

# 1. INTRODUCTION

The Northeast Multispecies Fishery, referred to as the groundfish fishery, is managed by the New England Fishery Management Council (NEFMC). The groundfish fishery is carried out using both fixed and trawl gears.<sup>1</sup> The groundfish resource is distributed throughout waters of the Gulf of Maine (GOM) and Georges Bank (GB) and, to a lesser extent, Southern New England (SNE) and the Mid-Atlantic Bight. Prior to Fishing Year 2010, the groundfish fishery was managed using effort controls, including Days at Sea (DAS). Amendment 13 to the groundfish Fishery Management Plan (FMP) was implemented in May 2004; it redefined initial allocations of DAS and allowed vessels to engage in DAS leasing and DAS transfers under certain conditions. Amendment 13 also introduced the “Sector Allocation” program, which gave fishermen the opportunity to voluntarily form sectors that would be constrained by quotas rather than DAS. Sectors could request exemption from many of the traditional input controls such as trip limits. This set the stage for Amendment 16 to the Northeast Multispecies FMP, which implemented a catch share program on 1 May 2010.

The catch share program was designed to comply with catch limit requirements and stock rebuilding deadlines required under the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSA). The new groundfish management program contained two significant changes. The first consisted of “hard quota” annual catch limits (ACLs) for all 20 stocks in the groundfish complex. The second expanded the use of “sectors,” which are groups of fishing vessels allotted a share (quota) of the total groundfish ACL. Sectors are allocated subdivisions of ACLs called Annual Catch Entitlements (ACE). All permit holders with a limited access groundfish permit that was valid as of 1 May 2008, were eligible to participate in a sector, including holders of inactive permits currently held in Confirmation of Permit History (CPH).

Sectors, including state permit banks, receive ACE for nine of 13 groundfish species in the FMP and are exempt from many of the traditional effort controls.<sup>2</sup> Each limited access groundfish permit has a potential sector contribution (PSC) that, based on that permit’s fishing history, is a percentage of the total quota allocation for each allocated groundfish stock. When a fisherman becomes a sector member, his PSC is pooled with those of the other members of that sector. The pooled PSCs of the sector become the sector’s ACE. Fishermen may hold limited access eligibilities, which are linked to a Moratorium Rights Identifier (MRI), in CPH. CPH permits are limited access groundfish eligibilities that are not attached to an actual vessel. An important consequence of Amendment 16 is that it allowed fishermen with permits in CPH to join sectors or to remain in the common pool with the option of leasing DAS, which was granted by Amendment 13. When a fisherman holding a CPH joins a sector, the PSC associated with those permits becomes part of that sector’s ACE. This is significant, because it means that a fisherman can lease the PSC associated with his CPH permits to other sector members or his

---

<sup>1</sup> Fixed gear includes gillnet and hook gears including bottom longline, tub trawls, and rod and reel.

<sup>2</sup> The nine allocated species are American plaice (*Hippoglossoides platessoides*), cod (*Gadus morhua*), haddock (*Melanogrammus aeglefinus*), pollock (*Pollachius virens*), redfish (*Sebastes fasciatus*), white hake (*Urophycis tenuis*), winter flounder (*Pseudopleuronectes americanus*), witch flounder (*Glyptocephalus cynoglossus*), and yellowtail flounder (*Limanda ferruginea*). The four non-allocated groundfish species are halibut (*Hippoglossus hippoglossus*), ocean pout (*Zoarces americanus*), windowpane flounder (*Scophthalmus aquosus*), and wolfish (*Anarhichas lupus*). All references to groundfish species include these 13 species unless there is specific mention of the nine allocated species. Non-groundfish species are any species other than the 13 groundfish species listed here.

sector can lease the PSC to other sectors through ACE trading. However, sectors are not permitted to transfer ACE to or from common pool vessels.

Fishing vessels owners may also opt to fish the quota associated with their groundfish permits, including permits they have placed in CPH, on fewer vessels (including a single vessel) to reduce the costs associated with operating multiple vessels. In 2010, approximately half (46%) of the vessels with limited access groundfish permits opted to remain in the common pool, likely because of their small individual potential contribution to a sector's total ACE. Common pool vessels act independently of one another; each vessel is constrained by the number of DAS it can fish, by trip limits, and by time and area closures designated in the FMP. These restrictions help ensure that the groundfish catch by common pool vessels does not exceed the common pool's allocation of the total ACL before the end of the fishing year. In 2013, nearly 43% of the active vessels with limited access groundfish permits were common pool vessels.

Nineteen sectors operated in 2013 (see 78 FR 25591, May 2, 2013).<sup>3</sup> Four of these are "lease only" sectors,<sup>4</sup> which hold eligible permits with accumulated ACE or DAS that they can make available to fishermen that intend to actively fish for groundfish. Each sector establishes its own rules for using its allocations, but the allocated catch restrictions are applicable to the sector as a unit (i.e., not to individual vessels in the sector). Sector enrolled permits accounted for approximately 98% of the FY 2013 commercial groundfish sub-ACL.

The trends in this report must be evaluated in the context of the quota changes that have occurred for fishing year 2013, as well as over the four years since Amendment 16 has been in place. From 2012 to 2013, several commercial sub-ACLs were cut from their 2012 levels: eastern Georges Bank cod (-43.2%), western Georges Bank cod (-61.4%), Gulf of Maine cod (-77.6%), eastern Georges Bank haddock (-45.4%), Gulf of Maine haddock (-71.4%), Georges Bank yellowtail flounder (-58.1%), SNE/MA yellowtail flounder (-22.9%), CC/GOM yellowtail flounder (-54.2%), American plaice flounder (-56.7%), witch flounder (-57.9%), Gulf of Maine winter flounder (-0.1%), northern windowpane (-24.0%), and wolffish (-15.1%). Some stocks' sub-ACLs increased from their 2012 levels: western Georges Bank haddock (+10.5%), Georges Bank winter flounder (+4.2%), southern New England winter flounder (+299.3%), redfish (+21.7%), white hake (+17.2%), pollock (+2.2%), southern windowpane flounder (+41.7%), and halibut (+44.4%).

Sub-ACLs for several allocated stocks in 2013 were at a four-year low for the 2010-2013 time period, with substantial cuts overall since the implementation of Amendment 16 in 2010: eastern Georges Bank cod (-72.8%), western Georges Bank cod (-44.5%), Gulf of Maine cod (-81.8%), eastern Georges Bank haddock (-68.7%), Gulf of Maine haddock (-77.3%), Georges Bank yellowtail flounder (-81.2%), CC/GOM yellowtail flounder (-38.5%), American plaice flounder (-50.1%), witch flounder (-28.4%). Sub-ACLs for three allocated stocks were at a four-

---

<sup>3</sup> These sectors were the Fixed Gear Sector (FGS), the Maine Coast Community Sector (MCCS), the Maine Permit Bank Sector (MEPBS), the New Hampshire Permit Bank Sector (NHPBS), the Northeast Coastal Communities Sector (NCCS), Northeast Fishery Sectors 2 through 13, and Sustainable Harvest Sectors 1 and 3 (SHS1 and SHS3). The Georges Bank Cod Hook Sector (operating since 2004) and the Georges Bank Cod Fixed Gear Sector (implemented in 2006) operated as separate sectors prior to fishing year 2010, when all members of the Georges Bank Cod Hook Sector joined FGS. In fishing year 2013, the Port Clyde Community Sector became known as the Maine Coast Community Sector.

<sup>4</sup> The Northeast Fishery Sector IV, Sustainable Harvest 3, Maine Permit Bank, and New Hampshire Permit Bank Sectors are lease only sectors. The Sustainable Harvest 3 Sector has not explicitly prohibited fishing activity, and may transfer permits to active vessels.

year high in 2013, with overall increases in quota since 2010: Georges Bank winter flounder (+90.5%), redfish (+48.0%), and white hake (+50.6%).<sup>5</sup>

This report provides an evaluation of the economic and social performance of the groundfish fishery for fishing year 2013 (1 May 2013 – 30 April 2014). In this report, all references to year are for the fishing year. The report presents year-to-year comparisons for the four-year period of 2010-2013 to evaluate performance, and compares performance in 2012 and 2013. Table 1 presents data on major trends in the groundfish fishery by total fleet, sector vessels, and common pool vessels. Differences in the performance of sector and common pool vessels are discussed in Section 1.2; thereafter, the report focuses on the performance of the total groundfish fleet.

This report falls under the fisheries performance measures program developed by the NEFSC Social Sciences Branch in 2009 with extensive consultation from stakeholders in the Northeast region (see Clay et al. 2010; Plante 2010). The broad performance measure categories identified are the following: financial viability, distributional outcomes, stewardship, governance, and well-being. There are multiple indicators within each category. The Northeast indicators are part of a NMFS-wide process of developing social and economic indicators for all U.S. fisheries.<sup>6</sup> This report includes a subset of indicators that are sufficiently developed for reporting. These cover aspects of financial viability (landings, revenue, number of vessels and effort, and average vessel performance) and distributional outcomes (employment and fleet diversity). Gross revenues are based on landings and ex-vessel (first sale) prices and—together with fishing effort, operating costs, and quantities of fishing inputs—provide an indication of vessel performance. Employment opportunity is measured by the number of crew positions, crew trips, and crew days. Fleet diversity is measured by vessel size and vessel revenue categories, and by distributions of revenues among individual vessels and vessel affiliations. Over time, additional indicators will be available for reporting as the NEFSC Social Sciences Branch's research and the National Performance Measures Program continue to develop.

Amendment 16 contains several broad goals and objectives, carried over from Amendment 13. This report does not provide a detailed analysis of progress toward achieving these goals and objectives. However, where possible, it addresses trends related to Goal 2, Goal 4, and Objective 7, particularly for economic efficiency and diversity of the groundfish fleet.<sup>7</sup> For example, changes in economic efficiency may be reflected by changes in revenue per unit effort and revenue per vessel and by changes in the Lowe Index, which measures productivity of the fleet. The diversity of the groundfish fleet can be explored by examining trends in (1) the number of vessels and vessel affiliations; (2) the geographic distribution of landings and revenues across ports and states; (3) employment indicators across ports and states; and (4) the distribution of revenues among vessels and vessel affiliations.

---

<sup>5</sup> See NMFS Northeast Regional Office's website:

<http://www.greateratlantic.fisheries.noaa.gov/aps/monitoring/nemultispecies.html> . These data do not include sector carryover.

<sup>6</sup> Contact [Rita.Curtis@noaa.gov](mailto:Rita.Curtis@noaa.gov) for more information on this national effort. The National Catch Shares Report, released in August 2013, presents performance metrics for all catch share managed fisheries in the U.S and may be found at <https://www.st.nmfs.noaa.gov/economics/fisheries/commercial/catch-share-program/index>.

<sup>7</sup> Goal 2 in Amendment 16 is “create a management system so that fleet capacity will be commensurate with resources status so as to achieve goals of economic efficiency and biological conservation and that encourages diversity within the fishery.” Goal 4 is “minimize to the extent practicable, adverse impacts on fishing communities and shoreside infrastructure.” Objective 7 states: “To the extent possible, maintain a diverse groundfish fishery, including different gear types, vessel sizes, geographic locations, and levels of participation.”

The NEFSC released the first performance report for the FY2010 groundfish fishery in 2011 (see Kitts et al. 2011) and released a second performance report for FY 2011 in 2012 (see Murphy et al. 2012). In 2013, the net revenue estimation previously presented in the FY2011 report was extended to include the impact of quota leasing activities on the distribution of net revenues in the fishery for FY2011 (see Kitts and Demarest 2013).<sup>8</sup> The FY2012 report was released in January 2014 and expanded the analyses presented in earlier reports by including a section on the impacts of quota leasing on the distribution of net revenues for different segments of the groundfish fleet (see Murphy et al. 2014).

Other efforts have been, and are being, undertaken in the Northeast to further the understanding of social and economic issues in the fisheries. A study of social capital among groundfish permit holders (Holland et al. 2010) has recently been repeated and the data collected from the second round of this study have been analyzed. Results were submitted to a scholarly journal for publication. The NEFSC implemented a revised vessel fixed costs survey in August 2012 and May 2013 that surveyed commercial fishing vessel owners in the Northeast, by vessel size and gear type. This effort resulted in cost data from 741 commercial fishing vessels, which are being analyzed with the goal of developing profitability profiles for different segments of the Northeast fleet. Socioeconomic surveys of crew and vessel owners across the Northeast fisheries have been implemented to collect basic demographic data on the fishing community and to develop additional performance indicators. An emphasis is placed on indicators that measure how well fisheries are performing in the areas of stewardship, governance, and fishing community well-being. The NEFSC concluded the first year of its socioeconomic survey of vessel crew in autumn of 2013; about 400 crew, including hired captains, were interviewed in ports in New England and the Mid-Atlantic. Results will soon be published as a NEFSC Technical Memoranda.<sup>9</sup> The first round of data collection for NEFSC's socioeconomic survey of vessel owners has been completed, and those data are currently being analyzed. Dr. Eric Thunberg, an economist in NMFS' Office of Science and Technology is engaged in work to measure fleet diversity for the Northeast Multispecies Groundfish fleet, which will be available in published form shortly.<sup>10</sup> See <http://www.nefsc.noaa.gov/read/socialsci.html> for more information on these and other NEFSC projects.

## 1.1. Data and Analytical Approach

The vessels whose activities are evaluated in this report are those with valid limited access multispecies permits during fishing years 2010-2013. An active vessel is defined as having revenue from the landing of any species on any trip while fishing under a limited access groundfish permit within the given fishing year. In this report, trips are defined as commercial trips in the Northeast Exclusive Economic Zone (EEZ). The evaluation includes only fish landed and sold. Weights are given in landed pounds (after heading/gutting) rather than in live pounds (whole fish) as prices are commonly calculated on a per landed pound basis. Gross revenues are based on what is landed and sold. Landings data in this report should not be used to conduct

---

<sup>8</sup> Available at <http://www.nefsc.noaa.gov/read/socialsci/pdf/QuotaTradingImpacts.pdf>.

<sup>9</sup> See the NEFSC Technical Memoranda Series at <http://www.nefsc.noaa.gov/publications/tm/>. The technical memo containing results from the first round of the crew survey will be published as Henry, Anna, and Julia Olson. An Overview of the Survey on the Socio-economic Aspects of Commercial Fishing Crew in the Northeast.

<sup>10</sup> Contact Dr. Eric Thunberg at [eric.thunberg@noaa.gov](mailto:eric.thunberg@noaa.gov) for additional information.

comparisons with sector sub-ACLs or the catch monitoring reports issued for sectors, because the ACLs are calculated and monitored in live pounds and include both landings and discards.

This year's report differs from previous ones in that all monetary metrics (revenues, prices, costs) have been adjusted for inflation by converting nominal dollars for a given year into real, constant dollars. The GDP Implicit Price Deflator was used to adjust nominal amounts for inflation, with the second quarter of calendar year 2010 as the base time period. For 2013, nominal amounts observed were indicated for selected metrics.

A groundfish trip is defined as a trip where the vessel owner or operator declared, either through the vessel monitoring system (VMS) or through the interactive voice response system, that the vessel was making a groundfish trip. This includes trips on which groundfish DAS were used, including monkfish (*Lophius americanus*) trips that used groundfish DAS. Other trips were also counted as groundfish trips if the dealer or vessel reported that groundfish was landed (e.g., trips with monkfish declarations that were not also using groundfish DAS).

Some statistics are reported by both home port and port of landing. "Home port" does not necessarily identify the port where fish are landed, but rather it is the information on "city and state where vessel is moored" provided by vessel owners on the vessel permit applications. Most often, the home port is the port where supplies are purchased and crew is hired, although this does not apply in all cases.<sup>11</sup> "Landed port" is the actual port where fish are landed. We report by home port and by landed port because the implications of each are different. For example, revenue by home port gives an indication of the benefits received by vessel owners and crew (and some fishing-related businesses such as gear suppliers) based in that port. Revenue by landed port gives an indication of the benefits that other fishing-related businesses (primarily businesses that handle fish, such as dealers and processors) derive from landings in their port. We identified the top six home ports and landed ports in the Northeast and also examined changes by home port and landed port at the state level.

Some indicators in the report use a measure of time called a "day absent." A day absent is defined as the number of days (24 hours each) a vessel is "absent" from port and is calculated by subtracting the sail date/time from the land date/time as entered on vessel logbook records, called vessel trip reports (VTRs). For comparative purposes, many measures have been calculated for both groundfish landings and all species landings. "All species" refers to the total of all species of fish or shellfish landed, including groundfish. The home port and length of a vessel are provided by the vessel owner on the vessel's yearly permit application. Data on vessel landings, nominal prices, and nominal revenues come from seafood dealer reports. Information about the number of fishing trips and crew size is from VTRs.<sup>12</sup> In addition to mean values, standard

---

<sup>11</sup> Alternative port affiliation data are available. Principal port declaration and the vessel owner's mailing address are also entered on the permit application. However, actual landings by port may vary widely from what a vessel owner thinks his principal port of landing will be before the fishing year begins. Also, an owner's mailing address can be different from a vessel's base of operation. Therefore, home port is typically used in social and economic studies to establish port affiliation (as in this report). As the home port listed for a vessel can change over the year depending on what is declared on permits, this report assigns a vessel's home port to be the first home port that is used during FY2013.

<sup>12</sup> All data are from GARFO's fishing year 2010 – 2013 Data Matching Imputation System, or DMIS, database (a combination of seafood dealer reports, vessel trips reports, and quota monitoring reports) as of July 21, 2014. Differences in results reported in each year's annual performance report are due to updates and corrections to the DMIS database. In addition, in this year's report, all monetary amounts are reported in constant 2010 dollars (nominal monetary amounts were adjusted for inflation).

deviations are provided to show the degree of variability in the data. Some standard deviations are large relative to the mean, indicating that the values are widely dispersed. Therefore, care should be used when comparing mean values that have large standard deviations.

Several performance metrics in this report, including effort and revenue, are examined by vessel size category using four vessel length classes: under 30' in length, 30' to less than 50' in length, 50' to less than 75' in length, and 75' and longer. Many of the vessels in the under 30' vessel length class are considered to be "skiffs," a colloquial term used by fishermen and fishery managers to refer to small vessels, generally unseaworthy, used only for the attaching of a permit. Although skiffs may appear as inactive vessels in the database, the quota or DAS associated with their permits is commonly transferred to other vessels.

Some of the metrics in this report are presented at both the individual and at the affiliated vessel level. To evaluate changes at the affiliated vessel level, vessels were grouped according to ownership patterns. Permit applicants are required to list all persons and entities that have an ownership interest in the vessel for which a permit is being registered. Using this database, it is possible to find affiliations among vessels. We define "vessel affiliations" as networks of vessels connected through common owners. Vessels connected to one another through ownership, for the purpose of data analyses, are deemed a single vessel affiliation. For example, two vessels owned by one person are considered to be in one vessel affiliation. Further, a vessel owned in partnership is considered to be in the same vessel affiliation with a second vessel if that second vessel is owned by one of the partners. A vessel affiliation could have multiple vessels and/or multiple owners or it could consist of a single vessel and a single owner. A vessel affiliation can include vessels in multiple sectors and/or the common pool. It is likely that vessels in the same vessel affiliation are subject to some degree of joint decision making among common owners.

## 1.2. Performance of Sector and Common Pool Vessels

There are fundamental differences in the characteristics of sector and common pool vessels and in the ACE and DAS allocations.<sup>13</sup> A large number of common pool vessels have few or no DAS, while some common pool vessels have small vessel exemption permits (Category C) or hand gear permits (HA) excluding them from DAS constraints. Common pool vessels are regulated not only by DAS, but also by additional measures, some of which changed during the 2010 fishing year. Finally, vessels opting into the common pool landed significantly less groundfish during the landings qualification period of 1996 through 2006 than those electing to operate in sectors, which resulted in the common pool being allocated only 1-2% of the total ACL for all stocks. In 2013, sector vessels accounted for 98.2% of the total value of groundfish landed (Table 1).

This section discusses major trends in performance, broken down by sector and common pool vessels, as presented in Table 1. Differences in these performance measures should not serve alone as the basis for an evaluation of catch share versus DAS management regimes. In Sections 2 through 8 of this report, performance indicators are reported for the active groundfish fleet as a whole, with sector and common pool vessels combined.

---

<sup>13</sup> These may include differences in physical characteristics of the vessel, different fishing histories, and different attitudes about sector management. Also, fishermen presumably opted to join a sector or remain in the common pool based on their analysis of the advantages and disadvantages to them of each regimen.

The total number of active groundfish vessels continues to decline; the fishery lost 120, or 14.0%, of its active vessels over the 2010-2013 period (Table 1). Possible reasons for the declining number of active groundfish vessels will be addressed in Section 6. In 2013, there were 735 active vessels in the limited access groundfish fleet, with 419 vessels (57%) enrolled in sectors and 316 vessels (43%) remaining in the common pool. From 2012 to 2013, the number of vessels enrolled in sectors decreased by 26 vessels and the number of vessels in the common pool decreased by two vessels (Table 1).

For both sector and common pool vessels, total gross revenues for all species (groundfish and non-groundfish) were at four-year lows in 2013. Total all species gross revenue for the entire fleet was \$269.9 million, an 8.8% decrease from 2012. Total all species gross revenue fell by \$18.7 million (-9.2%) from 2012 to 2013 for vessels enrolled in sectors. Common pool vessels saw total all species gross revenue fall by \$7.4 million (-7.9%); Table 1).

For 2013, declines in total all species revenues for sector vessels were driven primarily by the declines in groundfish revenues, while declines in total all species revenues for common pool vessels were driven by declines in non-groundfish revenues. In 2013, sector vessels had \$54.2 million dollars in gross groundfish revenues, the lowest groundfish revenues for sector vessels since the implementation of catch shares in 2010. Groundfish revenues were nearly \$13.0 million (19.3%) lower in 2013 than in 2012 for sector vessels, and declining groundfish revenue accounted for 69.6% of the decline in total all species revenue for these vessels. Total non-groundfish revenues also decreased for sector vessels, but this decrease was more modest, with non-groundfish revenues declining by \$5.7 million (-4.2%) from 2012 to 2013 (Table 1).

Common pool vessels also experienced a decline in non-groundfish revenue from 2012, but their groundfish revenue was higher in 2013 than it was in 2011 and 2012. Groundfish revenues for common pool vessels were just over \$1.0 million in 2013, a 66.4% increase over 2012. Common pool vessels saw their non-groundfish revenue drop to a four-year low of just under \$85 million in 2013, an 8.4% decline from 2012 (Table 1).

Average groundfish price decreased in 2013 for both sector and common pool vessels from 2012, by \$0.13 per pound (-9.1%) for sector vessels and \$0.12 per pound (-7.0%) for common pool vessels. Common pool vessels continued to receive a higher average price at the dock for groundfish than sector vessels in 2013, as they did in 2012. Sector vessels received an average groundfish price of \$1.30 per pound in 2013, while common pool vessels earned an average price of \$1.59 per pound for groundfish (Table 1).

Average non-groundfish price was at a four-year low, \$1.00 per pound, in 2013 for the fleet as a whole. From 2012, average non-groundfish price decreased by \$0.08 per pound (-7.8%) for sector vessels and by \$0.03 per pound (-2.7%) for common pool vessels in 2013 (Table 1).

Effort in the groundfish fishery is represented in part by the number of active vessels, the number of trips taken, and by days absent on trips. For the fleet as a whole, 73 fewer vessels had revenue from at least one groundfish trip in 2013 than in 2012; 58 fewer sector vessels and 15 fewer common pool vessels targeted groundfish in 2013 than in 2012. The numbers of groundfish trips taken were at four-year lows in 2013 for both sector and common pool vessels. For sector vessels, the number of groundfish trips taken fell by 3,865 trips (-29.8%) from 2012 to 2013. Common pool vessels took 427 (-31.9%) fewer groundfish trips. The total numbers of days absent on groundfish trips also decreased to their lowest levels in 2013 for both sector and common pool vessels. Sector vessels had 2,642 fewer days absent (-13.9%) on groundfish trips in 2013 than in 2012, while total days absent on groundfish trips for common pool vessels fell by 185 (-22.0%); Table 1).

Non-groundfish effort increased for sector vessels in 2013. Sector vessels took 4.2% more non-groundfish trips (+728 trips) than in 2012, reaching a four-year high. Total days absent on non-groundfish trips also increased to a four-year high for sector vessels, with 575 more days absent in 2013 than in 2012, a 3.5% increase. In contrast, effort measures for non-groundfish decreased slightly for common pool vessels in 2013 compared with 2012; common pool vessels took 435 fewer non-groundfish trips (-2.7%), with 288 fewer days absent on non-groundfish trips (-2.2%; Table 1).

## 2. LANDINGS AND GROSS REVENUES

Gross revenues are one important indicator of financial performance. In commercial fishing, gross nominal revenues are a function of the amount of fish landed and the price paid at the time of sale. Prices paid by dealers vary by species and may fluctuate as a result of short- and long-term market changes. Annual changes in gross revenues can result from three different factors: changes in prices paid for fish at the dock, changes in quantity of landings, and changes in the species composition of the landings. Flexibility to target specific species and/or market categories at times when market values are high can be important in maximizing gross fishing revenues. Information is provided below on landings, overall gross revenues, and prices in 2013 compared with those in 2010 through 2012.

In this report, nominal revenues have been adjusted to account for the effects of inflation. Nominal revenues observed throughout the four-year time span were converted to real revenues using the GDP Implicit Price Deflator, with the second quarter (April-June) of calendar year 2010 as the base time period. Nearly all revenues contained in this report are in constant 2010 dollars. This approach differs from previous reports. In the 2010, 2011 and 2012 reports, nominal revenues were presented for most revenue metrics, with the exception of groundfish revenues, non-groundfish revenues, and all species revenues from all trips, which were presented in both nominal and real dollars.<sup>14</sup> In this year's report, we report monetary metrics in nominal amounts observed in 2013 for selected metrics only (see Tables 1-3). Unless otherwise indicated, the discussion in this report refers to monetary amounts in real or constant terms, i.e. amounts that have been adjusted for inflation.

### 2.1. Landings

Groundfish landings in 2013 continued the decline that the limited access groundfish fleet experienced in 2012. Declining groundfish landings were coupled with little growth in non-groundfish landings for the fleet in 2013. Total landings of all species on all trips were 256.4 million pounds in 2013, a 1.6% decrease from 2012 (260.5 million pounds). In 2013, total landings of all species were at their lowest point over the 2011-2013 time period, but higher than they were in 2010 (232.9 million pounds; Table 2). Total groundfish landings on all trips decreased to a four-year low of 42.2 million pounds in 2013, compared with 58.7 million pounds in 2010. Total groundfish landings on all trips declined 10.9% in 2013 compared with 2012 and 28.0% overall from 2010 to 2013. Total non-groundfish landings on all trips in 2013 were 214.2 million pounds, a four-year high, but less than 1% greater than in 2012. Groundfish landings

---

<sup>14</sup> Table 2 (Total landings and revenue from all trips by fishing year) in the FY2010, FY2011, and FY2012 reports.