Office of Regulatory Management

Economic Review Form

Agency name	Virginia Marine Resources Commission		
Virginia Administrative Code (VAC) Chapter citation(s)	4 VAC 20-1270-10 et seq.		
VAC Chapter title(s)	Pertaining to Atlantic Menhaden		
Action title	To modify purse seine area and time restrictions.		
Date this document prepared	November 1, 2022		

Cost Benefit Analysis

Table 1a must be completed for all actions. Tables 1b and 1c must be completed for actions where the agency is exercising discretion, but are not needed if all changes are required by state or federal law or regulation. Delete 1b and 1c if they are not applicable, and include a statement that all changes are mandated.

- (1) Direct Costs & Benefits: Identify all specific, direct economic impacts (costs and/or benefits), anticipated to result from the regulatory change. (A direct impact is one that affects entities regulated by the agency and which directly results from the regulatory change itself, without any intervening steps or effects. For example, the direct impact of a regulatory fee change is the change in costs for these regulated entities.) When describing a particular economic impact, specify which new requirement or change in requirement creates the anticipated economic impact. Keep in mind that this is the proposed change versus the status quo. One bullet has been provided, add additional bullets as needed.
- (2) Quantitative Factors:
 - (a) Enter estimated dollar value of total (overall) direct costs described above.
 - (b) Enter estimated dollar value of total (overall) direct benefits described above.
 - (c) Enter the present value of the direct costs based on the worksheet.
 - (d) Enter the present value of the direct benefits based on the worksheet.
- (3) Benefits-Costs Ratio: Calculate d divided by c OR enter it from the worksheet.
- (4) Net Benefit: Calculate d minus c OR enter it from the worksheet.
- (5) Indirect Costs & Benefits: Identify all specific, indirect economic impacts (costs and/or benefits), anticipated to result from the regulatory change. (An indirect impact is one that results from responses to the regulatory change, but which are not directly required by the regulation. Indirect impacts of a regulatory fee change on regulated entities could include a change in the prices they charge, changes in their operating procedures or employment levels, or decisions to enter or exit the regulated profession or market. Indirect impacts also include responses by other entities that have close economic ties to the regulated entities, such as suppliers or partners.) If there are no indirect costs or benefits, include a specific statement to that effect.

- (6) Information Sources: Describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why they are not.
- (7) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

(1) Direct Costs & Benefits	The purpose of this regulation is to reduce fish spills and potential impacts to shorelines and waterways associated with net tears in the menhaden purse seine fisheries and reduce user conflict by prohibiting purse seine activities: 1) within 1 nm of shorelines in the Chesapeake Bay and the City of Virginia Beach; 2) one half nautical mile on either side of the Chesapeake Bay Bridge Tunnel; and 3) the Thursday prior to and through Memorial Day, July 1-7, and the Thursday prior to and through Labor Day. Direct Costs: N/A Direct Benefits: N/A Menhaden Purse Seine Fisheries: In 2019, the revenue for the total landings				
	of the menhaden fishery in Virginia was \$26,922,000. The value of this fishery should overall remain unchanged as the quota and therefore landings are not being reduced by this regulatory amendment.				
(2) Quantitative Factors	Estimated Dollar Amount Present Value				
Direct Costs	(a) (c)				
Direct Benefits	(b) (d)				
(3) Benefits- Costs Ratio	N/A (4) Net Benefit				
(5) Indirect Costs & Benefits	Indirect Costs: The indirect costs to the menhaden fishery may be increased fishing effort and fuel costs to compensate for the closed areas and 17 days in the Bay closure around holidays if travel times increase. Six of those 17 days are weekends when the fleet does not typically fish. Indirect Benefits: A large part of the tourism revenue in the beach communities of the Easter Shore and Virginia Beach areas are centered on water activities (beach, swimming, fishing, boating, etc). Presently there are on average 4 fish spil per year. If each spill results in dead fish washing ashore on public beacher.	ern lls			

	and clean up averages 3-5 days per event, there will be up to 20 days
	annually that the use of public beaches and waterways are not conducive to
	recreational activities due to dead fish and clean-up efforts. Reduced fish spills in these areas may indirectly lead to greater public utilization of those
	areas. Small businesses on Eastern Shore and Virginia Beach may benefit
	from reducing menhaden fish spills by keeping beaches and waterways
	open for swimming, fishing, boating, etc.
	Reducing user conflicts by creating restricted areas for menhaden fishing
	adjacent to the Chesapeake Bay Bridge Tunnel may increase the fishing experience of Virginia's recreational anglers and increase participation and
	revenue.
(6) Information	Tevende.
(6) Information	
Sources	Virginia Fishing Economics: Economics from Fisheries Economics of the
	United States 2019 Economics and Sociocultural Status and Trends Series.
	NOAA 2019. https://media.fisheries.noaa.gov/2022-06/FEUS-2019-
	final.pdf
	interpor
(7) Optional	

(i) Title §28.2-201 which allows the MRC to establish fisheries regulation necessary to promote the general welfare of the seafood industry and to conserve and promote the seafood and marine resources of the Commonwealth. (ii) These restricted areas and times established by regulation minimize the likelihood of fish spills and dead discards, thereby conserving the marine resources of the Commonwealth.

Impact on Local Partners

- (1) Describe the direct costs and benefits (as defined on page 1) for local partners in terms of real monetary costs and FTEs. Local partners include local or tribal governments, school divisions, or other local or regional authorities, boards, or commissions. If local partners are not affected, include a specific statement to that effect and a brief explanation of the rationale.
- (2) Quantitative Factors:
 - (a) Enter estimated dollar value of total (overall) direct costs described above.
 - (b) Enter estimated dollar value of total (overall) direct benefits described above.
- (3) Indirect Costs & Benefits: Describe any indirect benefits and costs (as defined on page 1) for local partners that are associated with all significant changes. If there are no indirect costs or benefits, include a specific statement to that effect.
- (4) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why they are not.

- (5) Assistance: Identify the amount and source of assistance provided for compliance in both funding and training or other technical implementation assistance.
- (6) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 2: Impact on Local Partners

	DI LOCALI ALLICIS				
(1) Direct Costs	There are no direct costs or benefits for local partners.				
& Benefits					
(2) 0 1 1					
(2) Quantitative					
Factors	Estimated Dollar Amount				
Direct Costs	(a)				
Direct Benefits	(b)				
(3) Indirect	A large part of the tourism revenue in the beach communities of the Eastern				
Costs &	Shore and Virginia Beach areas are centered on water activities (beach,				
Benefits	swimming, fishing, boating, etc). Presently there are on average 4 fish spills				
201101105	per year. If each spill results in dead fish washing ashore on public beaches				
	and clean up averages 3-5 days per event, there will be up to 20 days				
	annually that the use of public beaches and waterways are not conducive to				
	recreational activities due to dead fish and clean-up efforts. Reduced fish				
	spills in these areas may indirectly lead to greater public utilization of those				
	areas. This may lead to indirect benefits to the tourism commissions and				
	visitors bureaus for these areas.				
	TIDIOTS GUITAUR TOT WILDOW				
(4) Information					
Sources					
Sources					
(5) Assistance					
(6) Ontional					
(6) Optional					

Economic Impacts on Families

(1) Describe the direct costs and benefits (as defined on page 1) to a typical family of three (average family size in Virginia according to the U. S. Census) arising from any proposed regulatory changes that would affect the costs of food, energy, housing, transportation,

healthcare, and education. If families are not affected, include a specific statement to that effect and a brief explanation of the rationale.

- (2) Quantitative Factors:
 - (a) Enter estimated dollar value of direct costs.
 - (b) Enter estimated dollar value of direct benefits.
- (3) Indirect Costs & Benefits: Describe any indirect costs and benefits (as defined on page 1) to a typical family of three that are most likely to result from the proposed changes.
- (4) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why not.
- (5) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 3: Impact on Families

Table 3. Impact of	in a annues
(1) Direct Costs	There will be no direct cost or benefit for the average family of three.
& Benefits	
(2) Quantitative	
Factors	Estimated Dollar Amount
Direct Costs	(a)
Direct Benefits	(b)
(3) Indirect	The average family of three may have indirect benefits due to this
Costs &	regulatory change as the reduction of spills may lead to increased utilization
Benefits	of public shoreline and waterways.
	of public shoreline and waterways.
(4) Information	
Sources	
(5) Optional	

Impacts on Small Businesses

- (1) Describe the direct costs and benefits (as defined on page 1) for small businesses. For purposes of this analysis, "small business" means the same as that term is defined in § 2.2-4007.1. If small businesses are not affected, include a specific statement to that effect and a brief explanation of the rationale.
- (2) Quantitative Factors:
 - (a) Enter estimated dollar value of direct costs.

- (b) Enter estimated dollar value of direct benefits.
- (3) Indirect Costs & Benefits: Describe the indirect benefits and costs (as defined on page 1) for small businesses that are most likely to result from the proposed changes.
- (4) Alternatives: Add a qualitative discussion of any equally effective alternatives that would make the regulatory burden on small business more equitable compared to other affected business sectors, and how those alternatives were identified.
- (5) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why not.
- (6) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 4: Impact on Small Businesses

(1) D: . G .	m Silitar Dustresses
(1) Direct Costs	There is no direct cost or benefit for small businesses.
& Benefits	
	900000
(2) Quantitative	
Factors	Estimated Dollar Amount
Direct Costs	(a)
Direct Benefits	(b)
(3) Indirect	Small businesses on Eastern Shore and Virginia Beach may benefit from
` '	THE TOTAL PROPERTY OF THE PROP
Costs &	reducing menhaden fish spills by keeping beaches and waterways open for
Benefits	swimming, fishing, boating, etc.
(4) Alternatives	
(5) Information	
Sources	
Sources	
(6) Optional	

Changes to Number of Regulatory Requirements

For each individual VAC Chapter amended, repealed, or promulgated by this regulatory action, list (a) the initial requirement count, (b) the count of requirements that this regulatory package is adding, (c) the count of requirements that this regulatory package is reducing, (d) the net change in the number of requirements. This count should be based upon the text as written when this

stage was presented for executive branch review. Five rows have been provided, add or delete rows as needed.

Table 5: Total Number of Requirements

	Number of Requirements				
Chapter number	Initial Count (Subsections)	Additions	Subtractions	Net Change	
4 VAC 20-1270	43	6	1	5	

