

FINAL
ATLANTIC HERRING FISHERY MANAGEMENT PLAN

incorporating the

REGULATORY IMPACT REVIEW
(Including the Regulatory Flexibility Analysis)

SUPPLEMENT

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prepared by the

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1.0 Initial Regulatory Flexibility Analysis

1.1 Introduction

The purpose of the RFA is to reduce the impacts of burdensome regulations and recordkeeping requirements on small businesses. To achieve this goal, the RFA requires government agencies to describe and analyze the effects of regulations and possible alternatives on small business entities.

On the basis of this information, the Regulatory Flexibility Analysis determines whether the proposed action would have a “significant economic impact on a substantial number of small entities.”

The main elements of the RFA are discussed in several sections of the FMP and the relevant sections are identified by reference. The following discussion summarizes the consequences for small businesses of the proposed action and non-preferred management options in the Atlantic herring fishery. This document supplements the information contained in Section 7.3, Initial Regulatory Flexibility Analysis, Volume I.

The purpose and need for management (statement of the problem) is described in Section 2.2 of Volume 1.

1.2 Objectives

The management objectives are enumerated in section 2.3 of Volume 1.

1.3 Management Alternatives

The proposed action is described in Section 3.0 of the FMP document (Volume 1) and described in this supplement document.

In compliance with the RFA, the Council has prepared an Initial Flexibility Analysis that concludes this proposed action could have significant economic impacts on a substantial number of small entities. The measures proposed may be restrictive, and impacts on the industry, which consists mostly of small entities, and could be significant. The impacts on small entities attributable to the preferred and other alternative management measures are discussed below.

Small Entities Affected by an Open Access Fishery

Prior to plan implementation (no action alternative), vessels fishing for herring are not required to possess a federal herring permit. This complicates determining the permit status of those vessels that fish for herring. While many vessels currently landing herring possess other federal permits or letters of authorization, there are some vessels that may fish only in state waters that do not. This complicates any analysis of the permits that are held by herring fishers. Only those vessels that have another federal permit are required to submit vessel trip reports and can be readily

identified in the permit, vessel trip report, and dealer weighout databases.

Because some vessels may target herring for a small number of trips each year, vessels were determined to participate in a “directed” fishery for herring if they landed at least one trip of one metric ton (2,205 lb) or more during 1997. There were only 61 vessels, which landed 97,300 mt (214.5 million lb), amounting to 99 percent of all herring landings in the Northeast, while 185 vessels landing herring during 1997 accounted for less than 71 mt (0.15 million lb). Expressed in terms of revenues, the 61 vessels derived about \$10.7 million from herring fishing while the remaining vessels’ total herring revenues did not exceed \$8,000. Therefore, for RFA purposes, the set of affected vessels are limited to these 61 vessels in the directed herring fishery.

Of the 61 vessels, 17 of them derived, on average, less than \$1,000 in herring revenues in 1997. The remaining 44 vessels, (constituting 72 percent) of them, were divided into two groups. The first group of 25 vessels derived, on average, \$5,534 from herring revenues in 1997. The remaining group of 19 vessels earned, on average, \$524,000 from herring revenues in 1997. The 44 vessels constitute 22 percent of the 201 vessels that landed some herring in 1997 and 72 percent of the 61 vessels in the directed herring fishery. The regulations would mostly affect the group of 19 vessels that, on average, earned \$524,000 from herring revenues in 1997. These vessels alone represent 31 percent of all business entities in the directed herring fishery. Whether the affected set of vessels is defined to include only 61 vessels or all of the 201 vessels that landed herring in 1997, the regulations will affect a substantial number, i.e., more than 20 percent, of the small entities in the fishery.

Because the fishery will be open access, a herring permit can be requested for any new or existing vessel (subject to the size, GRT and horsepower restrictions). Some vessels, however, are more likely than others to request a herring permit. As a pelagic fish, herring is most likely to be harvested by mobile gear vessels. While foreign fleets targeted herring with gillnets in the 1960s and there is a gillnet fishery for herring in Canada, mesh size restrictions in other fisheries and marine mammal concerns make it unlikely for a herring gillnet fishery to develop in U.S. waters. Because herring is a low value/high volume fishery, smaller vessel classes that do not have adequate hold capacity are also unlikely to enter the fishery. These vessels may still request a permit, however, to preserve the option of forfeiting other permits subject to size upgrading restrictions and obtaining a larger vessel to target herring.

The Council also considered adopting a limited entry or controlled access system alternative. The Council considered a comprehensive system that could be adopted for either the entire management unit or for specific management areas. This alternative included the possibility of using limited entry in the GOM where there is a desire to restrict harvests, but not in the offshore areas where there is a desire to increase fishing effort. The Council did not choose this approach, because it felt that it would limit the ability of some smaller vessels in rebuilding fisheries to shift into the herring fishery.

1.4. Determination of Significant Economic Impact on a Substantial Number of Small Entities

Impacts of the Management Areas and Sub-areas

The management areas adopted by the plan are based on knowledge of the various spawning components. This allows the development of management measures that specifically target a particular spawning component. The management areas further provide the basis for TAC distribution and have been established to avoid the over-exploitation of individual spawning components that are included within the stock complex. The designation of management areas is not expected to have any direct economic impacts. The establishment of the areas does not impose any additional requirements on vessel operators, does not directly limit participation in the fishery, and does not restrict catches. The areas are, however, used to guide the distribution of the TACs, which will have economic impacts on vessels that are discussed in the following section.

Impacts of TAC Distribution

Under the existing management scheme, there are no limits on the domestic harvest of herring. While overall revenues could increase under the FMP, there will be changes in which management areas supply those revenues. Historically, most domestic herring landings have come from the inshore Gulf of Maine, defined now as Management Area 1A. The proposed management measures are not intended to reduce herring landings overall, but rather to reduce herring landings from Management Area 1A only. However, other TAC options considered by the Council also reduce the expected landings from Management Area 1A from current levels.

Consequently, the proposed TAC exceeds current domestic landing levels in Management Areas 1B, 2 and 3 (and the proposed overall TAC). Since specification of TACs in Areas 1B, 2 and 3 that are greater than current landing levels would not constrain fishing activity, reduce revenues, or impact small businesses, the Council focused on analyzing the economic impacts of the TAC specification in Management Area 1A.

The range of options considered by the Council provided different levels of protection to individual spawning components. When considering the TAC distribution options, the Council did not just consider different TAC levels for the various management areas. Each option also identified a different process for distributing the TACs. While some of the options have less economic impact on Management Area 1A revenues than the proposed action (based on catches in 1997 and 1998), the rejected options included methods of distributing the TAC that were determined not to meet the conservation goals and objectives of the FMP.

Option 1 proposed assigning a TAC to Management Areas 1A, 1B, 2A and 2B/3. (The proposed Area 2A - the northern part of Area 2 - is not adopted by this FMP.) The seasonal (winter) TAC assigned to Area 2A would have explicitly considered the mixing of GOM and GB/Nova Scotia

fish in this area. By limiting the catch in this area, some control is exercised over the amount of GOM fish caught during the winter months. If the catch in this area during this time period were unlimited, it is possible that the GOM spawning component could be rapidly depleted without notice. Similarly, the TAC in Area 1A protects the GOM fish in this area during the remainder of the year. TACs for the other areas insure that the overall catch does not exceed the OY. This option was rejected because of uncertainty over the migration of GOM fish into the proposed Management Area 2. While the migration patterns can be estimated based on the location of herring in this area during the winter months when the GB stock had collapsed, the exact location of fish in this area is unknown.

Option 2 proposed assigning a TAC to management Areas 1A and 3. A TAC was also to be assigned to Management Areas 1B and 2 (the TAC could be taken from these two areas regardless of catch location). TACs are assigned based on knowledge of stock structure and migration of herring. By limiting the catch in Management Area 1A, protection is provided to the GOM spawning component. Using a TAC to limit catches in Management Area 3 provides some protection to GB/Nantucket Shoals spawning component fish. The combined TAC in Management Areas 1B and 2 simplify the administration of the TAC system. This option was rejected because the combined TAC for Management Areas 1B and 2 increases the risk of overfishing those herring in Management Area 1B in the summer months. Herring in this area are believed to come from both the GOM and GB/Nantucket Shoals spawning components. Large catches (in theory, at least, of up to the total TAC for these two areas) would unacceptably risk damaging these spawning components. While catches of this magnitude may be unlikely given recent landings in Area 1B, the strong market demand during the summer months when herring are in this area could result in an unacceptably high catch. By combining the TAC for this area with the TAC for Area 2, there is little protection provided to herring in Management Area 1B.

Option 3 proposed assigning TACs to all four areas for each of three seasons. It makes explicit use of knowledge of stock structure and relative stock sizes to control catch in each area and time period so that individual spawning components are not damaged. In theory, this option provided the greatest protection to individual spawning components of herring. This option was rejected however because, in practice, it relied on a level of detail on stock structure that is lacking. The complexity of the scheme also made it less likely that it could be accurately monitored and implemented, reducing its effectiveness.

Option 4 proposed assigning TACs to the three major management areas based on an estimate of the amount of fish that is present in these areas on an annual basis. It does not have as close a relationship to current knowledge on stock structure. It does provide some measure of protection to the individual spawning components, primarily through the use of conservative TACs. Because this method places less emphasis on seasonal migrations of herring, any amount of herring assigned to Management Area 1B reduces the amount of herring available for Management Area 1A. TACs must be set at conservative levels to prevent overfishing of specific spawning components. This option was rejected because of its reliance on historic fishing patterns that may change.

Option 5 proposed assigning one overall TAC to the entire coastal stock complex based on the ABC and OY. This option was rejected because it ignores any information on stock structure, and assumed that the entire coastal stock complex is one homogenous stock. For this reason, it provides no protection whatsoever to individual spawning components. In theory, the entire OY could be taken from the GOM in the summer months. Harvests at this level far exceed historical catches from this area and could not be supported. This approach could decimate herring stocks if all fishing effort is concentrated in one management area.

The proposed TAC alternative would result in a greater decline in landings from 1996-97 levels in the in-shore Gulf of Maine than the non-selected alternatives. (The potential changes in revenue under the various TAC options in Management Area 1A may be seen in Table E.58 of the FMP.) These alternatives would increase the risk of overfishing the inshore herring resource. In general, the rejected options did not provide sufficient protection to specific spawning components of herring - specifically, the GOM spawning component of herring. Note: The proposed options were developed prior to issuance of the report of the 27th SAW, which evaluated GOM herring as fully exploited. The 27th SAW noted that current levels of fishing mortality in the GOM may not be sustainable. The Council considered this report in selecting and determining its TAC distribution method and initial TACs.

The variability of herring stocks, coupled with their key role as a forage species, argues for a cautious approach to their management. If overfishing of the inshore resource resulted in a stock collapse, the impacts on the fishery would be severe and could last for an extended period. In the 1970s the GB component was overfished; it took over 10 years for that stock to recover.

In the worst case scenario, the imposition of a TAC in Management Area 1A (the inshore GOM) could reduce herring harvests from this area by 36.5 percent from the amount that was caught in 1997 (the most recent year landings data is available). Since almost 70 percent of all herring landings and 67 percent of all herring revenues in 1997 came from this area, the proposed measures could result in a decline in landings and revenues of about 25 percent. Harvest costs are also expected to increase for vessels that must fish farther from shore.

The proposed spawning closures could also reduce harvests in the inshore GOM. The negative impacts of the proposed action would not be uniform for all vessels or all sectors. It would most heavily impact those vessels that fished only in the inshore GOM.

Actual impacts of the proposed action are expected to be less than these maximum impacts. The overall TAC for the herring fishery is set at a level that would allow landings to double. Given the flexibility of vessels to fish outside of Management Area 1A, vessels are expected to harvest herring in other management areas and thereby would replace any revenues lost due to Area 1A harvest restrictions. If they are unable to harvest herring in other areas, lower herring landings could result in an increase in the ex-vessel price, which would reduce the impact of the decline in landings (although this is uncertain, since herring ex-vessel prices have remained almost constant

in nominal terms for the last 20 years - and declined in real terms - in spite of a wide range of catch levels). Also, the spawning closures actually open a large area that was closed under state regulations, which should mitigate the negative impacts of the closed areas.

Impacts of Permitting and Reporting Requirements

Vessels, dealers, and processors will be required to obtain permits and comply with mandatory reporting requirements. Some participants in the fishery already have a federal permit and comply with reporting requirements established by another fishery. The compliance costs are primarily due to the time required to complete and submit the necessary forms. Total vessel costs for these requirements are estimated at \$7.80 for vessel permits, \$25.32 for operator permits, \$27.00 for vessel trip reports, and \$52.00 (maximum) for interactive voice reports. Total compliance costs per vessel are thus \$112 per vessel for these measures. The total cost for dealers is estimated to be \$1.58 for permits and \$78.70 for weekly landing reports, for a total of about \$80 per dealer. The compliance costs for processors is also estimated to be \$1.58 for permits and \$7.83 for an annual report, or a total of \$9.41 per processor. These costs are considered insignificant.

The Council's rationale for requiring permits, as opposed to taking no action in this regard, is to identify participants in the fishery. Currently, no comprehensive reporting requirements for vessels fishing for herring exist. When permitted, participants in the fishery will be identified and landings and purchases of herring will be reported. With the level of detailed reporting required, catches will be better monitored, enabling managers to more accurately calculate estimates of fishing mortality and resource status.

Impacts of VMS Requirements

Vessels that intend to harvest more than 500 mt of herring, or that harvested 500 mt of herring in the previous year, will be required to operate a VMS unit. The annual cost per vessel to purchase, install, and operate a VMS unit is estimated to be \$2,700. Additional costs are incurred due to burden-hour estimates of the requirements associated with VMS, estimated at an additional \$111 per vessel. At the 500 mt threshold, this is approximately 4 percent of annual revenues. When compared to the average herring revenues of the 19 vessels that landed most of the herring in 1997 and who would be required to have a VMS if based on 1997 landings, this cost is equal to approximately 0.5 percent of the average revenues for this group.

The compliance costs for the FMP will not result in an increase in the total costs of production by more than 5 percent.

Taking no action would result in difficulty in confirming fishing locations of affected vessels for enforcement of the area specific TACs. While VMS only shows where the vessel was and not the activity per se, the track can be compared to reported catch locations to confirm the vessel was in the management area reported. Herring vessels can also be quickly located with VMS to verify current activity, which can be compared to trip reports submitted on that trip. VMS will also help

enforce spawning closures and effort controls. With a no action alternative, the entire area closure requires surveillance. The 500 mt threshold requirement to use a VMS insures that the majority of herring landings are monitored, while minimizing costs to the industry.

Impacts of Spawning Closures

The proposed spawning closures are expected to have an impact on herring landings and revenues, subject to the ability of fishers to locate herring in other areas or at other times. The total impacts of these closures are estimated to be a reduction of 10,332 mt in herring landings and \$1.1 million in revenues. The actual decline in landings and reduction in revenues due to the spawning closures is likely to be less, however. The displacement of effort to other areas, opening of a large area south of 42°30'N to fishing by the proposed action, and the interaction of the spawning closures with the Management Area 1A TAC will reduce the negative impacts on landings and revenues. Further, spawning closures were not established in Management Areas 2 and 3 because the Council wants to promote interest in developing the offshore fishery.

The Council considered other spawning area closure alternatives. It originally considered four areas that, through complementary Commission action, may have extended to the shore. These proposed restrictions did not allow any directed fishing subject to the limitation on catch of spawning fish and created an offshore boundary, providing a limited opportunity for fishers to move into offshore areas. Small herring vessels in Maine ports would be disadvantaged by this. Such vessels would be at risk of losing their market, and may not be able to regain it when the closed areas reopen. The expected result of the original Council proposal was the potential loss of all herring landed during the Commission's existing closures, which would have been mitigated by the opportunity of fishers to fish seaward of the closure boundaries. Also, fishers may have been able to harvest the herring after the closure - a delay in the catch, rather than a complete loss.

The preferred alternative differs from the above option significantly. All closure areas apply only to federal waters. The closure area off Massachusetts and New Hampshire has been significantly reduced in size. This would significantly reduce the negative economic impacts of the spawning closures. In a qualitative sense, the proposed alternative should also reduce impacts on smaller vessels, as it provides options to fish seaward of the boundary, in state waters, or in areas of federal waters that remain open, and reduces the necessity for any vessel to fish seaward of the closure boundaries.

The Council also considered a number of variations for determining the starting dates of the closures. These variations were predicated on the biological condition of spawning herring. While the economic impacts are not likely to differ significantly from the preferred alternative, this approach would introduce uncertainty into the timing of the closures. The fixed date selected by the Council in the preferred alternative allows vessels and dealers to plan fishing operations around known closure dates and was preferred by many in the industry. It also avoids the administrative costs necessary to operate a sampling program that would be a required part of

determining the closure dates.

Finally, the Council also considered the option of not establishing any spawning restrictions in Management Areas 1A or 1B. In the short term, landings and revenues would have increased if this option had been selected. Over a longer period, the practice of fishing on spawning aggregations in this intensely fished area is expected to have a negative impact on the biological condition of the resource. Failure to provide protection during the spawning periods could result in the elimination of individual spawning components, even while remaining within overall mortality goals set by the TAC. This would have resulted in either lower TACs to reduce effort on spawning fish, or, in the extreme, could damage the resource sufficiently so that no fishing would be allowed in the area. Either result would reduce revenues from this area. As vessels moved into other areas to find herring, operating costs would be expected to increase with the additional transit time offshore.

Impacts of Mandatory Days out of the Fishery

Fishing effort will be reduced as the TAC is approached by requiring vessels to take mandatory days out of the fishery. The number of days taken out of the fishery is determined by how close the catch is to approaching the TAC. This alternative should reduce catch rates as the TAC is approached. This will help prevent the TAC from being exceeded before the fishing year is over.

This measure also redistributes fishing effort to other areas. As the number of days out of the fishery increases, some vessels may choose to relocate to areas that remain open. The Council selected this measure over other alternatives because it minimizes impacts on the industry while extending the season. It allows fishing activity to continue unfettered in management areas where landings are at a lower level and are not approaching the TAC. This will encourage a shift in effort from areas with restrictions into other open areas, particularly when three or four days are closed to the directed fishery. Shifting effort will not be costless however. As fishing days are restricted, vessels will incur higher operating costs if they choose to fish in other areas further from their home port.

The major reason for this measure is to provide a supply of herring to the market for a longer period of time than if there were no controls put into place until the overall TAC is reached and the fishery closed. For this reason, the Council rejected the no controls approach.

The Council also considered trip limits as an alternative but rejected the idea because of concerns over discards, enforcement difficulties, and difficulty in creating an equitable system.

The Council also considered apportioning the TAC over a shorter time period - rather than an annual basis. See Option 3 under 'Impacts of TAC Distribution', above. It rejected this alternative because it would result in unacceptable administrative costs to monitor the TAC.

Impacts of Vessel Size Limits

The Council is establishing a size limit on domestic harvesting vessels in the herring fishery. The Council is recommending a size limit less than 165 feet in length, and no more than 750 GRT. Such vessels also must have no more than 3,000 shaft horsepower. The Commission first adopted such restrictions in a Commission emergency action in 1997 (reacting to the interest of large factory trawler owners to exploit the herring resource) and the Council voted at that time to support the Commission's action. Congress further addressed the issue in the NMFS appropriations bill for fiscal year 1998, and again in 1999, restricting NMFS from using its funds to issue permits or other authorization letters to vessels exceeding like size restrictions. The proposed Council restrictions, established by ASMFC and later in several congressional bills, are larger than any of the vessels that landed herring in 1996 or 1997. (For vessels identified as having caught herring in 1997, the maximum length was 126 ft., the maximum horsepower was 2,100, and the maximum GRTs was 246.) It will tend to maintain the existing industry structure. Because the herring resource is underutilized, there is some room for growth in harvesting and processing capacity. The Council feels that a number of large vessels would rapidly reach the proposed limits on the TAC. The resultant rapid attainment of the TAC would reduce the supply of fresh herring to the bait and cannery markets. There is also the possibility that large catcher/processors would monopolize the resource.

The Council is also limiting processing by large, domestic vessels to an amount specified on an annual basis. These two restrictions comprise the preferred alternative of the Council and are intended to provide some control over the development of excess fishing capacity in the region, and to take into account the concerns of fishing communities and historic herring fishery participants.

One of the objectives of the FMP is to provide controlled opportunities for fishers in other fisheries in New England and the mid-Atlantic regions. Many fishers are facing additional restrictions in the groundfish, scallop, monkfish, dogfish, and whiting fisheries due to poor resource conditions. The ability to enter the herring fishery provides an opportunity for them to shift their effort onto a robust resource until rebuilding plans in these fisheries can be accomplished. The number of vessels that can enter this fishery is dependent on each vessel's share of the resource. The limit on vessel size reduces the size of the share of the TAC that can be harvested by each vessel. This will allow the largest number of vessels to enter the fishery, ameliorating the impacts of restrictions in other fisheries.

For the first year of the plan, the recommended specification for large at-sea domestic processors is 0 mt. This is a precautionary approach that will give the Council time to evaluate the impacts of the management program before introducing large domestic processors into the fishery. This measure explicitly considers the concerns of those communities in the northeast region that are dependent on the herring fishing industry and the possible impacts that may result from the uncontrolled entry of large domestic processors.

The "no action" alternative would allow large domestic vessels to enter the fishery unfettered. The most likely role would be as processing vessels. While the impacts of allowing such large

domestic processors into the fishery are not clearly understood, they could result in displacement of shoreside processors that depend on herring and may limit the development of additional shoreside processing capacity.

One possible benefit of the “no action” alternative, however, is if large domestic processing vessels enter the fishery and hire local catcher vessels to supply them herring. The increased revenues from this activity could benefit communities suffering from reduced revenues caused by resource shortfalls and increasing regulation of the fishing industry. Some are concerned, however, that the companies that own these vessels may bring their own catcher vessels into the region. As a result, the benefits may accrue to the regions that are less dependent on the fishing industry.

Impacts of Joint Venture Specifications and Restrictions

The Atlantic herring FMP does not allow directed foreign fishing in order to have benefits from the fishery accrue to domestic fishers. The expansion of the herring fishery will require domestic fishers to develop markets and invest in the vessels and processing capability to enter those markets. Any directed foreign fishing in U.S. waters would directly compete with the attempts of fishers to enter those markets. Further, directed foreign fishing would discourage additional U.S. investment in the herring fishery.

However, the FMP provides for foreign participation in the fishery in the EEZ through joint venture processing (just as the states provide for such participation through internal waters processing). In the EEZ, these vessels are permitted into the fishery only when it suits the needs of the U.S., and such vessels are limited to processing fish in excess of the capacity needed for domestic processors. The total allocations (DAP, JVpt, BT and the Reserve) in any one management area or subarea will not exceed the TAC set for that area or subarea during the fishing year. Forty thousand metric tons is recommended for JVpt after reviewing recent foreign processing performance. While this level is lower than the 80,000 mt allocated by the Commission for the 1998/1999 IWP season, it is over three times higher than the highest actual combined JVP and IWP performance in the last ten years and allows for substantial temporary participation by foreign vessels in the U.S. fishery. In the event of a closure to a directed herring fishery in any one area or subarea, BT, JVP and IWP (the Council and the Commission agree on the recommended allocation of JVpt to JVP and IWP) operations will cease to receive any herring caught from a closed area or subarea. A key element in the review of JV activities is the impact on domestic processing activity - specifically, on the east coast, shoreside processors (since there have not been any large domestic at-sea processors in east coast fisheries).

Strict permitting requirements are imposed on foreign JV partners, which include, at times, restrictions on markets for the fish so that they do not directly compete with domestic processors. Reporting, recordkeeping, and observer regulations are also more stringent than those imposed on U.S. vessels.

In recent years there has been little interest by foreign vessels to participate in herring joint ventures and the actual performance of herring JVs has been insignificant, occurring only in connection with mackerel JVs. (Confidentiality restrictions prevent listing actual JV herring catches in 1997.) The demand for herring JVs is directly linked to world herring prices, most notably herring prices from the North Sea herring fishery.

Impacts of Initial and Annual Specifications

The domestic Atlantic herring fishery has not been subject to limits on catch by a federal FMP since 1982. Because of the lack of current permitting and reporting systems, there is some uncertainty in the current levels of fishing effort and the actual harvest of Atlantic herring. There is also uncertainty in the ability of U.S. fishers to develop new markets for the increased catch levels that are possible, and for U.S. processors to process increased catches of herring that may occur under this FMP.

These uncertainties make it difficult to predict exactly how the fishery will develop. The Council has adopted a precautionary approach to many elements of the management program in order to account for these uncertainties. First, even though current estimates show the stock exceeds B_{MSY} (and may be more than twice B_{MSY}), the Council has recommended that the initial determination of OY be based on B_{MSY} rather than on estimates of current biomass (ABC). OY has been further reduced to less than the maximum amount possible.

DAP is based on existing processing capacity with the addition of nearly 80,000 mt to account for the introduction of new capacity, possible misreporting in the bait fishery, and increases in processing by existing processors.

The amount allocated to BT is about 10 percent larger than the highest amount reported transferred to Canadian canneries in any of the last 10 years. These transfers are part of a traditional cross-border trade in raw herring that helps U.S. sardine canneries obtain herring during periods of low resource abundance in U.S. waters.

Forty thousand mt is recommended for JVpt after reviewing recent foreign processing performance. (This is further discussed above under Impacts of Joint Venture Specifications and Restrictions.)

The zero amount specified for USAP will prevent large domestic processing vessels from entering the fishery in 1999. Concern has been expressed that this results in unfair treatment to such vessels, which cannot participate in at-sea processing while large foreign vessels can (through JVs). The Council's initial recommendation to specify USAP at zero is because of a desire to maintain the status quo in the industry until the effectiveness of the FMP can be evaluated. By contrast to JVs, large domestic processing vessels have a great deal of flexibility once allowed into the fishery. They can compete in the same markets as other processors without restraints. Once allowed into a fishery, there is a perception that they will have earned permanent "rights" to

participate. The possible impacts of large at-sea processors in the Atlantic herring fishery are not clearly understood, arguing for a cautious approach to their introduction into the fishery. While the specification for USAP may be set at a level other than zero mt in the future, the Council's recommendation to allocate zero mt initially is within the Council's discretion.

Finally, the FMP establishes an annual review process, using the Council's Plan Development Team and working closely with the Commission, to monitor the fishery and recommend changes as necessary.

Impacts of Transfers at Sea

Allowing a vessel to transfer herring at sea during a closure or when subject to effort controls complicates the enforcement of the 2,000 lb trip/possession limit. A complete prohibition on all transfers, however, would unnecessarily restrict the lobster and tuna fisheries. Vessels in these fisheries frequently obtain fresh bait through transfers (sales) at-sea. This measure places some controls on transfers at-sea to prevent them from leading to wide scale violations of the trip limit.

1.5 Conclusion

The proposed action could allow increased landings of herring, the extent of which may depend more on market conditions than on the regulations. The FMP could, however, change fishing patterns, particularly in the GOM. The restrictive TAC in the inshore GOM could force fishing effort into other areas where harvest rates may not be as high, possibly increasing operating costs. Spawning closures could also move fishing effort into other areas. The benefit of these changes, however, is that they minimize the risk of a resource collapse due to overfishing, contributing to the development of a sustainable fishery.

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