

Office of Regulatory Management

Economic Review Form

Agency name	Virginia Marine Resources Commission
Virginia Administrative Code (VAC) Chapter citation(s)	4 VAC 20-720
VAC Chapter title(s)	Pertaining to restrictions on oyster harvest
Action title	2022-2023 public oyster harvest season
Date this document prepared	July 22, 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)

<p>(1) Direct Costs & Benefits</p>	<ul style="list-style-type: none"> • This regulation will establish the 2022-2023 areas of public harvest, public oyster harvest seasons, and oyster resource conservation measures. <p>Direct Costs: \$996,138</p> <p>. The potential direct costs of harvesting oysters from Virginia waters would be potential decreased water quality, food sources, and habitat for other marine resources of the Commonwealth. However, there are no data available to quantify this expected direct cost.</p> <p>The cost of replacing habitat removed by the harvest of oyster shell can be quantified as cost of replacing the shell that is removed by using current market values.</p> <ul style="list-style-type: none"> • \$4.50 per bushel of shell x 221,364 bushels = \$996,138 <p>Direct Benefits: Estimated at \$12,121,880 (221,364 x \$54.76)</p> <p>The average harvest from public ground over the last 10 season has been 221,364 bushels per year and the average price per bushel of public oysters was \$54.76 over the last 5 years. There is some fluctuation in price due to market conditions and the bushel price was lower than this longer term average in the spring of 2022. It is anticipated that it will increase to a level closer to this longer term average based on current market conditions.</p> <p>Any regulatory changes that allow for increased harvest may result in a higher direct benefit. However, increased harvests in the near term may result in decreased harvest in the future and a less economically and ecologically sustainable long term fishery.</p>	
<p>(2) Quantitative Factors</p>	<p>Estimated Dollar Amount</p>	<p>Present Value</p>
<p>Direct Costs</p>	<p>(a) \$996,138</p>	<p>(c) \$996,138 (Same as (a) since the regulation applies only to one year.)</p>

Direct Benefits	(b) \$12,121,880	(d) \$12,121,880 (Same as (b) since the regulation applies only to one year.)	
(3) Benefits-Costs Ratio	12.17	(4) Net Benefit	\$11,125,742
(5) Indirect Costs & Benefits	<p>Indirect Costs: \$2,500,000 a year is expended on maintaining the public oyster grounds open to harvest. These are dedicated General Funds for oyster replenishment.</p> <p>If there was not an oyster season established by regulation in Virginia, consumers may still get oysters harvested in other states, however there would be an additional cost in the form of decreased quality and cost of product.</p> <p>Indirect Benefits: Public oyster harvest helps provide income to the Virginia Seafood industry and Virginia Watermen during the winter months when other economically important species are not readily available.</p>		
(6) Information Sources	<p>MRC Mandatory Harvest Reporting Program and Voluntary Seafood Pricing Survey.</p> <p>The <i>Mandatory Harvest Reporting Program</i> is an MRC run program that requires all commercially licensed seafood harvesters in Virginia to report all harvests of seafood on a monthly basis.</p> <p>The <i>Voluntary Seafood Pricing Survey</i> is a MRC run pricing survey that solicits dockside prices of seafood from Virginia Seafood Dealers on an annual basis.</p>		
(7) Optional	<p>Market price will fluctuate and it is also possible that the estimated harvest could increase as there is the possibility of latent effort entering the fishery, particularly if market conditions result in increased demand for oysters. Harvest has topped 300,000 bushels in previous seasons. Current harvest amounts are related to market conditions and regulations intended to increase long term sustainability.</p>		

(i) Title §28.2-507 and §28.2-524 allow the MRC to establish oyster seasons by regulation in order to protect and promote the growth of oysters as well as the oyster fishery in Virginia. (ii) The season established by Title §28.2-506 may not protect and promote the oyster natural resource to the greatest extent possible when compared to the season established by MRC regulation. The opening and closing of public grounds during specific seasons by regulation provide a greater potential benefit from the reoccurring costs of maintaining public oyster grounds in the form of shell planting. These seasons established by regulation help promote the oyster fishery by maximizing the economic benefits of oysters to the oyster fishery. These

regulatory amendments will also maximize potential yield and associated economic value of the oyster resource.

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

(1) Direct Costs & Benefits	There are no local partners that would be affected by these changes
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a)
Direct Benefits	(b)
(3) Indirect Costs & Benefits	
(4) Information Sources	

(5) Assistance	
(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

(1) Direct Costs & Benefits	A typical family of three would not be affected by changes to this regulation as typical families are not engaged in commercial oyster harvest.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a)
Direct Benefits	(b)
(3) Indirect Costs & Benefits	

(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) Direct Costs & Benefits	A considerable portion of the participants in the Virginia public oyster fishery are likely small or independent businesses.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) The proposed change would not create any new costs for independent watermen.
Direct Benefits	(b) The majority of the Direct Benefits listed previously would go to independent watermen
(3) Indirect Costs & Benefits	

(4) Alternatives	
(5) Information 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

Chapter number	Number of Requirements			
	Initial Count	Additions	Subtractions	Net Change
4 VAC 20-720	5	0	0	0