

**Gulf of Maine Research Institute
Responsibly Harvested Seafood from the Gulf of Maine Region**

**Report on
Gulf of Maine/Georges Bank Stock of Pollock**

- ☒ The fishery is managed by a competent authority and has a management plan in place that incorporates a science-based approach to ensure sustainability.
 - *Pollock is managed by NMFS and NEFMC, and regulated by the Northeast Multispecies Fishery Management Plan, which utilizes the best available science to set biological reference points and harvest restrictions.*

- ☒ If stock sizes are below management target levels, whether due to natural or man-made causes, management plans are established that enable rebuilding within a specified timeframe.
 - *According to the updated biological reference points and analysis utilized in the 2010 50th Northeast Regional Stock Assessment Workshop (50th SAW), Atlantic pollock is not overfished ($SSB > \frac{1}{2} SSB_{MSY}$). In addition, this most recent assessment also determined that overfishing of pollock is not occurring ($F < F_{MSY}$), based on data from the 2009 fishing year.*

- ☒ Sufficient data exists to determine harvest levels.
 - *June 2010 assessment (50th SAW) estimated biological reference points based on a new model. Ultimately, the Council and/or the Regional Administrator sets the harvest levels (Annual Catch Limits) based on these data and information, which incorporate uncertainty. It is not considered a data poor species.*

- ☒ Monitoring and compliance measures are in place to ensure acceptable harvest levels.
 - *Pollock catch is monitored through vessel trip reports (VTRs), observers, dealer reports; and for sectors, dockside monitoring and other electronic reporting requirements. Compliance is assessed through consistency throughout these reports as well as enforcement in the field.*

- ☒ Enforcement exists to ensure that harvesters follow regulations, and to prevent illegal practices and unreported harvest.
 - *U.S. Coast Guard, NMFS Office of Law Enforcement agents, and state marine patrol agents enforce the laws and regulations governing the harvest of Pollock.*

I. Definition of Pollock

Gulf of Maine/Georges Bank pollock (*Pollachius virens*) is harvested from the waters off the coast of Maine, south to New Jersey (see Figure 1). While the pollock stock unit extends into southern New England waters, this report focuses on the management and harvesting of pollock in the area outlined by Gulf of Maine Responsibly Harvested Standard¹. The primary gear utilized to target pollock is otter trawl and gillnet.

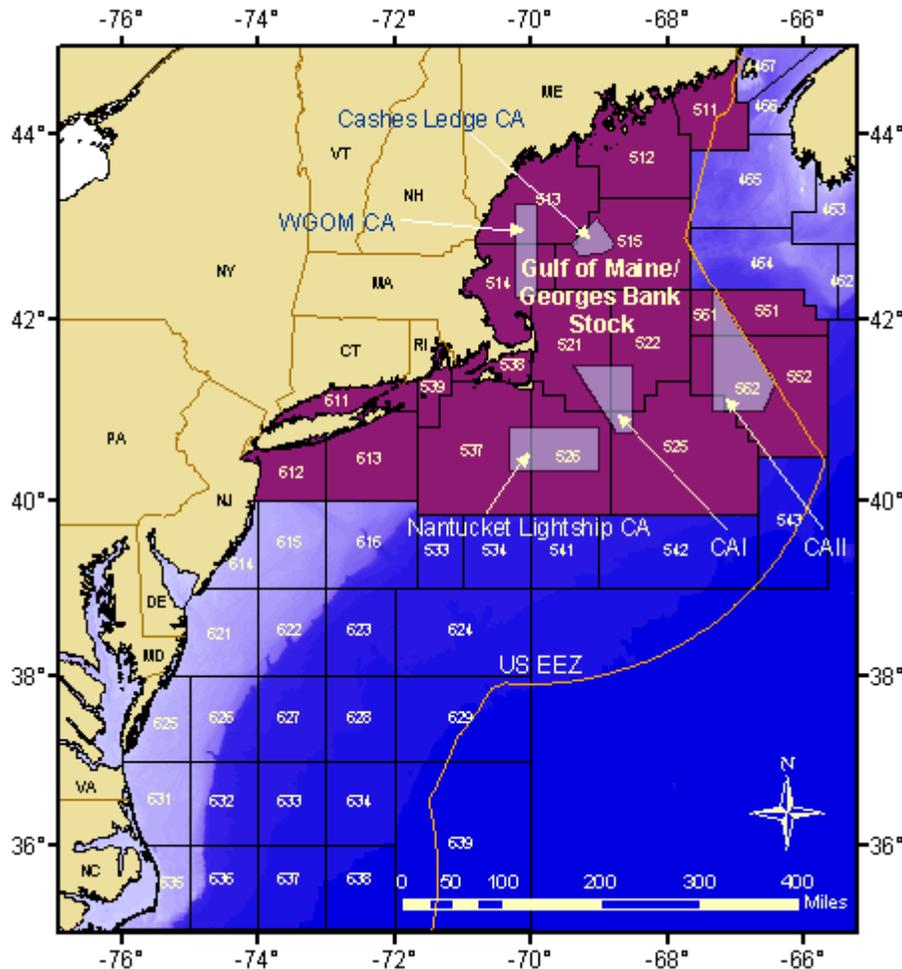


Figure 1. Statistical areas that define the Gulf of Maine/Georges Bank stock of pollock. The dashed line represents the United States Exclusive Economic Zone (NEFSC 2006).

II. Description of the Management Authority and Regulatory Process

Responsibility of Gulf of Maine/Georges Bank pollock management lies within the [National Marine Fisheries Service \(NMFS\)](#), which is a part of the [National Oceanic and Atmospheric Administration \(NOAA\)](#). The [New England Fishery Management Council \(NEFMC\)](#) facilitates the development of pollock regulations as part of a complex of 15 groundfish species that are managed together as the Northeast Multispecies Fishery. The NEFMC consists of 18 voting members, including the Regional Administrator for

¹ This excludes pollock harvested in statistical area 536 and all other areas directly west of statistical area 525.

NMFS, the principal marine resource management official from each New England state, and governor appointees.

For Gulf of Maine/Georges Bank pollock management, the NEFMC is advised by an oversight committee that currently consists of representatives from state and federal management agencies, the fishing industry, and environmental groups. This committee is responsible for the development of the fishery management plan and regulations that are consistent with the ten national standards outlined in the [Magnuson Stevens Act \(MSA\)](#), which dictate that conservation and management measures shall:

1. Prevent overfishing while achieving optimum yield.
2. Be based upon the best scientific information available.
3. Manage individual stocks as a unit throughout their range, to the extent practicable; interrelated stocks shall be managed as a unit or in close coordination.
4. Not discriminate between residents of different states; any allocation of privileges must be fair and equitable.
5. Where practicable, promote efficiency, except that no such measure shall have economic allocation as its sole purpose.
6. Take into account and allow for variations among and contingencies in fisheries, fishery resources, and catches.
7. Minimize costs and avoid duplications, where practicable.
8. Take into account the importance of fishery resources to fishing communities to provide for the sustained participation of, and minimize adverse impacts to, such communities (consistent with conservation requirements).
9. Minimize bycatch or mortality from bycatch.
10. Promote safety of human life at sea.

To help the oversight committee meet these requirements, an Advisory Panel made up of representatives from the fishing industry, scientists, and conservation organizations provides input to management measures. The chairs of the oversight committee provide detailed guidance (terms of reference) to a Plan Development Team (PDT), which consists of scientists, managers and other experts on biology and/or management of pollock. Then the PDT provides reports to the oversight committee in response to the terms of reference. The PDT meets regularly to provide analysis of species-related information and to develop issue papers, alternatives, and other documents as appropriate. Figure 2 provides a visual of this process.

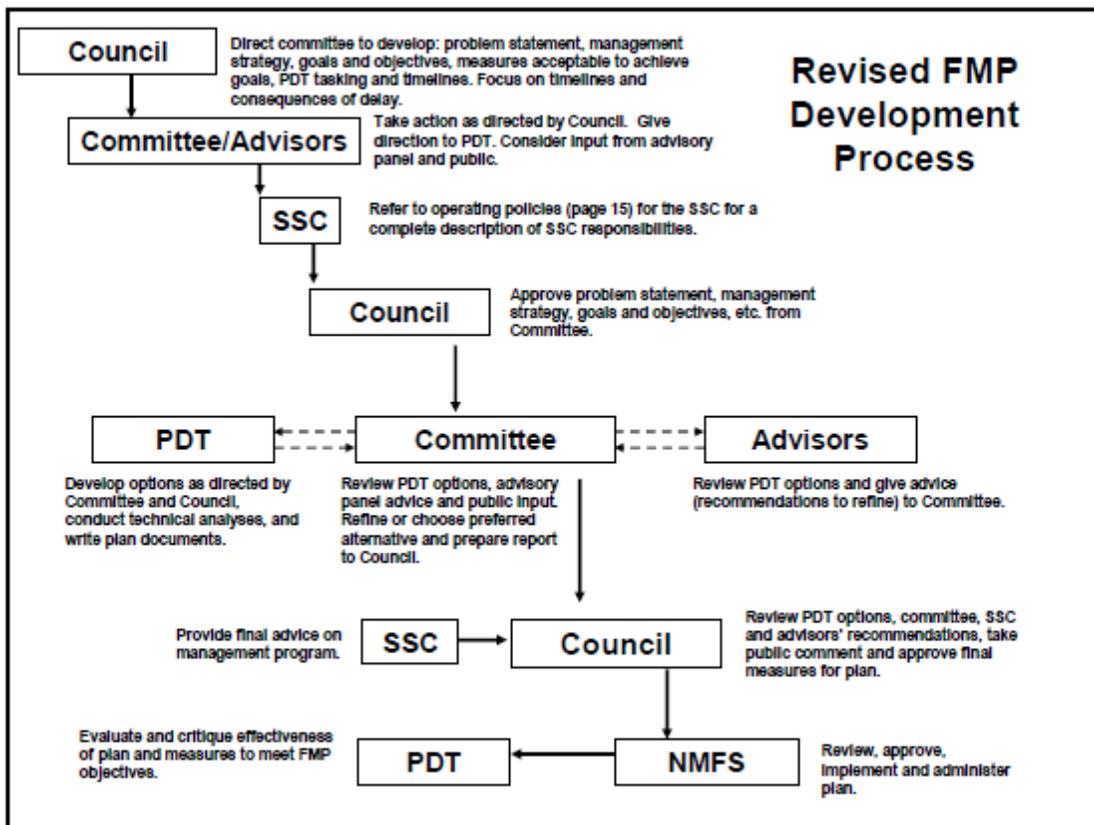


Figure 2. Fishery Management Plan Process (Fiorelli 2008)

III. Gulf of Maine/Georges Bank Pollock Data

The Gulf of Maine/Georges Bank stock of pollock was assessed by the 50th Northeast Regional Stock Assessment Workshop (50th SAW) in June 2010, and the Assessment Summary Report (NMFS CRD 10-09) was published in July 2010 (NEFSC 2010).

The 2010 stock assessment utilized a new model known as an aged structured assessment program (ASAP) to determine the stock status of pollock. This model incorporates age structure, additional surveys, more comprehensive catch information, changes in selectivity, and uncertainty in the input data. Catch at age and NEFSC spring and fall surveys, both from 1970-2009, were used in the ASAP model. **Using this model and the newly accepted reference points, which are accepted as the best available science, pollock is not overfished and overfishing is not occurring.**

As determined in the 50th SAW, the biological reference point (BRP) used to determine if pollock is overfished is $\frac{1}{2} SSB_{MSY} = B_{THRESHOLD} = 45,500$ metric tons (mt). In 2009, spawning stock biomass (SSB) was estimated to be 196,000 mt, and thus well above the $\frac{1}{2} SSB_{MSY}$ threshold (45,500 mt).

The 2010 assessment also determined that the BRP for determining if overfishing of the pollock stock is occurring, is when the fishing mortality (F) exceeds 0.25. In 2009, $F=0.07$ and thus overfishing of the pollock stock was not occurring (Table 1). Previous

biological reference points were based on the AIM model in GARM III, and are no longer recommended for assessing pollock.

Table 1. Biological Reference Points Used to Determine Overfished and Overfishing Statuses	
SSB _{MSY} (B _{TARGET})	91,000 mt
2009 SSB	196,000 mt
½ SSB _{MSY} (Overfished threshold)	45,500 mt
F _{MSY} (Overfishing threshold)	0.25
2009 F	0.07

The following excerpt is from the 50th SAW Report summarizes trends in pollock landings since 1970, which are depicted in Figure 3:

Pollock were traditionally landed as bycatch in various demersal otter trawl fisheries, but directed otter trawl effort increased during the 1980s, peaking in 1986 and 1987. Directed effort by US trawlers declined in the 1990s and early 2000's, but there have been recent increases in landings that may reflect increased targeting of pollock. Similar trends have also occurred in the U.S. winter gillnet fishery.

U.S. commercial landings increased from approximately 4,000 mt per year in the late 1960s to a peak of 24,000 mt in 1986. Landings rapidly decreased to 4,000 mt in 1996, and generally increased to 10,000 mt in 2008. Historical landings were primarily from trawl fisheries, but contributions from gillnet fisheries generally increased, and the recent fishery is composed of 60% trawl and 40% gillnet landings.

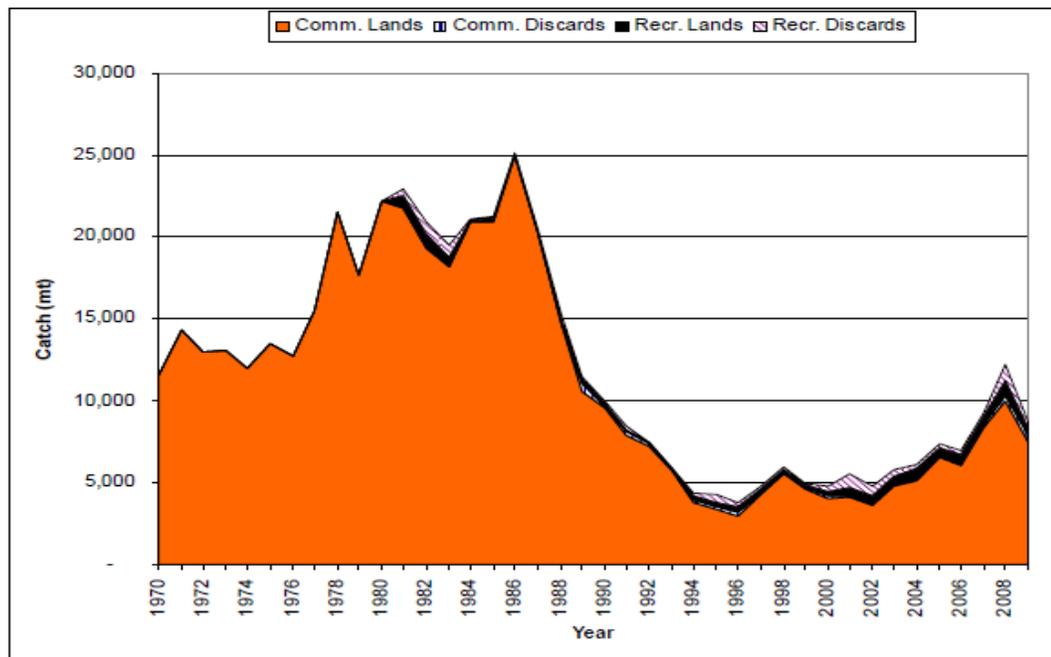


Figure 3. Total Pollock Catch by Fleet, from 1970 to 2008

Emergency Ruling

Verified as of May, 2011

Under federal law, NMFS is empowered to enact emergency rules, such as raise catch limits, if the following criteria are met:

1. The emergency results from recent, unforeseen events or recently discovered circumstances;
2. The emergency presents serious conservation or management problems in the fishery;
3. The emergency can be addressed through emergency regulations for which the immediate benefits outweigh the value of the advance notice, public comment, and deliberative consideration of the impacts on participants to the same extent as would be expected under normal rulemaking process (62 FR 44421, August 21, 1997).

The findings of 50th SAW pollock stock assessment, emergency ruling criteria was achieved and NFMS determined that it was necessary to implement an emergency rule that would revise and substantially raise pollock catch limits FY2010, while ensuring the increased catch limits are consistent with sustaining a long-term biomass associated with maximum sustainable yield (75 FR 41997, July 20, 2010). The revised catch limits can be found in Table 2.

Pollock Catch Limit	Revised Specifications (mt)
OFL of Catch	25,200
ABC	19,800
State Waters ACL subcomponent	1,188
Other ACL sub-component	1,188
Groundfish sub-ACL	16,553
Sector sub-ACL	16,178
Common Pool sub-ACL	375
Incidental Catch TAC	7.50

IV. Northeast Multispecies Fisheries Management Plan

The Northeast Multispecies Fishery Management Plan (FMP) was implemented in 1986 to reduce fishing mortality of heavily fished groundfish stocks and to promote rebuilding to sustainable biomass levels. Sixteen species of groundfish are managed under Amendment 16 to Northeast Multispecies FMP. Thirteen large-mesh species are managed together based on fish size and type of gear used to harvest the fish: Atlantic cod, haddock, pollock, yellowtail flounder, witch flounder, winter flounder, windowpane flounder, American plaice, Atlantic halibut, redfish, ocean pout, white hake, and wolffish. The other three species (silver hake [or whiting], red hake, and offshore hake) are managed under a separate small-mesh multispecies program pursuant to Amendment 12 of the Northeast Multispecies FMP. Because several large-mesh species are managed as

two or more separate stocks, e.g., Gulf of Maine haddock and Georges Bank haddock, there are a total of 20 separate stocks of groundfish managed under the FMP.

The groundfish complex has been managed by seasonal and year-round area closures (i.e., no fishing in certain areas), gear restrictions (i.e., specified mesh size, number of nets/hooks, etc.), minimum fish size limits, trip limits (i.e., limiting fishermen to a certain poundage of fish per trip), limited access (i.e., limiting the number of participants in the fishery) and restrictions on the number of days a vessel is allowed to fish for groundfish each year (i.e., days-at-sea) (NEFMC 2009). In May 2004, Amendment 13 to the FMP implemented formal rebuilding plans for groundfish stocks, including pollock, based on revised biomass and fishing mortality targets derived by the Working Group on Re-evaluation of Biological Reference Points for New England Groundfish. The overall goal of these actions was to reduce fishing mortality to rebuild depleted groundfish stocks to target biomasses.

The current regulations, which were implemented by Amendment 16 in 2010, address the requirements the Magnuson-Stevens Reauthorization Act (MSRA) of 2006. The MSRA requires the NEFMC to determine Annual Catch Limits (ACLs) and Accountability Measures (AMs) for all managed stocks. This action implements a process for calculating an ACL in addition to the Overfishing Level (OFL) and Acceptable Biological Catch (ABC) for each stock. Recommendations for these figures are developed by the PDT. The Science and Statistical Committee (SSC) recommends ABC levels, and the NEFMC approves final ACLs, but cannot exceed the SSC's recommended levels. ACLs may be broken into subcomponents for different segments of the fishery, including state waters, commercial, recreational, sectors, and the common pool. Although the following stocks do have ACLs, possession is prohibited due to their overfished status: SNE/MA winter flounder, windowpane flounder, ocean pout, and wolffish. In addition, halibut catch is limited to one fish per trip. Northeast Multispecies permit holders are eligible to receive an allocation for the remaining 14 groundfish stocks.

In addition to general regulations for the fishery, Amendment 16 also implements species- and stock-specific regulations for vessels in the common pool and in sectors. Beginning in Fishing Year (FY= May 1st – April 30th) 2010, commercial harvesters of Gulf of Maine/Georges Bank pollock will be managed in two self-selecting categories: Common Pool and Sectors. The following sections describe each of these categories.

Common Pool

Members in the common pool are managed by an effort control system that regulates the number of days a harvester may fish. In addition to a limited number of days a harvester may fish, controls include 24-hour days-at-sea counting, trip limits on other groundfish stocks, gear restrictions, minimum mesh size restrictions, gillnet restrictions, hook limits, seasonal and year-round closures, minimum fish size restrictions, and special access programs. Specific effort control measures, such as minimum mesh size and trip limits, are described in the final rule for Amendment 16 (NMFS 2010). Framework 44 implemented a trip limit of 1,000 lbs/DAS, up to 10,000 lbs/trip for pollock for common pool vessels (75 FR 18356; April 9, 2010).

In FY2010 and FY2011, for a year following an overage of any ACLs specified for vessels in the common pool, the rate DAS are charged would be increased proportional to

the overage. In 2012, trimester hard total allowable catch (TAC) will be used as a primary AM, and the fishery will be suspended once the ACL of a stock is reached.

Sectors

Seventeen sectors have been authorized in the New England region. Sectors are self-selecting and largely self-regulating groups of fishermen who collaboratively manage an allocation of fish. Sectors must draft and submit formation proposals, operations plans, and sector monitoring plans, revised enforcement provisions, and clarification of the interaction of sectors with Special Management Programs, such as U.S./Canada management areas. Sectors are required to submit supporting environmental impact assessment documents with their application and operations plan.

In exchange for fishing under an ACL for each allocated species in the management plan, sectors are exempt from most common pool effort control measures, such as limited number of days at sea and trip limits. A Sector's allocation of an ACL for a particular stock is called the Annual Catch Entitlement (ACE). At-sea and dockside catch monitoring ensures that sector ACEs are not exceeded. For each permit that is eligible to join a sector, the permit's Potential Sector Contribution (PSC) is calculated based on the permit's catch history. The ACE that is allocated to a sector is based on the sum of the PSCs for the permits that join the sector. Sector participants are not allowed to discard legal sized fish, and all fish caught count toward their allocations.

Regulations Shared by Common Pool and Sector Vessels

There are not any shared regulations for pollock.

V. Monitoring

Monitoring of the common pool is carried out through several different programs. When fishing in certain areas, such as the Eastern U.S./Canada Area, vessels are required to submit daily vessel trip reports (VTRs), which provide details on type of gear fished, area fished, species caught (and discarded), dealer information, and port of landing information, in addition to other details. The New England Fisheries Observer Program (NEFOP) employs at-sea observer coverage and port sampling for the groundfish fleet. The final rule for Standardized Bycatch Reporting Methodology (SBRM) states that the Regional Administrator and the Science and Research Director will allocate at-sea observer coverage to the applicable fisheries of the Northeast Region sufficient to achieve a level of precision (measured as the coefficient of variation [CV]) no greater than 30% for each (73 FR 4736; January 28, 2008). In addition, vessels fishing in Special Access Programs (SAPs) are required to contact NEFOP prior to their trip to determine if they will have observer coverage. There are also shore-side port samplers who periodically work at fish auctions and exchanges taking biological samples. This program ensures compliance with the MSA in addition to the Endangered Species Act (ESA) and the Marine Mammal Protection Act (MMPA). Shore-side, there is 100% electronic dealer reporting on a weekly basis, which includes, but is not limited to, unique trip identifier, quantity of species landed, price per unit by species, and port and state landed.

Sectors have additional monitoring requirements. Sector operations plans specify how a sector will monitor its catch to assure that sector catch does not exceed the sector allocation. In addition, 50% random dockside monitoring is required in Fishing Year (FY) 2010, and will be reduced to 20% in subsequent years. While at-sea monitoring is not required until 2012, NMFS is providing funding to cover the costs of at-sea monitoring in FY 2010, which provides vessels with a more accurate estimate of discards, and therefore it is assumed that the majority of sectors will participate in at-sea monitoring in FY 2010. For those sectors that participate, at-sea monitoring is required at less than 100%, with coverage levels set by NEFSC. This level has been set at 38% in FY 2010. This monitoring is in addition to NEFOP coverage, and sector vessels are still required to submit daily VTRs.

Based on the data collected through monitoring, the Northeast multispecies complex is routinely evaluated and necessary changes to management measures are made through biennial Framework adjustments.

VI. Enforcement

In general, enforcement of the NE Multispecies FMP is coordinated through NOAA's Office of Law Enforcement (OLE). OLE Special Agents and Enforcement conduct complex criminal and civil investigations, board vessels fishing at sea, inspect fish processing plants, and conduct patrols on land, in the air and at sea. In addition to this enforcement work, the OLE administers the Cooperative Enforcement Program (CEP), which authorizes certain coastal state and territorial marine conservation law enforcement agencies to enforce federal laws and regulations in the Exclusive Economic Zone (EEZ). OLE also partners with the U.S. Coast Guard (USCG) and various other federal agencies, fishery management councils, and non-governmental organizations. In the common pool, enforcement is focused on compliance with DAS, seasonal closures, closed areas, gear restrictions, and trip limits, to name a few measures. Enforcement for sector vessels will primarily rely on monitoring harvest levels through sector reporting, dockside monitoring, dealer reporting, and VTR (in addition to some of the measures described above for which sectors are not universally exempt); however individual sectors are also responsible for self-enforcement.

It will be the responsibility of each sector to enforce any provisions adopted through procedures established in the operations plan and agreed to through the sector contract. Sectors may be held jointly liable for violations of the following sector operations plan requirements: ACE overages, discarding of legal-sized fish, and misreporting of catch (landings or discards).

VII. References

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