

## CORRESPONDENCE

September 6, 2017

Honorable District Judge William G. Young  
John Joseph Moakley U.S. Courthouse  
1 Courthouse Way, Suite 2300  
Boston, Massachusetts 02210



**Re: United States v. Carlos A. Rafael, No. 16-CR-10124-WGY (D. Mass.)**

Honorable Judge Young:

Conservation Law Foundation (“CLF”) respectfully submits this letter as a victim impact statement for your consideration as you evaluate appropriate criminal penalties for Rafael in the above-captioned matter. CLF is a member-supported non-profit organization that uses law, economics, and science to protect New England’s natural resources and communities from environmental threats. CLF and its members, who include fishermen, have a deep and abiding interest in the health and sound management of New England’s fisheries. Since 1989, CLF has worked on groundfish management issues in court and before the New England Fisheries Management Council and the National Oceanic and Atmospheric Administration (“NOAA”) to pressure these bodies to achieve the management objectives of federal fisheries law. In our opinion, CLF’s efforts and the valuable programs that some of these efforts helped produce were significantly harmed by Carlos Rafael’s crimes.

On March 30, 2017, Rafael pled guilty to all 28 criminal counts against him in this matter, including conspiracy to evade federal fishing quotas and profit from the sale of misreported fish, and falsified reporting to the federal government. Rafael’s egregious crimes inflicted severe damage that has rippled across many communities. We submit this statement to call the Court’s attention to the broad suite of victims who are suffering as a direct result Rafael’s crimes, including:

- a New England commercial groundfish fishing community, central to the culture and history of our region, that has declined over the past decade, in our belief, partly due to an inability to compete with illegal fishing operations such as Rafael’s;
- all participants in the groundfish fisheries that were affected by misreported information, which skews stock assessment models and weakens the credibility of fisheries scientists, thereby compromising acceptable future catch levels for all;

- conservation groups such as Conservation Law Foundation and recreational fishing groups who have worked for decades on behalf of the public and their thousands of members to safeguard the health and sustainability of New England's fisheries, the success of which has been undermined and jeopardized by Raphael's crimes and criminal activity;
- all New Englanders who value or make their living from the iconic groundfish populations that are among the stocks Mr. Rafael's boats illegally landed and misreported, and which have been subject to ongoing overfishing since the 1990s; and
- all who have a stake in a fishery management scheme that has not been able to achieve its statutory objectives of producing a sustainable yield of these stocks despite ever-tightening catch limits.

In particular, we write to your Honor on behalf of the many fishermen who are fearful of publically speaking out against Rafael even now, given the very real threat that his federal civil settlement will allow him to continue to participate in the New England commercial fishing industry. Many suspect, with good cause, that Rafael will continue to control his fishing businesses even if he receives jail time for his crimes. As we describe below, Rafael's historic contempt for his fellow fishermen and tactics of intimidation are well documented. His moniker, "The Godfather," speaks for itself. It is no surprise, then, that many of the fishermen most directly victimized by Rafael's crimes are unwilling to put their livelihoods at risk by publically detailing their harms to this Court. A few of the more forthright industry representatives have spoken out in the press, and we have enclosed copies of those press materials and incorporate them into this victims' statement for your Honor's consideration. We endeavor here to give voice to the many other silent victims, and all fishery stakeholders.

On behalf of all victims, we respectfully urge the Court to impose criminal penalties that are commensurate with the significant injuries Rafael inflicted through his crimes.

**I. Rafael's illegal catches and falsified reports injured the fishing community and destabilized the fisheries regulatory regime.**

Rafael's crimes have damaged the fishing industry and the very foundations of our regulatory system, undermining the well-being of every participant and stakeholder, and imposing significant costs.

Nothing is more corrosive to our fisheries regulatory scheme than fraud. Due to the cost of placing individuals on fishing boats to monitor activity, NOAA was only able to fund third-party observers on 14 percent of groundfish trips in New England last year.<sup>1</sup> This means that the

---

<sup>1</sup> NOAA, *NOAA Fisheries Announces At-Sea Monitoring 2017 Coverage Levels for Groundfish Sector Fishery* (Mar. 15, 2017), available at [https://www.greateratlantic.fisheries.noaa.gov/mediacenter/2017/03/15\\_asm2017levels.html](https://www.greateratlantic.fisheries.noaa.gov/mediacenter/2017/03/15_asm2017levels.html).

fundamental integrity of this critical fishery is on an honor system for vast majority of the time spent fishing; NOAA, fisheries scientists, other fishermen and the public must rely on fisherman to accurately self-report the amount, weight, location, and type of fish they catch. Another critical source of fishery data that directly impacts scientists' evaluation of population health is dealers' reports on recorded landings. These data sets are used by the populations assessment scientists at the NOAA Northeast Fisheries Science Center in Wood's Hole as inputs to their population assessment models, used in turn to propose maximum harvest levels to federal fishery managers. Most fisherman and dealers handle this responsibility with integrity; but we believe Rafael's criminal misreporting of landings has tarnished the reputation of all.

Furthermore, Rafael's crimes have caused fishermen to question the validity of their quota limits under the current catch-share program. The catch-share management system established in 2010 apportioned shares based on ten-year historic catch totals. Based on now-questionable catch numbers, Rafael accrued the biggest stake of groundfish shares. Rafael reportedly owns significant amounts of quota in nearly all groundfish species, including almost 10 percent of Georges Bank cod, 8.3 percent of Georges Bank haddock, 14.5 percent of Georges Bank yellowtail flounder, and nearly 23 percent of Georges Bank winter flounder.<sup>2</sup>

What's more, as noted above, Rafael's falsified data has flowed directly into the scientific models used to determine future catch-share allocations. Over the past few years, population predictions about yellowtail flounder and cod stocks based on these models has proven to be so unreliable that scientists have concluded that some of the models are no longer credible for providing management advice on quotas. American plaice and witch flounder models also remain largely out of sync. All of these are stocks that Rafael inaccurately reported or illegally fished, and of which Rafael had an outsized, substantial share. While a causal relationship will likely never be determined between Rafael's criminal misreporting and the failure of these models, the coincidence is striking and noteworthy.

In a regulatory scheme where scientists and the public depend on fishermen and dealers for accurate data and where fishermen depend on science to set accurate and sustainable catch targets, illegal actors such as Rafael initiate a negative feedback loop that is virtually impossible to overcome. Everyone gets hurt and is therefore a victim of such criminal activity—false data causes scientists and fisheries managers to doubt the validity of their datasets and catch advice, which in turn leads to establishment of more conservative catch levels or high-cost enforcement measures, or both. Law-abiding fishermen will bear the burden of expected higher monitoring compliance costs as a result of Rafael's crimes.

Just as importantly, false data can lead fishermen, committed conservation groups such as Conservation Law Foundation, concerned politicians, and the public to doubt agency guidance. The anxiety surrounding the stability and future of our fisheries is well documented; regulations

---

<sup>2</sup> Specific information on Rafael's catch and holdings is difficult for the public to access because of various confidentiality provisions implemented by NOAA pursuant to section 402(b) of the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. § 1881a(b).

built on falsified data erode faith in the regulatory system and put critical management measures at risk.

**II. Rafael ostensibly used criminal behavior to gain unfair market advantage at the expense of competitors.**

As fishing businesses were collapsing around him, it is likely that Rafael's illegal behavior gave him a significant competitive advantage that allowed his business to buy out struggling competitors and increase his market share. In 2010, Rafael "horded" fishing permits in anticipation of the new catch-share system, allegedly spending \$10 million<sup>3</sup> and growing his share of groundfish revenue from 9 percent to more than a quarter.<sup>4</sup> As of 2013, he was allegedly using 57 permits to operate 15 full-time trawl vessels and five part-time trawl vessels.<sup>5</sup> The size of his fleet, the large quotas, and his species misreporting allowed him and his fishing sector to continue fishing for groundfish when smaller operators could not. Much of this impact fell on the smaller fishing operations. Of the 120 boats that exited the fishery between 2010 and 2013, small boats left around twice the rate of larger boats.<sup>6</sup>

We urge the Court to consider the dire conditions of the groundfish fishing industry over the past five years, which put Rafael's crimes into sharp relief. Struggling groundfish populations—the very ones Rafael was directing his boats to catch and misreport—are in need of sustainable management and recovery. In 2012, the Department of Commerce declared the Northeast multispecies industry to be in a state of disaster.<sup>7</sup> Between 2011 and 2013, the value of the groundfish sector in New Bedford declined from \$31 million to \$19 million, losing a third of its value and costing over a hundred jobs.<sup>8</sup> THE BOSTON GLOBE ran a headline asking *Is this the end*

---

<sup>3</sup> See Danny McDonald, *Carlos Rafael and His Fish Are the American Dream*, VICE (May 24, 2013), available at [https://www.vice.com/en\\_us/article/kwnmea/carlos-rafael-fish-interview](https://www.vice.com/en_us/article/kwnmea/carlos-rafael-fish-interview).

<sup>4</sup> Ben Goldfarb, *The Deliciously Fishy Case of the "Cofather"*, MOTHER JONES (Mar. 17, 2017), available at <http://www.motherjones.com/environment/2017/03/codfather-carlos-rafael-fish-fraud-catchshares/>.

<sup>5</sup> See Brendan Borrell, *The Last Trial of the Cofather*, HAKAI MAGAZINE (Jan. 10, 2017), available at <https://www.hakaimagazine.com/article-long/last-trial-codfather>.

<sup>6</sup> Goldfarb, *supra*.

<sup>7</sup> See NOAA Fisheries, *Secretary of Commerce declares Fisheries Disasters in Northeast, Alaska, and Mississippi* (Sept. 13, 2012), available at [http://www.nmfs.noaa.gov/stories/2012/09/09\\_13\\_12disaster\\_determinations.html](http://www.nmfs.noaa.gov/stories/2012/09/09_13_12disaster_determinations.html).

<sup>8</sup> See Borrell, *supra*.

*of the New England fisherman?*,<sup>9</sup> and Massachusetts set up a disaster relief fund for the struggling groundfish industry.<sup>10</sup>

In the midst of this devastation, Rafael was declared the “American Dream” by one media outlet, effortlessly and inexplicably thriving against odds that other dedicated, talented fishermen could not seem to overcome.<sup>11</sup> It is now known that what Rafael’s failed competitors lacked was the benefit of a massive, vertically integrated criminal conspiracy and that his “American Dream” was more of an “American nightmare” for everyone else. It is our conclusion that Rafael distorted the market by leveraging fraudulent landings sales to expand, while the law-abiding fishermen struggled (and too often failed) to survive.

### III. Rafael’s behavior demonstrates malice and brazen disregard for the law.

Rafael has evidenced persistent, open, malicious and selfish disregard for the fishing community, regulators, and the public whose resources he has pillaged. Taken as a whole, Rafael’s course of conduct should, we believe, lead this Court to conclude that his crimes deserve maximum punishment.

Rafael’s reputation for aggressively challenging and belittling anyone who stood in his way is well-known by anyone in the groundfish fishery and is well-corroborated by Rafael’s own reported statements to the media, as the following reported comments make clear. When his business was just starting out, Rafael would bid highest on daily hauls before systematically driving the price down later, claiming “*shame on them if they didn’t know any better.*”<sup>12</sup> When struggling fishermen protested the size of his colossal operation, Rafael decried them in crude terms as “*mosquitos on the balls of an elephant*”<sup>13</sup> and “*maggots screaming on the sidelines . . . they can scream all they want. Nobody can save them.*”<sup>14</sup> He sued Massachusetts for excluding him from a portion of the state disaster relief funding, then threatened to sell his boats to a buyer out-of-state out of spite, arguing that he “*didn’t want them to bring in one dollar for this state again.*”<sup>15</sup>

---

<sup>9</sup> Jenna Russell, *Is this the end of New England fishermen?*, BOSTON GLOBE (June 16, 2013), available at <https://www.bostonglobe.com/magazine/2013/06/15/this-end-new-england-fisherman/XDE93VGrorgaz5iwui7s3L/story.html>.

<sup>10</sup> See Jennifer Smith, *Mass. to receive \$14.5m for groundfish disaster funding*, BOSTON GLOBE (May 29, 2014), available at <https://www.bostonglobe.com/metro/2014/05/28/massachusetts-receive-million-for-groundfish-disaster-funding/ummCB1OfL0QL15ErdsuVSJ/story.html>.

<sup>11</sup> See McDonald, *supra*.

<sup>12</sup> *Id.*

<sup>13</sup> Goldfarb, *supra*.

<sup>14</sup> McDonald, *supra*.

<sup>15</sup> Simon Rios, *King of New England groundfishing plans to sell his fleet out of New Bedford*, SOUTH COAST TODAY (Jan. 4, 2015), available at <http://www.southcoasttoday.com/article/20150104/NEWS/150109720>.

Rafael's self-centered philosophy and fundamentally criminal state-of-mind is plainly revealed in a quote recently attributed to him by a regulator: "*I am a pirate . . . . It's your job to catch me.*"<sup>16</sup> To anyone involved in exercising the privilege of fishing in federal waters in the United States or anyone trying to manage or promote sustainable management of sustainable, healthy fisheries, this statement and perspective are extremely alarming. Pirates are criminals who do not abide by the laws or faithfully perform the responsibilities of a commercial fisherman. Pirates are not and should not be afforded the privilege of harvesting public resources, particularly those that are on the fragile edge of collapse. Pirates cannot be trusted to respect a management regime on which a great many honest fishermen depend for their livelihoods.

**We respectfully urge the Court to impose criminal penalties that are just and commensurate with the significant economic, reputational, and environmental damage Rafael inflicted on the above-listed victims through his extensive crimes, including full forfeiture of all the vessels identified by the Department of Justice and NOAA as having played a part in this criminal enterprise.** Given the notoriety of the defendant and the widespread attention on this case, Rafael's criminal penalties must be of sufficient magnitude to deter future illegal fishing conduct. The government has recommended the low end of possible prison time, per the Plea Agreement. As your Honor is well aware, criminal sentencing is not constrained by the prosecution's recommendation; the Court has sole discretion to impose Rafael's sentence up to the maximum sentence allowed by law. In the wake of Rafael's audacious illegal behavior, we feel it is critical that his term of imprisonment and other penalties send a strong signal that conduct like Rafael's will not be tolerated in our nation's fisheries. As we detailed above, illegal fishing and misreporting have real adverse consequences for real people; accordingly, we believe violators should be given penalties that are more than a mere "slap on the wrist" and a cost of doing business.

**With regards to Rafael's fishing vessels subject to forfeiture, we respectfully urge the Court to consider the gravity of Rafael's crimes and order the forfeiture of all connected vessels.** We strongly believe that Rafael and his associates should not gain any further benefit from vessels and permits that were used in the commission of crimes. Given the significant harms inflicted by Rafael through his crimes, forfeiture of *all* vessels identified in the indictment would be proportional and just.

Indeed, the purpose of the forfeiture provision of the Lacey Act, 16 U.S.C. § 3374(a)(2), is to impose strict penalties that match the grave environmental and economic impacts of illegal wildlife trade. The Report of the Senate Environment and Public Works Committee that accompanied the Lacey Act Amendments of 1981 explains that the amendments, including section 3374(a)(2), were a reaction to evidence that "uncovered a massive" and "highly profitable" illegal trade in fish and wildlife, often run by "well organized," "sophisticated,"

---

<sup>16</sup> Goldfarb, *supra*.

“professional criminals.”<sup>17</sup> The Committee highlighted “grim environmental consequences” of illegal wildlife trade, which “threatens the survival of many species” and has “severe” economic consequences.<sup>18</sup> One of the express purposes of the Lacey Act Amendments of 1981 was to address enforcement problems that had developed over time due to the fact that the original statute’s “penalties [we]re too low, and the culpability standard too stringent.”<sup>19</sup> According to the Committee, “[f]orfeiture of equipment that has been used—and may be used again—in violation of the Lacey Act fosters the purpose of preventing further illicit use of the equipment and by imposing an economic penalty, thereby rendering illegal behavior unprofitable.”<sup>20</sup>

Overall, legislative history suggests that Congress intended for the Lacey Act Amendments of 1981 to impose strict penalties that would deter sophisticated violators like Rafael and prevent repeat offenses. In the case of Rafael, forfeiture of *all* vessels and properties engaged in the illegal activities would further both of these aims.

**Additionally, as the Court considers the fate of forfeited vessels, we respectfully urge the Court to consider remedies that would help bring relief to the fishery that has borne the brunt of Rafael’s crimes.** Rafael has pled guilty to crimes that have harmed many victims. This Court has discretion under Title 18 of the U.S. Code to order restitution to certain victims in connection with several of Rafael’s crimes, including conspiracy (18 U.S.C. § 371) and falsifying federal records (18 U.S.C. § 1519).<sup>21</sup> Additionally, under the Mandatory Victims Restitution Act of 1996, 18 U.S.C. § 3663A, restitution is mandatory in any case where a victim has directly and proximately suffered a pecuniary loss as a result of a crime. In cases of illegal fishing, courts have held that such victims can include governments, who are trustees of public resources and represent the public’s interest in protecting natural resources from illegal harvest.<sup>22</sup> Accordingly, we ask the Court to create a process by which fishing operations that believe they have been directly harmed by Raphael’s illegal actions can make a claim for restitution.

---

<sup>17</sup> S. REP. No. 97-123, at 1 (1981), *reprinted in* 1981 U.S.C.C.A.N. 1748.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.* at 2.

<sup>20</sup> *Id.* at 14.

<sup>21</sup> 18 U.S.C. § 3663(a)(1)(A).

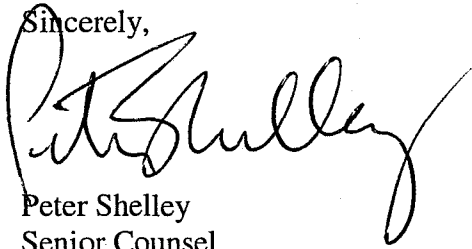
<sup>22</sup> *See* *United States v. Bengis*, 631 F.3d 33 (2d Cir. 2011) (where defendant plead guilty to conspiracy to violate Lacey Act by illegally harvesting lobsters in South Africa, finding that South Africa was due restitution under the Mandatory Victims Restitution Act); *United States v. Oceanpro Indus., Ltd.*, 674 F.3d 323, 331, 332 (4th Cir. 2012) (upholding a restitution order to Maryland and Virginia where seafood wholesaler was convicted of conspiracy to violate Lacey Act, finding that the states “possess a legitimate and substantial interest in protecting the fish in their waters as part of the natural resources of the State and its fishing industries” and that “[t]o qualify as victims, Maryland and Virginia need not even have been ‘owners’ of the striped bass, although they were after the fish were illegally caught; they merely had to have interests that were ‘harmed’ as a result of the defendants’ criminal conduct. Because we have concluded that their interests were indeed harmed, the States were victims and therefore properly awarded restitution”).



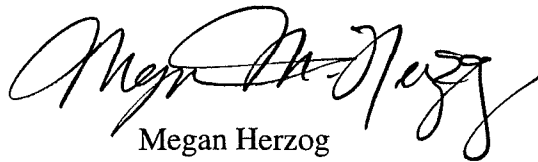
Restitution proceeds could be obtained from the sale of forfeited vessels. Proceeds should also be used to fund fisheries monitoring initiatives that help to mitigate the adverse impacts caused by Rafael's crimes. Greater monitoring coverage would not only help to deter and identify illegal fishing operations like Rafael's but also improve data collection and scientific models that have been compromised by Rafael's illegal behavior. Enhanced monitoring coverage would allow fishing industry regulators and participants a more complete and accurate picture of what is happening on the water, which should in turn enhance the reliability of fisheries management models and control measures. Electronic monitoring, in particular, has the potential to feasibly allow 100-percent monitoring coverage, and would represent a major step forward in managing New England's complex and diverse fisheries and making Raphael's approach to fishing a bad chapter in New England fishing that everyone can now move beyond. Lack of adequate NOAA funding has resulted in delay in implementation of much-needed electronic monitoring programs. Funds obtained in connection with Rafael's violations could provide critical support for such programs.

Thank you for your consideration.

Sincerely,



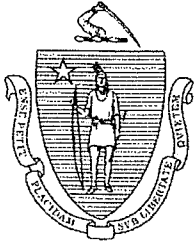
Peter Shelley  
Senior Counsel



Megan Herzog  
Staff Attorney

Encls.

Cc: Martha Victoria, Probation Officer, U.S. Probation and Pretrial Services  
Andrew E. Lelling, Esq., U.S. Attorney's Office MA  
David G. Tobin, Esq., U.S. Attorney's Office MA  
Sara E. Silva, Esq., Collora LLP  
William H. Kettlewell, Esq., Collora LLP  
John Bullard, Regional Administrator, Greater Atlantic Regional Fisheries Office, NOAA  
Chris Oliver, Assistant Administrator for Fisheries, NOAA  
Joseph Heckwolf, Esq., Northeast Section, NOAA Office of General Counsel  
Thomas A. Nies, Executive Director, New England Fishery Management Council



THE GENERAL COURT OF MASSACHUSETTS  
STATE HOUSE, BOSTON 02133-1053

August 14, 2017

The Honorable Charlie Baker  
Governor, Commonwealth of Massachusetts  
Room 360, State House  
Boston, MA 02133

Dear Governor Baker:

We are contacting you to state our interest regarding groundfish permits currently held by Mr. Carlos Rafael following the conclusion of the case, **United States v. Carlos Rafael**. Mr. Rafael has already plead guilty to criminal conspiracy, false labeling and fish identification, falsifying federal records, tax evasion and bulk cash smuggling. As a condition of his guilty plea, he will also forfeit thirteen fishing vessels and their associated groundfish permits. It is our understanding that under the Magnuson-Stevens Act, his actions would justify the permanent revocation and redistribution of these permits back to the National Marine Fisheries Service (NMFS) as part of the criminal case.

Mr. Rafael's blatant disregard for the law and sustainable fishing practices is a challenge to the beleaguered groundfish industry and has greatly harmed the vast majority of law abiding Massachusetts fishermen. Our fishermen, who have complied with federal quotas and regulations have been forced to compete with his illegal activities and further suffer the consequences on their future stock assessments. We urge you to contact NMFS to urge them to cancel each of his groundfish permits and redistribute the fishing privileges to all eligible permit holders in the Massachusetts fleet.

In addition to the redistribution of permits we strongly feel that any financial settlement of this case must take into account the collective harm caused by Mr. Rafael's criminal actions and seek to repair that damage. Responsible management of the groundfish stocks remains an ongoing issue, with compliance being the major challenge. While fishermen may agree or disagree about monitoring, the challenge is constant, and that is who pays for it. This concern could be alleviated if 100% electronic monitoring were to be implemented with the settlement from this case.

Mr. Rafael has been flouting the rules for decades. His fishing enterprises have accounted for hundreds of millions of dollars of economic impact over those decades, but he has gained at the expense of his fellow fishermen, federal regulators and even the researchers who have been

decrease costs to the affected vessel owners. Groups of vessel owners, however, may elect to contract with the same service provider to help lower the costs associated with such requirements.

#### **Exemption of the Dockside/Roving Monitor Requirements for Certain Permit Categories**

Vessels issued a limited access NE multispecies Handgear A, Handgear B, and Small Vessel category permit are exempt from any dockside/roving monitoring requirements when operating in the common pool. Given this exemption, it is not possible for dockside/roving monitor service providers to provide statistically random coverage of all common pool trips, as required under Amendment 16, because not all common pool trips are subject to dockside/roving monitoring requirements. Therefore, the dockside/roving monitoring coverage regulations have been revised to accommodate this exemption, and specify that service providers must provide random coverage of all trips subject to the dockside/roving monitoring requirements.

#### **Trip-End Hail Requirement**

To facilitate dockside intercepts by both state and Federal enforcement personnel, beginning in FY 2011, all sector vessels and common pool vessels fishing under a DAS must submit a trip-end hail report via VMS prior to returning to port on each trip. Vessels subject to dockside monitoring (i.e., sector vessels starting in FY 2010 and common pool vessels starting in FY 2012) are required to submit both a trip-start and a trip-end hail report for that trip, consistent with current practice. The trip-end hail report must contain the same information as the trip-end hail report implemented by Amendment 16.

#### **Inspection of Fish Holds**

Amendment 16 established approval requirements for entities providing dockside/roving monitoring services. These standards included hiring individual dockside monitors that were capable of climbing ladders and inspecting fish holds. For FY 2010, NMFS developed operational standards necessary to implement the Amendment 16 dockside monitoring provisions, based on a pilot dockside/roving monitoring program conducted during the summer of 2009. These standards did not require dockside monitors to inspect fish holds for FY 2010. However, based on further evaluation of the performance of the dockside

monitoring program and consideration of concerns expressed by enforcement personnel, this action now requires that dockside monitors inspect the fish holds for any trip that is assigned a dockside/roving monitor beginning in FY 2011. This requirement will enhance the enforceability of existing provisions and minimize the incentives to under-report/misreport the amount of regulated species landed.

#### **11. Sector Measures**

##### **Distribution of the PSC From Cancelled Permits**

As described in Amendment 16, a PSC represents an individual permit's portion of the total historical landings of each regulated species or ocean pout stock during FYs 1996–2006 by all permits, including those in confirmation of permit history (CPH), that were eligible to participate in the NE multispecies fishery as of May 1, 2008. If a permit had been cancelled after May 1, 2008, its historic landings between FYs 1996–2006 have still been used to calculate the total landings by eligible permits.

As noted above, the current regulations calculate the ACL available to sector and common pool vessels based on the cumulative PSCs of each permit participating in each sector. By default, if the owner of a particular permit has not elected to participate in a sector, that permit is considered to be participating in the common pool, and its PSC contributes to the sub-ACL available to the common pool at large. Similarly, if a permit or CPH is permanently cancelled for any reason, that permit or CPH cannot participate in sectors, or any fishery, and the PSC is used to contribute to the sub-ACL available to the common pool. Thus, the PSCs of cancelled permits artificially inflate the PSCs of those permits operating in the common pool and are not equitably distributed among all permits remaining in the fishery.

Beginning in FY 2011, the PSC of all valid permits, including those held in CPH, that are eligible to participate in the fishery must be recalculated as of June 1 of each year, unless another date is specified by the RA, to redistribute the landings histories of cancelled permits to all remaining eligible permits. To do so, the PSCs for each stock calculated pursuant to the process specified in Amendment 16 must be multiplied by a factor of "1/PSC of the remaining permits." These recalculated PSCs shall then be used to calculate ACEs for each sector during the following FY. For FY 2012 and beyond, a PSC that is calculated on June 1, shall

affect sector ACE for the FY that begins on May 1, of the following year.

This provision means that each permit's PSC may increase on a yearly basis to reflect its higher portion of the historic landings of each regulated species and ocean pout stock due to the removal of the landings histories of any permits that were cancelled by June 1 of each year. This will ensure that the yearly PSC calculations reflect eligible permits at the beginning of each FY (May 1), and allow NMFS time to process such renewals. On or about July 1 of each year, NMFS will inform permit holders of updated PSCs through a permit holder letter sent to owners of a valid limited access NE multispecies permit or CPH.

The FW 45 proposed rule specified that the RA would recalculate FY 2011 PSCs for each permit using valid permits as of May 1, 2011, to update PSCs for FY 2011 and reflect permits cancelled through FY 2010. However, to ensure that permit owners had sufficient information to make informed decisions about whether or not to participate in sectors before the start of FY 2011 on May 1, 2011, the RA recalculated FY 2011 PSCs for each permit using valid permits as of February 11, 2011, to reflect permits cancelled through that date. This information was sent out to permit holders on February 11, 2011, to facilitate their decision to join a sector based on measures proposed in FW 45. The RA will recalculate PSCs for each permit as of June 1, 2011, to account for permits cancelled through FY 2010 and determine the PSCs that will be used to calculate FY 2012 sector ACE for each stock, consistent with the procedures outlined above.

#### **Operations Plan Requirements**

Amendment 16 specified that sectors must submit final rosters, proposed operations plans, including rosters and associated environmental analyses by September 1, so that NMFS could review such documents as part of the process to approve sector operations for the following FY. Based on industry input, this action increases the flexibility of these deadlines by requiring sectors to submit preliminary rosters and proposed operations plans to NMFS by September 1, and final rosters by December 1 of each year. Following further industry input submitted during the public comment period for this action and ongoing discussions with industry participants, NMFS will allow for a limited opportunity for additional changes to FY 2011 sector rosters to accommodate changes in vessel ownership that occurred after the submission of final sector rosters on

ITEM	VIOLATION DATE	SETTLEMENT DATE	VIOLATION TYPE	CORPORATION	NOVA AMOUNT	SETTLED AMOUNT
1	3/95	8/94	NO OPERATOR PERMIT	JOAO-CARLOS	\$2,000	\$1,500
2	7/94	6/97	PURCHASED FISH IN EXCESS OF TRIP LIMIT	CARLOS SEAFOOD	\$39,000	\$9,000
3	5/95	11/97	FALSE DAS DECLARATION	JOAO-CARLOS	\$10,000	\$1,000
4	5/95	12/97	FALSE DAS DECLARATION, NO/LATE VTR REPORT	C&J FISHING	\$35,000	\$3,500, 7-DAY OPERATOR SUSPENSION
5	1/98	12/98	EXCEEDED TRIP LIMIT, FAILED TO FILL OUT VTR, CONCEALED FISH	P&S FISHING	\$35,000	\$2,500
6	4/96	6/99	EXCEEDED DAS LIMIT	C&V FISHING	\$15,000	\$1,000, 2 DAS
7	6/95, 11/95	3/00	EXCEEDED TRIP LIMIT, INACCURATE VTR	IVONLIDE FISHING	\$55,000	\$10,000
8	2/00	8/01	CLOSED AREA VIOLATION, TOWED THROUGH GEAR	C&V FISHING	\$65,000	\$22,500
9	4/97, 8/97	3/02	FALSE LANDING REPORTS IN PERMIT APPLICATION	C&B FISHING	\$220,000	\$10,000, SOME SMB FISHING RIGHTS REVOKED
10	3/03	10/03	EXCEEDED TRIP LIMIT	IVONLIDE FISHING	\$50,000+\$135,113	\$30,000+\$110,000
11	12/02	UNKNOWN	EVADED BOARDING	R&P FISHING	\$25,000	UNKNOWN
12	5/04	10/04	NO VMS, FISHING IN CLOSED AREA WITH NO DECLARATION	AJ&C FISHING	\$40,000+\$26,146	\$517+\$26,146
13	12/05	2/08	MESH SIZE	C&D FISHING	\$70,000+\$23,781	\$30,000+\$23,781
14	11/06	11/08	EXCEEDED TRIP LIMITS	C&B FISHING	\$7,500	\$3,800
15	8/12	UNKNOWN	EXCEEDED TRIP LIMIT	VILA FISHING	\$6,000	UNKNOWN
16	11/11-11/12	UNKNOWN	INCORRECT DAS DECLARATIONS	APOLLO FISHING	\$1,000	UNKNOWN
17	9/14	UNKNOWN	IMPEDED LAW ENFORCEMENT	LADY PATRICIA	\$6,000	UNKNOWN
18	10/13	10/15	FALSE CATCH REPORT	IVONLIDE FISHING	\$100,000, PERMIT SANCTION	\$70,000, PERMIT SANCTION
19**	7/02	5/03	EXCEEDED TRIP LIMIT, DAS NOTIFICATION VIOLATION	MARINALDO FISHERIES**	\$30,000+16,183	\$30,000+16,183, 30-DAY OPERATOR SUSPENSION

Summary of fishery violations committed by Carlos Rafael prior to *United States v. Carlos Rafael*

May 4, 2017

Dear Governor Baker:

We request your support of our position on the dissolution of fishing rights associated with groundfish permits that have been, or will be, seized by the government in the case of *United States v. Carlos Rafael*, as well as any subsequent civil action carried out by the National Marine Fisheries Service Office of Law Enforcement.

Rafael has a history of egregious fishing violations spanning two decades (attached). In *United States v. Carlos Rafael*, he has pled guilty to falsifying fish catch reports, cash smuggling, and tax evasion. While other fishermen were complying with steep reductions in fishing quotas, Rafael decided the rules don't apply to him

Rafael's violations have set back groundfish rebuilding requirements, and forced others to compete with his illegal activity on the fishing grounds and in the market. Rafael has harmed the entire groundfish industry, and fishermen from Maine to New York deserve to be compensated.

The City of New Bedford has launched a campaign claiming that the permits issued to Rafael and seized by the government should stay in the control of the City. We disagree.

Existing regulations describe a process regarding fishing privileges associated with groundfish permits that are cancelled or otherwise removed from the fishery. Those privileges are to be redistributed to the entire fleet. This policy was developed by the New England Fishery Management Council, in a transparent public process, and was approved by the National Marine Fisheries Service in 2011 (attached).

It is our firm position that the National Marine Fisheries Service should cancel all of Rafael's groundfish permits, and redistribute the fishing privileges associated with those permits to the entire fleet. We request that you convey your support of our position to the National Marine Fisheries Service.

Sincerely,

John Pappalardo  
Cape Cod Commercial Fishermen's Alliance

Maggie Raymond  
Associated Fisheries of Maine

Christopher Brown  
Rhode Island Commercial  
Fishermen's Association

Ben Martens  
Maine Coast Fishermen's Association

Hank Soule  
Sustainable Harvest Sector

Cc: George Peterson, Jr., Commissioner, Fish and Game  
David Pierce, Director, Marine Fisheries

identification, and falsifying federal records. He cannot change his guilty plea, according Judge William Young, even if the plea deal falls through.

But Rafael has not been expelled from the sector and his vessels still ply the waters off our coastline.

Soule contends that NOAA had an obligation to penalize the sector when they didn't adhere to their own enforcement rules.

"We also believe the failure of NMFS (NOAA Fisheries) to enforce the terms of its agreement with (Sector IX) undermines the entire sector management system," Soule wrote in his May 30 comment letter to NOAA.

"Fishermen are saying why should I do this (comply with sector rules) if NMFS is going to turn a blind eye," Raymond said.

Citing an ongoing case, NOAA officials at the regional office in Gloucester, the Office of Law Enforcement, and their General Counsel in Washington, D.C., declined to comment.

### 'ENORMOUS COLLATERAL IMPACT'

Rafael didn't resign as president and from the board of directors until a May 23 meeting. Sector IX's new president, Virginia Martins, and manager DeMello did not return several emails and phone messages left for them requesting comment. Board member Daniel Georgianna, a UMass Dartmouth economics professor, declined to comment.

Gloucester fisherman and vessel owner Vito Giacalone is the chairman of governmental affairs, and sits on the board of directors of the Northeast Seafood Coalition, the umbrella organization that oversees a dozen sectors, including Rafael's. Up until 2016, Rafael was also a coalition board member.

Giacalone believed that Rafael was simply too big to be allowed to fail, that his sector worked with NOAA to enact changes — including bringing in new board members and a new enforcement committee — that allowed them to stay in business.

Rafael's vessels control considerable groundfish quota, up to 75 percent of what New Bedford holds, according to New Bedford Mayor Jon Mitchell, and Rafael has said he has 280 employees.

"You don't have to be too imaginative to see that that is an enormous collateral impact as soon as that operation is stopped in its tracks," Giacalone said, estimating that as many as 80 fishermen would be immediately out of work.

"I wish Carlos Rafael had thought about that before he did what did," Soule said. "The bottom line is New Bedford is the richest port in the U.S. The loss of his groundfish boats won't devastate the port."

NOAA is reportedly working with Rafael's legal team on an agreement that would have him selling off his vessels and permits and leaving fishing forever, including scallop and lobster vessels not involved in the fish smuggling scheme.

At least 13 vessels are scheduled to be forfeited to the government as part of the plea deal and Giacalone thinks NOAA may be trying to maintain the value of the assets by keeping them fishing.

"I think it would be clumsy of the sector to cause collateral damage that could be excessive to innocent third parties," Giacalone said.

— Follow Doug Fraser on Twitter: @DougFraserCCT.

# Despite guilty plea, 'Cofather' continues to fish

---

 [capecodtimes.com/news/20170811/despite-guilty-plea-codfather-continues-to-fish](https://www.capecodtimes.com/news/20170811/despite-guilty-plea-codfather-continues-to-fish)

Doug Fraser @dougfraserct

Doug Fraser @dougfraserct

New England fishermen are wondering how the fishing fleet owned by New Bedford fishing mogul Carlos Rafael continues to fish nearly five months after he pleaded guilty on March 30 in federal district court in Boston to 28 offenses, including conspiracy, false labeling of fish, bulk cash smuggling, tax evasion and falsifying federal records.

"It's the question I'm asked nearly every day by the people I work for," said Maggie Raymond, executive director of Associated Fisheries of Maine, representing fishing boats that fish the Gulf of Maine and Georges Bank.

Those vessels include many Rafael agreed to forfeit in his plea deal for their role in his scheme to sell fish he didn't have enough quota to catch, under the name of species for which he had enough quota. The fishing year starts May 1 and Rafael won't be sentenced until Sep. 25 and 26. Many are angry that Rafael's fleet has been allowed to operate through the summer months when fishermen traditionally catch most of their fish.

"It infuriates those of us that have been crippled by onerous regulations yet have managed to comply," Boston fishing vessel owners Chris and Amanda Odlin wrote in their comments to the National Oceanic and Atmospheric Administration on their decision to renew the operations plan of Rafael's fishing sector.

Others commenters demanded the sector be disbanded and the quota redistributed to the region's fishermen.

In May, NOAA renewed the IX Northeast Fisheries Sector, in which Rafael was listed as president, and in which he owns 21 of the 22 vessels listed as actively fishing. The renewal is an interim measure, NOAA spokesman Jennifer Goebel explained in an email, which could be revised after Rafael is sentenced next month.

"The way I'm interpreting it is that it is a rubber stamp approval of an operations plan unchanged from prior years," said Hank Soule, manager of the Sustainable Harvest Sector in South Berwick, Maine. Soule contends that Sector IX hasn't investigated or penalized Rafael, violating the enforcement requirements of the sector contract.

## RAFAEL'S DAUGHTER MANAGES SECTOR

The sector system was created in 2010 as a way to deal with chronic overfishing of groundfish (cod, haddock, flounder and other bottom feeding species) and a fleet that was too large for the resource. Fishermen were allocated a percentage of the annual groundfish quota based on their landings history. They formed associations, known as sectors, to collectively manage their combined quota shares. Autonomy came at a price: They agreed not to overfish their quota and to self-police members to guarantee that.

Rafael was listed as the president of Sector IX for more than a year after he was arrested, and is virtually its only active member, owning 21 of 22 of the vessels designated as actively fishing this year. The sector's contract with NOAA states that the sector's manager, in this case Rafael's daughter Stephanie Rafael DeMello, must investigate serious transgressions as soon as she is aware of them and send them to an enforcement committee. DeMello is also required to report enforcement issues to NOAA, but Soule, in his comment letter on the operations plan renewal, said he was told by the agency that no report had come from the sector as of April.

The Sector IX contract also stipulates that a third offense of "subverting the reporting requirements" is an automatic expulsion from the sector, which ends the member's right to fish in the sector. In the court case, Rafael admitted to misreporting around 800,000 pounds of fish of various species and 25 instances of false labeling and fish

Our daily headlines email is delivered each morning.

- This field is for validation purposes and should be left unchanged.



# Letter to the editor: The Codfather's money could help fix fishing

---

[www.pressherald.com/2017/06/11/letter-to-the-editor-the-codfathers-money-could-help-fix-fishing/](http://www.pressherald.com/2017/06/11/letter-to-the-editor-the-codfathers-money-could-help-fix-fishing/)

We wholeheartedly agree with your editorial about Carlos Rafael ("Our View: Catching 'The Codfather' should just be first step," May 14).

His criminal actions stole from honest fishermen and undermined the entire groundfishery for cod, flounder and other bottom-dwelling species.

## Related Headlines

- Letter to the editor: Our proms don't have to break the bank
- Letter to the editor: Would Jesus be a liberal in a modern context?
- Letter to the editor: No matter ideology, we can't ignore climate reality
- Letter to the editor: Poverty problem needs to be addressed at home, abroad

Search photos available for purchase: [Photo Store](#) →

Yet an opportunity exists now to make both fishermen and the fishery itself whole again by taking even bigger steps, and one of his quotes offers inspiration:

"This is America; anything can happen, with money behind it."

Let's put his money to work fixing the fishery he badly damaged.

Honest fishermen have not been playing on a level field with the likes of Carlos.

We need to make sure they aren't put in that position again.

To do that, we must invest some of his illegal gains in fishing's future by improving dockside monitoring, expanding electronic monitoring and increasing fishermen-scientist collaborations to get better fish counts.

We can transform this moment into an opportunity to create the oversight and infrastructure necessary to make honest, long-term success possible for our iconic fishery.

This can happen, and Carlos Rafael's money should be behind it.

**John Pappalardo**

*CEO, Cape Cod Commercial Fishermen's Alliance*

*Chatham, Massachusetts*

Share

Read or Post Comments

Send questions/comments to the editors.

**Want the news vital to Maine?**

Fishery managers know we need to improve monitoring and accountability. They've fashioned something called Multispecies Amendment 23 to do so. As managers learn more about what Rafael did and how he did it, they will have more information to build better oversight and protections — and he should pay for that, too, so what he did can never be repeated.

Already, some of the best captains in our fleet are turning to video cameras to record every trip, and every catch. Revenue recouped from Rafael's criminal activities could be used to expand this fledgling electronic monitoring program.

This is how we can turn disaster into benefit, and help rebuild fish populations vital for our future.


New England fishermen have borne the brunt of a well-organized, cynical crime. We cannot make them whole, but we have a rare opportunity to offer compensation, return Rafael's assets to the remaining groundfishermen across New England, end opportunities large and small to keep on cheating, and give honest people a fair fighting chance to fish for a living.

That's what justice looks like now. And that should be the real legacy of Carlos Rafael.

— John Pappalardo is chief executive officer of the Cape Cod Commercial Fishermen's Alliance in Chatham.

# What justice looks like for our fisheries

---

 [capecodtimes.com/opinion/20170520/what-justice-looks-like-for-our-fisheries](https://www.capecodtimes.com/opinion/20170520/what-justice-looks-like-for-our-fisheries)

By John Pappalardo

By John Pappalardo

The high-profile arrest of Carlos Rafael followed by his guilty plea to lying about the fish he caught and sold is final proof of the existence of a devastating rogue wave that has battered the historic New England fishery.

Rafael tainted an entire industry, making fools of hardworking, honest fishermen who have been playing by the rules under increasingly difficult circumstances.

It's entirely possible that his illegal reporting distorted the scientific analysis that powered our fish population assessments. By mislabeling depleted species and selling them as abundant species, Rafael kept scientists from making honest estimates of how much fish actually was in the water. Public policy was built on bad assumptions, which in turn created double damage — lowering limits on the amount of fish honest fishermen were allowed to bring to shore while at the same time stealing the resource we are all committed to rebuilding.

Now comes the crucial question: What does justice look like in the aftermath of an admitted economic and environmental crime of this magnitude?

First, Carlos Rafael should be banned from commercial fishing, forever.

Second, the fishing quota he owns (pounds of fish allowed to be landed each year) should be redistributed to all of the fishermen in our region, because they are the ones most damaged by his criminal enterprise.

Third, additional revenue on his assets, whether from outright confiscation and sale, or fines and penalties, should be used to fund major improvements in how our fisheries are monitored and studied. This is the only way to assure that the same thing won't keep happening over and over again, to protect honest fishermen and to revive fish populations.

While most fishermen are hardworking and law-abiding, making a living in a dangerous but gratifying way, we need to acknowledge that Rafael is not the only person to game the system (though he's likely the worst). This is the moment to learn from what he was able to pull off and shut the door on anyone who aims to steal public resources from the ocean, other fishermen and the American public.

By Rafael's own estimation, his fleet is worth between \$75 million and \$100 million. In the plea bargain proposed in return for his guilty plea, only 20 percent of his holdings (13 vessels and permits worth about \$15 million) would be confiscated. This would leave him with \$60 million or more of assets.

That can't be right. All of his fishing assets should be forfeited. The \$15 million defined in the plea bargain should be to make amends directly to fishermen, distributing rights to catch fish worth millions of dollars to the struggling fleet across New England. Rafael's actions did not damage just people in New Bedford, where at least the port accrued jobs processing the fish Rafael's boats illegally landed. His crimes damaged groundfish fishermen from Maine to New York.

A lifetime ban means he must sell his remaining \$60 million of ill-begotten assets, and a big chunk of those proceeds should be forfeited to the government and used to repair the fishery he damaged. That means improved at-sea and dockside monitoring, as well as funding for more and better fish counts done through fisherman-scientist partnerships, to give us better data and drive better management decisions.

# Letter: Rafael's ill-gotten gains should go to those he cheated

---

[southcoasttoday.com /opinion/20170517/letter-rafaels-ill-gotten-gains-should-go-to-those-he-cheated](https://southcoasttoday.com/opinion/20170517/letter-rafaels-ill-gotten-gains-should-go-to-those-he-cheated)

Carlos Rafael pleaded guilty to running a massive criminal enterprise that stole from honest fishermen and undermined the fisheries as a whole. One of his quotes offers a revealing insight into his perspective:

"This is America; anything can happen, with money behind it."

Let's put his money to work fixing the fishery he badly damaged.

Carlos Rafael should be banned from commercial fishing forever. The fish quota he owns should be redistributed to all the fishermen he harmed. That's what existing regulations mandate, that's what many in the industry believe, and we agree.

But we can demand and expect more. Honest fishermen have not been able to play on a level field against the likes of Carlos. We need to make sure they aren't put in that position again.

To do that, we must invest some of his illegal gains in fishing's future by improving dockside monitoring, expanding electronic monitoring and increasing fishermen-scientist collaborations to get better fish counts.

We can transform this moment into an opportunity to create the oversight and infrastructure necessary to make honest, long-term success possible for our iconic fishery.

This can happen, and Carlos Rafael's money should be behind it.

John Pappalardo

CEO, Cape Cod Commercial Fishermen's Alliance



## JOHN PAPPALARDO: RAFAEL SHOULD BE PERMANENTLY BANNED FROM FISHING, REDISTRIBUTION OF QUOTA

May 15, 2017 — SEAFOOD NEWS — Carlos Rafael pled guilty to running a massive criminal enterprise that stole from honest fishermen and undermined the fisheries as a whole. One of his quotes offers a revealing insight into his perspective:

“This is America; anything can happen, with money behind it.”

Let's put his money to work fixing the fishery he badly damaged.

Carlos Rafael should be banned from commercial fishing forever. The fish quota he owns should be redistributed to all the fishermen he harmed. That's what existing regulations mandate, that's what many in the industry believe, and we agree.

But we can demand and expect more. Honest fishermen have not been playing on a level field with the likes of Carlos. We need to make sure they aren't put in that position again.

To do that, we must invest some of his illegal gains in fishing's future by improving dockside monitoring, expanding electronic monitoring and increasing fishermen-scientist collaborations to get better fish counts.

We can transform this moment into an opportunity to create the oversight and infrastructure necessary to make honest, long-term success possible for our iconic fishery.

This can happen, and Carlos Rafael's money should be behind it.

*This letter originally appeared on SeafoodNews.com, a subscription site. It is reprinted with permission.*

# Letter to the editor: Honest fishermen should get lawbreaker's privileges

---

📄 [www.pressherald.com/2017/05/07/letter-to-the-editor-honest-fishermen-should-get-lawbreakers-privileges-2/](http://www.pressherald.com/2017/05/07/letter-to-the-editor-honest-fishermen-should-get-lawbreakers-privileges-2/)

Carlos Rafael's environmental crime spree, spanning two decades, will finally come to an end. Rafael pled guilty to federal charges of falsifying fish catch reports, conspiracy and tax evasion. He will serve at least four years in jail and will forfeit millions of dollars in fishing assets. For law-abiding fishermen, this day is long overdue.

While other fishermen were complying with steep reductions in fishing quotas, Rafael decided those rules didn't apply to him. Rafael's violations set back groundfish rebuilding requirements, and forced others to compete with his illegal activity on the fishing grounds and in the market. Rafael has harmed the entire groundfish industry, and fishermen from Maine to New York deserve to be compensated.

## READ MORE

- Letter to the editor: Judges can help stop drunken drivers
- Letter to the editor: Restaurant noise ratings should be understandable
- Letter to the editor: Many on disability benefits would like to be working
- Letter to the editor: 'The Summer King' story hits it out of the park
- Letter to the editor: It's warming ocean, not wind power, that threatens lobsters

Search photos available for purchase: [Photo Store](#) →

Rafael's history is so egregious that the National Marine Fisheries Service is obliged to cancel all his groundfish permits and fishing privileges. Existing regulations describe a process for redistributing the fishing privileges from canceled permits to all other permit holders in the fishery – and this is precisely the process that should be followed in this case.

## Maggie Raymond

*executive director,*

*Associated Fisheries of Maine*

*South Berwick*

Share

Read or Post Comments

Send questions/comments to the editors.


## Want the news vital to Maine?

Our daily headlines email is delivered each morning.

- This field is for validation purposes and should be left unchanged.

## Letter: 'Cofather' should lose all his permits

---

 [southcoasttoday.com/opinion/20170503/letter-codfather-should-lose-all-his-permits](http://southcoasttoday.com/opinion/20170503/letter-codfather-should-lose-all-his-permits)

Carlos Rafael's environmental crime spree, spanning two decades, will finally come to an end. He pleaded guilty to federal charges of falsifying fish catch reports, conspiracy and tax evasion. He will serve at least four years in jail and will forfeit millions of dollars in fishing assets. For law abiding fishermen, this day is long overdue.

While other fishermen were complying with steep reductions in fishing quotas, Carlos Rafael decided those rules didn't apply to him. His violations set back groundfish rebuilding requirements, and forced others to compete with his illegal activity on the fishing grounds and in the market. He has harmed the entire groundfish industry, and fishermen from Maine to New York deserve to be compensated.

Carlos Rafael's history is so egregious that the National Marine Fisheries Service is obliged to cancel all his groundfish permits and fishing privileges. Existing regulations describe a process for re-distributing the fishing privileges from canceled permits to all other permit holders in the fishery — and this is precisely the process that should be followed in this case.


Maggie Raymond

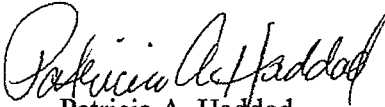
Executive director, Associated Fisheries of Maine


unknowingly using data fouled by his criminal schemes. With the hope of a significant financial penalty handed down in this case, implementation could be achieved without being burdensome to the fleet.

We thank you for your attention on this important matter.


Sincerely,

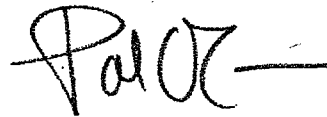
  
Sarah K. Peake  
State Representative  
4<sup>th</sup> Barnstable


  
Patricia A. Haddad  
State Representative  
5<sup>th</sup> Bristol


  
Bradford R. Hill  
State Representative  
4<sup>th</sup> Essex


  
Julian Cyr  
State Senator  
Cape & Islands


  
Timothy R. Whelan  
State Representative  
1<sup>st</sup> Barnstable

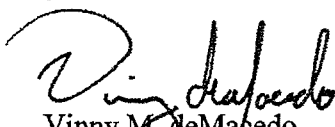
  
Patrick O'Connor  
State Senator  
Plymouth & Norfolk

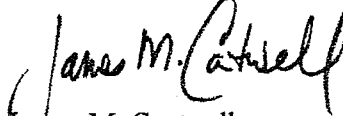
  
Bruce E. Tarr  
State Senator  
First Essex & Middlesex

  
Mathew M. Muratore  
State Representative  
1<sup>st</sup> Plymouth

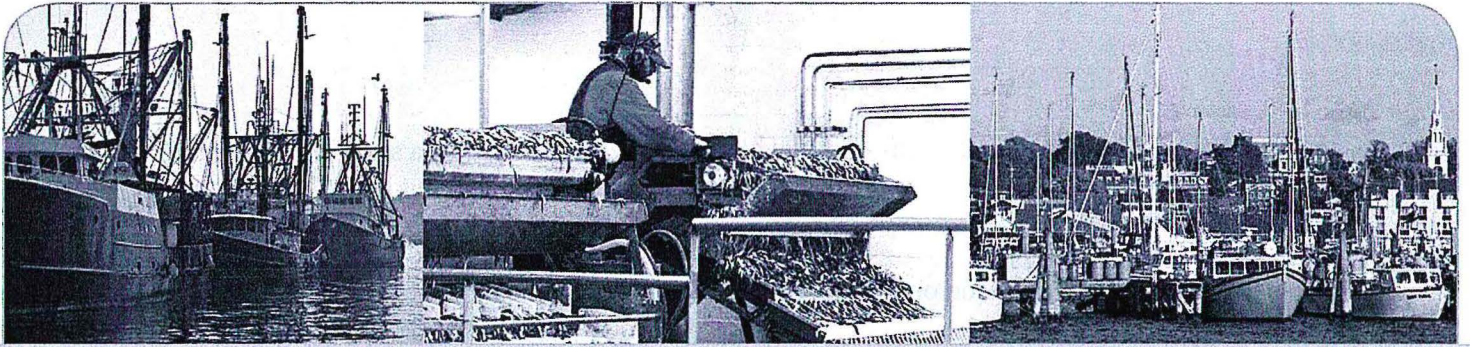
  
Tackey Chan  
State Representative  
2<sup>nd</sup> Norfolk

  
William Crocker  
State Representative  
2<sup>nd</sup> Barnstable

  
Vinny M. deMacedo  
State Senator  
Plymouth & Barnstable

  
James M. Cantwell  
State Representative  
4<sup>th</sup> Plymouth





LENFEST  
OCEAN  
PROGRAM

RESEARCH SERIES

JUNE 2009

Fishing violations in New England could jeopardize fish population recovery.

# NEW ENGLAND FISHERIES ENFORCEMENT

## A SUMMARY OF NEW SCIENTIFIC ANALYSIS:

King, D. and Sutinen, J. 2009. Rational noncompliance and the liquidation of Northeast groundfish resources. *Marine Policy*.

IN NEW ENGLAND, government officials enforce fisheries regulations developed to prevent overfishing and allow recovery of depleted fish populations. However, the number of times that fishermen have violated regulations has doubled since the 1980s, and a substantial number of fishermen, managers, scientists and enforcement officials believe that noncompliance levels are high enough to jeopardize fisheries rebuilding programs and the health of the resources.

In a nationwide study, Drs. Dennis King and Jon Sutinen examined fisheries enforcement compliance rates and their associated financial implications. In a case study of the Northeast multispecies groundfish (NEGF) fishery, they found that given the conditions in the fishery and current levels of enforcement, there are high economic incentives for fishermen to violate regulations. They also found evidence that social factors that usually support voluntary compliance, including moral obligation and community pressure, are declining as the credibility of fisheries regulations among fishermen decreases and economic pressures increase. The authors call for a smart compliance program that focuses enforcement and penalties on frequent offenders, while strengthening the basis of moral obligations to comply. This *Lenfest Ocean Program Research Series* report is a summary of the scientists' findings.

## ILLEGAL FISHING IS SIGNIFICANT

The authors examined noncompliance by analyzing enforcement records and surveying affected stakeholders such as fishermen, researchers, fisheries regulators and enforcement officials. Based on their survey results, the authors estimate that between 12 and 24 percent of the NEGF fishery catch is illegal. From enforcement data, they calculated that the financial gains from illegal fishing are five times greater than the expected penalty, taking into account 1) the likelihood of a violation being caught (Figure 1), 2) the percent of violations that are prosecuted and 3) the size of the typical penalty. For example, a captain on a mid-size trawler could expect to increase his profit on average by \$4,334 per trip, by fishing illegally.

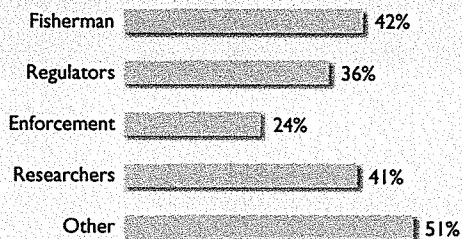
A substantial fraction of violations are accidental, rather than intentional (Figure 2). Chronic, intentional violators constitute a smaller number of fishermen (Figure 3). These chronic violators, who account for most of the illegal harvest, are motivated by the clear economic gain and low likelihood of being caught or penalized.

## FISHING VIOLATIONS JEOPARDIZE FISHERY HEALTH

Significant percentages of survey respondents believe that illegal fishing currently undercuts the biological and economic health of the fishery. Large majorities of respondents believe that one or more of the possible types of violations are significantly harming the fishery. While there appears to be a near consensus on this matter, opinions about the relative impacts of specific types of violations are more varied (Figure 4).

At current levels of noncompliance, a large majority of enforcement agents and approximately a third of fishermen believe that illegal fishing reduces long-term economic gains for fishermen who follow the rules (Figure 5). Similarly, 68 percent of enforcement personnel and a third of fishermen believe that illegal fishing will prevent law-abiding fishermen from benefiting from population rebuilding programs.

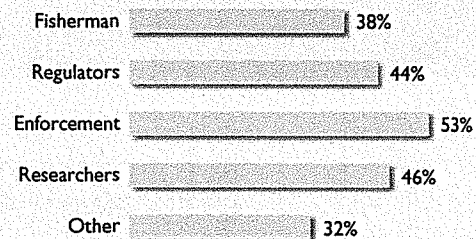
FIGURE 1: WHAT PERCENT OF VIOLATIONS OF U.S. FISHERY LAWS DO YOU THINK ARE DETECTED?



NOTE: RESPONSE ROUNDED IN MEAN PERCENTAGES

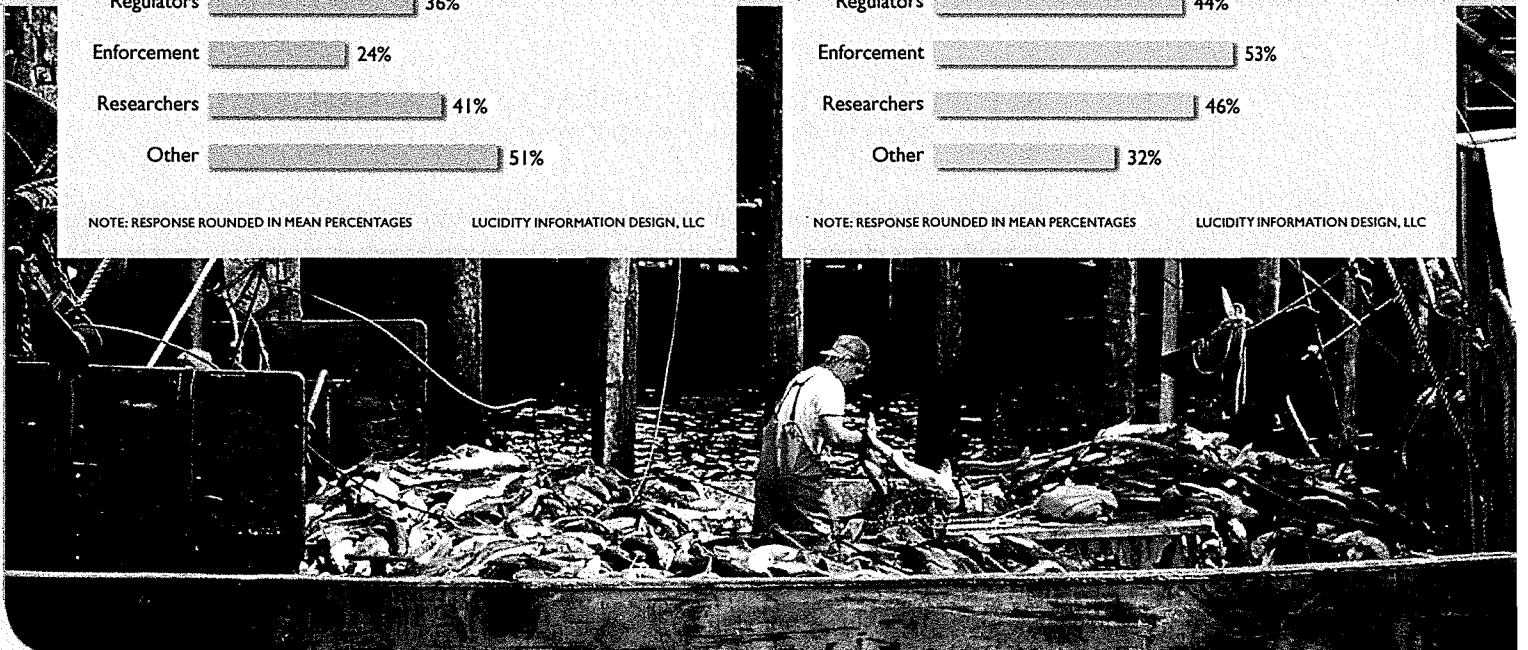
LUCIDITY INFORMATION DESIGN, LLC

FIGURE 2: WHAT PERCENT OF VIOLATIONS IN THE NEGF FISHERY ARE INTENTIONAL AS OPPOSED TO ACCIDENTAL?

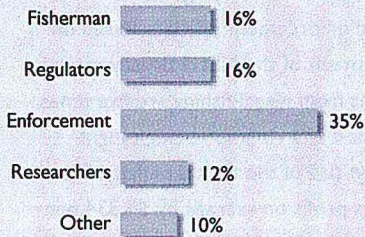


NOTE: RESPONSE ROUNDED IN MEAN PERCENTAGES

LUCIDITY INFORMATION DESIGN, LLC



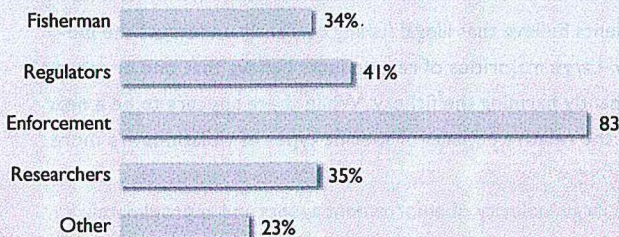
**FIGURE 3: WHAT PERCENT OF COMMERCIAL FISHERMEN DO YOU THINK ROUTINELY VIOLATE FISHERY LAWS?**



NOTE: RESPONSE ROUNDED IN MEAN PERCENTAGES

LUCIDITY INFORMATION DESIGN, LLC

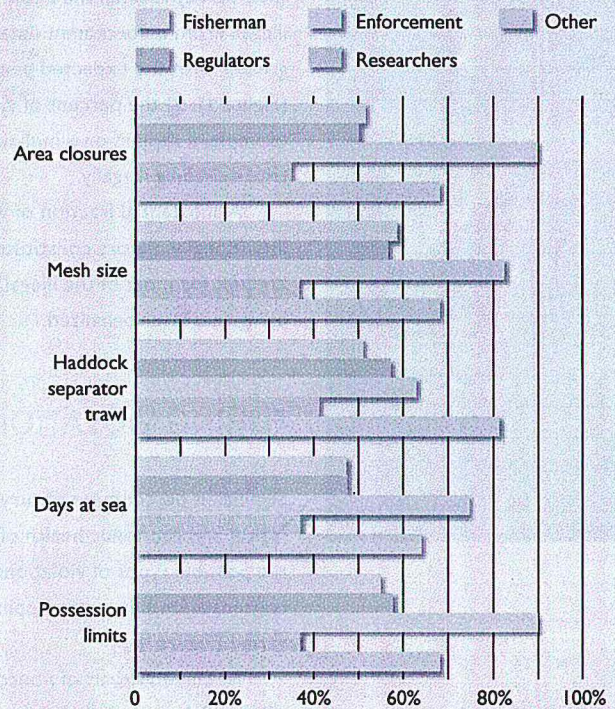
**FIGURE 5: AGREE OR STRONGLY AGREE THAT THE ADVERSE EFFECTS OF FISHING VIOLATIONS ON FISH STOCKS ARE SIGNIFICANT ENOUGH TO REDUCE LONG-TERM ECONOMIC RETURNS FROM FISHING**



NOTE: RESPONSE ROUNDED IN MEAN PERCENTAGES

LUCIDITY INFORMATION DESIGN, LLC

**FIGURE 4: PERCENT OF GROUP RESPONDING THAT SPECIFIC TYPES OF VIOLATIONS HAVE A SIGNIFICANT, OR GREATER THAN SIGNIFICANT, ADVERSE IMPACT ON THE HEALTH AND MANAGEABILITY OF NE GROUND FISH RESOURCES**

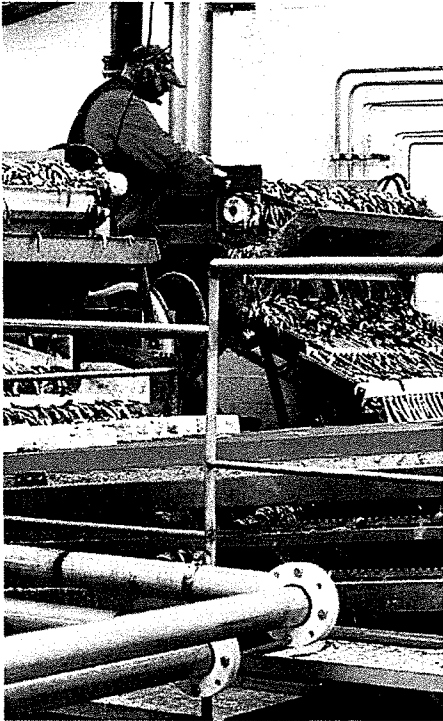


LUCIDITY INFORMATION DESIGN, LLC

Significant percentages of survey respondents believe that illegal fishing currently undercuts the biological and economic health of the fishery.

### FUTURE ECONOMIC AND SOCIAL FACTORS WILL LIKELY ENCOURAGE INCREASED ILLEGAL FISHING

Other studies indicate that most fishermen comply with fishery regulations most or all of the time because of a sense of moral obligation and social pressure, despite economic incentives to do otherwise. Unfortunately, the influence of these factors is diminishing in the NEGF fishery. The U.S. Magnuson Stevens Act requires managers to end overfishing of all fish stocks and rebuild them over time. This will require tightening fishing restrictions which will increase economic pressure on fishermen and incentives not to comply. Moreover, illegal fishing undermines fishermen's trust in the legitimacy of fishery management decisions because fishermen know that illegal fishing makes it harder for populations to recover and that unreported catches make it harder for managers and scientists to get accurate data on catch levels. When fishermen disagree with a regulation or question the legitimacy of the management institutions, they are more inclined to violate fishing rules. As more individuals question the validity of rules in the NEGF fishery, the social norm may shift in favor of noncompliance.



## IMPLEMENT SMART COMPLIANCE POLICIES

Stronger economic incentives to fish illegally, combined with weaker legitimacy of the management process in the eyes of fishermen, suggest that a smart compliance and enforcement process is needed to prevent further biological and economic decline in the NEGF fishery. A Smart Compliance program:

- **Targets frequent offenders with severe penalties that sufficiently deter violations.** Focusing enforcement more heavily on frequent offenders increases the chances that offenders will be caught and prosecuted. In addition, it can prevent other fishermen from concluding that violators are immune from punishment, and that the rules are not being applied fairly and will not have the intended effects on fish stocks.
- **Provides enough deterrence to discourage occasional offenders.** Uniformly severe penalties for all offenders can lead to questions about the legitimacy and fairness of management systems and reduce voluntary compliance. To avoid this, penalties for occasional offenders should be less than for chronic repeat offenders.
- **Strengthens the basis for voluntary compliance by improving how regulations are developed, implemented and enforced.**
- **Considers how changes in fishery management, including possible shifts to “rights based” fishing, such as dedicated access privileges, “individual fishermen quotas”, or “sector” quotas, will influence compliance and enforcement requirements.**

Focusing enforcement on frequent offenders increases the chances that offenders will be caught and prosecuted.

### About the Authors

DENNIS M. KING is a Research Professor in the Center for Environmental Science, University of Maryland, PO Box 38, 1 Williams Street, Solomons Island, Maryland, 20688, USA.

JON G. SUTINEN is a Professor Emeritus, Department of Environmental and Natural Resource Economics, University of Rhode Island, 209 Seacliff Way, Point Richmond, California, 94801, USA.

*This study was initiated and supported by the Lenfest Ocean Program.*

*The Lenfest Ocean Program was established in 2004 by the Lenfest Foundation and is managed by the Pew Environment Group. For more information about the Program or Marine Policy paper, please visit [www.lenfestocean.org](http://www.lenfestocean.org) or contact us at [info@lenfestocean.org](mailto:info@lenfestocean.org).*

Credits—Photography: Cover (left) © Kristjan Maack/Alamy, (center) © Enigma /Alamy, (right) © Joseph Sohm/Alamy; Page 2, (top) © Dougie Taylor/Alamy, (bottom) © Bert Hoferichter/Alamy; Page 3 © Celeste Fowler/Seapics.com; Charts: Robert Cronan, Lucidity Information Design, LLC.




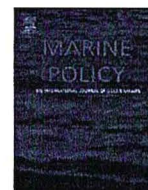
LENFEST  
OCEAN  
PROGRAM

Lenfest Ocean Program: Protecting Ocean Life Through Marine Science

The Lenfest Ocean Program supports scientific research aimed at forging new solutions to the challenges facing the global marine environment.

901 E Street NW, 10th Floor, Washington, DC 20004 • ph: 202.552.2179 • fx: 202.552.2299  
email: [info@lenfestocean.org](mailto:info@lenfestocean.org) • [www.lenfestocean.org](http://www.lenfestocean.org)

 Printed on 100% recycled paper.



## Rational noncompliance and the liquidation of Northeast groundfish resources

Dennis M. King<sup>a,\*</sup>, Jon G. Sutinen<sup>b</sup>

<sup>a</sup> Chesapeake Biological Laboratory, University of Maryland, P.O. Box 38, Solomons, MD 20688, USA

<sup>b</sup> Department of Environmental and Natural Resource Economics, University of Rhode Island, 1 Greenhouse Road, Kingston, RI 02881, USA

### ARTICLE INFO

#### Article history:

Received 19 March 2009

Received in revised form

8 April 2009

Accepted 9 April 2009

#### Keywords:

Illegal fishing  
Violations  
Compliance  
Enforcement  
Management  
Stock rebuilding

### ABSTRACT

The results of a 2007 survey of fishers, managers, scientists, and enforcement officials indicate that noncompliance is a significant problem in the Northeast multispecies groundfish (NEGF) fishery, as it has been for at least 20 years. The percent of total harvest taken illegally is estimated to be 12–24%, which is significantly higher than estimates of 6–14% in the 1980s. Thirty-seven percent of fishers, 61% of fishery managers and 80% of fishery enforcement staff believe that “the combined adverse impact of all violations on the health and manageability of fish resources” is significant, highly significant, or extremely significant. Many fishers believe that illegal fishing will prevent them from ever benefiting from stock rebuilding programs.

The deterrence effect of the existing enforcement system in the NEGF fishery is weak because economic gains from violating fishing regulations are nearly 5 times the economic value of expected penalties. For example, by fishing illegally a midsize trawler in the NEGF fishery is estimated to increase expected earnings per trip by \$5,500. Fishing violations have a 32.5% probability of being detected, and enforcement data show that a detected violation has a 33.1% probability of being prosecuted and resulting in a penalty. The average penalty assessed for a violation is \$20,455 and the settlement amount averages 53% of the assessed penalty. The expected cost of a violation, therefore, is \$1,166. When compared with the illegal gain, the economic incentive not to comply is \$4,334 per trip.

Normative factors, such as moral obligation and peer and community pressure often induce fishers to be law-abiding despite potential illegal gains. However, normative factors favoring compliance in the NEGF fishery are weak because many fishers believe recent fishery management decisions were not justified, and that planned stock rebuilding targets and schedules are arbitrary and unfair. Until this situation changes, more enforcement and more certain and meaningful penalties will be needed to improve compliance. Fishing restrictions will need to be tightened to achieve new legally mandated stock rebuilding targets. This will increase economic incentives for noncompliance in the fishery and require even more enforcement and more significant penalties to achieve adequate compliance rates.

This article recommends that a “smart compliance policy” be implemented in the NEGF fishery that employs different types of enforcement strategies and penalties with different groups of fishers identified based on their compliance histories. This should include aggressive targeting of frequent violators and criminal penalties and the forfeiture of all fishing privileges for certain types of violations. Funds should be redirected toward incentive programs to support collaborations between other fishers and enforcement staff to increase the number of violations that are detected, reported, and successfully prosecuted.

© 2009 Elsevier Ltd. All rights reserved.

### 1. Introduction

This article provides an overview of noncompliance in the Northeast multispecies groundfish (NEGF) fishery; presents an

assessment of how it contributes to overfishing and could prevent successful fish stock rebuilding plans in that fishery; and provides recommendations regarding what can be done to improve the situation.

This assessment is based primarily on the results of a recently completed study of enforcement and compliance in the NEGF fishery which draws on data from: (a) a mail survey of fishermen; (b) an online survey of federal and state enforcement staff, regulators, and scientists; (c) in-person and phone interviews

\*Corresponding author. Tel.: +14103267212; fax: +14103267419.

E-mail addresses: [dking@cbl.umces.edu](mailto:dking@cbl.umces.edu) (D.M. King),

[jgsutinen@gmail.com](mailto:jgsutinen@gmail.com) (J.G. Sutinen).

with fishermen and fishery enforcement staff; and (d) analysis of 6 years of National Oceanic and Atmospheric Administration (NOAA) enforcement statistics (2001 through 2006) for the Northeast (NE) region.<sup>1</sup>

Study results are used to determine the extent and significance of noncompliance in the fishery and to test hypotheses about what can be done to improve compliance. The hypotheses are derived from what has become known as an “enriched theory of compliance” that is based on the influence of both deterrence and normative factors on fishers’ decisions to comply or not.<sup>2</sup> Deterrence factors are based on the difference between the expected benefits of noncompliance and the likelihood of detection and the expected penalty or sanction if detected. Normative factors include: fishers’ moral standards and perspectives about whether the fishery management regime is legitimate and competent, and developed fishing regulations in ways that are fair and equitable; and whether they believe that complying with fishing regulations is likely to make a difference. Based on this “enriched theory of compliance,” the level of enforcement required to achieve a given level of compliance is lower when normative factors have a positive effect on compliance and higher when they have a negative influence.

The research results indicate that noncompliance is a significant problem in the NEGF fishery. Whether used to test deterrence or normative factors influencing compliance, the research results further indicate that unless there is more enforcement and/or more certain and meaningful penalties facing violators, noncompliance problems in this fishery can be expected to increase in the years ahead.

These results confirm the outcomes of previous studies of enforcement and compliance in this fishery [4–6].<sup>3</sup> These studies, like the current study, show that the economic payoff to fishermen from noncompliance is relatively high and the expected likelihood of being detected, and the penalties if detected, are relatively low.<sup>4</sup> This more recent study, however, was conducted during a time when deteriorating biological conditions increase the adverse impacts of noncompliance on fish stocks; while simultaneously there are growing incentives for noncompliance due to deteriorating economic conditions in the fishery, more restrictive fishing regulations and more contentious fishery management targets and timetables.

<sup>1</sup> A complete description of the study and results are available from the study sponsor (Lenfest Ocean Program). A summary of the study and results is available from the authors.

<sup>2</sup> The conventional “theory of compliance” [1] focuses on economic incentives and how potential violators compare the relative costs and benefits of violating the law. The “enriched theory of compliance” [2,3] includes both economic incentives and “normative” factors associated with moral convictions of fishers, peer pressure, attitudes regarding the legitimacy of regulations, and other factors that result in most fishers complying with the law even when there are economic gains from not complying.

<sup>3</sup> Results from Sutinen et al. [5] indicate that potential illegal gains in the NEGF fishery are high and the expected penalties are low. The rates of noncompliance and the amounts of illegal harvests are similar to those reported here from our 2007 survey. The results of the Shaw [6] study were: “(1) fishermen do not perceive fishery management agencies and the fishery regulations to be holistically legitimate; (2) participants (fishers) maximize their personal benefits; and (3) the National Marine Fisheries Service (NMFS), United States Coast Guard (USCG), and NOAA General Council need to coordinate their data maintenance programs to provide for greater data consistency and integrity.”

<sup>4</sup> For example, Sutinen et al. [5] report that during 1987 in the Georges Bank portion of the NEGF fishery “a quarter to half of all groundfish vessels were identified as frequent violators, committing closed area violations on about one-third of their trips and using illegal mesh on nearly all trips [and] illegal earnings by a typical frequent violator...amounted to approximately \$225,000 per year.”

In most fisheries normative influences result in most fishers complying with fishing restrictions despite potential economic gains from doing otherwise. The survey results show this to be true in the NEGF fishery except that a significant number of fishers have formed an unfavorable and distrustful view of fishery management, which is having an adverse affect on their willingness to comply with fishing restrictions. One-third of fishermen in the fishery believe illegal fishing is already significant enough to prevent them from ever benefiting from fish stock rebuilding programs. From the perspective of these fishermen, the most “sustainable” strategy is to earn as much income as possible from fishing as soon as possible before the fishery collapses or is shut down. Under these circumstances, further tightening of restrictions on legal fishing increases the likelihood that normally law-abiding fishermen will engage in illegal fishing for economically rational reasons.

The policy implications of this research are significant because they indicate that: (1) strategies to meet new federal mandates to reduce overfishing and to meet fish stock rebuilding targets in this fishery<sup>5</sup> will not succeed until enforcement and compliance problems in the fishery are addressed and (2) a robust “smart compliance policy” [7] needs to be implemented to effectively control illegal fishing in the fishery.

Smart compliance policy deals explicitly with the fact that the influence of compliance drivers on behavior varies among fishers; and that compliance problems presented by those fishers who are not influenced by moral obligation and social influence need to be addressed differently than compliance problems presented by other fishers. Smart compliance policy involves developing strategies that: (a) target and meaningfully penalize frequent, routine violators; (b) provide adequate deterrence to discourage occasional violators; and (c) strengthen the basis for achieving voluntary compliance. Evidence regarding compliance in the NEGF fishery and the different factors that motivate compliance among different types of fishers strongly support developing and implementing a robust smart approach to compliance in this fishery.

Research results also indicate that it is important to address noncompliance problems soon. Fishermen know that additional fishing restrictions needed to meet new federal fish stock rebuilding mandates will create more economic incentives for fellow fishers to engage in illegal fishing. They also know that more illegal fishing may prevent stock rebuilding targets from being met and force regulators to tighten regulations further, or perhaps even shut down the fishery. Fishers also recognize that increases in the illegal harvest mean fishery scientists and managers receive less reliable catch and effort statistics with which to assess conditions in the fishery. As a result, fishers have less trust in the scientific basis and legitimacy of fishery management decisions. The stronger incentives to fish illegally, combined with the weaker legitimacy of the management process, indicate that a robust smart compliance and enforcement program needs to be implemented soon to prevent further economic and biological decline in the NEGF fishery.

The following sections include an overview of the NEGF fishery (Section 2) and the prevailing theories and models that can be used to assess enforcement and compliance in this fishery (Section 3). Section 4 provides an overview of the survey results and uses them to address three critical questions: Is

<sup>5</sup> The 2007 reauthorization of the Magnuson-Stevens Act (MSA), the US law that governs fishery management, mandates science-based definitions of “overfishing” for all fisheries and requires regional fishery management councils to set clear targets and timetables for “preventing and ending overfishing and rebuilding US fisheries.”

**Table 1**  
Size of the New England groundfish (NEGF) fleet.

State	Number of vessels <sup>a</sup>
Connecticut	182
Delaware	184
Maine	1,656
Maryland	32
Massachusetts	695
New Hampshire	109
New Jersey	397
New York	N/A
Rhode Island	344
Virginia	261
Total	3860

Source: NOAA, 2002, fisheries of the United States.

<sup>a</sup> Includes only permitted vessels greater than 5 net registered tons.

noncompliance a serious problem in the NEGF fishery? What factors affect noncompliance in the NEGF fishery? How does the current system of enforcement and penalties need to change to improve compliance? Section 5 provides conclusions and recommendations for improving compliance in this fishery.

## 2. The Northeast multispecies groundfish (NEGF) fishery

### 2.1. Fishery overview

The Northeast multispecies groundfish (NEGF) fishery consists of 24 species targeted by a fishing fleet of nearly 3,400 vessels that range from small hook-and-line vessels, operating in near-coast waters; to large offshore trawlers<sup>6</sup> (Table 1 and Fig. 1). The fishery has been the mainstay of New England's fishing industry for three centuries but overfishing over the past 50 years has resulted in an alarming decline in the abundance of fish resources and in the economic value of this fishery (Fig. 2).<sup>7</sup> A 2008 report to congress by the National Marine Fishery Service (NMFS) listed 13 of the 24 species in this multispecies complex as "already overfished," 8 as being "subject to overfishing," and 4 as experiencing "unknown" levels of overfishing.<sup>8</sup> For this reason, the NEGF fishery is generally considered to be one of the most mismanaged and seriously threatened fisheries in the country.<sup>9</sup>

Attempts by regulators to reduce overfishing in the fishery have involved frequently changing and increasingly complex combinations of gear restrictions, by-catch limits, days at sea restrictions and fishing area closures. These regulations have not reduced overfishing sufficiently to allow fish stocks to rebuild. They have imposed economic hardships on many fishers and resulted in a relatively hostile relationship between fishery regulators and some fishers. Currently, regulators are considering

<sup>6</sup> The 3,375 vessels had permits to operate in the NEGF fishery in 2007. Permit data are available at: <http://www.nero.noaa.gov/permits/data/2007/>. Discussions with NOAA economists at Woods Hole indicate that, based on permit type, approximately 1,665 of these vessels are active in the fishery and account for nearly all the harvest. We surveyed the permit holders associated with 708 of these 1,665 vessels and had a survey response rate of over 40%.

<sup>7</sup> A history of the NEGF fishery is available at: <http://www.nefsc.noaa.gov/history/stories/groundfish/grndfish2.htm>.

<sup>8</sup> These figures are from the NMFS report to congress on the status of US fisheries [8].

<sup>9</sup> Fishery scientists and managers have written extensively about the various causes of fishery management problems in this fishery [9]. A 1996 report prepared for NOAA describes the perceptions of fishers about how fishery managers contributed to the decline of the fishery and is available at (<http://www.nefsc.noaa.gov/read/socialsci/cultural-aspects/50-DGNF-5-00008.pdf>).

entirely new ways of managing the fishery, including "sector based management" which involves granting dedicated access privileges to what are essentially fishermen cooperatives.<sup>10</sup> Sectors are favored by some fishers and opposed by others. However, as of early 2009, details have not yet been developed regarding how liability will be shared among fishers operating within sectors, how many fishers are likely to join sectors or how the allowable harvest from the NEGF fishery might be shared by sector and non-sector vessels.<sup>11</sup> Until these issues are resolved it is not clear how widespread sectors will be, or how they might affect enforcement and compliance in the fishery.

There is also increasing concern among fishery scientists that some fish stocks in the NEGF fishery do not appear to be increasing in response to forced reductions in fishing effort as quickly as their models predict.<sup>12</sup> Fishery scientists are searching for explanations that focus on possible structural changes in ocean ecosystems, imbalances in predator-prey relationships, ocean pollution, habitat loss, shifting ocean currents, ocean warming, etc. However, it is possible that forced reductions in legal overfishing are being offset by increases in illegal overfishing and unreported catches that are not taken into account in fishery models being used to predict fish stock improvements from forced reductions in (legal) fishing effort. Since deteriorating economic conditions and more restrictive regulations in the NEGF fishery strengthen economic incentives for fishermen not to comply, and normative influences on compliance are not strong in this fishery, this is clearly a hypothesis worth addressing.

### 2.2. Policy context

The 2007 reauthorization of the Magnuson-Stevens Act (MSA), the US law that governs fishery management, mandates science-based definitions of "overfishing" for all fisheries and requires regional fishery management councils to set clear targets and timetables for "preventing and ending overfishing and rebuilding US fisheries."<sup>13</sup> The NMFS, Northeast Fishery Center and New England Fishery Management Council (NEFMC) are now preparing to address three key challenges in implementing this law in the NEGF fishery: (1) how to establish scientifically defensible annual harvest limits that will meet mandated stock rebuilding targets for each of the 24 stocks; (2) how to find combinations of effort restrictions (e.g., days at sea limits and closed areas) and catch restrictions (e.g., fleetwide, sector, or individual harvest quotas and by-catch limits) that will minimize and equitably allocate the unavoidable and potentially catastrophic economic costs that achieving these harvest limits will impose on fishermen; and (3) how to reform fishery management institutions so they will respond to science and not to short-term economic and political pressures.<sup>14</sup>

<sup>10</sup> The New England Fishery Management Council (NEFMC) describes a sector as: "a group of persons holding limited access vessel permits who have voluntarily entered into a contract and agree to certain fishing restrictions for a specified period of time, and which has been granted a TAC(s) (total allowable catch) in order to achieve objectives consistent with applicable fishery management plan (FMP) goals and objectives."

<sup>11</sup> A description of how sectors are likely to operate in the NEGF fishery is provided in Turriss and McElderry [10]. Descriptions of how various fishers and fishing industry representatives view "sectors" appear frequently in fishing industry publications, such as *National Fisherman* and *Commercial Fishing News*.

<sup>12</sup> A recent article by Rosenberg et al., examines various explanations for why some fish stocks do not appear to be recovering quickly, as most fishery models predict, after forced reductions in fishing effort [11].

<sup>13</sup> Information about the 2006 amendments to the MSA and planned implementation strategies are available at [www.nmfs.noaa.gov/msa2007](http://www.nmfs.noaa.gov/msa2007).

<sup>14</sup> Discussion papers that describe new mandates for NMFS and the fishery management councils to implement "science-based" management are available at <http://www.nmfs.noaa.gov/msa2007/>

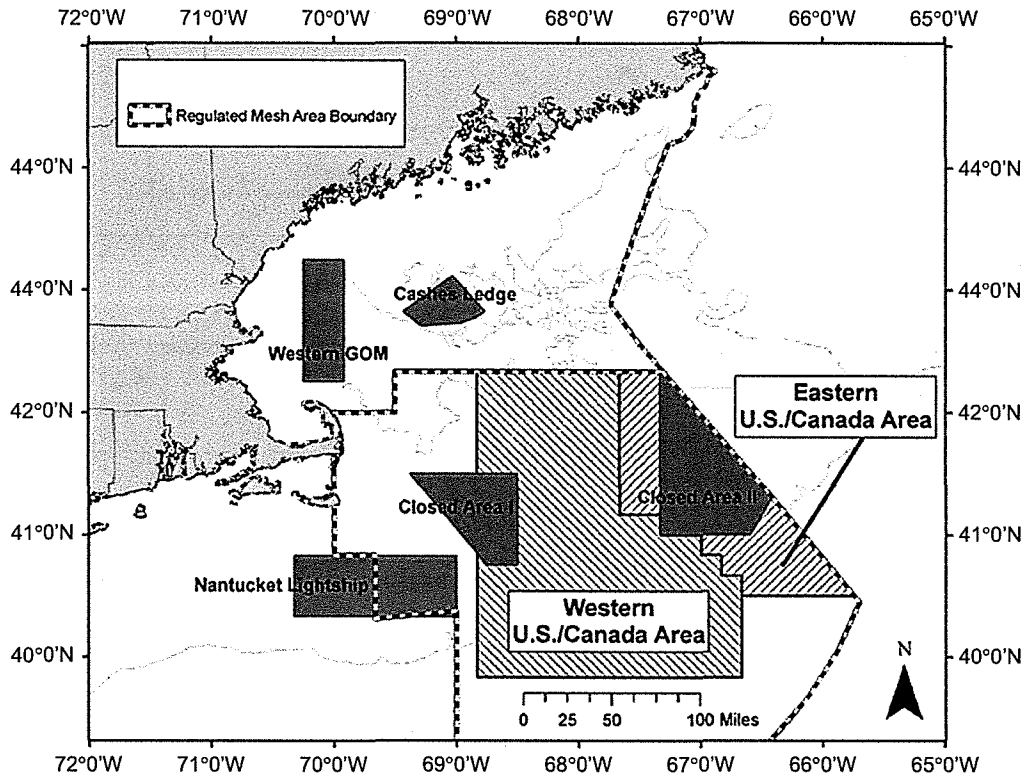


Fig. 1. Location of the NEGF Fishery. Source: NOAA, Northeast Regional Office.

Enforcement has always been recognized as an essential part of management in the NEGF fishery but it is not always a primary consideration when fishery managers make regulation decisions [12]. The NEFMC has a standing enforcement committee that meets regularly and provides the council with enforcement reports.<sup>15</sup> NMFS fishery enforcement staff and state fishery enforcement staff working with NMFS under Joint Enforcement Agreements (JEAs) also generate reports that summarize enforcement effort (e.g., number of enforcement man-hours, vessel-hours, or fishermen contacts) and the outcomes of that effort (e.g., number of citations, types and sizes of penalties, etc.). However, these reports only provide information about violations of fishing restrictions that are detected and reported.<sup>16</sup> Research focusing on the overall level of noncompliance in the fishery, detected and undetected, and how it may be affecting biological and economic conditions in this fishery, is rare. Also rare are studies that address whether the overall enforcement system that is in place in this fishery, including the combination of dock-side and at-sea inspections and associated procedures for prosecuting and penalizing violators, is adequate to deter illegal fishing.

The US coast guard (USCG) maintains records related to compliance in regional US fisheries that are based primarily on violations that are detected during at-sea boardings. However,

these records are not generally available, and the aggregate compliance rates that are reported by the USCG based on these records do not seem credible.<sup>17</sup> Other evidence based on surveys and interviews indicates that the high compliance rates reported routinely by the USCG to demonstrate the success of its at-sea fishery enforcement program actually reflect the failure of current USCG at-sea enforcement activities to detect violations [13].

### 2.3. Compliance/Enforcement context

It is often reported that US fishermen who violate fishing restrictions fall into three general categories: chronic or frequent violators of fishing restrictions; those who usually comply but will violate fishing regulations occasionally when the economic incentive is high or the likelihood of detection is low; and those who fail to comply by accident because they misunderstand fishing restrictions, or have faulty electronics, etc. In a study of compliance and enforcement in the NEGF fishery during the 1980s, Sutinen et al. [5] determined that “passion, inadvertence,

<sup>15</sup> NOAA also maintains two enforcement databases, Enforcement Management Information System (EMIS) and Law Enforcement Accessible Database System (LEADS), which include records of reported violations. These databases are explained in the report cited in footnote 1. Summaries of EMIS data for years 2001 through 2006 are used in subsequent sections of this paper.

<sup>16</sup> A 2008 NOAA, Office of Inspector General, review of NMFS management of JEAs is available at [www.oig.doc.gov/oig/reports/2008/IPE-19050.pdf](http://www.oig.doc.gov/oig/reports/2008/IPE-19050.pdf). The study report cited in footnote 1 contains a summary of that report. A review of JEA data available for the Northeast region conducted as part of the study referenced in footnote 1 concluded that JEA data are not suitable for assessing or managing the performance of the JEAs in that region.

<sup>17</sup> The results of a 2006 review of USCG fishery enforcement by the Office of Management and Budget (OMB) are available at <http://georgewbush-whitehouse.archives.gov/omb/expectmore/detail/10001072.2003.html>. The USCG regularly reports compliance rates in US fisheries of 96–97% based on the percent of at-sea boardings where violations are detected. USCG notes in their reports, however, that since USCG targets likely violators, USCG observed and reported compliance rates probably overstate compliance rates that would be observed if the USCG were sampling randomly. The USCG uses these results to show that the USCG domestic fishery enforcement is highly successful at achieving the established USCG compliance goal of 97%. However, all other available evidence, including research results presented in this paper, indicates that the high compliance rates reported by USCG: (a) reflect the fact that USCG at-sea inspections fail to detect many actual fishing violations; (b) may actually reflect shortcomings of the USCG's \$500 million per year fishery enforcement program rather than its success; and (c) may be preventing these shortcomings from being addressed and preventing the effective reallocation of fishery enforcement spending and effort [13].



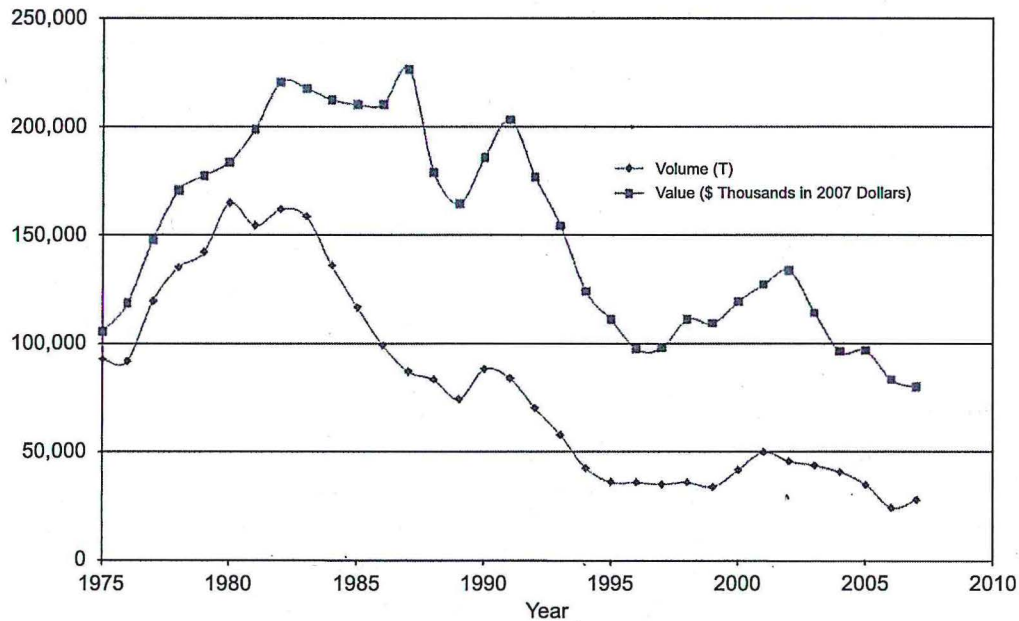


Fig. 2. Volume and value of annual harvest from the NEGF Fishery (1975–2007). Source: NOAA, office of Science & Technology, Fisheries Statistics Division—Annual Commercial Landings Statistics. [http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual\\_landings.html](http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html).

and accident rarely cause a fishery violation.” The conclusion of that study, in other words, was that most violations of fishing regulations in the NEGF fishery fall in the first two categories and are intentional.

However, in the 2007 survey conducted for this study, the portion of intentional violations in the NEGF fishery was estimated by fishermen to be 38%, by fishery regulators to be 44%, and by fishery enforcement staff to be 53%. These results indicate that as many as half of the violations in the NEGF fishery may be accidental. This relatively high portion of accidental violations recently reported is probably a result of more complex regulations and the decline in economic returns that has resulted in more part-time fishers and a high turnover rate.

However, earlier studies also determined that fishers who are chronic intentional violators contribute most significantly to the illegal harvest, so as that category grows there is a disproportionately higher increase in the illegal harvest. In the current survey, the percent of fishermen in this category is estimated by fishermen and regulators to be around 16% and by enforcement staff to be 35%. This is significantly higher than the roughly 12% of fishers estimated to be chronic violators in previous studies of this fishery [4].

Survey statistics presented in Section 3 show that the percent of the total harvest taken illegally in the NEGF fishery is estimated by fishermen to be about 12%, and by enforcement agents to be about 24%. If the actual percentage is somewhere between these two estimates, these results also indicate a significant increase in the illegal harvest compared with earlier surveys, which estimated the illegal harvest at 6–14% [4]. Because the size of the overall harvest has gone down, the size of the illegal harvest may have declined despite this percent increase. However, fish stocks are more depleted now which means the illegal harvest, although perhaps lower in terms of volume, can be expected to have more significant adverse effect on fish stocks than in previous years.

### 2.3.1. NOAA enforcement data

Table 2 lists the 1,689 violations of fishing regulations reported to NOAA in the NE region during the period of January 1, 2001

through May, 31, 2006.<sup>18</sup> Because the sources of some of these reports may not be reliable and some were never fully investigated and “proven,” these reported violations are generally referred to as “incidents.” Interviews with NOAA enforcement staff and others familiar with fishery enforcement indicate that government fishery enforcement agents often have “probable cause” to inspect for a violation, and if an inspection results in the decision to report a violation, give it a tracking number and enter it into the official NOAA enforcement database. That reported violation then probably reflects an actual violation.<sup>19</sup> Therefore, for the purpose of this analysis, only “incidents” where the reported violation source was NMFS, USCG, or state fishery enforcement staff were examined and were considered “probable violations.”<sup>20</sup> Based on this criterion, 1,614 of the 1,689 incidents (95.6%) reported during this period probably are actual violations and, for purposes of this analysis, will be treated as actual violations.

Table 2 lists violations in the Northeast region contained in the NOAA enforcement database and the percentage of them that resulted in a financial penalty, forfeited catch or property, permit sanction, or any type of penalty at all.<sup>21</sup> Overall, 33% of violations reported by law enforcement resulted in one or more types of penalties. The remaining 67% of these cases were dropped or for various other reasons resulted in the violator facing no penalty or sanction. A breakdown of the resolutions of violations in the

<sup>18</sup> Enforcement data from NOAA’s EMIS database were available to researchers only for violations reported from January 1, 2001 through May 31, 2006.

<sup>19</sup> For a variety of reasons, reported violations, whether they involve actual violations or not, may not be pursued by prosecutors and be “proven” or may not have resolutions that indicate that they were actual violations.

<sup>20</sup> Some of these were not fully investigated and “proven” to involve actual violations. However, interviews with NOAA enforcement staff and others familiar with this database indicate that in many cases enforcement officers have probable cause to inspect for a violation and, if after inspecting they decide to report a violation, it probably is a violation even though it may not be prosecuted or have a resolution that results in a penalty.

<sup>21</sup> These include only violations of commercial fishing restrictions, not safety or marine mammal violations or violations by recreational vessels. These commercial fishing violations in the NE region are not strictly limited to violations in the NEGF fishery.

**Table 2**  
Reported incidents and probable violations<sup>a</sup> in NOAA's EMIS database.

Source	Incident		Probable violations		Violations resulting in one or more type of penalty		
	#	%	#	%	#	% of all violations that resulted in one or more type of penalty	% of violations by source that resulted in one or more type of penalty
<i>Northeast region only (Jan 1, 2001 through May 31, 2006)</i>							
US coast guard <sup>b</sup>	291	17.2	291	18.0	167	31.2	57.4
NMFS <sup>c</sup>	979	58.0	979	60.7	203	37.9	20.7
State <sup>d</sup>	47	2.8	47	2.9	24	4.5	51.1
NMFS/State	297	17.6	297	18.4	141	26.4	47.5
F/EN IFQ clerk <sup>e</sup>	0	0.0	0	0.0	0	0.0	0.0
Canadian referral	0	0.0	0		0		
Complaint directly through region or agent	10	0.6	0		0		
Conservationist organization	1	0.0	0		0		
Hotline complaint	7	0.4	0		0		
Marine sanctuary contractor	0	0.0	0		0		
Member of the general public	26	1.5	0		0		
NOAA general counsel	0	0.0	0		0		
Other	5	0.3	0		0		
Other federal agency initiated report	1	0.1	0		0		
U.S. customs	0	0.0	0		0		
U.S. fish and wildlife service	4	0.2	0		0		
U.S. fishing vessel	21	1.2	0		0		
<b>Total</b>	<b>1689</b>	<b>99.9</b>	<b>1614</b>	<b>100.0</b>	<b>535</b>	<b>100.0</b>	<b>33.1</b>

Source: NOAA Enforcement Management Information System (EMIS) Database (closed cases reported during January 1, 2001 through May 31, 2006).

<sup>a</sup> Violations are reported violations where the source of the report was coast guard, NMFS or State enforcement staff. Since not all of these reported violations were pursued and/or proven, these violations are considered "probable".

<sup>b</sup> Total CG includes: coast guard surface, coast guard aerial, NMFS/coast guard surface, NMFS/coast guard aerial, and other source of coast guard initiated report.

<sup>c</sup> NMFS includes: NMFS surface, NMFS observer, NMFS initiated, and NMFS initiated VMS only.

<sup>d</sup> State includes: authorized state agency/official initiated and state or local government agency.

<sup>e</sup> F/EN IFQ clerk sources are NMFS sources, but are shown separately here for clarity.

**Table 3**  
Resolution of violations in NOAA's fishery enforcement database.

Year	Incidents	Violations	Violations resulting in payment of penalty		Violations resulting in forfeited property		Violations resulting in seized property		Violations resulting in permit sanction		Violations resulting in one or more type of penalty	
			#	%	#	%	#	%	#	%	#	%
<i>Percent of violations resulting in penalties<sup>a</sup></i>												
<i>Northeast region only</i>												
2001	295	272	50	18.38	34	12.50	7	2.57	12	4.41	84	30.88
2002	313	296	83	28.04	34	11.49	12	4.05	5	1.69	119	40.20
2003	394	382	59	15.45	36	9.42	13	3.40	6	1.57	108	28.27
2004	306	290	66	22.76	31	10.69	25	8.62	9	3.10	116	40.00
2005	313	306	54	17.65	23	7.52	26	8.50	1	0.33	88	28.76
2006 <sup>b</sup>	68	68	16	23.53	10	14.71	0	0.00	0	0.00	20	29.41
<b>Total</b>	<b>1689</b>	<b>1614</b>	<b>328</b>	<b>20.32</b>	<b>168</b>	<b>10.41</b>	<b>83</b>	<b>5.14</b>	<b>33</b>	<b>2.04</b>	<b>535</b>	<b>33.15</b>

<sup>a</sup> Penalties may include payment of fines, permit sanctions (e.g., loss of privileges) or forfeit of property (e.g., catch) or seizure of property (e.g., vessel or gear).

<sup>b</sup> Data ranges from Jan 1, 2001 through May 31, 2006.

Northeast region for each year during the study period is presented in Table 3 and shows a decline in the percentage of violations resulting in any type of penalty or sanction from 40% in 2004 to around 30% in 2005 and 2006.

Models of deterrence and compliance will be described and applied to the NEGF fishery in the following two sections. To put the above numbers in context, however, it is useful to point out here that within these models, when fishers consider violating a fishing regulation, they are assumed to consider both the probability of being detected and the probability of facing a penalty if they are detected. Survey results that will be presented later indicate that the probability of a violation being detected in the NEGF fishery is around 32%. If the likelihood that a violation of fishing regulations will be detected is 32%, and, as shown above,

the likelihood that a detected violation will result in a penalty is 33%, the likelihood of a violation resulting in a penalty is about 11% ( $0.33 \times 0.32$ ). Whether this provides adequate deterrence depends on which theories and concepts of compliance apply in this fishery and the size of the expected illegal gain compared with the size of the expected penalty. These two factors are addressed in the following two sections.

### 3. Theories and concepts of compliance in fisheries

Although the problem of enforcement and compliance in fisheries has been recognized for decades, Sutinen and Andersen [14] published the first rigorous theoretical analysis of the

problem in 1985. Sutinen and Andersen combined Becker's [1] general model of enforcement/deterrence with a bioeconomic fishery model to theoretically and empirically investigate the implications of different levels and types of fishery enforcement on the outcomes of fisheries management.<sup>22</sup>

### 3.1. Deterrence

The Becker model assumes that decision-makers, such as fishers, who are deciding to comply or not with a regulation, such as fishing restrictions, tend to make rational economic decisions. Following Smith [17,18] and Bentham [19], Becker's model focuses on criminals and assumes they behave like other individuals in their attempt to maximize their net benefits, subject to budget and other constraints.<sup>23</sup> In Becker's model, a potential criminal will commit a crime if the expected illegal gain exceeds the expected penalty of getting caught. The higher the expected penalty and the lower the illegal gain, the less illegal activity should be expected, and vice versa. Although fishers are not criminals, Becker's basic model also applies to potential violators of regulations. Several studies have empirically demonstrated the deterrent effect of enforcement in fisheries and illustrated that the basic deterrence model is correct: higher probabilities of detection and/or penalties result in fewer violations [2,22–25].

However, the basic deterrence model does not sufficiently explain the available evidence about compliance in fisheries. Evidence from several studies indicates that despite strong economic incentives to violate some fishing regulations (high potential illegal gain and low expected penalty), a high proportion of fishers (50–90%) normally comply with regulations [5,22,26]. Results from the 2007 survey of the NEGF fishery confirm the results of these earlier studies and indicate 65–84% of fishers normally comply with regulations in the NEGF fishery. This is in the typical range estimated previously in this fishery and in other regulated fisheries.

The illegal gain or benefit in a commercial fishery can be measured as the amount of additional income that can be earned from violating a regulation and can be quite large. In the NEGF fishery Sutinen et al. [5] found an unusually high percentage of fishers (25–50%) operating illegally with individuals earning about a quarter of a million dollars more per year by doing so. In some cases, illegal fishing trips earned three times the revenue of legal trips. In an earlier report, Sutinen et al. [4] estimated that in 1988 illegal landings by frequent violators in the US Atlantic scallop fishery ranged from \$75,000 to \$105,000 per year. In the Rhode Island quahog fishery, Bean [22] estimated that illegal catches by frequent violators ranged from one-third to one-half of an average fisherman's income. The economic incentive to violate, in other words can be very powerful and can be difficult for fishers to resist, especially those facing economic hardships or unable to succeed by fishing legally.

Offsetting the expected illegal gain is the potential cost if the illegal fishing is detected. This cost is measured by multiplying the dollar value of the expected financial penalty, forfeiture, or permit sanction if detected and convicted by the probability of being caught and convicted. If this expected cost is large enough and certain enough it can offset the expected illegal gain and remove the incentive to violate. However, penalties facing domestic fishers for violating fishing regulations in US waters are generally not large relative to illegal gains. In the NEGF fishery, for example,

Sutinen et al. [5] estimated flagrant violators grossed about \$15,000 *per trip* from violating closed area and mesh size regulations, resulting in illegal earnings per vessel of approximately \$225,000 during 1987.

Past studies estimated the probability of being caught violating a fishery regulation, in most fisheries, at near one percent, and often at or near zero [22,23,25,27]. Sutinen et al. [5] estimated that the typical penalty for a detected violation ranged from \$3,000 to \$15,000. With this range of potential penalty and an estimated likelihood of detection of close to 1%, these earlier studies concluded that the expected cost of violating fishing regulations during any given fishing trip is very small, perhaps in the hundreds of dollars, while illegal gains are relatively large, usually in the thousands or tens of thousands of dollars.

In the following section, the 2007 survey results and NOAA enforcement data are used to estimate that the net illegal earnings from violating fishing restrictions in the NEGF fishery are approximately \$5,500 per trip. For a variety of reasons, perhaps associated with declining fish abundance and limits on days at sea, this estimate for 2007 is about a third of the amount estimated for 1988 by Sutinen et al. [5]. However, the analysis indicates that once the low probability of being detected and penalized and the expected size of the penalty are taken into account, this level of illegal gain is still high enough to provide an economic incentive not to comply. Deterrence effects of the enforcement system in the NEGF fishery, while stronger than estimated previously, are still relatively weak.

### 3.2. An enriched model of compliance

In addition to comparing the expected illegal gain and expected penalty, most individuals also consider the moral and social consequences of their actions when deciding whether to comply with a law or regulation. When asked why they usually comply with fishing restrictions even though illegal gains are much larger than the expected penalties, many fishers refer to the need to "do the right thing" [28,29]. That is, they express an obligation to obey a set of rules (either their own or an authority's). A sense of moral obligation is as common among fishermen as other people and has been shown in many previous studies to be a significant motivation that explains a great deal of compliance behavior among fishers.<sup>24</sup>

However, an individual's moral obligation to comply is the result of two forces: the individual's standard of personal morality and the individual's perceptions about whether rules and regulations are just and moral and are being applied fairly and equitably [30]. Where possible, these factors are built into policy formulation and implementation to build compliance. In general, individuals who believe complying with the regulation is the "right thing to do" will feel a moral obligation to comply regardless of the potential illegal gain. Individuals who disagree with the basis of a regulation, the way it is being imposed, or question the credibility or legitimacy of management institutions and procedures may be inclined to violate the regulation regardless of the size of the expected illegal gain.

Peer pressure, or the sentiments of people who matter to an individual, also influence most individual decisions regarding whether to comply. These social influences are known to play a significant role in fisheries, often taking subtle forms of ostracism or withholding of fishing information or other favors [3]. A group of fishers can reward and punish those who violate group norms

<sup>22</sup> Also see Anderson and Lee [15] and Milliman [16].

<sup>23</sup> Becker's framework became the basis for a series of subsequent studies on the economics of crime. See Heineke [20] and Pyle [21] for an overview of the theoretical models used in the economic literature of criminal behavior.

<sup>24</sup> See Kuperan and Sutinen [2] and Sutinen and Kuperan [3] for a detailed derivation of these factors; also see Hatcher and Gordon [24] and Gezelius [27] for reviews of the fisheries compliance research literature.

(i.e., a tacit agreement not to violate a particular fishing restriction) by withholding signs of group status and respect or even by direct threats. Social influence in fisheries is often manifested in forms of verbal and physical abuse (e.g., fist fights, destruction of gear and vessels). In the Massachusetts lobster fishery, for example, a strong form of social influence, commonly called “self-enforcement,” is estimated to account for relatively high compliance in the fishery [26]. Other fisheries where social influence appears to be strong include the American lobster (Massachusetts and Maine), clam (Rhode Island), herring roe (Alaska, British Columbia, Oregon, and San Francisco Bay), saithe (Norway), and sakuri ebi (Japan). It is likely that there are several other fisheries where this phenomenon is operative [3].

Individuals tend to use the same standards to judge their own behavior and the behavior of others, so social influence and personal moral obligations are closely linked. The more widespread an individual sense of moral obligation is in the fishing population, the stronger the social influence to support that conviction. An important implication of this is that policies that strengthen the moral obligation to comply also strengthen social influence. Unfortunately, this works both ways; when normative factors begin to have an adverse effect on the moral commitments to comply among individuals it is often reflected in a corresponding decline in social obligations to comply.

This is important because individual moral influences and social influences can combine to create a situation where noncompliance is an accepted norm in a fishery. This was the case in the NEGF fishery during the late 1980s when pressure from crews and competition on the fishing grounds drove fishing captains to fish in closed areas and use illegal nets on most trips [5]. In such cases, compliance programs must not only strive to increase deterrence (i.e. the expected penalty), they must also attempt to build a stronger moral obligation to comply among fishers and to shift social influence to the side of supporting compliance.

### 3.3. Aggregate compliance behavior

Fishers are not all alike in their compliance behavior. For example, some fishers invest in methods to avoid detection and therefore face lower probabilities of detection than other fishers [15,22]. Others have a stronger moral obligation and face more social pressure to comply [28] but will violate when the expected gains are high or the probability of detection is low.

The available evidence suggests that within the typical population of fishers there is a small core subgroup of about 5–15% who tend to violate routinely, motivated primarily by the tangible financial gains from illegal fishing, and very little by moral obligation or social influence [4]. The only control mechanism that will influence the behavior of these fishers is changing the economic incentives. Aside from some kind of incentive program that involves paying them to comply (in which case they may take the money and still not comply), the only real option is increasing enforcement and the size and certainty of penalties.

At the other extreme is a small percentage of fishers, 5–15%, that is strongly influenced by moral obligation and comply most, if not all, of the time. In the middle is the large portion of fishers that normally comply and only occasionally violate. Their decision to comply or not depends largely on economic conditions and the degree of social influence they face. This group typically consists of about 70–90% of the fishing population.

The result is that a small number of fishers tend to account—directly and indirectly—for most of the noncompliance in a fishery and most of the risks that illegal fishing imposes on

fish stock protection and recovery programs. Routine violators can only be controlled by strict enforcement and other tangible incentives. Smart compliance policy recognizes and exploits this critical feature of compliance behavior, while employing other methods to promote voluntary compliance among occasional violators [5,7].

## 4. Enforcement and compliance in the NEGF fishery

This section applies the concepts described in the previous section using the results of the research in the NEGF fishery to address the following three questions:

1. Is noncompliance a significant problem in the NEGF fishery?
2. Are enforcement factors associated with the probability of detection and size of penalties adequate to deter noncompliance in the NEGF fishery?
3. Are the effects of normative factors associated with fishers' perceptions about their moral obligations and the legitimacy, fairness, and competency of fishery managers increasing or decreasing the need to use deterrence to reduce noncompliance?

Because most illegal fishing is not observed, it is reasonable to assume that much illegal fishing is not detected or reported. As a result, conclusions about noncompliance in most fisheries must be based on surveys and interviews.<sup>25</sup> The 2007 survey of fishermen, enforcement officers and others involved in the NEGF fishery addressed many issues related to the frequency and significance of various types of fishing violations, the effectiveness of dockside and at-sea inspections, most and least important types of violations, the size of penalties, and so on. The following sections summarize survey results that address the three questions listed above.

### 4.1. Noncompliance in the NEGF fishery

#### 4.1.1. What is the extent and nature of noncompliance in the NEGF fishery?

The survey results show that fishers and enforcement personnel had different views on the extent of noncompliance in the fishery, with fishermen estimating that about 12.5% of the commercial harvest is taken illegally and enforcement agents estimating that about 24.4% is taken illegally. For purposes of this analysis it is assumed that the actual level of noncompliance is reflected by the midpoint of these two estimates which means that 18.5% of total catch is due to fishing illegally. The estimate of illegal harvest provided by fishers in the survey is in the same range found in a survey of fishers by Sutinen et al. [4], suggesting that fishers believe the level of compliance today is similar to what it was in the fishery 20 years ago.

#### 4.1.2. How significant is the level of noncompliance in the NEGF fishery?

Actual landings from the NEGF fishery in 2006 were 28,110 mt with a dockside value of \$70.275 million. So at 18.5%, the illegal catch in that year amounted to about 5,202 mt, worth about \$13 million. As a first approximation of the

<sup>25</sup> In general, statistics based on observations are preferable to those based on survey results. However, the available evidence in the NEGF fishery indicates that fishing violations at sea are not observable, even by USCG surveillance aircraft and vessels. So in this case estimates of compliance and noncompliance rates based on surveys are more reliable than those based on at-sea observations. (See footnote 18).

potential impact of this illegal harvest, consider how those 5,202 mt of fish would contribute to the health and economic value of the NEGF fishery over time if left in the sea to spawn and grow, instead of being harvested illegally. At an annual net biomass growth rate of 2–5%, for example, eliminating an annual illegal groundfish harvest of 5,202 mt per year would result, over 5 years, in an increase in groundfish stock biomass of about 28,000–30,000 mt, or an increase of around 60,000–70,000 mt over ten years.

Respondents estimated that 18% of commercial fishers routinely violate fishery laws, and 24% occasionally violate such laws. This is similar to the results of Sutinen et al. [5] who estimated that approximately 14–38% of commercial fishers frequently violate conservation regulations.

A strong majority (69%) of survey respondents in the NEGF fishery believe that compliance with fishery regulations is better than it was 5 years ago. This finding, together with the estimates of illegal catch rates and percent of routine violators in our 2007 survey, suggests that compliance has been worse at times during the past 20 years. As mentioned in Section 2.1, however, the health of fish stocks has deteriorated over the past 20 years so the problems associated with noncompliance may be worse now than in previous years.

#### 4.1.3. What are the most common violations?

The survey asked respondents to estimate the percent of days at sea where particular types of violations took place. Overall (fishermen, enforcement, fishery managers, and others) estimated that the most common violations involve by-catch, possession limit, and catch reporting regulations (20–21% of days fished), followed by haddock separator trawl, mesh size and fish size violations (14–17%), and area closures, days at sea, and permit violations (10–11%). Sutinen et al. [5] reported much higher rates of noncompliance for area closures and mesh size regulations—the principal conservation regulations at the time. Respondents to the survey by Shaw [6] reported that violations of possession limits were the most common (72% of days at sea) during the fishing year of 2003, followed by violations of mesh size limits (45% of days at sea), area closures (38% of days at sea), and days at sea regulations (36% of vessels).<sup>26</sup> The rankings of most common violations in the 2007 survey were very similar to those in the Shaw survey; but the frequency of violations perceived by 2007 respondents is considerably lower than reported by Shaw's respondents in 2003. These findings support the claim by a strong majority of 2007 respondents that compliance has improved during the past 5 years.

Respondents who identified themselves as enforcement personnel reported very different perceptions about rates of compliance than fishers and others. For example, enforcement personnel, on average, estimated that 35% of commercial fishers routinely violate fishery laws, and that 38% occasionally violate the laws—higher rates than all respondents combined. Only 38% of enforcement personnel agree or strongly agree that compliance is better than 5 years ago—compared to 69% of all respondents and 73% of commercial fishers. Only 29% of fishery enforcement staff disagree or strongly disagree that compliance has improved. Enforcement personnel tended to rank the most common and most important violations similar to other respondents combined, but generally gave higher estimates of violation rates.

<sup>26</sup> The Shaw survey focused only on commercial fishers. Commercial fishers comprised approximately two-thirds of the respondents to our survey and their responses closely mirror the average rates reported by Shaw.

#### 4.2. Impacts of noncompliance on the NEGF fishery

Majorities of most types of respondents believe that one or more types of violations are having either a moderate, significant, or major adverse impacts on the fishery<sup>27</sup> (Table 4 and Fig. 3). Thirty-seven percent of fishers, 61% of fishery managers, and 80% of fishery enforcement staff believe that “the combined adverse impact of all violations on the health and manageability of fish resources” is significant, highly significant, or extremely significant.<sup>28</sup> And only 27% of fishers, 12% of fishery managers, and 2% of fishery enforcement staff believe that the combined impact of all violations is having no significant impact on the health and manageability of fish resources. Although groups provided different responses in terms of the significance of impacts, a strong majority of all groups believe that violations are having at least some adverse impact on the fishery which seems to reflect a consensus on this critical matter. In addition, strong majorities of all respondents agree about the ranking of specific types of violations in terms of the significance of their impacts (Tables 4a–c and Fig. 3).

While there is general agreement about the ranking of specific violations in terms of impact, there is some diversity of opinion among groups of respondents about the degree of the impacts of specific violations. For example, enforcement personnel tend to think adverse impacts of specific violations are more significant (i.e., highly and extremely significant) than other groups of respondents. Larger proportions (*not* numbers) of researchers think some specific violations are not significant compared to other groups of respondents. For example, 40% of researchers responding to the survey think that violations of closed areas are not having an adverse impact on the health and manageability of the resource; only 22% of fishers and 20% of regulators believe this is the case. Interestingly, fishers and regulators tend to agree on the significance of various impacts, in terms of the proportions of each group. If respondents think that violations are having a significant impact on the health and manageability of the resources, do respondents also think that the nature and extent of violations are jeopardizing the sustainability of stocks in the NEGF fishery? Although a majority (55%) of all respondents think that violations are not threatening sustainability, it is relevant that many respondents do. For example, 67% of enforcement personnel, 31% of regulators, 25% of researchers, and 20% of fishers agree or strongly agree that “violations of fishing regulations are jeopardizing the sustainability of fish stocks in the NE groundfish fishery.” Opinions are mixed about whether fishing violations are significant enough to “reduce long-term economic returns from fishing” and reduce fishers' expectations that they will gain in the future from stock rebuilding programs. A weak majority of fishers (51%) and of researchers (55%) disagree with these statements. However, it is significant that a strong majority of enforcement personnel (68%) agree, and many regulators (31%), researchers (30%), and even fishers (26%) agree or strongly agree that illegal fishing is reducing long-term economic returns and lowering fishers' expectations that they will benefit from rebuilding fish stocks.

<sup>27</sup> The types of violations include those related to mesh size, vessel upgrades, landing limits, fish size, closed areas, days at sea limits, reporting requirements, and fishing permits.

<sup>28</sup> Respondents could choose *not significant*, *barely significant*, *significant*, *highly significant*, or *extremely significant* in response to our questions about impacts of fishing violations.

**Table 4**  
Responses to selected survey questions by type of respondent.

	29. What percent of fishing violations in the NE groundfish fishery are intentional as opposed to accidental?		33. What percent of commercial fishermen do you think routinely violate fishery laws?		35. What percent of violations of US fishery laws do you think are detected?		36. What percent of total catch is due to fishing in violation of fishery regulations?	
	Mean (%)	Median (%)	Mean (%)	Median (%)	Mean (%)	Median (%)	Mean (%)	Median (%)
Fishermen	37.7	30.0	16.4	10.0	41.7	40.0	12.5	10.0
Regulators	44.4	50.0	16.4	10.0	36.0	25.0	10.9	10.0
Enforcement	52.5	51.0	34.9	35.0	23.4	15.0	24.4	20.0
Researchers	46.1	50.0	12.2	10.0	41.1	50.0	9.3	10.0

	16. It is easy for those violating fishing laws and regulations to evade dockside detection by the NMFS and state agents		17. It is easy for those violating fishing laws and regulations to evade detection at sea by the coast guard		22. Too many detected violations that should have resulted in official notices of violation and assessment (NOVAs) and penalties result in warnings or other lesser sanctions		24. Penalties that are actually imposed for violating fishing restrictions in the NE groundfish fishery are sufficient to deter potential violators		41. Violations of fishery regulations are jeopardizing the sustainability of fish stocks in the NE groundfish fishery		47. The adverse effects of fishing violations on fish stocks are significant enough to reduce long-term economic returns from fishing		48. Violations of fishing regulations are significant enough to reduce fishermen's expectations that they will gain in the future from stock rebuilding programs		31. What impact do you think the frequency of all fishing violations combined has on the health and manageability of NE groundfish resources?	
	Agree or strongly agree (%)	Agree or strongly agree (%)	Agree or strongly agree (%)	Agree or strongly agree (%)	Agree or strongly agree (%)	Agree or strongly agree (%)	Agree or strongly agree (%)	Agree or strongly agree (%)	Agree or strongly agree (%)	Agree or strongly agree (%)	Agree or strongly agree (%)	Agree or strongly agree (%)	Agree or strongly agree (%)	Agree or strongly agree (%)	Significant, highly significant or extremely significant (%)	
Fishermen	28.5	16.0	27.8	88.0	25.2	34.0	32.9	36.7								
Regulators	56.7	30.5	45.2	63.6	38.3	40.6	44.5	61.0								
Enforcement	81.8	72.7	32.3	51.5	78.3	82.8	67.7	80.5								
Researchers	31.6	12.5	30.0	75.0	29.4	35.3	20.0	45.0								

Question 49: Percent of group responding that specific types of violations have a moderate, significant or major adverse impact on the NEGF fishery									
	49a. Mesh size (%)	49b. Illegal vessel upgrades (%)	49c. Exceeding landing limits (%)	49d. Undersize fish in landings (%)	49e. Closed area (%)	49f. Days at sea (%)	49g. Misreporting in logbooks (%)	49h. Misreporting in dealer reports (%)	49i. Permit violations (%)
Fishermen	65.0	40.9	58.1	49.8	54.7	48.0	46.5	49.3	41.7
Regulators	59.5	42.5	61.0	42.9	54.8	45.3	64.2	64.6	26.8
Enforcement	82.5	55.2	87.5	82.5	85.0	87.5	71.8	76.4	61.5
Researchers	47.4	44.5	47.4	31.5	31.6	27.8	52.7	36.4	22.3

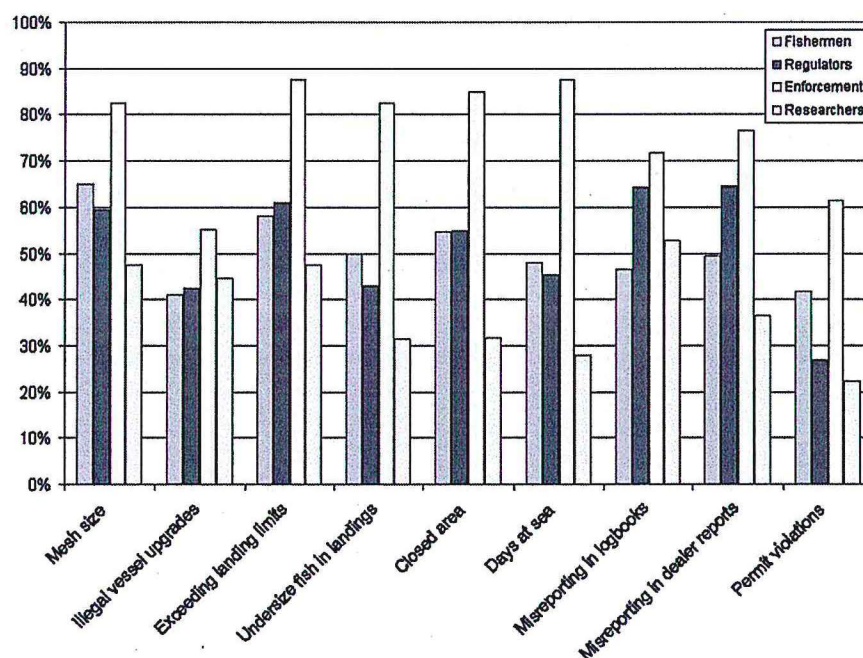


Fig. 3. Responses to survey question #49 by type of respondent: Percent of respondents in each group answering that the adverse impacts of specific types of violations on the NEGF Fishery are: major, significant or moderate. Respondents were given option to answer: no impact, small impact, moderate impact, significant impact or major impact.

#### 4.3. Enforcement and deterrence

As with compliance, a strong majority of all respondents (62%) believe that the overall enforcement program in the NEGF fishery is better now than 5 years earlier. Although this is encouraging, it does not imply that the adverse effects of noncompliance on fish stocks and economic conditions is better now than 5 years earlier, or that the enforcement program is adequate to achieve the rate of compliance that will be necessary to prevent overfishing and allow stock rebuilding programs to succeed.

##### 4.3.1. Do the respondents see weaknesses in dockside and at-sea enforcement and prosecution?

4.3.1.1. *Detection and prosecution—resources and effectiveness.* There is considerable divergence of opinion on some aspects of the dockside enforcement program. For example, 75.1% of fishers, but only 46.3% of regulators and 26.9% of enforcement officers believe that there are an adequate number of NMFS and state enforcement agents for detecting landings violations.

Fishers and enforcement personnel also have different opinions about whether it is easy for violators to evade dockside detection by enforcement agents. A majority of fishers (59%) think it is not easy to evade detection and a strong majority of enforcement personnel (64%) think it is.

Similar patterns of agreement and disagreement appear with respect to the number of dockside inspections and the presence and coverage of dockside enforcement. Majorities of all respondent groups and strong majorities of fishers view as adequate or more than adequate the number of dockside inspections and the presence and coverage of the dockside enforcement program. Regulators and enforcement personnel disagree or strongly disagree that these are adequate.

On other aspects of the dockside enforcement program, however, views are similar among groups of respondents. Strong majorities of each group view as adequate or more than adequate: the effectiveness of dockside inspections, methods and use of

equipment, response time to tips from fishers, follow through on investigations and dedication to effective enforcement.

With respect to *at-sea enforcement* by the USCG, strong majorities of all groups of respondents view as adequate or more than adequate the numbers of USCG equipment, personnel, at-sea boardings and inspections, presence and coverage, effective methods and use of equipment, response time to tips from fishers, and dedication to effective enforcement. Significant minorities of enforcement personnel and researchers (47% and 46%, respectively) believe that the USCG's follow through on investigations has been poor or less than adequate, a result also found by Shaw [6].

As with evasion of dockside detection, there are differences of opinion about how easy it is for fishers to avoid detection of violations at-sea. A strong majority of fishers (84%) do not believe that "it is easy for those violating fishing regulations to evade being detected by the USCG at-sea," while a strong majority of enforcement personnel (73%) believe that evasion is easy.

There is strong agreement among all groups of respondents that the use of *vessel monitoring systems* (VMS) is an effective means of enforcing area closures and effectively deters violations of area closures. Strong majorities of all groups agree or strongly agree with the effectiveness of VMS. However, a strong majority of enforcement personnel (67%) believe that fishers "tamper with or turn off their VMS to avoid detection of violations." Strong majorities of fishers and other groups believe this to be rare. Majorities of all groups except enforcement personnel agree, or strongly agree, that the presence of *observers* on fishing vessels, though not playing an enforcement role, reduces violations. A majority of enforcement personnel disagrees or strongly disagrees with this view.

Questions regarding the *prosecution* branch of the enforcement program elicited differences of opinion, especially between fishers and enforcement personnel. Majorities of fishers think that the number of attorneys prosecuting fishing violations is sufficient, that enforcement officials focus more on minor rather than major

violations, and that more violations should have resulted in warnings instead of penalties. Majorities of enforcement personnel are of the opposite opinion on those three issues.

Many fishers (42%) and majorities of the other groups (from 51% to 69%) believe that attorneys effectively prosecute fishery violations. Generally, there is strong agreement among groups of respondents that the General Counsel's performance is adequate or more than adequate in terms of case processing effectiveness, timely processing of violations, settlement policy and practice, administrative court trials, and dedication to effective deterrence. An important exception is that a strong majority of enforcement personnel (66%) and many fishers (47%) and regulators (44%) view the timely processing of violations as poor or less than adequate. Respondents to Shaw's [6] survey also reported long delays in processing cases where fishers were charged with violations. This result is important because delays in prosecution, especially when combined with relatively small penalties, can weaken incentives to comply and lead to more violations.

**4.3.1.2. Penalties and deterrence.** Strong majorities of all groups of respondents think that financial penalties, permit sanctions and confiscation of catch are effective (somewhat or very) deterrents against violating NE groundfish regulations. All groups also believe that lost fishing privileges (permit sanctions) are a more significant deterrent than financial penalties. Majorities of all groups—except enforcement personnel—agree or strongly agree that the penalties actually imposed are sufficient to deter potential violators. Enforcement personnel are about evenly split on this issue.

#### 4.4. Combined analysis of survey results and NOAA enforcement data

As an exercise to assess the effectiveness of deterrence in the fishery the 2007 survey results summarized above were combined with NOAA enforcement statistics for 2001 through 2006 in a "deterrence model" that compares the expected benefits of not complying with fishing restrictions on a typical trip with the expected costs.

##### 4.4.1. Expected benefits

Using the midpoint between the numerical estimates provided by fishermen and enforcement staff, as discussed in Section 4.1.1, the percent of the total harvest that is taken illegally in the fishery is 18.5%. A large trawler operating in this fishery during 2006 landed about \$30,000 per trip. If the added revenue from fishing illegally during this trip is estimated to be 18.5%, a first approximation of the expected benefits from noncompliance would be about \$5,500 ( $0.185 \times \$30,000$ ).<sup>29</sup>

This is approximately 1/3 of the \$15,000 in expected earnings per trip from illegal fishing estimated by Sutinen [31]. The difference is probably explained by declines in stock abundance and limits on days at sea that have significantly reduced actual and expected revenues per trip from illegal as well as legal fishing. Sutinen [31] may also have focused primarily on the large Georges bank trawlers, which tend to make longer trips and harvest more fish per trip than average vessels operating in NEGF fleet.

Expected benefits from noncompliance=\$5,500.

<sup>29</sup> Fishing illegally, in some instances, may reduce trip costs rather than, or in addition to, increasing trip revenues. It is assumed here that fishing illegally results in 18.5% in trip revenues that would not be earned otherwise, but does not affect fishing costs.

##### 4.4.2. Expected costs

A first approximation of expected costs of noncompliance can be estimated by using survey results and NOAA enforcement data to estimate the following equation:

Expected cost of noncompliance= $A \times B \times C \times D$  where:

A=Probability of being detected.

B=Probability of being prosecuted and having to face a penalty, if detected.

C=Average "assessed penalty" for this violation (e.g., Notice of Violation (NOVA), penalty assessment).

D=Average "final settlement" amount; the % of the average "assessed penalty" paid.

Based on survey results summarized above, the midpoint between the estimates provided by fishermen and enforcement staff of the likelihood of a violation being detected was 32.5%.

So,  $A=0.325$ .

Based on the summary statistics from the NOAA's EMIS database (Table 2), 33.1% of detected violations resulted in any type of penalty (e.g., NOVA, summary judgment, permit sanction).

So,  $B=0.331$ .

Data are not available to determine the nature of permit sanctions imposed on violators or their economic cost to them. However, NOAA enforcement data show that the average NOVA penalty assessment was \$20,455, and the average percent of NOVA penalty that was actually paid (settlement amount) was 53%.

For purposes of this exercise it is assumed that the average NOVA amount, adjusted by the average percent of the NOVA amount paid, reflects the dollar value of expected penalties and other sanctions for all violations,

So  $C=\$20,455$  and,  $D=0.53$ .

For purposes of estimating expected noncompliance costs, therefore, the following values are used:

$A = 0.325$ ,  $B = 0.331$ ,  $C = \$20,455$ , and  $D = 0.53$

This means the expected cost of noncompliance:

$$\begin{aligned} &= A \times B \times C \times D \\ &= 0.325 \times 0.331 \times \$20,455 \times 0.53 \\ &= \$1,166 \end{aligned}$$

Expected net payoff for noncompliance=expected benefits less expected costs

$$\begin{aligned} &= \$5,500 \text{ less } \$1,166 \text{ per fishing trip} \\ &= \$4,334 \text{ per fishing trip} \end{aligned}$$

Based on the above analysis, a typical fishing skipper in this fishery can expect to increase net earnings per trip by approximately \$4,300 by not complying with fishing restrictions.

##### 4.4.3. An illegal fishing deterrence index

This exercise can be carried one step further by using the ratio of the expected cost of noncompliance to the expected benefits as a metric of the cumulative deterrence effects in the NEGF fishery, called here the Illegal Fishing Deterrence (IFD) Index for the fishery.

- IFD Index > 1: *Strong deterrence*—conditions where the expected costs of noncompliance exceed the expected benefits.
- IFD Index=to 1: *Moderate deterrence*—conditions where the expected costs and benefits of noncompliance are more or less identical.
- IFD < 1: *Weak deterrence*—conditions where the expected cost of noncompliance is below expected benefits.



In the NEGF fishery the IFD is 0.21 (\$1,166/\$5,500) which is low and reflects benefits from noncompliance that are about 5 times higher than expected costs.

*4.4.3.1. Extraordinary deterrence challenges in the NEGF fishery.* In the modern NEGF fishery low catch rates and very restrictive fishing regulations mean that some fishers are facing significant economic hardships and may not be able to generate sufficient earnings to remain in business by fishing legally. For such fishermen the potential cost of compliance can be higher, more certain, and more permanent than the expected cost of non-compliance. Sutinen [31] reports, for example, that some crewmen, concerned about their ability to earn a decent livelihood, have refused to work on fishing vessels with skippers who are not willing to ignore fishing regulations. In such a situation, even otherwise law abiding skippers have powerful incentives to violate fishing regulations or, alternatively, to leave the fishery and sell their vessels to others who are willing to violate fishing regulations in order to remain solvent.

This conventional economic model of deterrence and the IFD index ignore the need for extraordinary enforcement to provide adequate deterrence in circumstances where the cost of complying is unusually high and, for some fishers, may include bankruptcy. The long-term costs of not being able to cover trip expenses and vessel payments by fishing legally may provide far more incentive to not comply than illegal gains themselves. If this condition exists or is expected in the NEGF fishery the above analysis may vastly understate the incentives that exist for fishers to not comply and understate the level of enforcement required to deter prospective violators.

#### 4.5. Social influence and moral obligation

As Section 3 described, fishers also consider the moral and social consequences when deciding whether or not to comply with fishery laws. Shaw [6] performed a survey of NEGF fishers that was designed to assess their attitudes towards NEGF fishery management and enforcement, and the extent to which moral and social considerations shape their compliance behavior. Her survey and analysis examined the theory [30] that, enforcement effects aside, people tend to comply with regulations when the regulatory authority is perceived to be legitimate.

Shaw organized the results of her survey around the four factors that determine perceptions of legitimacy: procedural fairness, procedural efficiency, outcome fairness, and outcome effectiveness. Her survey results showed that fishers in the NEGF fishery gave fishery management institutions low ratings on all of these factors. Fishers view management procedures in the NEGF fishery as both unfair and inefficient, and management outcomes to be both unfair and ineffective.

Possession limits are perceived to be both unfair and ineffective because fishers are required to discard fish that exceed the limit. In their view the discarded fish are dead and cannot contribute to rebuilding the stocks. Shaw quotes one fisher who wrote that “throwing dead fish overboard doesn’t do anyone any good—not the fish stock and not the fishermen.” Answers to open ended questions in the 2007 survey support Shaw’s results. A significant number of fishers, for example, reported that they viewed regulations that force them to throw back fish that will die anyway and could be used to feed people as “immoral.”

Shaw found that fishers feel managers victimize them with complex regulations that do not work and impose unnecessary hardships on them. The rule-making processes are also unfair in the views of fishers. As an example, fishers claim that regulations tend to favor larger vessels and impose disproportionate hard-

ships on smaller fishing operations. The 2007 survey confirms these perspectives—a number of fishers reported that regulations are designed to drive small boats out of the fishery because fewer larger vessels would be easier for fishery institutions to manage.

Fishers’ views about the enforcement program in the NEGF fishery are somewhat better, but are not positive overall. The processing and prosecution of violations is inefficient in the opinion of fishers. Shaw reports fishers believe that, when they are charged with a violation, the case is not processed in a timely fashion. She quotes one respondent who claimed it took up to a year for the charges against him to be processed. In addition, many of her respondents felt that enforcement agents are not always fair and neutral, treating some fishers differently for similar violations. The analysis of NOAA enforcement data for years 2001 through 2006 confirm Shaw’s findings. The average length of time between the date of a reported violation and a resolution that resulted in the payment of a penalty was 320 days.

Shaw concludes that NEGF fishers find the legitimacy of the management and enforcement programs weak. While this implies that more enforcement may be needed to achieve a given level of compliance, Shaw indicates that voluntary compliance also could be significantly strengthened by improving how fishery regulations are developed, implemented and enforced. Efforts to make such improvements to promote more compliance may be more cost-effective than investing in more surveillance and inspection resources to detect violations. For example, adding more attorneys to expedite enforcement case processing is expected to greatly improve the efficiency and effectiveness of the entire enforcement program.

## 5. Conclusions and recommendations

The survey results indicate that a significant number of fishers, managers, enforcement personnel and researchers believe that that the extent and nature of noncompliance in the NEGF fishery is comparable now to 20 years ago. However, they also believe that illegal fishing is currently a serious problem because it: reduces the ability of the fish stocks to rebuild; jeopardizes sustainability; reduces long-term economic returns from legal fishing; and lowers fishers’ expectations that they will benefit in the future by supporting and cooperating in fish stock rebuilding programs.

The results show that: (1) many fishers operating in the NEGF fishery cannot take a long-term economic perspective and are focused primarily on near-term economic returns from fishing; (2) fishers, on average, can earn higher economic returns by violating rather than complying with fishing regulations because the illegal gain exceeds the expected penalty for violating; and (3) the forces of moral obligation and social pressure that normally cause fishermen to comply, despite the economic incentives, are weak because fishers (and other survey respondents) view the fishery management process at work in the NEGF fishery to be unfair and ineffective.

Because stock rebuilding targets and schedules associated with new congressional mandates are viewed by some fishers as not being justified on scientific, economic, biological, or moral grounds; implementing them will further weaken normative factors that favor compliance. At the same time, expected changes in fishing restrictions aimed at achieving these new targets and mandates will increase fishers’ economic hardships and generate more incentives for them to fish illegally. The enforcement program in the fishery needs to prepare to react to these challenges.

Respondents to the survey believe that the enforcement program—dockside and at-sea inspections and prosecutions—is

basically sound and has improved during the past 5 years. However, there are specific areas where they believe improvements should be made. For example, regulators and enforcement personnel believe improvements in compliance could be achieved by increasing the number of dockside enforcement agents, the number of dockside inspections and the presence and coverage of the dockside enforcement programs. In addition, they believe strengthening investigations associated with reported violations by the USCG, increasing the number of attorneys in the General Counsel's office and reducing case processing time would be helpful. Other improvements involve increasing the certainty and magnitude of penalties and making greater use of permit sanctions which are generally perceived to be a more effective deterrent against illegal fishing than financial penalties.

Many respondents questioned the effectiveness of USCG at-sea enforcement and the method the coast guard uses to measure its effectiveness. Survey results indicate that fishers are not in compliance during 10–20% of days at sea. Twelve to sixteen percent of fishers and regulators, and 35% of enforcement agents, agree or strongly agree that "it is easy for those violating fishing regulations to evade USCG at-sea detection." Yet annual reports by the USCG to congress state that compliance rates, based on the number of violations observed during at sea boardings, are near or exceed 97%, the target rate used by the USCG as a measure of enforcement success. Instead, they may actually reflect the failure of at-sea boardings to detect most violations [13 and footnote 18]. In any case, these high compliance rates are generally viewed as being inaccurate, misleading and harmful because they prevent federal policymakers from appreciating the significance of non-compliance problems in the NEGF fishery and other fisheries.

This hypothesis should be examined to determine if insufficient data and data management and misinterpretations of data are preventing the effective allocation of effort and spending on dockside and at-sea enforcement.

Because economic incentives for noncompliance are increasing and normative factors favoring compliance are relatively weak, a robust "smart compliance policy" [7] needs to be implemented soon in the NEGF fishery to effectively control illegal fishing. Smart compliance policy deals explicitly with how the influence of compliance drivers on behavior varies among fishers. In particular, compliance problems presented by those fishers who are not influenced by moral obligation and social influence need to be addressed far more aggressively than compliance problems presented by other fishers. Smart compliance policy involves developing strategies that: (1) target and meaningfully penalize frequent, routine violators; (2) provide adequate deterrence to discourage occasional violators; and (3) strengthen the basis for achieving voluntary compliance. Evidence regarding compliance in the NEGF fishery and the different factors that motivate compliance among different types of fishers strongly supports developing and implementing a robust smart approach to compliance in this fishery.

It is possible that maximizing the deterrence effect of enforcement in the NEGF fishery can be achieved most effectively by applying the game theory-based "heaven, hell, and purgatory approach" to compliance [32,33]. This has been recommended for other types of environmental enforcement programs [7] and involves placing individual fishers in specific compliance categories with graduated sanctions (in terms of privileges and obligations). These graduated sanctions will produce more deterrence for a given probability of detection and penalty.<sup>30</sup>

<sup>30</sup> See chapter III in Olsen et al. [7] for an explanation of how this approach can be used in fisheries.

Previous studies of fishery enforcement and compliance conclude that there are multiplier effects from aggressively controlling frequent violators [2,7,34]. When frequent violators appear to be immune to punishment, their behavior sends signals to fishers who normally comply that the regulations are unfair and will not have the intended effects on fish stocks. This, in turn, weakens their confidence in the legitimacy of the fishery management program and erodes their willingness to comply with fishing regulations. Targeting frequent violators, besides putting them at higher risk of facing penalties and providing a more potent deterrent to their violations, has a positive multiplier effect because it strengthens compliance among other fishers. Penalties for the routine, frequent violators should be severe, especially for those who have multiple citations. Chronic violators should also face more stringent reporting and monitoring requirements or be prohibited from fishing. On the other hand, Sutinen [34] determined that imposing severe penalties uniformly to all fishers, including those who violate only occasionally, can result in fishers questioning the legitimacy and fairness of fishery management and reduce voluntary compliance.

Unless enforcement effort is increased to achieve compliance rates high enough to allow fish stock rebuilding efforts to succeed, it is economically rational for an increasing number of fishers in the NEGF fishery not to comply with fishing restrictions. The "optimal" harvest strategy for an increasing number of fishermen will be to earn as much income as possible as soon as possible from fishing, either legally or illegally, before fish stocks collapse or the fishery is shut down.

Under these conditions increasing enforcement, especially against chronic or frequent violators, is necessary not only to deter violations, but to create fishing conditions and expectations that promote compliance and support for fish stock rebuilding programs. Recent MSA amendments will require tighter fishing restrictions that will impose additional costs on fishers. These restrictions are currently designed to achieve fish stock rebuilding targets that many fishers do not support on scientific, economic, and moral grounds. The economic and normative forces at work in the NEGF fishery, therefore, are trending against compliance. To prevent further biological and economic decline in the fishery these forces will need to be offset by more enforcement and more certain and meaningful penalties for all fishers; a special emphasis on identifying and penalizing chronic violators; and a dedicated effort to improve the fishery management institutions and processes so that they are viewed as being more legitimate.

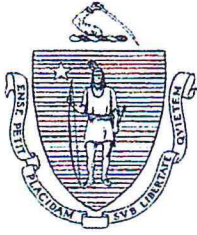
#### Acknowledgments

Research on which this article is based was supported by the Lenfest Ocean Program. The authors are grateful to the hundreds of fishermen and many federal and state fishery enforcement staff, fishery managers, fishery scientists and others who contributed to this research by participating in surveys and/or agreeing to be interviewed. Special thanks go to those who helped pretest the survey instruments and interview protocols and also to the staff of the NOAA Office of Law Enforcement and NOAA National Marine Fisheries Service regional offices who provided researchers with enforcement data. The authors are solely responsible for any errors or omissions in the article.

#### References

- [1] Becker G. Crime and punishment: an economic approach. *Journal of Political Economy* 1968;76(2):169–17.
- [2] Kuperan K, Sutinen JG. Blue water crime: legitimacy, deterrence and compliance in fisheries. *Law and Society Review* 1998;32(2):309–38.

- [3] Sutinen JG, Kuperan K. A socioeconomic theory of regulatory compliance in fisheries. *International Journal of Social Economics* 1999;6:174–93.
- [4] Sutinen JG, Rieser A, Gauvin JR. Compliance and enforcement in northeast fisheries from a report for the new England fishing management council, 1989.
- [5] Sutinen JG, Rieser A, Gauvin JR. Measuring and explaining noncompliance in federally managed fisheries. *Ocean Development and International Law* 1990;21:335–72.
- [6] Shaw RL. Enforcement and compliance in the Northeast groundfish fishery: perceptions of procedural justice in fishery management, the effects of regulatory methods and prospects for compliance. AAT 3206256, University of Rhode Island; 2005.
- [7] Olsen SB, Sutinen JG, Juda L, Hennessey T, Grigalunas TA. A handbook on governance and socioeconomics of large marine ecosystems. Coastal Resources Center, University of Rhode Island, 2006. Available online at <[www.iwlearn.net/abt\\_iwlearn/pns/learning/b2-2lme/riworkshop](http://www.iwlearn.net/abt_iwlearn/pns/learning/b2-2lme/riworkshop)>.
- [8] National marine fisheries service. 2008 status of US fisheries. Available at: <<http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>>.
- [9] Rosenberg AA. Managing to the margins: the overexploitation of fisheries. *Frontiers in Ecology and the Environment* 2003;1(2):102–6.
- [10] Turris B, McEldery H. Evaluation of monitoring and reporting needs for groundfish sectors in New England: phase I report. Pacific Fisheries Management Incorporated: Vancouver, BC, Canada; 2008.
- [11] Rosenberg AA, Swasey JH, Bowman MB. Rebuilding US fisheries: progress and problems. *Frontiers in Ecology and the Environment* 2006;4(7):303–8.
- [12] Randall JK. Improving compliance in US federal fisheries: an enforcement agency perspective. *Ocean Development and International Law* 2004;35:287–17.
- [13] King DK, Porter RD, Price EW. Reassessing the value of US coast guard at-sea fishery enforcement. In press 2009.
- [14] Sutinen JG, Andersen P. The economics of fisheries law enforcement. *Land Economics* 1985;61(4):387–97.
- [15] Anderson LG, Lee DR. Optimal governing instruments, operation level, and enforcement in natural resource regulation: the case of the fishery. *American Journal of Agricultural Economics* 1986;68(3):678–90.
- [16] Milliman SR. Optimal fishery management in the presence of illegal activity. *Journal of Environmental Economics and Management* 1986;13(4):363–81.
- [17] Smith A. *The theory of moral sentiments*. London: A. Millar; 1759.
- [18] Smith A. *An inquiry into the nature and causes of the wealth of nations*. New York: Random House; 1776.
- [19] Bentham J. *An introduction to the principles of morals and legislation*. Oxford: Basil Blackwell; 1789.
- [20] Heineke JM, editor. *Economic models of criminal behavior*. New York: North-Holland; 1978.
- [21] Pyle DJ. *The economics of crime and law enforcement*. New York: St. Martin's Press; 1983.
- [22] Bean C. *An economic analysis of compliance and enforcement in the Quahaug fishery of Narragansett Bay*. Unpublished Masters thesis, University of Rhode Island; 1990.
- [23] Furlong WJ. The deterrent effect of regulatory enforcement in the fishery. *Land Economics* 1991;67(1):116–29.
- [24] Hatcher A, Gordon D. Further investigations in the factors affecting compliance with UK fishing quotas. *Land Economics* 2005;81(1):71–86.
- [25] Sutinen JG, Gauvin JR. *An econometric study of regulatory enforcement and compliance in the commercial inshore lobster fishery of Massachusetts from rights-based fishing*. Boston: Kluwer Academic Publishers; 1989.
- [26] Sutinen JG, Gauvin JR. *A study of law enforcement and compliance in the commercial inshore lobster fishery of Massachusetts: volumes I and II*. Environmental Enforcement Division, State of Massachusetts; 1988.
- [27] Kuperan VK. *Deterrence and voluntary compliance with the zoning regulation in the Malaysian fishery*. Kingston: University of Rhode Island; 1992.
- [28] Gauvin J. *An econometric estimation of compliance behaviour in the Massachusetts inshore lobster fishery*. Kingston: University of Rhode Island; 1988.
- [29] Gezelius S. Do norms count? State regulation and compliance in a Norwegian fishing community. *Acta Sociologica* 2002;45:305–14.
- [30] Tyler T. *Why people obey the law*. New Haven: Yale University Press; 1990.
- [31] Sutinen JG. Enforcement of the MFMCA: an economist's perspective. *Marine Fisheries Review* 1987;49(3):36–43.
- [32] Russell CS. Game models for structuring monitoring and enforcement systems. *Natural Resource Modeling* 1990;4(2):143–73.
- [33] Russell CS. *The economics of environmental monitoring and enforcement*. Ashgate Publishing Ltd; 2003.
- [34] Sutinen JG. *Fisheries compliance and management: assessing performance*. Canberra: Australian Fisheries Management Authority, ACT; 1996.



OFFICE OF THE GOVERNOR  
COMMONWEALTH OF MASSACHUSETTS  
STATE HOUSE • BOSTON, MA 02138  
(617) 725-4000



**CHARLES D. BAKER**  
GOVERNOR

**KARYN E. POLITO**  
LIEUTENANT GOVERNOR

August 24, 2017

Mr. Chris Oliver, Assistant Administrator for Fisheries  
National Oceanic and Atmospheric Administration  
NOAA Fisheries  
1315 East-West Highway  
Silver Spring, MD 20910

Dear Mr. Oliver,

On behalf of the Commonwealth of Massachusetts, I am writing in regards to the potential redistribution of fishing permits assigned to various vessels associated with Carlos Rafael. As I am sure you are aware, earlier this year, Mr. Rafael pleaded guilty in the U.S. District Court in Boston to a host of federal charges in connection with his fishing business. As a result of this guilty plea, I understand that Mr. Rafael may be required to forfeit thirteen fishing vessels and groundfish permits associated with those vessels to the United States.

The fishing permits associated with Mr. Rafael's business are significant and account for the following allocations:

- 7% of all the Georges Bank yellowtail flounder;
- approximately 5% of Georges Bank cod;
- approximately 11½% of Georges Bank winter flounder;  
4% of Georges Bank haddock; and
- about 7% of southern New England winter flounder.

It is my understanding that, should these vessels and the associated permits be forfeited or the permits otherwise cancelled, the National Marine Fisheries Service (NMFS) would be justified in redistributing these permits. On behalf of the Commonwealth, I respectfully request that should NMFS engage in a redistribution of these permits that the fishing privileges associated with these vessels be redistributed to all eligible permit holders in the Massachusetts fleet.

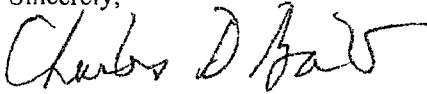
The Commonwealth is committed to working collaboratively with NMFS and the Commonwealth's law-abiding fishermen to promote sustainable, fair fishing practices. Mr. Rafael's actions are in direct conflict with these efforts and have put many of our fishermen

at a significant competitive disadvantage while further threatening the long-term sustainability of these already stressed fisheries.

In addition, responsible management of fisheries must be based on sound science and compliance with fishing regulations. Given the ongoing debate about monitoring of the industry and its associated costs, I ask that, to the maximum extent possible, any money received as a result of Mr. Rafael's sentence and any associated forfeiture be used to improve the monitoring program, including implementation of electronic monitoring. This is the best way to provide some level of restitution to the industry that Mr. Rafael harmed through his crimes. While I recognize that these funds would not cover the entire cost of monitoring, it is our hope that a fully funded program could be developed in the near future.

The recommended actions outlined in this letter are intended to benefit the responsible fishermen in the industry and ensure they are not punished for the illegal actions of one fisherman, and strengthen our federal-state partnership in managing fisheries based on science and respect for the law. I greatly appreciate your consideration of these requests.

Sincerely,



Charles D. Baker

cc: The Honorable William R. Keating  
The Honorable Stephen F. Lynch  
The Honorable Seth W. Moulton  
The Honorable Michael E. Capuano  
The Honorable Katherine Clark  
The Honorable Elizabeth Warren  
The Honorable Edward Markey  
The Honorable Sarah K. Peake  
The Honorable Patricia A. Haddad  
The Honorable Bradford R. Hill  
The Honorable Timothy R. Whelan  
The Honorable Mathew Muratore  
The Honorable Tackey Chan  
The Honorable William L. Crocker, Jr.  
The Honorable James M. Cantwell  
The Honorable Julian Cyr  
The Honorable Patrick M. O'Connor  
The Honorable Bruce E. Tarr  
The Honorable Vinny M. deMacedo



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
GREATER ATLANTIC REGIONAL FISHERIES OFFICE  
55 Great Republic Drive  
Gloucester, MA 01930-2276

AUG 31 2017



Dr. John F. Quinn, Chairman  
New England Fishery Management Council  
50 Water Street, Mill 2  
Newburyport, MA 01950

Dear John:

The Northeast Fisheries Science Center published final results of the stock assessment updates for the 20 groundfish stocks in October 2015. The Center also published the final report for a benchmark assessment for witch flounder in January 2017. Based on the results of these assessments, NOAA's National Marine Fisheries Service (NMFS) updated the stock status for a number of stocks and determined that several stocks are not making adequate rebuilding progress or are in need of a rebuilding plan. This letter serves as official Council notification of our determinations under sections 304(e)(2) and (7) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). With this notification, the Council should take action for each of the following stocks, as outlined below:

- Ocean pout;
- Georges Bank (GB) winter flounder;
- Witch flounder;
- Northern windowpane flounder;
- Southern New England/Mid-Atlantic (SNE/MA) yellowtail flounder; and
- White hake.

#### Stock status updates

The attached table summarizes the current stock status for all 20 stocks. Below are details for stocks with status changes:

- SNE/MA yellowtail flounder is now subject to overfishing and is overfished. The Council must implement a new rebuilding plan for this stock within 2 years.
- GB winter flounder is now subject to overfishing and is overfished. This stock is currently in a rebuilding plan, and we have determined that the stock is not making adequate rebuilding progress. We discuss our determination and make recommendations for revising the rebuilding plan for GB winter flounder under the "Rebuilding progress reviews" section below.
- Stock status improved for northern windowpane flounder. The stock is still overfished, but overfishing is not occurring. This stock is currently in a rebuilding plan, and we have determined that the stock is not making adequate rebuilding progress. We discuss



our determination and make recommendations for revising the rebuilding plan for northern windowpane flounder under the “Rebuilding progress reviews” section below.

- Stock status is unchanged, but more uncertain, for GB cod and Atlantic halibut. The assessments for these stocks were not accepted as a basis for management. However, the assessment review panel determined that available information indicates these stocks are still in poor condition and that stock size has not increased. Therefore, the panel recommended that, the status remain overfished for both stocks, consistent with the information from previous assessments. However, in the absence of fishing mortality estimates to compare to the overfishing thresholds, the panel recommended using an unknown overfishing status for both stocks.

Although the review panel concluded that the overfishing status should be unknown for GB cod and Atlantic halibut, NMFS has determined that the stock status for GB cod will remain overfished, with overfishing occurring, consistent with the determination from the 2013 GB cod benchmark assessment, and that the status for Atlantic halibut will remain overfished, with overfishing not occurring, consistent with the 2012 assessment update for this stock. This aligns with the national approach for making official status determinations that are reported in the annual Report to Congress on the Status of U.S. Fisheries. Under this approach, where a known determination had previously been provided and a new assessment is rejected or the results are inconclusive, the known stock status will continue to be the official stock status. This approach relies on a valid prior determination as long as there were no errors in calculations or methodology, and the best available science at the time was used. These status determinations will remain until an assessment can provide new reference points and/or numerical estimates of existing status determination criteria or the Council implements alternative status determination criteria.

- Witch flounder remains overfished. However, it is now unknown whether the stock is subject to overfishing. The assessment peer review panel rejected the 2016 witch flounder benchmark assessment model, as well as the previous benchmark assessment model updated with 2015 data.

Although we could not use the assessment to estimate stock size relative to a reference point, there is other information in the assessment that suggests that the witch flounder stock remains in poor condition. For example, the swept-area biomass approach used to generate catch advice indicated that stock biomass was at historical low levels. In addition, the fishery landings and survey catch data show truncation of age structure and a reduction in the number of old fish in the population. These indicators support maintaining the overfished status. Unlike the overfished status, we do not have reliable indicators for overfishing status. Thus we are changing the overfishing status to unknown. While we cannot specify an overfishing status determination criterion for this stock, catch for the last five years has been below the annual catch limit (ACL). The lack of reliable indicators, the rejection of the previous stock assessments, and the fact that catch has remained below the ACL, support changing the overfishing status of this stock to unknown.

### Rebuilding progress reviews

We reviewed the assessment results to determine whether groundfish stocks in rebuilding plans were making adequate rebuilding progress under section 304(e)(7) of the Magnuson-Stevens Act. The criteria in the revised National Standard 1 (NS 1) guidelines state that the Secretary may find that a stock is not making adequate rebuilding progress if either:

1. The fishing mortality rate (F) required to rebuild the stock within the rebuilding timeframe ( $F_{rebuild}$ ) or the ACL associated with  $F_{rebuild}$  is exceeded, and accountability measures (AMs) are not correcting the operational issue that caused the overage, nor addressing any biological consequences to the stock or stock complex resulting from the overage when it is known; or
2. The rebuilding expectations of a stock or stock complex are significantly changed due to new and unexpected information about the status of the stock.

After reviewing all 20 stocks, we determined that several stocks are not making adequate rebuilding progress. Those stocks have either not reached or approached their rebuilding targets by the end of their rebuilding period, or are not expected to rebuild by their rebuilding end dates, even in the absence of fishing mortality. Below, we summarize our determinations and recommend specific conservation and management measures the Council should take to rebuild each stock.

#### *Ocean pout*

Ocean pout did not rebuild by its target rebuild date of 2014. We acknowledge the Council's efforts to support stock rebuilding. The regulations have prohibited possession of ocean pout since May 2010. The Council has also consistently set catch levels to promote rebuilding. Despite the Council's efforts to reduce fishing mortality for this stock, the 2015 stock assessment indicated that biomass was at 6 percent of the rebuilding target, continuing a decreasing trend. The final rule for the revised NS 1 guidelines discusses that cases where stock biomass is not increasing despite maintaining catch levels at or below  $F_{rebuild}$  levels would be unexpected. Because ocean pout is not rebuilding in spite of low catch levels and conservative management measures, this stock meets the second criterion of the NS 1 guidelines criterion for not making adequate rebuilding progress. The lack of stock growth suggests uncertainty in our assessments or catch estimates, including unaccounted for management factors, biological factors, or environmental factors that could be limiting rebuilding progress.

The Council must implement a new rebuilding plan for ocean pout within 2 years, consistent with Magnuson-Stevens Act section 304(e)(3). A benchmark assessment for ocean pout is not scheduled for the near future. In the meantime, the Council should continue to use the available assessment information to set catch levels, and consider further conservation and management measures that may achieve adequate progress. In addition, we will work with the Council to prioritize additional research to determine why low catch levels have not supported stock growth, and develop other management measures that may be appropriate for the stock.



### *Georges Bank winter flounder*

We implemented the GB winter flounder rebuilding plan in 2010, with a target rebuild date of 2017. The stock assessments in 2011 and 2012 showed the stock was making adequate rebuilding progress, and in 2012, the stock was estimated to be approximately 86 percent of its rebuilding target. However, the 2015 assessment significantly changed our understanding of stock status, and the stock is not expected to rebuild by 2017, even in the absence of fishing. The stock is now estimated to be only 43 percent of its rebuilding target. This change is not due to a significant decline in biomass, but rather the emergence of a major retrospective pattern that led to previous overestimates of stock biomass. As a result, this stock meets the second criterion of the NS 1 guidelines for determining that a stock is not making adequate rebuilding progress.

The Council must revise the rebuilding plan for GB winter flounder within 2 years, consistent with Magnuson-Stevens Act section 304(e)(3). We recommend the Council explore whether additional management measures, such as the expansion of selective gear requirements or area closures, or changes to the current method of setting catch levels, would support additional growth for this stock.

### *Witch flounder*

We implemented the rebuilding plan for witch flounder in 2010, with a target rebuild date of 2017. The 2012 and 2015 assessment updates indicated that biomass was at 41 and 22 percent of the biomass target, respectively. Based on the 2015 assessment, the stock was not expected to rebuild by 2017, even in the absence of fishing. The Center performed a benchmark assessment of this stock in 2016. The assessment peer review panel rejected the 2016 benchmark assessment model and was unable to generate model-based reference points to determine stock status. Without biological reference points, we are no longer able to evaluate stock size relative to the current rebuilding target, and as a result the rebuilding expectations for the stock have significantly changed. Therefore, this stock meets the second criterion of the NS 1 guidelines for not making adequate rebuilding progress. As noted previously in this letter, available data still suggest this stock is in poor condition, and in need of rebuilding measures.

The Council must develop a new rebuilding plan for witch flounder within 2 years, consistent with Magnuson-Stevens Act section 304(e)(3). Recognizing that the 2016 benchmark assessment was not able to generate reference points for witch flounder, we recommend that the Council explore developing a rebuilding plan that monitors available data sources as proxies for rebuilding progress. This could include indicators such as: 1) increases in exploitable biomass from surveys using the empirical approach that the peer review panel developed; 2) expansion in size or age structure in fishery-dependent and independent data sources; and 3) tracking and monitoring the progress of year classes over time.

### *Northern windowpane flounder*

We implemented the rebuilding plan for Northern windowpane flounder in 2010, with a target rebuild date of 2017. Although the 2015 assessment indicated that overfishing is no longer occurring, stock biomass was at 34 percent of the biomass target. Catch exceeded the ACL

every fishing year since ACLs were first put in place (2010). To date, the AMs have not fully corrected the operational issues that caused overages and, as a result, may not have addressed the potential biological consequences to the stock. As a result, this stock meets the first criterion of the NS1 guidelines for not making adequate rebuilding progress.

The Council must revise the rebuilding plan for northern windowpane flounder within 2 years, consistent with Magnuson-Stevens Act section 304(e)(3). We recently approved measures in Framework 56 that are intended to correct an operational issue that contributed to some of the recent ACL overages. A scallop fishery sub-ACL for this stock will hold the scallop fishery accountable for its catch contribution and provide incentive for this fishery to reduce its bycatch of the stock. Additionally, we anticipate that associated scallop fishery AMs (to be implemented in a future action) will further bolster management efforts to prevent future ACL overages. When revising the rebuilding plan for northern windowpane flounder, we recommend the Council explore additional conservation and management measures, taking Framework 56 into account, that will support stock growth and improve the probability of rebuilding success.

#### *White hake*

We implemented the white hake rebuilding plan in 2004, with a target rebuild date of 2014. Stock biomass has steadily increased since we implemented the rebuilding plan, and is now estimated to be at 88 percent of the rebuilding target. Stock projections in the 2015 assessment show that this stock is expected to continue growing, and the stock will rebuild by 2022. Additionally, catch has been below the ACL in all fishing years since we established ACLs for this stock, so we have not needed to implement AMs.

Although the rebuilding plan ended in 2014, because of the positive gains in stock biomass and the expectation that it will continue to rebuild, we determined that white hake is making adequate rebuilding progress. Consistent with the NS 1 guidelines and the Council's ABC Control Rule, the Council should continue to set catch limits to maintain fishing mortality at 75 percent of F at maximum sustainable yield until the stock is rebuilt.

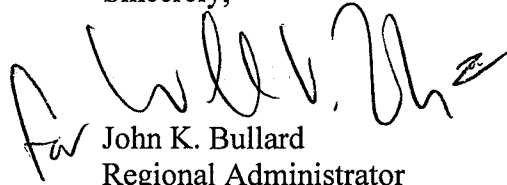
#### Next steps

The Council has 2 years from the date of this letter to prepare and implement new rebuilding plans for SNE/MA yellowtail flounder due to the revised status determination for this stock. The Council also has two years to prepare and implement new rebuilding plans for ocean pout and witch flounder, and to revise the rebuilding plans for GB winter flounder and northern windowpane flounder. We acknowledge that the Council used the most recent assessment information to set catch limits that prevent overfishing for each of these stocks for the 2017 and 2018 fishing years until new rebuilding plans can be developed. Based on the 2017 groundfish operational assessments, we also expect the Council to revise the current 2018 specifications using the updated information. Beyond setting appropriate catch limits and working to develop or revise rebuilding plans for these stocks, we encourage the Council to continue to make progress on the Groundfish Monitoring Amendment. Improved fishery information can reduce uncertainty that may contribute to the retrospective patterns in the assessments.

We will continue to provide advice and collaborate on the development and implementation of rebuilding programs through our participation on the Groundfish Plan Development Team, the Groundfish Committee, and the Council. We also previously provided advice on developing rebuilding plans in a letter dated April 13, 2012, and have attached that letter for reference to help respond to questions about the timing for, and analysis of, rebuilding measures.

If you have any questions about this guidance, or the development of rebuilding plans for these stocks, please contact Michael Pentony, Assistant Regional Administrator for Fisheries for the Greater Atlantic Regional Fisheries Office, at (978) 281-9283.

Sincerely,

A handwritten signature in black ink, appearing to read "John K. Bullard", with a stylized flourish at the end.

John K. Bullard  
Regional Administrator  
Greater Atlantic Regional Fisheries Office  
National Marine Fisheries Service

Cc: Chris Oliver, Assistant Administrator for Fisheries, National Marine Fisheries Service  
Samuel D. Rauch III, Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service  
Tom Neis, Executive Director, New England Fisheries Management Council  
Dr. Jon Hare, Director, Northeast Fisheries Science Center  
Alan Risenhoover, Director, Office of Sustainable Fisheries

Attachments

**Summary of changes to stock status based on 2015 Groundfish Operational Assessments  
and 2016 Witch Flounder Assessment**

Stock	Previous Assessment		2015/2016 Assessment		Rebuilding Program Start Date	Planned Rebuilding End Date
	Overfishing?	Overfished?	Overfishing?	Overfished?		
<b>GB Cod</b>	Yes	Yes	Yes	Yes	5/1/2004	2026
<b>GOM Cod</b>	Yes	Yes	Yes	Yes	5/1/2004	2024
<b>GB Haddock</b>	No	No	No	No	5/1/2004	Rebuilt
<b>GOM Haddock</b>	No	No	No	No	5/1/2004	Rebuilt
<b>GB Yellowtail Flounder</b>	Unknown	Unknown	Unknown	Unknown	11/22/2006	2032
<b>SNE/MA Yellowtail Flounder</b>	No	No	Yes	Yes	5/1/2004	Rebuilt
<b>CC/GOM Yellowtail Flounder</b>	Yes	Yes	Yes	Yes	5/1/2004	2023
<b>American Plaice</b>	No	No	No	No	5/1/2004	2024
<b>Witch Flounder</b>	Yes	Yes	Unknown	Yes	5/1/2010	2017
<b>GB Winter Flounder</b>	No	No	Yes	Yes	5/1/2010	2017
<b>GOM Winter Flounder</b>	No	Unknown	No	Unknown	N/A	N/A
<b>SNE/MA Winter Flounder</b>	No	Yes	No	Yes	5/1/2004	2023
<b>Acadian Redfish</b>	No	No	No	No	5/1/2004	Rebuilt (2010)
<b>White Hake</b>	No	No	No	No	5/1/2004	2014
<b>Pollock</b>	No	No	No	No	5/1/2010	Rebuilt (2009)
<b>Northern Windowpane Flounder</b>	Yes	Yes	No	Yes	5/1/2010	2017
<b>Southern Windowpane Flounder</b>	No	No	No	No	5/1/2004	Rebuilt (2010)
<b>Ocean Pout</b>	No	Yes	No	Yes	5/1/2004	2014
<b>Atlantic Halibut</b>	No	Yes	No	Yes	5/1/2004	2056
<b>Atlantic Wolffish</b>	No	Yes	No	Yes	5/1/2010	In rebuilding, data poor; end date not defined.



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
NORTHEAST REGION  
55 Great Republic Drive  
Gloucester, MA 01930-2276

APR 13 2012

Mr. C.M. "Rip" Cunningham, Jr., Chairman  
New England Fishery Management Council  
50 Water Street, Mill 2  
Newburyport, MA 01950

Dear Rip:

This letter responds to your request for further guidance on revising the rebuilding plan for Gulf of Maine (GOM) cod. This guidance is based on legal advice, which in turn is based on a review of the legislative mandates of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), our National Standard (NS) Guidelines, and relevant case law. While this guidance is constructed with GOM cod in mind, it would also be applicable in any situation where an inadequate rebuilding determination is made or for any stock that has not reached its rebuilding target by the end of its rebuilding period.

### **Background**

Revision of the GOM cod rebuilding plan is necessary because NOAA's National Marine Fisheries Service (NMFS) determined that the Northeast Multispecies Fishery Management Plan was not making adequate progress toward ending overfishing and rebuilding the stock. NMFS notified the Council of this determination, and the requirement to implement a revised rebuilding plan within 2 years under MSA §304(e)(3), in a letter dated January 26, 2012. In addition, the letter notified the Council that it must implement measures, by May 1, 2013, to immediately end overfishing for GOM cod.

The Council requested, pursuant to MSA §304(e)(6), that NMFS implement interim measures to reduce overfishing until the Council's revised rebuilding measures are implemented. NMFS has implemented interim measures for the first 6 months of the 2012 fishing year, and these measures may be extended an additional 6 months under the provisions of MSA §305(c)(3) that authorize interim measures.

### **Applicable MSA, NS1 guideline provisions, and relevant case law**

In developing revised rebuilding measures for GOM cod, the provisions of MSA §304(e)(3) and (4) apply. The rebuilding plan shall:

- Prevent overfishing
- Specify a time period for rebuilding the fishery that shall be as short as possible, taking into account the status and biology of the overfished stock, the needs of the



fishing community, and the interaction of the overfished stock within the marine ecosystem.

- Not exceed 10 years, except in cases where the biology of the stock, or other environmental conditions, dictate otherwise.
- Allocate both overfishing restrictions and recovery benefits fairly and equitably within the fishery.

NS1 guidelines that apply to rebuilding measures are found in 50 CFR 600.310(j)(3). In order to support the selection of a particular rebuilding plan, the Council must evaluate a range of alternative rebuilding plans whose end dates include and fall between the  $T_{MIN}$  and  $T_{MAX}$  reference points described in the NS1 guidelines. Selection of a rebuilding target time longer than  $T_{MIN}$  must be based on analysis showing that the preferred  $T_{TARGET}$  is as short a time as possible, taking into account the needs of fishing communities. The analysis should clearly document the range of economic impacts to fishing communities associated with each of these alternatives by describing their dependence on GOM cod, their vulnerability to near-term reductions in cod harvest, and how related management measures affect various user groups of the fishery.

### **Rebuilding plan analysis**

The following steps are essential for the analysis of revised rebuilding measures:

- Calculate the minimum time to rebuild ( $T_{MIN}$ ) with no fishing mortality ( $F=0$ ) that provides at least a 50% probability of attaining  $B_{MSY}$ . Fishing mortality includes both directed and incidental mortality from all fisheries. The calculation of  $T_{MIN}$  starts with the first year the revised measures are to be implemented. This would be 2013 if the Council is implementing revised rebuilding measures coincident with its measures to end overfishing following the end of the interim measures implemented in 2012. Otherwise, the starting point will be the start of the 2014 fishing year – the maximum time allowed for the Council to act.
- Identify the maximum time to rebuild ( $T_{MAX}$ ).  $T_{MAX}$  is 10 years, unless  $T_{MIN}$  is longer than 10 years. In that event, the NS1 guidelines describe how to calculate  $T_{MAX}$ .
- Identify a range of alternative rebuilding times between  $T_{MIN}$  and  $T_{MAX}$ , and the associated  $F_{REBUILD}$  values. Because the current rebuilding plan specifies an  $F_{REBUILD}$  of 75% of  $F_{MSY}$ , the analysis may include that case as one of the alternatives.
- Explore and explain the impacts of each alternative to fishing communities and the GOM cod stock. The analysis should include impacts on both the directed fishery for cod and other fisheries that may incidentally catch cod.
- Identify an appropriate  $T_{TARGET}$  and  $F_{REBUILD}$  based on this analysis that is as short as possible, taking into account the needs of the fishing communities.

The starting point for calculations described above is the first year that the revised rebuilding measures will be implemented. This would be 2013 if the Council is implementing revised rebuilding measures coincident with its measures to end overfishing following the end of the

interim measures implemented in 2012. Otherwise, the starting point will be the start of the 2014 fishing year – the maximum time allowed for the Council to act

I appreciate your patience and collaboration as we move ahead through the process to set appropriate measures to rebuild GOM cod. Should you have any additional questions or concerns about this letter, please contact George Darcy, Assistant Regional Administrator for Sustainable Fisheries at 978-281-9331 or Gene Martin, General Counsel, Northeast at 978-281-9242 regarding legal concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Morris', followed by a horizontal line extending to the right.

Daniel S. Morris  
Acting Regional Administrator

cc: Adam Issenberg, Section Chief, Fisheries and Protected Resources Section, NOAA GC  
Dr. William Karp, Acting Director, Northeast Fisheries Science Center  
Carrie Selberg, Acting Director, Office of Sustainable Fisheries



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116  
John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director*

August 31, 2017

Mr. John Bullard  
Regional Administrator  
National Marine Fisheries Service  
Greater Atlantic Regional Fisheries Office  
55 Great Republic Drive  
Gloucester, MA 01930

Dear John:

The accountability measures (AMs) for windowpane flounder require the use of selective trawl gear in specific areas. The list of approved gears can be modified using the process described in 50 CFR 658.85(b)(6)(iv)(J)(2). The Council recommends that the Large Mesh Belly Panel (LMBP) net be authorized for use and added to the list of approved gears. It should be considered for use in all flatfish AM areas.

The Council funded a collaborative research project to test whether Large-Mesh Belly Panel net (LMBP) was effective in reducing catches of windowpane flounder. The Council's Research Steering Committee reviewed the report of this experiment in March, 2017 and concluded the experiment could be used for management decisions. On August 30, 2017, the Executive Committee reviewed the experiment and additional analyses provided by the Groundfish Plan Development Team (attached). Without objection, the Executive Committee recommended that you approve this gear for use.

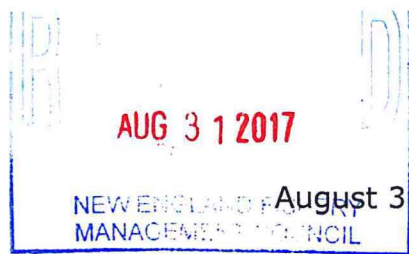
Please contact me if you have questions.

Sincerely,

Thomas A. Nies  
Executive Director

Attachment: Groundfish PDT memorandum dated August 25, 2017  
cc: Dr. Chris Moore





To: John Bullard  
New England Fishery Management Council  
Mid Atlantic Fishery Management Council

August 31, 2017

John Bullard's "There is no silver bullet for groundfish" message might be better received if his actions didn't negate his points. John has repeatedly pushed his ENGO preferences. In his opinion, the ENGOs are right and commercial fishermen are wrong. No other regional administrator has interjected as much as John has with his personal ideology.

When the Council votes and it is not the way John wants, he interjects and pushes to add things back in. This is what happened with the Nantucket squid buffer zone and the coral zone preferred alternative.

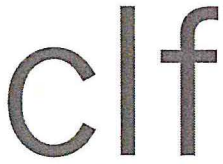
But back to groundfish. John has put the burden of groundfish cuts on commercial fishermen, but he has refused to address recreational codfishing. In his own words, the commercial fishermen have taken an 80-90% cut in GB codfish, and now we are getting another 13% cut. This all since catch shares took effect. Yet there has not been one reduction to the recreational or the party/charter industry, which has a size limit but no bag limit for GB codfish.

Of all the commercial fishermen that I know, not one has a yearly quota of GB cod of 20,000 lbs (including discards). All have less. Yet a single party boat can catch that in one day. This is not about conservation- this is about punishing the commercial fishermen. It is very disheartening to see a former mayor of New Bedford (the highest grossing fishing port in the country) treat his ENGO and recreational friends like royalty and the commercial fishermen like second or third class citizens.

The lobbying that Mr. Bullard did to get Ellen Goethel off the New England Fishery Management Council should have raised red flags about his ethical standards along with other questionable treatment of council members and public persons who said or did things John did not like.

In Mr. Bullard's last sentence, he correctly states "If anyone thinks that the status quo is good enough, then they haven't been paying attention"; but being partisan is not the answer. Mr. Bullard's actions have proven he works for some of the people, and the rest of the people he looks down on. There are no easy answers to groundfish, but when one group takes all the cuts you create a untenable scenario.

Thank you,  
Mark S Phillips  
F/V Illusion  
210 Atlantic Ave  
Greenport, NY 11944



conservation law foundation

For a thriving New England

CLF Massachusetts 62 Summer Street  
Boston MA 02110  
P: 617.350.0990  
F: 617.350.4030  
www.clf.org

August 29, 2017

Dr. John Quinn  
Chair, New England Fishery Management Council  
219 Smith Neck Road  
Dartmouth, MA 02748  
[iquinn3@umassd.edu](mailto:iquinn3@umassd.edu)

Thomas M. Nies  
Executive Director, New England Fishery Management Council  
50 Water Street  
Newburyport, MA 01950  
[tnies@nefmc.org](mailto:tnies@nefmc.org)

RE: NEFMC Formal Statement on Carlos Rafael

Dear Chairman Quinn and Executive Director Nies:

I am writing to express CLF's profound disappointment that the New England Fishery Management Council (NEFMC) has not yet issued a formal statement condemning Carlos Rafael's behavior, including his multiple admissions of criminal guilt as well as his violations of civil sanctions from NOAA Fisheries. Mr. Rafael's admissions comprise the most significant, documented incidents of illegal and unpermitted activities in New England fisheries, if not U.S. domestic fisheries, in the modern era. Their severity is compounded by the fact that Rafael's operations have been the subject of 19 administrative violations dating back to 1994, many for the same activities that are the subject of the criminal action.

Among other consequences, Mr. Rafael's self-characterized "pirate" behavior:

- tarnished the reputation of New England fishing management and New England fishermen in the public arena,
- threatened sector management and the success of the catch share program,
- undoubtedly cost jobs and reduced the access of other states to the groundfish fisheries of the future by virtue of the economic advantages his illegal activities gave him,
- increased the already-widespread cynicism and contempt in the New England fleet about fisheries management, managers, accountability and enforcement, and
- may well have been a significant factor in setting back the recovery and rebuilding schedules of the groundfish stocks that his vessels have targeted, caught, discarded and misreported.

jc 9/5/17

## CONSERVATION LAW FOUNDATION

The NEFMC has taken prominent public positions on topics such as the Northeast Canyons and Seamounts Marine National Monument. In a recent joint letter to President Trump, the NEMFC indicated that the designation of marine monuments prohibiting fishing have “disrupted the ability of the Councils to manage fisheries throughout their range as required by MSA and in an ecosystem-based manner.” The joint letter further proclaims that the Councils “not only meet conservation objectives but also ensure sustainable seafood for U.S. consumers, promote the economies of coastal communities, and maintain the social-cultural fabric of our Nation's recreational, commercial, and subsistence fishing communities.”

Yet, when it comes to the criminal behavior of the largest fishing operation in New England that disembowels the very fishery management system itself and affects the lives and well-being of countless fishing families, the Council is silent beyond issuing a press release in March 2017 with the executive director stating: "It is deplorable that the self-interest of one person may have affected the quotas available to other honest fishermen. The federal enforcement agencies deserve our gratitude for detecting this violation and bringing this perpetrator to justice."

That press release was an important communication at the time but it is hardly sufficient for all time. Where is a condemnatory statement from the Council itself? What is the Council's view on Mr. Rafael's continued participation in New England fisheries given his long track record of demonstrated contempt for the rules the Council develops for its groundfish and scallop fisheries? What is the Council's position on the disposition of penalties or assets that may be received or forfeited to guide NOAA in its decision making? What steps will the Council take to ensure this never happens again and that sector operation plans are enforceable and enforced? Where is the Council's statement to NOAA Fisheries affirming the rule of law and urging NOAA Fisheries to use whatever means are at its disposal to put this history behind the region and move the groundfish fishery towards a more hopeful future?

A number of private individuals, a number of state representatives, and a U.S. Congressman have taken strong and principled positions on these issues, even at the risk of direct personal or economic retaliation in the case of the individuals. Where *is* the Council?

Sincerely,



Peter Shelley  
Senior Counsel



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
GREATER ATLANTIC REGIONAL FISHERIES OFFICE  
55 Great Republic Drive  
Gloucester, MA 01930-2276

AUG - 8 2017

Dr. John F. Quinn  
New England Fishery Management Council  
50 Water Street, Mill 2  
Newburyport, Massachusetts 01950



Dear John:

On behalf of the Secretary of Commerce, I have partially approved Framework Adjustment 56 to the Northeast Multispecies Fishery Management Plan (FMP). The final rule implementing the approved measures in Framework 56 published in the *Federal Register* and became effective on August 1, 2017. We also finalized recreational management measures for the 2017 fishing year. The final rule for recreational management measures became effective on July 27, 2017, and published in the *Federal Register* on July 31, 2017. Below, I highlight some key issues associated with these rulemakings.

### **Framework 56 Measures**

#### *2017 Catch Limits and Other Framework 56 Measures*

We approved the updated 2017-2019 catch limits for witch flounder and 2017 catch limits for the three U.S./Canada stocks. All other catch limits are the same as those previously implemented in Framework 55, and became effective on May 1, 2017. The Northeast Fisheries Science Center will conduct assessment updates next month for all groundfish stocks, which will provide the opportunity to update the 2018 catch limits implemented in Frameworks 55 and 56. Although there are 2018 catch limits in place for all stocks, we recognize that the Scientific and Statistical Committee may recommend substantial changes for some stocks based on the results of the 2017 assessments. There will also be a default 2018 catch limit in place for eastern Georges Bank (GB) cod, eastern GB haddock, and GB yellowtail until Framework 57 is finalized. As a result, we intend to work closely with the Council to ensure that final measures for the 2018 fishing year are implemented as quickly as possible given the compressed timeline for Framework 57, and to prevent major disruption to the groundfish fishery.

We also approved the scallop fishery allocation for northern windowpane flounder, the revised threshold for scallop accountability measures (AM), and the increase to the GB haddock allocation for the midwater trawl fishery. We made minor clarifications regarding the implementation of these measures in the final rule based on your comments on the proposed rule.

#### *Disapproval of Witch Flounder Status Determination Criteria Change*

We disapproved the Council's recommendation to change the status determination criteria (SDC) for witch flounder to unknown. Instead, the final rule maintains the witch flounder SDCs put in place through Amendment 16, until the criteria can be replaced by suitable SDCs or reference points (i.e., SDCs that relate to available information about the stock). I recognize that this is



new guidance to the Council that we provided after the Council took final action on Framework 56, and it is different than the approach taken for other groundfish stocks like GB yellowtail flounder. We are working to develop national guidance on how to approach SDCs in situations when status determination relative to model-based reference points is no longer possible. In developing national guidance, we determined that SDCs must be specified for every stock consistent with the Magnuson-Stevens Fishery Conservation and Management Act, particularly the process for identifying if a stock is subject to overfishing or overfished. However, SDCs do not have to be derived from a model-based assessment.

A number of groundfish stocks are now in this unique situation, and no longer have analytical stock assessment models to provide historical estimates of biomass, fishing mortality rates, or recruitment. Although it is best to develop SDCs as part of a benchmark assessment, we recognize there are unlikely to be benchmark assessments for these stocks in the near future. Given this, following the 2017 operational assessments, we will work with the Council to develop a plan for establishing new SDCs for the pertinent stocks. This may include consideration of establishing simple SDCs, for example, an annual comparison of catch to the overfishing limit to determine if overfishing is occurring. As part of this process, we should also consider whether it is appropriate, or beneficial, to develop a standard protocol for groundfish stocks that would be applied in similar situations in the future. For example, the groundfish FMP could specify that the alternative criteria would be used if an assessment is rejected, and until they could be replaced by new model-based or other appropriate SDCs whenever they are available.

### **Windowpane Flounder Accountability Measures**

The final rule for Framework 56 announced the implementation of the AMs for northern and southern windowpane flounder due to 2015 overages for both stocks. Based on catch information that just became available, catch of both windowpane stocks was below the quota in 2016. The FMP allows us to remove the groundfish fishery AM early if a subsequent overage does not occur. As a result, the AMs for groundfish vessels will only be in place for 1 month, through August 31, 2017, and will be removed on September 1, 2017. However, the FMP only provides this flexibility for the groundfish fishery AM, and we are considering a future action to remove the AM for non-groundfish trawl vessels.

At its June 2017 meeting, the Council recommended developing revisions to the large-mesh non-groundfish fishery AMs in Framework 57. The Mid-Atlantic Council has offered analytic support for potential revisions. We will work with both Councils to ensure that changes to the windowpane AMs maintain conservation benefits to the windowpane flounder stocks while still allowing the affected fisheries to achieve optimum yield. In addition to the changes that will be considered in Framework 57, the Council is also investigating additional selective gears for use in the AM areas and the possibility of re-designating southern windowpane flounder within the FMP. We support future development of all of these options that may provide more flexibility for managing windowpane flounder.

**Recreational Management Measures**

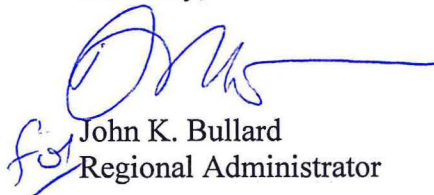
We consulted with the Council, including its Recreational Advisory Panel and Groundfish Oversight Committee, in January 2017 to develop recreational management measures for 2017. We implemented the 2017 measures for Gulf of Maine (GOM) cod and haddock that the Council recommended (Table 1). In the proposed rule, we solicited public comment on an additional set of measures with the same minimum size and bag limit for haddock, but a slightly different fall closure than the Council’s recommendation. However, as described in detail in the final rule, we determined that the Council’s recommended measures are more effective and more consistent with the FMPs goals and objectives compared to the alternative seasonal closure we presented.

Table 1: GOM Cod and Haddock Recreational Management Measures for 2017

Stock	Per Day Possession Limit (fish per angler)	Minimum Fish Size	Season When Possession is Permitted
GOM Cod	Possession Prohibited Year-Round		
GOM Haddock	12	17 inches	May 1 – September 16 November 1 – February 28 and April 15 – April 30

The Council identified a number of important priorities for 2017 and beyond, including adjustment of windowpane flounder measures and improvement of the recreational process. We agree that these efforts are a priority, among other issues identified for development in Framework 57, and will support the Council’s work through our membership on the Groundfish Plan Development Team, the Groundfish Committee, and the Council. If you have questions about any of these issues, please contact Michael Pentony, Assistant Regional Administrator for Sustainable Fisheries, at (978) 281-9315.

Sincerely,



John K. Bullard  
Regional Administrator

- cc: Tom Nies, Executive Director, New England Fishery Management Council
- Dr. Chris Moore, Executive Director, Mid-Atlantic Fishery Management Council
- Dr. Jon Hare, Director, Northeast Fisheries Science Center



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116  
John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director*

August 8, 2017

Eric P. Nelson  
Ocean and Coastal Protection Unit  
Unit Diving Officer  
U.S. EPA, Region 1  
5 Post Office Square, Suite 100, Mail Code OEP06-1  
Boston, MA 02109

Dear Eric:

Thank you for contacting our office to seek comments on the disposal at sea of the F/V Sabrina Maria. We have reviewed the disposal request, and appreciate your outreach to Vito Giacalone of the Northeast Seafood Coalition. We are in agreement with EPA's and Mr. Giacalone's assessment that the site is appropriate for disposal, given that it is inside the Western Gulf of Maine Closure Area, within which mobile bottom-tending gears are currently prohibited. We also agree that sinking the vessel as close as possible to the F/V Little Sandra and F/V Blue Skies is preferable, as it minimizes the footprint of potential hangs, should fishing with mobile bottom-tending gears be allowed at this location at some point in the future. While there are sensitive deep-sea coral habitats in the Gulf of Maine, to the best of our knowledge this is a gravel habitat, but not one that includes deep-sea corals. Overall, we do not expect this disposal to have substantial impacts on fishing operations or fish habitats of concern to the New England Fishery Management Council.

Sincerely,

Thomas A. Nies  
Executive Director

cc: Lou Chiarella, NMFS



# Greater Atlantic Region Bulletin

NOAA Fisheries, Greater Atlantic Regional Fisheries Office, 55 Great Republic Drive, Gloucester, MA 01930

For Information Contact:  
Sustainable Fisheries Division  
(978) 281 – 9315

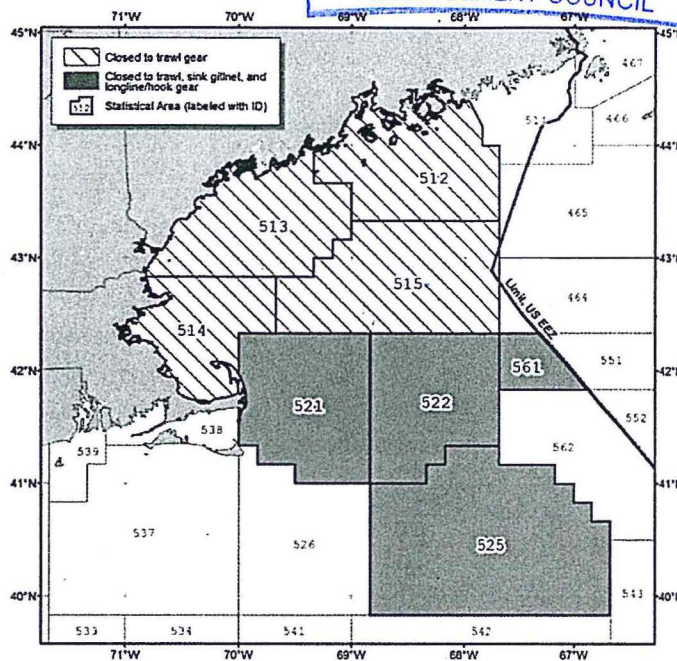
www.greateratlantic.fisheries.noaa.gov  
Date Issued: 7/28/2017

## Northeast Multispecies Common Pool Vessels Closure of the Trimester Total Allowable Catch Area for Georges Bank Cod *Effective Date: July 28, 2017, through August 31, 2017*



Effective at 0845 hours on July 28, 2017, statistical areas 521, 522, 525, and 561 are closed for the remainder of Trimester 1, through August 31, 2017, to all common pool vessels fishing on a groundfish trip with trawl, sink gillnet, or longline/hook gear, including handgear vessels. This closure is required because 90 percent of the Trimester 1 Total Allowable Catch (TAC) for Georges Bank cod has been caught. This area will reopen at the beginning of Trimester 2, at 0001 hours, September 1, 2017.

If you have crossed the vessel monitoring system demarcation line and are currently at sea on a groundfish trip, you may complete your trip in all or part of the closed areas. If you have set gillnet gear prior to July 28, 2017, you may complete your trip to retrieve that gear.



### Frequently Asked Questions

<b>Why is this action being taken?</b>	To avoid quota overages we are required to close the Trimester TAC Area for a stock when 90 percent of the Trimester TAC is caught.
<b>How much of the quota has been caught?</b>	As of July 27, it is projected that 90 percent of the quota for GB cod has been caught. Quota monitoring reports are updated on the internet at: <a href="http://www.greateratlantic.fisheries.noaa.gov/">http://www.greateratlantic.fisheries.noaa.gov/</a> .
<b>What happens if the Trimester TAC is exceeded? Underharvested?</b>	If the Trimester 1 or Trimester 2 TAC for a stock is exceeded, the overage is deducted from the Trimester 3 TAC. Any unused portion of the Trimester 1 or Trimester 2 TAC for the stock is carried forward to the following trimester. No unused portion of the total annual quota may be carried over to the following fishing year.
<b>What happens if the annual quota is exceeded?</b>	If the 2017 fishing year quota is exceeded, the amount of the overage will be deducted from the common pool's quota for fishing year 2018.

*For small entity compliance guides, this bulletin complies with section 212 of the Small Business Regulatory Enforcement and Fairness Act of 1996. This notice is authorized by the Regional Administrator of the National Marine Fisheries Service, Greater Atlantic Region.*



## Sherie Goutier

---

**From:** QC <QC@nefm.com>  
**Sent:** Wednesday, August 02, 2017 2:53 PM  
**To:** info info  
**Subject:** unfair

I don't know who to contact on this but think this is a start  
I cannot believe what they have done to the recreational deep see fishing laws.  
You let the net draggers kill everything in their path and I can't keep 1 cod  
Last trip out I had to ask the captain of the boat to move because we were catching nothing but BIG cod.  
Now you are shutting down the Haddock season as of 9/17/17  
That is absolute BULLSHIT  
You are going to put the recreational boats out of business. Or is that what you are trying to do.  
I have never seen anything so asinine in my life.  
Take away the poor man's ability to go catch dinner and let the net draggers continue to destroy the fish population.  
Please come to your senses

Don Westcott

JC 8/8/17



# Greater Atlantic Region Bulletin

NOAA Fisheries, Greater Atlantic Regional Fisheries Office, 55 Great Republic Drive, Gloucester, MA 01930

For Information Contact:  
Sustainable Fisheries Division  
(978) 281-9315

<http://www.greateratlantic.fisheries.noaa.gov/>

Date Issued: 7/27/2017

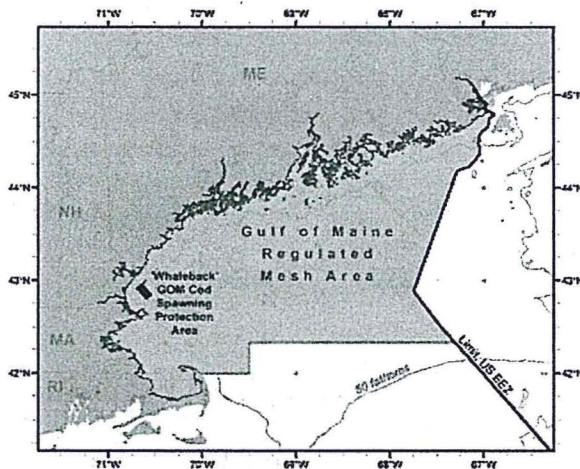
JUL 31 2017

## NORTHEAST MULTISPECIES (GROUNDFISH) FISHING YEAR 2017 RECREATIONAL REGULATIONS

NEW ENGLAND FISHERY  
MANAGEMENT COUNCIL

*Effective Date: July 27, 2017*

We have approved new management measures for the remainder of the 2017 fishing year for the Gulf of Maine (GOM) cod and haddock recreational fishery. These changes take effect on July 27, 2017.



### Gulf of Maine Cod Possession Prohibition

This action reinstates the prohibition on recreational possession of GOM cod. In 2016, recreational catch was greater than predicted, and the cod recreational harvest limit was exceeded by 92 percent. Haddock catch exceeded the harvest limit by 15 percent.

### New Recreational Measures for Fishing Year 2017

After consulting with the Council, we are implementing a prohibition on recreational possession of GOM cod. Additionally, we are reducing the bag limit, for GOM haddock, from 15 fish to 12 fish. In addition to the existing spring

closure (March 1 – April 14), a fall closure is being implemented from September 17 through October 31. The minimum size for GOM haddock is unchanged. Recreational measures for cod and haddock outside the GOM Regulated Mesh Area remain unchanged.

### **Fishing Year 2017 Recreational Fishing Measures for GOM cod and haddock**

Year	GOM Haddock			GOM Cod		
	Bag Limit	Size Limit	Open Season	Bag Limit	Size Limit	Open Season
2017	12	17 inches	May 1 – September 16 November 1 – February 28 and April 15 – April 30	Recreational GOM Cod Possession Prohibited		

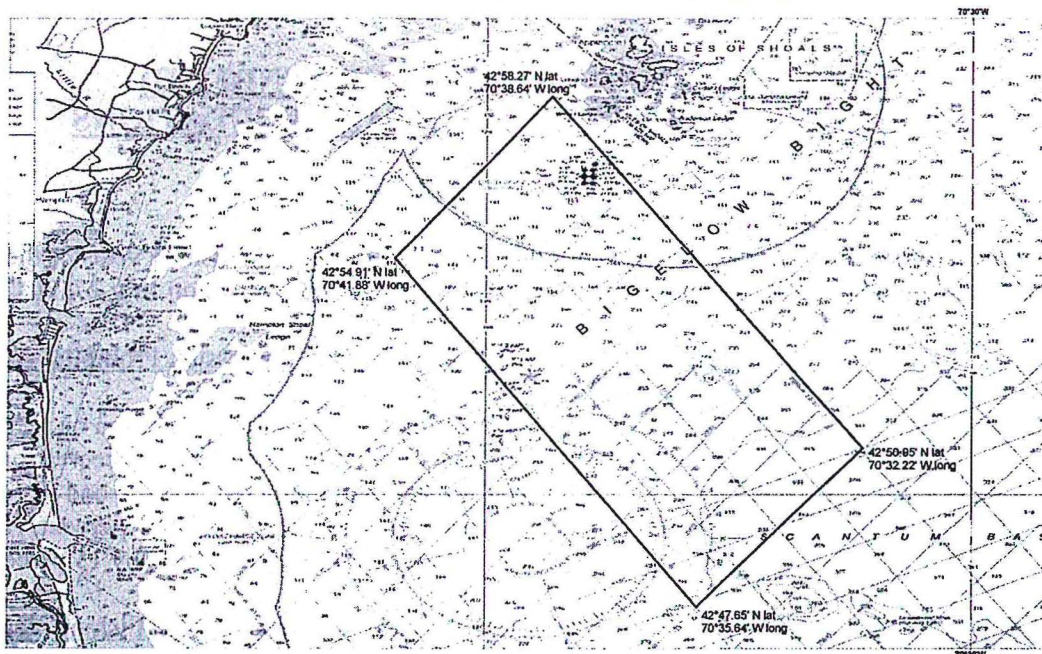
*Bag limits are per person per day and size limits are minimum total length.*

Additional information on the fishing year 2017 recreational measures can be found at:  
<http://www.greateratlantic.fisheries.noaa.gov/sustainable/recfishing/regs/index.html>.

## Whaleback Cod Spawning Protection Area

Recreational vessels remain subject to the Whaleback Cod Spawning Protection Area.

### Whaleback Cod Spawning Protection Area



#### **Gear Restrictions**

From April 1 through June 30 of each year, all recreational vessels, including private recreational and charter/party vessels, may only use pelagic hook-and-line gear, as defined below, when fishing in the GOM Cod Spawning Protection Area.

Point	N. Latitude	W. Longitude
CSPA1	42° 50.95'	70° 32.22'
CSPA2	42° 47.65'	70° 35.64'
CSPA3	42° 54.91'	70° 41.88'
CSPA4	42° 58.27'	70° 38.64'

Pelagic hook-and-line gear is defined as handline or rod and reel gear that is designed to fish for, or that is being used to fish for, pelagic species. No portion of this gear may be operated in contact with the bottom at any time.

#### **Possession Restrictions**

Any vessel fishing in the GOM Cod Spawning Protection Area, including pelagic hook-and-line gear by recreational vessels, is prohibited from possessing or retaining regulated species or ocean pout from April 1 through June 30 of each year.

#### **Transiting**

Recreational and commercial vessels are allowed to transit the GOM Cod Spawning Protection Area, provided all gear is stowed in accordance with the regulations.



**Billing Code 3510-22-P**

**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

**50 CFR Part 648**

**[Docket No. 161220999-7682-02]**

**RIN 0648-BG52**

**Magnuson-Stevens Fishery Conservation and Management Act Provisions;  
Fisheries of the Northeastern United States; Northeast Groundfish Fishery; Fishing  
Year 2017; Recreational Management Measures**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and  
Atmospheric Administration (NOAA), Commerce.

**ACTION:** Final rule.

**SUMMARY:** This action sets the recreational management measures for Gulf of Maine  
cod and haddock for the remainder of the 2017 fishing year. This action prohibits  
recreational possession of cod, reduces the haddock bag limit, and implements a new  
closed season for haddock in the fall. The intended effect of this action is to reduce catch  
of cod and haddock in order to ensure that fishing year 2017 recreational catch limits are  
not exceeded.

**DATES:** Effective July 27, 2017.

**ADDRESSES:** Copies of a supplemental environmental assessment (EA) to Framework  
Adjustment 55 to the Northeast Multispecies Fishery Management Plan prepared by the  
Greater Atlantic Regional Fisheries Office and Northeast Fisheries Science Center; and  
the Framework 55 EA prepared by the New England Fishery Management Council for

this rulemaking are available from: John K. Bullard, Regional Administrator, National Marine Fisheries Service, 55 Great Republic Drive, Gloucester, MA 01930. The Framework 55 EA and supplement are also accessible via the Internet at:

<https://www.greateratlantic.fisheries.noaa.gov/regs/2016/March/16mulfw55ea.pdf>

and

[https://www.greateratlantic.fisheries.noaa.gov/regs/2016/March/160212\\_rec\\_measures\\_draft\\_ea.pdf](https://www.greateratlantic.fisheries.noaa.gov/regs/2016/March/160212_rec_measures_draft_ea.pdf). These documents are also accessible via the Federal eRulemaking Portal:

<http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** Emily Keiley, Fishery Management Specialist, phone: 978-281-9116; e-mail: [Emily.Keiley@noaa.gov](mailto:Emily.Keiley@noaa.gov).

**SUPPLEMENTARY INFORMATION:**

**Table of Contents**

1. Fishing Year 2017 Recreational Management Measures
2. Regulatory Corrections Under Regional Administrator Authority

**1. Fishing Year 2017 Recreational Management Measures**

**Background**

*Statutory Authority*

Under the Northeast Multispecies Fishery Management Plan (FMP), sub-annual catch limits (sub-ACL) for the recreational fishery are established for each fishing year for Gulf of Maine (GOM) cod and haddock. The regulations at 50 CFR 648.89(f)(3) authorize the Regional Administrator, in consultation with the New England Fishery Management Council (NEFMC), to modify the recreational management measures for the upcoming fishing year to ensure that the recreational fishery achieves, but does not

exceed, the recreational fishery sub-ACLs. The proposed rule for this action (82 FR 24086; May 25, 2017) provides details on the consultation with the NEFMC and how the NEFMC developed its recommendations; that information is not repeated here.

### *Council's Proposed Measures*

Because of repeated recreational fishery sub-ACL overages (haddock the last five years and cod three of five years) and the model's prediction that the NEFMC's recommended measures have only a 50-percent probability of keeping haddock catch below the sub-ACL, we considered whether it may be prudent to implement a more conservative fall closure that would likely have a higher probability of constraining haddock catch to the sub-ACLs. There are four primary reasons that the Council's proposed measures would sufficiently constrain catch to the sub-ACL's and were more consistent with the FMPs goals and objectives than the closed area measure we presented: 1) The Council's measures include a new fall closed season, cod prohibition, and a more conservative haddock bag limit; 2) improved information used in the bioeconomic model this year provides greater confidence in its predictions compared to previous years; 3) the interactions between GOM cod and haddock and the status of each of these stocks; and 4) newly available commercial catch data show a strong likelihood that overall GOM haddock catch will be under the total ACL for 2016 and, that the recreational sub-ACL and AM system combined with the overall ACL is effectively constraining catch.

We presented a more conservative closure season for comments to closely consider whether the Council's proposed accountability measures would sufficiently account for management uncertainty, prevent GOM cod and haddock catch overages, and

provide an opportunity for the fishery to attain its allowable catch. We have determined that the more conservative measure is not necessary. The measures proposed by the Council are more conservative than the 2016 management measures. The possession of cod is being prohibited, the haddock bag-limit has been reduced, and a new fall closure is being implemented. We expect that these measures will allow the recreational fishery to achieve, but not exceed their sub-ACLs.

We also considered the improved performance of the model. The model projects recreational catch using economic information from an angler choice experiment survey and biological information about the current stock structure for the GOM cod and haddock stocks with historical catchability data from recreational anglers. Recent modifications to the model, including the incorporation of new data, improved its ability to accurately estimate recreational catches, and thus increases our confidence in the management measures based on its output. Specifically, the model now includes data from 2015, when cod possession was prohibited for the first time, and as a result, the model is better able to estimate the impact of prohibiting cod on the number of angler trips and catch of cod and haddock. While we have relied on the model using similar buffers in the past, the model is now improved, providing greater confidence in the outputs.

When evaluating the merit of each fall closure option, we considered the impacts on both haddock and cod. GOM cod is overfished and overfishing is occurring, but GOM haddock is a healthy stock. The more conservative closed area we sought comments on is estimated to have an increased probability of constraining GOM haddock catch to the sub-ACL (70 percent), but is projected to result in slightly increased GOM

cod catch. Given the poor status of GOM cod, an option that is projected to increase GOM cod catch is a concern. We determined that the risk associated with increasing GOM cod catch outweighed the potential benefits of a slightly higher probability of limiting GOM haddock catch to the sub-ACL especially given the model improvements.

Last, newly available commercial catch data for 2016 show that overall catch is being effectively constrained. The newly available data shows that that the total commercial catch for GOM haddock was only 66 percent of the commercial ACL. The recreational sub-ACL is only a small portion of the overall ACL. Thus, despite a relatively minor overage in the recreational fishery, total 2016 GOM haddock catch, is expected to be below the overall ACL.

*Fishing Year 2017 Recreational Measures*

Because the recreational measures currently in place for GOM cod and haddock are not expected to constrain fishing year 2017 catch to the sub-ACLs, we are adjusting management measures for the remainder of the fishing year, as recommended by the NEFMC. Effective July 27, 2017, recreational possession of GOM cod will be prohibited. The minimum size for GOM haddock is unchanged, but the bag limit is reduced from 15 fish to 12 fish, and a fall closed season has been added to the existing spring closure. These measures are summarized in Table 1, along with information on the current measures for comparison.

**Table 1. GOM Cod and Haddock Recreational Management Measures for Fishing Year 2017 and Status Quo (Fishing Year 2016) Measures.**

	Current Measures			New 2017 Measures		
Stock	Per Day Possession Limit (fish per angler)	Minimum Fish Size	Season When Possession is Permitted	Per Day Possession Limit (fish per angler)	Minimum Fish Size	Season When Possession is Permitted



GOM Cod	1	24 inches (61.0 cm)	August 1 – September 30	Possession Prohibited Year-Round		
GOM Haddock	15	17 inches (43.2 cm)	Year Round Except March 1 – April 14	12	17 inches (43.2 cm)	May 1 – September 16 November 1 – February 28 and April 15 – April 30

*Analysis*

Recreational catch and effort data are estimated by the Marine Recreational Information Program (MRIP). A peer-reviewed bioeconomic model, developed by the Northeast Fisheries Science Center, was used to estimate 2017 recreational GOM cod and haddock mortality under various combinations of minimum sizes, possession limits, and closed seasons. Even when incorporating zero possession of GOM cod, the model estimates that the status quo measures for GOM haddock are not expected to constrain the catch of haddock, or the bycatch of cod, to the 2017 catch limits. Therefore, we are implementing more restrictive measures. Additional details are provided in the Supplemental EA (see **ADDRESSES**) and the proposed rule, and are not repeated here.

The final measures implemented by this action for the 2017 fishing year, as recommended by the NEFMC, are expected to result in a decrease in the number of trips taken by anglers, and decreased catch, in comparison to retaining the current measures, which is projected to allow the recreational fishery to reach, but not exceed, the 2017 recreational sub-ACLs (Table 2).

**Table 2. Summary of the Model Estimates of Catch and the Likelihood of Catch Remaining Below the sub-ACLs for the Status Quo Measures and the 2017 Measures.**

Measures	Predicted Haddock Catch (mt)	Probability Haddock Catch Below sub-ACL	Predicted Cod Catch (mt)	Probability Cod Catch Below sub-ACL
New 2017 Measures	1,160	50%	147	78%
Status Quo	1,299	0%	292	0%

**2. Regulatory Corrections and Other Measures Under Regional Administrator Authority**

We have made numerous administrative changes under the authority of section 305(d) of the Magnuson-Stevens Fishery Conservation and Management Act that are necessary and consistent with the FMP’s goals and objectives. In § 648.89(b), we added an exception to the minimum fish sizes for GOM cod and haddock to allow vessels to transit the GOM Regulated Mesh Area while in possession of cod and haddock caught outside the area, provided those fish meet the minimum sizes specified for fish caught outside the area. Amendment 16 to the FMP included seasonal closures of the GOM recreational fishery for cod and haddock, and also implemented a possession limit exemption to allow vessels to transit the GOM when it was closed while in possession of fish legally caught outside the area. At that time, there was a single minimum size for cod, and a single minimum size for haddock, regardless of where the fish were caught and the transiting provision included in Amendment 16 did not address minimum fish size restrictions.

Subsequently, we changed the minimum sizes for GOM cod and haddock as part of the proactive accountability measures. We adjust the recreational measures for only GOM cod and haddock because these are the only stocks allocated a recreational sub-

ACL. This has created a complicated system in which vessels may transit the GOM Regulated Mesh Area with fish legally caught outside the area in excess of the GOM possession limits, but those vessels must comply with the most restrictive minimum size of the two areas, rather than the minimum size applicable to where the fish were caught. The intent of this change is to simplify the existing transiting exemption by allowing any cod and haddock legally caught outside the GOM to be possessed by vessels transiting the GOM to ensure consistent implementation of the existing transiting provision.

In § 648.89(e), we revised the text specifying the requirements for the letters of authorization allowing charter and party boats to fish in the GOM closed areas and the Nantucket Lightship Closed Area to improve readability. In paragraph (e)(3), we also corrected the name of the NMFS office issuing letters of authorization from the “Northeast Regional Office” to the “Greater Atlantic Regional Fisheries Office.”

In § 648.89(f)(2)(ii), we removed text prohibiting the Regional Administrator from adjusting the possession limit for GOM cod while recreational possession of GOM cod was prohibited by the Northeast Multispecies FMP. In 2016, Framework Adjustment 55 removed this prohibition, but the final rule implementing Framework Adjustment 55 inadvertently failed to remove this text. This change is intended to correct the regulations to accurately reflect the NEFMC’s intent in Framework Adjustment 55.

### **Comments and Responses**

We received 67 comments on the proposed 2017 recreational measures. Two comments received were not germane to the proposed measures. We received pertinent comments from the NEFMC, the Massachusetts Division of Marine Fisheries, the New

Hampshire Fish and Game Department, the Stellwagen Bank Charter Boat Association, and 63 members of the public.

*Timing*

*Comment 1:* The New Hampshire Fish and Game Department, the Stellwagen Bank Charter Boat Association, and 31 individuals submitted comments regarding the publication of the proposed rule after the May 1 start of the 2017 fishing year. The New Hampshire Fish and Game Department expressed concern that the publication of the proposed rule after the start of the fishing year would exacerbate the existing timing problems of states attempting to match federal measures and inform anglers, and for-hire businesses attempting to attract business before knowing the regulations. The Stellwagen Bank Charter Boat Association and 30 individuals expressed disappointment because they feared that late implementation of the changes to the recreational measures would undermine the work of the NEFMC and its Recreational Advisory Panel (RAP) to develop and provide recommendations that would prevent catch from exceeding the quotas. The Stellwagen Bank Charter Boat Association and 30 individuals also urged that recreational anglers should not be subject to any further restrictions in the haddock bag limit or increases in the haddock minimum size in fishing year 2018 as a result of late implementation of changes in fishing year 2017. One individual commented that we should not change measures mid-season because business owners and recreational anglers have made financial decisions based on the current regulations.

*Response:* We agree that these timing issues make it difficult for the for-hire fleet to market and book trips, hamper the ability of states to implement complementary recreational measures, and create challenges for recreational anglers to be informed of the

latest regulations. The timing of changes to the recreational measures has been an issue for several years. MRIP collects information on recreational catch and effort. This information is processed in 2-month 'waves' and preliminary data is available six weeks after the end of each wave. Because of this, preliminary catch through October (which includes the majority of annual recreational groundfish activity) is first available after mid-December. As a result, January is the earliest we are able to present an analysis of the MRIP information and any potential changes that may be necessary for the next fishing year. This creates a compressed period for consideration of options, the public NEFMC consultation process, and proposed and final rulemaking. Because of this timeline, recreational measures for the new fishing year are generally not finalized until just prior to the start of the fishing year.

Although it is not ideal to change the recreational measures after the start of the fishing year this year, it is necessary that the revised measures be implemented before the recreational cod season opens. The recreational cod season is closed under status quo measures until August 1. While late implementation is not ideal, the timing of this action will still effectively prohibit the retention of cod in the recreational fleet.

Because of the challenging timeline of the current recreational process, we are working with the NEFMC to consider possible ways to modify the regulatory process so regulations for the recreational fishery can be finalized sooner. Changes to the recreational process would be incorporated into Framework 57, which is intended to be implemented for the 2018 fishing year. Additionally, any changes to the recreational measures for fishing year 2018 would be based on the 2018 catch limits and an analysis of expected catch in 2018.

*NMFS Additional Option for a September Closure*

*Comment 2:* The Stellwagen Bank Charter Boat Association and 30 individuals alleged that the reason the agency proposed an alternative September closure for haddock was because implementing the reduced haddock bag limit after May 1 would result in increased catch. One additional individual requested that we inform the recreational community of our reasons for the measures that were proposed.

*Response:* As discussed in the proposed rule, we sought comments on the effects of a more conservative fall closure on the fishery in comparison to the Council's proposed closure to address concerns about the recreational fishery's recent history of exceeding the GOM cod and haddock sub-ACLs. A U.S. District Court considered a history of overages and the effectiveness of accountability measures in the Gulf of Mexico red snapper fishery (*Guindon v. Pritzker, 2014*) and struck down the accountability measure because they did not sufficiently ensure the limits would not be exceeded. We presented a more conservative closure season for comments to closely consider whether the Council's proposed accountability measures would sufficiently account for management uncertainty, prevent GOM cod and haddock catch overages, and provide an opportunity for the fishery to attain its allowable catch. As discussed in the preamble, we have determined that the Council's proposed measures sufficiently constrain catch and are more consistent with the FMP's goals and objectives.

*Comment 3:* The NEFMC, the Massachusetts Division of Marine Fisheries, and the New Hampshire Fish and Game Department, and one individual commented that the issues in the *Guindon v. Pritzker* case are distinct from the recreational fishery for GOM

cod and haddock, and that measures more conservative than the suite recommended by the NEFMC are not necessary or justified. The commenters also noted that the additional NMFS alternative in the proposed rule would not provide a clear conservation benefit in comparison to the NEFMC's recommended suite of measures.

*Response:* We agree that the recreational fishery for GOM cod and haddock and the suite of management measures for the fishery is distinct from the *Guindon v. Pritzker* case. Further, the GOM haddock stock is healthy and that the total ACL has not been fully harvested in the last 2 years. We considered stock status when evaluating the alternatives and, as discussed in the preamble, are implementing the NEFMC's recommended measures rather than the more conservative September closure for haddock. The model predicts that these measures have a 78-percent chance that catch of the rebuilding GOM cod stock will not exceed the recreational quota, and a 50-percent chance that the catch of the abundant and healthy GOM haddock stock will achieve, but not exceed the recreational quota. While the GOM haddock stock is healthy, the GOM cod stock is overfished and estimated to be only 4-6 percent of the target population size. Given the differences in the sizes and health of these two stocks, the final 2017 measures appropriately balance the risk of exceeding the quotas with the goal of achieving the quotas and providing the greatest overall benefit to the nation.

#### *The Bioeconomic Model and Uncertainty*

*Comment 4:* The Massachusetts Division of Marine Fisheries and the New Hampshire Fish and Game Department commented that the bioeconomic model fails to account for variance in the underlying MRIP data and uncertainty in the model inputs because it uses point estimates. The NEFMC commented that, in 2015, when recreational

possession of cod was prohibited for the first time, the bioeconomic model overestimated cod catch and angler effort, and that a cod prohibition in 2017 could again result in lower actual angler effort than the model has predicted.

*Response:* The bioeconomic model uses point estimates of catch from MRIP and currently does not incorporate measures of uncertainty in the MRIP data, although it might be possible to incorporate some measures of uncertainty in the future. As a result, the the model may underestimate or overestimate catch and angler trips in any given year. In recent years, the model has underestimated haddock and cod catch, with one exception in 2015. Although the bioeconomic model overestimated cod catch and the number of angler trips in 2015, it is unlikely to recur in 2017. The model had likely overestimated cod catch because at that time the model did not take into account factors that we expected would keep cod catch low, including a prohibition on retention of cod and the ability of vessels to avoid cod while targeting other species. However, we expect the bioeconomic model to better estimate the effect of prohibiting cod possession on total cod catch and the number of angler trips in 2017 because the model now incorporates data from 2015.

Although there are uncertainties in the bioeconomic model, the Northeast Multispecies FMP incorporates both scientific uncertainty and management uncertainty in setting annual catch limits. These uncertainty buffers increase the likelihood of achieving management targets and reduce the risk of overfishing. Among other factors discussed in the preamble, the incorporation of scientific and management uncertainty already built into setting recreational catch limits was a consideration in our determination to adopt the less conservative measures for haddock.



*Comment 5:* The New Hampshire Fish and Game Department and the Massachusetts Division of Marine Fisheries commented that we should address uncertainty in the GOM cod and haddock recreational fishery in a similar manner to the Atlantic States Marine Fisheries Commission's approach to using point estimates in the black sea bass fishery. Specifically, the New Hampshire Fish and Game Department recommended that we compare MRIP harvest estimates with a percent standard error to the recreational sub-ACLs and retain the status quo recreational measures for the next year if the recreational quota was within the percent standard error of the MRIP harvest estimate. The Massachusetts Division of Marine Fisheries also urged that we consider the Atlantic States Marine Fisheries Commission's approach to summer flounder. Specifically, using multiple years of MRIP data and incorporating standard errors around the MRIP catch estimates when developing recreational measures.

*Response:* The bioeconomic model uses point estimates of recreational catch and effort from MRIP and produces point estimates that may underestimate or overestimate catch and angler trips. At the request of the New Hampshire Fish and Game Department, we provided an estimate of model uncertainty for the two options proposed. That estimate did not include uncertainty in the MRIP data, but did incorporate some sources of uncertainty in the model simulations. While the estimate is informative, additional work should be done before determining whether or not the bioeconomic model can incorporate uncertainty. Amendment 16 to the Northeast Multispecies FMP requires that recreational catch is calculated consistent with the catch used in the stock assessment. At this time, the stock assessments for GOM cod and haddock do not incorporate separate calculations of uncertainty for MRIP catch estimates. In evaluating possible changes to

the recreational management process in Framework 57, the NEFMC could consider changes to the method for determining when AMs are triggered.

#### *Haddock Measures*

*Comment 6:* The New Hampshire Fish and Game Department urged us to maintain the current haddock measures, in conjunction with prohibiting recreational possession of cod (analyzed and presented to the NEFMC as Option 1), because the GOM haddock stock is not overfished and the haddock quota is increasing. Additionally, New Hampshire contended that overfishing would not occur if the recreational fishery caught the amount of haddock predicted by the bioeconomic model for this scenario (1,288 mt) because total catch (including all other sectors catching their full quotas) would still be less than the acceptable biological catch due to the buffers between the acceptable biological catch and the catch limits. Further, New Hampshire argued that the recreational haddock quota, 1,160 mt, was within the 95-percent confidence interval of the model's predicted haddock catch for Option 1. The Massachusetts Division of Marine Fisheries (MA DMF) also commented that the recreational haddock quota for 2017 was within the 95-percent confidence interval for Option 1, but supported the NEFMC's recommended haddock measures, rather than the status quo haddock measures.

*Response:* We disagree that the status quo haddock measures should be maintained. While the GOM haddock stock is healthy and growing, we are still obligated to set measures we expect will achieve, but not exceed the catch limit. As explained in our response to Comment 7, we expect the model's estimate of catch and effort to be more accurate now because the bioeconomic model now incorporates data from 2015,

when cod possession was prohibited. The 12-fish bag limit, with a 17-inch (43.2-cm) minimum size, and closed seasons March 1–April 14 and September 17–October 31 have a 50-percent chance of achieving, but not exceeding, the catch limit. This is an appropriate balance of risk for a healthy stock with a growing population. Setting measures we expect will exceed the catch limit solely because we expect the overage will not cause overfishing is inconsistent with the requirements of the Magnuson-Steven Fishery Conservation and Management Act.

*Comment 7:* Six commenters generally supported maintaining status quo measures.

*Response:* We disagree that the status quo recreational measures should be retained for 2017. A peer-reviewed bioeconomic model, developed by the Northeast Fisheries Science Center, was used to estimate 2017 recreational GOM cod and haddock mortality under various combinations of minimum sizes, possession limits, and closed seasons. Even when incorporating zero possession of GOM cod, the model estimates that the status quo measures for GOM haddock are not expected to constrain the catch of haddock, or the bycatch of cod, to the 2017 catch limits. The Council's more conservative measures are necessary to prevent exceeding the 2017 catch limits.

*Comment 8:* Thirty-three commenters supported the fall haddock closure as proposed by the NEFMC (September 17 through October 31). MA DMF specifically commented on the potential significant economic impact of a Labor Day closure, and cited this as one reason they supported the NEFMC proposed option. Thirty commenters discussed the benefits of keeping the fishery open in early September relative to allowing

recreational anglers a final opportunity to fish before many typically haul out their vessels, and end their season.

*Response:* We agree. After further consideration of the alternatives, the fall closure recommended by the NEFMC better aligns with the objectives of this action. We have approved the haddock measures recommended by the NEFMC. As further discussed in the proposed rule, the supplemental EA, and the preamble to this rule, the measures being implemented for the 2017 fishing year are expected to meet, but not exceed the catch limits, and provide a better balance between our conservation objectives and the anticipated negative short-term economic impacts of the proposed alternatives.

*Comment 9:* One commenter supported the 4-week September closure for haddock that we presented for comments as an alternative in the proposed rule. Another commenter supported a 4-week September closure starting the Monday after Labor Day, and one commenter opposed a fall closure for haddock in general.

*Response:* We disagree and are implementing the 6-week closure proposed by the NEFMC, as discussed in the preamble and response to Comment 11. Selection of the timing and length of the closure was based on the outputs of the model and the consideration of other factors in order to ensure the recreational fishery achieves, but does not exceed, the recreational fishery sub-ACLs. A fall closure was determined to be a necessary measure to ensure that not only the GOM haddock, but GOM cod sub-ACLs are not exceeded.

*Comment 10:* Thirty-seven commenters supported the 12-fish haddock bag limit.

*Response:* We agree and have approved the 12-fish haddock bag limit recommended by the NEFMC. As further discussed in the proposed rule, preamble, and

the supplemental EA, and the preamble to this rule, the measures being implemented for the 2017 fishing year are expected to meet, but not exceed the catch limits.

*Comment 11:* Three commenters support a lower bag limit for haddock than was proposed.

*Response:* We disagree that a lower bag limit is needed. The 12-fish bag limit for haddock, in conjunction with the other measures, is intended to balance the need to constrain catch within the ACL, with social and economic considerations. Further reduction of the haddock bag limit is not biologically necessary and would likely unnecessarily increase negative economic effects to the recreational fishery.

*Comment 12:* One commenter suggested that we reduce the haddock minimum size to 16 inches (40.64 cm) to reduce discards.

*Response:* We disagree. Potential changes to minimum sizes and the impact on the catch and fishery are incorporated into the bioeconomic model. We are maintaining the current minimum size (17 inches; 43.2 cm) for GOM haddock in this action.

#### *Cod Measures*

*Comment 13:* Seven commenters wanted the recreational cod fishery to be reopened. Two commenters wanted to maintain the status quo cod season. Several commenters referenced their personal fishing experience and stated that they encountered more cod in 2016 than they had in the past.

*Response:* We disagree that the recreational fishery for cod should be open in 2017. This action prohibits the retention of GOM cod by recreational anglers year-round. GOM cod is overfished, and overfishing is occurring. In fishing year 2016, the recreational cod ACL was exceeded by 92 percent, and the recreational cod quota

remains the same in 2017 as it was in 2016. More restrictive measures on recreational cod, and haddock, fishing are required to ensure that the recreational cod quota is not exceeded again. We understand that there are short-term negative economic effects associated with the prohibition on recreational cod fishing. We are hopeful that the continued efforts to rebuild the GOM cod stock will result in increased opportunities for recreational fishermen in the future.

*Comment 14:* Two comments discussed alternative management measures for cod that were not in the proposed rule: A 2- to 4-week cod season for one 26-inch (66.0-cm) or greater cod, or the use of a slot limit for cod (24-29 inches; 61.0-73.7 cm).

*Response:* We disagree that these options would have been viable alternatives for the 2017 fishing year. Even when zero possession of cod was analyzed, the recreational cod catch limit was projected to be exceeded without additional measures limiting the catch of haddock to further reduce the projected cod catch. Limited seasons and slot limits could be appropriate for consideration in future actions.

*Comment 15:* Thirty-six commenters supported the prohibition of cod.

*Response:* We agree. We have implemented the prohibition on recreational GOM cod catch as one measure to constrain 2017 recreational cod catch to the sub-ACL. GOM cod are overfished and overfishing is occurring so the recreational sub-ACL has been set at an extremely low level of 157 mt. This decision has been explained further in the preamble.

*Comment 16:* Two commenters cited concerns about the impact of the recreational fishery on spawning cod.

*Response:* This action did not consider measures to protect spawning cod, and as a result, these comments are irrelevant to, and outside the scope of, the measures approved in this final rule. However, to provide some background, the Northeast Multispecies FMP includes measures to protect spawning cod during times when aggregations are known to occur consistently. Some of these closures apply to the recreational fishery, while others only apply to commercial groundfish vessels. In the future, the NEFMC could consider changes to these closures, including the fisheries that are exempt from the closures, as well as additional spawning protections.

#### *General Comments*

*Comment 17:* Thirty-four commenters supported adoption of the measures proposed by the NEFMC.

*Response:* We agree, and are implementing the measures proposed by the NEFMC because these measures balance regional differences and impacts on anglers and the for-hire fleet. Additionally, the NEFMC measures provide a sufficient probability of achieving, but not exceeding, the GOM cod and haddock 2017 catch limits.

*Comment 18:* The NEFMC commented that although the NMFS option is estimated to have only \$100,000 less economic benefit than the NEFMC option, it is not clear if the model can accurately estimate the economic impact of a Labor Day weekend closure because it is less than a whole MRIP wave.

*Response:* We agree that the bioeconomic model estimates for a timeframe of less than 1 month may be less precise than estimates produced for a complete wave. We are not implementing the additional NMFS option for a 4-week closure in September.

*Comment 19:* Seven individuals commented that the commercial fishery should be shut down, or kept 50 miles from shore, to allow increased harvesting opportunities for recreational fishermen. One commenter asserted that the recreational fishery cannot catch as much as one commercial haul.

*Response:* The Northeast Multispecies FMP allocates separate sub-ACLs for GOM cod and haddock to both the commercial and recreational components of the fishery. Each component allocated a sub-ACL is also subject to specific AMs if it exceeds that sub-ACL. These measures are intended to ensure that each fishery is able to access the resource and be accountable for any overages, and is intended to prevent one component of the fishery from negatively affecting another component. The recreational fishery is allocated 33 percent of the total GOM cod ACL and 27 percent of the GOM haddock ACL, and in 2016 caught more than its allocation for both stocks. In recent years, recreational catch has, at times, exceeded commercial catch, and can be a substantial portion of overall GOM cod and haddock catch. Additionally, the status quo measures are not expected to constrain recreational catch to its sub-ACLs in 2017, and as a result, the final measures implemented in this action are necessary to ensure that the recreational sub-ACLs are not exceeded.

*Comment 20:* Two commenters supported separate measures for private vessels and for-hire vessels.

*Response:* During development of 2017 measures, the Council's RAP and Groundfish Oversight Committee considered separate measures for private vessels and the for-hire fleet. As discussed in the proposed rule, the NEFMC declined the Groundfish Committee's recommendation to implement separate measures for these



fleets at this time in deference to having a larger public process to consider the concept. Separate measures for these fleets may be considered in a future action.

*Comment 21:* One individual commented that haddock 17 inches (43.2 cm) and larger were rare and questioned why anglers do not see these small haddock turn into high numbers of larger fish the next year.

*Response:* In recent years, there have been multiple large year classes of haddock. These large year classes can make larger haddock appear less common by comparison; the proportion of young fish to old fish is high in the current population. The growth rate of haddock has varied over time and may be related to population size. Prior to declines of the haddock population in the mid-twentieth century, haddock grew slower than was observed when the population was smaller in the later twentieth century. In recent years, with the large populations of haddock and as a result, slower growth rates in haddock.

The average weight of haddock caught by recreational anglers in 2016 (1.7 lb; 0.8 kg) was the same as the average weight in 2015, while the average number of haddock caught per angler trip nearly doubled (from 5.5 to 14) between 2015 and 2016. This information does not demonstrate a strong benefit to further reduce the minimum size for haddock at this time.

*Comment 22:* The Stellwagen Bank Charter Boat Association and 31 individuals commented that the MRIP data are incorrect and suggested we should not use catch and effort estimates to manage the recreational fishery. In particular, estimates of the number of angler trips was a concern raised in these comments.

*Response:* Estimates of catch and effort must be used because it is not possible to have a complete census of all recreational anglers to capture all catch and every angler trip. MRIP is the method used to count and report marine recreational catch and effort. In January 2017, the National Academies of Science released their latest review of MRIP and recognized NMFS for making “impressive progress” and “major improvements” to MRIP survey designs since the 2006 review of MRIP. While there are some remaining challenges to MRIP surveys, we continue to make improvements including transitioning from the Coastal Household Telephone survey to the Fishing Effort Survey, which will further improve our estimates of recreational fishing effort.

#### **Classification**

The Administrator, Greater Atlantic Region, NMFS, determined that these measures are necessary for the conservation and management of the Northeast multispecies fishery and that the measures are consistent with the Magnuson-Stevens Fishery Conservation and Management Act and other applicable laws.

#### *Administrative Procedure Act*

Pursuant to 5 U.S.C. 553(d)(3), the Assistant Administrator for Fisheries finds good cause to make this rule effective immediately upon filing with the Office of the Federal Register. This final rule implements reductions from the recreational management measures implemented for fishing year 2016, and that currently remain in place. In fishing year 2016, the GOM cod recreational sub-ACL was exceeded by 92 percent and recreational sub-ACL is unchanged for 2017. GOM cod are overfished and overfishing is occurring, and it is critical that the 2017 recreational management measures, which prohibit the retention of cod, go into effect before the season opens to

ensure that the catch limit is not exceeded again. Fishing effort and catch are both strong in summer months. Further delay of the implementation of these measures increases the likelihood of quota overages that could require implementation of even more restrictive measures in a future action. If this rule is not effective on, or before, August 1, then the GOM recreational cod season will open and anglers will be able to retain these fish. A targeted fishery would result in an increase in cod catch not only due to retention of cod, but due to discards of cod which are higher during an open season than when anglers are intentionally avoiding cod altogether to focus on other species. Thus, delaying implementation of these measures would be contrary to the public interest of ensuring that GOM cod catch limits are not exceeded.

The Northeast Multispecies fishing year begins on May 1 of each year and continues through April 30 of the following calendar year. The collection and processing of recreational data creates a very compressed period for consideration of options, the public NEFMC process, and the rulemaking process prescribed by the Administrative Procedure Act. We consulted with the NEFMC in January 2017. On January 25, 2017, the NEFMC voted to recommend to us the suite of recreational measures we are implementing. In addition to this collaborative consultation process prescribed for the proactive AM, we must fully evaluate and analyze the measures under consideration. This involves not only the bioeconomic model output presented in January, but also includes an environmental analysis consistent with the NEPA requirements, and a systematic review of compliance with other applicable laws. In order to evaluate the impact of the 2016 recreational catch overages, and the proposed management alternatives, we needed to consider them in the context of total catch and catch limits.

Final data on commercial catch of GOM cod and haddock, and the portion of the catch limit that was utilized, was not available until July 5, 2017.

For the reasons outlined, NMFS finds that there is good cause to waive the otherwise applicable requirement to provide a 30-day delay in implementation.

*Executive Order (E.O.) 12866*

This final rule has been determined to be not significant for purposes of E.O. 12866.

*Regulatory Flexibility Act (RFA)*

A final regulatory flexibility analysis (FRFA) was prepared for this action. The FRFA incorporates the IRFA, a summary of the significant issues raised by the public comments in response to the IRFA and NMFS responses to those comments, and a summary of the analyses completed to support the action. The FRFA includes sections of the preamble (**SUPPLEMENTARY INFORMATION**) and analyses supporting this rulemaking, including the Framework Adjustment 55 EA, the supplemental EA to Framework Adjustment 55, and the supplemental information report. A description of the action, why it is being considered, and the legal basis for this action are contained in the supplemental information report and preamble to the proposed rule, and are not repeated here (see **ADDRESSES**). A summary of the analyses follows.

*A Summary of the Significant Issues Raised by the Public in Response to the IRFA, a Summary of the Agency's Assessment of Such Issues, and a Statement of Any Changes Made in the Final Rule as a Result of Such Comments*

Our responses to all of the comments received on the proposed rule, including those that raised significant issues with the proposed action, or commented on the

economic analyses summarized in the IRFA, can be found in the Comments and Responses section of this rule. In the proposed rule we solicited comments on two options. The majority of comments supported implementing the measures that the NEFMC recommended, including the fall haddock closure from September 17 through October 31. Most of these comments expressed disappointment that the recommended measures were not implemented in time for the May 1 start to the fishing year and raised concerns that the delay would cause further overages and result in additional restrictions on the recreational fishery in 2018. There was one comment on the IRFA. The NEFMC pointed out that the bioeconomic model cannot estimate recreational effort at a time scale of less than a month. Given this restriction it is not clear that the model can accurately capture the impacts of a closure that discourages recreational fishing during the Labor Day weekend, the last 3-day weekend of the summer and an important component of the for-hire fleet's business. This comment, among other information as discussed in the preamble, supports our decision to implement the NEFMC's proposed option.

*Description and Estimate of the Number of Small Entities to Which this Rule Would Apply*

The Small Business Administration (SBA) defines a small commercial finfishing or shellfishing business as a firm with annual receipts (gross revenue) of up to \$11.0 million. A small for-hire recreational fishing business is defined as a firm with receipts of up to \$7.5 million. Having different size standards for different types of fishing activities creates difficulties in categorizing businesses that participate in multiple fishing related activities. For purposes of this assessment business entities have been classified into the SBA-defined categories based on which activity produced the highest percentage

of average annual gross revenues from 2013-2015, the most recent 3-year period for which data are available. This classification is now possible because vessel ownership data have been added to Northeast permit database. The ownership data identify all individuals who own fishing vessels. Using this information, vessels can be grouped together according to common owners. The resulting groupings were treated as a fishing business for purposes of this analysis. Revenues summed across all vessels in a group and the activities that generate those revenues form the basis for determining whether the entity is a large or small business.

This rule includes closed seasons in addition to possession limits and size limits. For purposes of this analysis, it is assumed that for-hire businesses are directly affected by all three types of recreational fishing restrictions. According to the FMP, it is unlawful for the owner or operator of a charter or party boat issued a valid multispecies permit, when the boat is carrying passengers for hire, to:

- Possess cod or haddock in excess of the possession limits;
- Fish with gear in violation of the regulations; and/or
- Fail to comply with the applicable restrictions if transiting the GOM Regulated Mesh Area with cod or haddock on board that was caught outside the GOM Regulated Mesh Area.

As the for-hire owner and operator can be prosecuted under the law for violations of the proposed regulations, for-hire business entities are considered directly affected in this analysis. Anglers are not considered “entities” under the RFA and thus economic impacts on anglers are not discussed here.

For-hire fishing businesses are required to obtain a Federal charter/party multispecies fishing permit in order to carry passengers to catch GOM cod or haddock. Thus, the affected businesses entities of concern are businesses that hold Federal multispecies for-hire fishing permits. While all business entities that hold for-hire permits could be affected by changes in recreational fishing restrictions, not all business that hold for-hire permits actively participate in a given year. Those who actively participate, i.e., land fish, would be the group of business entities that are impacted by the regulations. Latent fishing power (in the form of unfished permits) has the potential to alter the impacts on a fishery, but it's not possible to predict how many of these latent business entities will or will not participate in this fishery in fishing year 2017. The Northeast Federal landings database (i.e., vessel trip report data) indicates that a total of 645 party/charter vessels held a multispecies for-hire fishing permit in 2015 (the most recent full year of available data). Of the 645 for-hire permitted vessels, however, only 208 actively participated in the for-hire Atlantic cod and haddock fishery in fishing year 2015 (i.e., reported catch of cod or haddock).

Using vessel ownership information developed from Northeast Federal permit data and Northeast vessel trip report data, it was determined that the 208 actively participating for-hire vessels are owned by 191 unique fishing business entities. The vast majority of the 208 fishing businesses were solely engaged in for-hire fishing, but some also earned revenue from shellfish and/or finfish fishing. The highest percentage of annual gross revenues for all but 18 of the fishing businesses was from for-hire fishing. In other words, the revenue from for-hire fishing was greater than the revenue from shellfishing and the revenue from finfish fishing for all but 18 of the business entities.

According to the SBA size standards, small for-hire businesses are defined as firms with annual receipts of up to \$7.5 million, and small commercial finfishing or shellfishing business as firms with annual receipts (gross revenue) of up to \$11.0 million. Average annual gross revenue estimates calculated from the most recent three years (2013-2015) indicate that none of the 191 for-hire business entities had annual receipts of more than \$5.2 million from all of their fishing activities (for-hire, shellfish, and finfish). Therefore, all of the affected for-hire business entities are considered “small” by the SBA size standards and thus this action will not disproportionately affect small versus large for-hire business entities.

*Description of the Projected Reporting, Record-Keeping, and Other Compliance Requirements of this Rule*

There are no reporting, recordkeeping, or other compliance requirements.

*Federal Rules Which May Duplicate, Overlap, or Conflict with this Rule*

The action is authorized by the regulations implementing the Northeast Multispecies FMP. It does not duplicate, overlap, or conflict with other Federal rules.

*Description of Significant Alternatives to the Rule Which Accomplish the Stated Objectives of Applicable Statutes and Which Minimize Any Significant Economic Impact on Small Entities*

A total of seven combinations of recreational measures were presented to the Recreational Advisory Panel, the Groundfish Oversight Committee, and the NEFMC. This included the status quo and an option (presented as Option 1) that prohibited cod possession while retaining the current haddock measures that would not have restrained catch to the quotas, and thus, would not have accomplished the objective. The proposed



options that would accomplish the objectives were the NEFMC recommended option (presented as Option 2) and the additional NMFS option (presented as Option 3), which are discussed in detail in the preamble of the proposed rule. The remaining three options (Options 4, 5, and 6 in Table 3) that would accomplish the objective were discussed by all three groups. These remaining options were rejected either because implementation was viewed as confusing to the public (e.g., implementing a May closure shortly after the start of the fishing year on May 1) or in deference to having a larger public process to consider the concept (i.e., separate measures for the private anglers and the for-hire fleet).

**Table 3. Projected Fishing Year 2017 Recreational Cod and Haddock Catch under Alternative Measures Not Proposed**

Possible 2017 Measures	Haddock			Cod			Predicted Haddock Catch (mt)	Probability Haddock Catch Below sub-ACL (percent)	Predicted Cod Catch (mt)	Probability Cod Catch Below sub-ACL (percent)
	Haddock Possession Limit	Minimum Fish Size	Closed Season	Cod Possession Limit	Minimum Fish Size	Closed Season				
Option 4	15	17	3/1 - 4/14 2 weeks in May	N/A	N/A	5/1 - 4/30	1,118	73	153	61
Option 5	10	17	3/1 - 4/14 1 week in May	N/A	N/A	5/1 - 4/30	1,149	68	157	51
Option 6 Private	12	17	3/1 - 4/14 9/17 - 10/31	N/A	N/A	5/1 - 4/30	1,159	51	153	55
Option 6 For Hire	10	17	3/1 - 4/14	N/A	N/A	5/1 - 4/30				

Section 212 of the Small Business Regulatory Enforcement Fairness Act of 1996 states that, for each rule or group of related rules for which an agency is required to prepare a FRFA, the agency shall publish one or more guides to assist small entities in complying with the rule, and shall designate such publications as “small entity compliance guides.” The agency shall explain the actions a small entity is required to take to comply with a rule or group of rules. As part of this rulemaking process, a letter to permit holders that also serves as small entity compliance guide (the guide) was prepared. Copies of this final rule are available from the Greater Atlantic Regional Fisheries Office (see ADDRESSES), and the guide, i.e., bulletin, will be sent to all holders of permits for the Northeast multispecies fishery. The guide and this final rule will be available upon request.

**List of Subjects in 50 CFR Part 648**

Fisheries, Fishing, Recordkeeping and reporting requirements.

Dated: July 25, 2017.

---

Samuel D. Rauch, III,

Deputy Assistant Administrator for Regulatory Programs,

National Marine Fisheries Service.

For the reasons set out in the preamble, NMFS amends 50 CFR part 648 as follows:

**PART 648--FISHERIES OF THE NORTHEASTERN UNITED STATES**

1. The authority citation for part 648 continues to read as follows:

**Authority:** 16 U.S.C. 1801 *et seq.*

2. In § 648.89:

a. Revise paragraphs (b)(2) and (c)(1);

b. Remove paragraph (c)(2);

c. Redesignate paragraphs (c)(3) through (8) as paragraphs (c)(2) through (7), respectively;

d. Revise newly redesignated paragraph (c)(7); and

e. Revise paragraphs (e) and (f).

The revisions and additions read as follows:

**§ 648.89 Recreational and charter/party vessel restrictions.**

\* \* \* \* \*

(b) \*\*\*

(2) *Exceptions*—(i) *Fillet size*. Vessels may possess fillets less than the minimum size specified, if the fillets are taken from legal-sized fish and are not offered or intended for sale, trade or barter.

(ii) *Transiting*. Vessels in possession of cod or haddock caught outside the GOM Regulated Mesh Area specified in § 648.80(a)(1) may transit this area with cod and haddock that meet the minimum size specified for fish caught outside the GOM Regulated Mesh Area specified in § 648.80(b)(1), provided all bait and hooks are

removed from fishing rods, and any cod and haddock on board has been gutted and stored.

\*\*\*\*\*

(c) *Possession Restrictions*—(1) *Cod*—(i) *Outside the Gulf of Maine*—(A) *Private recreational vessels*. Each person on a private recreational vessel may possess no more than 10 cod per day in, or harvested from, the EEZ when fishing outside of the GOM Regulated Mesh Area specified in § 648.80(a)(1).

(B) *Charter or party boats*. Each person on a charter or party fishing boat permitted under this part, and not fishing under the NE multispecies DAS program or on a sector trip, may possess unlimited cod in, or harvested from, the EEZ when fishing outside of the GOM Regulated Mesh Area specified in § 648.80(a)(1).

(ii) *Gulf of Maine*—(A) *Private recreational vessels*. When fishing in the GOM Regulated Mesh Area specified in § 648.80(a)(1), persons aboard private recreational fishing vessels may not fish for or possess cod, except that each person on a private recreational vessel in possession of cod caught outside the GOM Regulated Mesh Area may transit the GOM Regulated Mesh Area with cod up to the possession limit specified at § 648.80(c)(1)(i)(A), provided all bait and hooks are removed from fishing rods and any cod on board has been gutted and stored.

(B) *Charter or party boats*. When fishing in the GOM Regulated Mesh Area specified in § 648.80(a)(1), persons aboard a charter or party fishing boat may not fish for or possess cod, except that each person on a charter or party fishing boat permitted under this part, and not fishing under the NE multispecies DAS program or on a sector trip, in possession of cod caught outside the GOM Regulated Mesh Area specified in §

648.80(a)(1) may transit the GOM Regulated Mesh Area in possession of cod caught outside the GOM Regulated Mesh Area with cod up to the possession limit specified at § 648.80(c)(1)(i)(B), provided all bait and hooks are removed from fishing rods and any cod on board has been gutted and stored.

(iii) *Fillet conversion.* For purposes of counting fish, fillets will be converted to whole fish at the place of landing by dividing the number of fillets by two. If fish are filleted into a single (butterfly) fillet, such fillet shall be deemed to be from one whole fish.

(iv) *Application of possession limit.* Cod harvested by recreational fishing vessels in or from the EEZ with more than one person aboard may be pooled in one or more containers. Compliance with the possession limit will be determined by dividing the number of fish on board by the number of persons on board. If there is a violation of the possession limit on board a vessel carrying more than one person, the violation shall be deemed to have been committed by the owner or operator of the vessel.

(v) *Storage.* Cod must be stored so as to be readily available for inspection.

\*\*\*\*\*

(7) *Haddock—(i) Outside the Gulf of Maine—(A) Private recreational vessels.* Each person on a private recreational vessel may possess unlimited haddock in, or harvested from, the EEZ when fishing outside of the GOM Regulated Mesh Area specified in § 648.80(a)(1).

(B) *Charter or party boats.* Each person on a charter or party fishing boat permitted under this part, and not fishing under the NE multispecies DAS program or on

a sector trip, may possess unlimited haddock in, or harvested from, the EEZ when fishing outside of the GOM Regulated Mesh Area specified in § 648.80(a)(1).

(ii) *Gulf of Maine—(A) Private recreational vessels.* Each person on a private recreational vessel in possession of haddock caught outside the GOM Regulated Mesh Area specified in § 648.80(a)(1) may transit the GOM Regulated Mesh Area with more than the GOM haddock possession limit specified at paragraph (c)(7)(ii) of this section up to the possession limit specified at paragraph (c)(7)(i) of this section, provided all bait and hooks are removed from fishing rods and any haddock on board has been gutted and stored.

(1) *May 1 through September 17.* Each person on a private recreational fishing vessel, fishing from May 1 through September 17, may possess no more than 12 haddock per day in, or harvested from, the EEZ when fishing in the GOM Regulated Mesh Area specified in §648.80(a)(1).

(2) *September 18 through October 31.* When fishing in the GOM Regulated Mesh Area specified in § 648.80(a)(1), persons aboard private recreational fishing vessels may not fish for or possess any haddock from September 18 through October 31.

(3) *November through February.* Each person on a private recreational fishing vessel, fishing from November 1 through February 28 (February 29 in leap years), may possess no more than 12 haddock per day in, or harvested from, the EEZ when fishing in the GOM Regulated Mesh Area specified in § 648.80(a)(1).

(4) *March 1 through April 14.* When fishing in the GOM Regulated Mesh Area specified in § 648.80(a)(1), persons aboard private recreational fishing vessels may not fish for or possess any haddock from March 1 through April 14.

(5) *April 15 through April 30.* Each person on a private recreational fishing vessel, fishing from April 15 through April 30, may possess no more than 12 haddock per day in, or harvested from, the EEZ when fishing in the GOM Regulated Mesh Area specified in § 648.80(a)(1).

(B) *Charter or party boats.* Each person on a charter or party fishing boat permitted under this part, and not fishing under the NE multispecies DAS program or on a sector trip, in possession of haddock caught outside the GOM Regulated Mesh Area specified in § 648.80(a)(1) may transit the GOM Regulated Mesh Area with more than the GOM haddock possession limit specified at paragraph (c)(7)(ii) of this section up to the possession limit specified at paragraph (c)(7)(i) of this section, provided all bait and hooks are removed from fishing rods and any haddock on board has been gutted and stored.

(1) *May 1 through September 17.* Each person on a charter or party fishing boat permitted under this part, and not fishing under the NE multispecies DAS program or on a sector trip, fishing from May 1 through September 17, may possess no more than 12 haddock per day in, or harvested from, the EEZ when fishing in the GOM Regulated Mesh Area specified in § 648.80(a)(1).

(2) *September 18 through October 31.* When fishing in the GOM Regulated Mesh Area specified in § 648.80(a)(1), persons on a charter or party fishing boat permitted under this part, and not fishing under the NE multispecies DAS program or on a sector trip, may not fish for or possess any haddock from September 18 through October 31.



(3) *November through February.* Each person on a charter or party fishing boat permitted under this part, and not fishing under the NE multispecies DAS program or on a sector trip, fishing from November 1 through February 28 (February 29 in leap years), may possess no more than 12 haddock per day in, or harvested from, the EEZ when fishing in the GOM Regulated Mesh Area specified in § 648.80(a)(1).

(4) *March 1 through April 14.* When fishing in the GOM Regulated Mesh Area specified in § 648.80(a)(1), persons aboard a charter or party fishing boat permitted under this part, and not fishing under the NE multispecies DAS program or on a sector trip, may not fish for or possess any haddock from March 1 through April 14.

(5) *April 15 through April 30.* Each person on a charter or party fishing boat permitted under this part, and not fishing under the NE multispecies DAS program or on a sector trip, fishing from April 15 through April 30, may possess no more than 12 haddock per day in, or harvested from, the EEZ when fishing in the GOM Regulated Mesh Area specified in § 648.80(a)(1).

(iii) *Fillet conversion.* For purposes of counting fish, fillets will be converted to whole fish at the place of landing by dividing the number of fillets by two. If fish are filleted into a single (butterfly) fillet, such fillet shall be deemed to be from one whole fish.

(iv) *Application of possession limit.* Haddock harvested in or from the EEZ by private recreational fishing boats or charter or party boats with more than one person aboard may be pooled in one or more containers. Compliance with the possession limit will be determined by dividing the number of fish on board by the number of persons on board. If there is a violation of the possession limit on board a vessel carrying more than

one person, the violation shall be deemed to have been committed by the owner or operator of the vessel.

(v) *Storage.* Haddock must be stored so as to be readily available for inspection.

\*\*\*\*\*

(e) *Charter/party vessel restrictions on fishing in GOM closed areas and the Nantucket Lightship Closed Area—(1) GOM closed areas.* (i) A vessel fishing under charter/party regulations may not fish in the GOM closed areas specified in § 648.81(d)(1), (e)(1), and (f)(4) during the time periods specified in those paragraphs, unless the vessel has on board a valid letter of authorization issued by the Regional Administrator pursuant to § 648.81(f)(5)(v) and paragraph (e)(3) of this section. If the vessel fishes or intends to fish in the GOM cod protection closures, the conditions and restrictions of the letter of authorization must be complied with for a minimum of 3 months. If the vessel fishes or intends to fish in the year-round GOM closure areas, the conditions and restrictions of the letter of authorization must be complied with for the rest of the fishing year, beginning with the start of the participation period of the letter of authorization.

(ii) A vessel fishing under charter/party regulations may not fish in the GOM Cod Spawning Protection Area specified at § 648.81(n)(1) during the time period specified in that paragraph, unless the vessel complies with the requirements specified at § 648.81(n)(2)(iii).

(2) *Nantucket Lightship Closed Area.* A vessel fishing under charter/party regulations may not fish in the Nantucket Lightship Closed Area specified in § 648.81(c)(1) unless the vessel has on board a letter of authorization issued by the

Regional Administrator pursuant to § 648.81(c)(2)(iii) and paragraph (e)(3) of this section.

(3) *Letters of authorization.* To obtain either of the letters of authorization specified in paragraphs (e)(1) and (2) of this section, a vessel owner must request a letter from the NMFS Greater Atlantic Regional Fisheries Office, either in writing or by phone (see Table 1 to 50 CFR 600.502). As a condition of these letters of authorization, the vessel owner must agree to the following:

(i) The letter of authorization must be carried on board the vessel during the period of participation;

(ii) Fish species managed by the NEFMC or MAFMC that are harvested or possessed by the vessel, are not sold or intended for trade, barter or sale, regardless of where the fish are caught;

(iii) The vessel has no gear other than rod and reel or handline gear on board; and

(iv) For the GOM charter/party closed area exemption only, the vessel may not fish on a sector trip, under a NE multispecies DAS, or under the provisions of the NE multispecies Small Vessel Category or Handgear A or Handgear B permit categories, as specified at §648.82, during the period of participation.

(f) *Recreational fishery AM—(1) Catch evaluation.* As soon as recreational catch data are available for the entire previous fishing year, the Regional Administrator will evaluate whether recreational catches exceed any of the sub-ACLs specified for the recreational fishery pursuant to § 648.90(a)(4). When evaluating recreational catch, the components of recreational catch that are used shall be the same as those used in the most recent assessment for that particular stock. To determine if any sub-ACL specified for

the recreational fishery was exceeded, the Regional Administrator shall compare the 3-year average of recreational catch to the 3-year average of the recreational sub-ACL for each stock.

(2) *Reactive AM adjustment.* If it is determined that any recreational sub-ACL was exceeded, as specified in paragraph (f)(1) of this section, the Regional Administrator, after consultation with the NEFMC, shall develop measures necessary to prevent the recreational fishery from exceeding the appropriate sub-ACL in future years.

Appropriate AMs for the recreational fishery, including adjustments to fishing season, minimum fish size, or possession limits, may be implemented in a manner consistent with the Administrative Procedure Act, with final measures published in the *Federal Register* no later than January when possible. Separate AMs shall be developed for the private and charter/party components of the recreational fishery.

(3) *Proactive AM adjustment.* When necessary, the Regional Administrator, after consultation with the NEFMC, may adjust recreational measures to ensure the recreational fishery achieves, but does not exceed any recreational fishery sub-ACL in a future fishing year. Appropriate AMs for the recreational fishery, including adjustments to fishing season, minimum fish size, or possession limits, may be implemented in a manner consistent with the Administrative Procedure Act, with final measures published in the *Federal Register* prior to the start of the fishing year where possible. In specifying these AMs, the Regional Administrator shall take into account the non-binding prioritization of possible measures recommended by the NEFMC: For cod, first increases to minimum fish sizes, then adjustments to seasons, followed by changes to bag

limits; and for haddock, first increases to minimum size limits, then changes to bag limits, and then adjustments to seasons.

[FR Doc. 2017-16018 Filed: 7/27/2017 8:45 am; Publication Date: 7/31/2017]

**From:** Michael Pierdinock [<mailto:cpfcharters@yahoo.com>]

**Sent:** Monday, July 24, 2017 12:34 PM

**To:** Mark Grant

**Cc:** Moira Kelly; Tom Nies; John Bullard; Barry Gibson; Frank Blount; Dave Waldrip; David Pierce; Russell Dunn

**Subject:** Proposed EFP For CHB Fleet with Mandatory Use, eVTRs when Targeting Groundfish

Marc:

At the recent NEFMC RAP meeting and follow up conversations we discussed the potential for a EFP for the CHB fleet that would require mandatory use of eVTRs and reporting within 24 hours that would permit the fleet to also retain cod for their customers. The data can be used to determine the spatial distribution and extent of the cod and other groundfish that we are encountering in the areas that we fish. We would also propose mandatory use of J hooks for jigs and non-offset circle hooks when utilizing bait when targeting groundfish as well as sound catch and release methods.

The reports continue from Maine to north of the Cape, there appears to be no lack of cod in the waters that we fish and the public still wants cod or they are not booking the trips. This study will assist in providing timely, prompt detailed data of where we are encountering cod and other groundfish that can assist in the stock assessment.

As discussed we could use your help to make this occur by May 2018. Please email or give me a call on who I need to contact or what I need to do to initiate the process.

Thanks

***Mike Pierdinock***  
***(617) 291-8914***

JC 7/26/17



# Greater Atlantic Region Bulletin

National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office, 55 Great Republic Drive, Gloucester, MA 01930

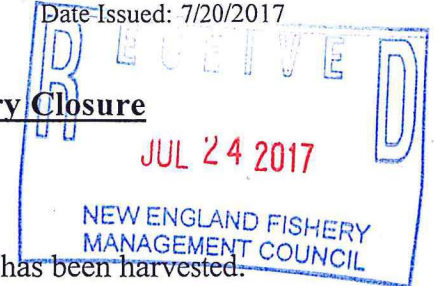
For Information Contact:  
Sustainable Fisheries Division  
(978) 281-9315

<http://www.greateratlantic.fisheries.noaa.gov/>

Date Issued: 7/20/2017

## Massachusetts Commercial Summer Flounder Fishery Closure

*Effective Date: 0001 hours on July 20, 2017*



The 2017 commercial summer flounder quota allocated to Massachusetts has been harvested.

Effective 0001 hours July 20, 2017, fishing vessels issued a Federal moratorium permit for the summer flounder fishery may no longer land summer flounder in Massachusetts for the remainder of the 2017 calendar year. *This closure is concurrent with the Commonwealth of Massachusetts' closure of its commercial summer flounder fishery to state permitted vessels and dealers, effective 0001 hours on July 19, 2017.*

Vessel owners issued Federal permits must continue to complete and submit vessel logbooks for all other species landed. Additionally, dealers issued Federal dealer permits for summer flounder may not purchase summer flounder from federally permitted vessels that land in Massachusetts for the remainder of the calendar year. Federally permitted dealers must also continue to report all fish purchases from any vessel

*For small entity compliance guides, this bulletin complies with section 212 of the Small Business Regulatory Enforcement and Fairness Act of 1996. This notice is authorized by the Regional Administrator of the National Marine Fisheries Service, Greater Atlantic Region.*



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
GREATER ATLANTIC REGIONAL FISHERIES OFFICE  
55 Great Republic Drive  
Gloucester, MA 01930-2276

JUL 17 2017

Robert E. Beal, Executive Director  
Atlantic States Marine Fisheries Commission  
1050 N. Highland Street, Suite 200A-N  
Arlington, VA 22201



Dear Bob,

Please accept these comments regarding Draft Amendment 3 to the Interstate Fishery Management Plan (FMP) for Northern Shrimp.

Draft Amendment 3 provides some important details on the northern shrimp fishery and stock that highlight the complexity and challenges for effective management. Suboptimal environmental conditions and intensive fishing have resulted in continued stock declines and a fishery moratorium.

The alternatives offered in the draft amendment provide some reasonable and responsible approaches for the future management of northern shrimp. Specifically, the amendment includes options to improve the timeliness of catch reporting, provide more flexibility to include the most up-to-date and best available scientific information, and apply accountability measures to deter annual catch overages. These options may prove to be effective in helping to maintain catches within the annual total allowable catch limits, if the fishery moratorium is lifted in the future.

We note that some of the alternatives in the draft amendment that address changes to the finfish excluder device requirements may conflict with the current excluder device specifications in the Federal Northeast multispecies regulations that allow the shrimp fishery to occur as an exemption. The exemption allows Federal groundfish permit holders to participate in the northern shrimp fishery using mesh smaller than required in the Northeast multispecies regulations. This exemption program, in part, requires the use of a finfish excluder device and that the percentage of regulated species caught as bycatch is less than 5 percent, by weight, of the total catch.

If the Atlantic States Marine Fisheries Commission adopts changes to these or any other requirements, we may need to analyze those measures in a rulemaking action to ensure that our exemptions remain consistent and complementary to the Commission's Interstate FMP for Northern Shrimp as well as the New England Fishery Management Council's Northeast Multispecies FMP. Accordingly, I encourage the Commission to consult with the Council as the amendment is finalized to ensure that any new measures are appropriately addressed in the Northeast Multispecies FMP.

ex, jc 7/21/17

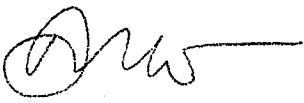





As you know, the northern shrimp fishery has historically provided a reliable winter fishery for coastal trap and trawl gear fishermen and the fishery and resource occur predominantly in Federal waters. We are concerned about the future of this fishery and the northern shrimp resource. Although we are not represented on the Commission's Northern Shrimp Section, we will continue to pay close attention to the management process and intend to continue to support the Commission's efforts to monitor and manage northern shrimp through participation on the technical committee, plan development and review teams, and through cooperative monitoring and assessment programs.

Thank you for the opportunity to provide comments on this important fishery resource.

Sincerely,

  
 John K. Bullard  
Regional Administrator

cc: Thomas Nies, Executive Director, New England Fishery Management Council



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
GREATER ATLANTIC REGIONAL FISHERIES OFFICE  
55 Great Republic Drive  
Gloucester, MA 01930-2276

July 18, 2017

Thomas A. Nies, Executive Director  
New England Fishery Management Council  
50 Water Street, Mill 2  
Newburyport, MA 01950



Re: Exempted Fishing Permit (EFP) Proposal

Dear Tom:

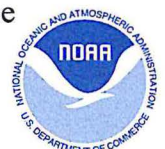
The regulations on exempted fishing activities at 50 CFR 600.745(b)(3) require that the Regional Administrator forward copies of EFP applications to the Regional Fishery Management Council(s), the U.S. Coast Guard, and the appropriate fishery management agencies of affected states, accompanied by the following information: (A) The effect of the proposed EFP on the target and incidental species, including the effect on any Total Allowable Catch; (B) a citation of the regulation or regulations that, without the EFP, would prohibit the proposed activity; and (C) biological information relevant to the proposal, including appropriate statements of environmental impacts, including impacts on marine mammals and threatened or endangered species. Therefore, we have attached a notice that describes activities proposed under an EFP.

We have been collaborating with the Cape Cod Commercial Fishermen's Alliance (CCCFA), The Nature Conservancy, the Gulf of Maine Research Institute, the Maine Coast Fishermen's Association, Ecotrust Canada, and several groundfish sectors since 2015 to develop electronic monitoring (EM) for catch accounting in the groundfish fishery. In May 2017, we renewed an EFP to continue efforts towards implementing EM, allowing vessels to use EM in lieu of at-sea monitoring (ASM) on trips selected for ASM coverage (16 percent). Under this EFP, 100 percent of the video from these trips is reviewed and used to identify and enumerate discards of groundfish species. This EFP is intended to help resolve remaining implementation issues, such as the pass/fail criteria and the video review rates, for a program that utilizes EM to audit the captain-reported discards.

The CCCFA requested an additional EFP for the 2017 fishing year to further develop the audit model that would require participating vessels to use EM on 100 percent of groundfish trips. Because vessels would be fully monitored, and due to presumably high concentrations of healthy stocks, the CCCFA also requested access to portions of the groundfish closed areas to allow vessels to selectively target healthy fish stocks (e.g., haddock, pollock, redfish), while avoiding cod. Vessels would report all catch (kept and discards) on a vessel trip report (VTR), and EM would be used to monitor discards from each trip. All catch of allocated groundfish stocks by vessels would be deducted from the sector's annual catch entitlement.

Participation in this EFP would be heavily dependent on how many vessels leave the current EFP that targets EM coverage on 16 percent of trips and does not include closed area access, to join this new EFP. There are currently 14 vessels listed on the current EFP. Because vessels may only participate in one of these EFPs; these 14 vessels, plus an additional 3 vessels, could be

jc 7/20/17



approved under this new 100-percent EM EFP. If access to the closed areas is approved, we expect most vessels would choose to participate in this new EFP.

This EFP is expected to significantly increase EM data collection compared to the current EFP, by requiring EM on 100 percent of trips along with increased opportunities for accessing healthy fish stocks within some closed areas. This will improve our ability to develop and implement an audit program (i.e., reduce video review rates below 100 percent and/or use electronic VTR for discard data in quota monitoring), beyond the EFP that requires a target of 16 percent coverage.

Regulations implementing the Northeast Multispecies Fishery Management Plan (50 CFR 648.87(b)(1)(v)(B)) require a sector to implement an at-sea or electronic monitoring program, and this EFP would exempt vessels from adhering to their sector's monitoring program by not requiring an ASM when selected for ASM coverage. This EFP would also approve exemptions from § 648.81(a), (b), (d), and (e) to access portions of closed areas.

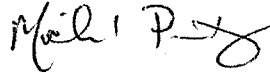
Please respond to the following contact person with any comments you have on the exempted fishing proposal on or before July 28, 2017.

CONTACT

Claire Fitz-Gerald  
Sustainable Fisheries Division  
Greater Atlantic Regional Fisheries Office, NMFS  
55 Great Republic Drive  
Gloucester, MA 01930  
Phone: (978) 281-9255  
FAX: (978) 281-9135

Thank you for your cooperation.

Sincerely,



Michael Pentony  
Assistant Regional Administrator  
for Sustainable Fisheries

coverage. EM would not replace Northeast Fishery Observer Program (NEFOP) observers, but EM would run concurrently on these trips. Initially, 100 percent of the video from every trip would be reviewed for data collection to monitor discards and support ongoing analysis to implement an audit program (*i.e.*, reduce video review rates below 100 percent and/or use electronic VTR for discard data in quota monitoring).

Given presumably high concentrations of healthy fish stocks in portions of groundfish closed areas, and because vessels would be fully monitored, the CCCFA also requested access to portions of groundfish closed areas to enable vessels to more effectively target healthy fish stocks (*i.e.*, pollock, haddock, hake, and redfish), while avoiding cod. If approved, this request would help achieve another project objective, which is to increase participation and incentivize the use of EM. These exemptions would include: (1) Hook gear (jig machines, hand gear, benthic long lines) and sink gillnets in Closed Area I (CAI) and Closed Area II (CAII); (2) Hook gear (jig machines, hand gear, benthic long lines) in the Western Gulf of Maine (WGOM) Closure Area; and (3) Jig gear (jig machines and hand gear) in the Fippennies Ledge portion of Cashes Ledge. The CCCFA did not request that trawl gear vessels be allowed to access these closed areas under the EFP. The EFP would not exempt any participating vessels from the seasonal Gulf of Maine (GOM) Cod Protection Areas to ensure cod spawning protection is not undermined. EFP trips would occur year-round (excluding seasonal closures), although the majority of trips would occur in the summer and fall months. Participation in this EFP would be heavily dependent on how many vessels leave the already-approved EFP (*i.e.*, 16 percent coverage, no closed area access), and choose to join this new EFP (*i.e.*, 100 percent coverage, closed area access). There are currently 14 vessels listed on the current EFP. Because vessels may only participate in one of these EFPs; these 14 vessels, plus an additional 3 vessels, could be approved under this new 100-percent EM EFP. If access to the closed areas is approved, we expect most vessels would choose to participate in this new EFP.

All catch of groundfish stocks allocated to sectors by vessels would be deducted from the sector's annual catch entitlement for each groundfish stock. Legal-sized regulated groundfish would be retained and landed, as required by the FMP. Undersized groundfish would be handled according to the EM project guidelines in view of cameras and

returned to the sea as quickly as possible. All other species would be handled per normal commercial fishing operations. No legal-size regulated groundfish would be discarded, unless otherwise permitted through regulatory exemptions granted to the participating vessel's sector.

NMFS has not yet developed the full set of business rules for an audit program, such as the pass/fail criteria and the video review rates. However, under this EFP, vessels would continue to pursue the audit model by reporting all catch (kept and discards) on their electronic VTR, and EM would be used to monitor discards from each trip. This EFP is expected to significantly increase EM data collection by requiring EM on 100 percent of trips along with increased opportunities for accessing healthy fish stocks within some closed areas. This will improve the ability to develop and implement an audit program, beyond the EFPs that required EM coverage of 14 percent last year, and 16 percent this year.

The CCCFA requested a gear exemption from the Atlantic Highly Migratory Species (HMS) regulations; that request is being considered separately by the Atlantic HMS program.

The CCCFA also requested an exemption from the Pre-Trip Notification System (PTNS), which is used in several fisheries for NEFOP observer deployment and for ASM deployment in the groundfish fishery; we do not intend to grant that exemption. Vessels participating in this EFP are still required to take NEFOP observers, and without a suitable and fair alternative, we must still use PTNS to facilitate and monitor observer deployments in the fishery. Additionally, it is highly likely that all Federal vessels will have a pre-trip requirement as part of the Region's Fishery-Dependent Data Vision (FDDV) project. We think it is important to retain this type of requirement, rather than temporarily exempt vessels only to have it replaced by a similar requirement in the near future. However, we recognize the concerns expressed by the applicants, and the fishing industry at-large regarding reporting requirements. We expect that the FDDV will address many of these concerns, and that EM may offer the ability to simplify reporting. If approved, the applicant may request minor modifications and extensions to the EFP throughout the year. EFP modifications and extensions may be granted without further notice if they are deemed essential to facilitate completion of the proposed research

and have minimal impacts that do not change the scope or impact of the initially approved EFP request. Any fishing activity conducted outside the scope of the exempted fishing activity would be prohibited.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: July 11, 2017.

Emily H. Menashes,  
Acting Director, Office of Sustainable  
Fisheries, National Marine Fisheries Service.  
[FR Doc. 2017-14820 Filed 7-13-17; 8:45 am]  
BILLING CODE 3510-22-P

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

#### Proposed Information Collection; Comment Request; Billfish Tagging Report Card

AGENCY: National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice.

**SUMMARY:** The Department of Commerce, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995. **DATES:** Written comments must be submitted on or before September 12, 2017.

**ADDRESSES:** Direct all written comments to Jennifer Jessup, Departmental Paperwork Clearance Officer, Department of Commerce, Room 6616, 14th and Constitution Avenue NW., Washington, DC 20230 (or via the Internet at [pracomments@doc.gov](mailto:pracomments@doc.gov)).

**FOR FURTHER INFORMATION CONTACT:** Requests for additional information or copies of the information collection instrument and instructions should be directed to Gerard DiNardo, NOAA Southwest Fisheries Science Center, (858) 546-7106, or [gerard.dinardo@noaa.gov](mailto:gerard.dinardo@noaa.gov).

#### SUPPLEMENTARY INFORMATION:

##### I. Abstract

This request is for extension of a currently approved information collection. The National Oceanic and Atmospheric Administration's Southwest Fisheries Science Center operates a billfish tagging program. Tagging supplies are provided to volunteer anglers. When anglers catch and release a tagged fish they submit a

**Notification to Interested Parties**

This notice constitutes the antidumping orders with respect to rebar from Turkey and Japan, pursuant to section 736(a) of the Act. Interested parties can find a list of antidumping duty orders currently in effect at <http://enforcement.trade.gov/stats/iastats1.html>.

These orders are issued and published in accordance with section 736(a) of the Act and 19 CFR 351.211(b).

Dated: July 10, 2017.

Gary Taverman,

*Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, Performing the non-exclusive functions and duties of the Assistant Secretary for Enforcement and Compliance.*

**Appendix**

**Scope of the Orders**

The merchandise subject to these orders is steel concrete reinforcing bar imported in either straight length or coil form (rebar) regardless of metallurgy, length, diameter, or grade or lack thereof. Subject merchandise includes deformed steel wire with bar markings (e.g., mill mark, size, or grade) and which has been subjected to an elongation test.

The subject merchandise includes rebar that has been further processed in the subject countries or a third country, including but not limited to cutting, grinding, galvanizing, painting, coating, or any other processing that would not otherwise remove the merchandise from the scope of these orders if performed in the country of manufacture of the rebar.

Specifically excluded are plain rounds (i.e., nondeformed or smooth rebar). Also excluded from the scope is deformed steel wire meeting ASTM A1064/A1064M with no bar markings (e.g., mill mark, size, or grade) and without being subject to an elongation test.

The subject merchandise is classifiable in the Harmonized Tariff Schedule of the United States (HTSUS) primarily under item numbers 7213.10.0000, 7214.20.0000, and 7228.30.8010. The subject merchandise may also enter under other HTSUS numbers including 7215.90.1000, 7215.90.5000, 7221.00.0017, 7221.00.0018, 7221.00.0030, 7221.00.0045, 7222.11.0001, 7222.11.0057, 7222.11.0059, 7222.30.0001, 7227.20.0080, 7227.90.6030, 7227.90.6035, 7227.90.6040, 7228.20.1000, and 7228.60.6000.

HTSUS numbers are provided for convenience and customs purposes; however, the written description of the scope remains dispositive.

[FR Doc. 2017-14802 Filed 7-13-17; 8:45 am]

BILLING CODE 3510-DS-P

**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

RIN 0648-XF510

**Magnuson-Stevens Act Provisions; General Provisions for Domestic Fisheries; Application for Exempted Fishing Permits**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice; request for comments.

**SUMMARY:** The Assistant Regional Administrator for Sustainable Fisheries, Greater Atlantic Region, NMFS, has made a preliminary determination that an Exempted Fishing Permit application submitted by the Cape Cod Commercial Fishermen's Alliance contains all of the required information and warrants further consideration. This Exempted Fishing Permit would allow participants to use electronic monitoring systems in lieu of at-sea monitors in support of a study to develop electronic monitoring for the purposes of catch monitoring in the groundfish fishery. Additionally, vessels would be authorized to access portions of groundfish closed areas. Regulations under the Magnuson-Stevens Fishery Conservation and Management Act require publication of this notification to provide interested parties the opportunity to comment on applications for proposed Exempted Fishing Permits.

**DATES:** Comments must be received on or before July 31, 2017.

**ADDRESSES:** You may submit written comments by either of the following methods:

- *Email:* [nmfs.gar.efp@noaa.gov](mailto:nmfs.gar.efp@noaa.gov). Include in the subject line "CCCFA EM EFP."
- *Mail:* John K. Bullard, Regional Administrator, NMFS, Greater Atlantic Regional Fisheries Office, 55 Great Republic Drive, Gloucester, MA 01930. Mark the outside of the envelope "CCCFA EM EFP."

**FOR FURTHER INFORMATION CONTACT:** Claire Fitz-Gerald, Fishery Management Specialist, 978-281-9255.

**SUPPLEMENTARY INFORMATION:** Groundfish sectors are required to implement and fund an at-sea monitoring (ASM) program. A sector is allowed to use electronic monitoring (EM) to satisfy this monitoring requirement, provided that NMFS deems the technology sufficient for catch monitoring. EM typically incorporates video cameras, gear

sensors, and electronic reporting systems into a vessel's fishing operations. For the groundfish fishery, the program designs currently being considered are the "audit model" and the "maximized retention model." The audit model would use EM to verify discards reported by a captain on a vessel trip report (VTR). Under the maximized retention model, vessels would be required to retain most fish species (e.g., allocated groundfish stocks), but be required to discard other species, such as those managed by trip limits (e.g., dogfish) or protected species (e.g., Atlantic salmon), and EM would be used to ensure compliance with discarding regulations.

NMFS has not yet approved EM as a suitable alternative to ASM for the groundfish fishery. There are still some issues that must be resolved; for example, specifying how much video needs to be reviewed to satisfy monitoring objectives and identifying best practices for species that are difficult to identify. To address these challenges, NMFS has been collaborating with the Cape Cod Commercial Fishermen's Alliance (CCCFA), The Nature Conservancy (TNC), the Gulf of Maine Research Institute, the Maine Coast Fishermen's Association, Ecotrust Canada, and several groundfish sectors since 2015. NMFS continues to develop an EM program with these partners that can be implemented for catch monitoring in the groundfish fishery. In May 2016, NMFS issued EFPs to vessels from the Georges Bank Cod Fixed Gear Sector, the Maine Coast Community Sector, the Sustainable Harvest Sector, and Northeast Fishery Sectors 5 and 11, which allowed them to use EM in lieu of at-sea monitors on trips selected for ASM, at the 14 percent target observer coverage level. Under the EFP, 100 percent of the video from these trips are reviewed and used to identify and enumerate discards of groundfish species. NMFS did not use discarded catch reported on the vessel trip report. In May 2017, the EFP was renewed to continue efforts to improve the functionality of EM, refine fish handling protocols, and support future implementation of the audit model. The 2017 target observer coverage is 16 percent. However, our partners are seeking to expand the use of EM and data collection, and requested this new, additional EFP.

Under this newest EFP, participants would be required to use EM on 100 percent of their groundfish trips to verify regulated groundfish discards, and EM would be used to replace at-sea monitors when selected for ASM



# Greater Atlantic Region Bulletin

NOAA Fisheries, Greater Atlantic Regional Fisheries Office, 55 Great Republic Drive, Gloucester, MA 01930

For Information Contact:  
Sustainable Fisheries Division  
(978) 281 – 9315

<http://www.greateratlantic.fisheries.noaa.gov/>

Date Issued: 7/6/2017

## Summer Flounder and Scup 2017 Recreational Management Measures

*Effective Date: July 7, 2017*



We have approved the final 2017 minimum fish size, angler possession limits, and fishing season rules for the summer flounder (fluke) and scup (porgies) recreational fisheries. States have already put their rules in place for the season.

We are continuing “conservation equivalency” for the **summer flounder** fishery. Conservation equivalency means that we have waived the Federal recreational bag limit, minimum fish size, and fishing season, and vessel owners are subject only to regulations in their state. **Please contact your state for information on your state’s summer flounder regulations.**

We are aware that the Atlantic States Marine Fisheries Commission has requested that the Secretary of Commerce review the Commission’s finding that New Jersey is out of compliance with Addendum XXVIII to the Summer Flounder, Scup, and Black Sea Bass Interstate Fishery Management Plan. The Commission has requested that the Secretary review the non-compliance determination and decide whether or not to implement a moratorium on summer flounder fishing in New Jersey state waters. This determination is occurring through a separate process and we will have a final decision on this issue in early July.

We are also maintaining the **year-round** open season for recreational **scup** fishing, the minimum fish size is still **9 inches**, and the per person per trip possession limit is still **50 scup per person**. Please keep in mind that, if the Federal minimum size, possession limit, and/or season differ from the regulations for the state in which you will be landing, you must follow the more restrictive regulations.

If you have additional questions on the recreational management measures after reading this letter, please call the Sustainable Fisheries Division at (978) 281-9315.

*For small entity compliance guides, this bulletin complies with section 212 of the Small Business Regulatory Enforcement and Fairness Act of 1996. This notice is authorized by the Regional Administrator of the National Marine Fisheries Service, Greater Atlantic Region.*



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116  
John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director*

July 7, 2017

Mr. John Bullard  
Regional Administrator  
Greater Atlantic Regional Fisheries Office  
National Marine Fisheries Service  
55 Great Republic Drive  
Gloucester, MA 01930

Re: NEFMC Comments on the proposed rule for Framework 56 to the Northeast Multispecies FMP

Dear John:

On June 22, 2017, a Proposed Rule was published that requests comments on Framework Adjustment 56 (FW 56) to the Northeast Multispecies (Groundfish) Fishery Management Plan (82 *Federal Register* 28447). In general, the Proposed Rule matches the Council's intent. However, there are some exceptions and this letter provides comments on some of the provisions included in the Proposed Rule.

*Status Determination Criteria for Witch Flounder*

The Council proposes that the status determination criteria for witch flounder should be considered unknown. The Proposed Rule states on pp. 28449:

*We [NMFS] propose disapproving the Council's recommendation, and maintaining the existing criteria until a valid assessment model is available to use for setting new catch limits or for generating new criteria. This is new guidance to the Council, provided after it took final action on Framework 56, and is different than the approach the Council has taken, and that we have approved, for recommending status determination criteria for other groundfish stocks with rejected assessments (e.g., GB yellowtail flounder).*

We disagree with this approach. The Council's proposal to change the status determination criteria (more accurately, the Maximum Fishing Mortality Threshold, (MFMT), and Minimum Stock Size Threshold, (MSST) to unknown was based on the conclusions of the peer review of the 2016 benchmark for witch flounder. The report of the 2016 benchmark was unequivocal:

*The age-structured models applied to data for the witch flounder fishery from 1982-2015 were found to have major retrospective patterns that prevented their use for status evaluation and determination of catch advice. Therefore biological reference points are not available.*

The 2008 assessment referenced in the Proposed Rule ignores eight additional years of catch and survey data and should not be considered the best scientific information available. The 2016

benchmark is the best scientific information available; there is no justification for rejecting the 2016 peer review panel's conclusion that reference points are not available.

The agency's proposed action appears to be an attempt to resolve the concern that there would not be any objective and measureable criteria standards in place by which to measure the status of the witch flounder stock. While it is accurate to state that there will not be an MFMT or MSST, the Council has established an acceptable biological catch (ABC) based on the recommendation of the Scientific and Statistical Committee. The agency acknowledges in the Proposed Rule that this ABC is expected to prevent overfishing. As such, it should be considered a proxy for an overfishing limit (OFL) and provides one objective measure for stock status.

Further, the Proposed Rule states on pp. 28449:

*In conjunction with the 2017 assessment updates, we [NMFS] will work with the Council to use updated fishery information to develop fishery mortality and biomass estimates and new status determination criteria for this stock.*

We question if this can be accomplished within the Terms of Reference of the 2017 Groundfish Operational Assessments. Work of this nature is usually reserved for benchmark assessments or the research track. The 2017 Operational Assessment that will be conducted later this year will apply the witch flounder empirical approach developed in the 2016 benchmark. It will not attempt to develop fishing mortality estimates, and will not develop new status determination criteria. These are not part of the terms of reference for this assessment.

#### *Overfished Status Determination for Witch Flounder*

The Proposed Rule states on pp. 28449:

*The witch flounder stock was previously listed as subject to overfishing and overfished. Despite the rejection of the recent stock assessments for stock status purposes and lack of numerical estimates of stock size, there is qualitative information in the assessment that supports continuing to list the status as overfished, but changing the overfishing status from subject to overfishing to unknown. The conclusion that the stock is at historical low levels and other signs of poor stock condition, provide reliable indicators the support this stock remaining listed as overfished.*

Based on our review of the information in the Proposed Rule, no meaningful analysis is provided to make the determination of overfished – and to the contrary of that provided by the peer review of the 2016 benchmark assessment of witch flounder. The Proposed Rule implies that the benchmark concluded that "... the stock is at historical low levels..." This is a misquotation of the actual report ("...low historical levels...") that changes the meaning of the sentence. Figure B1 in the report indicates that while the survey biomass is low, survey biomass was lower in the early 1990s, and has shown some slight improvement in recent years.

#### *Specifications*

In reviewing the specifications in the Proposed Rule, we found that the Cape Cod/Gulf of Maine yellowtail flounder specifications include a mistake for the OFL for FY 2018. The value should be 900 mt (not 7,900 mt), see Table 2 of the Proposed Rule (pp. 28451). We also found a mistake in our Environmental Assessment (EA) submission (sent on June 29, 2017) for the total ACL for GB haddock in FY 2017 and FY 2018 due to a transcription error. The values should be



54,568 mt in FY 2017 and 74,058 mt in FY 2018, as in the Proposed Rule in Table 3 (pp. 28452) and Table 4 (pp. 28453). We will correct the mistake and send you the corrected EA. The mistake does not affect the environmental impact analysis.

### *Scallop Accountability Measure (AM) Implementation Policy*

With respect to the scallop AM implementation policy for FY 2017 and FY 2018 for Georges Bank yellowtail flounder and Northern windowpane flounder, the Council was clear that this was a temporary change in policy. The Council did not indicate as in the Proposed Rule (on pp. 28455) that “The revised thresholds would only be effective for fishing years 2017 and 2018, after which the Council would evaluate the provision to ensure the threshold has effectively constrained both scallop fishery catch and total mortality. Rather, the Council expects this to be a temporary change for FY 2017 and FY 2018 and the underlying policy would apply for catches in FY 2019 and beyond. See pages 50-51 of the EA (submitted on June 29, 2017), in summary:

*[The] temporary change to the AM implementation policy for [these two stocks is that] the only criteria to determine if an AM would be implemented would be if the scallop fishery exceeds its sub-ACL for a stock and the overall ACL is also exceeded. The measure include a 2-year “sunset” provision. Therefore if the measure was implemented in FY 2017, the temporary change to AM policy would only apply for FY 2017 and FY 2018 catches and in FY 2019 and beyond the underlying policy would apply...*

*[such that] there would be two criteria that would result in implementing the AMs if either was met:*

- 1) The scallop fishery exceeds its sub-ACL for a stock and the overall ACL is also exceeded or*
- 2) The scallop fishery exceeds its sub-ACL for a stock by 50 or more percent.*

### *Review Process for the Georges Bank Haddock Midwater Trawl sub-ACL*

To clarify a statement in the Proposed Rule, the Groundfish Plan Development Team would review the factors indicated on pp. 28455 of the Proposed Rule, but could also consider other factors. See page 48 of the EA (submitted on June 29, 2017):

*The review for GB haddock would consider but not be limited to: fishery catch performance, utilization, status of the resource, recruitment, incoming year-class strength, and evaluation of the coefficient of variation (CV) of the GB haddock incidental catch estimates for the Atlantic herring midwater trawl fishery.*

### *Northern Windowpane Flounder Accountability Measures for the Groundfish Fishery in Fishing Year 2017*

In reference to the Proposed Rule and at its June meeting, the Council passed the following motion:

*That the Council provide written comments to the Agency on FW 56 requesting that the Northern Windowpane AM not be triggered for the Groundfish Fishery in FY 2017.*

The motion **carried** on a show of hands (13/0/2).

The Proposed Rule specifically acknowledges that FW 56 addresses the operational issues that contributed to the overage of the Northern windowpane flounder annual catch limit in fishing year 2015 and specifically requests comment about implementing the accountability measure in fishing year 2017. The triggering of the accountability measure for Northern windowpane flounder is based on the fishing activity of the scallop fleet in fishing year 2015. The groundfish fishery caught 75.1% of the 98 mt sub-ACL in fishing year 2015. The Council addressed this operational issue by proposing to establish a scallop fishery sub-ACL for Northern windowpane flounder in FW 56. In light of the Council addressing this operational issue, it appears that triggering the accountability measure on the groundfish fishery for an overage they did not create would be purely punitive and not the intent of accountability measures. In addition, the Council previously took a similar action for Southern windowpane flounder. Further, the impacts to the groundfish fishery are estimated to be \$10.6 million for the large accountability measure area (based on the FW 52 analysis of FYs 2010-2012).

Lastly, we urge you to approve all the measures included within FW 56 as proposed by the Council. Thank you for considering these comments. Please feel free to call me with any concerns.

Sincerely,



Thomas A. Nies  
Executive Director



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116  
John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director*

June 29, 2017

Mr. John Bullard  
Greater Atlantic Regional Administrator  
NMFS/NOAA Fisheries  
55 Great Republic Drive  
Gloucester, MA 01930

Dear John:

Today, my staff electronically sent a resubmission of the Environmental Assessment (EA) for Framework Adjustment 56 (FW 56) to the Northeast Multispecies (Groundfish) Fishery Management Plan (FMP) to your staff in the Sustainable Fisheries Division at the Greater Atlantic Regional Fisheries Office.

After reviewing the comments received by my staff on June 14, 2017 on the formal submission sent on April 13, 2017, the framework document has been updated to incorporate all changes requested.

Please contact me if you have questions.

Sincerely,

Thomas A. Nies  
Executive Director



**Mid-Atlantic Fishery Management Council**

800 North State Street, Suite 201, Dover, DE 19901  
Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org  
Michael P. Luisi, Chairman | G. Warren Elliott, Vice Chairman  
Christopher M. Moore, Ph.D., Executive Director

June 27, 2017

Mr. John Bullard  
Regional Administrator  
National Marine Fisheries Service Greater Atlantic Region  
55 Great Republic Drive  
Gloucester, MA 01930-2276



Dear Mr. Bullard, *John;*

The proposed rule for Framework Adjustment 56 to the New England Fishery Management Council's Northeast Multispecies Fishery Management Plan, published in the Federal Register on June 22, 2017, states that an AM for southern windowpane flounder will be implemented in 2017 in response to a 2015 ACL overage.

As stated in the proposed rule, southern windowpane flounder are not overfished and overfishing is not occurring. The stock has been rebuilt since 2010 and overfishing has not occurred since 2006 despite recent ABC and ACL overages. In addition, survey indices suggest that stock size has been increasing since the mid-1990s. Thus, the ACL overage which triggered this year's AM may not have resulted in negative biological consequences for the stock. Despite this, the magnitude of the 2015 ACL overage necessitates implementation of the large AM areas in 2017. The large AM areas have the potential to substantially negatively impact Mid-Atlantic fisheries by limiting the ability of vessels to target summer flounder and scup within the AM areas. As summarized in the March 9, 2017 letter from the New England Council, 2015 model-estimated revenues for summer flounder and scup within the large AM areas were \$705,776 and \$601,571, respectively, illustrating the magnitude of the potential negative impacts of this AM.

As stated in my February 2, 2017 letter to you, the Mid-Atlantic Council requests that you consider any and all remediation methods available to put in place a one year exemption from this AM due to the negative impacts the AM could have on Mid-Atlantic fisheries, and also recognizing that the ACL overage which triggered the AM may not have negatively impacted the southern windowpane flounder stock. If a one-year exemption is not possible, we request that you consider implementing the small AM areas instead of the large AM areas or removing the AMs mid-year.

Our Council is committed to working with the New England Council to find appropriate ways to modify these AMs to address similar situations, should they arise in the future.

Sincerely,

Christopher M. Moore, PhD.  
Executive Director, MAFMC

Cc: Luisi, Elliot, Nies

*jc 6/29/17*

RECEIVED

Copy of public statement by Richard Beal at New England Fishery Management Council meeting on June 21, 2017

JUN 21 2017

Ladies and Gentlemen,

AT THE NEW ENGLAND FISHERY  
MANAGEMENT COUNCIL MEETING

When I started fishing, everywhere you went, you saw boats. They were of all types and sizes, domestic and foreign. There were no regulations. The only limitation was how hard you could physically work. It was a free-for-all, the Wild West revisited. I look around and I doubt many here, if any, can remember those days. Now I go fishing and often don't see another commercial fishing boat. It is my generation of fishermen that has bridged the gap from what was to what is, from an unregulated, volume- based industry to one that is highly regulated and quality- orientated. I believe there have been more changes in my lifetime than in all of the industries prior history.

Change had to come. With changes in vessel design, advances in electronics and gear technology, the resource ultimately could not support a fleet of the previous size. As recently as the 1980's, over-fishing was occurring. In Ipswich Bay alone, an area of approximately 60 square miles, you could count 30 or more boats on most days. Today the fleet is a small fraction of what it was then. Though hard figures are difficult to come by, I estimate presently there are fewer than 30 boats actively fishing shore-side of the Western Gulf of Maine Closure, an area of approximately 1,000 square miles. By considering such factors as door spread and time-at-sea, I estimate that if these boats all fished at the same time, they would cover less than 0.5 percent of this area. And, by estimating trips- per- year, I conclude this would happen less than 7 percent of a years time-- and the percentages would be even lower when you include other factors such as overlapping tows and travel time. If this can cause over-fishing, if the survival of the resources that support our fishery depends on even stricter control of this minuscule fishing effort, then we have failed as stewards of this public resource and all the sacrifices made, not to mention the time and public money spent, have been for nothing.

This, I refuse to believe. My attitude towards the process has changed over the years from one of defiance to one of advocacy. It all begins with the science. Magnuson- Stevens mandates, and we all agree, that we must use the best available science. I just question if what were getting now is the best science available.

I have no doubt the scientists and their staffs are doing the best they can with the information they have. I can't address the analytics. That's way beyond my pay-grade. What I can speak to is the collection of data. It has remained basically the same since its beginnings in the 1960's-- sampling at randomly chosen stations. I understand science's need for consistency, but the only constant in nature is change. History itself has tried to teach us that you can't react to a fluid situation by adhering to a ridged doctrine. During a recent survey cruise, approximately 40 stations -- or about one-- third of the total-- were in a 3,500- square mile area in the western gulf. The other two- thirds, or about 80 stations, were spread throughout the rest of the Gulf of Maine. So, each station in the west represented 90 square miles while stations in the remainder of the Gulf represented 450 square miles. While reporting increases in catch rates those of us who fish in the west have been told repeatedly that we're not seeing the big picture. I suggest that with the disproportionate distribution of stations, and based on many reports I continue to hear, it's science itself that is missing the big picture. It's happened before with

jc, rf 6/29/17

Pollock. It's also been asserted that stocks are concentrating in the west. One theory for this is that stocks tend to group together when depleted.

If we were to take the same protocol that's used to determine fish stocks and apply it to the next U. S. Census, we would find that most of us are grouped together in the East and we are dispersed in the vastness of the West. Are we to assume our population is decreasing? Of course not. We would call the assumption foolish, but this example does parallel fish distribution in the Gulf of Maine.

We change our habits and our population shifts slowly. We are able to physically see what's happening. We can't see below the surface of the ocean, where fish habits and population shifts happen quickly, often day- to- day. Without flexibility how can science take these changes into account? How can they get accurate data?

We know there are many reasons for changes in fish habits. Food availability, water temperature, predation and spawning cycles to name a few. Conditions such as moon phases, whether it's night or day or if the tide is going in or out even wind direction will affect catch rates tremendously. Wrong place, wrong time, false data.

Policy is created from a myriad of ideas. If these ideas are formed using inaccurate or misread data how can sound policy be formed? I've been told that people sitting in windowless rooms have to make hard decisions. I ask these people to please look past the numbers given to them. To open a door, knock down a wall if need be, to listen to what both the commercial and recreational fishing industries are saying. And more importantly, to see what were seeing. Nature runs in cycles. I've seen many in my half-century of studying fish habits. I believe we're on an up- cycle now. An entry in my log book dated October 2013 speaks of signs I'd seen that year suggesting this.

It took another year to develop but subsequent years have proven me right. It continues and includes more species than previous up cycles have. I'd be happy to discuss my observations, but in light of continuing comments that say , in effect, that if science doesn't see it it's not there I doubt personal observations would be welcome. My fear is that under the current system by the time the changes are recognized these changes will have changed again. Our never ending circle continues. Nobody I know wants to go back to what was. We're only asking for a little relief from what is -- and to stop being asked to pay for the sins of the past. The Magnuson Stevens Act also mandates the resource be used for maximum benefit to society. Toward this end I believe that at least modest increases in quota are warranted. There are strict regulations in effect and fishing effort is at an extremely low level . Permanent and rolling closures are in place to protect spawning. Add in the explosion of fixed gear in federal waters which effectively closes more area to the fishery. And I find it very hard-- if not impossible-- to uphold the argument of over- fishing or environmental damage. I'm sure an informed public would agree.

The creation of the situation is not shared by all. But responsibility for complicating it's solution is. Most of us have either investments to protect, superiors to answer to, budgets to legitimize or contributors to impress. It's time to end partisan-ism. To take a pause from the accusations, finger- pointing and opportunism that have infected the process for four decades. To take a deep breath and reflect. If you do I think you'll realize, as I did, that despite all our differences the sacrifices, time and money haven't been wasted. We've done a good job. Were in a good place.

Lastly, I'd like it to be known that these are my personal observations and beliefs. I do not belong to any organization. And other than an occasional job, I have no financial interests in the industry. My motivation is twofold. First, to help ensure the survival of the industry so future generations can earn an honest living and experience the beauty and wonder of nature as I have. Secondly, when my grandchildren see a story touting how ecologically friendly and sustainable our industry has become I can say my generation, in fact all of us here, helped make that possible.

May we work together for the good of the resource and the future of the industry.

Thank You

Richard Beal



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
GREATER ATLANTIC REGIONAL FISHERIES OFFICE  
55 Great Republic Drive  
Gloucester, MA 01930-2276

JUN 19 2017

RECEIVED

JUN 20 2017

AT THE NEW ENGLAND FISHERY  
MANAGEMENT COUNCIL MEETING

Thomas A. Nies  
Executive Director  
New England Fishery Management Council  
50 Water Street, Mill 2  
Newburyport, MA 01950

Dear Tom:

Earlier this year, following discussion of Atlantic halibut management measures, the Council requested information on section 306(b) of the Magnuson-Stevens Fishery Conservation and Management Act. The Council also requested that we revise the discard mortality assumption for halibut based on a series of scientific studies. Attached is a description of the section 306(b) process and a brief summary of the instances when we have taken action, or a group has formally requested that we take action, under section 306(b) authority. Additionally, this letter includes information on the discard mortality assumption for halibut, as well as halibut management issues that the Council should consider.

#### *Halibut Management Issues*

Section 306(b) of the Magnuson-Stevens Act allows the Secretary of Commerce to regulate a fishery within state boundaries where state management substantially and adversely affects a Federal fishery management plan (FMP). As you might expect, to date such instances have arisen in limited, exceptional circumstances after other efforts have failed to resolve the issue. The coordination of state and Federal management is inherent to the regional Fishery Management Council structure, as constituent states have voting members on the Council. Through the Council process, it is intended that the development and implementation of Federal FMPs occurs with cooperation between the Council and the states. However, when this process, along with other efforts, are not able to align state management with the Federal FMP, consideration of action under section 306(b) authority may be warranted.

We encourage the Council to continue to work with the State of Maine to explore all possible options to ensure the effectiveness of halibut conservation objectives established in the Northeast Multispecies FMP. As you know, Federal possession limits were developed to prevent a directed halibut fishery, and keep catch and effort low, in order to support rebuilding for this slow-growing species. The minimum size limit and various area closures provide additional protections.

Staff from the Maine Department of Marine Resources (DMR) indicated that DMR will complete a review of its halibut regulations this year. We intend to coordinate closely with the Council and DMR during this regulatory review. The Council's Groundfish Plan Development Team (PDT) identified a number of issues related to the state fishery that should be explored



JC 6/23/17



further, including an increase in effort and catch in the state fishery, the magnitude of latent effort in the state fishery, the potential for underreporting, and other uncertainties in catch estimates.

Some note that increased availability of halibut to the fishery, or increased state waters landings, is a sign of rebuilding success. While increased availability may be a sign of stock growth, we caution that there is uncertainty about what factors have led to this increased availability. Additionally, although some stock growth is a potential positive sign, halibut is still considered overfished and remains in a rebuilding program. As the stock rebuilds, appropriate and proactive management efforts must be made to ensure that all stakeholders realize the benefits of rebuilding, and that stock growth continues. Regardless of the outcome of the 2017 assessment update, there are a number of management issues that need improvement, particularly those highlighted in this letter. Similarly, we should not rely on, or wait for, a quota overage to explore these issues and make appropriate changes.

Some changes to the Federal accountability measures may be warranted; however, we encourage the Council to focus on changes to Federal management measures that will address the underlying issue(s) that may undermine conservation objectives, or cause an overage. For example, changes *only* to the current size and/or location of the halibut area closures may not be effective considering a large portion of the catch comes from vessels without Federal groundfish permits. The PDT presented a potential option to extend the federal possession restrictions to all federally permitted vessels, not just groundfish vessels. This option may be more effective and appropriate for reducing halibut catch to prevent and/or correct an overage, and the Council should further explore this option.

#### *Halibut Compliance and Enforcement*

As the Council continues to discuss halibut management, we wanted to make you aware of other issues that came to light during the 2017 Maine halibut season. There was considerable non-compliance with the Federal regulations that restrict most federally-permitted groundfish vessels from fishing for groundfish and hauling lobster traps on the same trip. This was primarily occurring for vessels issued an open access Handgear B permit. We worked with DMR staff to clarify the Federal regulations, and have conducted appropriate outreach to Federal permit holders. We intend to continue these efforts and expand our outreach to ensure Federal vessels are aware of how Federal groundfish regulations overlap with other fisheries.

Additionally, we are concerned about continued reports of state vessels fishing in Federal waters. Based on the Council's request and ongoing halibut management discussions, we included halibut as an enforcement priority this year and will continue to prioritize this issue. As the 2017 Maine halibut season closes on June 30, we intend to pursue a joint meeting with DMR staff to continue to coordinate enforcement efforts and improve compliance with halibut regulations.

#### *Halibut Discard Mortality Assumption*


The Council requested that we consider revising the discard mortality assumption for halibut. At the fall 2017 assessment update for halibut, all of the available scientific studies will be considered to inform a potential change to the discard mortality assumption. If the available

information supports a change, we will incorporate the new discard mortality assumptions for quota monitoring.

We always strive to ensure that the assumptions used in the stock assessments, and for quota monitoring, are based on the best scientific information available. A change in the discard mortality assumption for halibut should not be viewed as a solution to the current halibut management issues. Additionally, a change in the discard mortality assumption may have little impact on overall catch estimates depending on the magnitude of the change, and because discards make up a small portion of state waters catch, which is an increasingly larger component of total catch.

I want to thank the Council for its continued proactive efforts on this challenging issue. Halibut is a key groundfish stock that could provide potential opportunities for the groundfish fishery. We will continue to work with the State of Maine and the Council to ensure that all halibut management measures are consistent with Federal conservation objectives and management strategies of the Northeast Multispecies FMP. If you have questions about any of the issues highlighted in this letter, please contact Sarah Heil, Groundfish Team Lead, at (978) 281-9257.

Sincerely,

  
for John K. Bullard  
Regional Administrator

cc: Dr. John Quinn, Chairman  
Terry Stockwell, Chairman, Groundfish Committee  
Patrick Keliher, Commissioner, Maine Department of Marine Resources

Attachment

ATTACHMENT: Description of the Section 306(b) Process and Relevant Examples

*Section 306(b) Process (see 50 CFR §600.605 – 630)*

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) does not intend to diminish the jurisdiction or authority of any state within its boundaries. Federal and state fishery management efforts should be cooperative in order to implement effective management programs and ensure the sustainability of fishery resources. When state management is inconsistent with a Federal fishery management plan and its applicable regulations, section 306(b) of the Magnuson-Stevens Act allows the Secretary of Commerce (Secretary) to regulate a fishery within state boundaries. The Secretary must determine that:

- (1) The fishing in a fishery, which is covered by a fishery management plan implemented under the Magnuson-Stevens Act, is engaged in predominately within the exclusive economic zone (EEZ) and beyond such zone; and
- (2) Any state has taken any action, or omitted to take any action, the results of which will substantially and adversely affect the carrying out of a fishery management plan.

A determination of whether fishing occurs predominantly within or beyond the EEZ is based on several relevant factors, including catch or fishing effort over a fishing season or year, and historical patterns of catch or fishing effort distribution. The factors considered to determine whether the effects of the state's action, or inaction, are substantial include the proportion of the fishery subject to the effects of the state's action, the characteristics and status of the stocks, and the similarity or dissimilarity between the state's action and the Federal fishery management plan goals, objectives, or policies.

If, based on the factual findings above, a section 306(b) proceeding is deemed necessary, a formal rulemaking process is initiated. Under the Administrative Procedure Act, the formal rulemaking process requires NMFS to present evidence in a hearing before an Administrative Law Judge. The formal rulemaking process for section 306(b) is summarized below.

- (1) *NMFS issues a notice of proposed preemption to the Attorney General of the relevant state(s). The notice must contain: a) A description of the legal authority for the proceeding; b) a concise statement of factual findings for Federal preemption; and c) the logistics (date/time) of the hearing. NMFS would publish this notice in the *Federal Register*, and may combine it with a proposed rulemaking, further described below.*
- (2) *To ensure NMFS can take timely action to avoid conservation risks, NMFS may propose regulations, or take emergency action, to regulate fishing within state boundaries. Any proposed regulations would publish in the *Federal Register* concurrent with the notice of proposed preemption. NMFS would implement proposed regulations, if necessary, when the Secretary makes a final determination after the formal hearing. If an emergency action is justified under section 305(e) of the Magnuson-Stevens Act, NMFS could implement emergency measures to address state waters management conflict.*

- (3) *The state has the opportunity to respond in writing to the preemption notice.*
- (4) *At any time prior to the Secretary's decision, NMFS may withdraw the notice of proposed preemption*
- (5) *NMFS holds a hearing before an Administrative Law Judge, and the judge recommends a decision.* The judge evaluates NMFS' presentation of factual findings, as well as the state's response, determines whether the facts warrant section 306(b) preemption, and makes a recommendation to the Secretary.
- (6) *NMFS records the Administrative Law Judge's findings, and decides whether to preempt state regulations.* The Secretary can accept or reject any of the judge's findings, reserve decision based on the merits of the case, withdraw the notice of proposed preemption, or remand the case to the judge for further proceedings. If the Secretary determines the factual findings for the preemption exist, the Attorney General of the relevant state(s) would be notified and proposed regulations would be finalized.

### *Examples of Actions Taken Under Section 306(b) Authority*

On May 22, 1982, NMFS initiated a section 306(b) proceeding to preempt the State of Oregon's decision to open its waters for a 2-week recreational salmon fishery. The Secretary found that Oregon's action to open its waters to recreational fishing during this period would have substantially and adversely affected the Federal ocean salmon fishery. Following a hearing, an Administrative Law Judge recommended that the Secretary preempt Oregon's authority. NMFS subsequently decided to preempt the authority and issued an emergency rule closing Oregon's waters to recreational fishing (47 FR 24136; June 3, 1982).

On September 7, 1984, NMFS initiated a 306(b) proceeding to preempt Oregon's salmon management authority. The Oregon Fish and Wildlife Commission deviated from the Federal salmon management plan by opening Oregon waters for a September commercial "other than coho" troll salmon fishery. Pending a hearing before an Administrative Law Judge, NMFS published a proposed rule to carry out the preemption (49 FR 35815; September 12, 1984). Following the hearing, the judge recommended that the Secretary temporarily preempt Oregon in certain areas until September 30, 1984, pending the judge's final determination of whether preemptive action should continue after September 30, 1984, and to what extent. Based on this recommendation, NMFS issued an emergency rule to temporarily preempt Oregon (49 FR 37783; September 26, 1984) pending the judge's further consideration. In the meantime, Oregon engaged in discussions with the Pacific Fishery Management Council and, adopted a policy that Oregon would consult with the Council if it proposed to take an action inconsistent with an approved fishery management plan. Based on that policy, NMFS withdrew the initiation of the 306(b) process, as well as the proposed rule to preempt Oregon (50 FR 134; January 2, 1985).

In 2008, the United Cook Inlet Drift Association petitioned NMFS to issue an emergency rule to preempt the State of Alaska's salmon management authority. NMFS denied the petitioner's request for rulemaking in 2009 after review of the available information. In this case, the petitioner requested that NMFS apply Federal management measures to a fishery that was predominantly carried out in state waters. As such, NMFS denied the request, in part, because the Magnuson-Stevens Act only allows preemption if the fishery occurs predominantly within the EEZ.



UNITED STATES DEPARTMENT OF COMMERCE  
 National Oceanic and Atmospheric Administration  
 NATIONAL MARINE FISHERIES SERVICE  
 GREATER ATLANTIC REGION  
 55 Great Republic Drive  
 Gloucester, MA 01930-2298

## Groundfish Summary Report

May 1, 2017 – June 19, 2017

RECEIVED

JUN 20 2017

AT THE NEW ENGLAND FISHERY  
 MANAGEMENT COUNCIL MEETING

### DAS Leasing Program

	Common Pool	Sectors
Total Leases Processed:	3	3
Total Leases Approved:	3	3
Number of Distinct Permits:	6	6
Total DAS Leased:	43.2	92
Average Cost per DAS Leased*:	\$86.83	\$0.00
Highest Cost per DAS Leased:	\$150.00	\$0.00
Lowest Cost per DAS Leased:	\$0.50	\$0.00

\* For leases greater than \$ 0.00

### Sector ACE Transfers

STOCK	Number of Transfers	Total Pounds Transferred
CC/GOM Yellowtail Flounder	15	44699
GB Cod East	15	19379
GB Cod West	17	67282
GB Haddock East	7	214760
GB Haddock West	7	250117
GB Winter Flounder	8	54262
GB Yellowtail Flounder	3	2193
GOM Cod	16	19393
GOM Haddock	12	72884
GOM Winter Flounder	7	9987
Plaice	23	91912
Pollock	9	773530
Redfish	9	414770
SNE/MA Yellowtail Flounder	2	103
White Hake	9	182886
Witch Flounder	18	32067
SNE/MA Winter Flounder	14	48942
<b>Total</b>	<b>191</b>	<b>2299166</b>





National Marine Fisheries Service  
Greater Atlantic Regional Fisheries Office  
Sustainable Fisheries Division  
[www.greateratlantic.fisheries.noaa.gov](http://www.greateratlantic.fisheries.noaa.gov)



**RECEIVED**

JUN 20 2017

# Status Report of AT THE NEW ENGLAND FISHERY MANAGEMENT COUNCIL MEETING Greater Atlantic Region Actions

---

Prepared for the June 20-22, 2017  
Meeting of the  
New England Fishery Management Council

June 19, 2017

**Table of Contents**

**NEW ENGLAND COUNCIL ACTIONS ..... 2**  
SMALL-MESH MULTISPECIES.....2  
GROUND FISH.....2  
SCALLOPS .....3  
MONKFISH .....3  
HERRING.....3  
SKATE.....3  
ATLANTIC DEEP-SEA RED CRAB .....3  
**MID-ATLANTIC COUNCIL ACTIONS ..... 4**  
SUMMER FLOUNDER, SCUP, AND BLACK SEA BASS.....4  
ATLANTIC BLUEFISH.....4  
SPINY DOGFISH.....4  
SURFLAM AND OCEAN QUAHOG.....5  
ATLANTIC MACKEREL, SQUID, AND BUTTERFISH.....5  
TILEFISH .....5  
**OTHER ACTIONS ..... 5**  
PAPERWORK REDUCTION ACT .....5  
FORAGE SPECIES.....6  
LOBSTER.....6  
JONAH CRAB.....6  
BLUELINE TILEFISH .....6  
INDUSTRY FUNDED MONITORING OMNIBUS AMENDMENT .....6  
ELECTRONIC VESSEL TRIP REPORT OMNIBUS FRAMEWORK.....7  
COMMUNITY RESILIENCE.....7  
**PROTECTED RESOURCES ACTIONS ..... 7**  
**RESEARCH PERMITS AND ACKNOWLEDGMENTS - APPLICATIONS  
UNDER REVIEW ..... 7**  
**RESEARCH PERMITS AND ACKNOWLEDGMENTS - APPLICATION  
REVIEW COMPLETED..... 10**



## **New England Council Actions**

### **Small-Mesh Multispecies**

None at this time

### **Groundfish**

#### **2017 Recreational Measures for Gulf of Maine Cod and Haddock**

On May 24, 2017, NMFS published a proposed rule in the Federal Register (82 FR 24086) to modify recreational management measures for Gulf of Maine cod and haddock for the 2017 fishing year. The action proposed to prohibit recreational possession of cod, reduce the haddock bag limit, and implement a new closed season for haddock in the fall. The comment period for the proposed rule closed on June 9, 2017.

#### **Reimbursement of Sector At-Sea Monitoring Costs**

On June 16, 2017, NMFS announced that we will continue to offset a portion of industry's costs for the groundfish at-sea monitoring program through a cooperative agreement with the Atlantic States Marine Fisheries Commission. The ASMFC is reimbursing sectors for 60 percent of their ASM costs for sector trips beginning on or after May 1. For additional information, please contact Liz Sullivan at (978) 282-8493 or email at [Liz.Sullivan@noaa.gov](mailto:Liz.Sullivan@noaa.gov).

#### **Approval of Groundfish Sectors for Fishing Years 2017 and 2018**

NMFS published an interim final rule in the Federal Register on April 30, 2017 (82 FR 19618) to approve groundfish sector operations plans for 2017 and 2018. This rule approved operations plans for 20 sectors in fishing years 2017 and 2018. A 30-day public comment period on the rule closed May 30, 2017. For additional information, please contact Kyle Molton at (978) 281-9236 or email at [Kyle.Molton@noaa.gov](mailto:Kyle.Molton@noaa.gov).

#### **Possession and Trip Limit Implementation for the Groundfish Common Pool Fishery**

On May 1, 2017, NMFS published a temporary rule in the Federal Register (82 FR 20285) that set the initial Fishing Year 2017 possession and trip limits for the common pool groundfish fishery. The initial 2017 possession and trip limits were the same as the initial 2016 trip limits, with the exception of Georges Bank (GB) cod, Gulf of Maine (GOM) haddock, Southern New England/Mid-Atlantic (SNE/MA) yellowtail flounder, and witch flounder. Initial GB cod and witch flounder trip and possession limits were reduced relative to 2016 initial trip limits, while initial SNE/MA yellowtail flounder and GOM haddock trip and possession limits were increased relative to 2016 initial trip limits. For additional information, please contact Spencer Talmage at (978) 281-9232 or email at [Spencer.Talmage@noaa.gov](mailto:Spencer.Talmage@noaa.gov)

**Trimester TAC Closure for American Plaice**

On May 24, 2017, NMFS published a temporary rule in the Federal Register (82 FR 24569) closing the Trimester Total Allowable Catch (TAC) area for American plaice to groundfish common pool vessels fishing with trawl gear. This closure affects statistical areas 512, 513, 514, 515, 521, 522, and 525. This closure is required when catch information shows the common pool fishery has harvested 90 percent of its Trimester 1 TAC for American plaice. The area will reopen at the start of Trimester 2 on September 1, 2017. For additional information, please contact Spencer Talmage at (978) 281-9232 or email at [Spencer.Talmage@noaa.gov](mailto:Spencer.Talmage@noaa.gov)

**Scallops**

None at this time

**Monkfish**

**Framework Adjustment 10**

We published a Proposed Rule in the Federal Register on May 9, 2017, (82 FR 21498) soliciting public comment on Framework Adjustment 10. The public comment period closed on May 24, 2017. Framework 10 would set monkfish specifications for fishing years 2017-2019. It would also increase current days-at-sea allocations and trip limits to provide additional operational flexibility and fishing opportunities. NMFS anticipates publishing a final rule shortly. For additional information, please contact William Whitmore at (978) 281-9182 or email at [William.Whitmore@noaa.gov](mailto:William.Whitmore@noaa.gov).

**Herring**

None at this time

**Skate**

None at this time

**Atlantic Deep-Sea Red Crab**

None at this time

## **Mid-Atlantic Council Actions**

### **Summer Flounder, Scup, and Black Sea Bass**

#### **Revised Black Sea Bass Specifications for 2017 and 2018**

NMFS published a final rule in the Federal Register on May 25, 2017, (82 FR 24078) that revises black sea bass specifications for the 2017 and 2018 fishing years, as well as the removes a previously implemented accountability measure. Updated scientific information from the 2016 stock assessment indicates that higher catch limits should be implemented to obtain optimum yield, and that the accountability measure to account for commercial sector overages in 2015 is no longer necessary or appropriate. The revised specifications represent a 53-percent increase in the 2017 commercial black sea bass quota established in 2015, and a 52-percent increase in the 2017 recreational harvest limit. The Mid-Atlantic Council will revisit its decision on the 2018 specifications following the SSC's review next summer, and if no changes are necessary, this action will remain unchanged. For additional information, please contact Cynthia Hanson at (978) 281-9180, or email at [Cynthia.hanson@noaa.gov](mailto:Cynthia.hanson@noaa.gov).

#### **Proposed Rule for the 2017 Summer Flounder and Scup Recreational Management Measures**

NMFS published a rule in the Federal Register on April 19, 2017 (82 FR 18411), proposing 2017 summer flounder and scup recreational management measures for the 2017 fishing year. Based on the recommendations from the Mid-Atlantic Fishery Management Council and Atlantic States Marine Fisheries Commission, NMFS proposed to continue the use of summer flounder conservation equivalency measures to all the states, through the Commission, to determine the most appropriate measures to constrain the landings to the 2017 recreational harvest limit. NMFS proposed maintaining status quo measures for the 2017 recreational scup fishery. The comment period for this action closed on May 4, 2017, and we anticipate a final rule will publish with a final determination in late June or early July. For additional information, please contact Emily Gilbert at (978) 281-9244 or email at [Emily.Gilbert@noaa.gov](mailto:Emily.Gilbert@noaa.gov).

#### **Commercial Summer Flounder Quota Transfer – North Carolina to Virginia**

NMFS published a temporary rule in the Federal Register on May 18, 2017, (82 FR 22761) allowing a transfer of 2,510 lb of commercial summer flounder quota from North Carolina to Virginia. The revised summer flounder quotas for calendar year 2017 are: North Carolina, 1,539,693 lb; Virginia, 1,219,912 lb. This transfer was requested by North Carolina to repay landings by a North Carolina-permitted vessel that landed in Virginia under a safe harbor agreement. For additional information, please contact Cynthia Hanson at (978) 281-9180, or email at [Cynthia.hanson@noaa.gov](mailto:Cynthia.hanson@noaa.gov).

### **Atlantic Bluefish**

None at this time

### **Spiny Dogfish**

None at this time

## **Surfclam and Ocean Quahog**

### **Surfclam and Ocean Quahog ITQ Cost Recovery**

On May 10, 2017, NMFS announced the 2017 cost recovery tag fees for the surfclam and ocean quahog individual transferable quota (ITQ) fisheries. This is the start of the new cost recovery program for the surfclam and ocean quahog ITQ fisheries. The 2017 tag fees are \$0.32 per surfclam tag and \$0.20 per ocean quahog tag. The fee to the ITQ shareholder will be based on how many cage tag numbers initially allocated to each shareholder are used to land clams, even if some or all of those tags are leased or otherwise transferred to another individual who uses them to land clams. NMFS will issue ITQ shareholders a single bill in March 2018 based on all of the cage tags used during 2017. Shareholders who do not use any tags will not receive a bill. The tag fee announcement is available online at:

[www.greateratlantic.fisheries.noaa.gov/sustainable/species/clam/](http://www.greateratlantic.fisheries.noaa.gov/sustainable/species/clam/). For additional information, please contact Doug Potts at 978-281-9341 or [Douglas.Potts@noaa.gov](mailto:Douglas.Potts@noaa.gov).

## **Atlantic Mackerel, Squid, and Butterfish**

### **Notice of Intent to Prepare an Environmental Impact Statement for Chub Mackerel**

NMFS published a notice of intent in the Federal Register on March 22, 2017, (82 FR 14694) documenting the Mid-Atlantic Council's intent to prepare an environmental impact statement to support integrating Atlantic chub mackerel into the Atlantic Mackerel, Squid, and Butterfish Fishery Management Plan. This action would consider implementing annual catch limits, accountability measures, essential fish habitat designations, and a definition of the management unit for this species. The Council may also consider other measures such as permit requirements, annual catch targets, possession limits, minimum fish size restrictions, gear restrictions and reporting requirements. The comment period on the notice of intent closed on May 31, 2017. For additional information, please contact Douglas Christel at (978) 281-9141, or email at [douglas.christel@noaa.gov](mailto:douglas.christel@noaa.gov).

## **Tilefish**

### **Tilefish Framework 2**

This action would modify the incidental possession limit, clarify allowed gear for recreational fishing, and make several improvements to the tilefish individual fishing quota (IFQ) program. We are currently preparing a proposed rule to seek public comment on the action. For additional information, please contact Doug Potts at 978-281-9341 or [Douglas.Potts@noaa.gov](mailto:Douglas.Potts@noaa.gov).

## **Other Actions**

### **Paperwork Reduction Act**

None at this time

## Forage Species

### Notice of Availability for the Unmanaged Forage Fish Omnibus Amendment

NMFS published a notice of availability for the Unmanaged Forage Fish Omnibus Amendment in the Federal Register on March 28, 2017 (82 FR 15311). The Forage Fish Amendment would: Set a 1,700 lb/trip cumulative possession limit for certain previously unmanaged forage species in Mid-Atlantic Federal waters; establish a 2.86 million lb annual landing limit for Atlantic chub mackerel and a 40,000 lb incidental trip limit once the annual landing limit is reached; require a Federal commercial vessel, operator, and dealer permit to fish for, possess, land, and purchase forage species or Atlantic chub mackerel in or from Mid-Atlantic Federal waters; require vessel operators and dealers to report catch and landings of forage species and chub mackerel on logbooks and dealer reports, respectively; allow vessels to transit Mid-Atlantic waters with forage species and chub mackerel caught outside of the Mid-Atlantic Federal waters; and specify certain measures that can be revised through a future framework action. The comment period on the notice of availability closed on May 30, 2017. For additional information, please contact Douglas Christel at (978) 281-9141, or email at [douglas.christel@noaa.gov](mailto:douglas.christel@noaa.gov).

### Proposed Rule for the Unmanaged Forage Fish Omnibus Amendment

NMFS published a proposed rule for the Unmanaged Forage Fish Omnibus Amendment in the Federal Register on April 24, 2017 (82 FR 18882). This amendment would implement measures to prevent the expansion of existing commercial fisheries for certain previously unmanaged forage species and Atlantic chub mackerel. As noted above, proposed measures include possession limits, an annual landing limit for chub mackerel, permit and reporting requirements, a transiting provision, and a list of allowable framework measures. The comment period on this rule closed on May 30, 2017. For additional information, please contact Douglas Christel at (978) 281-9141 or email at [douglas.christel@noaa.gov](mailto:douglas.christel@noaa.gov).

## Lobster

None at this time

## Jonah Crab

None at this time

## Blueline Tilefish

### Blueline Tilefish Amendment

This action would add blueline tilefish to the Tilefish Fishery Management Plan and establish management measures for the resource in the Mid-Atlantic. A Notice of Availability published on June 14, 2017, (82 FR 27223) comments must be received by August 14, 2017. A proposed rule should publish soon.. For additional information, please contact Doug Potts at 978-281-9341 or email at [Douglas.Potts@noaa.gov](mailto:Douglas.Potts@noaa.gov).

## Industry Funded Monitoring Omnibus Amendment

None at this time

## **Electronic Vessel Trip Report Omnibus Framework**

NMFS published a proposed rule in the Federal Register on May 24, 2017, (83 FR 23774) that would implement a requirement for charter and party vessels that hold a Federal permit to fish for species managed by a Mid-Atlantic Council FMP, while on a trip carrying passengers for hire, to submit VTRs by electronic means. Vessels would also be required to submit these reports within 48 hours following the completion of a fishing trip. The comment period for this proposed rule closes on June 23, 2017. For additional information, please contact Dan Luers at 978-282-8457 or email at [Daniel.Luers@noaa.gov](mailto:Daniel.Luers@noaa.gov).

## **Community Resilience**

### **Fishing Community Resilience Workshop**

NOAA Fisheries' Greater Atlantic Regional Fisheries Office (GARFO) and Northeast Fisheries Science Center will host a collaborative workshop on Community Resilience within our region on June 27-28, 2017. The event convenes mayors, community leaders, researchers, state and Federal agency representatives, and members of the fishing industry for a two-day workshop at GARFO in Gloucester, MA. The workshop will support our strategic goal to strengthen community resilience to ensure sustainable fisheries, recovery of protected species, and healthy marine habitat. The workshop will feature a distinguished group of speakers who will share their insights on community resilience. Speakers include the mayors of Gloucester and Newburyport, MA; the Port Director for the City of New Bedford, MA; fisheries scientists and researchers; Pat Keliher of Maine Department of Marine Resources; Mike Luisi of Maryland Department of Natural Resources; aquaculture innovators, social scientists, and fishing industry leaders. Attendees will have the opportunity to participate during several discussion sessions to provide NOAA Fisheries leadership with information on how we can help improve resilience in our communities and fishing industry.

For additional information, please contact Peter Burns at (978) 281-9144, or email at [peter.burns@noaa.gov](mailto:peter.burns@noaa.gov).

## **Protected Resources Actions**

None at this time

## **Research Permits and Acknowledgments - Applications Under Review**

GMRI submitted an initial application for an exempted fishing permit (EFP) on April 10, 2017, in support of research associated with a 2016 Saltonstall-Kennedy Program (SK) Project titled "Complementary testing of off-bottom trawls to target Georges Bank haddock". The overall goal of this project is to test the efficacy of an off-bottom trawl to access healthy groundfish stocks using a trawl that is highly-selective, fuel-efficient, and reduces environmental impacts. One vessel, the F/V *Teresa Marie IV*, would test the off-bottom trawl with two different codends; a 4.5-inch diamond mesh codend used when targeting redfish, and a 5.1-inch square mesh codend when targeting haddock. The proposed off-bottom trawl would require an exemption from the Northeast Multispecies minimum mesh size requirements at 50 CFR 648.80(a)(3)(ii). For additional information, please contact Emily Keiley at (978)-281-9116 or email at [emily.keiley@noaa.gov](mailto:emily.keiley@noaa.gov).

## *Status Report of Greater Atlantic Region Regulatory Actions*

On March 29, 2017, NMFS received a complete application from Coonamessett Farm Foundation for an Exempted Fishing Permit (EFP) for a project titled: “Optimizing the Georges Bank Scallop Fishery by Maximizing Meat Yield and Minimizing Bycatch” to be considered for the 2017 Scallop Research Set-Aside program. The application being considered would conduct a seasonal survey using scallop dredges to collect data on the distribution of bycatch species and examine scallop meat quality; in addition to conducting biological sampling of American lobsters. The EFP would exempt participating vessels from several fisheries regulations, including: Atlantic sea scallop days-at-sea, crew size, observer program requirements, gear restrictions, possession and size limits, and access to restricted areas on Georges Bank. For additional information, please contact Alyson Pitts at (978) 281-9352 or email at [Alyson.Pitts@noaa.gov](mailto:Alyson.Pitts@noaa.gov).

On April 3, 2017, NMFS received a complete application from Coonamessett Farm Foundation for an EFP for a project titled: “Development of an Extended Link Apron: A Broad Range Tool for Bycatch Reduction” to be considered for the 2017 Scallop Research Set-Aside program. The application being considered would determine the efficacy of an extended link apron at reducing the capture of yellowtail and windowpane flounder using a commercial scallop dredge. The EFP would exempt participating vessels from several fisheries regulations, including: Atlantic sea scallop days-at-sea, crew size, observer program requirements, possession and size limits, and access to restricted areas on Georges Bank and southern New England. For additional information, please contact Alyson Pitts at (978) 281-9352 or email at [Alyson.Pitts@noaa.gov](mailto:Alyson.Pitts@noaa.gov).

On February 6, 2017, the University of Rhode Island submitted a complete EFP application for a project to conduct gear research to reduce flatfish bycatch in the scallop dredge. The project has been funded through a grant as part of the 2016 Bycatch Reduction Engineering Program. The project would need exemptions from the scallop fishery observer program requirements, along with minimum fish sizes and possession limits for sampling purposes only. All research would be conducted on limited access general category individual fishing quota (IFQ) vessels under normal commercial fishing conditions. All catch within regulatory limits will be kept, sold, and counted towards the vessel’s yearly IFQ allocation. For additional information, please contact Shannah Jaburek at (978) 282-8456 or email at [Shannah.jaburek@noaa.gov](mailto:Shannah.jaburek@noaa.gov).

On March 7, 2017, NMFS received an initial EFP request from the Environmental Defense Fund and Gulf of Marine Research Institute to test a maximized retention electronic monitoring (EM) program. A revised and complete EFP request was submitted on April 17, 2017. If the EFP is approved, participating vessels would be exempt from commercial minimum fish sizes and be required to retain all allocated groundfish catch, regardless of size. Vessels would run EM on 100 percent of trips; the video footage would be used to verify compliance with retention requirements. Catch would be sampled through a dockside monitoring program for all EFP trips. Participating vessels may be granted access to closed areas and exemptions from gear requirements. For additional information, please contact Claire Fitz-Gerald at (978)281-9255, or email at [claire.fitzgerald@gmail.com](mailto:claire.fitzgerald@gmail.com).

On November 29, 2016, NMFS received a request for an EFP from William G. Brown in support of a study investigating the economic viability of electronic jigging machines to target pollock. NMFS published a notice for comment in the Federal Register on March 16, 2017 (82 FR 13977), and public comment closed on March 31, 2017. The participating commercial fishing vessel would conduct sampling using electronic jigging machines in the Western Gulf of Maine Closure Area between June and August of 2017. For additional information, please contact Kyle Molton at (978) 281-9236 or email at [Kyle.Molton@noaa.gov](mailto:Kyle.Molton@noaa.gov).

*Status Report of Greater Atlantic Region Regulatory Actions*

On April 5, 2017, NMFS received an EFP request from The Nature Conservancy (TNC) to expand on TNC's existing electronic monitoring program. Participating vessels would use EM, and adhere to catch handling and reporting requirements, on 100 percent of sector trips. Data collected through this EFP would be used to further explore an audit-based EM model, in which a subset of EM video footage is reviewed to ensure accurate reporting. Participating vessels may be granted access to closed areas and other measures to improve business flexibility. Vessels are in four separate sectors and use trawl, gillnet, tub trawl, and handline gear. For additional information, please contact Claire Fitz-Gerald at (978)281-9255, or email at [claire.fitz-gerald@noaa.gov](mailto:claire.fitz-gerald@noaa.gov).

On May 16, 2017, NMFS published a notice in the Federal Register (82 FR 22515) that three commercial fishermen submitted separate and complete applications requesting an EFP to conduct independent projects testing the economic viability of using hook gear to selectively target healthy pollock and haddock stocks in the Western Gulf of Maine and Cashes Ledge Closure Areas (excluding Cashes Ledge Habitat Closed Area), while avoiding bycatch of cod and other bycatch species; the comment period closed May 31, 2017. The applicants will leverage this exemption to explore and develop premium markets for their catch. If issued, these EFPs would authorize three commercial fishing vessels to fish a combined total of 200 trips in these closure areas. Participating vessels would be required carry 100 percent observer coverage on EFP trips. For additional information, please contact Claire Fitz-Gerald at (978)281-9255, or email at [claire.fitz-gerald@noaa.gov](mailto:claire.fitz-gerald@noaa.gov).

On May 25, 2017, NMFS received a request for a letter of acknowledgement (LOA) from the University of Maine in support of its' ongoing sentinel survey in the eastern Gulf of Maine. The participating commercial fishing vessels would conduct survey work using longline and jig gear in the Gulf of Maine during the summer of 2017. For additional information, please contact Kyle Molton at (978) 281-9236 or email at [Kyle.Molton@noaa.gov](mailto:Kyle.Molton@noaa.gov).

On April 17, 2017, Coonamessett Farm Foundation submitted a complete application for an EFP to complete work on a 2016 scallop RSA seeding and enhancement project on Georges Bank titled "Drivers of Dispersal and Retention in Recently Seeded Sea Scallops." The goal of the project is to demonstrate the feasibility of a seeding program to enhance and stabilized scallop recruitment on Georges Bank while documenting the factors that affect seed survival. The EFP would exempt vessels from the Atlantic sea scallop crew size restrictions, observer program requirements, closed area requirements for Nantucket Lightship and Closed Area I, and minimum fish sizes and possession limits for biological sampling only. For additional information, please contact Shannah Jaburek at (978) 282-8456 or email at [Shannah.jaburek@noaa.gov](mailto:Shannah.jaburek@noaa.gov).

On April 25, 2017, NMFS received a request for an EFP from the Massachusetts Division of Marine Fisheries to complete the second year of a whiting study. This EFP allows up to eight commercial vessels to use standard raised-footrope gear to fish for whiting within a portion of Small-Mesh Area 1, two weeks prior to the start of the open season. The study would analyze if whiting stocks can be more effectively targeted within the study area before the start of the open season. This EFP would exempt the participating vessels from minimum mesh size gear requirements found at 50 CFR 648.80(a)(3), and from the possession limits and minimum size requirements specified at 50 CFR part 648, subparts B and D through O. For additional information, please contact Reid Lichwell at (978) 281-9112 or email at [Reid.Lichwell@noaa.gov](mailto:Reid.Lichwell@noaa.gov).



On May 23, 2017, CFF submitted a complete application for an EFP, to conduct an optical and dredge survey in the NGOM Scallop Management Area. The project titled “An Optical Assessment of Sea Scallop Abundance and Distribution in Select Areas of the Northern Gulf of Maine Scallop Management Area” would be funded through the Scallop Research Set-Aside Program. The primary survey instrument will be the HabCam imaging system, but a scallop survey dredge would be deployed to enable collection of biological information. One vessel would conduct the survey in early July 2017 over the course of four days-at-sea. The EFP would exempt the vessel from the Northern Gulf of Maine management program requirements, days-as-sea allocations, crew size exemptions, observer program requirements, and dredge gear restrictions. For additional information, please contact Shannah Jaburek at (978) 282-8456 or email at [Shannah.jaburek@noaa.gov](mailto:Shannah.jaburek@noaa.gov).

On May 23, 2017, NMFS received a request for an LOA from the Massachusetts Division of Marine Fisheries (MA DMF) to perform scientific research testing of an experimental, off-bottom trawl net. This project has been funded by the 2015 Saltonstall-Kennedy Grant Program. Testing of the off-bottom trawl would occur in July and August 2017. For additional information please contact Emily Keiley at (978)281-9116 or email at [Emily.Keiley@noaa.gov](mailto:Emily.Keiley@noaa.gov).

## **Research Permits and Acknowledgments - Application Review Completed**

On March 30, 2017, NMFS issued an LOA to the Massachusetts Division of Marine Fisheries (MA DMF) to conduct an industry-based survey (IBS) on Gulf of Maine (GOM) cod. This LOA authorizes MA DMF to contract one fishing vessel to conduct monthly cruises from April through July, and from October through January. Each cruise will be approximately 10 days, with an average of 5 30-minute tows each day. All cruises will be accompanied by at least one chief scientist and trained contracted sampler, or a MA DMF staff member. Prohibited species will be returned to the water as quickly as possible. Commercially valuable species will be sampled and sold; proceeds from the sale will be used to support this research. For additional information, please contact Claire Fitz-Gerald at (978) 281-9255, or email at [claire.fitz-gerald@noaa.gov](mailto:claire.fitz-gerald@noaa.gov).

On May 10, 2017, NMFS issued a LOA to the University of Rhode Island to conduct a new phase of the Southern New England Cooperative Ventless Trap Survey, which seeks to understand the distribution and habitat usage of American lobster and Jonah crab in the RI/MA Wind Energy Area in Lobster Management Area 2. Three active vessels will survey lobsters and Jonah crabs at 24 established sampling sites within the study area, using eight standard trawls with 10 traps (6 ventless, 6 standard) per trawl, for a total of 80 traps per vessel. One trawl will be deployed at each of the fixed sample sites, and fished twice a month from May through November 2017, with a soak time of five days. During sampling, detailed biological information will be recorded for all lobsters and up to 10 Jonah crabs from each trap, and other bycatch species will also be enumerated, weighed, and measured. All species will be returned promptly to the water after sampling. No catch from this project will be landed for sale. Biologists from URI will direct survey activities for all trips conducted under this LOA. For additional information, please contact Cynthia Hanson at (978) 281-9180, or email at [Cynthia.hanson@noaa.gov](mailto:Cynthia.hanson@noaa.gov)

NMFS issued a LOA to Northeastern University on April 28, 2017, to conduct a cod population dynamics study. A revised LOA for this project was issued on May 31, 2017, to incorporate a small change to the project’s research design. For additional information please contact Emily Keiley at (978)281-9116 or email at [Emily.Keiley@noaa.gov](mailto:Emily.Keiley@noaa.gov).

## *Status Report of Greater Atlantic Region Regulatory Actions*

On April 25, 2017, NMFS issued a revision to Rutgers University's LOA to conduct a hook and line black sea bass spatial dynamics survey. The project surveys five sites from Rhode Island to North Carolina at different depths using the recreational fishery and volunteer anglers. This revision removed three vessels from the LOA and added two new vessels. The overall effort and scope of the research project remains unchanged by this modification, and runs through November, 2017. For additional information, please contact Cynthia Hanson at [\(978\) 281-9180](tel:(978)281-9180), or email at [Cynthia.hanson@noaa.gov](mailto:Cynthia.hanson@noaa.gov).

On May 19, 2017, NMFS issued a revision to an EFP originally issued to Massachusetts Division of Marine Fisheries (MA DMF) on May 18, 2017, replacing an incorrect vessel with the correct one. The EFP was issued to allow MA DMF to conduct a 2-year scientific study with experimental gear and lobster possession and landing that would otherwise be restricted under the Federal lobster regulations. The purpose of the survey is to provide fishery-independent data on lobster growth and abundance within the Massachusetts state waters of stat. area 514, and state and Federal waters of stat. areas 537 and 538. Funding is provided by MA DMF through their commercial and recreational lobster license fees. This survey has been conducted since 2006 in MA state waters, and an EFP has been issued for the survey since 2014. The EFP would allow five federally permitted lobster vessels to set, haul, and retain on-board lobster traps without escape vents during setting and sampling activity. The vessels would also be exempt from trap limits, trap tag requirements, size requirements, and V-notch and berried female possession requirements for research purposes only. Sampling will occur from June through October of 2017 and 2018. For additional information, please contact Carrie Wein at [\(978\) 978-281-9225](tel:(978)978-281-9225) or email at [Carrie.Wein@noaa.gov](mailto:Carrie.Wein@noaa.gov).

On April 18, 2017, NMFS issued a one year EFP extension to the University of New England for an existing EFP after receiving a no cost extension of the Bycatch Reduction Engineering Program grant funding this study. The original EFP was issued on April 29, 2016. This study will assess the injuries of cod captured in lobster traps while fishing for lobster, and was designed to obtain information for fisheries managers to more accurately predict cod discard mortality in the GOM lobster fishery. This EFP allows exemption from 50 CFR 648.86(b)(5) and § 648.83(a), while sampling and tagging cod. For additional information, please contact Carrie Wein at [\(978\) 978-281-9225](tel:(978)978-281-9225) or email at [Carrie.Wein@noaa.gov](mailto:Carrie.Wein@noaa.gov).

On April 27, 2017, NMFS issued a LOA to the Maine Department of Marine Resources (DMR) in support of a halibut tagging study. The participating vessels will conduct sampling using longline gear in the Gulf of Maine in June and July, 2017. DMR staff will accompany all research trips. For additional information, please contact Kyle Molton at [\(978\) 281-9236](tel:(978)281-9236) or email at [Kyle.Molton@noaa.gov](mailto:Kyle.Molton@noaa.gov).

On April 20, 2017, NMFS issued a Scientific Research Permit (SRP) from the Northeast Fisheries Science Center (NEFSC) in support of NOAA's Gulf of Maine Bottom Longline Survey. The chartered commercial fishing vessels will conduct survey work using longline gear in the Gulf of Maine in Spring and Fall of 2017. For additional information, please contact Kyle Molton at [\(978\) 281-9236](tel:(978)281-9236) or email at [Kyle.Molton@noaa.gov](mailto:Kyle.Molton@noaa.gov).

On April 26, 2017, NMFS issued an EFP to the Northeast Fisheries Science Center. The EFP supports the ongoing NEFSC Study Fleet biological sampling program. For additional information, please contact Spencer Talmage at [\(978\) 281-9232](tel:(978)281-9232) or email at [Spencer.Talmage@noaa.gov](mailto:Spencer.Talmage@noaa.gov)

## *Status Report of Greater Atlantic Region Regulatory Actions*

On May 12, 2017, NMFS issued an Exempted Educational Activity Authorization (EEAA) to the University of New Hampshire in support of the Shoals Marine Laboratory (SML) programs, which included high school and college marine science courses, public educational programs, and a marine science workshop for teachers. For additional information, please contact Spencer Talmage at (978) 281-9232 or email at [Spencer.Talmage@noaa.gov](mailto:Spencer.Talmage@noaa.gov)

On May 31, 2017, NMFS issued EFPs to the University of Massachusetts Dartmouth, School for Marine Science and Technology and The Nature Conservancy. The EFPs support a project conducted with funding from the Saltonstall-Kennedy Grant Program studying Atlantic halibut stock structure, seasonal movement, behavior, and life history. The EFPs allow participating vessels to land Atlantic halibut under the minimum size limit and in excess of possession limits. For additional information, please contact Spencer Talmage at (978) 281-9232 or email at [Spencer.Talmage@noaa.gov](mailto:Spencer.Talmage@noaa.gov)

On June 1, 2017, NMFS issued an EFP to The Nature Conservancy renewing an EFP issued in fishing year 2016. This EFP authorizes 14 vessels to continue using electronic monitoring (EM) in lieu of human at-sea monitors (ASM) on trips selected for ASM coverage for fishing year 2017. All video from these selected trips will be reviewed and used to identify and enumerate discards of groundfish species. A continuation of this project will enable The Nature Conservancy and its partners to further improve the functionality of EM, refine fish handling protocols, and support future implementation of EM. For additional information, please contact Claire Fitz-Gerald at (978) 281-9255, or email at [claire.fitz-gerald@gmail.com](mailto:claire.fitz-gerald@gmail.com).

NMFS issued an authorization of exempted educational activities on June 5, 2017. The Exempted Educational Activity Authorization (EEAA) will be conducted to support the Shoals Marine Laboratory's academic program through UNH as part of two courses: Sustainable Marine Fisheries and Marine Immersion. Both courses are intended for students interested in marine conservation, and explore the theory and practice of fisheries sustainability through lectures, field work, and interactions with the fishing community. One day of trawling and two days of gill-netting will occur during the period of June 11-28, 2017, and one day of trawling will occur during the week of August 14-21, 2017. For additional information, please contact Emily Keiley at (978)281-9116 or email at [Emily.Keiley@noaa.gov](mailto:Emily.Keiley@noaa.gov).

RECEIVED

JUN 21 2017

# Current Reporting Systems

AT THE NEW ENGLAND FISHERY  
MANAGEMENT COUNCIL MEETING

	PTNS/OBS	VMS Trip Declaration	VMS Trip Start Hail	In Trip Catch Report	Post Trip Catch Report	Trip End Hail / PreLand	VTR	Other
Lobster							Paper/Electronic ***	
Herring	PTNS/OBS	VMS		VMS Daily Catch Report	Open Access - Weekly IVR	VMS - PreLand	Paper/Electronic	Slippage Affidavit
Scallop	PTNS/OBS	VMS		VMS Daily Catch Report		LAGC - VMS PreLand	Paper/Electronic	
Black Sea Bass							Paper/Electronic	
Mackerel, Squid, Butterfish	Longfin PTNS/OBS	Mackerel - VMS Longfin - VMS		Longfin - VMS Daily Catch Report		Mackerel - VMS PreLand	Paper/Electronic	Mackerel & Longfin - Slippage Report
Monkfish		VMS / IVR		VMS - Daily or Trip Level Catch Report		Monk/Mults DAS - VMS Trip End Hail	Paper/Electronic	VMS - Monk option
Multispecies	PTNS	VMS / IVR	Exemptions - VMS Hail	VMS - Daily or Trip Level Catch Report		VMS Trip End Hail	Paper/Electronic	
Skates							Paper/Electronic	
Scup							Paper/Electronic	
Dogfish							Paper/Electronic	
Summer Flounder							Paper/Electronic	
Surfclam, Ocean Quahog		VMS					Clam Log & VTR/eVTR	
Golden Tilefish					IVR - Trip Catch Report		Paper/Electronic	
Menhaden							Paper/Electronic ***	



# Future Reporting Systems

	TMS	PTNS/OBS	VMS Trip Declaration	VMS Trip Start Hail	In Trip Catch Report	Post Trip Catch Report	Trip End Hail / PreLand	VTR	Other
Lobster	TMS							eVTR	
Herring	TMS	PTNS/OBS	VMS		VMS Daily Catch Report	Open Access - Weekly IVR	VMS - PreLand	eVTR	Slippage Affidavit
Scallop	TMS	PTNS/OBS	VMS		VMS Daily Catch Report		LAGC - VMS PreLand	eVTR	
Black Sea Bass	TMS							eVTR	
Mackerel, Squid, Butterfish	TMS	Longfin PTNS/OBS	Mackerel - VMS Longfin - VMS		Longfin - VMS Daily Catch Report		Mackerel - VMS PreLand	eVTR	Mackerel & Longfin - Slippage Report
Monkfish	TMS		VMS / IVR		VMS - Daily or Trip Level Catch Report		Monk/Mults DAS - VMS Trip End Hail	eVTR	
Multispecies	TMS	PTNS	VMS / IVR	Exemptions - VMS Hail	VMS - Daily or Trip Level Catch Report		VMS Trip End Hail	eVTR	
Skates	TMS							eVTR	
Scup	TMS							eVTR	
Dogfish	TMS							eVTR	
Summer Flounder	TMS							eVTR	
Surfclam, Ocean Quahog	TMS		VMS					eVTR	
Golden Tilefish	TMS					IVR - Trip Catch Report		eVTR	
Menhaden	TMS							eVTR	