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Guidance for Conducting Review of Catch Share Programs

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I. Introduction

The goal of this guidance is to provide a resource to help ensure the reviews of catch share programs (CSPs) are comprehensive and targeted at meeting statutory requirements; coordinated with stakeholders; carried out in a transparent, efficient, and effective manner; and are conducted by applying consistent standards across the country while allowing necessary regional flexibility. This guidance applies to CSPs established by the Regional Fishery Management Councils (Councils) or the Secretary of Commerce (Secretary).^{1,2} This guidance is based on a variety of sources, including the Magnuson-Stevens Fishery Conservation and Management Act (MSA),³ particularly sections 301, 303, and 303A; the NOAA Catch Share Policy (CS Policy);⁴ The Design and Use of Limited Access Privilege Programs (LAPPs) (Holliday and Anderson 2007);⁵

¹ This guidance is also applicable to Atlantic Highly Migratory Species CSPs established by the Secretary under MSA sec. 304(g).

² Please consult with NMFS and NOAA General Counsel regarding questions on the application or implementation of this guidance.

³ http://www.nmfs.noaa.gov/sfa/magact/MSA_Amended_2007%20.pdf

⁴ http://www.nmfs.noaa.gov/sfa/management/catch_shares/about/documents/noaa_cs_policy.pdf

⁵ <http://spo.nmfs.noaa.gov/tm/tm86.pdf>

reviews that have already been completed (Bering Sea and Aleutian Islands (BSAI) Crab Rationalization,⁶ Amendment 80 (BSAI non-pollock Cooperatives),⁷ Gulf of Mexico (GOM) Red Snapper,⁸ and Pacific sablefish permit stacking);⁹ reviews currently underway and interim reports related to such reviews for various CSPs, including Gulf of Alaska (GOA) rockfish,¹⁰ GOM grouper-tilefish Individual Fishing Quotas (IFQ),¹¹ Northeast Limited Access General Category Scallops IFQ,¹² and Pacific groundfish trawl rationalization,¹³ as well as discussions among National Marine Fisheries Service (NMFS) staff.

II. Applicability of Guidance

Section 303A(c)(1)(G) of the MSA requires the Councils and Secretary to “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 (FMP); but no less frequently than once every 7 years)” of all LAPPs established after January 12, 2007.^{14,15} This requirement applies to LAPPs established under Secretarial authority as well. The date a program was established is the effective date of the action in the final rule that implemented the program. If a component from this guidance is determined not applicable for a specific review, the Council should document in its final plan for the review its rationale for why the component is not applicable.

⁶ <http://www.npfmc.org/crabrationalization/>

⁷ <https://npfmc.legistar.com/View.ashx?M=F&ID=3300713&GUID=DB925E16-602F-41BD-8690-8156BEC4FB82>

⁸ <http://www.gulfcouncil.org/docs/amendments/Red%20Snapper%205-year%20Review%20FINAL.pdf>

⁹ http://www.pcouncil.org/wp-content/uploads/2015/06/Final_FGSPS_PrgmRev.pdf

¹⁰ http://www.npfmc.org/wp-content/PDFdocuments/catch_shares/Rockfish/RPPreview508.pdf

¹¹ http://sero.nmfs.noaa.gov/sustainable_fisheries/ifq/documents/pdfs/annual_reports/2015_gt_annualreport_final.pdf

¹² <http://www.nefmc.org/library/ifq-report-information>

¹³ <http://www.pcouncil.org/groundfish/five-year-review-trawl-catch-share-program-amendment-20-intersector-allocation-amendment-21/>

¹⁴ The CS Policy indicates that periodic reviews are expected of all CSPs, regardless of whether the program is a LAPP or when it was put in place. Thus, the Northeast Multispecies Sector, which is not a LAPP, and CSPs implemented prior to January 12, 2007, should undergo periodic review. The CS Policy states: “NOAA recommends Councils apply the LAPP review and duration principles and requirements to all catch share programs.”

¹⁵ Reviews of the Western Alaska (AK) Community Development Program (CDQs) are not covered by this guidance as that program is subject to separate statutory requirements for review, and the state of AK has responsibility for conducting that review.

III. Periodicity of Reviews

A. Initial Reviews. For CSPs established after January 12, 2007, the initial review should be initiated no later than 5 years after the program was implemented (MSA sec. 303A(c)(1)(G)). For CSPs established prior to January 12, 2007, the requirement to initiate the first review 5 years after implementation does not apply. However, because the CS Policy indicates that periodic reviews are expected of all CSPs, reviews for CSPs established prior to January 12, 2007, should be initiated no later than 7 years after the CS Policy went into effect in 2010 (i.e., no later than the end of calendar year 2017), consistent with MSA's requirement for subsequent reviews.

The MSA does not preclude an earlier review, but it is not recommended. The Councils and NMFS should be mindful that it takes time for program participants and related entities (e.g., dealers/first receivers, processors, bait/tackle shops, etc.) to adjust to a new program. In turn, there will be a lag between when those behavioral adjustments occur and when they can be discerned, analyzed, and understood. The Councils and NMFS should also follow any timelines for additional program reviews specified by the FMP or FMP amendment (hereinafter collectively referred to as "FMP") that created or modified the CSP.

B. Subsequent Reviews. According to Section 303A(c)(1)(G) of the MSA, all subsequent reviews should coincide with scheduled Council review of the relevant FMP, but no less frequently than once every 7 years.¹⁶ Thus, for CSPs established after January 12, 2007, the second review should be initiated before the end of the program's 12th year, regardless of when the initial review was actually completed. How and when Councils review their FMPs, or parts thereof, varies by Council. The Councils and NMFS should follow any timelines for additional program reviews specified by the FMP creating the CSP and should not conduct reviews more frequently than every 3 years for the purpose of complying with the MSA requirement or CS Policy.

IV. Process and Procedures

A. Review Plan. Ideally, a general plan for conducting future reviews should be outlined when the CSP is being developed, or as soon as feasible thereafter. This outline should cover necessary data collections, data analyses/models, a timeline for implementing and/or completing each required task within that plan, as well as staff and funding requirements. Since the review will require data from the first day of the program, and preferably prior to the program's

¹⁶ As with a new program, if significant changes are made to an existing program, it will take time for program participants and related entities to adjust and lags between when the adjustments occur and when they can be discerned, analyzed, and understood should be expected.

implementation, every effort should be made to ensure the necessary data collection programs are put in place when the program is being developed or implemented. Otherwise, potentially significant data gaps may be created which will later confound the analyses needed for the review. The first year or two of a program is critical with respect to discerning how program participants and related entities are adjusting to the program. Further, data collections associated with CSPs will most likely require Paperwork Reduction Act (PRA) clearance, and that process often takes at least 6 months. Similarly, if external assistance is needed to conduct certain analyses, the contracting process can also introduce delays. The content of the outline should be periodically refined, revised, and updated as additional information becomes available and issues are identified.

The review plan outline should be converted into a final plan prior to initiating the review. The earlier the plan is finalized, the more time is available to conduct any necessary supplementary/specialized data collections and acquire the resources needed to conduct the review, if any. This detailed review plan should provide a transparent overview of how the review will be conducted and over what time period, and includes what elements will and/or will not be analyzed as part of the review as outlined in sections V and VI below. Additionally, approval of the review plan by the Council and concurrence from NMFS that the review plan meets the requirements of the MSA should occur at this point.

B. Review Team. Establishment of a review team is an effective way to facilitate the development of the review plan and process. The Council should determine appropriate members for the review team. It would be useful to include members of the Plan Development Team, or equivalent, who worked on the implementing action or made significant changes to the program where possible, as well as staff responsible for administering or overseeing the program. This will promote continuity in the program's development, implementation, evaluation, and revision process. The Council should consider representatives from the Council, Regional Office, Science Center and Office of Law Enforcement to ensure their respective issues and concerns are appropriately addressed in a timely manner.¹⁷ If needed, external expertise or contract support can be included as part of the review team. The distribution and nature of responsibilities for the review should be clearly identified as early as possible in the process, with the Council determining the "lead" or "co-leads" of the review team. Each organization represented on the review team should play a role in the review, understanding that the distribution of appropriate staff, data management responsibilities, and analytical capabilities varies by region and Council.

C. Interim Reports. In some cases, Regional Offices, Science Centers, and/or Councils have already developed annual or biennial reports for existing CSPs. These reports should be

¹⁷ For CSPs created under Secretarial authority, team composition will vary to some degree.

considered when completing the 5/7 year reviews as they can serve to refine and revise the review plan and act as important source documents for the 5/7 year review.¹⁸ Further, the annual/biennial reports could be used to identify gaps in the available data and analyses and other unforeseen issues, in turn allowing time for these gaps to be filled and issues addressed prior to the conduct of the more formal and detailed review. For example, a Stock Assessment and Fishery Evaluation (SAFE) report that adequately covers the program under review may be an additional source document for the 5/7 year review. Although interim reports should make use of standardized approaches to the extent possible, specific content is a local determination. These interim reports could be used to elicit feedback from program participants and interested stakeholders about the pros and cons of the program.

D. External Input. Program participants and other entities have a vested interest in program performance and the outcomes arising from program reviews. Therefore, each Council should establish a mechanism for public input that could include sharing drafts of the 5/7 year program review document with Council advisory groups (e.g., Scientific and Statistical Committees (SSCs), Advisory Panels (AP), etc.).

E. Finalizing Reviews. The 5/7 year review will be considered a Council document. The Regional Administrator (or designee) will participate in the review process as a partner in the Council process, and serve as the NMFS primary point of contact. Once the review is completed, the results would be submitted to the Council for approval and NMFS for concurrence¹⁹ that the review meets the requirements of the MSA and is consistent with this guidance.

V. **General Approach, Scope of Review, and Use of Standardized Approaches**

A. General Approach. The initial review will compare and analyze the fishery before and after the program's implementation, to the extent necessary data prior to the program's implementation are available. Best available scientific information should be used for the review. If quantitative analyses are not available, qualitative assessments may suffice. We reference existing analytical approaches throughout this document, but use of new or updated approaches is encouraged where appropriate. As part of the initial development of a CSP, the Council and Secretary will have conducted an analysis of the program's expected effects (i.e., an ex-ante analysis) in the FMP that created the program and its associated National Environmental Policy Act (NEPA) analyses. A 5/7 year review of a CSP is a retrospective evaluation of an

¹⁸ See Section I of this Guidance for examples of such reports in certain programs.

¹⁹ Such concurrence will likely be given at the time of Council approval as any substantive issues regarding whether the review itself meets the requirements of the MSA should have been resolved in the development of the review plan.

established program²⁰. Thus, rather than analyzing the program's expected effects, the task in a 5/7 year review is to describe and analyze the effects that have actually taken place since the "baseline" time period prior to the CSP's implementation, or since the program's implementation (i.e., an ex-post analysis). Therefore, Councils need to consider an appropriate baseline for comparison. A baseline period of at least 3 years is preferable, but this may be modified depending on circumstances surrounding the creation and implementation of each program.

Additional data collection programs have been implemented in conjunction with most, if not all, CSPs, so the initial 5-year review may be somewhat limited by a lack of data for the time prior to when the CSP was established. However, subsequent reviews should not be similarly hindered as, ideally, all necessary data collection programs will be in place prior to those reviews. Even if pre-program data are somewhat limited, the review should describe and analyze any changes that have taken place since the program's implementation, with a general focus on performance trends over that time rather than performance in a specific year.

The review should contain the following eight elements. If an element is determined not applicable for a specific review, the Council should document in its final plan for the review its rationale for not conducting a more formalized analysis of that element. The eight elements are: 1) purpose and need of the review (discuss legal/policy requirements), 2) goals and objectives of the program, the FMP, and the MSA, 3) history of management, including a description of management prior to the program's implementation, a description of the program at the time of implementation (including enforcement, data collection, and monitoring), and any changes made since the program's implementation or the previous review (including an explanation of why those changes were made), 4) a description of biological, ecological/environmental, economic, social, and administrative environments before and since the program's implementation²¹, 5) an analysis of the program's biological, ecological/environmental, economic, social, and administrative effects, 6) an evaluation of those effects with respect to meeting the goals and objectives (i.e., program performance), including a summary of the conclusions arising from the evaluation, 7) a summary of any unexpected effects (positive or negative) which do not fall under the program's goals and objectives, and 8) identification of issues associated with the program's structure or function and the potential need for additional data collection and/or research.

The review should contain an assessment of the program's effects on net benefits to the Nation,

²⁰ Other examples of retrospective analyses done by NMFS include reviews of regulatory actions conducted under Executive Order 13563 (http://www.nmfs.noaa.gov/sfa/laws_policies/economic_social/eo13563.pdf) and regulatory reviews completed under section 610 of the Regulatory Flexibility Act (RFA) (http://www.nmfs.noaa.gov/sfa/laws_policies/economic_social/rfa_revised_through_2010_jobs_act.pdf).

²¹ For subsequent reviews of the program, analyses should discuss changes since the last review and may not need to go back to the conditions prior to implementation of the program.

keeping in mind that net benefits are not exclusively economic in nature. This assessment should be consistent with NMFS' Economic Guidelines for conducting cost-benefit analyses.²²

However, one exception is the baseline considered for analyses of CSPs should be an appropriate number of years prior to the implementation of the CSP, and not what would have been likely to occur in the absence of the CSP, which is how a baseline is defined in the Economic Guidelines. In particular, the identification of economic costs and benefits in the review should be consistent with the Economic Guidelines. For example, increases in employment and tax revenues are not economic benefits within a cost-benefit analysis. The latter is a transfer and the former is an example of an economic impact. Changes in economic impacts at the regional, state, and/or community level are also an important consideration and should be assessed as they are often of key interest to Council members and other stakeholders.

Reviews should not be restricted to a particular length. The review should contain sufficient background information to provide the reader with the necessary context for understanding the analyses contained in the review. However, for the sake of brevity, if particular information has not changed since the program was implemented or last reviewed (e.g., biology of the species), that information can be incorporated by referencing the appropriate document. In addition, if a detailed analysis of a particular component of a program or certain aspect of that component has been conducted elsewhere, the detailed analysis can be incorporated by reference. However, a summary of the findings and their implications with respect to evaluating the program's performance should be included in the review.

B. Scope of Review. In general, the review should use as holistic an approach as possible given available data and resources. Interdependencies between related fisheries can generate spillover effects that may be unexpected or unintended. When this occurs and it is difficult to separate impacts from the CSP under review from impacts of other management measures, programs should be considered together. For example, the operations of vessels and associated businesses are frequently not limited to the boundaries of a specific CSP. In the Gulf of Mexico Reef Fish fishery, some species are managed within a CSP (e.g., red snapper and grouper-tilefish) while others are not (e.g., vermillion snapper, greater amberjack, gray triggerfish, etc.). Species from within and outside the CSP can be harvested on the same trip. In this case, it would be best to analyze the effects of the CSP by analyzing the harvest of all species since the costs associated with harvesting these species cannot be separated. When evaluating a program's effects on those businesses, analyses should take into account the entirety of those operations, not just those which take place within the program's bounds. Councils should determine if analyzing the CSP alone will likely mischaracterize the program's performance, and the effects on human communities, fish stocks, and the ecological communities/environment. In instances where two

²² <http://www.nmfs.noaa.gov/op/pds/documents/01/111/01-111-05.pdf>

or more CSPs are found to have significant interdependencies, joint program reviews would lead to a more holistic approach and thus more accurate analysis, as well as reduce administrative costs associated with the conduct of these reviews. However, if the CSPs were established in different years, a joint initial review may not be feasible, particularly if they were established more than 5 years apart. Thus, joint reviews may be more likely for subsequent rather than initial reviews.

In addition, in cases with significant interdependencies or spillover effects between programs, the review could also consider whether interdependencies between programs interfere with and possibly preclude achieving the goals and objectives of each program. These issues would be particularly acute in situations where there is significant overlap in the vessels and businesses that participate in multiple programs. If the review identifies issues with interdependencies, the Council could consider potential changes such as adding or removing species or gear types from a program, merging separate CSPs, or reallocating species or gears across CSPs.

C. Use of Standardized Approaches. When describing current conditions, changes since the baseline period, analyzing the effects of the program, and evaluating program performance, the review should make use of standardized performance indicators or metrics developed at the national level, to the extent practicable. Reviews could also make use of additional indicators that may have been developed at the regional level and properly vetted by an appropriate scientific body (e.g., Science Center, Scientific and Statistical Committee, etc.).²³

For example, with respect to biological conditions and effects, the reviews should make use of information contained in the most recent stock assessment. Additional information on other key biological indicators will also likely be necessary, depending on the program's goals and objectives (e.g., changes in bycatch, discard mortality, etc.). This information can be obtained from stock assessment reports, observer program reports, SAFE reports, and other sources.

When describing economic and social conditions and analyzing economic and social effects, reviews should make use of the NMFS Office of Science and Technology's (S/T) economic and social performance indicators to the extent possible.^{24,25} New indicators may also be used, such as a Walden, et al.'s (2014) method of measuring multi-factor productivity changes in CSPs.²⁶ Further, although Holland et al. (2014) indicates that sufficient data on the prices of Quota Shares (QS) and Quota Pounds (QP) are not available for every program,²⁷ a 5/7 year review

²³ <http://nefsc.noaa.gov/read/socialsci/pdf/publications/IIFET2010-PMC-PPDS-AK-revised%20gfish%20list.pdf>

²⁴ <http://www.st.nmfs.noaa.gov/humandimensions/social-indicators/>

²⁵ <http://www.st.nmfs.noaa.gov/economics/fisheries/commercial/catch-share-program/index>

²⁶ <http://spo.nmfs.noaa.gov/tm/TM146.pdf>

²⁷ <http://spo.nmfs.noaa.gov/tm/TM145.pdf>

should contain an analysis of trends in these indicators when sufficient data are available.²⁸ Although some of S/T's indicators are not purely economic or social in nature (e.g., catch and landings, effort, cost recovery, etc.), they should still be used where appropriate. Also, the suite of economic and social performance indicators for CSPs is still under development and so the review team should check for updates during the review process.²⁹ If quantitative estimates of particular indicators are not available, a qualitative assessment is acceptable.

Social impacts on fishermen and communities are an important aspect of all fishery management decisions. For example, National Standard 8 requires that fishery conservation and management measures take into account potential impacts on fishing communities. S/T's social indicators for CSPs are not as developed across all regions as the economic indicators. As an alternative or in addition to using the social indicators for CSPs, analysts should adapt the social indicators developed by Jepson and Colburn (2013) to assess community vulnerability, resilience, and dependency on the CSP to the extent possible.³⁰ In addition, the description of social conditions and analysis of social effects should include safety at sea.^{31,32} This is consistent with other provisions of the MSA, such as National Standard 10, which requires fishery conservation and management measures to promote the safety of human life at sea. It is recommended the review team consult with the U.S. Coast Guard, and the National Institute for Occupational Safety and Health's (NIOSH) Alaska Pacific Office³³ on issues related to safety, data, and analyses.³⁴ Finally, reviews should analyze changes in concentration and distributional changes (e.g., revenue, landings, QS, QP, etc.). Current guidance documents suggest using the Herfindahl–Hirschman Index (HHI)³⁵ to measure changes in concentration, and Gini coefficient to document distributional changes,³⁶ but other indicators may be appropriate. The analysis of distributional effects should also examine whether small entities have been disproportionately affected relative

²⁸ QS refers to the long-term catch privileges generally denominated as shares of the total allowable catch (TAC) for a species, area, and/or fishery sector and QP refers to the annual form of quota in a CSP. The QS price reflects expected economic profits in the long-term while the QP price reflects expected economic profits in the short-term. Both are critical to assessing the program's economic effects on participants, particularly if current data are insufficient to directly estimate net revenue or economic profits.

²⁹ See <http://www.st.nmfs.noaa.gov/economics/fisheries/commercial/catch-share-program/indicators-definition/>

³⁰ <http://www.st.nmfs.noaa.gov/humandimensions/social-indicators/index>

³¹ Changes in safety at sea can also be covered in the description of economic conditions and analysis of economic effects.

³² Guidance on Fishing Vessel Risk Assessments and Accounting for Safety at Sea in Fishery Management Design. U.S. Dept. of Commer., NOAA. NOAA Technical Memorandum NMFS-OSF-2, 57 p., available at: fisheries.noaa.gov/sfa/publications/technical-memos/nmfs_osf_tm2.pdf

³³ Requests for data and analytical assistance should be sent to Jennifer Lincoln, PhD, APO Director, at jlincoln@cdc.gov

³⁴ NIOSH provided data that contributed to the analysis of safety at sea in the Gulf of Mexico Red Snapper 5-year review and conducted the analyses for the 5-year reviews of the Amendment 80 and Crab Rationalization CSPs in the North Pacific.

³⁵ <http://www.justice.gov/atr/public/guidelines/hmg-2010.html>

³⁶ <http://www.st.nmfs.noaa.gov/economics/fisheries/commercial/catch-share-program/index>

to large entities, consistent with the RFA and the CS Policy.

VI. Describing and Analyzing Program Performance

As outlined in the MSA, the purpose of the review is to evaluate whether the CSP is meeting its goals and objectives and the goals of the MSA. Based on the outcome of the review, the goals and objectives of the CSP may need to be revised through a subsequent action. In order to properly describe and analyze a CSP's performance relevant to the goals of the program and the MSA, the 5/7 year review must address the components identified in the CS P's goals and objectives and the following key areas: A) goals and objectives, B) allocations, C) eligibility, D) transferability, E) catch and sustainability, F) accumulation limits/caps, G) cost recovery, H) data collection/reporting, monitoring, and enforcement, I) duration, J) new entrants, and K) auctions and royalties. If a component is determined not applicable for review, the Council should document in its final plan for the review its rationale for not conducting a more formalized analysis of the component. Such documentation is necessary to produce a strong record demonstrating that the component has been at least initially considered. Further, if a particular component of a program is the subject of a current management action,³⁷ that component does not need to be addressed in a detailed manner within the review. A summary containing a description of, rationale for, and current status of the management action is sufficient.

A. Goals and Objectives. According to Section 303A(c)(1)(G) of the MSA, a primary goal of the review is to assess progress in meeting the goals of the program and the MSA. The CS Policy indicates it is necessary to examine objectives as well, including those of the FMP (see p. iii and p. 7). Thus, the goals and objectives in this case include those identified in the implementing Amendment, the FMP, the CS Policy, and the MSA, particularly those specific to LAPPs, though the primary focus should be on those identified in the implementing Amendment.

In addition, the goals and objectives of the Amendment and FMP should be evaluated with respect to whether they are clear, measurable (at least qualitatively³⁸), achievable (i.e., are two or more objectives mutually exclusive?), and still appropriate under the current circumstances. Fishery performance changes over time, and for other reasons than the effects of the program or other management measures. Such changes should be taken into account when evaluating the efficacy of the original goals and objectives. If certain goals and objectives are found not to be clear, measurable, achievable, and/or still appropriate, the review should note deficiencies for the Council to address.

³⁷ A current management action is an issue currently being deliberated by the Council.

³⁸ For example, qualitative objectives that provide a direction of the desired change may be used when quantitative objectives that provide explicit details on the magnitude of the change are not possible.

When a goal or objective is found to be unclear, the review team should seek clarification from Council members or members of NMFS leadership directly involved with the program's development. If this approach proves unsuccessful, the review team should make its best attempt to interpret the Council's or NMFS' intent in each case rather than not address it. A common example of an unclear goal or objective is when an objective is stated in the form of an action that was taken in the Amendment (e.g., allocate a portion of the total available harvest to a specific sector of the fishery). While this is a valid action associated with the implementation of the CSP, it does not clarify a fundamental objective of the fishery; the action is not the objective but rather the tool used to achieve that objective. The team should make its best effort to discern what that action was meant to achieve using the identified approaches.

Another complication review teams are likely to encounter is the lack of specific performance standards to evaluate whether, or to what extent, the goals and objectives have been met. For example, a Council may have indicated that a goal of the program is to reduce overcapacity. Such a goal tells the review team the direction of the desired change in overcapacity, but not the magnitude of the desired change. If the Council actually meant to indicate that its goal was to eliminate overcapacity, then the goal needs to be clarified. If it has a particular target level of reduction in mind, or alternatively a particular level of harvesting capacity, then that level should be stated explicitly in the FMP. Thus, one specific purpose of the reviews is to encourage Councils and NMFS to clearly identify specific performance standards that can be used in assessing whether, or to what extent, the goals and objectives have been met.

If the program is performing as expected at the time of implementation, then the various goals and objectives either should have been achieved or substantial progress should have been made towards achieving them. If the analysis concludes otherwise, such conclusions may serve as the basis for future changes to the program. If the review identifies numerous and serious problems with the existing program, it is recommended that the Council evaluate if the problems can be solved by modifying the existing program, whether the CSP's current form is still preferable to other alternatives, and if the program should be continued or eliminated.

B. Allocations. The MSA requires initial allocations to be fair and equitable under all LAPPs. In 2016, NMFS and the Council Coordination Committee³⁹ finalized the Fisheries Allocation Review Policy⁴⁰ and two associated Policy Directives⁴¹ that provide a mechanism to ensure fisheries allocations are periodically evaluated to remain relevant to current conditions. The first procedural directive outlines three categories of triggers that can be used by a Council to initiate an allocation review: public interest-, time-, or indicator-based. Each Council will identify one

³⁹ <http://www.nmfs.noaa.gov/sfa/management/councils/ccc/ccc.htm>

⁴⁰ <http://www.fisheries.noaa.gov/op/pds/documents/01/01-119.pdf>

⁴¹ <http://www.nmfs.noaa.gov/op/pds/documents/01/119/01-119-01.pdf>, and <http://www.nmfs.noaa.gov/op/pds/documents/01/119/01-119-02.pdf>

or more triggers for each fishery with an allocation by August 2019, or as soon as practicable. The second procedural directive identifies four main types of information that should be considered when reviewing and updating allocations: ecological, economic, social, and indicators of performance and change. If the 5/7 year review is identified as a trigger for a CSP, then the allocations for that program should be reviewed during the 5/7 year reviews. However, if an alternative trigger has been chosen for a CSP (public input, indicator-based or some other time-based), the Council should note this, and discuss their method for determining if the identified trigger has been met. If the 5/7 year review is not identified as a trigger, and the alternative identified trigger has not been met, a full analysis of allocation is not necessary in the 5/7 year review.

The allocations to be reviewed include the allocations between individuals or entities within the program, the allocations between subgroups (e.g., gear types) within the program, and the allocations between the commercial and recreational sectors in instances where both sectors harvest the species covered by the CSP.⁴² In the analysis and evaluation of allocations between individuals or entities, existing caps/limits on QS and QP should be explicitly taken into account. Thus, any analyses completed on changes to those allocations should consider the potential for individuals or entities to exceed the existing caps/limits on QS and QP under an alternative allocation and, in turn, the possibility they would be forced to divest under a different allocation.

Because an evaluation of allocations between subgroups as well as individuals or entities in the program may require considerable time and resources, and is expected to be analytically complex, it may be appropriate to conduct the detailed analysis separately from the other components of the review. As stated in Section V, part A, of this guidance, the detailed analysis can be incorporated by reference and the review need only contain a summary of the analytical findings and a discussion of their implications with respect to evaluating the program's performance. In addition, if the underlying allocation between subgroups is the subject of a current management action, that would be a compelling reason not to address it in the 5/7 year review. As stated in Section V, part A, of this guidance, a summary containing a description of, rationale for, and current status of the management action is sufficient for this review. Other compelling reasons may exist for not addressing the underlying allocation between subgroups, but would need to be determined on a case-by-case basis.

⁴² The NOAA Catch Share Policy

(http://www.nmfs.noaa.gov/sfa/management/catch_shares/about/documents/noaa_cs_policy.pdf) states: "For all fishery management programs, including catch shares, the underlying harvest allocations to specific fishery sectors (e.g., commercial and recreational) should be revisited on a regular basis, and the basis for the allocation should include consideration of conservation, economic, and social criteria used in specifying optimum yield and in furtherance of the goals of the underlying FMP." The CS Policy also states, "if the underlying allocation between sectors for a given fishery has not been reviewed by the Council since a LAP was initially approved, the Council should include such an assessment as part of its 5-year review unless there are compelling reasons not to do so" (emphasis added).

C. Eligibility. Section 303A(c)(1)(D) of the MSA indicates that eligibility requirements must be established for LAPPs. Reviews should evaluate eligibility requirements regarding who is allowed to hold QS or QP (e.g., owner on board provisions, etc.). The review may determine that certain restrictions on eligibility are inhibiting or precluding the achievement of certain objectives. The review may also indicate that additional restrictions are necessary to achieve particular objectives.

When analyzing the program's economic and social effects, if resources are available, it could be useful to also assess the effects on "historical" participants who were previously but are no longer involved in the fishery or program (i.e., prior to the program's implementation or the last review). If resources allow, a survey to assess current and historical participants' satisfaction with the program and changes in their well-being would be useful in understanding why the historical participants no longer participate and could clarify the program's social and economic effects, and its performance.

D. Transferability. Section 303A(c)(7) of the MSA requires a Council to establish a policy and criteria for the transferability of limited access privileges. All existing CSPs in the United States allow for at least some transferability of QS or QP. Transferability is generally thought to improve technical efficiency and thus aid in achieving economic efficiency in a fishery, which, for example, is a goal under National Standard 5. Therefore, restrictions on transferability are thought to result in technical and economic inefficiency. However, economic efficiency is not a CSP's only objective. Restrictions on transferability may serve to meet other objectives, such as equity, which is also a goal under National Standard 4, providing for the sustained participation of and minimizing adverse economic effects on fishing communities, which is also a goal under National Standard 8, or reducing adverse effects on particular types of habitat (e.g., Essential Fish Habitat). The review should determine whether existing transferability provisions are conducive to achieving the specified objectives, keeping in mind that trade-offs often exist between objectives.

E. Catch and Sustainability. With limited exceptions,⁴³ MSA section 303(a)(15) requires that FMPs or FMP amendments must establish mechanisms for specifying annual catch limits (ACLs) at a level such that overfishing does not occur in the fishery, including measures to ensure accountability. Reviews should discuss whether the CSP has helped to keep harvests/landings within the applicable limit(s). If overages have occurred, the frequency and magnitude of such overages should be discussed along with an analysis of why they occurred. The review should also describe and analyze changes in the status of stocks within the CSP.

⁴³ See 50 C.F.R. §600.310(h) describing exceptions for species that have a life cycle of approximately one year unless the Secretary has determined the fishery is subject to overfishing, and for stocks or stock complexes subject to management under an international agreement to which the United States is a party).

Additionally, the review should analyze whether the program is encouraging full utilization of the available ACL, total allowable catch (TAC), or quota. If full utilization is not taking place, the review should assess why this is the case. Full utilization of the ACL, TAC, or quota should not be confused with achieving optimum yield (OY; a provision under National Standard 1), which involves the consideration of many other factors, including available harvesting capacity, since harvesting capacity is not determined by the available ACL, TAC, or quota.

The review also should assess changes in bycatch and discard mortality to determine whether the program is minimizing bycatch and bycatch mortality to the extent practicable. This is consistent with provisions of the MSA, such as National Standard 9.

F. Accumulation limits/caps. Section 303A(c)(5)(D) of the MSA requires Councils and NMFS to establish limits or caps to prevent the excessive accumulation of harvesting privileges. The accumulation of excessive shares is thought to potentially create market power in the product market, input markets (e.g., gear, bait, labor, etc.), and/or the markets for QS and QP. Market power creates economic inefficiency, and the MSA reflects concern over such inefficiency. For example, National Standard 5 requires that fishery conservation and management measures consider efficiency in the utilization of fishery resources. Even if market power is not created, excessive shares are also to be avoided for equity/distributional reasons. This is reflected in various MSA provisions, such as National Standard 4, National Standard 8, and section 303A(c)(5)(D)(ii) of the MSA. Reviews should analyze and evaluate the equity/distributional impacts of existing caps and the impacts those caps have had on the creation of market power by affected entities.

In addition, Holliday and Anderson (2007)⁴⁴ indicate that a primary concern with accumulation limits and caps is their ability to prevent firms from being technically efficient (i.e., firms could produce more output with their current inputs, or they could use less inputs to produce their current output). Technical inefficiency would in turn prevent firms from fully utilizing existing economies of scale and producing at the minimum average cost per unit of harvest (i.e., firms are also productively inefficient). Because caps on QS do not necessarily limit a firm's production in a given year, and QS owners can purchase additional QP, this concern primarily applies to caps or limits on QP. Reviews should analyze whether and to what extent QP caps or limits have generated technical inefficiency for firms operating in a CSP.

As with allocations, an analysis of market power is expected to be analytically complex and therefore may require considerable time and resources. Thus, it may be appropriate to conduct the detailed analysis separately from the other components of the review. In that case, the review need only contain a summary of the analytical findings and a discussion of their implications

⁴⁴ http://www.fisheries.noaa.gov/sfa/management/catch_shares/resources/design_and_use_laps_2007.pdf

with respect to evaluating the program's performance. An analysis of market power in the Mid-Atlantic Surf Clam/Ocean Quahog Individual Transferable Quota (ITQ) program has already been conducted⁴⁵ and was the subject of a review by the Center for Independent Experts (CIE).⁴⁶ An analysis using the same approach has also been conducted for the Northeast Multispecies Sectors program,⁴⁷ which was also reviewed by the CIE.⁴⁸ However, the conclusions of the two CIE reviews differ with respect to the appropriateness of the approach and data used to reach the conclusions and recommendations in the respective analyses. Analysts are advised to take into account the concerns and deficiencies noted in the CIE review of the analysis for the Sectors program when conducting market power analyses.

Further, the review should address whether existing data collection and monitoring programs are sufficient to accurately determine each entity's ownership level and thus whether entities are exceeding the existing caps. The review should also address whether the caps are being applied at the appropriate levels to ensure they are serving their intended purpose. Because caps typically apply to all "persons"⁴⁹, the review team should determine whether "persons" are being identified in the program in a manner consistent with the Council's intent and other agency practices and guidance (e.g., accounting for affiliation, consistent with the Small Business Administration's regulations, where practicable). For example, if the caps are being applied in a manner that precludes the estimation of an appropriate HHI or Gini coefficient, that should be noted and addressed in the review.

One of the anticipated effects of limits and caps is to limit the degree of consolidation within the fleet. Consolidation would typically be expected to result in a reduction in capacity and overcapacity, which is a goal of most CSPs. Analyses of changes in capacity and overcapacity should be conducted in a manner consistent with the terminology and methods outlined in NMFS' National Plan of Action for the Management of Fishing Capacity.⁵⁰

G. Cost Recovery. The review should discuss whether a cost recovery program is in place, per Section 303A(e) of the MSA, the cost recovery fee percentage, any changes to the fee, and the amount of fees collected on an annual basis. According to the CS Policy, "[i]ncremental government costs for management, data collection and analysis, and enforcement of limited

⁴⁵ http://www.nefsc.noaa.gov/read/socialsci/pdf/SCOQ_ITQ_Exc_Share_Rec_2011-05-03.pdf

⁴⁶ http://www.nefsc.noaa.gov/read/socialsci/pdf/CIE_report_final.pdf

⁴⁷ http://www.nefmc.org/nemulti/planamen/Amend%2018/compass_lexecon/NEMFC%20Report%20Final.pdf

⁴⁸ https://www.st.nmfs.noaa.gov/Assets/Quality-Assurance/documents/peer-review-reports/2014/2014_07_22%20Weninger%20excessive%20shares%20review%20report.pdf

⁴⁹ The MSA defines "person" to mean "any individual (whether or not a citizen or national of the United States), any corporation, partnership, association, or other entity (whether or not organized or existing under the laws of any State), and any Federal, State, local or foreign government or any entity of any such government." MSA section 3.

⁵⁰ <http://www.nmfs.noaa.gov/op/pds/documents/01/113/01-113-01.pdf>

access privilege programs shall be recovered from participants as required by the MSA.”⁵¹ The review should determine whether the program is assessing fees in a manner such that all incremental costs are included in the assessment, whether the collected fees cover all incremental costs (i.e., does the 3% cap imposed by MSA preclude collecting fees to cover all incremental costs?), and evaluate the current economic effect of these fees on program participants (e.g., what is the reduction in gross revenue, net revenue, or profits on average per participant?). Any compliance or enforcement issues related to cost recovery should also be discussed. If the program does not include cost recovery, the review should include an explanation of that decision along with a discussion of plans to develop such a program in the future, where applicable.

H. Data Collection/Reporting, Monitoring, and Enforcement. According to Section 303A(c)(1)(H) of the MSA, each LAPP must include “an effective system for enforcement, monitoring, and management of the program, including the use of observers or electronic monitoring systems.” Thus, the review should contain a description and assessment of the existing data collection, monitoring, and enforcement programs (e.g., observers, logbooks, economic data reporting, etc.), including a discussion of any changes since the CSP’s implementation or the previous review. Specific attention should be paid to assessing whether the existing programs are sufficient to assess the program’s performance relative to the various goals and objectives.

Important data gaps or deficiencies, including gaps in the ability to validate collected data, should be discussed. Cost estimates for filling any gaps or deficiencies could also be provided so that a net benefit assessment can be conducted, as certain data improvements may be cost prohibitive given current resources and other factors. In addition, particular attention should be paid to documenting the reporting burden on CSP participants.⁵² It may be useful to evaluate whether current CSP data collection programs are redundant with other existing programs so that the Council and NMFS can consider eliminating overlapping requirements. In general, potential means to reduce reporting burden should be identified and discussed.

Specific attention should be given to describing and assessing the use of electronic technologies versus paper-based and other more labor intensive methods, particularly with respect to their effect on the accuracy of the collected data and resulting statistical estimates but also with respect to their effect on the ability to engage in real-time reporting. In general, electronic reporting is more conducive to achieving real-time reporting. Another purpose of this assessment is to estimate the administrative costs associated with data collection and monitoring, as these costs are either borne by industry (e.g. via cost recovery fees) or the public via tax

⁵¹ http://www.nmfs.noaa.gov/sfa/management/catch_shares/about/documents/noaa_cs_policy.pdf, pg iii.

⁵² If resources allow, a customer satisfaction survey may be useful in discerning participants’ views on this issue.

collections. Potential cost saving changes should be identified and discussed.

With respect to enforcement, particular attention should be paid to assessing whether the current enforcement provisions and activities, including resources for conducting the latter, are sufficient to ensure a high rate of compliance with program requirements. Wide-spread non-compliance can adversely affect the ability of other CSP attributes to achieve their desired goals and objectives. Information collected can be used by the Council to clarify what can be considered a sufficiently “high” rate of compliance.

Although cost recovery, data collection/reporting, monitoring, and enforcement should each be individually addressed, a description and overall assessment of the CSP’s administrative costs should be provided to determine whether total administrative costs are being minimized to the extent practicable, which is consistent with National Standard 7. It is likely there will be trade-offs in the various types of administrative costs. If the review indicates various types of improvements may be necessary to achieve the CSP’s goals and objectives, the Council and NMFS will want to know the potential change in total administrative costs.

I. Duration. The review should indicate the lifespan of catch privileges within the CSP. QS are not issued in perpetuity. According to Section 303A(f) of the MSA, their lifespan is limited to 10 years if the program was established after January 12, 2007, though they will be renewed if not revoked, limited, or modified.⁵³ The review should discuss the pros and cons of the current duration of catch privileges, given the CSP’s goals and objectives and other factors (e.g., lending practices of financial institutions).

J. New Entrants. The issue of new entrants is one that cuts across multiple program design features, including but not necessarily limited to allocations (e.g., is there a set-aside?), transferability (e.g., do the transferability rules make it more or less difficult for new entities to participate in the program?), duration (are QS prices increasing over time as a result of the QS duration?), and auctions (e.g., are auctions being used to provide another means for new entities to participate in the program?). An additional consideration is whether loan programs have been established to help new entities participate in the CSP, consistent with Section 303A(g) of the MSA. Programs to assist new entrants are supposed to be considered when CSPs are initially developed. Where possible, an assessment of the costs of entry should be provided, along with a discussion of whether entry costs have increased to the point where market power is being exercised and economic inefficiencies are being created. A discussion of equity/distributional

⁵³ For example, see the rules to revoke inactive QS in the wreckfish ITQ program (<https://www.federalregister.gov/articles/2012/09/26/2012-23731/fisheries-of-the-caribbean-gulf-of-mexico-and-south-atlantic-snapper-grouper-fishery-off-the>) and the Pacific halibut/sablefish IFQ program (<https://alaskafisheries.noaa.gov/sites/default/files/finalrules/77fr29556.pdf>)

considerations should also be provided, including where possible, an assessment of any inter-generational effects.

K. Auctions and Royalties. For CSPs implemented after January 12, 2007, section 303A(d) of the MSA requires Councils and NMFS to consider the use of auctions or royalties for the initial or any subsequent distribution of limited access privileges. Royalties and auctions are means to collect resource rents and return some of the economic value of the resource to the general public. Resource rent is the difference between the price at which fish can be sold and the respective production costs, which include a normal return to the privilege holder. Thus, royalties and cost recovery fees are not synonymous.