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Rita Heimes
University of Maine School of Law

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MANAGING A FISHERY THROUGH CONTRACT:
LEGAL ISSUES RAISED BY SECTOR OPERATING
AGREEMENTS IN THE NEW ENGLAND
MULTISPECIES FISHERY

Rita Heimes*

I. INTRODUCTION

New England boasts one of the most productive marine ecosystems in the world. It has a long and rich tradition of fishing and has supported large scale commercial fisheries for cod and other groundfish (e.g., haddock and flounder) for centuries.1 The region also has a less enviable tradition of fishery management failures including the “collapse” of a number of groundfish stocks in the 1990s.2 Before 1977, the groundfish fishery was practically unregulated and was open to local and international fishing fleets alike.3 Overfishing4 caused dramatic declines in many fish stocks in New

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England and other regions,\(^5\) prompting passage of the Fishery Conservation Management Act (known as the Magnuson-Stevens Act), which allowed the federal government to regulate fisheries out to 200 miles.\(^6\)

The Magnuson-Stevens Act (MSA) created a fishery system that revolved around regional management councils, which developed and implemented fishery management plans (FMPs) and directed fishermen in their activities.\(^7\) The New England Fishery Management Council (NEFMC) has management authority over the New England multispecies groundfish fishery.\(^8\) It implemented a series of fishery management plans for the northeastern United States. These plans adopted a broad suite of management measures designed to achieve the fishing mortality targets necessary to rebuild certain overfished stocks and aspired to meet other requirements of the MSA.\(^9\)

When a regional council develops an FMP, the National Oceanic and Atmospheric Administration (NOAA) and the National Marine Fisheries Service (NMFS), acting on behalf of the Secretary of Commerce,\(^10\) evaluate it for compliance with the ten national standards set forth in the MSA,\(^11\) as amended by the Sustainable Fisheries Act (SFA).\(^12\)

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5. See Vellucci, supra note 3, at 279 (“In 2004, the [National Marine Fisheries Services] reviewed 236 stocks of fish and identified 44 stocks that were being overexploited. . . . [It] examined 200 stocks of fish and identified 53 stocks as overfished; the status of 113 stocks was unknown.”) (citation omitted); see André Verani, Community-Based Management of Atlantic Cod by the Georges Bank Hook Sector: Is It a Model Fishery?, 20 Tul. Envtl. L.J. 359, 361-65 (providing a history of Atlantic cod and the fishery’s collapse).


11. Id. at 6 n.4 (citing Conservation Law Found. v. Mineta, 131 F. Supp. 2d 19, 21 n.2 (D. D.C. 2001)); see also 16 U.S.C. § 1851. The national standards require the Secretary and his or her designees to:

- (1) prevent overfishing and maintain ‘optimum yield’;
- (2) base conservation on the best available scientific information available;
- (3) manage each stock of fish as an individual unit;
- (4) fairly and equitably allocate fishing privileges among the states;
- (5) be efficient in the utilization of fishery resources;
- (6) take into account variations and contingencies in fishery resources;
- (7) minimize costs and unnecessary duplication;
- (8) minimize adverse economic impacts on communities;
- (9) minimize bycatch and the mortality of bycatch; and
- (10) promote the safety of human life at sea.

Evans, 209 F. Supp. 2d at 6 n.4.

A 2001 lawsuit by the Conservation Law Foundation (CLF) against the Secretary of Commerce, NOAA, and NFMS alleged that plans for rebuilding groundfish stocks failed to meet the national standards.\textsuperscript{13} CLF argued that the plans failed to adequately mitigate overfishing practices or to comply with bycatch restrictions.\textsuperscript{14} The lawsuit’s settlement led to Amendment 13 of the FMP.\textsuperscript{15} Among other things, Amendment 13 made possible a new style of fishery management for the New England multispecies groundfish fishery, namely, the creation of harvesting cooperatives known as “sectors.”\textsuperscript{16}

Sectors are a form of community-based fisheries management. They require that groups of fishermen join together and agree to manage themselves collectively.\textsuperscript{17} By law, fishermen are obliged to sign a formal contract setting forth the key terms of their cooperative arrangement.\textsuperscript{18} The novelty and complexity of these contracts requires specialized legal drafting.

Pursuant to a grant from the National Sea Grant Law Center,\textsuperscript{19} the University of Maine School of Law, in partnership with the Gulf of Maine Research Institute, and the New England office of the Ocean Conservancy, convened a workshop in November 2007, to address key legal issues raised

\begin{itemize}
\item 14. \textit{Id.} at 1. “The term ‘bycatch’ means fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. Such term does not include fish released alive under a recreational catch and release fishery management program.” 16 U.S.C. § 1802(2).
\item 16. 50 C.F.R. § 648.87 (2007).
\item 17. This article explores community-based management in the form of sectors in contrast to a more centralized governance regime in which the government attempts, through regulation and enforcement, to induce fishermen to change their actions. Another fisheries management approach not discussed at length here is that of generating private property interests in the fishery such that fishermen, by owning the right to fish for a portion of the fish stocks, have an inherent incentive to conserve and manage the resource. \textit{See e.g.,} Jonathan H. Adler, \textit{Legal Obstacles to Private Ordering in Marine Fisheries}, 8 ROGER WILLSIAMS U. L. Rev. 9, 10 (2003). The aversion to such private property systems in the United States, as well as the governments’ inability to implement them effectively, is one factor contributing to the popularity of community-based management as an alternative to the “command and control” system. \textit{See} Joseph M. Sullivan, \textit{Harvesting Cooperatives in U.S. Antitrust Law Recent Developments and Implications} 9 (2000) [hereinafter Sullivan] (unpublished manuscript, on file with author).
\item 18. 50 C.F.R. § 648.87(b)(2).
\item 19. The National Sea Grant Law Center conducts and coordinates research on issues of ocean and coastal law and policy. \textit{See} The National Sea Grant Law Center, http://www. olemiss.edu/orgs/SGLC/lawcenterhome.htm (last visited Dec. 5, 2008).
\end{itemize}
by sector operating agreements.20 This article summarizes the Sector Workshop’s proceedings by highlighting the major legal issues discussed at the meeting. Part II describes community-based management generally and sectors as a management tool for the New England multispecies fishery. Part III discusses the legal issues to be resolved in sector operating agreements and reflects some of the specific concerns and suggestions raised by the workshop participants. Part IV concludes with reflections on sectors as a management tool and provides information on resources for those in the New England multispecies fishing industry who are considering forming or joining a sector.

II. COMMUNITY-BASED FISHERIES MANAGEMENT:
A SOLUTION FOR NEW ENGLAND?

A. Controlling a Fishery Through Community Norms

Community-run fisheries and collective practices are neither unique nor necessarily modern innovations. Scholars have long been studying and describing “community-based, spontaneously developed and informally organized” arrangements21 that appear to avoid the “tragedy of the commons” problem first described by Garrett Hardin.22

Early Native American communities managed fishing resources through controlled access practices and enforcement of meaningful consequences for breach of such traditions.23 For years, the lobster fishery off Maine islands has been managed by informal agreements among fishermen relying on their own private enforcement means. Off Matinicus Island, for example, all lobster fishers have been either island residents or resident-sponsored. Fishermen control access to fishing grounds by imposing take measures to discourage others from setting traps within islanders’ territory


23. Leal, supra note 21 (describing family groups organized by Tlingit and Haida Indians of Alaska to control access to sockeye salmon runs and Indian tribes of Washington State with similar salmon fishing traditions).
and by using self-imposed conservation measures such as trap limits. Several other examples of successful community-based management approaches—with and without government sanction or assistance—exist in fisheries around the world. Fishers of a mixed fishery in Valensa, Brazil resolved years of conflict and gear entanglement by dividing their estuary into fishing zones. Like island lobstermen in Maine, fishers off the Nova Scotia coast informally divided their fishing grounds into gear-specific territories that they fiercely defended against outsiders. With government involvement, similar arrangements have existed in Norway’s Lofoten commercial cod fishery, Scotland’s salmon fishery, and throughout Japan’s network of fishing cooperatives.

Community-based management systems tend to prosper when boundaries are well defined, rules are linked to local conditions, and sanctions are imposed for rule violations. Additional characteristics that support private agreements to allocate fish harvesting privileges include: (1) a relatively small number of participants sharing a similar “community of interest”; (2) an effective system for gathering fishery harvest data; (3) accurate data verification and monitoring to ensure compliance; (4) an ability to enforce the agreement in cases of non-compliance; (5) barriers to new, “free-riding” participants; and (6) an incentive to join the group and conform to its rules.

Many of these conditions were present in the Pacific Northwest in the 1990s. Government regulation of fisheries in the Pacific Northwest was
inefficient and unsuccessful, and the clumsy consideration of an individual fishing quota (IFQ) system caused fishermen to look for more certain options over which they had some control.

B. Cooperatives in the U.S. Pacific Northwest

The prototypes for New England groundfish sectors are the cooperative harvesting arrangements in the U.S. Pacific Northwest. The first formal harvest cooperative in this region was the Pacific Whiting Conservation Cooperative (Pacific whiting fishery), formed in 1997, by vessel owners participating in the off-shore whiting fishery. Four catcher/processor companies privately negotiated an arrangement that specified each member’s share of the total catch allocated to their sector by the Pacific Fishery Management Council.

Vessel owners in the Bering Sea pollock fishery, inspired by the economic success of the whiting fishery cooperative, lobbied Congress for permission to form pollock cooperatives. Their persistence resulted in the American Fisheries Act of 1998, which allowed the formation of two pollock harvest cooperatives in 1999.

Joseph Sullivan, an attorney in Seattle, Washington, assisted the pollock cooperatives in preparing their operating agreement and working through thorny legal issues, including antitrust concerns. He describes the ways in which harvesting cooperatives may be ever more prevalent in the U.S. Pacific Coast and Alaska fisheries:

Limited entry systems are prevalent. Fishery sectors are increasingly segregated by species and gear-specific licensing systems,
which restrict eligibility to fishermen with recent participation above marginal thresholds. Anecdotal information from fishermen suggests that the expense of adding harvesting capacity has increased as fishery technology has improved, while product markets have become increasingly competitive as a result of globalization and new information technology. Thus, the costs of continuing to compete in an olympic fishery has made doing so progressively less attractive. . . . Many Pacific Coast and Alaskan fisheries are managed on the basis of total allowable catch (“TACs”) or guideline harvest levels which, when attained, trigger closure of all fishing until the next season. Given these factors, there are opportunities and incentives for a significant subset of U.S. fishermen in these fisheries to seek rationalization through private agreement.38

C. “Sectors” in New England

Whereas the term “cooperative” has been applied consistently to groups of fishermen in the Pacific Northwest joining together to allocate harvesting privileges, in New England the same type of arrangement is known as a fishing “sector.” This can create some confusion because the term “sector” is also used in the Pacific Northwest to refer to a particular section of a fishery (e.g., an inshore sector and an offshore sector).39 Throughout this article, the term “sector” will be used as a synonym for “cooperative” to refer to the collective activity of several fishing vessel owners who seek to allocate fishing privileges through a private agreement.

1. Background to Amendment 13

The NEFMC performs its functions under the MSA by developing and implementing FMPs and amendments thereto.40 FMPs are submitted to the Secretary for approval after which they are implemented through “framework adjustments.”41 Among the management measures in the Northeast Multispecies FMP was an allocation of days at sea (DAS) for individual

38. Sullivan, supra note 17, at 2.
41. Id. at 5-6 (quotation marks omitted). According to Evans, “[a] framework adjustment is comprised of management measures which would achieve the fishing mortality objectives of an FMP.” Id. at 5 n.5 (citing 50 C.F.R. § 648.90).
vessels. This measure was intended to minimize the risk of overfishing. Implemented for the first time in Amendment 5 to the FMP in 1994, the original DAS allocation, in combination with other management measures, was inadequate to reduce fishing mortality to sustainable levels. The Sustainable Fisheries Act of 1996 ordered the Secretary of Commerce, through the NEFMC, to prevent overfishing and rebuild the severely depleted New England groundfish stocks.

Amendment 7, adopted in 1996, accelerated the DAS allocations, eliminated exemptions from effort controls, provided incentives for fishing with larger mesh sizes, and broadened area closures to protect juveniles and spawning fish. Amendment 9 established a new definition for overfishing and set the optimum yield for twelve groundfish species. According to a CLF lawsuit filed in 2001, however, rebuilding plans actually implemented by the Council did not live up to the overfishing definitions of Amendment 9. This lawsuit resulted in a court order requiring the Secretary of Commerce to adopt yet another Amendment that, among other things, calculated the total allowable catch (TAC) for all species governed by Amendment 9. The ultimate outcome was Amendment 13, which addresses stock rebuilding, reduces fishing effort and capacity, and proposes measures for additional habitat protection.

2. Sectors Provision of Amendment 13

For the first time in the history of the Northeast Multispecies FMP, the official management structure, as guided by federal regulations, allows for the formation of fishing “sectors” and the allocation of fishing privileges unique to that sector. The process for sector proposal and approval is set forth in Amendment 13 to the Northeast Multispecies FMP, principally at 50 C.F.R. § 648.87 (2007).
a. Procedure for Creating and Maintaining a Sector

First, owners of limited access multispecies fishing vessels must decide that they wish to form a sector. At least one year in advance of the start of the sector, they must submit a proposal to the NEFMC requesting that their sector be implemented pursuant to a framework adjustment procedure.50

Although the New England groundfish fishery has primarily operated under the DAS regime since the mid-1990s, a sector-based system requires that the fishery move to a regime with a TAC on a per-stock and per-sector basis. Thus, in order to qualify for sector approval, the sector’s allocation of fishing privileges must be based either on a fixed amount of fish the sector is allowed to catch (known as a “hard TAC”) or on a maximum number of DAS for all the vessels in the sector combined with a target TAC.51

Each stock in the fishery has its own TAC for the fishing year. Under Amendment 13, if the sector is assigned a hard TAC this amount may reach (but not exceed) twenty percent of the stock’s TAC.52 The assignment of either a TAC or a DAS allocation is based upon “documented accumulated catch histories of the harvested stock(s) for each vessel electing to fish in a Sector, for the 5-year period prior to submission of a Sector allocation proposal.”53 Under proposed Amendment 16, the hard TAC limit of twenty percent would be lifted.54

50. Id. § 648.87(a).
52. 50 C.F.R. § 648.87(b)(1)(ii).
53. Id. § 648.87(b)(1)(iii). Sectors have an incentive to attract members with large catch histories over the previous five years. To prove their catch histories, vessel owners must refer to dealer landings reported to the National Marine Fisheries Service (NMFS). Id. § 648.87(b)(iii). This has proved problematic for some vessel owners, particularly to the extent their vessels and/or permits have been transferred in recent history. Interview with Cindy Smith, Sectors Project Manager & Dan Holland, Res. Economist, Gulf of Me. Research Inst., Portland, Me. (June 25, 2008). NMFS requires that each permit holder authorize by signature the release of his landings data Fishers interested in participating in a sector are thus obliged to produce significant documentation to NMFS in exchange for release of catch data, and this data reportedly contains errors principally from missing landings reports and the like. Id.
54. Draft Amendment 16, supra note 51, at 43.
If it appears a sector will exceed its TAC, the sector must cease operations for the remainder of the fishing year.\textsuperscript{55} If the TAC is actually exceeded before operations can be stopped, the sector’s allocation for the following fishing year is reduced by the overage “and the Sector, each vessel, and vessel operator and/or vessel owner participating in the Sector may be charged jointly and severally for civil penalties and permit sanctions.”\textsuperscript{56} Although joint and several liability among sector members is a risk to participating in a sector, one benefit is that the sector’s TAC allocation will not be reduced for a following fishing year if other sectors or other non-sector vessels exceed their target or hard TAC.\textsuperscript{57} In other words, a compliant sector will not face reductions in its allocation simply because other sectors in the fishery (or vessels not joining a sector) exceed their harvest share.

Once a vessel owner or operator joins a sector it must remain in the sector for the entire fishing year.\textsuperscript{58} Similarly, if a sector member sells their permit during the fishing year the new owner must comply with the sector regulations and operating agreement during the remainder of the year.\textsuperscript{59} If a vessel owner is expelled from a sector for rule violations it loses the right to fish under New England multispecies regulations—even as a non-sector vessel—for the remainder of the year.\textsuperscript{60}

A sector will not be approved unless its proposal contains an analysis of the sector’s environmental impact pursuant to the National Environmental Policy Act (NEPA).\textsuperscript{61} The sector must also prepare and submit an Operations Plan and Sector Contract for initial approval and for each fishing year thereafter.\textsuperscript{62}

\textit{b. Sector Operating Agreement Terms}

Amendment 13 sets forth a list of required provisions that must appear in either the Operations Plan or the Sector Contract:

(i) A list of all parties, vessels, and vessel owners who will participate in the Sector;

\textsuperscript{55} 50 C.F.R. § 648.87(b)(1)(vi).
\textsuperscript{56} Id. § 648.87(b)(1)(vii).
\textsuperscript{57} Id. § 648.87(b)(1)(viii).
\textsuperscript{58} Id. § 648.87(b)(1)(xi).
\textsuperscript{59} Id. § 648.87(b)(1)(xiii).
\textsuperscript{60} Id. § 648.87(b)(1)(xiv).
\textsuperscript{61} Id. § 648.87(b)(1)(v). The National Environmental Policy Act (NEPA) is codified at 42 U.S.C. § 4321 (2000).
\textsuperscript{62} 50 C.F.R. § 648.87(b)(2).
(ii) A contract signed by all Sector participants indicating their agreement to abide by the Operations Plan;

(iii) The name of a designated representative or agent for service of process;

(iv) If applicable, a plan for consolidation and distribution of catch or effort, detailing the quantity and duration of such consolidation or redistribution of catch or effort within the Sector;

(v) Historic information on the catch or effort history of the Sector participants . . . ;

(vi) A plan and analysis of the specific management rules the Sector participants will agree to abide by in order to avoid exceeding the allocated TAC (or target TAC under a DAS allocation), including detailed plans for enforcement of the Sector rules, as well as detailed plans for the monitoring and reporting of landings and discards;

(vii) A plan that defines the procedures by which members of the Sector that do not abide by the rules of the Sector will be disciplined or removed from the Sector, and a procedure for notifying NMFS of such expulsions . . . [and]

(viii) If applicable, a plan of how the TAC or DAS allocated to the Sector is assigned to each vessel . . . .63

Moreover, other issues must be negotiated between sector members and addressed in the sector’s operations contract. For instance, the parties need to develop a system for rationing catch among members so that the sector can determine whether and how to adjust catch allocation inside the sector. The rights and duties of the sector manager must be determined. Monitoring is critical in a sector because the sector and its individual members can be held jointly and severally liable for sector members who fail to comply with federal regulations.64 Joint and several liability also compel sector members to consider including indemnification obligations by non-compliant members in their contract as well as possible penalty provisions and enforcement measures. The sector contract should explicitly divide administrative costs amongst the sector members, define eligibility for membership, and implement a process for fishers to join and exit a sector.

63. Id. § 648.87(b)(2)(ii)-(viii).
64. Id. § 648.87(b)(1)(vii)-(b)(2)(x).
III. LEGAL ISSUES RAISED BY SECTORS AS A MANAGEMENT TOOL

A. Sector Operating Agreements Workshop

The 2007 Sector Workshop was designed to address three primary issues: (1) How to ensure that a sector agreement complies with existing laws and regulations and how the regulatory process can be improved to support successful sectors; (2) what legal entity a sector should choose and the legal implications of that choice; and (3) how key terms of the sector agreement can be drafted to maximize the sector’s effectiveness.

B. Resolving Antitrust Concerns

Monopolies and contracts that unreasonably restrain trade may run afoul of antitrust laws. The Sherman Antitrust Act makes it a crime for competitors to form private agreements in certain circumstances.

65. Among our speakers was attorney Joseph Sullivan of Mundt MacGregor in Seattle, the author of several cooperative harvest agreements for fisheries in the Pacific Northwest and an expert on antitrust issues in this field. Another speaker was Donald Kassilke, a lawyer with Sher Blackwell in Washington, D.C. Attorney Kassilke was the primary author of the first two contracts for sectors approved in New England: (1) the Georges Bank Hook Sector; and (2) the Georges Bank Cod Fixed Gear Sector. Copies of the Pollock Cooperative contract and the Georges Bank Cod Hook Sector operations plan and agreement were available to all participants. See Cape Cod Commercial Hook Fisherman’s Association: Georges Bank Hook Sector, http://www.ccchfa.org/pages/4/25/ (last visited Dec. 5, 2008); Several practicing attorneys from throughout New England participated in the discussion, along with representatives of the New England multispecies groundfish industry and sectors experts from the Gulf of Maine Research Institute and Ocean Conservancy of New England.

66. See generally Sector Workshop Blog Archive, supra note 20 (including a link to the conference weblog, speaker presentations, copies of the Pollock Cooperative membership and Georges Bank Cod Hook Sector agreements, and detailed notes taken at meeting by University of Maine School of Law students Tamara Norris and David Kallin).

67. The Sherman Antitrust Act, 15 U.S.C. § 1 (2000). The Act provides that: Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal. Every person who shall make any contract or engage in any combination or conspiracy hereby declared to be illegal shall be deemed guilty of a felony, and, on conviction thereof, shall be punished by fine not exceeding $100,000,000 if a corporation, or, if any other person, $1,000,000, or by imprisonment not exceeding 10 years, or by both said punishments, in the discretion of the court.

Id. In addition to federal law, each state also has laws prohibiting anti-competitive behavior for conduct that takes place entirely within the state. See, e.g., Monopolies and Profiteering, 10 M.R.S.A. §§ 1101-1110 (2003); Massachusetts Antitrust Act, MASS. GEN. LAWS ch. 93, §§ 1-14A (2005); Rhode Island Antitrust Act, R.I. GEN. LAWS § 6-36-1 (2000).
Sometimes a court, applying the law to a potentially anticompetitive arrangement, will analyze the case under a “rule of reason” approach that considers “whether the agreement likely harms competition by increasing the ability or incentive to profitably raise price above, or reduce output, quality, service or innovation below, what likely would prevail in the absence of the relevant agreement.” 68 This involves evaluating the particular facts of any given situation and coming to a reasonable conclusion, but some arrangements between competitors are considered so likely to harm competition and have negative consequences on U.S. consumers that they are considered “per se” violations. 69 It is well understood that absent an express legal exemption an agreement among harvesters of a resource to share or divide that resource collectively would be held per se illegal. 70

Luckily for those who would join fish harvesting cooperatives and sectors, the Fishermen’s Collective Marketing Act (FCMA) 71 creates such an exemption provided that certain conditions are met. Under the FCMA, “[p]ersons engaged in the fishing industry . . . collectively catching, producing, preparing for market, processing, handling and marketing” their fish are not liable under federal antitrust law. 72

The FCMA is patterned after its predecessor, the Capper-Volstead Act (CVA), which exempts qualified agricultural producers from antitrust liability under certain circumstances. 73 Cases interpreting the CVA, which are deemed applicable precedent for purposes of interpreting the FCMA, underscore the importance of membership criteria for joining a cooperative association. 74 To determine whether members of a CVA or FCMA association qualify for the exemption, a court will consider “the nature of the association’s activities, the degree of integration of the member producers, and the functions historically performed by the farmers (or, in the case of the FCMA, of the fisherman) in the industry.” 75 Significantly, each member of the proposed association must qualify for the exemption in order for the association, as a whole, to qualify. 76

68. Sullivan, supra note 17, at 2.
69. Id.
70. See id.
72. Id.
74. Sullivan, supra note 17, at 3.
75. Id.
If a cooperative association or “sector” arrangement involves only fish harvesting by catcher vessel—and not also processing or marketing activities—the prevailing view is that the exemption should easily be met.\(^{77}\) By producing a lower cost product for consumers such arrangements may be more efficient and competitive.\(^{78}\) This type of association may be the kind originally envisioned by Congress in passing the FCMA.\(^{79}\) This provides greater certainty for New England multispecies groundfish sectors because members can rely on the FCMA exemption for their association if each member of the sector is a fisherman and is not also a fish processor or otherwise vertically integrated.\(^{80}\)

If the Pacific whiting fishery is any indication a harvesting sector may receive the FCMA exemption even if one or more catcher members are also a processor. The Pacific whiting fishery broke important ground when its cooperative, which involved catcher/processor vessels, received assurances from the US Department of Justice Antitrust Division that the association did not violate antitrust law.\(^{81}\) The cooperative’s attorney explained the circumstances as follows:

The Pacific whiting fishery, like many others in the region, is managed under a strict annual sectoral harvest limit. In addition, as is the case in many others of these fisheries, the catcher/processor sector’s allocation of the Pacific whiting fishery was being fully harvested each year, and could easily have been harvested within each annual fishing season with much less capacity. In traditional antitrust terms, the fishery was operating in a regulated output setting. In fact, all indications were that a harvesting share arrangement could well have a converse effect from that normally assumed, i.e., that it would result in more product being produced at a lower unit cost from the same fixed quantity of fish.

Informal contacts with Antitrust Division staff confirmed that market allocation agreements among competitors (including highly vertically integrated competitors) in a regulated output setting could qualify for rule of reason analysis under appropriate circumstances. These discussions also suggested that it was reasonable

\(^{77}\) See Sullivan, supra note 17, at 3.
\(^{78}\) See id.
\(^{79}\) Id.
\(^{80}\) A sector member is more likely to comply with the antitrust exemption standards if he or she is a catcher/fisher rather than a processor with limited investment in harvesting capacity. The distinction must be evaluated under all the circumstances including: (1) primary activity; (2) resource allocation; (3) initial activity; (4) volume; and (5) value.
\(^{81}\) Sullivan, supra note 17, at 4-5.
to expect a favorable business review from the Division if the proposed harvesting arrangement would increase efficiency and productivity, and the related products were marketed competitively.\footnote{2008] Managing Fisheries Through Contract 31}{82}

Once the four catcher/processor companies in the Pacific whiting fishery had negotiated a harvesting share allocation agreement and prepared formal corporate documentation for the “White Conservation Cooperative,” their attorney submitted the drafts to the Antitrust Division for a business review.\footnote{83}{82} Among the documents submitted for review was a formal membership agreement much like those required of New England groundfish sector participants.\footnote{84}{83} The Division ultimately issued a “no enforcement intention” letter in which it stated that “it does not appear that the proposed elimination of the Olympic system race to gather the governmentally-fixed quota of Pacific Whiting would have any incremental anticompetitive effect in the regulated output setting in which the harvesting agreement would take place” and noted the Division was “not presently inclined to initiate antitrust enforcement action against the proposed harvesting agreement.”\footnote{85}{84}

Counsel to a new sector should not assume that the sector and each of its members will qualify for an FCMA exemption to avoid per se antitrust liability, or otherwise satisfy the “rule of reason” approach before a federal judge. Instead, counsel should consider seeking a business review opinion from the Antitrust Division if any questions linger about antitrust liability.\footnote{86}{85}

\section*{C. Selecting and Managing the Sector’s Corporate Form}

A sector should select a corporate form and create a governance system.\footnote{87}{86} The entity may be a for-profit corporation, but if current

\begin{flushleft}
82. \textit{Id.}
83. \textit{Id.} at 5.
84. \textit{Id.}
86. Assuming a cooperative entity is properly formed under the FCMA, as addressed below, it may engage in some activities that might otherwise violate antitrust laws. Kitts & Edwards, supra note 33. For instance, members can agree on terms of sale and on minimum prices to accept for products, and may negotiate with a single buyer. \textit{Id.} Certain limitations apply; for example, exempt cooperatives may not enhance prices through unfair production limitations or force buyers into sole supplier agreements. \textit{Id.} They may not, for example, obtain monopoly power through alliances with non-exempt firms or force non-members to use the cooperative. \textit{Id.}
87. To receive NMFS approval a sector must, among other things, designate an agent for service of process and a plan for management rules by which each member will abide. 50 C.F.R. 648.87(b)(2)(iii). These tasks are more easily coordinated through a corporate entity.
\end{flushleft}
examples in the Northeast groundfish fishery remain a model for future sectors, a non-profit corporate form that qualifies for tax exempt status under federal law may be more appropriate.88 Pacific Northwest cooperatives have been formed89 as tax-exempt aquaculture associations,90 and trade associations.91

To avoid antitrust issues, the sector may also be a non-stock corporation formed consistently with state corporation laws.92 Under the FCMA, the organizational structure of a corporation seeking antitrust exemption must: (1) consist of fishermen with a vested ownership interest engaged in production or catching; (2) be “operated for the mutual benefit of the members thereof”; (3) limit dealings in products not produced by its members; (4) allow one vote per member; and (5) pay no more than eight percent annually in dividends.93

Attorneys at the 2007 Sector Operating Agreements Workshop concluded that the choice of a non-profit corporation versus a non-profit limited liability company (LLC) did not have a significant bearing on management or function of the sector. An LLC requires few administrative formalities.94 A corporation is required to have a board of directors, annual meetings, and other formalities.95 It may be more appropriate to choose a corporate form that obligates the sector to operate formally.

Attorney Sullivan explained that his cooperative harvesting clients in the Pacific Northwest typically wanted the ability to get in and out of a sector as an individual business.96 They wanted to avoid the perception of a “joint venture” that may inadvertently create interrelated financial obligations or the perception that the harvested asset was owned jointly by the group. In his experience, with a corporate structure it is easier to separate the members’ individual financial arrangements from the sector’s management regime.97

89. See Sullivan Remarks, supra note 39.
91. I.R.C. § 501(c)(6).
92. Sullivan Remarks, supra note 39. It may also be appropriate for the entity to incorporate under Delaware law to take advantage of limited liability provisions.
93. See 15 U.S.C. § 521; see also Kitts & Edwards, supra note 33.
95. Id. at 29-30.
97. Id.
Typical corporate documents for a sector are the articles of incorporation, bylaws, and the operation or membership agreement (Agreement). Articles of incorporation and bylaws establish management structure and authority, voting rights, and membership eligibility. It is generally advised that the sector have a Board of Directors and a Board-selected manager. While the Board must have significant management authority, many self-governance issues related to the membership agreement may be made by the members on their own initiative. Most also consider the way in which decisions are made. Compensation of sector administrators—in particular the manager but also any staff—should be described in the bylaws as well. The Agreement should address certain essential terms for proper sector operation.

D. The Operations or Membership Agreement:

Key Sector Contract Terms

1. Membership

As noted above, community-based management schemes tend to be most effective when participants live and work in close proximity, are limited in number, and share similar styles and methods of fishing (e.g. gear, vessel size, etc.). These characteristics exist with the cod fishermen of Cape Cod participating in the Georges Bank Hook and Fixed Gear sectors. Amendment 13 does not set limits or obligations on any sector’s membership, which is strictly voluntary.

98. Id.
99. Kassilke, supra note 88. According to Attorney Kassilke, the Georges Bank Hook Sector is a nonprofit corporation organized under I.R.C. § 501(c)(5). Id. Each member has one vote and a Board of Directors consisting of up to nine members. Id. The manager is crucial to administration of the sector, enforcement of the operating agreement, and communication with government agencies. Id.
101. Id.
102. Eric Brazer, Remarks at the Sector Operating Agreements Workshop (2007), http://mainelaw.maine.edu/mli/sectorWorkshop/ent06.html. Mr. Brazer, manager of the Georges Bank Cod Hook Sector, explained that fishermen in Chatham and Harwichport, Massachusetts, formed the first Northeast Multispecies fishing sector after meeting in basements and bars to formulate a strategy for economic survival in an increasingly stressed fishery. Id. Thus, the members are personally familiar with each other and, by agreement, the fishing area and landing ports are limited to those individuals known to current members. Id.
103. See 50 C.F.R. § 648.87. This is in contrast to the Pacific Northwest pollock fishery, where in-shore applicants must be admitted. Sullivan Remarks, supra note 39. Off-shore
Because the sector’s allocation of catch or effort is based upon the “documented accumulated catch histories of the harvested stock(s) for each vessel electing to fish in a sector,” the membership agreement must obligate sector members to disclose their catch or effort history. Under Amendment 13, the relevant history period is the five years prior to submission of a sector allocation proposal. If a sector allocation is based on effort, or days at sea, then sectors will want to see proof that members have “A” or “B” days, both of which allow fishing effort rather than “C” days, which prohibit fishing. Furthermore, the membership agreements also require participating members to prove that their fishing permits and the vessels to which they apply have no sanctions or restrictions that would prevent enrollment or participation in the sector.

Initial membership may be decided upon personal relationships and other factors that cause fishing vessel owners and operators to join together in a sector arrangement. New membership thereafter may be decided by petition or application, subject to approval by the Board of Directors. Members will want to have effective screening methods and be certain that applicants are admitted at the cooperative’s discretion. As Attorney Sullivan noted, monitoring and enforcement is much easier under the voluntary regime than one where the cooperative is forced to include members. In response, Joseph Sullivan, answered that, unless there is a history of effective cooperation, such groups are best kept to ten or fewer members with similar interests, social, or cultural relationships. It would also help to have some agreements already reached informally about allocation before taking the formal and expensive step of preparing an operating plan. If many questions remain unanswered or contentious, it might be better to hire a consultant to assist the members in reaching consensus before hiring an attorney to draft the sector plan.
new members are not added that, because of their fishing history, cause the aggregate fishing history of the sector to exceed the sector’s allocation.

The sector must have the authority and ability to collect dues from members to cover administrative costs. Up-front administrative expenses can be substantial because the sector must submit an environmental assessment, consistent with NEPA, and pay attorneys to assist with corporate documentation. To prevent new members from unfairly benefiting from the efforts of other members, new members could be required to pay dues sufficient to off-set some of the start-up costs borne by founding members.

2. Administration

Each sector needs a manager with authority to handle the day-to-day issues the sector will face, to work with government authorities, answer members’ questions, and even be responsible for monitoring and reporting with regard to catch. The manager will also take the lead on generating and submitting the annual operations plan and agreement, preparing and submitting the required annual report to the NEFMC, and creating or working with any committees the sector may find necessary to its operations. For instance, the Georges Bank Cod Hook Sector has an infractions committee, which it uses to investigate and recommend sanctions for any members accused of violating the contract and/or any federal fishing regulations.

3. Catch Allocation

Each sector member is entitled to an allocation of the sector’s total catch (known as its Annual Catch Allotment or ACE), to be determined by the sector members. One mechanism for allocating catch among members is to base the individual allocations on the member’s fishing history for the same years as the sector’s allocation (e.g., 1996-2006). Sector members could agree among themselves to any arrangements they deem equitable. If catch histories are kept confidential by the Council (which is true for both the Pacific Northwest and the New England fishery management councils) then it may be necessary to involve a third-party auditor rather than requiring sector members to disclose their catch histories to each other. After all, the members were essentially competi-

109. 50 C.F.R. § 648.87(b)(1)(v).
110. GEORGES BANK PLAN, supra note 107, art. III §§ 3.03-3.04.
111. See, e.g. 50 C.F.R. 648.87.
tors before joining a sector and may again return to that status when they withdraw from the sector.

A sector may wish to agree not to allocate all of the sector’s ACE to the members, but rather to hold some of it in reserve. This provides a cushion against accidentally exceeding the ACE as well as an opportunity for a year-end “bonus” to members if the ACE is not exceeded. 113

4. Allocation Transfer

Presently, sector members can trade their allocation within the sector to other members, but the sector is not yet officially authorized to trade ACE with other sectors. 114 This is likely to change through proposed Amendment 16 of the Northeast Multispecies Fishery Management Plan. 115 Mechanisms for intra-sector ACE trading should be addressed in the sector operating agreement. In addition, a member can be prohibited from transferring his other fishing permit during the fishing year subject to the sector agreement, unless the purchaser or transferee agrees to be bound by the terms of the sector agreement. 116 Often the purchaser may participate only for the remainder of the fishing year, after which it must apply for membership. 117 If the NEFMC allows inter-sector trading of ACE, the sector agreement must also address mechanisms and rules for such transfer.

5. Monitoring and Reporting

Members of an approved sector and the sector itself may be held jointly and severally liable for any member’s violations of either federal fishing laws or the sector’s operating agreement. 118 Moreover, all operating agreements must include a clause to that effect. 119 For a sector to succeed,

113. See GEORGES BANK PLAN, supra note 107, art. IV §§ 4.02-4.03 (providing that Board may reserve up to five percent of sector’s aggregate allocation to ensure compliance with aggregate allocation limit). See also Verani, supra note 5, at 369 (providing a detailed discussion of the Georges Bank Cod Hook Sector (GBCHS)).
114. See generally 50 C.F.R. 648.87.
115. See Draft Amendment 16, supra note 51.
116. 50 C.F.R. § 648.87(b)(1)(xiii).
117. See GEORGES BANK PLAN, supra note 107, art. II § 2.05.
118. 50 C.F.R. § 648.87(b)(1)(ix) (“It shall be unlawful to violate [the conditions and requirements of an Operating Plan] and each Sector, vessel, and vessel operator and/or vessel owner participating in the Sector may be charged jointly and severally for…civil penalties and permit sanctions pursuant to 15 CFR part 904.”).
119. Id.
it must have a means to monitor each member’s fishing activities and catch landings, and accurately report that information to NMFS.

One mechanism for monitoring is the requirement that participating sector or cooperative members carry an independent observer on board. This method was favored by the Pollock cooperative and the Pacific Whiting cooperative, the contracts for which obligated each member to host and pay for a federal observer on each vessel.120 This works well for a fishery that has historically used the federal observer system and that is comprised of larger trawl vessels.121

New England groundfish fishermen are less likely to submit to an obligatory observer system as a condition of sector membership.122 Like the Fundy Fixed Gear Council of Nova Scotia, in Canada, New England sectors may prefer a more informal observation method employing representatives (typically fishermen) to monitor wharves and catch activities rather than hiring observers to monitor individual vessels.123 The Georges Bank Cod Hook Sector monitors fishing activity by requiring members to provide the Hook Sector Manager with a report of each trip’s entire catch “on a landing-by-landing basis, by providing the Manager with a copy of the official Vessel Trip Report or other reporting document or system authorized by NMFS within 48 hours of offloading fish.”124 Monitoring is further aided by the members’ agreement to sell their catch only to a dealer licensed by NFMS and to authorize that dealer to provide the Manager, on a weekly basis, with an “official dealer weigh out slip” or other NMFS-approved document.125 Members also agree to offload fish only in certain designated ports.126 The Manager may require that observers be present during offloading operations.127

Additionally, electronic systems exist to monitor fishing activity and catch. In the Pacific Northwest, for instance, NMFS observers send infor-
mation electronically to a third party—Sea State, Inc.—which compiles the information and shares it with NMFS as well as the vessel owner.\footnote{128} NOAA’s Office of Law Enforcement also uses a satellite-based vessel monitoring system (VMS) to track vessel location and compliance with area restrictions.\footnote{129} These systems could be employed in combination with other monitoring tools.\footnote{130} Indeed, experts have identified up to eleven tools that should be combined and phased in over time, with the entire monitoring program contracted to a single service provider during the first five years of implementation.\footnote{131} They further recommend that the monitoring program’s costs be covered in part by the industry so that the program is used more “responsibly and efficiently.”\footnote{132} Such a program should lead to a more accurate accounting of both the total catch and released fish mortality, which should lead to a more sustainable fishery.\footnote{133}

\footnote{128} John R. Gauvin, Karl Haflinger & Mary Nerini, Solving Bycatch: Considerations for Today and Tomorrow, in Solving Bycatch: Considerations for Today and Tomorrow (University of Alaska Sea Grant College Program, 1995), http://www.groundfishforum.org/Project/SeaState/SeaStBdy.html. An article about the Sea State program explains the process as follows:

In our program, observer data on catch and bycatch are electronically transmitted from each vessel to the Sea State office in Seattle. Sea State conducts statistical expansions from observer data to calculate an average bycatch rate per vessel for the 24 hour period. Daily bycatch rates are then placed into a format where the relationship between bycatch rates and locations is accessible to skippers and their companies. The format currently in use plots each vessel’s daily bycatch rate on a chart of the fishing grounds. Sea State relays this information to the vessels and owner companies every 24 hours via fax or by a computer file loaded into a plotting program provided to the vessel. The need for a private contractor to implement this program exists because NMFS does not have sufficient resources for data processing and transmission of bycatch information in a time frame suitable for bycatch avoidance. Further, government rules pertaining to confidentiality allow individual companies to receive only their own fishing data which is not always useful for establishing bycatch trends. The contract with Sea State works through a general clearance agreement between participating companies, NMFS, and Sea State. This allows for the calculation of bycatch rates per ton of target catch while providing protection from general dissemination of individual catch data.

\footnote{130} Terris & McElderry, supra note 121, at 3.
\footnote{131} Id. at 2-3, 7.
\footnote{132} Id. at 7.
\footnote{133} Id. at 2.
6. Enforcement

Undoubtedly, sector agreement provisions concerning enforcement measures and sanctions for contract breach and legal violators will be among the most controversial ones. Conflict and mistrust can arise because sector members must agree to be jointly and severally liable for the misconduct of their former competitors. They must thus be able to trust one another and trust the system to keep all members in compliance. There must be fair and reliable procedures for investigating allegations, the ability to stop any ongoing violations quickly, and appropriate mechanisms for recovering damages to the sector and its members.

If a member exceeds his or her allocation, this may put the sector’s allocation (ACE) in jeopardy. The operations agreement must have a mechanism for injunctive relief to immediately halt an offending member’s activity. In a well-monitored system, when one member accidentally exceeds his or her individual allotment, the sector should be able to help that member acquire more from another member. Additionally, the sector should help manage the aggregate activity of its members to ensure the ACE is not exceeded.

Monetary damages awarded against an offender may also be appropriate, depending on the activity that triggers them and the laws of the state governing the contract. The Pollock cooperative contract, for example, sets a forfeiture amount for each species covered by the agreement. If a member harvests more than his percentage of any particular species he is obliged to pay the sector an amount equal to the forfeiture amount multiplied by the number of metric tons harvested in excess of the allocation. The cooperative gives the allegedly non-compliant member fifteen days’ notice of its intent to collect the forfeiture amount, during which time the member can make the payment voluntarily, contest the collection, or propose an alternative outcome. Collected funds are dispersed on a pro-rata basis to other cooperative members. The Pollock cooperative agreement also mandates both the payment of actual damages over and above the forfeiture amount, as well as the payment of any litigation costs incurred by the cooperative in collecting the forfeiture or damages.
The Georges Bank Cod Hook Sector Agreement includes a schedule of penalties for several violations. These are in addition to the costs and attorney’s fees incurred by the sector or its members for enforcing the agreement. Fines and penalties that are collected are applied in the following order: (1) to the costs of enforcement; (2) to the sector’s “administration, management, and preservation;” and (3) to “further research into efficient management of groundfish stocks for the benefit of the resource and those that harvest the resource.” The manager is authorized to enforce the agreement and impose penalties. The manager may also request assistance from a board-appointed infractions committee, which prepares the schedule of penalties and investigates alleged infractions.

In some states, including Maine, contracts cannot have provisions that impose a “penalty” for their breach. Clauses setting forth fixed or “liquidated” damages are valid only if the damages caused by breach of the contract would be difficult to accurately estimate and the fixed amount is a reasonable forecast of what it would take to justly compensate the harmed party. If the damages clause demands amounts in excess of reasonable and just compensation that clause may be deemed an unenforceable penalty. Accordingly, in states where penalty clauses can be held void in a contract, the monetary fines imposed for breach of the Sector Agreement must be reasonably tied to just compensation owed the sector or any of its members.

137. Georges Bank Plan, supra note 107, at A-1. For violations regarding permits, reporting, documentation, or exemption permit requirements the penalties range from up to $500 for a first offense to over $1,000 for a third offense. Id. Violations regarding time and area restrictions carry penalties between $2,000-50,000 for first offenses, $10,000-100,000 for a second offense, and expulsion from the sector for a third offense. Id. Violations that place the sector at risk start at a fine of up to $50,000 and loss of fishing rights for a year and result in expulsion for a second offense. Id. If a member drops out of the sector during the commitment period, he or she may be obliged to pay a one-time $10,000 penalty. Id.
138. Id. art. VI § 6.05.
139. Id. art. VI § 6.06.
140. Id.
141. Id.
142. Id. art. III § 3.02.
143. Id. art. III §§ 3.03-3.04.
145. Id.
146. Id.
7. Indemnification

Joint and several liability refer to the legal relationship between multiple parties when at least one of them causes redressable harm or otherwise violates the law. Joint liability allows any member of a sector to be sued for the full amount of damages. Several liability means that each party causing redressable harm is responsible only for their own share of the fault. In other words, the government may sue any sector member to recover all of the damages caused by one of them and that member then may sue any of the others to recover their share of the damages.

The key to sector enforcement and liability issues, therefore, is a solid indemnification provision in the sector agreement. The Georges Bank Cod Hook Sector agreement, for example, obliges each member to severally agree to indemnify, defend and hold harmless the other parties to the agreement for their respective losses. It further specifies that “[t]he indemnification obligations of the parties hereto shall be several and not joint and several.”

8. Term and Termination

Amendment 13 requires that any vessel owner or operator, entering a binding sector contract, must participate for the entire fishing year. The operating agreement must also reflect this requirement. Sectors may wish to allow members to renew the term each year provided NMFS approves the next fishing year’s sector proposal. Because of the expense of preparing annual proposals, the NEFMC is considering allowing multi-year sector authorizations.

The Pollock cooperative agreement has a perpetual term and can be terminated by any two members upon the occurrence of certain enumerated events including: (1) a determination that the cooperative violates antitrust or unfair competition law; (2) the transfer of a member’s vessel through

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148. GEORGES BANK PLAN, supra note 107, art. VI § 6.09.
149. Id.
150. 50 C.F.R. § 648.87(b)(1)(xi).
152. Pollock, supra note 135, at 6.
bankruptcy or insolvency order to a party not bound by the agreement;\cite{footnote:153} (3) termination of the cooperative’s allocation;\cite{footnote:154} (4) or members’ notice of termination in advance of the end of the calendar year.\cite{footnote:155}

9. Controlling Law

In the New England multispecies groundfish fishery, vessel owners and operators may join a sector with members residing in a different state. While residential and cultural similarities may be useful to a successful community-based management system, the sector system of Amendment 13 does not obligate participants to live near each other.\cite{footnote:156} Accordingly, choice of law considerations may become an issue for negotiation of a sector agreement should members hail from different states. If all participants are from a single state then typically that state’s law would apply. The Cape Cod fishermen joining the Georges Bank Hook and Fixed Gear sectors specified that the laws of the Commonwealth of Massachusetts would govern their sector agreement.\cite{footnote:157} Given Maine’s aversion to penalty provisions in contracts, sectors with members from Maine and Massachusetts may also elect Massachusetts law as governing their agreement.

IV. Outcomes, Observations, and Resources

Groups that have been able to successfully manage a commons over time without overexploiting it tend to have well-defined boundaries, rules linked to local conditions, and sanctions imposed for rules violations.\cite{footnote:158} They are also characterized by a strong community tradition and the absence of government interference.\cite{footnote:159}

The two examples of New England-based groundfish sectors that currently exist—both based out of Cape Cod—meet a bulk of these criteria. They are familiar to each other, they generally fish out of the same ports and within a familiar geographic boundary, and they both have their contract and traditional social norms to sanction misbehavior.\cite{footnote:160} Because

\begin{footnotes}
\footnote{153. \textit{Id.}}
\footnote{154. \textit{Id.}}
\footnote{155. \textit{Id.}}
\footnote{156. \textit{See generally} 50 C.F.R. 648.87.}
\footnote{157. \textit{GEORGES BANK PLAN, supra} note 107, art. IX § 9.05.}
\footnote{158. \textit{See Leal, supra} note 21.}
\footnote{159. \textit{Id.}}
\footnote{160. Our Workshop discussed this issue in general, but did not delve into the specific aspects of each New England states’ laws in sufficient depth to determine which law is most beneficial when sector members reside in different states.}
\end{footnotes}
they live in the same community, they can translate their local traditions into a formal agreement. What is not clear is the extent to which government interference will be necessary as the sector operates over time. If it functions as Amendment 13 envisions, there is little role for government apart from approving the sector’s existence and operating terms at the outset.

The regulatory structure created by the MSA still persists. Each sector is highly regulated and subject to government oversight. A reality of sector-based management is that some of the functions typically paid and performed by the government have been shifted to, or shared with, the industry. Monitoring and enforcement is, under a sector arrangement, now a responsibility of the fishermen. Another responsibility is the cost of initially establishing the management scheme, as represented by the fees associated with generating an environmental assessment consistent with NEPA and preparing an operating agreement and plan. Those obligations typically involve engaging experts and paying their customary fees.

Many agree that community-based management is a scheme the New England groundfish fishery should implement to more successfully manage the resource. Already, efforts are under way toward this goal. Several granting agencies and private foundations have provided support for service and education organizations that can benefit groundfish fishermen. The Gulf of Maine Research Institute is a perfect example of this phenomenon. Experts in economics, fisheries management, collaborative research and neutral convening work closely with potential sectors on such issues as preparing environmental assessments and NEFMC sector proposals. They also help individual vessel owners interested in joining a sector determine their vessel’s catch history through NFMS. Their legal

161. Sector proposals must be submitted to and approved by the New England Fishery Management Council; the Council establishes the sector’s annual catch allocation, ensures compliance with fisheries regulation, and takes other steps to enforce fisheries laws against the sector and its members. 50 C.F.R. § 648.87.
162. See, e.g., HOLLAND, supra note 15, at 2.
165. Interview with Cindy Smith, N. Sector Coordinator, Gulf of Me. Research Inst., in Portland, Me. (June 25, 2008).
counsel, who was closely involved in the workshop, is now developing a term sheet and model sector contract that should serve as a template for New England groundfish sectors grappling with the key issues discussed in this report.\footnote{166} Additionally, they recently commissioned expert assistance to study and make recommendations on monitoring and reporting needs for sectors.\footnote{167} These activities are fundamentally important to fishermen considering joining a sector. They are funded by a private foundation that appreciates the future significance of sectors in the New England groundfish fishery and hopes to help support its successful development and industry implementation.\footnote{168}

Significant support from non-profit and academic institutions may be the only way some New England groundfish sectors can affordably form and operate. By adopting a community-based management system with significant government interference, the NEFMC has created an expensive but potentially effective opportunity for groundfish fishermen to self-manage.

\section*{V. Conclusion}

The NEFMC is currently working on Amendment 16 to the Multi-species Groundfish FMP. That amendment will further clarify sector regulations. Many speculate that up to half of the participants in the groundfish fishery may participate in sectors in the near future, forming between 12 and 19 sector arrangements.\footnote{169}

As new sector proposals are prepared for the New England multi-species groundfish fishery, the obligatory sector plan and agreement will likely develop a model form useful across sectors. The Sector Operating Agreements Workshop was intended not only to begin a dialogue to develop those terms, but also to encourage attorneys and others working with sectors to share their final contracts openly with each other to keep costs under control. Through collaborative efforts on behalf of the legal community, the fishing industry, fishery regulators, and nonprofit support institutions, community-based management may indeed take hold and succeed in the New England groundfish fishery.

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\begin{itemize}
\item \footnote{166.} \textit{Id}.
\item \footnote{169.} TERRIS \& McELDERREY, supra note 121, at 2.
\end{itemize}