

10.0 REGULATORY IMPACT REVIEW (RIR)

10.1 Introduction

The Regulatory Impact Review (RIR) provides an assessment of the costs and benefits of proposed actions and other alternatives in accordance with the guidelines established by Executive Order 12866. The regulatory philosophy of Executive Order 12866 stresses that in deciding whether and how to regulate, agencies should assess all costs and benefits of all regulatory alternatives and choose those approaches that maximize the net benefits to the society.

The RIR also serves as a basis for determining whether any proposed regulations are a “significant regulatory action” under the criteria provided in Executive Order 12866 and whether the proposed regulations will have a significant economic impact on a substantial number of small entities in compliance with the Regulatory Flexibility Act of 1980 (RFA).

This RIR summarizes the effects of the proposed management plan and other alternatives considered in this amendment that has been developed to rebuild the scallop resource. The Amendment 10 document contains all the elements of the RIR/RFA, and the relevant sections are identified by reference to the document. The Initial Regulatory Flexibility Analysis, which evaluates the impacts of management alternatives on small businesses, is provided in Section 9.0.

10.2 Summary of Regulatory Impacts

- Section 8.7.3 evaluated the economic impacts of a broad-range alternatives for improving the yield from the scallop stock considered by the Council. Economic impacts of the rotational area management and non-rotational alternatives are summarized in Section 8.7.3.1. The impacts of these alternatives on fleet revenues for the first 10 years of the program are discussed in detail in Section 8.7.3.3. The impacts on producer and consumer surpluses, total benefits, and employment are discussed in Section 8.7.3.4. The long-term impacts are discussed further in Sections 8.7.3.5 and 8.7.3.6. The results included the variability of landings, revenues and benefits. Sources of uncertainty are identified in Section 8.7.3.7. The results of the long-term analyses show that the rotational management will have positive impacts on the scallop industry. Overall, all options that allow access to the Georges Bank areas increase fleet revenues, consumer and producer surpluses, and employment significantly.
- Section 8.7.4 analyzed the short-term economic impacts of alternatives considered by the Council, including rotation, area-access options, habitat closures, overfishing definitions, trip limits, and other measures. Although habitat closures will have negative impacts on scallop revenues and net national benefits to the nation (as measured by the total economic benefits comprising consumer and producer surpluses), the positive impacts of rotation and area access alternatives will offset these negative impacts. As a result, the total economic benefits relative to the no-action levels would be positive even when additional areas were closed under the various habitat alternatives. The combined economic impacts of various rotation, area access, and habitat alternatives are summarized in Section 8.7.4.6. The impacts on vessels are analyzed in Section 8.7.4.8. The economic impacts of the alternative overfishing definitions are compared in Section 8.7.4.7. Although, management by the alternative proposed overfishing definition would produce higher stock biomass and greater benefits in the long-term, but would reduce fleet revenues and total benefits in the short-term by allowing fewer DAS allocations. The final alternative selected by the Council, which requires 4-inch rings

and applies a higher DAS-tradeoff for controlled access with area-specific DAS allocations will improve the results for the status quo overfishing definition by reducing the fishing mortality and increasing the selectivity of gear towards larger scallops.

- Final alternatives proposed by Amendment 10 include adaptive area rotation with 4-inch rings, habitat closures, controlled access to the protected areas of Georges Bank and Hudson Canyon, area-specific DAS schedules, trip limits, one-to-one exchanges of controlled access trips, and general category rules. The Council also decided to adopt the status quo overfishing definition to determine target F, the area-specific DAS's and TACs. The impacts of these measures are discussed individually in Sections 8.7.2.2 through 8.7.2.5, and the results are summarized in IRFA in Section 9.0 above from the perspective of vessel impacts. This section provides a summary of the combined impacts of the proposed regulations on scallop fishery, consumers and on total economic benefits to the nation. The economic costs and benefits of the final alternatives are compared with the no action alternative in Section 8.7.2.1. "No action" is defined as the continuation of the Amendment 7 DAS schedule, which will remain in effect unless these measures are amended. It also includes no access to the groundfish areas and no new habitat closures:
 - As analyzed in Section 8.7.2.1 (Final Alternatives), the proposed area rotation alternatives, with or without access to the Georges Bank groundfish areas, will result in larger landings, lower prices, larger fleet revenue, producer and consumer surpluses, and greater total benefits during the first four years of the program (2004 to 2007) compared to no action.
 - The annual fleet revenues will exceed no-action levels by \$58 million during the first four years of implementation (i.e., 2004-2007) with access and by \$37 million with no access. If the overall multiplier for both the Northeast and Mid-Atlantic regions were close to the value of the Northeast multiplier, then the increase in overall sales for rotation alternatives compared to no action, on average, would range from \$67 million with no access to \$104 million per year with access to the Georges Bank groundfish areas during 2004-2007 period.
 - The increase in the abundance of scallops available for consumption, coupled with lower prices, will increase the cumulative present value of consumer benefits (measured by consumer surplus) by \$260 million with access and by almost \$118 million with no access compared to no action during the first four years of the program (2004 to 2007).
 - The benefit to the producers, as measured by increase in the present cumulative value of the producer surplus for the period from 2004 to 2007, is estimated to be \$112 million with access, but only \$6 million with no access.
 - As a result, the annual economic impacts on the economy will be positive. The cumulative value of the net economic benefits, as measured by the sum of consumer and producer surpluses, net of no-action values, will reach \$371 million with access and \$124 million without access during the first four years of the proposed implementation (2004 to 2007).
 - The economic impacts of the final alternative during the following four years and in the long-term will also be positive if access is provided to the groundfish areas. Total benefits are estimated to increase by \$53 million during the 2008-2011 period and by \$95 million over the long-term compared to no action.
 - With no access to the Georges Bank groundfish areas, however, the economic impacts are estimated to be positive in the short-term (2004-2007) but negative in the following period and over the long-term compared to the no-action levels. Although, the proposed rotation

with no access will generate revenues similar to the levels with no action, the fleet operating costs will be much higher for this option compared to no action due to a decline in landings per day-at-sea (LPUE). Consequently, the producer surplus, net of no action, will be negative during the period from 2008 to 2011 and in the long-term, resulting in a decline in total net benefits by \$161 million and by \$27 million, respectively.

- The increase in DAS allocations from the Amendment 7 levels will result in higher employment in the scallop fishing industry. Employment is estimated to more than double for the proposed alternatives relative to the no-action option.
- By increasing the scallop catch rates in the long run and reducing operating costs, the proposed measures expected to increase the productivity of the scallop industry.
- The proposed regulations could have some distributional impacts on fishing families and communities, on scallop vessels depending on their size, and on processors and ports as discussed in Section 8.8, Social Impact Assessment. The proximity of these entities to open and controlled access areas as well as to the areas closed for fishing because of rotation and/or habitat protection may result in differential impacts from area rotation. Area-specific DAS allocations for the controlled access areas could also have varying impacts on vessels depending on their capacity to fish in those areas as discussed in Section 8.7.2.3. However, the one-to-one exchange provision for the access allocations could mitigate some of these impacts. See also Section 9.0 (IRFA) for a summary of these impacts.
- The combined economic impacts of the final alternatives including of rotation, area-specific DAS allocations, area access, habitat closures, and 4-inch rings are presented net of 'no action' in accordance with the regulatory guidelines, which require that the economic impacts of the proposed options be compared relative to the impacts likely to occur if 'no action' is taken. These impacts could also be assessed, however, by comparing the impacts of the proposed alternatives with the "status quo" scenario which approximates the management policies of the recent years. Status quo is defined as no rotation with DAS allocations are adjusted to achieve $F=0.2$ at the current scallop resource conditions, no access to the groundfish areas and no change in the ring size. This option was not selected by the Council because it applies a uniform fishing mortality to all areas and fails to maximize yield from the scallop resource. Table 280 includes the landings, revenue and economic benefits estimates for 'status quo' along with proposed rotation with and without access to the groundfish areas. Results show that the final rotation alternative would have positive impacts relative to status quo if there is access to the groundfish areas, but negative impacts in the short-term if there is no access. Over the long-term, however, the economic benefits of the proposed alternatives will exceed status quo management even with no access (see Section 8.7.2.1 for further discussion).
- The cumulative impacts of the measures from Amendment 10 proposed measures, and the past actions including the Framework 11 to 15 to the scallop FMP, are estimated to be positive. Adjustment of the DAS allocations, implementation of trip limits and DAS trade-offs for controlled area access had positive impacts on the scallop industry by increasing the revenues, producer and consumer surpluses and net benefits in the past. The economic benefits of the actions proposed by Amendment 10 exceed the benefits from past actions, as reflected by the positive benefits net of 'no action' as well as net of 'status quo' with access to the groundfish areas. As a result, cumulative benefits, which measures the sum of benefits from previous and proposed actions, are expected to be positive (See also Table 152 for a summary of cumulative impacts).

The sources of the uncertainty for the economic results were identified in each major section. In addition, the sensitivity of the results to various parameters and biological inputs including the variability in the estimates, the values of the discount rate and the future values of the variables that went into the economic model, such as the future trends in disposable income and import prices, and uncertainties regarding area access are discussed in Appendix IV.

10.3 Enforcement Costs

A qualitative analysis of the enforcement concerns, cost and benefits of the proposed options is provided in Section 8.9. These include a comprehensive discussion of the pros and cons of the area rotation alternatives, alternatives for allocating effort, reducing bycatch and bycatch mortality, and alternatives for general category and incidental catch permits from an enforcement perspective. Section 8.9.5 also provides a description of the alternatives for improving data collection and monitoring, and discuss the implications of these in terms of the enforcement costs and benefits.

Despite the fact that rotational management, proposed area access programs and closures of other areas may increase the enforcement requirements and administrative burden, the monetary costs for the government may not appreciably change as long as the budgetary allocations for enforcement do not allow such an increase. Allocation of the existing resources to improve enforcement of new scallop regulations, however, would result in reduced enforcement of other management actions. In other words, the enforcement of the rotational management, area access and closures may reduce the overall efficiency of enforcement for fishery regulations in general if such enforcement requires a reallocation of resources. On the other hand, the proposed alternatives for improving data collection and monitoring, such as increased observer coverage, cooperative industry surveys and scallop research are expected to improve management of the scallop resource and increase the enforcement efficiency, offsetting some of these costs. The costs of these programs will be funded by the TAC and/or DAS set-asides as discussed in Section 8.2.4.

10.4 Determination of Significant Regulatory Action

Executive order 12866 defines a “significant regulatory action” as one that is likely to result in: a) an annual effect on the economy of \$100 million or more, or one which adversely affects in a material way the economy, a sector of the economy, productivity, jobs, the environment, public health or safety, or state, local, or tribal governments or communities; b) a serious inconsistency or interference with an action taken or planned by another agency; c) a budgetary impact on entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients thereof; d) novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in this executive order.

The preceding analysis shows that Amendment 10 would constitute a “significant regulatory action” since it will raise novel legal and policy issues because it introduces rotational area management, area-specific DAS allocations, one-to-one exchange of controlled access trips, automatic broken trip DAS adjustments, cooperative industry surveys, closures to protect complex and sensitive habitats, prohibiting limited access vessels from targeting scallops while not on a DAS, and the proactive protected species framework. The proposed regulations may not have an annual impact on the economy of \$100 million or more, unless access is provided to the Georges Bank groundfish areas through Framework 16, in which case regional revenues could increase by \$104 million, on average, during the 2004-2007 period. The proposed alternatives will not, however, adversely affect in a material way the economy, productivity, competition and jobs, public health or safety, or state, local, or tribal governments or communities in the long run. The proposed action also does not interfere with an action planned by another agency, since no

other agency regulates the level of scallop harvest. It does not materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients.