northeast have been a source of contention between the United States and Canada. For example, issues involving navigational channels, fishing rights, and ownership of islands have triggered much controversy.

The first boundary resolution in the area was negotiated by Great Britain and the United States in 1783. The Paris Peace Treaty of

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7. The United States and Canada originally negotiated a treaty for joint fisheries management as well as a treaty to submit the boundary determination to third party settlement. The fisheries agreement drew protest from New England fishermen and congressmen, and was eventually withdrawn from the Senate by President Reagan in March 1981. See infra notes 60-70 and accompanying text; Feldman & Colson, supra note 2, at 760-61; Emanuelli, La Delimitation des Espaces Maritimes entre le Canada et les Etats-Unis dans le Golfe du Maine, 28 McGill L.J. 335, 349-52 (1983).

8. See generally Comment, The United States and Canada in Passamaquoddy Bay: Internal Waters and the Right of Passage to a Foreign Port, 4 Syracuse J. Int'l. & Comp. L. 167, 171-75 (1976).

9. Id. at 171.
1783\textsuperscript{10} gave to the United States all islands in Passamaquoddy Bay within twenty leagues of the coast, except for those islands historically belonging to Nova Scotia.\textsuperscript{11} Because the islands that belonged to Nova Scotia were not identified, controversy continued over the precise location of the boundary. The United States and Great Britain concluded the War of 1812 by signing the Treaty of Ghent.\textsuperscript{12} This treaty provided for two commissioners, one appointed by each party, to determine the ownership of islands, and therefore the boundary in Passamaquoddy Bay.\textsuperscript{13} Only the three westernmost islands—Moose Island, Dudley Island, and Fredrick Island—were found to belong to the United States; the other disputed islands were found to be historically a part of the province of Nova Scotia.\textsuperscript{14}

The Passamaquoddy Bay boundary was more precisely defined, and a major portion of the territorial sea boundary between the United States and Canada established, by treaties in 1908,\textsuperscript{15} 1910,\textsuperscript{16} and 1925.\textsuperscript{17} As a result of these treaties, the Passamaquoddy Bay boundary line currently runs through the middle of Grand Manan Channel, terminating approximately seven miles northwest of the Canadian island of Grand Manan.\textsuperscript{18} The ownership of two small islands located outside of Passamaquoddy Bay and south of Grand Manan Island—Machias Seal Island and North Rock—is still disputed.\textsuperscript{19}

The fact that the United States and Canada each claim a different breadth of territorial sea can only add to the confusion surrounding jurisdiction and boundaries. The United States claims a three-mile territorial sea.\textsuperscript{20} In 1970, Canada extended its territorial sea boundary from three to twelve miles.\textsuperscript{21} Although international law does not

\begin{itemize}
\item\textsuperscript{10} Treaty of Paris, Sept. 3, 1783, United States-Great Britain, 8 Stat. 80, T.S. No. 2.
\item\textsuperscript{11} Id. art. 2.
\item\textsuperscript{12} Treaty of Ghent, Dec. 24, 1814, United States-Great Britain, 8 Stat. 218, T.S. No. 109.
\item\textsuperscript{13} Id. art. 4.
\item\textsuperscript{14} See I J. Moore, History and Digest of International Arbitrations to Which the United States Has Been a Party, 61-62 (1898); I Malloy, Treaties, Conventions, International Acts, Protocols and Agreements Between the United States of American and Other Powers 1776-1909 (1910). See generally Comment, supra note 8, at 172-74.
\item\textsuperscript{15} Treaty Concerning the Canadian International Boundary, Apr. 11, 1908, United States-Great Britain, 35 Stat. 2003, T.S. No. 497.
\item\textsuperscript{16} Treaty concerning the Boundary Line in Passamaquoddy Bay, May 21, 1910, United States-Great Britain, 36 Stat. 2477, T.S. No. 551.
\item\textsuperscript{17} Treaty in Respect of the Boundary between the United States and Canada, Feb. 24, 1925, United States-Canada, 44 Stat. 2102, T.S. No. 720.
\item\textsuperscript{18} See Emanuelli, supra note 7, at 342 n.37.
\item\textsuperscript{19} See generally id. at 342-48.
\item\textsuperscript{20} Feldman & Colson, supra note 2, at 730.
\end{itemize}
mandate any specific breadth of territorial sea, both country’s claims are clearly within the bounds of international custom. The 1958 Convention on the Territorial Sea and Contiguous Zone\textsuperscript{22} sets no specific limit on the width of the territorial sea, but a twelve-mile maximum can be inferred from the fact that the combined territorial sea and contiguous zone can extend no further than twelve miles from the baseline from which the territorial sea is measured.\textsuperscript{23} The United Nations Convention on the Law of the Sea\textsuperscript{24} recognizes the right to claim a twelve mile territorial sea.\textsuperscript{25} As for customary practice, a majority of coastal nations claim a twelve-mile territorial sea.\textsuperscript{26} Recognition of the validity of each country’s claim, however, contributes very little to the resolution of the geographic and equitable problems caused by adjacent or abutting territorial seas of different widths.

More recent problems concerning the use for the territorial sea and nearshore areas are considerably more complicated than issues of boundary lines and ownership. Two examples are the Head Harbor Passage controversy and Canada’s Fundy Tidal Power Project. A proposed oil refinery in Eastport, Maine, near the Canadian boundary, precipitated the Head Harbor Passage controversy.\textsuperscript{27} Access to the Eastport facility would have required oil tankers to pass through Head Harbor Passage, an area Canada claimed to be her internal waters. Due to navigation hazards and the environmental sensitivity of the area, as well as the local importance of fishing and tourism, Canada banned the passage of large oil tankers through the passage.\textsuperscript{28} Subsequently, the proposal for the Eastport refinery was abandoned because of problems unrelated to the issue of transnational environmental effects.\textsuperscript{29}

\begin{thebibliography}{99}
\bibitem{C0} Convention on the Territorial Sea and the Contiguous Zone, \textit{done} Apr. 29, 1958, 15 U.S.T. 1606, T.I.A.S. No. 5639, 516 U.N.T.S. 205. The United States and Canada are parties to this convention.
\bibitem{C1} \textit{Id.} art. 24.
\bibitem{C3} See LOS Convention, \textit{supra} note 24, art. 3.
\bibitem{C5} See J. Carroll, \textit{Environmental Diplomacy} 61-72 (1983); Comment, \textit{supra} note 8, at 169.
\bibitem{C6} See Carroll, \textit{supra} note 27, at 71-72; Comment, \textit{supra} note 8, at 168-69.
\bibitem{C7} See A. Spiller & J. Roanowicz, The Proposed Pittston Oil Refinery: A Case
\end{thebibliography}
The Fundy Tidal Power Project involves a Canadian proposal to harness the tidal energy in the Bay of Fundy through a hydroelectric project in a northern basin of the bay. The project would involve the containment of tremendous amounts of water, possibly resulting in such effects as a six inch increase in tidal amplitude in New England, shoreline erosion, disruption of wetland habitats, and altered currents in the Gulf of Maine.\(^{30}\)

Conflicting claims to offshore areas are of more recent origin than the territorial sea disputes. These conflicts date from the Truman Proclamation of 1945\(^{31}\) in which the United States unilaterally asserted jurisdiction and control over the continental shelf "contiguous to the coasts of the United States."\(^{32}\) The Truman Proclamation set no exact bounds for the limits of the claimed jurisdiction, but an accompanying press release expressed the United States view that the continental shelf extended to the one hundred fathom depth line.\(^{33}\) The proclamation provided that overlapping continental shelf claims should be resolved through the application of equitable principles.\(^{34}\)

The one hundred fathom depth line first claimed by the United States to be the limit of its continental shelf would include all of Georges Bank. It was Canada, however, rather than the United States, that made the first overt claim to jurisdiction over Georges Bank in 1964, by issuing geological exploration permits for areas of Georges Bank north of a line equidistant from Nova Scotia and Cape Cod.\(^{35}\) The United States (but not Canada)\(^{36}\) was then a party to the 1958 Convention on the Continental Shelf.\(^{37}\) Canada's

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**Note:**


31. Proclamation No. 2667, 3 C.F.R. 67 (1945) [hereinafter cited as Truman Proclamation].

32. Id.

33. 13 DEP'T ST. BULL. 484-85 (1945).

34. See Truman Proclamation, supra note 31.

35. See generally Cuypers, Maritime Boundaries: Canada v. United States, 2 MARINE POL'Y REP. 1 (1979); CANADIAN PRESS RELEASE, supra note 2; Gulf of Maine, 1984 I.C.J. at 279, para. 61.

36. The United States ratified the Continental Shelf Convention in 1961 and became a party when the treaty entered into force in 1964. See M. Bowman & D. Harris, MULTILATERAL TREATIES: INDEX AND CURRENT STATUS 228-29 (1964).

37. Canada did not become a party to the Continental Shelf Convention until 1970. Id. In ratifying the Convention, Canada appended an interpretative declaration to the effect that it did not recognize accidental features such as channels or depressions as interrupting the natural prolongation of its land territory. See Gulf of Maine, 1984 I.C.J. at 281, para. 65.

reliance on the equidistant line was drawn, however, from article 6 of the Convention, which provides that the boundary of the continental shelf shall be determined by an equidistant or median line unless special circumstances exist.\(^{39}\)

The United States did not formally object to the Canadian claim to Georges Bank until 1969, following the decision of the International Court of Justice in the *North Sea Continental Shelf* cases.\(^{40}\) The ICJ decision rejected the equidistance principle as a rule of law and emphasized the concept of natural prolongation.\(^{41}\) Canada was notified by diplomatic note of the United States refusal to acquiesce to Canadian claims and exploitation of Georges Bank on November 5, 1969, and by public notice on February 21, 1970.\(^{42}\)

Although negotiations to delimit the continental shelf began almost immediately in 1970,\(^{43}\) little had been accomplished by 1976 when the dispute was exacerbated by the imminent extension of 200 mile exclusive fisheries zones (FZs) by the two countries. In April 1976, the United States Congress enacted the Fishery Conservation and Management Act\(^{44}\) which extended the United States 200-mile FZ effective March 1, 1977.\(^{45}\) On June 4, 1976, the Canadian Foreign Secretary announced that Canada would extend jurisdiction

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39. *Id* art. 6. The Continental Shelf Convention states that:
1) Where the same continental shelf is adjacent to the territories of two or more States whose coasts are opposite each other, the boundary of the continental shelf appertaining to such States shall be determined by agreement between them. In the absence of agreement, and unless another boundary line is justified by special circumstances, the boundary is the median line, every point of which is equidistant from the nearest points of the baselines from which the breadth of the territorial sea of each state is measured.
2) Where the continental shelf is adjacent to the territories of two adjacent States, the boundary of the continental shelf shall be determined by agreement between them. In the absence of agreement, and unless another boundary line is justified by special circumstances, the boundary shall be determined by application of the principle of equidistance from the nearest point of the baselines from which the breadth of the territorial sea of each State is measured.


41. In the *North Sea Continental Shelf* cases the International Court of Justice (ICJ) stated that although equidistance was a convenient method of delimitation, it was not a rule of law in a case where the Continental Shelf Convention was not applicable. 1969 I.C.J. 3, 42 para. 69, 46 para. 81; see also Emanuelli, *supra* note 7, at 349.

42. *See Gulf of Maine*, 1984 I.C.J. at 280-81, paras. 64-65. For a complete discussion of the exchanges between the two governments during this period, see *Gulf of Maine*, 1984 I.C.J. at 278-81, paras. 60-65.


44. MFCMA, *supra* note 3, §§ 1801-1882.

45. *Id.* § 1812.
over a 200-mile FZ effective January 1, 1977. On November 1, 1976, Canada published the claimed limits of its FZ based on an equidistance line. The United States responded by publishing its claimed line, which followed the Northeast Channel. In September 1978, following the Anglo-French Arbitration, which emphasized the inequitable effects of islands and promontories on an equidistance boundary, Canada revised its FZ limits to an "equitable equidistance" line which disregarded Nantucket and Cape Cod but included more of Georges Bank in the Canadian claim.

[See Figure on Next Page]
From December 1975 through July 1976, the boundary negotiations were renewed and expanded with the intent of establishing a single maritime boundary for both the seabed (the continental shelf)
and the water column (the fishery zones). Boundary negotiations continued to be fruitless, but the more immediate problem of how to deal with conflicting fisheries jurisdictions, pending resolution of the boundary, was temporarily resolved. An interim resolution, the Reciprocal Fisheries Agreement, was signed on February 24, 1977. The purpose of the agreement was to preserve the status quo in the disputed area and allow each country's fishermen access to the other country's undisputed FZ based on traditional fishing patterns. The agreement expired, however, on December 31, 1977. On June 2, 1978, Canada unilaterally suspended provisional implementation of a new agreement based on the assertion that the United States had not maintained existing fishing patterns and was not enforcing the agreement. Each country's fishermen were subsequently banned from the other's undisputed fisheries zone. This resulted in the continued competitive overfishing of the disputed areas of Georges Bank and the Gulf of Maine.

In August 1977, the United States and Canada appointed special negotiators to recommend "the principles of a comprehensive settlement." The new negotiations were to include: "Maritime boundaries delimitation; [c]omplementary fishery and hydrocarbon resource arrangements, as appropriate; and [s]uch other related matters as the two governments may decide."

The negotiators issued an initial report in 1977 recommending a plan for cooperative management of fish stocks and a proposal for dealing with hydrocarbon resources in the boundary area. The negotiations continued through 1978, and in March 1979 the United States and Canada signed two treaties: one an agreement on joint management and conservation of fisheries resources, and the other a treaty to submit the Gulf of Maine-Georges Bank boundary dispute to binding arbitration. The two treaties were specifically linked so that one could not enter into force unless the other did.

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52. See Emanuelli, supra note 7, at 350.
55. See Feldman & Colson, supra note 2, at 741.
57. See id.
58. 77 DEP'T ST. BULL. 282 (1977). The United States was represented by Lloyd N. Cutler, a Washington attorney, while Canada chose Marcel Cadieux, a senior Canadian diplomat.
59. Id.
60. 77 DEP'T ST. BULL. 896-97 (1977).
62. See Boundary Treaty, supra note 4.
63. See Feldman & Colson, supra note 2, at 760.
The fisheries agreement called for the creation of a joint East Coast Fisheries Commission composed of seven members and co-chairs from each country. The Commission would have regulated fisheries in the area based on principles modeled after the standards of the United States Fishery Conservation and Management Act, and according to percentage allocations of allowable catches established by the agreement. The detailed regulatory structure divided fish stocks into three categories: stocks to be jointly managed by both countries, stocks to be managed primarily by one country, and stocks to be managed exclusively by one country. The agreement was intended to establish a permanent mechanism for United States-Canadian fisheries relations on the east coast.

The fisheries agreement met immediate and strong opposition from New England fishermen and senators. The Senate Foreign Relations Committee delayed a decision on the ratification of the treaties for two years, and in March 1981 President Reagan withdrew the fisheries agreement from Senate consideration. The non-controversial boundary settlement treaty, which in the United States view was generally the preferred first step in resolving the issues in the Georges Bank area, received the advice and consent of the Senate on April 29, 1981.

The Canadian government, although not pleased with the separation of the treaties, eventually agreed to settle the boundary issue independently, upon assurances from the United States government that Canadian fishermen would be allowed to fish in all claimed areas until the boundary was finally adjudicated. On November 20, 1981, the United States and Canada exchanged instruments of ratification for the boundary settlement treaty.

The boundary dispute was submitted to a special five judge chamber of the ICJ. The chamber was asked to determine “in accor-
dance with the principles and rules of international law applicable in
the matter . . . the course of the single maritime boundary which
divides the continental shelf and fishery zones of the United States
and Canada . . . .”

The chamber announced a boundary line on
October 12, 1984. To a large extent, the line chosen by the
chamber dividing the disputed area was a compromise of the two conflict-
ing claims, and in that respect, the chamber's decision was not unex-
pected. On the other hand, the methodology and criteria applied by
the chamber were decidedly unexpected.

The chamber rejected both the United States and Canadian
claims as inappropriate or inequitable, and drew the boundary using
geometric methods based on coastal geography. Most surpris-
ing, however, was the pronouncement that, because the parties re-
quested a single boundary for the seabed and water column, the
chamber would exclude “application of any criterion found to be ex-
clusively bound up with the particular characteristics of one alone of
the two natural realities that have to be delimited in conjunction.”
The chamber might just as well have said that it would not consider
anything that is particularly relevant. The chamber's approach not
only made most of the evidence compiled by the parties meaningless,
but precluded analysis of the issues relevant to fisheries zone delimi-
tation. This has ramifications not only for future boundary delimita-
tions, but also for fisheries management negotiations. An analysis by

three judges elected by the ICJ and one judge or judge ad hoc appointed by each party.
The members of the chamber were Judge Robert Ago of Italy, Judge Andre Gros of
France, Judge Hermann Nosier of the Federal Republic of Germany, Judge Stephen
Schwebel of the United States, and Judge ad hoc Maxwell Cohen of Canada. Schneider,
*The Gulf of Maine Case: The Nature of An Equitable Result*, 79 Am. J. Int'l L. 539,
543 (1985). The case was expected to be of major significance because in addition to
being the first case concerning the delimitation of both a fisheries zone and continental
shelf, it was the first time the special chamber of the ICJ had been used. Id. at 541.

74. Boundary Treaty, supra note 4, art. 2(1).

75. The boundary line is illustrated in the Figure, supra p. 499. See Gulf of
Maine, 1984 I.C.J. 246. For a more complete discussion of the decision, see generally
McDorman, Saunders, and VanderZwaag, supra note 30, and Schneider, supra note 73.


77. Id. at 326, para. 193. The chamber rejected a factor-by-factor analysis of
equitable principles and relevant criteria. Principles related to resources or economics
were considered only briefly at the final stage of the chamber's analysis of the delimita-
tion to determine whether the chosen boundary would “unexpectedly be revealed as rad-
ically inequitable, that is to say, as likely to entail catastrophic repercussions for the liveli-
hood and economic well-being of the population of the countries concerned.” Id. at 342,
para. 237.

78. One group of commentators has criticized the “degree to which the decision's
rationale is divorced from the reason for the dispute, [because] the case was not about
geography but rather was centrally concerned with the allocation of rights to the use of
ocean resources . . . .” See McDorman, Saunders & VanderZwaag, supra note 30, at
101; see also Clain, *Gulf of Maine—A Disappointing First in the Delimitation of a
view that the chamber's reasoning cannot be applied to future delimitations).
the chamber may have been useful in defining the rights of nations to traditional fisheries resources and in assessing the importance of economic dependence on fisheries. These issues are presumed relevant to fisheries zone delimitation and are also important to the question of right of access to another country’s fishery zone. A better understanding of each nation’s legal status concerning fisheries rights could have been useful in future negotiations on cooperative fisheries management.

Within two weeks of the chamber decision, United States and Canadian fishermen were limited to areas on their respective sides of the Georges Bank boundary line. Neither country’s fishermen perceived themselves “winners” in the dispute. Although United States fishermen called for a bilateral delay in boundary enforcement, Canada swiftly rejected a formal State Department proposal for a one year moratorium, which was intended to maintain the status quo while the impact of the delimitation was assessed.

Future negotiations concerning reciprocal access and management of shared stocks are inevitable, but the atmosphere at this point can best be described as cautious. Because the United States provides the major market for Canadian fish products, Canada anticipates that the United States will attempt to link trade issues to fisheries access. The New England congressional delegation, in a November 28, 1984, letter to the State Department, has warned that “[n]egotiations on a comprehensive reciprocal fisheries treaty should not commence until the fishing industry has had sufficient time and information to fully assess the implications of the new boundary and reach a consensus position in consultation with the departments of State and Commerce.”

MARINE FISHERIES MANAGEMENT

Both the United States and Canada are relatively inexperienced in the management of marine fisheries. It has only been a decade since

80. See McDorman, Saunders & VanderZwaag, supra note 30, at 90.


83. See Georges Bank Decision Upsets Canadian Fishermen, supra note 81, at 72, col. 3.

84. See Canada Rejects Boundary Moratorium on Georges, supra note 82, at 20, col. 4.
the countries extended jurisdiction over fisheries to 200 miles. The difficult process of developing management systems has often been further complicated by political and economic pressures, and by the insufficiency of scientific knowledge. It is apparent that there is still much to learn from scientific, socioeconomic, and administrative perspectives. During this developmental period, two radically different approaches to fishery management have emerged. This section will provide an overview of the fisheries management regime of each country and discuss how the two countries are dealing with the issue of foreign access to its exclusive zone.

The United States

Prior to 1976, fisheries exploited by United States fishermen were traditionally managed by individual states. The Magnuson Fishery Conservation and Management Act of 1976 (MFCMA) not only created an exclusive 200-mile FZ, but also established a comprehensive management scheme at the federal level. State management of territorial sea fisheries continues, but state input into the management of the FZ is primarily through representation on Regional Fishery Management Councils (FMCs). The New England FMC, which has overall responsibility for fisheries in the Gulf of Maine-Georges Bank area, is composed of principal state fisheries officials from Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut; eleven members appointed by the Secretary of Commerce from lists of qualified individuals submitted by state governors; and the regional director of the National Marine Fisheries Service. The FMC also includes nonvoting representatives of the Fish and Wildlife Service, the Coast Guard, the Marine Fisheries

87. MFCMA, supra note 3.
88. Id. § 1856.
90. MFCMA, supra note 3, § 1852(a)(1).
91. Id. § 1852(b)(1)(C). "Qualified individuals" are persons who are knowledgeable or experienced in management, conservation, or recreational or commercial fishing in the geographic area. Id. § 1852(b)(2)(A).
92. Id. § 1852(b)(1)(B).
Commission, and the State Department.\footnote{Id. § 1852(c).}

With the assistance of its staff, a Scientific and Statistical Committee, and additional advisors,\footnote{Id. § 1852(g).} the FMC develops fishery management plans (FMPs) consistent with the national standards set forth in the MFCMA.\footnote{Id. § 1851(a)(1)-(7). In summary, the seven national standards require fishery management plans to establish nondiscriminatory conservation and management measures based on the best scientific information to assure optimum yield. Fisheries should be managed throughout their range and measures should be taken to promote efficiency and avoid duplication.} FMPs must include a description and assessment of the condition of the fishery and a determination of its optimum yield.\footnote{Id. § 1853(a).} Domestic harvesting capacity, the portion of the optimum yield available for foreign fishermen, and the extent to which United States processors will use the domestic harvest must also be determined.\footnote{Id.} Although it might appear from the foregoing description that the role of the FMC involves simply applying finite figures involving a scientifically determinable amount of fish and certain number of fishermen, the process is considerably less quantifiable than managers would optimally desire, and involves as much policymaking as it does mathematics.

The single most important determination made by the FMC is the calculation of optimum yield. The MFCMA provides that the optimum yield is the amount of fish that will “provide the greatest overall benefit to the Nation, with particular reference to food production and recreational opportunities.”\footnote{Id. § 1802(18)(A).} The actual yield is determined by reference to the scientific determination of maximum sustainable yield, modified by “any relevant economic, social, or ecological factor.”\footnote{Id. § 1802(18)(B). Professor Burke describes the definition of optimum yield as having “two components, one expressing the objective (content) and the other providing for the concrete means of formulating and expressing it (procedural).” See Burke, \textit{U.S. Fishery Management and the New Law of the Sea}, 76 AM. J. INT’L L. 24, 36 (1982).} It is interesting to note that optimum yield does not have to be expressed in terms of a specific amount of fish. It may be expressed in such terms as the amount of fish harvested in certain areas or during certain seasons or with a particular type of gear.\footnote{See 50 C.F.R. § 602.11(e)(4) (1984).} The Atlantic groundfish management plan, for example, sets optimum yield by prescribing the type of gear that may be used in cer-
tain areas and designating certain areas as closed during March, April, and May.101

The FMP is submitted for approval to the Secretary of Commerce102 (Secretary) along with proposed regulations for implementing the plans.103 Within ninety-five days the Secretary must approve, disapprove, or partially disapprove the plan.104 The 1983 amendments to the MFCMA105 imposed strict timetables for secretarial action on FMPs106 and abbreviated time periods for promulgation of regulations for their implementation.107 If the Secretary fails to act within the mandated schedule, an FMP automatically becomes effective,108 and the Secretary must promulgate the proposed regulations.109 Ostensibly, these revisions in the FMP procedures were made to improve the efficiency of the FMP development and implementation process.110 The amendments, however, potentially may result in a much greater role for the councils in determining domestic fisheries.

Public participation at all stages of development of FMPs is an important part of the process. Meetings of the FMCs, their committees, and advisory panels are generally public111 and provide an opportunity for discussion of fishery plans and council actions. In addition, the FMCs must hold public meetings on FMPs in major ports and affected areas.112 The environmental impact statement procedures of the National Environmental Policy Act113 (NEPA) create

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101. See id. § 651.20-22.
102. MFCMA, supra note 3, § 1854.
103. Id. § 1853(c).
104. Id. § 1854(b)(1)-(2).
106. MFCMA, supra note 3, § 1854. A 75-day comment period follows submission of an FMP to the Secretary. Id. § 1854(a)(1)(B). The Secretary must notify a FMC of approval, disapproval, or partial disapproval of an FMP within 20 days of the close of the comment period. If no action is taken by the Secretary, the plan becomes effective automatically. Id. § 1854(b)(1).
107. Id. § 1855(c). Regulations to implement FMPs must be promulgated within 110 days of the date the FMC submits a plan. Regulations for plans resubmitted by the FMC after disapproval must be promulgated within 75 days.
108. Id. § 1854(b)(1).
109. Id. § 1855(c).
110. The former legislation (16 U.S.C. 1854(a)(1976)) required secretarial action within 60 days, but the action was often not timely and the FMP process ground to a halt. The running of the public comment period with the secretarial review period helps to expedite the process. These revisions to the MFCMA, however, have not completely resolved the problems related to the length of time involved in promulgating FMPs. The FMCs themselves are under no specific time limits for developing FMPs. In addition, the start of Secretary's strict timetable is tolled until an adequate EIS is submitted.
111. See 50 C.F.R. § 601.24(b)(4) (1984). Meetings may be closed or partially closed when they relate to matters of national security, employment matters, or briefing on pending litigation. Id. § 601.24(b)(4)(vi)(B).
112. MFCMA, supra note 3, § 1852(h)(3).
additional opportunities for public participation. The MFCMA also provides for a seventy-five day comment period following submittal of the FMPs to the Secretary and an additional thirty day period for comment on amended plans which have been resubmitted following secretarial disapproval.

Perhaps because of the emphasis on public participation in the FMP development process, the MFCMA restricts judicial review of regulations promulgated to implement the FMPs. Petitions for review must be filed within thirty days of the promulgation of the regulations, and a court may not enjoin implementation of the regulation pending review. A court may set aside a regulation only if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law," or if promulgation of the regulation fails to meet statutory, procedural, or constitutional requirements.

While the standard of review is not extraordinary, the narrow scope of review, combined with the time limitations and the denial of court authority to issue preliminary injunctions, makes the MFCMA atypical.

Determination of the amount of fish available for foreign fishermen in the exclusive United States FZ is part of the FMP process. Through FMPs, the councils establish the total allowable level of foreign fishing (TALFF), and may also impose conservation and management measures such as gear restrictions and designated fishing areas.

Because the MFCMA creates an absolute priority for the United States fishing industry, the TALFF is limited to the portion of the optimum yield not harvested by domestic fishermen. A simple formula of optimum yield minus domestic harvesting capacity was originally used to calculate the TALFF. A 1980 amendment to

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*also* Rogalski, *supra* note 89, at 181.


115. *Id.* § 1854(b)(3)(B)(ii).


117. MFCMA, *supra* note 3, § 1855(d).

118. *Id.* § 1855(d)(1).


123. *Id.* § 1853(a)(2).

124. *Id.* § 1853(a)(4)(B).

the MFCMA, the American Fisheries Promotion Act,\textsuperscript{126} provides FMCs with an alternative formula for calculating TALFF.\textsuperscript{127} The new formula is an attempt by Congress to deal with what is perceived as a “Catch 22” for fisheries industry development. That is, for the industry to develop, not only fish, but markets must be available. So long as foreign fishermen were supplying relatively inexpensive fish from the United States FZ to domestic and foreign markets, the United States industry could not effectively compete and expand. Nonetheless, prior to 1980 the MFCMA permitted foreign fishing to continue at the same levels unless actual domestic harvesting capacity increased. The 1980 amendment providing an alternative TALFF allocation formula is essentially a program for phasing out foreign fishing in the FZ, based on reductions in TALFF beyond actual increases in domestic harvesting capacity.\textsuperscript{128} One commentator notes that the application of this formula could eliminate foreign fishing in the United States FZ by 1990.\textsuperscript{129}

Once the TALFF is established, the Secretary of State, in cooperation with the Secretary of Commerce, determines the allocation of fish among foreign nations\textsuperscript{130} that have signed Governing International Fishery Agreements\textsuperscript{131} (GIFAs). Originally, the factors considered in determining allocations focused on a country’s traditional fishing in the area, and its cooperation with the United States in fisheries research and enforcement of fisheries regulations.\textsuperscript{132} Although the list of factors contains no provision for special deference to neighboring countries or countries that share fish stocks, it does include a general provision allowing consideration of other matters deemed “appropriate.”\textsuperscript{133} The 1980 amendments to MFCMA added factors emphasizing United States fisheries industry development and trade policy.\textsuperscript{134} This so-called “fish and chips policy” links entry into the FZ to affirmative acts by a country which reduce trade barr-

\begin{itemize}
\item \textsuperscript{127} MFCMA, supra note 3, § 1821(d)(2)(A) or (B).
\item \textsuperscript{128} Id. § 1821(d). See generally Note, Fishery Conservation: Is the Categorical Exclusion of Foreign Fleets the Next Step?, 12 CAL. W. INT’L L.J. 154 (1982).
\item \textsuperscript{129} See The Fish Feud, supra note 85, at 43. The author also notes that because 1979 harvests are used as base figures for the complex reduction formula, and since Canada has had no harvest in United States waters in 1979, the application of the formula would preclude Canadian fishing in the United States FZ. Id. at 57 n.59.
\item \textsuperscript{130} MFCMA, supra note 3, § 1821(e)(1)(A).
\item \textsuperscript{131} Id. § 1821(a), (c). In signing a GIFA, a country must make a commitment to follow United States fishery regulations and be subject to United States inspection and enforcement. A country must also pay for various other items such as observers aboard their vessels, fishing fees, and the costs of loss or damage to any United States fishing vessels or their gear. Id. § 1821(e)(1)-(2).
\item \textsuperscript{132} Id. § 1821(e)(1)(E)(ii), (vi)-(vii).
\item \textsuperscript{133} Id. § 1821(e)(1)(E)(viii).
\item \textsuperscript{134} Id. § 1821(e)(1)(E)(i)-(ii), (iv)-(v).
\end{itemize}
riers and create markets for United States fish exports. The Secretary’s consideration of “whether . . . such nation requires the fish harvested from the [FZ] for its domestic consumption” might be interpreted altruistically as favoring nations that are dependent upon a fishery as a food source. In the context of the fish and chips policy, however, one can infer that the real consideration is whether the fish will be re-imported into the United States. Because of the high degree of competition between Canadian-caught and United States-caught fish in northeastern United States markets, these considerations are likely to be major factors in future negotiations between the two countries.

Canada

While the United States fisheries management regime emphasizes formal procedures, bifurcation of authority in plan development and implementation, and a high degree of public accountability, the Canadian regime emphasizes informality, flexibility, and centralization of authority. The Constitution Act of 1982, continues the grant of exclusive federal control over fisheries first established by the Constitution Act of 1867. The Fisheries Act and the Coastal Fisheries Protection Act provide the source of authority for the Canadian Cabinet and the Minister of Fisheries and Oceans (Minister) to manage domestic and foreign fishing. The Fisheries Act grants the Canadian Cabinet power to promulgate regulations for every phase of fisheries operations from licensing and operating fishing vessels to the landing, handling, and transport of fish. The Minister has absolute discretion in the administration of fisheries leases and licenses.

135. Id.
136. Id. § 1821(e)(I)(E)(iv).
137. The Constitution Act, 1982, was proclaimed on April 17, 1982. The act also renamed the British North American Act, 1867, 30 & 31 Vict., ch. 3; the Constitution Act, 1867. In spite of the apparently clear designation in the federal government, judicial decisions have opened the door for provincial claims. See Canadian Fisheries, supra note 85, at 172-76; Fairley, Canadian Federalism, Fisheries and the Constitution: External Constraints on Internal Ordering, 12 Ottawa L. Rev. 256, 259-90 (1980).
139. Id. ch. C-21 (1970).
140. The Coastal Fisheries Protection Act prohibits foreign fishing unless authorized by regulations promulgated by the Canadian Cabinet. Id. § 3. Section 7 of the Fisheries Act, supra note 138, gives the Minister of Fisheries and Forestry “absolute discretion” in issuing domestic licenses.
142. Id. § 7.
The Department of Fisheries and Oceans is organized in four main sections: Atlantic Fisheries; Pacific and Freshwater Fisheries; Economic Development and Marketing; and Ocean Science and Surveys.\textsuperscript{143} The management of the Georges Bank fisheries is the responsibility of Atlantic Fisheries and its Scotia-Fundy regional office, which carries out much of the management activity.\textsuperscript{144} The branches and divisions of the regional office deal with all phases of fisheries management and development which include scientific research, economic studies, and technology development as well as the actual management of the fisheries.\textsuperscript{145}

Although there is a clearly identified administrative structure, the administrative processes involved in fishery management plan development are anything but clearly defined.\textsuperscript{146} The use of informal consultations, ever-changing advisory groups, and the lack of official published guidelines have been cited as reasons why management plan development is so difficult to document.\textsuperscript{147} Primarily through interviews with fisheries officials, one researcher has reconstructed the planmaking process for several Atlantic fisheries.\textsuperscript{148} In each case the procedures have varied. Although it is extremely difficult to generalize, a summary of the general approach to planning for Atlantic fisheries will suffice to distinguish the process from United States fishery management planning.

Scientific data, such as the condition of the fishery, stock assessments, and the recommended total allowable catch is provided by the Canadian Atlantic Fisheries Scientific Advisory Committee and reviewed by the directors of the regional offices. Federal fisheries officials prepare a draft plan which is then reviewed by various formal and informal industry advisory groups. Refinement of the draft plan and further review by the regional directors or the appropriate regional director is generally followed by review by the Minister of Fisheries and Oceans.\textsuperscript{149} There is a great deal of variation depending on whether the plans are developed for a region or for the entire

\textsuperscript{143} For a complete discussion of the administrative structure of the Canadian Department of Fisheries, see generally \textit{The Fish Feud}, supra note 85, at 69-72, and \textit{Canadian Fisheries}, supra note 85, at 181-85.

\textsuperscript{144} \textit{The Fish Feud}, supra note 85, at 69-72; \textit{Canadian Fisheries}, supra note 85, at 181-85.

\textsuperscript{145} \textit{The Fish Feud}, supra note 85, at 69-72; \textit{Canadian Fisheries}, supra note 85, at 181-85.

\textsuperscript{146} VanderZwaag describes the Canadian fisheries management system as "somewhat like a ghost ship... the system exists but it often lies veiled under a mysterious mist of flexibility and informality." \textit{Canadian Fisheries}, supra note 85, at 172.

\textsuperscript{147} See \textit{The Fish Feud}, supra note 85, at 72; \textit{Canadian Fisheries}, supra note 85, at 185.

\textsuperscript{148} See \textit{The Fish Feud}, supra note 85, at 72-76; \textit{Canadian Fisheries}, supra note 85 at 185-88.

\textsuperscript{149} \textit{The Fish Feud}, supra note 85, at 72-76; \textit{Canadian Fisheries}, supra note 85, at 185-88.

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Atlantic fishery. Advisory committees and working groups vary in each of the regions, and there are few formal mechanisms for industry and public input except for these committees and working groups. A great deal of informal consultation with both fishermen and processors is, however, an important element in plan development.

One commentator has compared the difference in public participation in FMP development in Canada and the United States to the difference between a boardroom decision and a town hall meeting. In Canada, once the plan is completed and implemented, aggrieved members of the public or fishing industry have little chance of obtaining court review of regulations promulgated under the Minister’s broad discretionary authority. Redress must generally be sought through the political, rather than the judicial, system.

The determination of total allowable catch (TAC) for domestic and foreign fishermen in Canadian fishery plans is intended to include economic, social, and political, as well as environmental considerations. Although this sounds very much like the concept of optimum yield, there is a basic difference. The biological reference point for TAC—called FO.1—is approximately ten to twenty per-

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150. The Fish Feud, supra note 85, at 72-76; Canadian Fisheries, supra note 85, at 185-88. For example, final review of plans that apply only to a region may be made by the director general of the region rather than by the Minister.

151. The fact that advisory groups are so numerous and constantly changing makes it impossible to identify them all or even establish how many exist. See The Fish Feud, supra note 85, at 72.

152. Snow, supra note 85, at 309. Snow states: Consultation with Canadian fishermen is on an informal, individual level and consists of managers contacting union and company leaders when they want their advice or cooperation. Instead of being built on closed meetings, [and] ad hoc discussions with the domestic fleet . . . leading to an unsupported TAC, the American procedure for establishing optimum yield is constructed around a series of public meetings and hearings to receive citizen input, culminating in a detailed fishery management plan that is exposed to the rigors of scientific, economic, and legal criticism. The development of these plans and the accompanying public debate are a central feature of the American system and provide a striking contrast to the Canadian approach, where the only public document is the TAC.

Id. at 310 (emphasis added). Snow tempers his criticism somewhat, however, by noting that “[w]hat the American system gains over the Canadian system in terms of public input into the decisionmaking process must be measured against what is lost in flexibility.” Id.

153. See id. at 323.

cent less than maximum sustainable yield and thus results in conservative determinations for catch allocations. Biologists see this as a way to rebuild exhausted fisheries, while economists believe this method will improve the economic efficiency of fisheries. With the exception of scallops and lobster, TAC is generally expressed in quotas for various classes of fishing vessels and specific areas.

The Coastal Fisheries Protection Act provides authority for the Canadian Cabinet to control entry to Canadian fishing zones by regulating the activities of foreign fishermen. Neither the act nor its implementing regulations, however, contain guidelines for determining the conditions for foreign entry or the method of allocating the foreign TAC. Again, discretion and flexibility are the major elements of the regime. The Canadian government has, however, generally tied foreign access to surplus stocks to either trade or conservation concessions. This policy of seeking “commensurate benefits” bears considerable similarity to the United States fish and chips policy. In addition to tariff reductions, the Canadian government has negotiated for such concessions as the use of Canadian ports and processing facilities, transfer of fishing technology, and the observance of conservation measures beyond the Canadian FZ for fisheries of importance to Canada.

HYDROCARBON DEVELOPMENT OF THE OUTER CONTINENTAL SHELF

Although fisheries conflicts have been the major focus of international attention and negotiations, there are at least two aspects of hydrocarbon development in the Georges Bank region that have serious transnational implications. First, because current patterns on Georges Bank are circular, pollutants from drilling operations or oil spills in United States or Canadian waters can be transported to the

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155. See Canadian Fisheries, supra note 85, at 205 n.118; The Fish Feud, supra note 85, at 84 n.54.
156. See Canadian Fisheries, supra note 85, at 205 n.118; see also Copes, supra note 154, at 224.
157. See The Fish Feud, supra note 85, at 75.
158. See generally id. at 74. It should also be noted that virtually all Canadian fisheries are limited entry.
162. Canada currently has more processing capacity than it has fish landed, especially during certain seasons. Therefore, using fish caught by foreign vessels is considered a benefit to local economies rather than as unhealthy competition for domestic fishermen. See generally The Fish Feud, supra note 85, at 77-78.
163. See Copes, supra note 154, at 232-33.
164. Transboundary oil reserves were a topic in early stages of the Georges Bank negotiations. See supra text accompanying notes 58-60.
other nation’s waters. The second problem involves the exploitation of transboundary reservoirs of hydrocarbons. If Georges Bank holds reserves of oil and gas, it is likely that common pools will exist in the area of the boundary line. Neither equity nor good management and conservation practices are likely to be served by allowing “drainage” by the first country which exploits this common reservoir.

In both the United States and Canada, the legal framework for outer continental shelf (OCS) development is more complicated than for fisheries management. Although this complexity is due primarily to the historical development of the law, other relevant factors include the concerns of adjacent coastal states and provinces about the environmental and economic effects of OCS development, and the desire of the states and provinces to share revenues from offshore oil leasing and production. An analysis of the law applicable to hydrocarbon development of Georges Bank must, of necessity, include an explanation of the jurisdictional conflicts in both the United States and Canada, as well as an overview of the schemes for leasing offshore areas.

The United States—The Tidelands Controversy and Beyond

The dispute between the federal and state governments over the ownership of submerged lands adjacent to the coasts did not arise until after the Truman Proclamation was issued. This dispute became known as the Tidelands Controversy. Prior to the 1940’s, state ownership of the tidelands (the wetlands between the low- and high-
Tide lines) was undisputed.169 There seemed to be little doubt that the submerged lands and the resources of the territorial sea were owned by the states rather than the federal government.170 Several factors, however, prompted the federal government to assert an exclusive claim to the territorial sea and continental shelf. Overfishing by Japan off the country's west coast and the need to defend against enemy submarines were offered as two reasons for the federal assertion of jurisdiction.171 The primary basis for the government's change of position, however, was the growing importance of oil and gas and the concomitant development of technology enabling the exploitation of offshore petroleum resources.172

By early May of 1945, the Truman Proclamation claiming United States jurisdiction over the continental shelf was being formulated.173 Later that month, on May 29, the Justice Department filed suit to challenge California's territorial sea leases and claims to marine mineral reserves.174 The Truman Proclamation, issued on September 28, 1945, publicly announced the United States position but did not "touch upon the question of Federal versus State control."175 Together, the two actions signaled the decision of the federal government to assert exclusive jurisdiction over the seabed and subsoil of the territorial sea and continental shelf.

In United States v. California176 and its progeny,177 the Supreme Court ruled that the federal government has paramount rights to the territorial sea. This resolution was short lived. The Submerged Lands Act178 and the Outer Continental Shelf Lands Act179 (OCSLA), both enacted in 1953, effectively transferred title to the three-mile territorial sea to the states while retaining for the federal government the continental shelf seaward of that boundary.

170. See generally Office of Ocean, Resource and Scientific Policy Coordination, Department of Commerce, Ocean Management: Seeking a New Perspective 7 (1978) [hereinafter cited as Ocean Management].
172. See generally Ocean Management, supra note 170, at 7-12; Ball, Good Old American Permits: Madisonian Federalism on the Territorial Sea and Continental Shelf, 12 Envtl. L. 623, 624-30 (1982).
173. See Ocean Management, supra note 170, at 12.
174. Id. at 7, 13. California had been leasing offshore areas under authority of a 1921 state act that reserved offshore mineral deposits for the state and established leasing procedures.
175. 13 Dep't St. Bull. 484-85 (1945).
This solution has never been fully accepted by the coastal states which have continued to contest it.\textsuperscript{180} Technically, each seabed jurisdiction case resolved only the relative rights of the national government and the state involved in the litigation.\textsuperscript{181} The Submerged Lands Act also provided no final resolution to continued state offshore claims, because its cession of the territorial sea had been phrased in the form of a quitclaim\textsuperscript{182} and was without prejudice to claims beyond three miles.\textsuperscript{183} In the 1970's, the Atlantic states' claim to the continental shelf was contested by the federal government.\textsuperscript{184} The Supreme Court decision in \textit{United States v. Maine}\textsuperscript{185} reaffirmed federal continental shelf jurisdiction to the Atlantic continental shelf, including the Gulf of Maine-Georges Bank region.

While the courts clarified jurisdictional lines, Congress, in recognition of legitimate state interests and environmental concerns, enacted legislation which gave the state a voice in the offshore development process and appropriated funds to deal with the effects of energy development. The OCSLA of 1953 established a federal leasing authority that was basically "a closed system controlled by oil companies and the Secretary of Interior."\textsuperscript{186} Much of the legislation enacted in recent years has been aimed at revising this system.\textsuperscript{187} This section of this Article will focus on the most significant legislation—the National Environmental Policy Act (NEPA),\textsuperscript{188} the 1978 OCSLA amendments,\textsuperscript{189} and the Coastal Zone Management Act (CZMA).\textsuperscript{190}

Passed in 1969, NEPA requires that federal agencies consider the environmental consequences of their actions and that they include a

\textsuperscript{180} See generally Ball, supra note 172, at 630.

\textsuperscript{181} "Of course, the defendant States were not parties to \textit{United States v. California} . . . and they are not precluded by res judicata from litigating the issues decided by [that] case." United States v. Maine, 420 U.S. 515, 527 (1975).

\textsuperscript{182} 43 U.S.C. § 1311(b)(1) (1982). "The United States releases and relinquishes . . . all right, title, and interest of the United States, if any it has. . . ." Id.


\textsuperscript{185} Id.

\textsuperscript{186} Ball, supra note 172, at 652.


\textsuperscript{190} 16 U.S.C. §§ 1451-1464 (1985) [hereinafter cited as CZMA].
“detailed statement” of predicted environmental impact when proposing “major Federal actions significantly affecting the quality of the human environment.”

Although not directed specifically at OCS activities, NEPA theoretically provides both the states, and the public, with a mechanism for participation in OCS decisionmaking through participation in the preparation of environmental impact statements (EISs) and the opportunity to judicially challenge the adequacy of completed EISs. Such judicial challenges have been a prime tactic for delaying or halting OCS lease sales. At least two commentators have noted, however, that the “chief effect of NEPA” is not to involve the states in the decisionmaking process, but to give states “time to build political opposition to block the leasing.”

The 1978 OCSLA amendments represented the first “overhaul” of the act in twenty-five years. They also institutionalized state participation in OCS development. The amendments specify that the Secretary of Interior must prepare comprehensive, five year lease plans and require approval, by the Secretary, of exploration and development plans before a leaseholder may proceed with OCS activities. The Secretary of Interior must not only consult governors of “affected states” for comment during preparation of the five

191. See NEPA, supra note 188, § 4332.
197. Id. § 1340.
198. Id. § 1351.
199. Id. § 1331(f). An “affected state” includes any state:
(3) which . . . will receive oil for processing, refining, or transshipment which was extracted from the outer Continental Shelf and transported directly to such State by means of vessels . . .
(4) which is designated by the Secretary as a State in which there is a substantial probability of significant impact on or damage to the coastal, marine, or human environment, or a State in which there will be significant changes in the social, government, or economic infrastructure, resulting from the exploration, development, and production of oil and gas anywhere on the outer Continental Shelf; or
(5) in which the Secretary finds that because of such activity there is, or will be, a significant risk of serious damage, due to factors such as prevailing winds and currents, to the marine or coastal environment in the event of any oilspill, blowout, or release of oil or gas from vessels, pipelines, or other transshipment
year lease plans, but must also accept recommendations by the governors as to the "size, timing, and location" of particular lease sales if the recommendations strike "a reasonable balance between the national interest and the well-being of the citizens of the affected state." Environmental and technical studies undertaken in conjunction with lease sales must be coordinated with affected states. A lessee may not commence drilling until an exploration plan, consistent with state coastal management programs, has been approved by the Secretary. If exploration is successful, state governors are again consulted for recommendations concerning the lessee's plan for development and production. These recommendations must also be adopted by the Secretary unless they do not represent a reasonable balance of state and national interests.

Although the OCSLA amendments requiring acceptance of state recommendations concerning leasing and development plans, except under certain conditions, appear to give the states a preeminent role in OCS decisionmaking, this is not necessarily the case. Review of a decision by the Secretary of Interior not to adopt state recommendations is extremely limited. For example, in *California v. Watt*, the district court noted that "[a]lthough the Secretary quite clearly violated the spirit of the [OCSLA], giving due deference to his judgment, it cannot be said that his determination to reject recommendations submitted by Governor Brown was 'arbitrary and capricious.'"

The Coastal Zone Management Act of 1972 provides to the states a third point of entry into the OCS development process. The CZMA was originally intended to protect coastal resources by encouraging states to develop protection and management plans for...
their coastal areas. Two inducements related to OCS development have been offered to the states to develop programs meeting federal guidelines: economic assistance and the so-called "federal consistency" requirement. The consistency provision requires federally conducted or supported activities directly affecting the coastal zone to be carried out "in a manner which is, to the maximum extent practicable, consistent with [federally approved] state management program[s]." The CZMA does not provide for state participation in policy decisions, but creates, on its face, only an opportunity for states to block implementation of federal decisions. The obvious solution to the potential for conflict created by this situation was identified by the federal district court in California v. Watt. The court concluded that the most efficient means for resolving conflict and achieving consistency was to include the coastal states from the beginning of the OCS development planning process.

The CZMA was amended in connection with the 1978 OCSLA amendments to specifically provide that OCS oil and gas exploration, development, and production affecting a state's coastal zone require state concurrence that the activity is consistent with its management plan. Although it had been generally assumed that the original federal consistency provision applied to federal lease sales, the United States Supreme Court recently held that leasing does not directly affect the coastal zone and thus does not trigger the consistency requirement. Moreover, the Court indicated that the 1978 amendments, requiring the consistency of exploration and development plans, evidenced congressional intent that only those later stages of OCS planning require consistency review. The CZMA was reauthorized in 1986, but no language was added to clarify the intent of Congress concerning the application of the consistency provision to OCS lease sales.

Since losing the battle for ownership of the OCS, states have sought to protect their coasts and citizens from the environmental and economic effects of offshore energy development. The coastal states have continued, however, to press their case for a share of the revenues generated by offshore leasing and oil production. The

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212. See id. § 1452.
213. See id. §§ 1454-1455.
214. Id. § 1456(c)(1).
215. Id.
217. Id. at 1370.
221. Id. at 334-41.
222. See BUREAU OF NAT'L AFF., 16 ENV'T REP. (Apr. 11, 1986).
states' arguments are that coastal states are negatively impacted by continental shelf development and should be compensated, and that their interest is analogous to the situation of federal resources within states.

Congress has already responded, at least partially, to the argument that coastal states should receive compensable damage from OCS development. In addition to the loans, guarantees, and grants made to the states for development and implementation of their coastal management programs,\(^{223}\) the CZMA includes Coastal Energy Impact Program (CEIP) grants.\(^{224}\) CEIP grants are made to coastal states based upon a formula which includes such factors as the amount of adjacent continental shelf acreage leased, the volume of oil and gas produced on the adjacent shelf, and the amount of oil and gas that first comes ashore in the state.\(^{225}\) CEIP funds may be used to provide public services, build facilities necessitated by OCS development, and prevent or mitigate unavoidable loss of recreational or environmental resources from energy development.\(^{226}\) Since CEIP grants and coastal plan implementation rely on budget allocations, rather than on a guaranteed share of offshore revenues, neither program is likely to continue to withstand attempts to eliminate its funding.\(^{227}\)

The states have also argued that their interest in continental shelf resources is analogous to the situation of federal resources located within a state's boundaries. When resources are developed on federal lands within a state, the state is entitled to a share of the federal royalties and may also impose a severance tax.\(^{228}\) At present, coastal states neither share in revenues nor have the power to tax severed minerals. In the case of nearshore federal leases that encroach on state boundaries, however, Congress recently has acted to provide

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224. See id. § 1456(a).
225. Id. § 1456(b)(2).
226. Id. § 1456(c).
compensation and revenue sharing. Enactment of a system of straight revenue sharing of other OCS proceeds with coastal states is unlikely.

Canada's Offshore Jurisdiction—A Political Resolution

Early development of the Canadian offshore jurisdictional dispute basically paralleled the United States experience. The Constitution Act of 1867 sets forth the distribution of rights and powers in the Canadian federal system. The federal government has exclusive jurisdiction over fishing, shipping and navigation, customs, and international trade. At the time of confederation, the original provinces retained ownership of lands, minerals, and royalties. But the Act was silent as to the question of offshore ownership and authority.

In 1967, the Canadian Supreme Court in Reference re Offshore Mineral Rights of British Columbia held that the federal government controls the resources of the territorial sea and continental shelf. As in the case of the Atlantic and Gulf states, other Canadian coastal provinces were not precluded from claiming rights in offshore areas by the initial determination of the Supreme Court of Canada. On Canada's Atlantic coast, however, it was clear that the jurisdictional dispute was an impediment to offshore oil and gas development.

Canada's federal-provincial conflicts are generally resolved by negotiation rather than by resort to the Supreme Court. Recognition

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230. Formerly entitled the British North America Act, 1867, 30 & 31 Vict., ch. 3 [hereinafter cited as Constitution Act, 1867].
231. Id. § 92.
232. The four original provinces are now New Brunswick, Nova Scotia, Ontario, and Quebec.
234. 1967 S.C.R. 792.
237. See Swan, supra note 236, at 311-12. Swan's article points out that American states are in a weaker bargaining position than the Canadian provinces vis-a-vis the federal government, and therefore, are likely to prefer impartial adjudication of disputes. In addition, the Constitution Act, 1867, was often perceived by Canadian politicians as "so outdated as to be irrelevant to contemporary problem-solving." Swan, supra note 236, at 312.

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of the jurisdictional dispute as an impediment to offshore development, and the need for economic activity in the Atlantic provinces,\textsuperscript{238} led the federal government to seek a political, rather than judicial, solution to the problem. The result was more than a decade of negotiations intended to set aside jurisdictional differences and provide a framework for cooperative administration and management of mineral resources off the east coast.

In 1977, the federal government and the provinces of Nova Scotia, New Brunswick, and Prince Edward Island\textsuperscript{239} signed a memorandum of understanding\textsuperscript{240} concerning revenue sharing and joint administration of offshore resources.\textsuperscript{241} The regime was to be implemented through a formal, comprehensive agreement providing for exclusive provincial management of resources of the adjacent seabed within five kilometers of the coast and administration of the area seaward of that boundary by a Maritime Offshore Resources Board.\textsuperscript{242} The Board was to have six members—three federal representatives and a member representing each province.\textsuperscript{243} In general, revenues would have been shared on the basis of twenty-five percent to Canada and seventy-five percent to the adjacent province.\textsuperscript{244} Nova Scotia withdrew from the memorandum before it was implemented,\textsuperscript{245} and, in 1980, formally renewed its offshore claim by introducing legislation entitled An Act Respecting Petroleum Resources.\textsuperscript{246} Negotiations between Nova Scotia and Canada resumed in 1981, however, and proclamation of the act was delayed.\textsuperscript{247}

Two major developments affecting administration of the Canadian offshore resources occurred in March 1982. First, the entry into


\textsuperscript{239} Newfoundland rejected the 1977 attempt at a political settlement and continued to press its offshore claims. See Harrison, \textit{Natural Resources and the Constitution: Some Recent Developments and Their Implications for the Future Regulation of the Resource Industry}, 18 ALTA. L. REV. 1, 15 (1980).


\textsuperscript{241} Harrison, \textit{supra} note 240, at 246.

\textsuperscript{242} \textit{Id.} at 249.

\textsuperscript{243} \textit{Id.}

\textsuperscript{244} \textit{Id.} at 246.


\textsuperscript{246} N.S. REV. STAT. ch. 12, § 7 (1980); see also Gault, \textit{supra} note 245, at 106.

\textsuperscript{247} \textit{Id.}
force of the Canada Oil and Gas Act (COGA) established a new administrative regime for all “Canada Lands” which included offshore seabeds. Second, the Canada-Nova Scotia Offshore Resources Agreement (Canada-Nova Scotia Agreement) was concluded. COGA sets forth the terms for exploration agreements and production licenses, defines basic and progressive royalties, and provides a mechanism for requiring the use of Canadian goods, services, and employees for offshore projects. As part of the Canada-Nova Scotia Agreement, Nova Scotia agreed to adopt COGA and to employ the federal administrative structure, the Canada Oil and Gas Lands Administration (COGLA), to help manage the adjacent shelf albeit with provincial participation.

The Canada-Nova Scotia Agreement did not resolve the issue of ownership of the offshore resources, but did make ownership irrelevant to offshore petroleum development. Because the agreement has been implemented by mirror legislation at both levels of government, a definitive court ruling on ownership will not change the administrative regime.

An integral part of the joint regime is the Canada-Nova Scotia Agreement.
Offshore Oil and Gas Board257 (CNS Board). The CNS Board, composed of three federally appointed members and two members from Nova Scotia, 258 makes decisions and recommendations to the Federal Minister of Energy, Mines, and Resources concerning development and licensing.258 Provincial members on the CNS Board are a minority, however, and the Minister is not required to accept decisions of the Board but may instead substitute his own decision.259 In the event the Minister accepts the CNS Board’s decision or substitutes his own, the Nova Scotia members have the power to delay implementation of certain “specified decisions,”260 thus allowing an opportunity for further political negotiation.261

Although the implementing federal legislation (the Canada-Nova Scotia Act) allows a series of delegations of authority to the CNS Board and the province,262 ultimate control appears to be clearly established at the federal level. The primary benefits of the agreement to Nova Scotia are in the economic development and revenue-sharing provisions. According to a formula based on the level of economic development,263 the province may receive bonus payments, proceeds from rental and license fees, and up to one hundred percent of the revenues generated from basic and progressive incremental royalties.264 In addition, Nova Scotia may apply its sales and income taxes to the offshore region.265 Nova Scotians will also have priority for jobs and industry participation,266 and the province is entitled to receive oil and gas produced from the Scotian shelf sufficient to cover its present and future domestic needs.267

Although rigorous protection of the environment and the fishing industry was included as an objective of the Canada-Nova Scotia

258. Id.
259. Id. § 8.
260. Id. § 16(2).
261. Id. § 16(3). A “specified decision” includes decisions respecting calls for submission of proposals for exploration agreements, entering into and terms of exploration agreements, approval of and terms of plans for Canadian participation, the granting of and terms of production licenses, and authorization of systems for producing oil and gas. Id. § 16(1).
262. See Doucet, supra note 238, at 135.
264. Id. §§ 64-65, 75-76.
265. See Gault, supra note 245, at 107; I. GAULT, supra note 255, at 64.
266. See Gault, supra note 245, at 107.
268. Id. § 21.
Agreement, the Canada-Nova Scotia Act does not address this issue specifically. COGA, the act specifically adopted for the administration of the Scotian offshore, gives the Minister of Energy, Mines, and Resources a great deal of discretion in the issuance and terms of exploration agreements. The Federal Minister will generally publish a notice calling for submission of proposals for an exploration agreement, but may enter into exploration agreements without notice if in the public interest. The Minister may accept any proposal, or none at all, and may take into account “any factors he considers appropriate in the public interest.” In addition, the Minister is required to publish the terms and conditions thirty days before concluding an unpublicized agreement. In practice, however, COGA creates a system whereby the Minister is given virtually total discretion in defining the rights and obligations embodied in an exploration agreement. This flexibility, although allowing the government ample latitude to take into account environmental concerns, lacks procedural safeguards for identifying and achieving objectives and assuring even-handed application.

Section 23(1) of the Canada-Nova Scotia Act requires that the Minister delegate to the CNS Board certain duties, including the negotiation of exploration agreements. The call for proposals and the negotiation of agreements are both identified “specified decisions,” subject to override by the Minister and delay by the Nova Scotian members of the CNS Board.

The holder of an exploration agreement is generally entitled to a production license if certain conditions are met. A production license gives the holder the exclusive right to produce oil and gas on

269. Canada-Nova Scotia Agreement, supra note 250, art 8. The agreement requires that offshore petroleum development plans meet both federal and provincial environmental standards and that federal and provincial environmental and fisheries agencies should review all applications for offshore exploration or production.


272. COGA, supra note 248, § 12.

273. Id. § 14.

274. Id. § 12(2).


276. Id. § 16(2).

277. Id. § 16(3).

278. COGA, supra note 248, § 9. The primary condition is that the party must demonstrate at least a 50% beneficial Canadian ownership interest. Id. § 19. In addition, if the production license is sought for lands in which the party had no previous interest, for example, lands adjacent to area subject to an exploration agreement, the party must satisfy the Minister that a “commercial discovery extends to those Canadian lands.” Id. § 18(3). A “commercial discovery” is defined as “a discovery of oil or gas that demonstrates the existence of oil or gas reserves that, if a feasible means of delivery to market existed, would justify the investment capital and effort to bring the discovery to production.” Id. § 2(1).
the submerged land and confers title to the oil and gas produced.\textsuperscript{279} The Oil and Gas Production and Conservation Act,\textsuperscript{280} (OGPCA) which was amended in connection with the enactment of COGA, further provides that "any work or activity related to the exploration for or the production of oil and gas" on the continental shelf requires an operating license issued by the Minister of Energy, Mines, and Resources.\textsuperscript{281} The Minister is given wide latitude in subjecting the holder of an operating license to "such requirements as he determines"\textsuperscript{282} and is specifically authorized to require environmental programs or studies.\textsuperscript{283}

The major amendments to the OGPCA were enacted as a result of concern over spills of oil and other pollutants.\textsuperscript{284} The OGPCA now prohibits any oil spills,\textsuperscript{285} imposes a reporting requirement for all spills,\textsuperscript{286} and establishes clean-up procedures and authorities.\textsuperscript{287} The act also imposes strict liability upon operators for cleanup costs and all actual loss or damage caused by oil spills\textsuperscript{288} or debris from ongoing or abandoned operations.\textsuperscript{289}

A major characteristic of the petroleum management system for the Scotian continental shelf is its uncertainty.\textsuperscript{290} In addition to the uncertainty inherent in the degree of ministerial discretion granted by COGA,\textsuperscript{291} there is also the issue of which law or regulatory scheme applies. Many of the Minister's powers are delegated to the CNS Board and may be granted to the Nova Scotia Minister of Energy and Mines.\textsuperscript{292} Furthermore, the implementing legislation at both the federal and state levels provides that it will prevail over any conflicting law,\textsuperscript{293} but fails to identify which other laws apply to the

\textsuperscript{279} \textit{Id.} § 17.
\textsuperscript{281} COGA, \textit{supra} note 248, § 3.1.
\textsuperscript{282} \textit{Id.} § 3.2(1)(a).
\textsuperscript{283} \textit{Id.} § 3.2(1)(b)(ii).
\textsuperscript{284} \textit{Id.} § 19-19.3.
\textsuperscript{285} \textit{Id.} § 19.1(1).
\textsuperscript{286} \textit{Id.} § 19.1(2).
\textsuperscript{287} \textit{Id.} §§ 19.1(3)-(9).
\textsuperscript{288} \textit{Id.} §§ 19.2(1)(a).
\textsuperscript{289} \textit{Id.} § 19.2(2)(a); see also \textit{id.} § 19.(2) (for the definition of "debris").
\textsuperscript{290} For a general critique of legal problems associated with the petroleum management regime, see Hunt, \textit{supra} note 270.
\textsuperscript{291} \textit{See, e.g.,} Doucet, \textit{supra} note 238, at 136 (arguing that the degree of ministerial discretion allowed by COGA makes it virtually impossible to certify title to land for purposes of securing credit).
\textsuperscript{293} \textit{See id.} § 3; Canada-Nov Scotia Oil and Gas Agreement Act, N.S. Rev.
Nova Scotia offshore. Even among federal agencies, there is a great deal of regulatory overlap. A new, and markedly different, federal-provincial agreement, the Atlantic Accord, now applies to management of the Newfoundland offshore. Rather than clarifying the situation, however, the implementation of inconsistent offshore regimes may create more confusion or, at least, instigate further Canada-Nova Scotia negotiations. One commentator has described the offshore petroleum management regime as "far from mature." There is likely to be a great deal more uncertainty and change while the regime "grows up."

ENVIRONMENTAL ASSESSMENT

Since the enactment of the National Environmental Policy Act of 1969 (NEPA), assessment of environmental impact has become a routine part of the activities of United States federal agencies. The Canadian government has also recognized the benefits of environmental assessment to planning and decisionmaking, but has found the "highly legalistic approach developed in the United States . . . wanting." The Canadian government, therefore, has taken a more cautious and "flexible" approach to environmental assessment in an attempt to avoid the pitfalls it perceived in the NEPA process: massive bureaucracy, inordinate delays, and lengthy and expensive lawsuits. The result has been the evolution of similar systems, but with some markedly different aspects. A direct comparison of the elements of each country's system of environmental assessment provides the best approach for analysis.

Unlike the statutorily mandated environmental assessment of NEPA, Canada's federal Environmental Assessment and Review Process (EARP) is completely nonstatutory. EARP was instituted by a Cabinet policy decision on December 20, 1973, and amended in 1977. Procedures were developed by the Interdepartmental Committee on the Environment to implement the cabinet decisions and were published as guides in 1975, 1977, and 1979. Review and recommendations by the Federal Environmental Assessment Review Of-

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294. See Hunt, supra note 270, at 136.
295. Id. at 139.
296. NEPA, supra note 188.
298. See id.; see also 1 R. Franson & A. Lucus, Canadian Environmental Law § 9.2.1 (1976).
299. NEPA, supra note 188, § 4332(A)-(C).
300. The process was instituted by a federal cabinet decision of December 20, 1973.
301. See 1 R. Franson & A. Lucus, supra note 298, § 9.2.3.
(FEARO) led to the issuance of the June 1984 Environmental Assessment and Review Process Guidelines Order (EARP Guidelines) as an Order-in-Council, replacing former cabinet decisions. Although EARP clearly lacks the legal force of NEPA, a 1979 amendment to the Government Organization Act clarified the authority of the Minister of Environment to establish environmental assessment procedures which impinge on activities and authorities of other federal agencies. In addition, the 1984 cabinet decision emphasized that although the new EARP order contains only “guidelines,” affected government agencies are to consider them mandatory.

The Environmental Impact Statement (EIS) is the primary planning and decisionmaking tool required under both the Canadian and United States systems of environmental assessment. In analyzing these systems, the first issues to consider are who is affected by the EIS requirement and under what circumstances. NEPA provides that an EIS must be prepared for “proposals for . . . major Federal actions significantly affecting the quality of the human environment.” The meaning of virtually every word of this phrase has been litigated many times to flesh out its skeletal requirements. For instance, federal actions are judged primarily by the degree of federal agency participation in the activity. Of course, a federal agency’s proposed activity which may degrade the environment triggers the EIS requirement, but a federal agency need not initiate nor even directly participate in a project to deem it a federal action. If the action is eligible for federal funding or requires federal approval or permitting, the action will be federal if the federal participation is

306. See 1 R. Franson & A. Lucus, supra note 298, § 9.2.3; see also D. Emond, supra note 297, at 271. The text suggests that the early success and failure of EARP were directly related to the extent that other departments were willing to recognize the legitimacy of environmental assessment and were prepared to give up control of activities to a relatively junior department in what the author terms a “not very subtle power change.” D. Emond, supra note 297, at 271.
308. See NEPA, supra note 188, § 4332(2)(C); EARP Guidelines, supra note 303, §§ 30-31.
309. NEPA, supra note 188, § 4332(2)(e).
sufficiently extensive or enables the activity to go forward. In addition, the promulgation of rules and regulations by a federal agency is a federal action, even when subsequent EISs may be required for individual actions taken to implement the rule or regulation.

Clearly, outer continental shelf lease plans, leasing activities, and plan approvals, as well as the adoption of fisheries management plans and regulations, are federal actions.

One commentator has noted that "[o]ne of the most difficult and persistent problems with EARP is knowing who and what is subject to the Process." The new EARP Guidelines attempt to clarify the situation by providing that EARP applies to any proposal

(a) that is to be undertaken directly by an initiating department;
(b) that may have an environmental effect on an area of federal responsibility;
(c) for which the Government of Canada makes a financial commitment; or
(d) that is located on lands, including the offshore that are administered by the Government of Canada.

The former procedures were applicable to "federal projects, programs, and activities." Federal projects were defined in terms of federal funds, lands, or initiatives. Federal programs and activities, however, were not defined although they apparently were not intended to include regulatory activities. EARP was not directly applicable to regulatory agencies which were merely "invited" to participate in the process. The new guidelines are more closely tied to the role of environmental assessment in the decisionmaking process, rather than to the nature of the project or activity. Regulatory bodies that have "a regulatory function in respect of a proposal" are now subject to EARP where there is no legal impediment or duplication.

One advantage of the flexibility of the Canadian process is that cooperative environmental assessments between jurisdictions can be instituted to avoid duplication, reduce costs, and expedite decision-
making. The EARP Guidelines authorize the Federal Environment Assessment Review Office (FEARO), which administers EARP for the Minister of Environment, to negotiate arrangements with provinces for joint environmental review procedures. Current practice relates the degree of federal or provincial participation on joint review panels to the extent to which major decisions affecting the project are made at each level. Pursuant to the Canada-Nova Scotia Agreement a joint environmental review board was appointed for the Venture Offshore Gas Development.

Both the United States and Canadian procedures emphasize environmental assessment procedures as a planning tool. This requires that environmental assessment be carried out in the earliest stages of proposal development. The United States Supreme Court, however, has interpreted NEPA to require an EIS only at the point a proposal is actually made. The Court held that “the contemplation of a project and the accompanying study thereof do not necessarily result in a proposal for major federal action.” This does not mean that EISs are routinely prepared as post hoc rationalizations for decisions, but rather that courts will not second guess agencies in determining when an EIS should be prepared.

The earliest Canadian reviews under EARP were particularly unsuccessful as planning tools. EARP was applied to the Point Lepreau Nuclear Power Station and the Wreck Cove Hydro Electric Power Project only after the decision to proceed had already been made. The current EARP Guidelines emphasize that the EARP is a planning tool, and not a regulatory process. Although the goal of the Canadian system is to initiate the process at the conceptual stages of proposal development, in practice the review process for offshore oil

321. EARP Guidelines, supra note 303, § 35(c).
323. See Canada-Nova Scotia Act, supra note 250, art. 8(b).
326. Id. at 406.
327. See D. Emond, supra note 297, at 271.
328. Raymond Robinson, the Executive Director of FEARO, emphasizes that the early initiation of EARP in cases that will require subsequent regulatory review does not necessarily result in a duplication of efforts. EARP findings can be incorporated into the design of projects before application, thus improving the project and reducing the workload of regulatory agencies. The two processes can complement each other if the regulatory agency includes the mitigatory measures recommended by the EARP report as conditions of the permit or certificate it may issue and has authority to enforce. See R. Robinson, supra note 302, at 22-23.
development starts at a much later stage than in the United States. Initial departmental decisions that leasing and exploration have no significant effect on the environment have meant that only proposals for production are referred for public review. In addition, no fisheries management proposals have been referred for review.

The procedures of either country apply only if the potential environmental effects of a proposal are "significant." Although there is no definition of the term in either NEPA or the EARP Guidelines, one can infer simply from the number of projects subject to environmental review under each country's procedures that the threshold for significance may be much higher in the Canadian process. For example, during the first nine years of EARP's application (1974 through 1982), review panel reports on only twenty-one projects were issued. In comparison, during the first nine years of NEPA (1970 through 1978), 9521 draft and final EISs were filed in the United States.

A unique feature of the Canadian review process is that the effects of a proposed project are deemed significant if the public perceives them to be. More precisely, the EARP guidelines provide that, notwithstanding a determination by a department that the environmental effects of a project are minimal or mitigable, the proposal should be submitted for review if "public concern . . . is such that

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329. Only exploration plans for oil exploration in particularly sensitive Arctic areas have been referred for application of EARP. Telephone interview with Mr. Bob Connelly, Federal Office on Environmental Assessment Review (Aug. 12, 1985).
330. Id.
331. See NEPA, supra note 188, § 4332(2)(C); see also EARP Guidelines, supra note 303, § 12(e).
332. United States agencies have developed procedures to implement NEPA including lists of activities which generally do or do not require an EIS. See, e.g., NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, PROCEDURES TO IMPLEMENT THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969, Directive 02-10 (revised June 18, 1980). The EARP Guidelines provide that for purposes of initial screening, departments shall develop, in cooperation with FEARO, lists of activities automatically excluded from or referred for environmental review. EARP Guidelines, supra note 303, at 11.
333. This inference may indeed be overly simple and not as valid as statistics seem to suggest. The division of authorities and activities between Canadian federal and provincial governments differs greatly from the situation in the United States. Many environmental assessment reviews are carried out at the provincial level. Increasingly, more projects are becoming subject to EARP. Only six panel reports were issued between 1973 and 1978 as compared to eighteen during the next five year period. FEARO, supra note 304, at 13. Emond notes that "as the Process becomes better known, it will become difficult for anything but the most innocuous project to slip by without an assessment." D. Emond, supra note 297, at 272.
334. FEARO, supra note 304, at 13.
335. See N. Orloff & G. Brook, THE NATIONAL ENVIRONMENTAL POLICY ACT—CASES AND MATERIALS 53-54 (1980). One commentator estimates that 30,000 EISs per year are now being filed by United States agencies. See T. Schoenbaum, ENVIRONMENTAL POLICY LAW 114 (1982).
336. See 1 R. Franson & A. Lucus, supra note 298, § 9.2.3.
public review is desirable.337

The initial screening of proposals and self-assessment by government agencies are similar in both countries. Unless significant environmental effects are patent, United States agencies normally prepare an environmental assessment as a decision document.338 Canadian initiating departments339 must determine whether the environmental effects of a proposal are: (1) insignificant or mitigable with known technology; (2) unknown and thus requiring further study and subsequent rescreening or reassessment; (3) unacceptable, in which case the proposal must be modified or abandoned; or (4) potentially significant.340

Both countries' procedures provide for public review at this initial stage.341 In the Canadian process, however, there is no provision for judicial or administrative review, nor is there standing to challenge a department's finding of no significant impact.342 The self-assessment decision is the sole basis for initiating the assessment and review procedure. Since there is no legal duty, it is doubtful that legal proceedings could be brought to require the application of EARP.343

Once the determination is made that potential environmental effects are significant, the procedures followed in the two countries are quite different. In the United States, the agency proceeds with the preparation of the EIS by first conducting a scoping process to identify and determine the range of issues to be addressed by the EIS.344 Public comment is invited through the publication of a notice of in-

337. EARP Guidelines, supra note 303, § 13; cf. Hanley v. Kleindienst, 471 F.2d 823, 830 (2d Cir. 1972) (finding that public controversy alone is insufficient to make an action significant enough to require an EIS).


339. EARP Guidelines define an "initiating department" as "any department that is . . . the decision making authority for a proposal." EARP Guidelines, supra note 303, § 2. Initiating departments cannot delegate authority for making initial screenings. Id. § 10(2).

340. Id. § 12.

341. When a United States agency issues a negative declaration or finding of no significant impact for a project that is similar to one that generally requires an EIS or a project of first impression, the agency must allow a 30 day public review period before beginning or approving the project. See 40 C.F.R. § 1501.4 (1981). Canadian departments are required to ensure that the public has "access to the information on and the opportunity to respond to the proposal. . . ." EARP Guidelines, supra note 303, § 15.

342. A decision by an agency not to prepare an EIS, however, is a final agency action subject to judicial review. See, e.g., Hanley v. Kleindienst, 471 F.2d 823 (2d Cir. 1972).

343. See I R. FRANSON & A. LUCUS, supra note 298, § 9.2.3.

tent to prepare an EIS. A draft EIS is then prepared according to the parameters identified by the scoping process and the general guidelines promulgated by the Council on Environmental Quality. The draft EIS is circulated for comment and, when considered "appropriate," public hearings are held. The final EIS is prepared in response to input from the comment process and public hearings.

When an initiating agency in Canada determines that the potential environmental effect of a proposal is significant or that public concern makes review desirable, the agency must refer the proposal to the Minister of Environment for review by an independent panel. The Environmental Assessment Panel (Panel) generally consists of five to seven members and is appointed by the Minister of Environment and chaired by the Executive Director of FEARO or his delegate. A different panel is usually appointed for each public review. The scope of public review for the proposal is defined in the terms of reference issued to the Panel by the Minister of Environment. A major function of the Panel is to develop EIS guidelines for each proposal. Public comment may be solicited on draft guidelines, and public meetings may be held before the EIS guidelines are finalized and submitted to the initiating department.

In the Canadian process, the EIS guidelines are submitted to the initiating department, but it is the responsibility of the proponent to

345. Id.
346. Id. § 1502.9(a).
347. See id. § 1500.
348. Id. § 1502.9.
349. Id. § 1502.6.
350. Id. § 1502.9.
351. EARP Guidelines, supra note 303, § 20.
352. See CURRENT PRACTICE, supra note 316, at 9.
353. EARP Guidelines, supra note 303, §§ 21-23.
354. Id. § 26.
355. Id. § 30. FEARO has issued general EIS guidelines for projects such as hydroelectric dams and nuclear power facilities, but they are only used as a basis for developing specific proposal guidelines. I R. FRANSON & A. LUCUS, supra note 298, § 9.2.3.
356. See Duinker & Beanlands, The Characteristics and Role of Scientific Information in the Canadian Environmental Assessment and Review Process, Working Paper 11, at 3 (1984) (to be published in ENVIRONMENTAL DECISION MAKING IN A TRANSBOUNDARY REGION: FUNDY TIDAL POWER AND THE NEW ENGLAND COAST (A. Rieser & J. Spiller eds.)). This study found EISs to be "often severely deficient in information," but identified the Panels to be as much at fault as the preparers of the EIS because the Panel submitted only broadly drawn, nonspecific guidelines. Duinker & Beanlands, Working Paper 11, at 8. The Executive Director of FEARO has stated that particular attention is now being given to improving EIS guidelines. Early meetings are being used to "scope" the parameters of review. Subsequent public meetings may be held to receive comment on draft guidelines. The goal is for the guidelines to evolve from a list of "detailed questions with prescribed methodology" to a focused list of "factors of value" to be examined. See R. Robinson, supra note 302, at 19-20.
prepare the EIS and implement a public information program.\textsuperscript{357} In the case of an environmental review of offshore oil production, for example, the oil company, rather than the Canada Oil and Gas Lands Administration,\textsuperscript{358} prepares the EIS. A leading United States case, \textit{Greene County Planning Board v. Federal Power Commission},\textsuperscript{359} held that private applicants cannot be responsible for the preparation of the necessary EIS.\textsuperscript{360} Subsequent cases\textsuperscript{361} and regulations,\textsuperscript{362} however, have allowed applicants to submit environmental information and participate in studies, so long as the federal agency determines the types of information required and independently evaluates the information.\textsuperscript{363} If an EARP Panel conscientiously designs the EIS guidelines and assesses the adequacy of the information submitted in the EIS, the differences in the two systems may be more form than substance.

The Canadian EIS is submitted to the Panel which determines through review and public comment the sufficiency of the EIS. Additional information may be sought by issuing a deficiency statement to the initiating department and proponent.\textsuperscript{364} After deficiencies in the EIS are corrected, formal public hearings are held on the proposal and the EIS. Hearings are nonjudicial and informal; the Panel may question, but not subpoena, witnesses.\textsuperscript{365} At least one commentator has criticized the Panel for making decisions based on information received after the public hearings.\textsuperscript{366} EARP guidelines now specifically provide that the public should have access to, as well as time to examine and comment on, information \textit{before} a public hearing.\textsuperscript{367} In addition, the Panel is arguably subject to a judicially reviewable duty of procedural fairness.\textsuperscript{368}

A report of the Panel's conclusions and recommendations is

\textsuperscript{357} EARP Guidelines, supra note 303, § 34(a), (c). The “proponent” is the organization or department actually undertaking the project. \textit{Id.} § 2.

\textsuperscript{358} The Canada Oil and Gas Lands Administration is the administrative office serving the Minister of Energy, Mines and Resources and the Canada-Nova Scotia Review Board.

\textsuperscript{359} 455 F.2d 412 (2d. Cir.), \textit{cert. denied}, 409 U.S. 849 (1972).

\textsuperscript{360} \textit{Id.} at 420-21.


\textsuperscript{362} See 40 C.F.R. § 1506.5 (1984).

\textsuperscript{363} See generally D. Mandelker, supra note 310, § 7.04.

\textsuperscript{364} See Duinker & Beanlands, supra note 356, at 4.

\textsuperscript{365} EARP Guidelines, supra note 303, § 27(1), (3).

\textsuperscript{366} D. Emond, supra note 297, at 230.

\textsuperscript{367} EARP Guidelines, supra note 303, § 29.

\textsuperscript{368} See 1 R. Franson & A. Lucas, supra note 298, § 9.2.3.
presented to the Minister of Environment and the minister of the
initiating department. It is the responsibility of the ministers to
make the report available to the public and to ensure that any
decisions made by the appropriate ministers as a result of the Panel's
conclusions and recommendations are incorporated into the design,
construction, and operation of the proposed project. It must be
emphasized, however, that the Panel report is advisory; a department
has no legal obligation to implement a Panel's recommendations. In
this case, again, the difference in the United States and Canadian
procedures may be one of form rather than substance. Although
NEPA creates the legal requirement that environmental impact and
alternative actions in agency decisionmaking must be considered,
so long as an agency conforms to the procedural requirements of
NEPA and considers the environmental consequences of its action, the
agency is not legally bound by environmental factors. EARP
guidelines appear to reflect United States jurisprudence by providing
that the self-assessment process is intended to "ensure that the envi-
ronmental implications of all proposals . . . are fully considered
. . .".

Must the environmental assessment process consider potential
transboundary effects of a proposal? EARP guidelines specifically
state that a department's self-assessment process should include "the
potential environmental effects of the proposal and the social effects
directly related to those environmental effects, including any effects
that are external to Canadian territory . . .".

Whether NEPA applies to extraterritorial environmental impacts
is much more questionable and controversial. Although no provi-
sion in NEPA specifically indicates whether an agency must consider
the extraterritorial environmental impacts of its activities, one para-
graph of NEPA does address international environmental
responsibility:

369. EARP Guidelines, supra note 303, § 31.
370. Id. § 31(2).
371. Id. § 33(1)(d).
372. NEPA, supra note 188, § 4332(2)(C).
374. EARP Guidelines, supra note 303, § 3 (emphasis added).
375. Id. § 4(1)(a) (emphasis added).
376. Objections to extraterritorial application of NEPA have ranged from financial
issues (costs greatly outweigh the benefits) to foreign policy issues (interference with the
sovereignty of other countries). See generally Almond, The Extraterritorial Reach of
United States Regulatory Authority Over the Environmental Impacts of Its Activities,
44 Alb. L. Rev. 739 (1980); Comment, Federal Agency Responsibility to Assess Extraterritorial Environmental Impacts, 14 Tex. Inst'L L.J. 425 (1979); Note, The Scope of
the National Environmental Policy Act: Should the 102(2)(C) Impact Statement Provi-
sion be Applicable to a Federal Agency's Activities Having Environmental Consequences Within Another Sovereign's Jurisdiction?, 5 Syracuse J. Inst'L L. & Com. 317
(1978).
[All] agencies of the Federal Government shall—recognize the worldwide and long-range character of environmental problems and, where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions, and programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankind's world environment.\textsuperscript{[377]}

The legislative history does not conclusively indicate, however, whether this section was intended to extend the effect of NEPA extraterritorially, or merely to authorize agency participation in international cooperative programs.\textsuperscript{[378]} Court decisions in which the issue was raised have been inconclusive,\textsuperscript{[379]} and draft regulations by the Council on Environmental Quality extending NEPA to extraterritorial actions were withdrawn when businesses and several federal agencies objected.\textsuperscript{[380]} President Carter's 1979 Executive Order on the Environmental Effects Abroad of Major Federal Actions\textsuperscript{[381]} was issued in an effort to settle the controversy. Unfortunately, it left unresolved the question of whether NEPA extended to direct impacts on foreign countries. The order applies to "major federal actions significantly affecting the environment of the global commons."\textsuperscript{[382]} Although the global commons is generally understood to include the oceans, exclusive jurisdictional zones such as continental shelves and fisheries zones would certainly be considered "the environment[s] of . . . foreign nations[s]" even though foreign nations are generally excluded from application of the order's EIS requirement.\textsuperscript{[383]} The question of whether NEPA mandates consideration of the extraterritorial environmental impacts on Canada of fisheries management or petroleum production, therefore, remains unclear.

\begin{itemize}
\item \textsuperscript{377} NEPA, supra note 188, § 4332(2)(F).
\item \textsuperscript{378} See generally Note, The Extraterritorial Scope of NEPA's Environmental Impact Statement Requirement, 74 Mich. L. Rev. 349, 365-71 (1975) (discussion of the legislative history of this section of the NEPA).
\item \textsuperscript{380} CEQ Memorandum to Heads of Agencies: Application of the National Environmental Policy Act to Federal Activities Abroad, reprinted in 8 Envt'l Rep. 1493 (1978).
\item \textsuperscript{381} Exec. Order No. 12,114, 44 Fed. Reg. 1957 (1979).
\item \textsuperscript{382} Id. § 2-3(a).
\item \textsuperscript{383} The Executive Order applies to environmental impacts in a foreign nation only if the project or product involves a toxic substance which creates a serious public health risk or involves radioactive substances. Id. §§ 2-3(e)(1), (2).
\end{itemize}
One commentator has noted that the Georges Bank-Gulf of Maine boundary hardly creates a unique situation. The new maritime boundary merely adds about 250 nautical miles to the approximately 5,525 statute miles of boundary already shared by the two countries.\textsuperscript{384} On the other hand, this formerly high seas area is quite different from continental frontier areas, because international law has not yet evolved to the point of developing with certainty the right and obligations of states in relationship to the fisheries and exclusive economic zones. Political, economic, and social issues peculiar to the region continue to pervade United States-Canadian relations and impede progress toward resolution of environmental problems.

The two countries are at a point that has been described as a "bilateral threshold."\textsuperscript{385} United States and Canadian negotiators and decisionmakers are faced squarely with the kind of resource allocation and social engineering issues that the ICJ has avoided by basing delimitation of offshore areas on geometric methods related to the coastline.\textsuperscript{386} Domestic politics,\textsuperscript{387} federalism, and nationalism further complicate attempts at objective resolution of the inherently complex problems.

In addition to the domestic impediments to reasoned solutions, certain behavioral characteristics of the United States and Canada have historically affected the relations of the two countries and will also shape future negotiations. First, the United States appears to favor litigation as a dispute resolution mechanism, while Canada clearly prefers negotiation. The history of federal-state and federal-

\textsuperscript{384} Schneider, supra note 73, at 575.
\textsuperscript{385} McDorman, Saunders & VanderZwaag, supra note 30, at 106.
\textsuperscript{386} The Special Chamber found that a delimitation according to equitable criteria primarily involved principles related to geographic features, and that other factors come into account only to assure an equitable result. See Gulf of Maine, 1984 I.C.J. 246. In the delimitation of the Libya-Tunisia continental shelf, the ICJ went even further in rejecting economic and social factors, such as a country's relative poverty or wealth, as factors in a delimitation of the continental shelf. The ICJ stated that "these economic considerations cannot be taken into account . . . . They are virtually extraneous factors since they are variables which unpredictable national fortune or calamity . . . might at any time cause to tilt the scale one way or the other." Concerning the Continental Shelf (Tunisia v. Libyan Arab Jamahiriya), 1982 I.C.J. 18, 64-65, paras. 106-07 (Judgment of Feb. 24), reprinted in 21 I.L.M. 225 (1982).
\textsuperscript{387} Domestic politics, rather than the inability of the governments involved to reach a negotiated conclusion, can probably be cited as the primary reason for submitting the boundary issue to the ICJ. Fisheries interests exert a disproportionate amount of influence on the governmental affairs of both the United States and Canada compared to the relatively small contribution of fisheries to the gross national product of the countries. See W. Willoughby, The Joint Organization of Canada and the United States 65 (1970). Willoughby suggests that the influence of fishing interests is due to "the concentration of . . . voting strength in several coastal regions. . . . increasing recognition of the importance of fish as food . . . ." and "the traditional link of fishing with the naval and commercial life of the nation." Id.
provincial relations in regard to the ownership and exploitation of the continental shelf\textsuperscript{388} and each country's experience with environmental assessment provide even better examples of these preferences than the Georges Bank boundary dispute.\textsuperscript{389} Second, Canada prefers strong treaty obligations and enforceable management authority in a supranational organization, rather than agreements on general principles with implementation left to future ad hoc negotiations. Both the Boundary Waters Treaty of 1909,\textsuperscript{390} establishing the International Joint Commission,\textsuperscript{391} and the failed East Coast Fisheries Agreement\textsuperscript{392} reflect this preference.\textsuperscript{393} Finally, the United States' law and administrative structure incorporate a much greater degree of formal public participation than Canada's. Although this is primarily a result of the United States' larger and more organized citizen's environmental movement, it may also be partly attributable to differences in political accountability in the two countries.

McDorman, Saunders, and VanderZwaag have suggested possible management steps for the Georges Bank region, which include harmonizing national legislation governing offshore resources, and providing each nation's citizens equal access to the courts and adminis-

\textsuperscript{388} See supra text accompanying notes 164-295.
\textsuperscript{389} See supra text accompanying notes 296-383; see also J. CARROLL, ENVIRONMENTAL DIPLOMACY: AN EXAMINATION AND A PROSPECTIVE OF CANADIAN-U.S. ENVIRONMENTAL RELATIONS 282-84 (1983). Carroll provides the two countries' approaches to pollution control as examples of their behavioral preferences. The United States' "standards [are] strict and were designed to accommodate expensive and inevitable litigation." Id. at 282. Canada chose "more realistic air and water quality objectives" and "negotiat[es] with the proposed polluter to determine what is an appropriate control objective for a given area, and then how much pollutant emission is reasonably allowable in order to reach or preserve this objective." Id. at 283.
\textsuperscript{390} Treaty Relating to Boundary Waters Between the United States and Canada, Jan. 11, 1909, United States-Great Britain, 36 Stat. 2448, T.S. No. 548 [hereinafter cited as Boundary Waters Treaty].
\textsuperscript{391} Id. art. 7.
\textsuperscript{392} Fisheries Agreement, supra note 61.
\textsuperscript{393} Canada perhaps perceives the United States as being in a stronger bargaining position and, therefore, as having an advantage if disputes are settled on a case by case basis. In addition, it may be that Canada finds the United States' political system too unpredictable to rely upon for negotiated resource allocation or dispute settlement on an ad hoc basis. In either case, it would seem that the words of George Gibbons, one of the original negotiators of the 1909 Boundary Waters Treaty, are equally appropriate today: There is only one way in which we will get fair play, and avoid a conflict with [the United States], and that is by a permanent joint commission which will play the game fairly, and whose conclusions will be so justified by public opinion, even in the United States, as to compel their acceptance.


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trative forums. This overview of the legal regimes for marine resource management and environmental assessment in the two countries identifies some of the impediments to these alternatives. Even in areas of clear federal supremacy, accommodation of state and provincial interests in management decisionmaking would make attempts to harmonize laws legally complicated and politically sensitive. Canada has consistently rejected the United States' rigid, litigation-oriented system of management, while environmental groups in the United States would be loathe to surrender any of the procedural safeguards which they have fought to implement. The flexibility which is the hallmark of the Canadian management systems would, arguably, make it easier for the Canadian system, rather than the United States regime, to adjust to a harmonization of the two systems. Unfortunately, the adoption of a structured, United States-type regime with a high degree of public participation tends to further emphasize local and domestic, but not international, concerns.

The harmonization of laws and authorities dealing with environmental assessment could be more useful than the harmonization of resource management regimes. The requirement that transnational environmental impacts be considered by both countries could be complemented by requiring joint environmental assessments for activities in frontier regions or for activities that affect shared resources.

Without harmonization, it is unlikely that equal access to the courts and administrative forums will contribute significantly to the improvement of resource management in the region. Presently, Canadian citizens have much greater access to the United States courts to redress environmental injuries than United States citizens have to Canadian courts. Although it would seem equitable to provide United States citizens an equal opportunity in Canada to be compensated for individual environmental damages, this measure would do very little to further general resource management objectives. In addition, the access of Canadian citizens to their own courts for review of resource management or environmental assessment decisions is so

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394. See McDorman, Saunders & VanderZwaag, supra note 30, at 106. The authors also suggest as possible management steps establishing a transboundary pollution compensation scheme, referring questions to the International Joint Commission, and creating new single purpose or multifunctional institutions to manage or advise upon activities in the region. Id. at 106.

395. See Arbitlit, The Plight of American Citizens Injured by Transboundary River Pollution, 8 Ecology L.Q. 339 (1979). In an action by a United States citizen for damages to property or other interests in the United States, a Canadian court would hold that it had no jurisdiction in any case involving injury to foreign land. Id. at 342. In addition, because Canadian courts will only enforce foreign judgments if jurisdiction in the original case conformed with a form of jurisdiction exercised in Canada, a judgment in the United States against a Canadian polluter may be unenforceable if the party has no assets in the United States. Id. at 345-46.
limited that equal access for United States' citizens would be virtually meaningless.

As management prescriptions, harmonization of laws and equal access to the courts only seem to treat the symptoms rather than the disease. These types of solutions perpetuate the current system of ad hoc responses and temporary accommodations that is potentially disastrous not only to resources and the environment, but to bilateral relations as well. Carroll warns that environmental problems present a greater threat to Canadian-United States relations than "any other difficulties experienced in recent history." Furthermore, a new order—a comprehensive approach to all transboundary issues—is necessary to preserve the friendly and cooperative relationship between the United States and Canada.

In the Georges Bank region, there are several comprehensive management approaches that could be implemented. In the case of fisheries management, resolution of the boundary may lead to the resurrection of a modified version of the East Coast Fisheries Agreement or a similarly structured joint management scheme. Although the original agreement met with opposition because it vested much of the power of the regional fishery management council with a supranational commission, the major obstacle in the United States was objection to the fixed percentages of catch allocated by the agreement to the two countries' fishermen. Either due to a belief that the United States' position would prevail in the case, or because negotiation over fisheries allocations without an established boundary created a kind of "blind man's bluff," United States fishermen strongly opposed the allocations and the agreement. The breakdown of the treaty should not, however, be attributed solely to narrow-minded self interest on the part of New England fishermen; when the circumstances provided the fishermen with no yardstick to measure what was "fair," the only guideline available was to consider what position was potentially more economically advantageous.

396. See supra text accompanying notes 152-53.
398. See Carroll & Mack, supra note 397, at 36.
399. See id. at 41-40; J. Carroll, supra note 389, at 279-305.
400. Fisheries Agreement, supra note 61. See also supra text accompanying notes 61-67.
401. Ironically, United States fishermen claimed that the proposed arrangement lacked the flexibility to deal with changing stocks and national fishing patterns. See Maritime Boundary Settlement Hearings, supra note 68.
Now that each country's fishing zone has been identified by the ICJ Chamber, what is being gained and lost through negotiation of allocations will become clearer, and the results may be more acceptable.\textsuperscript{402}

The complexity of fisheries management most likely requires that it be the subject of an independent management regime. But even presuming that a joint management scheme can again be negotiated and, more importantly, implemented, the regime would not address the problems associated with other uses in the region. Conflicts between oil development, navigation, tidal power development, and fisheries are only a partial list of the issues not addressed by a fishery management program. Likewise, other single purpose international institutions, focusing perhaps on oil and gas development or transnational pollution, could only deal comprehensively with their respective subjects.

Multi-use conflicts could be dealt with as they arise. A better and less confrontational approach, however, is to refer these issues to an established international commission. The commission's scope of power might range from actual management of the region, to an advisory group on policy, to merely that of a fact-finding agency. Ideally, such a commission would have the authority to plan and establish policy and resource management objectives for the region. Realistically, however, neither country is likely to agree to such a delegation of power to a supranational commission. At the other end of the spectrum, the merits of a \textit{mere} international fact-finding agency should not be discounted.

Although clearly not a total solution, it has been suggested that common agreement on facts "constitutes two-thirds of the battle to settle transboundary disputes."\textsuperscript{404} Furthermore, independent fact-finding, divorced from politics, nationalism, and emotion, is an achievable goal and provides an \textit{objective} basis for resolution of ideological differences. Finally, considering the current state of relations between the two countries, joint fact-finding seems to be the most realistic starting point for dealing with the plethora of transnational environmental problems.

\textsuperscript{402} Problems in a new negotiation of allocations will still exist, however, because east coast fishermen have no unity of interests—for example, the priorities of nearshore fishermen differ from those of offshore fishermen; those of groundfish fishermen differ from those of scallopers.


\textsuperscript{404} J. Carroll, \textit{supra} note 389, at 280.
It is primarily in the context of joint fact-finding that recommendations to expand the role of the International Joint Commission have emerged. The International Joint Commission (Commission) is a unique binational commission created by the 1909 Boundary Waters Treaty, with the power to make binding orders in "all cases involving the use or obstruction or diversion" of boundary waters. Of more relevance to the Georges Bank conflicts is the Commission's broad authority to investigate "any other questions or matters of difference arising between [the countries] involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along the common frontier... [as] shall be referred from time to time. . . ." Although either party can initiate a reference, the fact that both parties in practice have agreed to the terms of the reference has contributed to the use of the Commission and acceptability of its findings and recommendations. Since the mid-1950s, the Commission's investigative role has become its primary and most successful function. The Commission's perspective over the years has evolved from water use and diversion, to related land use issues, to water quality problems, and even to transboundary air pollution. Yet the Commission has clearly not been used to its full potential.

406. Boundary Waters Treaty, supra note 390, arts. 7 & 8. The Commission is composed of six commissioners, three from each country.
407. Id. art. 8.
408. The Preliminary Article of the Treaty defines boundary waters as the waters from main shore to main shore of the lakes and rivers and connecting waterways, or the portions thereof, along which the international boundary between the United States and the Dominion of Canada passes, including all bays, arms and inlets thereof, but not including tributary waters which in their natural channels would flow into such lakes, rivers, and waterways, or waters flowing from such lakes, rivers, and waterways, or the waters of rivers flowing across the boundary.
409. Id. art. 9 (emphasis added).
410. Id.
411. See Cohen, supra note 403, at 75 n.26.
412. See generally Note, supra note 393, at 504.
413. The investigative authority of the Commission is dependent upon the reference of an issue to it by one or both of the countries. Since the Commission cannot initiate such investigations, many questions are never brought to it, or are referred at a point at which the determinations cannot be effectively used for planning. A totally unused provision of the Boundary Waters Treaty is Article 10, which provides that the parties can refer "[a]ny questions or matters of difference" to the Commission "for decision." Unlike the investigative authority of the Commission, this decisionmaking author-
fact-finding concerning Georges Bank-Gulf of Maine transboundary issues would represent a natural evolution of the Commission's functions.

CONCLUSION

Neither international law nor the decision of the Special Chamber of the ICJ in delimiting the Georges Bank-Gulf of Maine boundary provide more than a starting point for dealing with the shared resource and transboundary problems of that area. A survey of the legal regimes for environmental assessment and marine resource management reveals commonly shared goals in environmental protection and conservation, but also discloses significant differences in policy, law, authority, and administration. When politics, nationalism, and economics are factored into the formula, there seems to be little common ground on Georges Bank.

Environmental issues such as acid precipitation, fisheries, and oil development have been straining United States-Canadian relations for several years and are seen by some commentators as a threat to the close relationship between the two nations. New institutions, such as a joint East Coast Fisheries Commission, have not been able to survive the political pressures created by the United States treaty ratification process. In the midst of this depressing scene, the International Joint Commission has been operating successfully for over seventy years. It has been under utilized, under funded, and perhaps its success has been due to the fact that yesterday's problems were not as difficult or far reaching as today's. Nevertheless, use of the Commission to deal with some of the problems of Georges Bank would abrogate the need to establish new institutions and, arguably, would not even require expanded authority for the Commission.

The economic and environmental goals of the two countries—achieving optimal resource use, while protecting existing resources for this and future generations—are very similar. If the investigative authority of the Commission were used to reach a first level of cooperation and joint agreement on factual issues, those facts could then become the basis for domestic resource management and environmental assessment decisions. This significant step toward reaching common goals could be augmented by a degree of harmonization in environmental assessment laws, including requiring the consideration of transnational environmental impacts, some uniformity as to the types of activities requiring environmental assessment,
and, perhaps even further use of the International Joint Commission for joint environmental assessment of projects affecting shared resources.