

I BACKGROUND

Requirement for Review

This review is intended to evaluate the progress made in meeting the goals of the Individual Bluefin Quota (IBQ) Program of the Atlantic pelagic longline fishery, managed under the 2006 Consolidated Atlantic Highly Migratory Species Fishery Management Plan (2006 Consolidated HMS FMP) as amended. The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act)(Section 303(c)(1)(G)) requires the regional fishery management Councils and Secretary of Commerce (Secretary) to periodically conduct “formal and detailed” reviews of all Limited Access Privilege Programs (LAPPs) established after January 12, 2007, including those established under Secretarial authority, such as the IBQ Program. This Catch Share program review was conducted according to guidelines developed by NOAA Fisheries (NMFS Procedural Instruction 01-121-01). The draft guidelines state that the reviews should be conducted no later than five years after the establishment of the Catch Share program. This review is being conducted 3 years after implementation of the IBQ Program, pursuant to the Amendment 7 to the 2006 Consolidated HMS FMP.

Management History

Atlantic HMS fisheries are managed under the dual authority of the Magnuson-Stevens Act and the Atlantic Tunas Convention Act (ATCA). Under the Magnuson-Stevens Act, NOAA Fisheries must manage fisheries to maintain optimum yield on a continuing basis while preventing overfishing. ATCA authorizes the Secretary to promulgate regulations, as may be necessary and appropriate, to carry out recommendations of the International Commission for the Conservation of Atlantic Tunas (ICCAT). The authority to issue regulations under the Magnuson-Stevens Act and ATCA has been delegated from the Secretary to the Assistant Administrator for Fisheries, NMFS.

The Atlantic bluefin tuna fishery is a quota managed fishery, and catch (landings and dead discards) must be accounted for within the available U.S. quota. The annual U.S. bluefin quota (recommended by ICCAT) is allocated among seven quota categories, including the Longline category, as well as categories for other commercial and recreational gear types and a Reserve category, used for research and inseason quota transfers as warranted. Because the pelagic longline fishery primarily targets swordfish, yellowfin tuna, and bigeye tuna, and incidentally catches bluefin tuna as bycatch, the Longline quota category was established to provide the pelagic longline fishery with bluefin quota to account for that bycatch in addition to the quota categories established for the directed bluefin fisheries (commercial hand gear, purse seine, and recreational fisheries). The amount of quota allocated to each category is expressed as a percentage of the U.S. quota.

Prior to the 2015 implementation of the IBQ Program, the Longline category was allocated 8.1% of the total U.S. quota for landings. Pelagic longline vessels were limited in the number of bluefin they could retain per trip (based on the amount of target species catch), and only landings counted toward the Longline quota. Dead discards by the pelagic longline fishery were estimated and accounted for within the overall U.S. quota. The trend prior to the implementation of the IBQ Program was that catches (landings plus dead discards) of bluefin tuna by pelagic

longline vessels had been significantly over the Longline quota for several years. Due to the disconnect between the amount of quota allocated to the Longline category, and the larger amount of catch, NMFS had to rely on under-harvest from other quota categories and annual quota adjustments to account for pelagic longline catch to ensure that the United States remained within its annual U.S. bluefin quota. In some years, the activity of only a few vessels constituted the majority of the quota overharvests. It became apparent through discussions with the Advisory Panel that measures focused more on individual vessel accountability would be needed to help limit the longline fleet to the quota and that the subquota allocations should be re-examined.

In this context, a catch share program (the IBQ Program) and electronic monitoring were implemented in the pelagic longline fishery in the Atlantic and Gulf of Mexico in 2015, through Amendment 7 to the 2006 Consolidated HMS FMP. Amendment 7 implemented substantial changes to the management of bluefin tuna that affected all participants/gear types in the bluefin tuna fisheries (directed or those with bycatch). The most sweeping regulations were those affecting the pelagic longline fishery, in order to reduce interactions with bluefin tuna and provide vessel-level accountability for both landings and dead discards. In addition to the Catch Share program implemented for the pelagic longline fishery, Amendment 7 implemented changes to the subquota allocations, including an increase to the Longline category allocation and increased management flexibility for transfers among quota categories through the Reserve quota category, as well as new gear restricted areas in the Atlantic (and criteria for access to the area) and Gulf of Mexico designed to reduce interactions with bluefin tuna. The IBQ Program for the pelagic longline fishery was designed to provide vessel accountability for bluefin tuna dead discards and landings, and incentives for the fishery to minimize interactions with bluefin tuna. The specific objectives of the IBQ program, excerpted from Amendment 7, follow:

IBQ Program Objectives

1. “Limit the amount of bluefin landings and dead discards in the pelagic longline fishery;
2. Provide strong incentives for the vessel owner and operator to avoid bluefin tuna interactions, and thus reduce bluefin dead discards;
3. Provide flexibility in the quota system to enable pelagic longline vessels to obtain bluefin quota from other vessels with available IBQ in order to enable full accounting for bluefin landings and dead discards, and minimize constraints on fishing for target species;
4. Balance the objective of limiting bluefin landings and dead discards with the objective of optimizing fishing opportunities and maintaining profitability; and
5. Balance the above objectives with potential impacts on the directed permit categories that target bluefin tuna, and the broader objectives of the 2006 Consolidated HMS FMP and Magnuson-Stevens Act.”

IBQ Program Key Features and Events

This section provides a summary of the key features of the IBQ Program and noteworthy milestones since its implementation on January 1, 2015, and is not intended to communicate all the operational details of the program or the pertinent regulations in detail. The complete regulations may be located at 50 CFR §635.15: https://www.ecfr.gov/cgi-bin/text-idx?SID=9ac84012cd221fc5fb47c063ba3cc2f7&mc=true&node=se50.12.635_115&rgn=div8.

Accountability and Fishing Under the IBQ Program

Pelagic longline vessels are required to account for any bluefin tuna retained or discarded dead, using IBQ, and are required to retain all legal-sized commercial bluefin tuna dead at haul-back. Legal-sized commercial bluefin tuna that are alive at haul-back are allowed to be retained; however, they must be accounted for using IBQ allocation. IBQ is designated as either Atlantic or Gulf of Mexico (GOM), with the restriction that Atlantic IBQ may not be utilized to account for bluefin caught in the GOM. At the end of a trip during which bluefin are retained or discarded dead, the appropriate amount of IBQ (in whole weight) is deducted from a vessel's IBQ account (by the dealer entering the data online, in coordination with the vessel operator). A vessel may go into 'quota debt' and have a negative balance of IBQ in the vessel account if the amount of bluefin catch exceeds the amount of IBQ in the account. If a vessel has remaining IBQ at the end of a year, it does not carry over into the subsequent year. If a vessel has quota debt at the end of a year, the quota debt does carry over into the following year.

Year 1 (2015): (Annual level accountability)

During 2015, there was 'annual accountability' such that at the end of 2015 vessels were responsible for reconciling (using IBQ to account for) any quota debt that may have accrued during the year (by using allocated IBQ or by leasing quota from other permit holders). In addition, the delay in trip level accountability (to 2016) provided time for permitted vessel owners or operators to start to adapt to fishing under the various new Amendment 7 regulations, including the new IBQ, vessel monitoring system (VMS), and electronic monitoring (EM) system requirements. If a vessel had quota debt at the end of 2015, the quota debt carried over into 2016, and the debt was automatically subtracted from the IBQ allocation distributed for 2016.

Years 2 and 3 (2016 to 2017):

As of January 1, 2016, in order to fish with pelagic longline gear an Atlantic Tunas Longline permitted vessel was required to have a minimum quota allocation ('trip-level accountability'). The minimum bluefin allocation required in order to depart on a trip was 0.25 mt whole weight (approximately 551 lb) if fishing in the GOM, or 0.125 mt whole weight (approximately 276 lb) if fishing in the Atlantic, (including the Northeast Distant gear restricted area (NED)). The NED is managed as a distinct area, and ICCAT quota recommendations include a 25 mt set-aside for bycatch of bluefin tuna related to the longline fishery in the vicinity of the ICCAT management area boundary. For management and monitoring purposes, NMFS implements this set aside for bluefin landings made in the NED by Atlantic Longline category permitted vessels. A larger minimum quota allocation is required for the Gulf of Mexico because the average size of the bluefin encountered by pelagic longline gear in the Gulf of Mexico is larger than the average size of the bluefin tuna encountered in the Atlantic. The two minimum increments reflect the historical patterns of bluefin catch in the pelagic longline fishery in the Gulf of Mexico. If a vessel had insufficient IBQ to account for bluefin that they caught on a particular trip, they could complete that trip but must obtain additional quota allocation from another vessel (via lease) prior to departing on a subsequent trip. Allowing a vessel to retain a bluefin for which they do

not yet have adequate quota to account provides flexibility and reduces incentives to discard fish and misreport.

If a vessel had quota debt at the end of 2016 or 2017, the quota debt carried over into the subsequent year, and the debt was automatically subtracted from IBQ allocation distributed for 2016 or 2017. For those vessels that did not have an annual allocation, the debt remained until addressed via lease or inseason distribution of Longline quota.

In late 2017, in response to suggestions from the HMS Advisory Panel, NMFS published a final rule on December 28, 2017 (82 FR 61489) that modified the IBQ accountability rules as explained below.

Year 4 (2018):

As of January 27, 2018, in order to provide additional flexibility, NMFS implemented quarterly accountability (instead of trip-level accountability). Thus, vessels are allowed to fish with a low IBQ balance or with quota debt during a calendar quarter, provided they hold the minimum amount necessary prior to the first trip of each quarter. Vessels are still required to report bluefin tuna catch at the end of each trip (and account for it with IBQ), but this regulatory change provided the flexibility to fish even if the vessel has less than the minimum amount of IBQ or quota debt, until the first fishing trip in each calendar quarter. The change provides flexibility for two important operational business decisions made by vessel owners: decisions regarding quota balance and any level of quota debt to maintain (subject to full accounting quarterly), and decisions regarding the timing and price at which they lease additional quota.

Initial Eligibility (Active Vessels)

In Amendment 7, vessels were required to meet two requirements to be eligible to receive IBQ shares: 1) vessels must have had a valid Atlantic Tunas Longline category permit; and 2) vessels must have been deemed to be “active.” Vessels that made at least one set using pelagic longline gear between 2006 and 2012 (based on pelagic longline logbook data) were defined as “active.” For the purpose of IBQ share eligibility, a “valid Atlantic Tunas Longline category permit” was determined to be one held as of the date of publication of the Proposed Rule for Amendment 7, August 21, 2013. The rationale for this measure was to implement criteria that reflected participation in the fishery. By allocating only to “active” vessels, the measure facilitated continued participation in the fishery by vessels that had made past investments in the fishery. Allocation among fewer eligible vessels increased the allocation amount per vessel. Permitted vessels that did not meet the initial eligibility criteria necessary to receive bluefin quota share allocation were still eligible to obtain quota through a lease of IBQ allocation (described below under “transferability”). The criteria for eligibility did not include 2013 or 2014 because Draft Amendment 7 and Final Amendment 7 were being written, respectively, during those years, and there were limitations on the availability of finalized data. Availability of finalized logbook and dealer data during 2013 and 2014 was limited to 2011 and 2012 data, respectively.

IBQ Allocation Formula

An IBQ quota share is the categorized percentage of the Longline quota that is associated with a permitted vessel that was distributed through Amendment 7, based upon the IBQ share formula and the relevant vessel history. The IBQ share associated with a permit does not change. One of three possible quota share percentages (three ‘tiers’) were assigned to eligible vessels based upon two elements: 1) historical bluefin tuna catch (landings and dead discards from vessel logbook data) expressed as a ratio of the number of bluefin tuna interactions to designated species landings; and 2) ‘designated species’ landings (from the NMFS dealer data (weigh-out slips) and logbook information). Designated target species are defined as swordfish, yellowfin, bigeye, albacore, and skipjack tunas; dolphin, wahoo; and porbeagle, shortfin mako, and thresher sharks.

The use of these two factors in the quota share formula was intended to acknowledge past bluefin tuna avoidance, ensure a fair initial allocation, and consider the diversity in vessel fishing patterns and harvest characteristics. Past fishing that resulted in fewer bluefin tuna interactions resulted in larger IBQ shares of bluefin tuna. Landings of designated target species were included as an indicator of both the level of fishing effort and activity as well as vessel success at targeting those species and minimizing bluefin bycatch interactions, recognizing that greater levels of fishing activity are likely to be correlated with a greater number of bluefin tuna interactions. The end results were three individual IBQ quota share tiers, the high tier allows the permitted vessels in this bin to receive 1.2 percent of the Longline quota, the middle tier allows the permitted vessels in this bin to receive 0.6 percent of the Longline quota, and the low tier allows permitted vessels in this bin to receive 0.37 percent of the Longline quota. These percentages are constant from one year to the next and any quota allocated stemming from these IBQ share percentages will be determined by the amount of quota in the Longline category as a whole.

With respect to regional designations, all IBQ share is designated as “Atlantic,” or “Gulf of Mexico,” based on the location of catch utilized to determine the IBQ share. If a vessel had fishing history in both the Gulf of Mexico and Atlantic, it may have received IBQ shares of both the Gulf of Mexico and Atlantic, depending upon the amount of IBQ share and the proportion of fishing history in the two areas. A relatively small percentage of sets in one area was not reflected in the IBQ share. If a vessel would receive less than a minimum share amount for a particular area (i.e., less than 0.125 mt for the Atlantic or less than 0.25 mt for the Gulf of Mexico), then no allocation was designated for that area and all of the permit holder’s share was designated to the other area (Atlantic or Gulf of Mexico). For example, if a vessel was eligible for an allocation of 0.51 mt and historically landed 10 percent of their catch in the Gulf of Mexico, the vessel would have received an allocation of 100 percent “Atlantic” quota (and none designated as “Gulf of Mexico”) because 10 percent of 0.51 mt (.051 mt) is less than the minimum share required to fish in the Gulf of Mexico (0.25 mt).

Annual Distribution of Allocation

Annually, bluefin quota is allocated to eligible vessels with IBQ shares on January 1. A permit holder’s share percentage is multiplied by the total pounds of Longline category quota available to derive the amount allocated in pounds. If an eligible permit is not associated with a vessel, the

relevant annual allocations of IBQ are not made unless/ until the permit is associated with a vessel.

Inseason Distribution of Allocation

It is important to remember that the regulations and process controlling inseason allocations of IBQ is distinct from those regulations and processes that determine annual allocations to IBQ shareholders. In contrast to the annual allocation of IBQ to those with IBQ shares described in the paragraph above, NMFS may transfer bluefin tuna quota from the Reserve category to other quota categories, throughout the year ('inseason'), based on consideration of regulatory determination criteria (relating to the current circumstances in the fishery and the goals and objectives of the FMP). In each year under consideration (2015 through 2017), NMFS transferred quota into the Longline category in order to achieve specific objectives including the following: Help vessel owners account for bluefin tuna landings and dead discards; foster conditions in which permit holders become more willing to lease IBQ; contribute toward full accounting of bluefin tuna catch by vessels that have quota debt (i.e., reduce quota debt), enhance the likelihood that vessel owners will make the decision to lease IBQ to other vessel owners, and reduce uncertainty in the fishery as a whole.

During 2015 and 2016, NMFS distributed equal amounts of such inseason available bluefin quota to IBQ share recipients, provided their Atlantic longline permits associated with a vessel. During 2016, NMFS proposed and then finalized a rule, modifying the IBQ regulations regarding distribution of inseason quota to pelagic longline vessels. The proposed rule (81 FR 65988) was published on September 26, 2016. The final rule that became effective on February 10, 2017 (81 FR 95903; December 29, 2016), authorized NMFS to distribute bluefin tuna quota inseason to either *all IBQ share recipients* or *only to vessels active* in the fishery (whether IBQ share recipients or not) in order to provide flexibility with respect to which vessels receive IBQ inseason and to achieve the objectives of the IBQ program (such as accounting for bluefin tuna during longline operations and optimizing fishing opportunity for target species. The final rule also clarified that inseason allocations of IBQ to vessels will be made in equal amounts and not based upon the IBQ share recipient's quota tier (percentage). For example, there may be fewer active vessels than there are eligible vessels, and therefore allocation of inseason quota to active vessels may be warranted to allocate quota more efficiently. Active vessels are those with any fishing activity with pelagic longline gear over the course of the previous and subject year, based on logbook, vessel monitoring system, or electronic monitoring data. The proposed rule (81 FR 65988; September 26, 2016) and final rule (81 FR 95903; December 29, 2016) contain full discussions of the reasons for the regulatory change. The final rule did not modify the annual allocations, rather it only affected the methods by which NMFS decides which vessels will receive inseason allocation of IBQ.

Transferability

Vessels with valid Atlantic Tunas Longline permits that did not meet the initial eligibility criteria for IBQ shares in Amendment 7 still may obtain bluefin tuna IBQ allocation through an online leasing program. Allocation may be leased annually by Atlantic Tunas Longline category permit holders from other Atlantic Tunas Longline category permit holders or from Purse Seine

category participants, regardless of whether they received their own IBQ share. The duration of a lease is only through the end of the year during which the lease transaction was initiated.

The IBQ Program as implemented in 2015 did not include a provision to allow the permanent sale of IBQ shares to reduce risks for permit holders during the initial stages of the IBQ Program, when the market for IBQ shares was new and uncertain. Amendment 7 stated that measures to allow permanent sale of IBQ shares could be implemented in the future. That strategy allowed time for pelagic longline fishermen to familiarize themselves with the IBQ Program and market for IBQ shares (i.e., the IBQ allocation leasing market) prior to the agency's consideration of permanent sale.

Leasing of IBQ is allowed among all Longline category vessels with valid limited access permits, regardless of whether they are eligible for their own quota share. If a vessel catches bluefin tuna using allocation that it has leased from another vessel, the fishing history associated with the catch of bluefin tuna will be associated with the vessel that catches the bluefin tuna (the lessee, not the lessor vessel). In other words, the vessel catching the fish gets the 'credit' for the landings and dead discards, and not the vessel that leased the allocation. This post-Amendment 7 bluefin tuna catch history does not affect the quota shares, but could affect the calculation of vessel performance metrics in the future. Sub-leasing of quota also is allowed (i.e., IBQ leased from vessel A to vessel B, then re-leased by vessel B to vessel C). For a particular calendar year, an individual lease transaction will be valid from the time of the lease until December 31.

Reporting and monitoring

Vessel Monitoring System

Amendment 7 implemented multiple reporting and monitoring requirements in support of the IBQ Program. Vessels fishing with pelagic longline gear must report through VMS the number of hooks and sets within 12 hours of completion of each pelagic longline haul-back and, for pelagic longline sets with bluefin tuna interactions, must report the length of all bluefin tuna retained or discarded dead (by standardized size ranges) within 12 hours of completion of the pelagic longline haul-back.

Electronic Monitoring System (i.e., video camera system)

Vessels fishing with pelagic longline gear must have an installed and fully functional EM system on the vessel. The objective of the EM system is to provide NMFS a means with which to verify the accuracy of counts and identification of bluefin tuna reported by the vessel owner/operator. The principal elements of the EM are video cameras (2 to 4); control box (computer) and monitor; GPS receiver; and hydraulic and drum rotation sensors (as well as power source, etc). The required cameras must be installed to provide a view of the area where the longline gear is retrieved and catch is removed from the hook (prior to placing in the hold or discarding boatside). At least one camera to record close-up images of the deck near the haul back or processing station for species identification/length estimation, and at least one camera to record activity along the side of the vessel at the water line of the haul back station to document animals that are caught and discarded but not brought aboard, as well as the disposition of that catch (released alive/dead).

At the start of a fishing trip the vessel operator is responsible for turning on the EM system and verifying that it is functioning properly. The vessel owner or operator is responsible for ensuring that the EM system remains powered for the duration of each trip; that cameras are cleaned routinely to ensure unobstructed views, and the EM system components are not tampered with. During the trip the vessel operator is responsible to ensure that all bluefin tuna are handled in a manner that enables the electronic monitoring system to record such fish.

Upon completion of a fishing trip, the vessel operator must mail the removable EM system hard drive containing all data to NMFS or the NMFS-approved contractor, within 48 hours of the completion of the trip, according to instructions provided by NMFS. Current instructions require the vessel operator to send with the hard drive a pre-paid, return addressed mailing envelope, to the NMFS contractor ERT. Prior to departing on a subsequent trip, the vessel owner or operator must install a replacement EM system hard drive to enable data and video recording. The vessel owner or operator is responsible for contacting NMFS, or NMFS-approved contractors, if they have not received a replacement hard drive(s). NMFS or the NMFS-approved contractor, with the vessel owner or operators' input, develop and provide a written Vessel Monitoring Plan, to document the standardized procedures relating to electronic monitoring and facilitate communication of such procedures to the vessel crew.

If the EM system is not functioning properly, the vessel operator is required to contact the NMFS-contractor Saltwater, Inc., to inform them of the status of the EM system and coordinate the necessary logistics to fix the system.

Cost recovery

The Magnuson-Stevens Act provides NMFS the authority for recovering from the fishery up to 3 percent of the cost of the management, data collection and analysis incurred by NMFS, and enforcement related directly to the Catch Share Program (i.e., the IBQ Program). Amendment 7, which implemented the IBQ Program, did not implement cost recovery in 2015 (upon the start of the IBQ Program), because NMFS determined that without obtaining further information about the operation of the fishery with IBQs, it would be very difficult. There was neither information regarding the incremental costs of managing the pelagic longline fishery under the IBQ program, nor information about the revenue from bluefin tuna under the program. Furthermore, it was determined that immediate implementation of a cost recovery program would increase the costs and uncertainty for fishing vessels during a time period when the fishery would be bearing other new costs and sources of uncertainty. Thus when Amendment 7 was implemented NMFS noted that it would address cost recovery during the planned 3-year review. A cost recovery discussion is included in this document.

Purse Seine Fishery Leasing and Modification to Category Quota under Am. 7

Amendment 7 made changes to the Purse Seine regulations in order to provide more flexibility in administering the overall bluefin quota system, and enable a robust leasing market for IBQ. Specifically, Amendment 7 implemented a system in which NMFS annually adjusts the Purse Seine quota, using a formula based on the weights of reported bluefin landings and estimated weights of dead discards by purse seine fishery participants in the previous year. Twenty-five

percent of each Purse Seine category participant's base quota is available as a minimum to each Purse Seine fishery participant annually. Beyond that amount, quota is available to such participants based on the fishery participant's catch in the previous year. Any quota not allocated to the Purse Seine category participants is allocated to the Reserve category for the possible redistribution consistent with specified regulatory criteria to other quota categories (including the Longline category), and to support other objectives of the 2006 Consolidated HMS FMP.

Secondly, Amendment 7 provided for the opportunity for Purse Seine participants to lease quota to (or from) pelagic longline vessels in order to ensure that the IBQ leasing market met the needs of the pelagic longline fishery to account for bluefin catch, and provide additional flexibility for the Purse Seine fishery participants in the context of new regulations.

Share caps

As implemented by Amendment 7, the initial limit on the amount of allocation an individual Atlantic Tunas Longline permit holder or Purse Seine category participant may lease annually is the combined Longline and Purse Seine category allocations. The reason for this initial decision was to provide flexibility for vessels to purchase quota in a manner that could accommodate various levels of unintended catch of bluefin tuna and enable the development of an active quota market.

II Program Review

Methods

This document compares data from the pelagic longline fishery prior to implementation of the IBQ Program (baseline period), to the fishery under the IBQ Program in order to determine if the program is achieving its objectives (and determine if any modification to the program is warranted). The baseline period is the 3-year period prior to implementation (2012 through 2014), in accordance with the guidelines for the review of catch share programs (NMFS Procedural Instruction 01-121-01; Catch Share Policy; Guidance for Conducting Review of Catch Share Programs). Amendment 7 specified a review after the first 3 years of operation in order to evaluate the program after a duration of time that balanced the need for adequate time to allow the program to operate and mature, with the goal of providing a formal opportunity to evaluate the program in the not-too-distant future. The 3 year period being compared to the baseline period is 2015 through 2017. Although the Catch Share review guidance recommends waiting 5 years prior to evaluating a new Catch Share program, it was determined that a review after 3 years was appropriate for the pelagic longline fishery. A three-year period provides adequate time for the fishery to operate under the Program, but allows for a sooner evaluation to enable responsive modifications if changes to the Program are needed. Responsive review may be important to the pelagic longline fishery, which has been subject to extensive regulations prior to implementation of the IBQ Program.

The data reviewed for this 3-year review are based on guidelines developed by NMFS' Office of Science and Technology, to provide standardized metrics used to evaluate all the catch share programs.

Table 1. List of *Tier I Performance Indicators for Catch Share Programs

Performance Measure	Indicator
Catch and Landing	Quota allocated to catch share program
	Aggregate landings
	Quota exceeded (Y/N)
Effort	Entities holding Quota share
	Active vessels
	Season length
	Trips
	Days at sea
Revenues	Aggregate revenue from catch share species (bluefin tuna)
	Aggregate revenue from non-catch share species (target species)
	Non-catch share species revenue
	Gini Coefficient
Accumulation	Share cap in place (Y/N)
Cost recovery	Cost recovery fee
Derived Indicators	
Prices	Average price
Revenues	Total revenue
	Revenue per active vessel
	Revenue per trip
	Revenue per day at sea
Catch and landings	% utilization

Source: NMFS Office of Science and Technology; *Tier in this context is not referring to IBQ Shares

Organization of Data:

The following sections provide tables and figures of data, as well as narratives comparing the 2015 to 2017 period, to the baseline period (2012 to 2014) if analogous data exists. Some data from the period 2015 to 2017, which are relevant to the evaluation of the IBQ Program, are not compared to the baseline period because analogous data do not exist during the baseline period prior to the IBQ Program (such as IBQ leasing data from 2015 to 2017). After the detailed information there is a large summary table where various data are shown in a single location.

In addition to the data listed in the Tier 1 performance indicators table above, we present data specific to the IBQ Program, which are intended to evaluate achievement of the objectives of the program and / or provide other insights into the program, and which also may be useful when considering possible changes to the program or associated rules.