

**Limited Access General Category (LAGC)
IFQ Fishery Performance Evaluation
(LAGC IFQ REPORT)**

May 2014 Version

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Executive Summary

Table of Contents

1.0	Background.....	7
2.0	General category fishery	8
2.1	Summary of Management history.....	8
2.1.1	Vision of general category fishery adopted under Amendment 11	9
2.1.2	Goals and Objectives of Amendment 11 related to the general category fishery.....	10
2.1.3	Summary of changes to the IFQ program since Amendment 11.....	11
2.2	Summary of general category fishery	12
2.2.1	Permit type.....	12
2.2.2	Scallop Landings.....	14
2.2.3	General category fishery by port and state	18
2.2.4	Ownership.....	22
2.2.5	Dependence on scallops and participation in other fisheries	24
2.2.6	Employment.....	28
3.0	Variables used to evaluate the lagc ifq program.....	32
3.1	Background.....	32
3.1.1	NMFS Report on the performance of the northeast multispecies fishery.....	32
3.1.2	NEFMC Draft FMP performance evaluation white paper.....	33
3.1.3	MSA requirements for review of LAPPs.....	35
3.2	Biological Performance	36
3.2.1	Biological Variable 1 – Catch and associated fishing mortality from LAGC fishery 36	
3.2.2	Biological Variable 2 – Bycatch	39
3.3	Economic performance	40
3.3.1	Summary of LAGC Incidental and NGOM Fisheries	40
3.4	Safety AND ENFORCEMENT performance.....	40
3.4.1	Measures of vessel safety.....	40
3.4.2	Measures of compliance and enforcement.....	44
3.5	Governance performance	46
3.5.1	Governance Variable 1 - Goals and Objectives.....	46
3.5.2	Governance Variable 2 – Council Vision Statement for Amendment 11.....	47
3.5.3	Governance Variable 3 - LAGC Representation and participation in Council process 50	
3.5.4	Governance Variable 4 - How quickly have changes been made to IFQ program... 52	
3.5.5	Governance variable 5 - Cost recovery.....	54
3.6	Summary	54

Appendices

Appendix I – Detailed Tables about General Category Scallop Fishery

Appendix II – Detailed Tables and Analyses Related to Economic Performance of LAGC IFQ Fishery

Table of Tables

Table 1. General category permit before and after Amendment 11 implementation	13
Table 2. Number of active vessels with LAGC permits by permit category	14
Table 3. <i>Estimated Landings</i> by permit plan before and after Amendment 11 implementation .	15
Table 4. <i>Estimated Landings</i> by permit plan before and after Amendment 11 implementation .	15
Table 5. <i>Estimated scallop landings</i> by LAGC vessels by permit category (Dealer and permit databases, including vessels that have both LA and LAGC permits).....	16
Table 6. General category scallop landings by primary gear (pounds, excluding LAGC vessels with LA permits).....	17
Table 7. Percentage of general category scallop landings by primary gear.....	18
Table 8. Number of permitted general category scallop vessels by homeport, 2001-2011. All ports with at least 3 GC permits in 2011 are included (not including those vessels with LA permits).	19
Table 9. Number of LAGC-IFQ vessels by home state (2012 Application year, Permit data)	21
Table 10. Number of LAGC-IFQ vessels and scallop landings by gear code and state of landings (2011 VTR).....	22
Table 11. Unique number of owners according to the number of vessels owned (Vessels with LGC permits including A, B and C categories, excluding vessels that also have LA permits) ...	23
Table 12. Unique number of owners according to the number of vessels owned (Vessels with LGC permits including A, B and C categories, excluding vessels that also have LA permits) ...	23
Table 13. Dependence on scallop revenue among limited access general category vessels (excluding GC vessels with LA permits).....	24
Table 14. Composition of Revenue for the Limited Access General Category Vessels (including those vessels with LA permits).....	24
Table 15. Composition of Revenue for the Limited Access General Category Vessels (not including those vessels with LA permits).....	25
Table 16. Other fishery management plan permits held by LAGC IFQ vessels in FY 2011	26
Table 17. Number of LAGC - IFQ vessels with landings of corresponding species.....	27
Table 18. Number of crew positions (sum of average number of crew per vessel) on active general category vessels. [Average vessel crew level calculated from scallop trips and separately from all trips.]	29
Table 19. Number of crew trips (sum of crew on all trips) on active general category vessels. [Calculated for trips with scallop landings and for all trips made by vessels with a valid GC permit (including incidental permits)]	30
Table 20. Total number of crew days (product of a trip’s crew size and the days absent from port) by homeport state for general category vessels.....	31
Table 21 – Summary of scallop allocations and landings for LAGC permits (FY2010-2013)....	38
Table 22 – Summary of scallop allocations and landings for LA vessels with LAGC permits (FY2010-2013)	38
Table 23 – YT catch estimates for scallop fishery by permit type (FY2011-2012)	39
Table 24 – Summary of “vessel casualties” that US Coast Guard has responded to in Northeast fisheries (2007-2012)	41
Table 25 – Number of LAGC IFQ vessels based on vessel age per fishing year.....	41
Table 26 – Compliance rate for VMS pre-landing requirement (2010-2013).....	44
Table 27 – Estimated number of LAGC IFQ trips per FY	45

Table 28 – Number of permits for LAGC IFQ permit categories 49

Table 29. Estimated Average annual revenue per limited access general category vessel (includes LA vessels with LAGC permits, Dealer Data) 49

Table 30 – Number of public meetings related to scallop management by calendar year since the IFQ program has been fully implemented 52

Table 31 – Summary of total cost recovery amount and fee% for LAGC IFQ fishery 54

Table of Figures

Figure 1. Average year built of the active LAGC IFQ vessels 42

Figure 2. Average year built of the LAGC IFQ vessels by leasing group 43

Figure 3. Average year built of the LAGC IFQ vessels by transfer group 43

List of Acronyms

1.0 BACKGROUND

The Council decided to initiate this review for four primary reasons. First, a recent review and analysis of impacts of sector management in the Groundfish FMP highlighted some important impacts and areas for improvement. Therefore, a similar analysis of the LAGC IFQ program may identify similar trends and issues that could be improved. Second, a review of the Council process in this region was recently conducted and it identified the need to identify a mechanism to evaluate the general performance of fishery management programs. This report uses some of the ideas that will be further developed in the longer-term evaluation of all FMPs in New England. Third, the Magnuson-Stevens Act (MSA) requires that all limited access privilege programs (LAPPs) should be evaluated within five years after adoption. This report is not the formal review of the LAGC IFQ program, but it can serve as an initial evaluation of the system before and after IFQs were implemented in 2010. Finally, the Council is potentially considering implementation of other LAPPs for other fisheries in this region. Therefore, a detailed analysis of the only IFQ system in New England could provide useful information for other actions and fisheries.

In 2011, the Council evaluated the sector management system that was first implemented in 2003 by Amendment 13 to the Multispecies FMP, and expanded in 2010 by Amendment 16. A report was conducted by the NEFSC that analyzed the economic and social performance of active limited access groundfish vessels in fishing year 2010 (NEFSC, 2011). In addition, the Council held a, “Lessons Learned Workshop” to collect input from the public related to sector performance and to identify potential solutions for improving the program. After the workshop the Council decided that a similar investigation of the economic and social changes from the only IFQ program in New England would be useful as well.

In addition, in 2011 there was a *Review of the New England Fishery Management Process* that was conducted by SRA Touchtone Consulting Group. The review was requested by a former Council Chairman and commissioned by NOAA NMFS. The first phase of the report focused on stakeholder interviews about the strengths and weaknesses of the management process. Over a dozen challenges were identified including the absence of a mechanism to evaluate or track the performance of management decisions. The Council has responded to a handful of the recommendations and most recently approved a white paper describing how the Council plans to conduct a “fishery performance evaluation” for all FMPs in this region to address the need for a mechanism to evaluate the performance of management decisions (Appendix 1).

The Draft FMP Performance Evaluation system approved by the Council at the January 2012 Council meeting, Appendix 1, is the first phase of a longer term project that will evaluate a wide range of performance measures such as biomass, economic indicators, fleet diversity, safety and general governance. Since this evaluation is based on available funding and may take several years to complete the Council decided to proceed with the LAGC IFQ Report now but expand the original scope to incorporate some of the relative indicators identified in the Draft FMP Performance Evaluation.

Furthermore, there is a requirement in the MSA to have a formal and detailed review of a limited access privilege program (LAPP) five years after implementation. This LAPP program has only

been in effect since 2010 (3 years), so the Council is not yet required to complete a formal review. However, the Council discussed that an initial analysis of trends in the fishery to date would be informative. Finally, the Council is already considering catch share systems in other plans, so it would be valuable to assess the impacts of the only IFQ system in this region first.

In summary, this LAGC IFQ Report will include some of the same economic and social performance analyses that were completed for the multispecies sectors, relevant performance evaluation indicators identified in the Council's Draft FMP Performance Evaluation, and some of the requirements in the five year review of LAPPs. This report will focus on the LAGC IFQ scallop fishery only and will not include detailed information about the overall scallop fishery. The analyses will include information about the participants before and after implementation of IFQs. The Scallop PDT will work on this report in 2012 and will present the results to the Scallop Committee and full Council in 2013. At that time the Council will decide if a specific meeting or workshop should be held to collect more input on the subject or not.

2.0 GENERAL CATEGORY FISHERY

2.1 SUMMARY OF MANAGEMENT HISTORY

The Council established the Scallop FMP in 1982. A number of Amendments and Framework Adjustments have been implemented since that time to adjust the original plan. Amendment 4 was implemented in 1994 and introduced major changes in scallop management, including a limited access program to stop the influx of new vessels and a day-at-sea (DAS) reduction plan to reduce mortality and prevent recruitment overfishing. Limited access vessels were assigned different DAS limits according to which permit category they qualified for: full-time, part-time or occasional. Amendment 4 also created the general category scallop permit for vessels that did not qualify for a limited access permit. Although originally created for an incidental catch of scallops in other fisheries, and for small-scale directed fisheries, the general category fishery and fleet has evolved since its creation in 1994.

Under Amendment 4 the general category scallop fishery was established as an "open access" fishery. Open access means any vessel that wants to apply for a permit can; there were no specific qualifications to receive a general category permit. The main control on mortality for this component of the scallop fishery was a daily possession limit.

Starting in 1999 there was considerable growth in fishing effort and landings by vessels with general category permits, primarily as a result of resource recovery and higher scallop prices. Landings went from an average of about 200,000 pounds from 1994-2000 to over one million pounds consistently from 2001-2003, and 3-7 million pounds each year from 2004-2006 (NEFMC, 2007). Without additional controls on the general category fishery, there was a great deal of uncertainty with respect to potential fishing mortality from this component of the scallop fishery, thus the potential for overfishing was increased. Therefore, the Council initiated Amendment 11 to consider a range of measures to control fishing mortality by this component of the fishery, improving the ability of this plan to prevent overfishing of the scallop resource overall.

A control date was implemented for the general category scallop fishery on November 1, 2004 (69 CFR 63341). A control date serves as advance notice to vessels that future access to that

fishery may be limited in some way. Specifically, a control date can be used for establishing eligibility criteria for determining levels of future access and it implemented to discourage speculative entry into a fishery while a Council develops a management program to control effort.

The Council began working on Amendment 11 in 2005 in June 2007 the Council approved Amendment 11 to the Scallop FMP and it was effective on June 1, 2008. To help focus Amendment 11 during development, the Council approved policy guidance as well as a “vision statement” for the general category fishery to help define the scope of issues that would be considered during the amendment. These have been included in this document to help identify potential indicators and evaluate whether the program implemented by Amendment 11 has achieved the goals and objectives set by the Council as well as the vision developed for this fleet.

The policy guidance read:

Amendment 11 will focus on addressing capacity in the general category fishery by considering measures that will better control fishing mortality by this component of the fishery. Specifically, the amendment will consider limited entry and implementation of a hard total allowable catch (hard TAC) to prevent overfishing. This amendment will not consider measures that maintain the general category fishery as an open access fishery with input controls as the only mechanism to manage general category effort (i.e. possession limits and crew restrictions).

2.1.1 Vision of general category fishery adopted under Amendment 11

The Council recognizes that the general category scallop fishery has changed since development and implementation of Amendment 4 in 1994. While some of the participants are the same, many have changed and fishing behavior has evolved with time. The general category scallop fishery has been and still is very diverse. This component of the fishery is prosecuted by vessels of different size and gear types. For example, some general category vessels fish for scallops full-time but only seasonally, another component of the fleet lands scallops above incidental levels while fishing for other species, and some are full-time day boat vessels that target scallops year round.

This action will implement measures that will control capacity and mortality in the general category scallop fishery. In order to accommodate this diverse fleet, this amendment will consider a range of measures that take these differences into account. Specifically, this action is considering a limited entry program, a hard TAC and other management measures to control capacity and mortality.

The overall intent of this action is to stabilize capacity and prevent overfishing from the general category fishery, and in doing so, the Council’s vision of this general category fleet from this point forward is to maintain the diverse nature and flexibility within this component of the scallop fleet. Specifically, the Council intends to consider measures that will control mortality from this component of the fleet, but preserve the ability for vessels to participate in the general category fishery at different levels. This Council recognizes the importance of this component of the fishery for small fishing communities, as a component of overall catch for some individual

vessel owners, and the value this “dayboat” scallop product has in the scallop market. Overall, the Councils’ vision of the general category fishery after Amendment 11 is implemented is a fleet made up of relatively small vessels, with possession limits to maintain the historical character of this fleet and provide opportunities to various participants including vessels from smaller coastal communities.

2.1.2 Goals and Objectives of Amendment 11 related to the general category fishery

The primary goal of Amendment 11 was to control capacity and mortality in the general category scallop fishery. In order to achieve this goal, the Council identified the following list of objectives:

1. Allocate a portion of the total available scallop harvest to the general category scallop fishery.
2. Establish criteria to qualify a number of vessels for a limited entry general category permit.
3. Develop measures to prevent the limited entry general category fishery from exceeding their allocation.
4. Develop measures to address incidental catch of scallops while fishing for other species.

Amendment 11 ultimately implemented a limited entry IFQ program for about 340 vessels (Category A LAGC permits). Each qualifying vessel received a “contribution factor” based on their catch history and years in the fishery. Vessels are allocated annual scallop poundage based on their individual contribution factor. Vessels are still subject to a possession limit; Amendment 11 maintained the limit of 400 pounds, but that was increased in a subsequent action to 600 pounds. The fleet of qualifying Category A general category vessels now receives a total allocation of 5% of the total projected (LA and LAGC) scallop catch each fishing year.

Amendment 11 also established separate limited entry programs for other classes of general category permits. Category B permits are restricted to fishing for scallop in the Northern Gulf of Maine and those vessels qualified under a separate set of criteria with different gear and possession limit restrictions. Category C LAGC permits are for vessels permitted to land and sell up to 40 pounds of scallop meat per trip while fishing for other species. There is a target TAC for this permit category of 50,000 pounds per year. Finally, about 120 limited access vessels (in Permit data, there are only 40 limited access vessels with IFQ permits in 2009-2012) also qualified for a LAGC IFQ permit under the same qualifying criteria). These vessels are allocated an overall 0.5% of the total projected annual scallop catch, and each permit has an individual contribution factor. These other limited access general category permits will not be evaluated in this report. This report is focused on LAGC IFQ vessels only, Category A permits.

Amendment 11 was implemented before the start of the 2008 fishing year, but there was a transition period for the first two years of the program. For fishing years 2008 and 2009 the fishery was managed under a quarterly hard-TAC equivalent to 10% of the total projected catch for the scallop fishery. The Council developed these interim measures because it was expected to take at least 12 months to implement a limited entry IFQ program. The Council adopted a quarterly TAC based on public comments related to potential derby fishing and safety concerns. The Council selected 10% because that is the value that was used in recent projections for assumed scallop mortality from the general category fishery, and that level of catch had not had

substantial impacts on the limited access fleet during that time period. Furthermore, the Council selected a higher value than the long-term allocation of 5% to reduce short-term impacts on vessels that would ultimately qualify for limited entry from additional effort expected under the appeals process.

2.1.3 Summary of changes to the IFQ program since Amendment 11

Since Amendment 11 there have been a handful of adjustments made to the IFQ program. The first action following Amendment 11, Framework 21 allowed partial leasing of general category IFQ allocations during the fishing year. The Council adopted this alternative to increase flexibility for general category qualifiers and to improve overall economic profits of the IFQ program. In addition, the amount of compensation a general category vessel can receive on observed access area trips was limited to 400 pounds per trip. This measure is not directly related to improvements of the IFQ program, but it does help prevent excessive compensation for observed LAGC trips, thus improving overall monitoring for both the LA and LAGC fleets. Limiting the compensation per trip will help the total observer set-aside compensation pool last longer, reducing the chance of the pool running out before the end of the year.

In 2010 Framework 22 considered a handful of modifications to various aspects of the LAGC program including VMS, accountability measures for YT flounder, and possession of in-shell scallops. But none of these measures were adopted, and none of them were specific to the IFQ program. In 2011 the Council approved Framework 23 which again did not consider any specific changes to the IFQ program, but modify one part of the NGOM LAGC permit. This action changed the NGOM management program so that a vessel with a Federal NGOM permit can fish exclusively in state waters and that catch would not apply against the federal NGOM TAC. Vessels could still fish in federal waters, but if they do all catch from that trip would apply against the federal TAC.

Amendment 15 included a handful of changes to the LAGC IFQ program specifically designed to make the IFQ program more effective and efficient for participating vessels. First, a rollover of 15% of the permit holder's original annual allocation will be allowed to a subsequent fishing year to increase flexibility and provide a safety mechanism in the case of a late-season breakdown. Second, the possession limit will be increased from 400 to 600 pounds to allow for more efficient harvest of quota, without the increase being large enough to change the nature of this small day-boat fishery and creating competition between the fleets. Third, the maximum amount of quota one vessel can harvest was increased from 2% to 2.5% to be more consistent with the maximum individual ownership value of 5%. Finally, IFQ vessels will be allowed to split the IFQ from their IFQ permit and other fishery permits to facilitate permanent IFQ transfers from vessels with a suite of NE fishery permits.

Finally in 2012 the Council approved Framework 24 to set fishery specifications for 2013, as well as a handful of other measures. Several were specific to the LAGC IFQ program. One measure designed to improve flexibility and efficient use of LAGC IFQ during the year was to allow LAGC vessels to sub-lease IFQ as well as lease IFQ during the fishing year even if some fishing has occurred. A handful of other measures adjust management for LAGC vessels, but were not specific to the IFQ program: specific YT AMs for the LAGC fishery; adjustment to the timing of YT AMs in the scallop fishery; expand the observer set-aside program to include

LAGC trips in open areas; and modify the observer set-aside TAC so that it is still 1% of the ABC, but it would not be area specific. These last few measures were developed to make LAGC vessels more accountable for bycatch, as well as improve overall monitoring of this fishery.

2.2 SUMMARY OF GENERAL CATEGORY FISHERY

This section briefly summarizes trends in the general category fishery, and is focused on the years *before* implementation of the limited access IFQ program. Some information about the fishery post IFQs are included in this section as well, but more detailed analyses of this fishery post IFQs is in Section 3.3. More detailed information about trends in this fishery before IFQs can be found in Appendix I, and more detailed information about the analyses related to the economic performance of the fishery post IFQs can be found in Appendix II.

2.2.1 Permit type

The general category permit was first established under Amendment 4 to the Scallop FMP. In 1994 it was established as an “open access” fishery; any vessel could apply for a permit. There were no specific qualifications to receive a permit and the primary control on mortality for this component of the scallop fishery was a daily possession limit.

Since Amendment 11, adopted in FY2008, there are now four types of LAGC permits; LAGC Category A permits which are IFQ permits; LAGC Category B permits which are restricted to fishing in the NGOM; and LAGC Category C permits which are incidental catch permits restricted to 40 pounds of scallop catch. Within the LAGC Category A permits there are two types: vessels that qualified for an IFQ permit that can transfer and lease quota; and limited access scallop vessels that also qualified for a LAGC IFQ permit, but are prohibited from leasing and transferring quota. Limited access scallop vessels can also qualify for the other general category permits (NGOM and incidental catch).

Many limited access scallop vessels also hold some type of LAGC permit. For example, in 2011 19 full-time limited access vessels also owned LAGC-IFQ permits, another 19 full-time vessels owned LAGC-NGOM permits, and about 83 full-time vessels also owned LAGC-incidental permits (See Table ??? in Appendix I). The number of general category permits declined considerably after 2007 as a result of the Amendment 11 provisions. Before Amendment 11 about 2,500 to 3,000 vessels had open access general category permits, and in 2011 fewer than 700 vessels had one of the four types of limited access general category permits (Table 1).

Table 1. General category permit before and after Amendment 11 implementation

AP_YEAR	General category permit (up to 2008)	Number of permits qualify under Amendment 11 program			Grand Total
		Limited access general category (A)	Limited access NGOM permit (B)	Incidental catch permit (C)	
2000	2263				2263
2001	2378				2378
2002	2512				2512
2003	2574				2574
2004	2827				2827
2005	2950				2950
2006	2712				2712
2007	2493				2493
2008		342	99	277	718
2009		344	127	301	772
2010		333	122	285	740
2011		288	103	279	670

Add 2012

About 200 general category vessels were active each year until 2004 when that value doubled over 400 vessels. The number of active general category vessels continued to increase until 2007 when Amendment 11 was being developed and implemented in 2008 (See Table ??? in Appendix I). Table 2 shows the number of active LAGC vessels by permit category. The quota has been fished by fewer vessels in 2011 compared to 2009 and 2010. For example, in 2009 there were 204 active LAGC IFQ vessels, and in 2011 that number fell to 141 active vessels. (replace these with 2010 and 2012 values).

Table 2. Number of active vessels with LAGC permits by permit category

Fishyear	Permit type	IFQ	INCI	NGOM	Grand Total
2009	LA+LAGC	27	8	<4	36
	LAGC only	204	66	>8	281
2009 Total		231	74	12	317
2010	LA+LAGC	31	15	4	50
	LAGC only	148	53	8	209
2010 Total		179	68	12	259
2011	LA+LAGC	28	21	7	56
	LAGC only	141	55	7	203
2011 Total		169	76	14	259

Source: Dealer and Permit Databases

Add 2012

2.2.2 Scallop Landings

Since 2001, there has been considerable growth in fishing effort and landings by vessels with general category permits, primarily as a result of resource recovery and higher scallop prices. Amendment 11 implemented a limited entry program for the general category fishery allocating 5% of the total projected scallop catch to the general category vessels qualified for limited access. However, while the fishery transitioned to an IFQ program it was managed under a quarterly hard-TAC that was set at 10% of the total allocation.

The IFQ program was fully implemented in fishing year 2010 fishing year, and that resulted in an overall decline in scallop catch by this category since the overall allocation was limited to 5% of total projected catch (See Table 3 and Table 4 in Appendix I).

Table 4 shows that in 2011 fishyear, the *estimated landings* by LAGC vessels including those by vessels with IFQ, NGOM and incidental catch permits and including the LAGC landings by the LA vessels that have both permits, amounted to 5.8% of total scallop landings in that fishyear.

Table 3. Estimated Landings by permit plan before and after Amendment 11 implementation

FISHYEAR	General Category	Limited Access		Unknown	Grand Total
		General category*	Limited Access		
1994	133,065		15,219,551	1,104,675	16,457,291
1995	129,500		15,711,338	1,039,227	16,880,065
1996	212,571		16,240,465	754,339	17,207,375
1997	370,207		12,261,725	815,643	13,447,575
1998	176,571		11,042,134	554,891	11,773,596
1999	167,447		21,160,523	351,958	21,679,928
2000	451,540		32,510,711	328,424	33,290,675
2001	1,649,916		43,882,139	190,957	45,723,012
2002	1,126,203		48,783,984	131,532	50,041,719
2003	1,902,253		52,889,177	301,558	55,092,988
2004	3,735,008		58,375,420	530,062	62,640,490
2005	7,586,819		45,887,228	184,078	53,658,125
2006	6,790,919		49,324,340	159,252	56,274,511
2007	5,058,517		54,309,292	302,081	59,669,890
2008	1,223,058	3,538,740	47,322,380	391,125	52,475,303
2009		4,528,767	52,337,947	1,106,772	57,973,486
2010		2,543,506	53,464,584	952,897	56,960,987
2011		3,403,692	54,215,577	830,408	58,449,677

Table 4. Estimated Landings by permit plan before and after Amendment 11 implementation

FISHYEAR	General Category	Limited Access		Unknown	Grand Total
		General category*	Limited Access		
1994	0.8%	0.0%	92.5%	6.7%	100.0%
1995	0.8%	0.0%	93.1%	6.2%	100.0%
1996	1.2%	0.0%	94.4%	4.4%	100.0%
1997	2.8%	0.0%	91.2%	6.1%	100.0%
1998	1.5%	0.0%	93.8%	4.7%	100.0%
1999	0.8%	0.0%	97.6%	1.6%	100.0%
2000	1.4%	0.0%	97.7%	1.0%	100.0%
2001	3.6%	0.0%	96.0%	0.4%	100.0%
2002	2.3%	0.0%	97.5%	0.3%	100.0%
2003	3.5%	0.0%	96.0%	0.5%	100.0%
2004	6.0%	0.0%	93.2%	0.8%	100.0%
2005	14.1%	0.0%	85.5%	0.3%	100.0%
2006	12.1%	0.0%	87.6%	0.3%	100.0%
2007	8.5%	0.0%	91.0%	0.5%	100.0%
2008	2.3%	6.7%	90.2%	0.7%	100.0%
2009	0.0%	7.8%	90.3%	1.9%	100.0%
2010	0.0%	4.5%	93.9%	1.7%	100.0%
2011	0.0%	5.8%	92.8%	1.4%	100.0%

*Includes landings by LAGC IFQ, NGOM and incidental permits and LAGC landings by LA vessels.

Table 5. Estimated scallop landings by LAGC vessels by permit category (Dealer and permit databases, including vessels that have both LA and LAGC permits)

Fishyear	Permit Type	IFQ	INCI	NGOM	Grand Total
2009	LA+LAGC	322,945	1,865	130	324,940
	LAGC only	3,985,303	194,198	24,326	4,203,827
2009 Total		4,308,248	196,063	24,456	4,528,767
2010	LA+LAGC	206,627	3,811	1,255	211,693
	LAGC only	2,177,528	148,406	5,879	2,331,813
2010 Total		2,384,155	152,217	7,134	2,543,506
2011	LA+LAGC	264,388	11,533	5,047	280,968
	LAGC only	3,067,777	48,954	5,993	3,122,724
2011 Total		3,332,165	60,487	11,040	3,403,692

Table 6 and **Table 7** describe general category landings by gear type. These tables are generated by VTR data and since not all VTR records include gear information, the number of vessels in these tables will differ from other tables that summarize general category vessels and landings from dealer data. Primary gear is defined as the gear used to land more than 50% of scallop pounds. Most general category effort is and has been from vessels using scallop dredge and other trawl gear. The number of vessels using scallop trawl gear increased through 2006 but has declined in recent years. In terms of landings, most scallop landings under general category are with dredge gear, with significant amounts also landed by scallop trawls and “other” trawls. **Table 6** shows the percent of general category landings by primary gear and year. The percentages of scallop landings with “other” trawl gear in 2008 and 2009 were the highest they have been since 2001, but still significantly less than dredge.

Table 6. General category scallop landings by primary gear (pounds, excluding LAGC vessels with LA permits)

Year	DREDGE, OTHER	DREDGE, SCALLOP	MISC.	TRAWL, OTHER	TRAWL, SCALLOP
1994	*	144,139	*	9,564	*
1995	4,812	501,910	1,146	43,585	11,797
1996	1,352	578,884	3,314	19,460	*
1997	3,253	682,270	3,465	30,227	
1998	6,049	334,930	2,443	19,677	*
1999	18,322	236,482	599	17,537	3,970
2000	6,446	303,168	1,411	173,827	8,179
2001	91,939	1,254,153	6,518	404,709	28,276
2002	21,888	1,266,144	919	74,686	41,977
2003	22,614	1,590,575	*	171,511	196,376
2004	36,260	2,499,393	2,359	422,426	340,921
2005	187,571	4,808,194	*	721,039	885,559
2006	189,786	5,583,477	5,431	399,909	549,745
2007	142,044	4,519,800	724	222,931	398,883
2008	88,761	2,596,790	1,502	525,675	290,179
2009	72,766	2,690,335	*	840,019	376,905
2010	63,795	1,601,073		238,773	175,610
2011	75,223	2,428,386	*	329,148	189,703

* indicates 3 or less vessels

Table 7. Percentage of general category scallop landings by primary gear

Year	DREDGE,	DREDGE,	MISC.	TRAWL,	TRAWL,
	OTHER	SCALLOP		OTHER	SCALLOP
1994	0.07%	92.00%	0.17%	6.10%	1.66%
1995	0.85%	89.11%	0.20%	7.74%	2.09%
1996	0.22%	95.74%	0.55%	3.22%	0.27%
1997	0.45%	94.86%	0.48%	4.20%	0.00%
1998	1.65%	91.30%	0.67%	5.36%	1.02%
1999	6.62%	85.40%	0.22%	6.33%	1.43%
2000	1.31%	61.49%	0.29%	35.26%	1.66%
2001	5.15%	70.24%	0.37%	22.67%	1.58%
2002	1.56%	90.08%	0.07%	5.31%	2.99%
2003	1.14%	80.27%	0.02%	8.66%	9.91%
2004	1.10%	75.71%	0.07%	12.80%	10.33%
2005	2.84%	72.82%	0.01%	10.92%	13.41%
2006	2.82%	82.98%	0.08%	5.94%	8.17%
2007	2.69%	85.53%	0.01%	4.22%	7.55%
2008	2.53%	74.13%	0.04%	15.01%	8.28%
2009	1.83%	67.58%	0.02%	21.10%	9.47%
2010	3.07%	77.00%	0.00%	11.48%	8.45%
2011	2.49%	80.34%	0.00%	10.89%	6.28%

2.2.3 General category fishery by port and state

New Bedford has the greatest number of general category scallop permitted vessels, but overall the fleet is more evenly distributed throughout coastal New England compared to the limited access fleet. In addition to New Bedford, Point Judith, RI, Gloucester, MA, Boston, MA, Cape May, NJ and Barnegat Light, NJ, are all the homeport of at least 20 vessels with general category scallop permits (Table 63). Relying on many small home ports instead of a few centralized ports is also part of the general category fleet’s fishing strategy which is less mobile and where vessels tend to fish closer to shore.

In terms of the number of permits by state, most LAGC vessels today are homeported in Massachusetts and New Jersey, followed by North Carolina and New York (Table 9). And in terms of catch the majority of LAGC landings are from New Jersey and Massachusetts, followed by New York and Rhode Island (Table 10).

Table 8. Number of permitted general category scallop vessels by homeport, 2001-2011. All ports with at least 3 GC permits in 2011 are included (not including those vessels with LA permits).

State	Homeport	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
MA	NEW BEDFORD	96	105	101	113	115	115	113	59	72	69	67
RI	POINT JUDITH	60	61	69	72	73	78	87	26	30	30	30
MA	GLOUCESTER	161	177	179	180	177	178	192	28	33	37	29
MA	BOSTON	226	207	192	166	133	120	107	29	38	31	27
NJ	CAPE MAY	34	34	39	53	67	71	76	19	28	23	23
NJ	BARNEGAT LIGHT	38	46	52	55	62	59	60	23	25	25	20
NJ	ATLANTIC CITY	11	15	13	18	23	27	24	12	14	16	16
NJ	POINT PLEASANT	22	26	24	30	34	36	37	14	20	15	16
MA	CHATHAM	62	76	78	76	69	65	70	7	13	16	12
NY	NEW YORK	69	66	60	66	61	60	57	11	12	12	10
NY	MONTAUK	39	41	47	55	58	56	65	8	9	8	10
MA	PROVINCETOWN	22	24	25	30	26	20	18	9	13	11	9
ME	PORTLAND	54	49	56	65	59	56	59	6	7	7	9
NC	NEW BERN				1	2	5	4	3	8	9	7
MA	SCITUATE	32	32	33	36	26	27	29	8	9	8	7
MD	OCEAN CITY	8	8	12	16	22	25	24	7	9	8	7
NY	SHINNECOCK	14	14	14	19	16	15	14	5	8	8	7
NC	WANCHESE	14	18	22	28	32	31	28	3	6	8	7
NC	SWAN QUARTER	3	5	5	7	10	11	8	4	6	8	7
PA	PHILADELPHIA	34	30	33	28	22	19	17	7	7	7	7
NH	SEABROOK	24	27	20	20	17	27	26	4	7	7	6
NC	BELHAVEN	4	6	8	10	16	13	11	5	6	6	6
ME	SOUTH BRISTOL	8	7	5	9	11	14	11	5	6	6	5
NJ	BELFORD	22	22	22	26	26	26	23	8	6	6	5
NC	BEAUFORT	11	11	14	15	17	17	12	9	7	7	4
NH	PORTSMOUTH	36	36	36	46	45	48	44	6	6	6	4
MD	TILGHMAN				5	11	10	8	3	4	4	4
NJ	POINT PLEASANT BEACH	1	3	3	3	3	4	4	2	3	3	4
NH	HAMPTON	18	20	18	22	22	17	16	5	5	5	3
NH	RYE	9	12	15	18	19	19	23	5	5	4	3

NC	ENGELHARD	5	4	5	9	12	9	9	5	5	4	3
NY	GREENPORT	6	6	7	7	8	5	5	3	4	3	3
NJ	WILDWOOD	10	11	9	9	8	8	8	4	3	3	3
MA	ROCKPORT	20	28	27	24	21	17	16	4	3	3	3
MA	NEWBURYPORT	18	23	23	20	20	18	16	3	3	3	3
NY	FREEPORT	5	6	7	10	12	11	9	1	3	3	3
NY	HAMPTON BAYS	9	8	8	8	6	11	10	1	2	2	3
NJ	PORT NORRIS	2	3	8	14	15	11	11	1	1	2	3

Table 9. Number of LAGC-IFQ vessels by home state (2012 Application year, Permit data)

Home Port	Number of permits
CT	3
DE	3
MA	84
MD	6
ME	8
NC	29
NH	6
NJ	82
NY	17
PA	3
RI	6
TX	1
VA	7
Grand Total	255

Table 10. Number of LAGC-IFQ vessels and scallop landings by gear code and state of landings (2011 VTR)

Gear	State	Number of vessels	Scallop landings (lb.)
DRS (SCALLOP DREDGE)	CT	NA	NA
	MA	45	898,705
	MD	4	9,111
	NC	NA	NA
	NH	NA	NA
	NJ	47	1,187,586
	NY	6	55,156
	RI	16	119,421
	VA	NA	NA
DRS Total		125	2,278,627
OTF (Otter TRW)	MA	13	9,369
	MD	NA	NA
	NC	7	2,613
	NJ	21	122,727
	NY	17	214,295
	RI	NA	NA
	VA	4	2,790
OTF Total		65	355,274
DRC (Q&CLAM DR.)	MD	NA	NA
	NJ	9	49073
DRC Total		NA	NA
OTC (SCAL.TRW)	NC	4	1,298
	NJ	7	60,539
	NY	9	117,812
	VA	6	9,923
OTC Total		26	189,572

Note: The data for 3 or less vessels are not shown to protect confidentiality. The landings by vessels that have both LAGC and LA permits are excluded. Other gear included OTB (Bottom fish trawl) and OHS.

2.2.4 Ownership

According to the permit data, 293 vessels had LAGC-IFQ permits in 2010 and 247 vessels had LAGC-IFQ permits in 2011. These numbers do not include vessels with LA permits. There was a corresponding ownership data for only 230 vessels in 2010 and 222 vessels in 2011. It is possible that some of the numbers in permit data included the same vessels that are replaced or sold to another owner. However, the available data connecting unique owners to the vessels indicate that majority of the vessels (134 out of 222 vessels in 2011) with LAGC-IFQ permits were owned by a single entity (Table 11). The part of the Table showing the data for active IFQ vessels (i.e., vessels with a record of scallop landings) indicates that close to half of the vessels owned by a single entity did not land scallops in 2010 and 2011 fishing years. Again, it must be cautioned that Table 11 does not include all the IFQ vessels due to the lack of ownership data for some of these vessels at this time. For example, although there were 161 number of active vessels with LAGC-IFQ permits in 2011, only 107 of these vessels had some corresponding ownership data (See **Table 2** for all active LAGC vessels).

Table 12 shows the ownership information for all vessels with LAGC permits including the IFQ, NGOM and Incidental permits but excluding those with LA permits. The results are similar to Table 11 showing that majority of the vessels, 242 out of 448 vessels with LAGC permits, were owned by one entity/person in 2011. Again, only half of these boats were active or landed scallops in 2011.

Table 11. Unique number of owners according to the number of vessels owned (Vessels with LGC permits including A, B and C categories, excluding vessels that also have LA permits)

Fishyear	Number of vessels owned	All vessels with LGC permits		Active vessels with LGC permits only			
		Total number of owners	Total number of vessels	Total number of owners	Total number of vessels	Percent of vessels	Percent of scallop landings
2010	1	147	147	66	66	56%	75%
	2	22	44	6	12	10%	6%
	3 or more	8	39	8	39	33%	19%
2010 Total		177	230	80	117	100%	100%
2011	1	134	134	65	65	61%	76%
	2	28	56	16	32	30%	14%
	3 or more	5	32	3	10	9%	11%
2011 Total		167	222	84	107	100%	100%

Table 12. Unique number of owners according to the number of vessels owned (Vessels with LGC permits including A, B and C categories, excluding vessels that also have LA permits)

Fishyear	Number of vessels owned	All vessels with LGC permits		Active vessels with LGC permits only			
		Total number of owners	Total number of vessels	Total number of owners	Total number of vessels	Percent of vessels	Percent of scallop landings
2010	1	269	269	122	122	49%	65%
	2	43	86	19	38	15%	16%
	3	13	39	6	18	7%	7%
	4	2	8	1	4	2%	0%
	5	2	10	2	10	4%	2%
	6 and over	6	57	6	57	23%	10%
2010 Total		335	469	156	249	100%	100%
2011	1	242	242	118	118	46%	54%
	2	49	98	29	58	23%	28%
	3	12	36	4	12	5%	4%
	4	2	8	1	4	2%	0%
	5	2	10	2	10	4%	2%
	6 and over	5	54	5	54	21%	12%
2011 Total		312	448	159	256	100%	100%

2.2.5 Dependence on scallops and participation in other fisheries

Table 13 shows that general category IFQ permit holders are less dependent on scallops compared to vessels with full-time limited access permits, which for the most part get over 90% of total revenue from scallops. In 2011, less than half (43%) of IFQ permitted vessels earned greater than 50% of their revenue from scallops. Scallops still comprise the largest proportion of the revenue for IFQ general category vessels, accounting for 38.6% of these vessels revenue. Scallops still comprise the largest proportion of the revenue for IFQ general category vessels, accounting for 38.6% of these vessels revenue (Table 14). The composition of revenue for IFQ general category vessels is shown in Table 14.

The relative ease with which a vessel is able to switch between fisheries is an indicator of the dependence on any one fishery or species. **Table 16** show the number and percentage of scallop vessels with permits from other fishery management plans, while **Table 17** shows the number of LAGC scallop vessels that have actual landings of other species. These tables show a general category fishery where a large percentage of vessels have permits in other fisheries and landings of corresponding species.

Table 13. Dependence on scallop revenue among limited access general category vessels (excluding GC vessels with LA permits)

Permit Category	Scallop Revenue as % of total	2008		2009		2010		2011	
		Number of Vessels	%	Number of Vessels	%	Number of Vessels	%	Number of Vessels	%
IFQ	<10%	92	39%	81	32%	103	48%	82	43%
	10% - 49%	29	12%	32	13%	26	12%	27	14%
	50% - 74%	29	12%	37	15%	16	7%	16	8%
	75% - 89%	10	4%	15	6%	11	5%	12	6%
	>=90%	75	32%	87	35%	60	28%	55	29%
Total		235	100%	252	100%	216	100%	192	100%

Table 14. Composition of Revenue for the Limited Access General Category Vessels (including those vessels with LA permits)

		2008	2009	2010	2011
LAGC - IFQ	SCALLOP, SEA	53882244	60745820	63662791	89295862
		56.2%	60.2%	58.9%	62.2%
	FLOUNDER, SUMMER	3698635	4057324	5965707	8601902
		3.9%	4.0%	5.5%	6.0%
COD		4898076	4019584	3878797	6692224
		5.1%	4.0%	3.6%	4.7%
HADDOCK		4651156	5175295	7006451	5902674
		4.9%	5.1%	6.5%	4.1%
	FLOUNDER, WINTER	4166806	3796259	3059348	4657612

	4.3%	3.8%	2.8%	3.2%
ANGLER	3735774	2356285	2523998	3535926
	3.9%	2.3%	2.3%	2.5%
SQUID (LOLIGO)	1340455	1168888	1706643	2647702
	1.4%	1.2%	1.6%	1.8%
QUAHOG, OCEAN	3791416	3353203	5489910	2508971
	4.0%	3.3%	5.1%	1.7%
LOBSTER	2786929	2166218	2205683	2292524
	2.9%	2.1%	2.0%	1.6%
FLOUNDER, YELLOWTAIL	1690610	1601151	1415039	2120194
	1.8%	1.6%	1.3%	1.5%
Total Landings	95790993	100902468	108034448	143470717

Table 15. Composition of Revenue for the Limited Access General Category Vessels (not including those vessels with LA permits)

		2008	2009	2010	2011
LAGC - IFQ	SCALLOP, SEA	21844640	24882995	19072784	32321259
		35.2%	39.1%	31.2%	38.6%
	FLOUNDER, SUMMER	3049527	3525085	4983035	7330321
		4.9%	5.5%	8.1%	8.8%
	COD	4897712	4017741	3878797	6692224
		7.9%	6.3%	6.3%	8.0%
	HADDOCK	4651152	5175295	7006451	5902674
		7.5%	8.1%	11.4%	7.1%
	FLOUNDER, WINTER	4165799	3795185	3059348	4656247
		6.7%	6.0%	5.0%	5.6%
	ANGLER	3558964	2217851	2415365	3404805
		5.7%	3.5%	3.9%	4.1%
	SQUID (LOLIGO)	1143579	1052227	1477045	2510885
		1.8%	1.7%	2.4%	3.0%
	QUAHOG, OCEAN	3791416	3353203	5489910	2508971
		6.1%	5.3%	9.0%	3.0%
	LOBSTER	2786253	2157673	2204780	2290224
		4.5%	3.4%	3.6%	2.7%
	FLOUNDER, YELLOWTAIL	1690610	1600759	1414633	2116837
		2.7%	2.5%	2.3%	2.5%
	Total Landings	62139710	63632899	61201103	83713450

Table 16. Other fishery management plan permits held by LAGC IFQ vessels in FY 2011

Plan	Description	LAGC - IFQ	% of IFQ vessels
BLU	Bluefish	262	90%
BSB	Black Sea Bass	105	36%
DOG	Dogfish	265	91%
	Summer		
FLS	Flounder	168	58%
HRG	Herring	235	81%
LO	Lobster	172	59%
MNK	Monkfish	278	96%
MUL	Multispecies	242	83%
OQ	Ocean Quahog	184	63%
RCB	Red Crab	207	71%
SC	Scallop LA	43	15%
LGC	Scallop LAGC	290	100%
SCP	Scup	115	40%
SF	Surf Clam	181	62%
SKT	Skate	264	91%
	Squid/Macker		
SMB	el/Butterfish	251	87%
TLF	Tilefish	233	80%

Table 17. Number of LAGC - IFQ vessels with landings of corresponding species

(includes fisheries with 10 or more participating vessels in 2011, but not vessels that also possess LA scallop permits)

	2008	2009	2010	2011
ANGLER	176	187	162	144
BASS, STRIPED	13	2	24	14
BLUEFISH	54	75	63	75
BUTTERFISH	34	55	42	46
COD	83	72	72	53
CRAB, JONAH	6	6	11	16
CROAKER, ATLANTIC	19	32	18	18
CUSK	34	33	30	20
DOG FISH SMOOTH	22	35	32	32
DOG FISH SPINY	32	57	44	46
EEL, CONGER	15	12	13	11
FLOUNDER, AM. PLAICE	70	65	52	43
FLOUNDER, SUMMER	100	104	102	94
FLOUNDER, WINTER	89	72	60	43
FLOUNDER, WITCH	78	64	62	43
FLOUNDER, YELLOWTAIL	80	74	66	53
HADDOCK	69	62	53	43
HAKE, RED	23	27	29	22
HAKE, SILVER	47	51	43	39
HAKE, WHITE	57	52	46	38
HALIBUT, ATLANTIC	41	38	24	22
HERRING, ATLANTIC	11	12	14	16
JOHN DORY	9	7	13	15
LOBSTER	85	78	75	50
MACKEREL, ATLANTIC	20	27	23	16
POLLOCK	62	55	50	41
REDFISH	39	43	36	31
SCALLOP, SEA	189	206	148	141
SCUP	35	41	51	52
SEA BASS, BLACK	47	47	52	49
SEA ROBINS	10	15	12	12
SHRIMP, BROWN	1	13		11
SKATE, WINTER (BIG)	32	41	44	43
SKATES (RACK)	79	76	68	61
SQUID (LOLIGO)	46	58	54	55
TILEFISH, BLUELINE	4	6	8	10
TILEFISH, GOLDEN	9	8	20	16
TUNA, BLUEFIN	5	7	12	12
WEAKFISH, SQUETEAGUE	30	38	27	37

WHELK, CHANNELED	11	14	15	10
WHELK, KNOBBED	6	8	10	13
WHITING, KING	13	23	13	24

2.2.6 Employment

In the Northeast fishing industry, actual employment numbers are not tracked but information about crew size on a trip and the duration of a trip can be gained from the Vessel Trip Report. Although these data do not identify the actual number of individuals employed and a crew member will often work for more than one vessel owner, the data can be used to indicate the number of crew positions available and the length of time crew spend at sea. These general indicators can then be used to describe broad trends in employment in the fishery.

Recently the number of crew positions in the general category fishery, measured by summing the average crew size of all LAGC scallop trips, has declined sharply. It first declined in 2008 when the limited entry was implemented and then again in 2010 when the hard TAC was set at 5% of the total scallop catch limit. Between 2007 and 2008 the total number of crew positions on general category vessels landing scallops dropped 43%, from 1276 positions to 731 (Table 18). Then, the total number of general category crew positions dropped another 21% in 2010, so that the number of crew positions was 576. In 2011 the number of general category crew positions has begun to rise adding 24 more crew positions.

A crew trip is another indicator of employment opportunity in the scallop fishery that examines the number of opportunities a crew member has to earn a share of the landing revenue. The crew trip is informative because while the number of crew positions is an indicator of the availability of jobs, the crew position provides no information about the quality of those jobs and whether the positions are part-time or full-time. Total crew trips were calculated by summing the crew size of all trips taken in each fishing year across home port state. The number of crew trips on general category vessels followed a similar pattern as the general category crew positions, with large declines in 2008 and 2010, but then an increase in 2011 (Table 19).

One final indicator of employment opportunity in the scallop fishery is the crew day, which is calculated by multiplying a trip's crew size by the days absent from port. A crew day provides additional information about the time a crew spends at sea to earn a share of the revenues. Because there is an opportunity cost associated with time spent at sea, a crew day can be viewed as an indicator of time invested in earning a share of a the revenues received at the end of a trip. For example, if crew trips and crew earnings remain constant, a decline in crew days would reveal a benefit to crew in that less time was forgone for the same amount of earnings. The number of crew days on general category vessels followed a similar pattern as the general category crew positions and trips, with large declines in 2008 and 2010, but then an increase in days in 2011 (Table 20). Oftentimes the number of general category crew days is smaller than the number of crew trips, which is because many of the general category trips are shorter than a single day which results in a fraction of a crew day.

Table 18. Number of crew positions (sum of average number of crew per vessel) on active general category vessels. [Average vessel crew level calculated from scallop trips and separately from all trips.]

	2007	2008	2009	2010	2011
Total GC crew positions	1276	731	751	576	600
ME	107	35	31	19	13
NH	27	10	12	11	8
MA	383	239	195	137	164
RI	113	54	65	49	57
CT	20	6	9	8	3
NY	57	40	64	52	48
NJ	323	197	203	172	195
PA	16	8	8	18	23
DE	7	8	4	8	8
MD	58	33	33	17	11
VA	28	13	15	14	11
NC	113	77	104	69	58
Other Homeport states	23	11	8	3	0
Total GC crew positions	2283	1239	1366	1262	1173
ME	281	120	127	112	102
NH	66	39	46	44	34
MA	785	476	497	481	422
RI	170	89	121	104	100
CT	45	9	10	7	5
NY	133	62	78	74	87
NJ	397	238	252	233	254
PA	25	12	15	18	23
DE	15	8	4	8	8
MD	64	33	38	27	20
VA	62	25	21	21	14
NC	215	117	148	131	105
Other Homeport states	26	11	8	3	0

Table 19. Number of crew trips (sum of crew on all trips) on active general category vessels. [Calculated for trips with scallop landings and for all trips made by vessels with a valid GC permit (including incidental permits)]

	2007	2008	2009	2010	2011
Scallop crew trips	42396	24531	27918	17132	23000
ME	3318	1066	901	475	434
NH	577	352	279	111	106
MA	9146	3813	5200	4473	7291
RI	1008	461	452	279	581
CT	596	270	364	126	52
NY	1155	1131	1160	1352	1743
NJ	17621	10587	10678	6708	8543
PA	272	127	171	273	520
DE	418	207	99	191	294
MD	1987	1797	1998	493	343
VA	1114	645	937	382	546
NC	3761	2643	5018	2175	2547
Other homeport states	1423	1432	661	94	0
All crew trips	119341	71886	84598	68900	69821
ME	15181	7515	8021	7054	6266
NH	4676	3916	4566	3543	2802
MA	35865	21308	24509	22337	22614
RI	10615	7434	8754	8144	7847
CT	1782	332	688	510	445
NY	9230	5182	7874	6360	6561
NJ	26208	15664	17262	13568	15892
PA	361	135	226	333	593
DE	646	287	103	203	318
MD	2512	2130	2622	1109	738
VA	2544	1167	1310	665	769
NC	8099	5313	7993	4980	4976
Other homeport states	1622	1503	670	94	0

Table 20. Total number of crew days (product of a trip's crew size and the days absent from port) by homeport state for general category vessels.

	2007	2008	2009	2010	2011
Scallop crew days	49344	26952	25560	15841	22348
ME	3093	1040	769	275	281
NH	650	349	296	102	81
MA	14019	6263	5704	4076	6153
RI	2399	659	1053	448	762
CT	766	240	295	80	38
NY	1609	1142	877	1043	1207
NJ	16971	9738	8139	6103	9235
PA	367	226	272	406	809
DE	661	319	185	311	453
MD	1546	1361	1543	409	182
VA	1436	900	961	475	741
NC	4351	3385	4997	2023	2406
Other homeport states	1477	1331	468	89	0
All crew days	173599	99883	115540	100852	103570
ME	18069	7488	7650	7193	7178
NH	2773	1984	2257	1755	1249
MA	61952	42349	47435	43148	42668
RI	20208	9828	15075	13233	12374
CT	3070	295	581	381	294
NY	13054	5114	7060	6219	6676
NJ	25506	16130	15856	14122	17940
PA	1038	239	356	495	921
DE	1216	424	192	329	481
MD	1929	1632	2024	890	463
VA	3279	1677	1585	1133	1586
NC	19495	11339	14961	11864	11740
Other homeport states	2010	1384	506	89	0

3.0 VARIABLES USED TO EVALUATE THE LAGC IFQ PROGRAM

These variables are a combination of the elements analyzed in the economic and social performance evaluation of sectors (NEFSC Groundfish Performance Report (NEFSC, 2011)), indicators from the Draft FMP Performance Evaluation process approved by the Council in January 2012 (Appendix 1), and requirements for review of limited access privilege programs (LAPPs) in the MSA.

3.1 BACKGROUND

3.1.1 NMFS Report on the performance of the northeast multispecies fishery

In October 2011 NMFS published a report that evaluated the economic and social performance of active groundfish vessels for FY2010 (NEFSC Groundfish Performance Report (NEFSC, 2011)). The report compared a range of performance measures over time, 2007-2010. The report highlighted some notable changes that have occurred in the fishery recently, as well as others that have been ongoing trends. The report looked at a variety of issues including but not limited to changes in fishing activity, employment, revenue and average price for groundfish and other species.

The New England Fishery Management Council (Council) hosted a two-day workshop in order to gain feedback about the performance of sectors during the first year of the Amendment 16 regulations. Reviewing the NEFSC Groundfish Performance Report was a major component of the workshop. Sectors are self-selecting, self-governing groups of fishermen in the Northeast multispecies fishery who receive a pool of quota based on the fishing history of their members. The main purpose of the workshop was to begin to identify improvements that can be made to the sector program to allow for maximum efficiency and success.

The Council invited managers and active fishermen from each of the nineteen approved sectors, as well as all Council members, members of the Scientific and Statistical Committee, the Groundfish Advisory panel, the Groundfish Plan Development Team, and staff from the Northeast Regional Office (NERO) of the National Marine Fisheries Service (NMFS) who work on sector issues. Managers or representatives from all of the sectors were in attendance, in addition to fishermen from many sectors. Approximately 160 participants in total attended the workshop. The format of the workshop consisted of several analytical presentations on the performance and impacts of sector management, six panels in which sector representatives shared their experiences and made recommendations for improvements, two public comment sessions, and breakout sessions in which all attendees brainstormed and prioritized solutions to challenges faced by sectors.

Dozens of issues and potential actions were identified for the various breakout discussions focused on monitoring, effort controls, visioning, data management, ACE trading, and communication. In addition five overall recommendations came out of the workshop. Some of the recommendations have become part of overall Council priority work items, some are being worked on internally at NERO, and some have not been elevated as a specific work item yet.

This LAGC IFQ performance report will evaluate similar aspects of the fishery and participants. However, the Council has not yet decided if a workshop or future action will be taken related to findings in this report.

3.1.2 NEFMC Draft FMP performance evaluation white paper

In January 2012 the Council approved a Draft FMP Performance Evaluation process, which included a range of indicators that could be used to evaluate fishery management performance.

There are other efforts underway to identify potential performance variables in this region as well as nationally. NMFS social scientists have compiled a list of performance variables that could be used for FMP tracking (Appendix 1, adapted from Clay, et al. 2010). In addition, NMFS plans to advance a nationwide set of fishery performance measures, as compared to FMP performance measures, beginning in 2012. This will begin with catch share fisheries using readily available data and will be expanded to include other fisheries and data in the future. In addition, MRAG Americas has developed a proposal for catch share system performance evaluation (MRAG Americas 2011).

The Draft FMP Performance Evaluation document approved by the Council incorporated all these sources and summarized a list of potential performance evaluation variables. The list balances the number of variables tracked with the time that is needed to compile and present the information recognizing the need for cost effectiveness and minimizing workload impacts.

3.1.2.1 Generic FMP Performance variables

1. Biological
 - a. Fishing mortality rate / target fishing mortality rate
 - b. Biomass / Biomass target
2. Economic
 - a. Catch as a percentage of ACL
 - b. Discards
 - i. Target species – use rate from NMFS NERO for ACL calculation
 - ii. Protected Resources – no estimate by FMP
 - c. Revenue from fishery
 - d. Revenue per active permit holder
 - e. Percentage of gross revenue taken by top 20% of permit
 - f. Net revenue per permit (if available, only available for few fisheries)
 - g. Number of active vessels
 - h. Number of inactive vessels
 - i. Average age of active vessels
3. Fleet Diversity
 - a. Number of vessels in fishery
 - i. Under 30 feet
 - ii. 30-50 feet
 - iii. 50-75 feet
 - iv. Over 75 feet
 - b. Landings revenue by port
 - c. Landing in weight by port

- d. Number of ports in which FMP species are landed
- e. Number of days fished by port
- 4. Safety
 - a. Fishing Vessel Casualty Rate
 - i. Per 100,000 hours fished (groundfish, scallop) – time intensive
 - ii. Per 1,000 days fished ?
 - iii. Working with USCG on best indicator
- 5. Governance
 - a. Ratio of actual vs. planned time for amendment or framework
 - b. Time needed to incorporate new assessment data into FMP
 - c. Time needed to respond to new conditions, e.g. changes in the fishery or requests from stakeholders
 - d. Number of advisory panel meetings
 - e. Public input metric to gauge how stakeholders feel their input is being heard and used.
 - i. Use web based survey tool, e.g. Survey Monkey, and note cards to allow people to comment in an anonymous, non-intimidating way.
 - ii. Questions to be developed

Once the specific variables or performance indicators are identified there are several other issues to consider.

1. What should the baseline years be?
2. Has the FMP met original objectives?
3. How should the material be presented?

3.1.2.2 Performance variables for this IFQ Report

The specific variables identified for this performance report are evaluated below in Sections 3.2 through 3.5. The other issues identified in the Draft NEFMC FMP Performance Report are summarized below with specific responses for the LAGC IFQ Performance Report are:

1. What should the baseline years be?
 - 5 years before IFQ (2005-2009) – This period is not a uniform one- 2005-2007 corresponds to big increase in GENERAL CATEGORY effort, while 2008-2009 is more limited entry with 10% quota – part of the program was implemented. Can compare 2011-2012 to two separate periods. I think 2008 could be a good starting year for comparison (ownership data is lacking in 2009).
 - Qualifying years (2000-2004); This baseline makes sense.
 - Transition period (2008-2009)
2. Has the FMP met original objectives?
 - Amendment 11 LAGC IFQ Program Objectives
3. How should the material be presented?
 - Separate white paper presented to Council (September 2013)
 - Sub-heading on the scallop page of the NEFMC website as well as NEFSC Social Science website

- Potential workshop to present info to public and gather feedback – *Council has not made a decision about this yet*

3.1.3 MSA requirements for review of LAPPs

In 2007 the Magnuson-Stevens Act was reauthorized. One new requirement of the Act is to regularly monitor and review all limited access privilege programs, which includes fisheries managed by individual fishing quotas (IFQs). A limited access privilege is defined as a Federal permit to harvest a quantity of fish representing a portion of the total allowable catch of the fishery. A formal and detailed review of whether the program is meeting management goals is required five years after implementation. The MSA regulations related to review of LAPPs are described below:

MSA 303A (c) Requirements for LAPPs

(1) In general

(G) include provisions for the regular monitoring and review by the Council and the Secretary of the operations of the program, including determining progress in meeting the goals of the program and this Act, and any necessary modification of the program to meet those goals, with a formal and detailed review 5 years after the implementation of the program and thereafter to coincide with scheduled Council review of the relevant fishery management plan (but no less frequently than once every 7 years);

The LAGC IFQ program was fully implemented in 2010; therefore, the formal five year review is not required until 2015. However, this review will serve as an initial evaluation of the program to date and help identify which factors should be further assessed in the formal review.

3.2 BIOLOGICAL PERFORMANCE

It needs to be highlighted that the LAGC IFQ fishery is a relatively small component of the overall Sea Scallop fishery in terms of total catch and mortality. Therefore, the status of the resource in terms of total biomass and fishing mortality is not driven by management measures set for the LAGC IFQ fishery. Rather, the limited access fishery is the major component of the fishery responsible for 90-95% of total catch. Therefore, the catch and associated fishing mortality from the LAGC fishery cannot be completely evaluated individually; it is part of a larger management system. This is also the case in terms of impacts on bycatch and other aspects of the ecosystem such as essential fish habitat. The LAGC IFQ fishery is only one aspect of a larger management program; therefore, it is difficult to parse out the biological performance of the LAGC IFQ fishery separate from the overall scallop fishery.

3.2.1 Biological Variable 1 – Catch and associated fishing mortality from LAGC fishery

The fishing mortality from the LAGC IFQ fishery, measured in terms of total catch, is estimated to be about 5% of the total projected fishing mortality. The LAGC fishery is allocated a total allowable quota of 5% of the projected catch after other sources of mortality are removed such as incidental catch and set-asides for observer coverage and research. This biological variable is evaluated by estimating how much of the total LAGC IFQ sub-ACL is harvested, an indirect measure of fishing mortality and biological performance.

In some cases general category vessels may have a lower fishing mortality than larger limited access vessels due to smaller gear and lower area swept. However, in other cases the mortality and impacts on the environment could be similar or even higher if general category vessels are fishing in areas with lower scallop densities, potentially having higher impacts on scallop mortality and bycatch per unit of effort. If it is assumed that fishing mortality from all scallop fishing is similar, then assessing the amount of catch harvested from the total available catch allocated is one way to measure the biological performance of this fishery in terms of associated fishing mortality.

In 2010 the LAGC IFQ sub ACL was 2.33 million pounds and 0.23 million pounds for LA vessels with LAGC IFQ permits (Table 21). Total catch for vessels with LAGC IFQ permits was 2.12 million pounds, or 91% of the total sub-ACL. Total catch for LA vessels with LAGC IFQ was 0.29 million pounds; over the sub-ACL, 127% (Table 22).

In 2011, vessels with LAGC IFQ were allocated a sub-ACL of 2.91 million pounds and LA vessels with IFQ permits were allocated a sub-ACL of 0.29 million pounds. Total catch for LAGC IFQ vessels in FY2011 was 2.77 million pounds, about 95% of the total sub-ACL. For LA vessels with LAGC IFQ permits total catch was about 273,000 pounds, or 94% of the total sub-ACL.

In 2012 the LAGC IFQ sub ACL was 2.9 million pounds and 0.29 million pounds for LA vessels with LAGC IFQ permits. Total catch for vessels with LAGC IFQ permits was 3.04 million pounds, about 95% of the total sub-ACL. FY2011 is the first year that vessels had carryover from FY2010 available. Overall the LAGC IFQ fishery carried over about 127,000 pounds from FY2010 to FY2011. When that available catch is added to the sub-ACL set for FY2011, the

total available catch is 3.04 million pounds, if all carryover and available catch in FY2011 is harvested. So total catch is closer to 92% of available catch (sub-ACL plus carryover). In 2012 the total sub-ACL was a bit higher, and the carryover was a bit higher as well. Total catch increased in 2012 to 3.03 million pounds, 98% of the sub-ACL and 92% of available catch (sub-ACL plus carryover).

The total amount of catch carrying over from one fishing year to the next is increasing. In 2013 over 300,000 pounds was carried over from 2012, and since the sub-ACL was lower in 2013 this carryover represents a larger percentage of total available catch (12% of total catch and 13.5% of the sub-ACL). However, the % of sub-ACL for 2012 was 98% and 99% for 2013. This should be monitored closely in future fishing years to evaluate whether a management buffer, or annual catch target, is necessary for this segment of the fishery to account for carryover.

Total catch for LA vessels with LAGC IFQ was about 297,000 pounds, or 128% of the total sub-ACL in 2010. IN 2011 94% of the sub-ACL was harvested and in 2012 about 96%. The total amount of carryover has increased for this segment of the fishery as well and in 2013 about 24,000 pounds were carried over from 2012, or 10.5% of the 2013 sub-ACL and 9.6% of the total catch available.

Based on three years of information only, the sub-ACLs and IFQs in place are effectively controlling mortality from this component of the fishery. Over 95%% of the total sub-ACL for the LAGC IFQ fishery was harvested in the first two years of the program; there are only relatively small amounts of quota unfished in the fishing year it is allocated. In FY2013, the amount of carryover from FY2012 increased, potentially indicating more vessels taking advantage of the IFQ rollover provision and potentially in anticipation of reduced catch levels in 2013 compared to 2012.

In summary, from a biological perspective this IFQ and sub-ACL management program has been effective at controlling mortality and preventing overfishing. Furthermore, during the first three years under IFQ management, a relatively small percentage of the total available catch has been left unharvested, about 10% of the sub-ACL the first year and under 5% in 2011 and 2012.

PDT Finding – *The 15% carryover provision added to this IFQ program in Amendment 15 potentially adds management uncertainty in terms of final catch staying below the sub-ACL. Total carryover has been about 5% of the sub-ACL. Even if all vessels utilized the 15% carryover provision, the risk of that measure causing the entire ACL to be exceeded is diminimus since 15% of the 5.5% allocation for LAGC vessels is a relatively small proportion of the total fishery. Since this is a relatively low risk and had not been an issue to date no action is needed at this time, but the issue should be monitored and a small buffer could be considered in the future if needed. For example, a sub-ACL could be set 1% lower than the sub-ACL to account for the 15% carryover provision allowed in this fishery.*

Table 21 – Summary of scallop allocations and landings for LAGC permits (FY2010-2013)

Fishing year	Sub-ACL allocated in FW A	Carryover from previous FY B	Total Available Catch (includes carryover) A+B = C	Final Catch D	% of sub-ACL D/A	% of Total Available (includes carryover) D/C
2010*	2,326,700	N/A	2,326,700	2,120,134	91.12%	91.12%
2011**	2,910,800	126,709	3,037,509	2,773,744	95.29%	91.32%
2012**	3,095,450	194,048	3,289,498	3,033,538	98.00%	92.22%
2013***	2,227,142	301,354	2,528,496	2,212,446	99.34%	87.50%

Sources:

*2010 quota monitoring script for Limited Access General Category IFQ scallop sub-ACL

**2011 and 2012 scallop year-end reports, carryover calculated by APSD permit office

***2013 Limited Access General Category IFQ scallop sub-ACL quota report GARFO web page, carryover calculated by APSD permit office

LA vessels with LAGC IFQ

While this component of the fishery is not permitted to lease or permanently transfer IFQ the majority of the sub-ACL has been harvested each year. The first year the sub-ACL was exceeded, and in 2011 about 94% and 95% in 2012. Carryover has increased each year in total pounds as well as in percentage of total catch, from 4% to 10% in 2013.

Table 22 – Summary of scallop allocations and landings for LA vessels with LAGC permits (FY2010-2013)

Fishing year	Sub-ACL allocated in FW A	Carryover from previous FY B	Total Available Catch (includes carryover) A+B = C	Final Catch D	% of sub-ACL D/A	% of Total Available (includes carryover) D/C
2010*	232,670	N/A	232,670	297,293	127.77%	127.77%
2011**	291,080	11,822	302,902	272,501	93.62%	89.96%
2012**	309,550	18,375	327,925	297,746	96.19%	90.80%
2013***	222,714	23,597	246,311	201,810	90.61%	81.93%

Sources:

*2010 quota monitoring script for Limited Access with LAGC IFQ scallop sub-ACL

**2011 and 2012 scallop year-end reports, carryover calculated by APSD permit office

***2013 Limited Access with LAGC IFQ scallop sub-ACL quota report GARFO web page, carryover calculated by APSD permit office

3.2.2 Biological Variable 2 – Bycatch

The biological performance of a fishery can also be measured in terms of impacts on non-target species or bycatch. Again, the LAGC IFQ fishery is a relatively small component of the scallop fishery; therefore, in terms of total bycatch it is less than the LA fishery. However, depending on the area and/or season fished, as well as gear type used, there are differences in bycatch rates for these fisheries.

The major bycatch species of concern for the scallop fishery is yellowtail flounder, both GB and SNE/MA stocks. Both these stocks have a sub-ACL allocated to the scallop fishery, and since 2011 have had associated accountability measures (AMs) in place if the sub-ACLs are exceeded. In addition, in FY2013 a sub-ACL of SNE/MA windowpane was allocated to the scallop fishery as well.

NMFS monitors the total estimated catch of YT and SNE/MA windowpane flounder for each fishery based on observer data expanded to the full fishery. The total estimate of YT catch for the LAGC IFQ fishery is summarized below (Table 23). Vessels that fish with trawl gear have higher YT bycatch rates based on available data. These estimates are based on a relatively small number of observed trips. However, starting in 2013 trips in open areas by LAGC IFQ vessels were included in the observer set-aside program. Therefore, the number of observed trips for LAGC IFQ vessels in open areas will likely increase in future years.

Table 23 – YT catch estimates for scallop fishery by permit type (FY2011-2012)

		2011	2012
GB	Total sub-ACL	442,688	345,905
	LA estimated catch	184,888	361,538
	LAGC dredge est. catch	80	44
	LAGC trawl est. catch	19	0
	Total estimated catch	184,987	361,581
	% of sub-ACL	41.8%	104.50%
	% of total catch from LAGC vessels	0.1%	0.01%
SNE/MA	Total sub-ACL	180,779	279,987
	LA estimated catch	200,810	99,558
	LAGC dredge est. catch	2,707	4,533
	LAGC trawl est. catch	40,958	20,456
	Total estimated catch	244,475	124,548
	% of sub-ACL	135.2%	44.50%
	% of total catch from LAGC vessels	17.9%	20.1%

In summary, from a biological perspective the total impact on bycatch from the LAGC IFQ fishery is relatively small compared to other sources of discard mortality. For SNE/MA YT the LAGC IFQ fishery was estimated to catch a larger percentage of total YT catch relative to total catch by the scallop fishery in 2011-2012, about 20% of total scallop fishery catch of SNE/MA YT. This catch predominately came from LAGC IFQ vessels using trawl gear.

3.3 ECONOMIC PERFORMANCE

See Separate Document

3.3.1 Summary of LAGC Incidental and NGOM Fisheries

This section will evaluate how these other two LAGC permit categories add to the overall diversity of the LAGC fishery.

3.4 SAFETY AND ENFORCEMENT PERFORMANCE

The overall safety performance of the LAGC IFQ fishery has been evaluated using two different variables: 1) number of vessel casualties based on US Coast Guard data; and 2) vessel age.

The overall monitoring and enforcement performance of the LAGC IFQ fishery has been evaluated using four different variables: 1) violations; 2) compliance based on VMS pre-landing reports; 3) compliance based on monitored offload data; and 4) summary of IFQ overages.

Overall, there have been very few documented issues related to safety and enforcement of the IFQ program. However, the level of enforcement presence overall seems to be very limited. Therefore, it is difficult to evaluate the performance of this variable with limited information.

3.4.1 Measures of vessel safety

1. Number of vessel casualties for the LAGC IFQ fleet

The US Coast Guard catalogues the number of “vessel casualties” or incidents at sea when the Coast Guard is called to assist a vessel. Overall there are ten general categories for vessel casualties including vessel groundings, medical emergency, collision, safety issue onboard, etc. Data are summarized below by year for LAGC IFQ vessels as well as all fisheries combined in the Northeast Region (Table 24). These data only include vessel casualties for vessels with a federal permit; incidents with vessels with state only permits are not included in this summary.

It is argued by some that IFQ management can improve the overall safety of fishing vessels by providing more stability long term so vessel owners are better able to return investment in their vessels (cite reference or two). These data can be used to reflect the overall vessel maintenance and upkeep of the fishing fleet; however there are important issues to keep in mind. For example, the overall number of “terminations” as a category, is directly dependent on the level of Coast Guard presence in a particular year. Furthermore, the size of the LAGC fishery and other fisheries in the Northeast overall has changed over time. Finally, even the best maintained vessels can have safety and maintenance issues. For example, a fire at sea does not necessarily mean a vessel is not well maintained or safe. Therefore, a change in the number of these records overtime is not directly reflective of the overall safety of a particular fishery.

A subset of these variables are more related to vessel safety and maintenance. For example, “disabled”, “sunk”, “flooding” and “fire”, are potentially more reflective of overall vessel maintenance than some of the other variables. However, even these can be the result of many variables and not necessarily vessel maintenance. Overall, the total number of incidents from LAGC IFQ vessels is about 10-15% of total calls in the Northeast, and that percentage has declined in more recent years. Since 2007, the total number of incidents has declined in the LAGC IFQ fishery, potentially suggesting that as a fishery overall there are fewer vessel safety issues. However, there are too many variables involved to conclude that vessel safety is any different now compared to before IFQs were implemented based on these data.

Table 24 – Summary of “vessel casualties” that US Coast Guard has responded to in Northeast fisheries (2007-2012)

	2007		2008		2009		2010		2011		2012	
	LAGC	Total	LAGC	Total	LAGC	Total	LAGC	Total	LAGC	Total	LAGC	Total
Groundings	2	11	0	14	1	7	0	15	1	14	1	4
Disabled	11	49	11	69	13	51	12	63	8	48	1	11
Medico	2	9	2	11	2	14	2	11	1	10	3	15
Medevac	5	18	7	19	0	7	2	10	0	16	0	7
Sunk	1	11	5	21	0	3	0	7	0	2	0	2
Collision	0	3	3	10	1	6	3	18	2	10	0	4
Allision	0	1	1	2	0	0	0	1	0	2	1	2
Flooding	3	22	1	10	0	11	0	7	1	10	0	11
Fire	0	7	0	2	0	10	0	10	0	5	0	4
Terminations	1	27	1	29	1	24	0	19	2	14	0	2
Total	25	158	31	187	18	133	19	161	15	131	6	62
<i>LAGC % of Total</i>		15.8%		16.6%		13.5%		11.8%		11.5%		9.7%
<i>LAGC % for vessel maintenance</i>		16.9%		16.7%		17.3%		13.8%		13.8%		3.6%
Fishing Related Deaths	4	9	0	3	0	3	0	5	0	2	2	4

Note: LAGC % for vessel maintenance: Includes disabled, sunk, flooding, and fire combined

2. Vessel age

There has been an overall reduction in the number of permitted LAGC IFQ vessels since adoption of the IFQ program. In 2012 there were 293 vessels, and in 2013 there were 214 vessels (Table 25).

Table 25 – Number of LAGC IFQ vessels based on vessel age per fishing year

	Before 1970	1970s	1980s	1990s	2000-present	Total vessels
2010	31	84	96	38	44	293
2011	23	69	88	34	35	249

2012	19	63	88	35	33	238
2013	17	59	78	34	26	214

A subset of the LAGC IFQ vessels are active, landed more than one pound of scallops. The average year built for active LAGC vessels has been relatively stable since adoption of the IFQ program, but has increased two years. In 2010 the average age of active IFQ vessels was 1982, and in 2012 it was 1984 (Figure 1).

Average year built was also evaluated incorporating leasing and transfer activity. There does not seem to be much of a difference in vessel age for vessels that lease in and lease out. However, for transfer there was right after the program was adopted. The average age of vessels that permanently transferred quota in 2010 was 1972, and the average age of vessels that purchased quota was 1986. This was not the case in 2011, but overall newer vessels are involved in purchases of IFQ compared to annual leasing.

The average year built for active LAGC IFQ vessels has been stable between 2010 and 2012. There is not much of a difference in vessel age for vessels that lease in and lease out. However, the average age of vessels that permanently transferred quota in is lower than vessels that have permanently transferred or sold quota.

Figure 1. Average year built of the active LAGC IFQ vessels

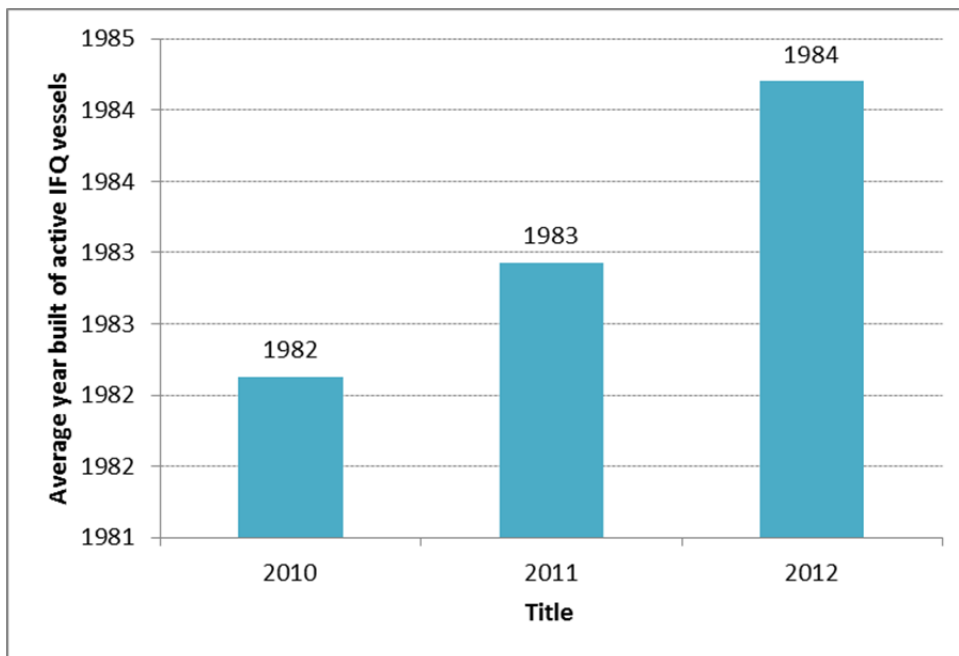


Figure 2. Average year built of the LAGC IFQ vessels by leasing group

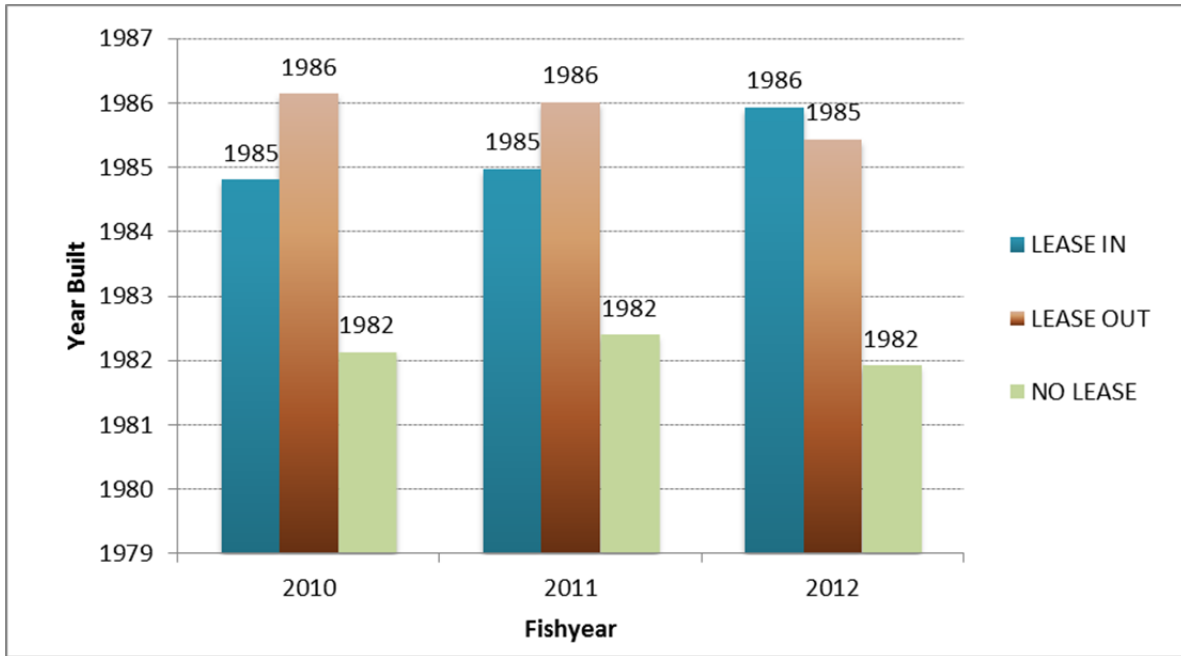
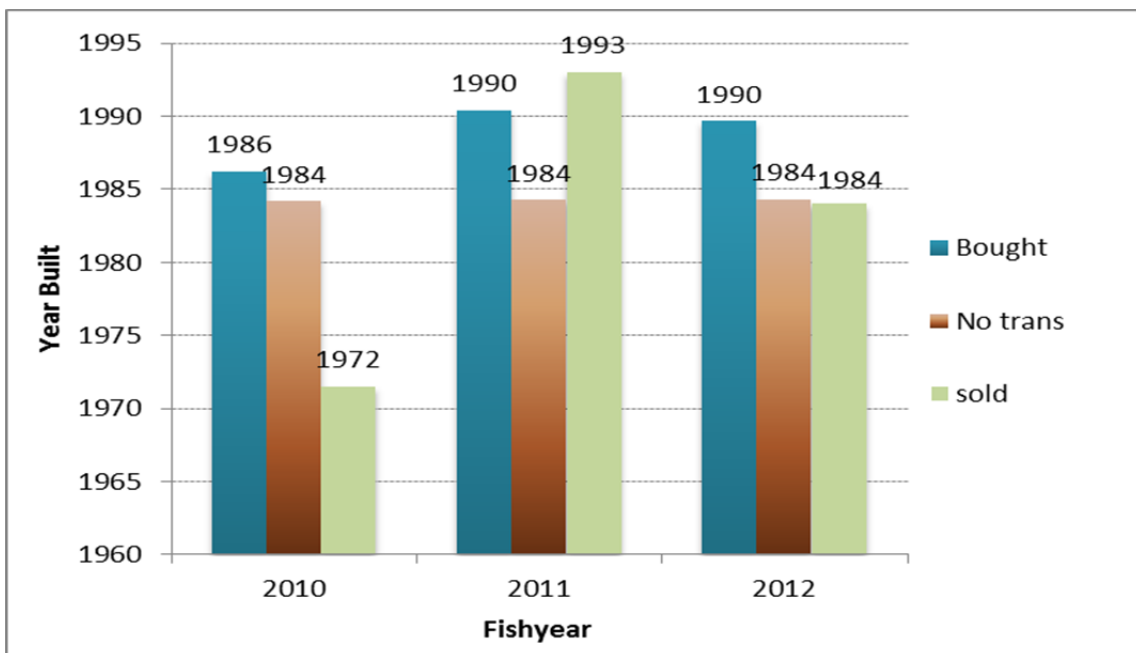


Figure 3. Average year built of the LAGC IFQ vessels by transfer group



3.4.2 Measures of compliance and enforcement

1. Violations

There have been over 60 enforcement related incidents with scallop vessels in the NE region between January 2010 and June 25 2013. About half of those involve LAGC IFQ vessels. And another two dozen involve vessels without a scallop permit. These data do NOT include incidents that are currently under investigation.

Of the 30 or so incidents involving LAGC IFQ vessels, only 5 resulted in a violation. Most had to do with observer program requirements (19/30 incidents) and less were related to specific scallop IFQ regulations such as exceeding the possession limit or fishing in closed areas. There has been a drop in enforcement incidents for IFQ vessels from 2010 to 2012, but that may be related to the level of enforcement presence and not necessarily improved compliance.

There has been a very limited number of violations for LAGC IFQ vessels since 2010. About 30 incidents overall and only 5 resulted in violations. Less than a handful of these incidents related to the IFQ program specifically, most had to do with observer program requirements. There has been a small decline in the overall number of incidents, but that may be related to the level of enforcement presence and not necessarily improved compliance.

2. Compliance based on VMS Pre-landing Reports

Vessels on a LAGC IFQ trip are required to submit a pre-landing notification to NMFS through VMS six hours prior to landing. The estimated catch, time and location of landing are required. VMS staff at the Regional Office analyzed the level of compliance with this regulation.

Each year about 6,000 LAGC IFQ trips are taken. The total number of trips varies based on the total quota available for the year, and the possession limit increased from 400 pounds to 600 pounds in 2011. Table 26 summarizes the number of trips that were in compliance with this requirement, and the overall compliance rate for the fleet. For all years combined the overall compliance rate is 71.52%. However, it should be pointed out that a subset of vessels (about 25-30 vessels each year) does not comply with this requirement at all and that is reducing the overall rate substantially.

Table 26 – Compliance rate for VMS pre-landing requirement (2010-2013)

	2010	2011	2012	2013
Total LAGC IFQ trips	6,639	6,856	6,176	5,203
Total trips in compliance	4,543	5,187	4,514	3,585
Compliance rate	68.43%	75.66%	73.09%	68.39%

Based on these data, a segment of the LAGC IFQ fishery is not complying with the VMS prelanding requirement (about 30 vessels each year are not sending in prelanding notifications at all). While most vessels are in compliance, since a subset are not reporting at all this reduces the overall capability for NMFS to effectively monitor and enforce this IFQ program.

PDT Finding – PDT is concerned about the level of compliance with the prelandings requirement since being able to enforce the possession limit and IFQ per vessel is critical for an IFQ program. NMFS should ensure that all LAGC IFQ vessels are aware of this requirement and specifically reach out to the 25 or so vessels that are chronically not in compliance with this regulation. The AP may be able to add insight on the level of awareness and compliance with this requirement.

3. Compliance based on monitored offloads

There was very limited onsite monitoring and enforcement of the LAGC IFQ program in the first year of adoption (2010). In 2011 and 2012 there were about 140 LAGC IFQ offloads monitored by Enforcement agents between Maine and North Carolina. The majority of these monitored offloads occurred in 2011 in NJ ports. The offload checks did not result in any violations. Compared to the total number of LAGC IFQ trips (), the proportion of trips that potentially had an offload monitored is very low. Total trips in 2011 and 2012 for the LAGC IFQ fleet was about 12,350 trips. If only 140 of those trips were monitored, that is about 1% for both years combined. Therefore, it is positive that none of the monitored offloads resulted in violations suggesting that compliance with the possession limit and IFQ is high, but the level of onsite monitoring is very low and seems concentrated in a small number of ports.

Table 27 – Estimated number of LAGC IFQ trips per FY

Fishing Year	LAGC IFQ	LA with LAGC IFQ	Total
2010	6,178	564	6,742
2011	6,573	531	7,104
2012	5,784	531	6,315

4. IFQ Overages

NMFS monitors the IFQ catches per vessel and usually several months into the fishing year reports any overages from the previous fishing year directly to vessels. For example, in June of 2012 about 25 LAGC IFQ vessels were notified that they had an overage from FY2011. Most overages from FY2011 were under 500 pounds per vessel, with 5-10 vessels having overages between 500 pounds and several thousand pounds. During the 2012 fishing year all of the vessels were able to cover these overages with either allocated 2012 catch, or catch leased in during FY2012.

In FY2013, about 20 vessels had overages from FY2012. This time about half were under 500 pounds per vessel, and the other half were greater amounts, even higher than the maximum overages from the previous year. During FY2013 all vessels with overages were again able to reconcile these overages before the end of FY2013. It should be noted that none of the vessels that had an overage in FY2011 had an overage again in FY2012.

Based on these first two years of data there does not seem to be any issues with IFQ overages, in terms of large numbers of vessels carrying over quota that cannot be reconciled the following fishing year. However, a vessel is technically in violation if it is fishing with a negative balance from a previous fishing year. Furthermore, some of the overages were higher from FY2012

compared to FY2011, so NFMS should continue to monitor this and notify the Council if patterns change and more vessels carryover IFQ in larger amounts, as that increases the potential for exceeding annual sub-ACLs.

3.5 GOVERNANCE PERFORMANCE

This section evaluates the overall governance of the IFQ program since implementation in 2010. It focuses on whether the program has met stated goals and objectives as well as other indicators of the management system. Overall, three years is a relatively short amount of time to evaluate whether a major management regime change has achieved the original goals and objectives. Therefore, these findings are preliminary at best and when this LAPP is formally reviewed five years after adoption these variables should be considered further in more detail.

3.5.1 Governance Variable 1 - Goals and Objectives

The first variable related to governance is an evaluation of whether the LAGC IFQ program has met the original Goals and Objectives set in Amendment 11. This report evaluates whether the overall goal and several specific objectives were met separately. Overall, the goal of Amendment 11 and the handful of specific stated objectives have been met.

3.5.1.1 Goal of LAGC IFQ Program

The primary goal of Amendment 11 was to control capacity and mortality in the general category scallop fishery.

Was this goal achieved? YES

Capacity was controlled by implementing a limited entry program starting in fishing year 2008. Prior to Amendment 11 general category permits were open access and about 2,500 – 3,000 vessels had open access general category permits (Table 1). Although not all vessels with general category permits were active in the years preceding 2008, there is no question that the potential capacity, or number of vessels (and owners) that held a limited access general category is now considerably less. In 2011 fewer than 700 vessels had one of the four types of limited access general category permits. In the last few years less than 200 vessels are active with LAGC IFQ permits (Table 2).

Mortality was controlled by implementing an overall hard TAC for this fishery equivalent to 5% of the total projected scallop catch. An IFQ program was established to determine what portion of the total general category allocation, or sub-ACL, would be allocated individually to qualifying vessels. Since implementation of a sub-ACL for the LAGC fishery, total catch, one measure of mortality, has not been exceeded (Table 21). About 90-95% of the allocated catch has been harvested since adoption of ACLs and the IFQ program.

3.5.1.2 Objectives of LAGC IFQ Program

In order to achieve the primary goal of Amendment 11 described in Section 3.5.1.1, the Council identified four objectives.

1. Allocate a portion of the total available scallop harvest to the general category scallop fishery.
Was this objective met? YES

The LAGC IFQ fishery is allocated 5% of the total projected catch and LA vessels that also qualified for a LAGC IFQ permit are allocated 0.5% of the total projected catch.

2. Establish criteria to qualify a number of vessels for a limited entry general category permit.
Was this objective met? YES

The LAGC IFQ program is limited entry and individual allocations are based on historical participation in the fishery. In order to qualify each vessel had to have a permit before the control date and 1,000 or more pounds of scallop catch in any fishing year during the qualification period (FY2000-November 1, 2004 – the control date). A vessels best year is weighted by the number of years active in the fishery to recognize historical participation and dependence on the fishery.

3. Develop measures to prevent the limited entry general category fishery from exceeding their allocation.

Was this objective met? YES

Total catch from the LAGC fishery is very controlled. There is a total IFQ for the fishery that is monitored using vessel trip reports, dealer reports, and vessel monitoring systems. Since implementation of the IFQ program the total allocation for the fishery has not been exceeded (Table 21).

4. Develop measures to address incidental catch of scallops while fishing for other species.
Was this objective met? YES

Amendment 11 also implemented a limited entry permit for incidental catch permits (40 pounds or less). Under 300 vessels qualified for this permit category, and about 70-80 vessels land scallops in this permit category each year since implementation of Amendment 11 (Table 1 and Table??). There is a target TAC that is adjustable for vessels that qualified for an incidental catch permit, and catch from that permit category has remained under the target TAC of 50,000 pounds since adoption of the program.

3.5.2 Governance Variable 2 – Council Vision Statement for Amendment 11

Amendment 11 included limited entry, consideration of an IFQ program, and allocation decisions for a highly valuable species. Therefore it was a relatively controversial action that the Council developed over several years. During development of Amendment 11 the Council drafted a vision statement to help clarify the intent and desired outcome of the action. The vision statement is pasted below and is evaluated as the second variable related to governance.

Amendment 11 Vision Statement:

The overall intent of this action is to stabilize capacity and prevent overfishing from the general category fishery, and in doing so, the Council's vision of this general category fleet from this point forward is to maintain the diverse nature and flexibility within this component of the scallop fleet. Specifically, the Council intends to consider measures that will control mortality from this component of the fleet, but preserve the ability for vessels to participate in the general category fishery at different levels. This Council recognizes the importance of this component of the fishery for small fishing communities, as a component of overall catch for some individual vessel owners, and the value this "dayboat" scallop product has in the scallop market. Overall, the Councils' vision of the general category fishery after Amendment 11 is implemented is a fleet made up of relatively small vessels, with possession limits to maintain the historical character of this fleet and provide opportunities to various participants including vessels from smaller coastal communities.

Has Amendment 11 vision statement been met to date? YES

Overall the vision statement has three principles:

1) maintain a fleet of relatively small vessels;

2) maintain possession limits to preserve historical character of fishery; and

3) provide opportunity for various participants from smaller coastal communities.

Overall these main principles have been maintained under the first three years of the LAPP program to varying degrees.

First, the fleet is relatively small compared to the directed limited access scallop fishery. The average size and horse power of a limited access vessel is ???. For LAGC IFQ vessels the average size and horse power is ???. Since 2010 some LAGC vessels have improved their vessels and increased horse power. ??? (info in other document)

Second, the LAGC IFQ fishery still has a possession limit. This is unique for an IFQ program, but was preserved under Amendment 11 to help preserve the "dayboat" character of this historic fishery. When fuel prices increased in 2009 the industry did request the Council increase the possession limit. The Council considered a range of possession limits and selected 600 pounds to help increase profits for LAGC IFQ vessels, but prevent excess consolidation. This higher possession limit was considered by the Council before the IFQ program was effective (FY2010), but not implemented until FY2011, one year after full adoption of the IFQ program.

Will insert more information about catch distribution of vessels in terms of the 600 pound possession limit

Third, the LAGC IFQ program has provided opportunity for various participants from smaller coastal communities. Will reference other sections of economic section that look at catch level groups, etc.

In addition, there are two other LAGC permits that were established under A11; the LAGC NGOM permit and the LAGC incidental permit. These permit categories were established for

vessels that did not qualify for a LAGC IFQ permit, and to continue to provide some access to the scallop fishery at various levels. About 100 NGOM permits existed after A11, and that has declined to 62 vessels, three years after the IFQ program was fully adopted. Similarly the number of LAGC Incidental permits has declined from 185 to 151 between 2009 and 2012.

Table 28 – Number of permits for LAGC IFQ permit categories

	LAGC IFQ	LAGC NGOM	LAGC Inc.
2009	303	99	185
2010	293	94	172
2011	247	76	165
2012	215	62	151

Although general category landings declined after 2009, the revenue per active limited access general category vessel increased in 2012 as the quota is consolidated on or fished by using fewer vessels. It should be noted that these are estimated numbers from dealer data based on some assumptions in separating the LAGC landings from LA landings. It was assumed that if an LA vessel also had an LAGC permit, those trip landings which are less than 600 lb. in 2011 and less than 400 lb. in 2010 and 2009 were LAGC landings and any among above these were LA landings.

Plan to remove the LA vessels with LAGC IFQ from this table –did not have time before the meeting

Table 29. Estimated Average annual revenue per limited access general category vessel (includes LA vessels with LAGC permits, Dealer Data)

Values	Fishyear	IFQ	INCI	NGOM
Number of permits	2009	231	73	12
	2010	179	67	12
	2011	170	76	15
	2012	159	88	16
Average scallop lb. per vessel	2009	18,650	2,685	2,038
	2010	13,319	2,255	595
	2011	19,608	797	757
	2012	19,992	561	1,707
Average scallop revenue per vessel	2009	116,164	16,192	12,915
	2010	117,567	18,106	4,727
	2011	202,737	7,741	6,885
	2012	203,712	5,296	12,119

Figure 3. Number of individuals with LAGC IFQ (including some individuals that have IFQ but no LAGC IFQ permit – they lease allocation out)

3.5.3 Governance Variable 3 - LAGC Representation and participation in Council process

One potential indicator of effective governance is the level of representation and participation of LAGC IFQ interested in the Council process. Overall the Council process is very public with opportunity for input at multiple stages during development. Several indicators have been summarized below to assess the overall variable of participation as it relates to governance.

1. Number of LAGC members on the Scallop AP

During development of Amendment 11 the Council established a separate advisory panel made up of general category industry participants only. The Council solicited for a new panel made up of fifteen individuals with explicit interest and knowledge in the general category fishery. The panel was made up of ten individuals: seven from New England and three from the Mid-Atlantic.

Several individuals with general category experience were already serving on the Council's Scallop Advisory Panel, so those individuals were temporarily assigned to serve on both panels to improve communication between the panels. The panels sometimes met separately during development of Amendment 11, and sometimes they met together. For about three years the Council had two panels. One panel was exclusively made up of general category advisors that communicated ideas directly to the Scallop Committee, and two general category participants served on the regular Scallop AP concurrently, which at the time had about a dozen participants.

Therefore, the level of representation and participation by the general category fishery during development of Amendment 11 was adequate; one exclusive AP made up of only general category members, and about 20% of the regular Scallop AP was made up of general category members.

Since Amendment 11 the Council has returned to one Scallop Advisory Panel that provides input on all scallop related issues. The size of the AP was increased to 15 seats, and the current make-up of the panel is about even in terms of limited access interests, general category interests, and either both LA and LAGC or "other". Specifically, about six of the current fifteen member AP primarily represents limited access interests, about five are general category participants, and about four are either both or represent other interests like the environmental community. The panel is made up of individuals from both New England and the Mid-Atlantic, with about 2/3rds from New England states and 1/3 from Mid-Atlantic states. The AP has discussed several times over the years whether the process should revert back to having two panels: one primarily for limited access participants and one for general category participants so each group can focus on issues germane to the different fisheries. But each time the AP ends up recommending status quo.

Therefore, the current level of representation and participation by the general category fishery on the Scallop AP is adequate considering the fishery has fewer active vessels and is a smaller fraction of the total fishery compared to the limited access fishery.

2. Number of Council members with LAGC interests

There are 18 voting members on the NEFMC; some are state and federal employees, and others are appointed by state Governors to represent each state. Overall, the membership of the New England Council is relatively diverse by state, with Maine and Massachusetts having slightly more seats than the other New England states. The current make up is: one federal member; four from Maine; three from New Hampshire; five from Massachusetts; three from Rhode Island; and two from Connecticut. In terms of LAGC IFQ interests, this make up is relatively reflective of the LAGC IFQ fishery since most permits in New England are from Massachusetts and Maine.

It can be argued that any Council member representing the state or federal agency responsible for fisheries management would have some level of LAGC interest in mind when recommending fishery policies. For example, all five states in New England have some level of LAGC IFQ participants within each state (Maine, New Hampshire, Massachusetts, Rhode Island and Connecticut). Therefore, the Council members representing each state fishery agency in New England have some level of interest in LAGC related issues based on the constituents in that state. Furthermore, the one voting federal agency Council member from NMFS also has some level of interest in LAGC IFQ issues. For the New England Fishery Management Council these seats include six of the eighteen voting members, or 33%.

The remaining seats are held by individuals that are selected to serve three-year terms based on recommendations from state Governors. Each state is entitled to one “obligatory seat”, and the remaining seats are appointed “at-large”. Therefore, the makeup of the Council by state can vary from year to year depending on who is appointed to the “at-large” seats. In New England, the at-large seats are usually filled with one member from each state, but in some years states like Massachusetts and Maine have two or three of the seven at-large seats, and other states do not have any of the at-large seats.

Overall, since there are vessels with LAGC IFQ permits from each state, the Council members at the table should have LAGC IFQ interests in mind when setting policy. The scallop fishery is diverse and at times the LA fishery component has a different view than the LAGC IFQ fishery in general. In these instances there are some Council members that may side one way or the other, but overall the makeup of the remaining 2/3rds of the Councils at-large and obligatory seats are diverse in terms of “small boat” and “large boat” interests.

In addition, a sub-set of Council members serve on specie specific Committees as well. These individuals develop recommendations to the full Council for a particular FMP. In more recent years the Scallop Committee has been about is made up of about the Scallop FMP; therefore, these individuals are typically more involved in scallop management issues. Ultimately all Council members vote, but these members have more input on the specific issues developed during an action, so arguably are more influential in terms of the governance of the fishery. In recent years the Scallop Committee has had about ten members: one from NMFS, two from the

Mid-Atlantic Council, and the remaining from the New England Council. For the most part the make-up of this Committee is diverse in terms of region and small versus large boat interests.

Overall, the composition of the New England Council, and more specifically the Scallop Committee, are adequate in terms of representing LAGC interests. The Committee and Council are not very off balanced in terms of governance and addressing issues important to the LAGC fishery. For the most part the composition of the Council and Committee is divided into thirds, one third typically supportive of LA interests for the most part, one third with LAGC interests, and one third for both, or more neutral on those issues.

3. Frequency and location of meetings

In recent years, there are about 12-16 scallop specific meetings of the Scallop PDT, AP, Committee, including a few full Council meetings when the Scallop FMP is discussed. The full Council typically discusses a current scallop action at 3 meetings per year. The Scallop Committee and AP generally meet at the same times, with one additional Committee elvel meeting each year. The Scallop PDT meets 3-6 times a year with additional conference calls in-between.

Table 30 – Number of public meetings related to scallop management by calendar year since the IFQ program has been fully implemented

Year	Council	Committee	AP	PDT	Total
2010	2	5	3	3	13
2011	3	4	2	3	12
2012	3	4	3	6	16

Aside from Council meetings which are set a year in advance at specific locations throughout New England, all scallop specific meetings during these years were held in either Rhode Island or Massachusetts. The locations are relatively central for LAGC IFQ vessels from New England. Vessels from Maine and Mid-Atlantic ports do need to travel farther, but meeting locations are generally near major airports for individuals that need to travel by air to attend a meeting.

Therefore, to the extent it is possible, scallop meetings are in convenient locations for some LAGC IFQ participants and are frequent enough so the public can feasibly participate.

To get a sense of the level of participation by LAGC participants at meeting, could go through attendance records and recording, but there was not time to complete that for this report.

PDT Finding – The PDT suggests that the AP provide input on this variable in terms of meeting locations and timing with PDT and/or Committee meetings.

3.5.4 Governance Variable 4 - How quickly have changes been made to IFQ program

Since adoption of Amendment 11 several adjustments have been made to the IFQ program. This variable measures the length of time needed to make an adjustment to the IFQ program – the time between when issue was first raised and when a change was implemented.

1. **Allow rollover of 15% of the permit holder's original IFQ to subsequent fishing year (Amendment 15)**
To increase flexibility and provide a safety mechanism in the case of a late-season breakdown.
2. **Increase the possession limit from 400 pounds to 600 pounds (Amendment 15)**
To allow for more efficient harvest of quota, without the increase being large enough to change the nature of this small day-boat fishery and creating competition between the fleets
3. **Modify the ownership cap restriction per vessel (Amendment 15)**
Maximum increased from 2% to 2.5% cap per vessel to be more consistent with the maximum individual ownership value of 5%.
4. **Modify permit provision to allow splitting of IFQ from vessel (Amendment 15)**
Allow an individual to split the IFQ from their IFQ permit and other fishery permits to facilitate permanent IFQ transfers from vessels with a suite of NE fishery permits.
5. **Partial leasing of IFQ during the fishing year (Framework 24)**
Allow vessels to sub-lease IFQ as well as lease IFQ during the fishing year even if some fishing has occurred To increase flexibility for general category qualifiers and to improve overall economic profits of the IFQ program.
6. **YT AMs for LAGC vessels (Framework 24)**
7. **Modify the observer set-aside program to include ALGC trips in open areas and modify set-aside so it is not area specific (Framework 24)**
These last few measures were developed to make LAGC vessels more accountable for bycatch, as well as improve overall monitoring of this fishery.

For the most part, it took about one year for most of these issues to be approved by the Council after raised as an issue to address. Generally, the Council initiates scallop actions in the spring and approves them that Fall. Council staff works with the Regional Office to complete a final submission document in the winter and measures are usually in place the following spring, about one year after the Council began working on it. This is the typical for most scallop framework actions.

Amendment 15 was a major EIS prepared by the Council that considered several major issues including ACLs, permit stacking and leasing for the LA scallop fishery and several measures for the LAGC IFQ program approved under A11, which was not even effective yet. Due to the large scope of this action it took over three years to develop and approve. Therefore, it took the first four provisions on the list above longer to implement, but that is primarily because they were included in a larger scallop action, not because they were more controversial or required more than the more typical one year time frame.

Overall, more than a handful of modifications have been made to the IFQ program, and for the most part were effective very soon after the program went into effect in 2010. The first four modifications were effective after the first year the IFQ was effective, March 1, 2011. And the fifth measure, to allow partial leasing during the fishing year, was effective two years after the IFQ program was effective, FY2012. Compared to many fishery actions in this region this is

relatively quick, especially since overall this is a small proportion of the total scallop fishery and there are numerous priorities and requirements the Council faces each year.

3.5.5 Governance variable 5 - Cost recovery

Under both the SFA and reauthorized Magnuson Act of 2007 the agency is mandated to collect up to 3% of ex-vessel value of landed product to cover actual costs directly related to enforcement and management of an individual fishing quota program (Section 304 (d)(2) of the Magnuson-Stevens Act). Since this fishery is an ITQ, the Secretary is authorized and shall collect a fee to recover the actual costs directly related to the management and enforcement of any individual fishing quota program. The fee shall not exceed 3% of the ex-vessel value of fish harvested under such program. This section will evaluate what the cost recovery program is providing and whether IFQ owners are complying with the requirement. The cost recovery program overall could be a measure of governance in terms of how the program is working administratively.

The fees for the LAGC IFQ program come back to the Regional Office from the Limited Access System Administration Fund (which is where all the bills are paid). The guidance in the MSA states that the funds are to be used to "administer and implement the MSA in the fishery in which the fees were collected". Throughout the year, recoverable time spent on the scallop IFQ fishery is charged directly to the fund. Each year the Regional Office sends a notice to LAGC IFQ permit holders explaining how the fee is calculated and bills are mailed to each owner with their individual fee.

Overall, the total cost collected is about \$100,000 dollars which is less than 0.4% of the value of scallop landings (Table 31). These fees cover primarily personnel costs at NMFS for hours spent on tasks directly related to the IFQ program; the largest portion coming from the Analysis and Program Support Division (APS). This division is responsible for issuing IFQ allocations, tracking leasing and transfer activity, tracking payments, etc. Individual fees to owners range based on their individual quota, but for 2011 and 2012 combined the fees ranged from about \$10 per vessel to over \$3,000. Permit holders have until January 1 in the next fishing year to pay their balance through Pay.gov section of the Fish-On-line website. For the first two years of the program permit holders paid all fees and did not submit any appeals. Overall, the cost recovery fee seems to be reasonable for the direct costs of the program, and IFQ owners have very high compliance in terms of paying bills on time. Overall the fee is less than half a percent of the landed value.

Table 31 – Summary of total cost recovery amount and fee% for LAGC IFQ fishery

Year	Total Recoverable Cost	Fee %
2011	\$82,856	0.2948
2012	\$107,015	0.3177
2013	\$118,510	0.3719

3.6 SUMMARY

Combine all indicators with major aspects and make one overall table for performance