Office of Regulatory Management

Economic Review Form

Agency name	Virginia Marine Resources Commission
Virginia Administrative Code (VAC) Chapter citation(s)	4VAC20-390
VAC Chapter title(s)	Wetlands Mitigation – Compensation Policy
Action title	Compliance with the mandate of Chapter 334 of the 2023 Acts of the Virginia General Assembly (HB 1950).
Date this document prepared	October 24, 2024
Regulatory Stage (including Issuance of Guidance Documents)	Final

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulations intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2. Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

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

(1) Direct & Indirect Costs & Benefits (Monetized)	This proposed revision aims to guide users in selecting mitigation options for tidal wetland losses, notably prioritizing mitigation banks over on-site restoration or in-lieu fees at the locality level. This shift is based on updated information regarding economic and ecological factors, representing the economic preference for businesses in this space. Mitigation banks, managed by private entities, are highlighted for their role in constructing and maintaining ecologically sound wetlands and providing efficient compensatory mitigation options for permitting.

	Previously, the preference for on-site solutions faced challenges such as insufficient monitoring, short project lifespans, and permitting delays, making entry into mitigation banking costly and risky, and limiting options across the Commonwealth. The proposed changes aim to streamline the permit process by promoting an increase in private banks, fostering competition to lower mitigation costs, and endorsing the ecologically preferred method of offsetting impacts to wetlands. Direct Costs: In certain circumstances, costs may temporarily rise, particularly when an "ad hoc in-lieu fee" is chosen for compensatory mitigation by the wetlands board. Currently, these fees are a last resort and are only applicable for smaller impacts to wetlands not requiring federal permits. However, not all localities have such programs, and the regulation's stipulation that fees should reflect necessary compensation acreage isn't consistently enforced, often resulting in insufficient fees for wetlands projects. To meet Chesapeake Bay Program Agreement obligations, the proposed revision suggests setting in-lieu fees at an amount that reflects the cost of establishing new wetlands that are at least twice the impacted wetlands area. Using Virginia Beach as an example, the regulation change aims to align fees with mitigation bank rates, potentially increasing fees by an additional \$15 per sq. ft., which would total of \$4,695 in 2023, for an average of \$1,173.75 per permit. In the long term, this adjustment aims to make in-lieu fees less appealing, encouraging demand for wetlands mitigation bank credits, thus offsetting short-term costs with a market-based mitigation option. Indirect Costs: None. Direct Benefits: The legislative mandate of HB 1950 seeks to update 4VAC20-390, aligning VMRC's Wetlands Mitigation Compensation Policy regulation with state and federal guidelines from the Department of Environmental Quality and the U.S. Army Corps of Engineers for compensatory mitigation in both tidal and non-tidal wetlands. These updates prioritize wetland banks as the preferred compensation method and recognize federally approved in-lieu fee programs as another valid form of mitigation for state permits. This is expected to drive demand for wetland bank credits and approved in-lieu fee program credits for permissible tidal wetland impacts, potentially leading to the establishment of additional mitigation banks and fee programs in Virginia. Making the ad hoc in-lieu fee program less attractive aims to further boost demand for mitigation banks. After accounting for acquisition costs and costs of developing wetlands on site, the profit to an operator is estimated at \$5 to \$10 per credit sold. Even at the lower figure, this could represent a profit of \$375,000 per year, based on demand levels at an existing bank. While

	the establishment of new tidal wetlands mitigation banks promises substantial benefits, the direct profit from this regulation change is estimated at a marginal 1%, or $3,750 per year, based on existing bank demand. Nonetheless, the availability of more market-based mitigation options should help offset increased costs for those utilizing ad hoc in-lieu fees for mitigation purposes. Indirect Benefits: As the market becomes more conducive to constructing and implementing banks, it's anticipated that permitting negotiations for mitigation will be streamlined thus reducing uncertainty for applicants and their agents. This is because credits will be readily available, facilitating smoother processes.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) $1,173.75	(b) $3,750
(3) Net Monetized Benefit	$2,576.25 (subtract (a) from (b) above).	
(4) Other Costs & Benefits (Non-Monetized)	Increasing the ad hoc in-lieu fee should give the localities that allow such fees sufficient funds to carry out wetlands establishment projects. In addition, prioritizing wetlands mitigation banks as a compensatory mitigation option will similarly increase the number of wetlands in the area. The public will benefit from the additional wetlands by enjoying the functions they provide, such as flood protection, wildlife habitat, and increased water quality.	
(5) Information Sources	The U.S. Army Corps of Engineers Regulatory In-lieu Fee and Bank Information Tracking System (RIBITS), which provides information about existing and proposed wetlands mitigation banks throughout the country; conversations with the sponsor of a tidal wetlands mitigation bank; agency staff; compensatory mitigation requirements reported from the Virginia Beach wetlands board (adjusted to remove an outlier).	

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: Continuing as-is would not only render the agency non-compliant with Federal standards but also continue to deter the creation of new tidal wetlands mitigation banks. To date, only two tidal wetland banks have been approved by the IRT. Both are located in the James River watershed, with no tidal wetland banks in the York, Rappahannock, and Potomac River watersheds. This lack of economic incentive has led to costs, in the form of lost opportunity, to potential operators of tidal wetlands mitigation banks. The analysis would be the inverse of the analysis set forth in 1(a) above.

	Indirect Costs: None. Direct Benefits: None. Indirect Benefits: None.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) $3,750	(b) $0
(3) Net Monetized Benefit	$0	
(4) Other Costs & Benefits (Non-Monetized)	The public would lose the benefit of wetlands impacted by development until a substitute compensatory mitigation project could be established.	
(5) Information Sources	Same as in 1(a) above.	

Table 1c: Costs and Benefits under Alternative Approach(es)

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: The primary alternative would be to eliminate ad hoc in-lieu fees as an option for compensatory mitigation requirements. Such fees are currently only used for small projects in watersheds where there are no mitigation banks selling credits. Elimination of the ad hoc in-lieu fee would mean that the only compensatory mitigation option available would be a permittee project creating wetlands either on-site or off-site from the permitted impacts if a mitigation bank is not available. It is likely cheaper for a locality to carry out a large wetlands creation project using ad hoc in-lieu fees collected from a number of projects than it is for a permittee to create a smaller wetland to compensate for the impacts from the permittee's single project because of economies of scale. The permittee would thus bear increased compensatory mitigation costs estimated at approximately $10/SF for both vegetated and non-vegetated wetlands. Using the Virginia Beach figures referenced above, this would equate to an increase of an average of $1,125 per project in which an in-lieu fee would have been used. In addition, the localities that allow ad hoc in-lieu fees as a compensatory mitigation option would no longer be able to collect such fees. Using Virginia Beach as an example, this would lead to a reduction in fees over 2023 in the amount of approximately $19,387. Indirect Costs: None. Direct Benefits: Like making the ad hoc in-lieu fee less attractive, elimination of the fee would be expected to increase demand for wetland

	mitigation bank credits, which would, in turn, encourage the creation of new banks. As noted previously, the profit to an operator of a wetlands mitigation bank is estimated at $5 to $10 per credit sold after accounting for acquisition costs and the costs of wetlands establishment. This could represent a profit of $375,000 per year, based on demand levels at an existing bank. As noted above, however, the proportion of this benefit directly attributable to the change in the regulation is marginal and estimated at 1%. Indirect Benefits: None.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) $19,387	(b) $3,750
(3) Net Monetized Benefit	$0	
(4) Other Costs & Benefits (Non-Monetized)	As with 1(a) above, to the extent that the change would potentially encourage the establishment of new banks, there would be a public benefit in the form of maintained wetlands functions and a benefit to permittees in the form of a more efficient method of complying with compensatory mitigation requirements.	
(5) Information Sources	Same as 1(a) above.	

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: None Indirect Costs: None Direct Benefits: Localities that collect ad hoc in-lieu fees will see increased collections in the short-term. However, in the long-term, the fees collected should decrease in favor of more market-based compensatory mitigation approaches, such as wetlands mitigation banks. As noted above, the short-term increase in the ad hoc in-lieu fee attributable to the regulation change would be expected to be approximately $4,695 per year, based on Virginia Beach's compensatory mitigation reports for 2023.

	Indirect Benefits: None	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) $0	(b) $4,695
(3) Other Costs & Benefits (Non-Monetized)	None	
(4) Assistance	None required.	
(5) Information Sources	Same as 1(a) above.	

Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 3: Impact on Families

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: None Indirect Costs: None Direct Benefits: None Indirect Benefits: None	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) $0	(b) $0
(3) Other Costs & Benefits (Non-Monetized)	None	
(4) Information Sources	VMRC permitting database, USACE, Mitigation bank database (RIBITS), personal conversations with mitigation bank owners	

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: None Indirect Costs: None Direct Benefits: A mitigation bank sponsor may qualify as a small business. To the extent that it does, the benefits would be the same as noted in 1(a) above. Indirect Benefits: None.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) $0	(b) $3,750
(3) Other Costs & Benefits (Non-Monetized)	None	
(4) Alternatives	None needed.	
(5) Information Sources	Same as 1(a) above.	

Changes to Number of Regulatory Requirements

Table 5: Regulatory Reduction

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved*	**Authority of Change**	**Initial Count**	**Additions**	**Subtractions**	**Total Net Change in Requirements**
4 VAC 20-390-10	**(M/A):**	**2**	0	0	0
	(D/A):	**3**	1	1	0
	(M/R):	**1**	0	0	0

through 20-390-60	**(D/R):**	**2**	0	1	-1
				Grand Total of Changes in Requirements:	**(M/A): 0**
					(D/A): 0
					(M/R): 0
					(D/R): -1

Key:
Please use the following coding if change is mandatory or discretionary and whether it affects externally regulated parties or only the agency itself:
(M/A): Mandatory requirements mandated by federal and/or state statute affecting the agency itself
(D/A): Discretionary requirements affecting agency itself
(M/R): Mandatory requirements mandated by federal and/or state statute affecting external parties, including other agencies
(D/R): Discretionary requirements affecting external parties, including other agencies

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved*	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases

Other Decreases or Increases in Regulatory Stringency (if applicable)

VAC Section(s) Involved*	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
4VAC20-390-50	Prioritizes mitigation banks and approved in lieu fee programs for compensatory mitigation requirements.	Spurs demand for credits from mitigation banks and approved in lieu fee programs. This should cause additional banks and approved in lieu fee programs to be formed, which should offset the additional costs below by providing lower-cost compensatory mitigation options for applicants because banks and approved in lieu fee programs can take advantage of economies of scale.
4VAC20-390-60	Discourages ad hoc in-lieu fees as a compensatory mitigation option and increases the minimum amount of such fees.	The change should make market-based compensatory mitigation options more attractive and prevent localities from undercutting such options with artificially low fees that are ineffective at replacing impacted wetlands. The increased fees should be offset in the long-term by the increased availability of market-based

		compensatory mitigation options as described above.