New England Fishing Communities:

Prospects and by Robert J. Johnston, Daniel S. Holland, and Seth Tuler Uncertainties



New commercial fishing regulations designed to enhance the long-term viability and profitability of New England fishing will create benefits and costs for fishermen. Support from policymakers, nonprofits, and banks can help keep small-scale fishermen and their communities viable while benefiting the region overall.

Fish and Fisheries

Fish that live near the bottom of the body of water they inhabit, such as cod, haddock, flounder, halibut, and hake, are called groundfish, and have long been important to New England's economy. The Northeast Multispecies Fishery Management Plan controls the New England and Mid-Atlantic groundfish harvest. Since 1994, it has done so primarily by limiting the number of vessels, allowable days of fishing, and

the number of certain species that can be caught, or landed, per trip.

Regulations scheduled for implementation in 2010 represent a radical change. Designed to protect groundfish stocks and promote profitability, they are expected to lead to widespread adoption of sectors. Sectors are self-organized groups of fishermen permitted to harvest a specific quantity and type of fish annually. So instead of having regulations that specify the number of vessels, days of fishing, and species landed, the focus is on the ultimate goal of limiting the harvest to sustainable numbers, and it is the group of fishermen who decide how to get there. Each sector can determine its own rules for managing fishing, provided they keep the catch within their limits. The increased efficiency should lead to greater profit.

Northeast Groundfish Landings and Revenues, 2004 – 2007 2004 2005 2006 2007 Total groundfish landings 79,619,512 65,497,279 49,956,475 60,584,026 Constant (1999) 84,489,706 85,074,085 76,800,650 84,241,285 revenues Source: New England Fishery Management Council, "Draft Amendment 16 to the Northeast Multispecies Fishery Management Plan," April 15, 2009.

In New England, there are two currently operating sectors, Georges Bank Cod Hook Sector and Georges Bank Cod Fixed Gear Sector, which have proposed merging. Sixteen new sectors have submitted operation plans. Together these sectors could be allocated more than 90 percent of the allowable commercial catch of most groundfish.

Until now, most observers agree, Northeast groundfish regulations have fallen short of both biological and economic goals. Increasingly restrictive controls have stabilized some fish stocks and have increased others, with Georges Bank haddock one success. However, as of 2007, stocks were still overharvested for 15 of 19 New England groundfish. From 2004 to 2007, groundfish landings declined, and inflation-adjusted gross revenues remained flat, while expenses for fuel and other inputs increased.3 (See "Northeast Groundfish Landings and Revenues, 2004 - 2007.") In New England communities experiencing the harshest effects from regulation, fishermen have consolidated, switched to other fisheries, or abandoned fishing. The number of vessels landing groundfish declined each year between 2004 and 2007. (See "Vessels Landing Groundfish in Primary Ports, 2004 -2007.")

Fishery declines often cause fishermen and other members of their communities to undergo family stress, heavier workloads, reduced income, social tensions, and increased need for social services.⁴ Fishermen

may delay boat repairs, skimp on safety, fish with fewer or less experienced crew, or forgo boat insurance. Some qualify for disaster relief funds. Others retire or shift to an activity like charter fishing. Shore businesses often reduce staff.

Can the Sector Approach Help?

The sector approach is not a panacea. Many problems facing fisheries result from an excess of boats and fishermen relative to what current fish stocks can support. For some species to recover, catches must be further reduced. Although that will likely have negative economic implications in the short run, there is a broad expectation that sectors will improve the industry's overall performance and reduce the impetus to discard harvested fish to meet regulations (a wasteful process known as regulatory discarding). Sectors also could foster cooperation to deliver more consistent product year-round, reduce costs, and diminish negative environmental impacts.

Similar harvest cooperatives in fisheries worldwide show positive results—longer seasons, increased profits, reduced waste, higher-quality products, and safer fishing. A National Research Council study of related programs concludes that allocation of permits to take a portion of the allowable harvest is a "tool with high potential for efficiency and stewardship" that can help "to prevent a race for fish and overharvesting."

Moreover, models of prospective community-based sectors in Portland and Port Clyde, Maine, suggest possible revenue gains of 16 percent to 79 percent.⁸

Concerns do remain. Sectors will create new administrative costs (estimated at \$60,000 to \$150,000 per sector) and additional monitoring costs that the industry will have to fund. And although sectors can promote community-based fishing, consolidation could potentially lead to inequity and social tension. Income may be greater and more stable for some, while consolidation reduces employment overall.

The Role of the Banking Community

Whether the industry can be maintained and strengthened depends on many factors, including banking support. Access to financing with reasonable terms is critical to enable smaller fishermen to purchase permits to expand their businesses and to let young fishermen enter the industry.

Permit banks, cooperatives that purchase vessel permits, are one option. Permit banks could be set up with voting shares owned by sector members, perhaps in coordination with community organizations or municipalities. Some organizations have already started permit banks, including The Cape Cod Commercial Hook Fishermen's Association, the Mid Coast Fishermen's Association, the Penobscot East Resource Center in Maine, and the Gloucester (Massachusetts) Fishing Community Preservation Fund.

The permit banks have relied on financing from foundations, charitable giving—or, in the case of Gloucester, mitigation money received for accepting a liquid natural gas terminal. However, bank financing might provide a larger, more secure source. The share of a sector's annual catch allocation contributed by permit-bank vessels could be leased to sector vessels at rates sufficient to repay loans. Federal loans or guarantees might also finance permit banks. Regardless of the financing mechanism, a transition to sectors is bound to heighten

Vessels Landing Groundfish in Primary Ports, 2004 – 2007					
Community	2004	2005	2006	2007	2004-2007
Portland, ME	Ш	109	94	75	-32.43%
Portsmouth, NH	41	25	27	19	-53.66%
Gloucester, MA	202	203	168	166	-17.82%
Boston, MA	24	29	24	32	33.33%
Chatham/Harwichport, MA	116	96	71	59	-49.14%
New Bedford/Fairhaven, MA	182	158	153	165	-9.34%
Point Judith, RI	78	75	74	76	-2.56%
Eastern Long Island, NY	69	62	79	74	7.25%
Total	823	757	690	666	-19.08%
Source: New England Fishery Management Council, "Draft Amendment 16 to the Northeast Multispecies Fishery Management Plan." April 15. 2009.					





The fishing fleet at rest in the harbor, Point Judith, Rhode Island. Photographs: Sandra M. Kelly

the importance of capital access.

The next 12 months will likely witness a major change in New England fishery management. Sectors, with appropriate regulation and access to capital, could offer the best hope of renewed prosperity for New England fishermen and their communities.

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Endnotes

- New England Fishery Management Council, "Draft Amendment 16 to the Northeast Multispecies Fishery Management Plan," April 15, 2009.
- The Hook Sector catches fish using hooks; the Fixed Gear Sector uses nets that catch fish by the gills.
- In technical terms, these stocks are either overfished, subject to overfishing, or both.
- J. Olson and P.M. Clay, "An Overview of the Social and Economic Survey Administered during Round II of the Northeast Multispecies Fishery Disaster Assistance Program" (National Oceanic and Atmospheric Administration Technical Memorandum NMFS-NE-164, Northeast Fisheries Science Center, Woods Hole, Massachusetts, 2001); S. Tuler, T. Webler, and C. Polsky, "A riskbased approach to rapid vulnerability assessment in New England fishery communities, a case study of the groundfishing sector in New Bedford, Massachusetts" (report 09-004, Social and Environmental Research Institute, Greenfield, Massachusetts, 2009).
- Although Coast Guard reports show no sign of resulting declines in vessel safety, some studies suggest that factors undermining safety, such as workload, fatigue, and crew reductions have been exacerbated. See, for example, D. Georgianna and D. Shrader, "Employment, income, working conditions and vessel safety in New Bedford after Amendment 13 to the Multispecies Management Plan" (final report for Contract NA05NMF4721057/UNH PZ06083, University of Massachusetts, Dartmouth, Massachusetts, 2008).
- Unlike cooperatives, sectors have annual allocation based on the aggregate shares of the permits (vessels) in that sector. Members coordinate harvests to stay within allocations. The sector and its members are held collectively accountable. Membership can change each year, with the sector's harvest allocation adjusted according to members' permit shares. See R. Townsend, R. Shotton, and H. Uchida, eds., "Case Studies in Fisheries Self-Governance" (FAO technical paper no. 504, Rome, Italy, 2008).
- National Research Council, "Sharing the Fish: Toward a National Policy on Individual Fishing Quotas" (Washington, DC: National Academy Press, 1999).
- D. Holland, "Community-Based Sectors for the New England Groundfish Fishery" (final report submitted to the National Marine Fisheries Service, Northeast Fisheries Science Center, Gulf of Maine Research Institute, Portland, Maine, 2007).
- S. Tuler, J. Agyeman, P. Pinto da Silva, K. LoRusso, and R. Kay, "Assessing Vulnerabilities: Integrating Information about Driving Forces that Affect Risks and Resilience in Fishing Communities," Human Ecology Review 15 (2008): 171-184.