

Office of Regulatory Management
Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-900
VAC Chapter title(s)	Certification of Nonpoint Source Nutrient Credits
Action title	Amendment to change the Certification of Nonpoint Source Nutrient Credits (9VAC25-900 et seq.) in response to Chapter 723 of the 2023 Virginia Acts of Assembly (SB959)
Date this document prepared	May 31, 2023
Regulatory Stage (including Issuance of Guidance Documents)	Final Exempt Action

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)

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p>Direct Costs: This regulatory change is being made in response to Chapter 723 of the 2023 Virginia Acts of Assembly. This statutory change and related regulation concerns the delivery factors used to calculate the number of nonpoint source nutrient credits generated by nutrient banks outside of the Chesapeake Bay watershed. Nonpoint source nutrient credits are reduced by the use of delivery factors (0 to 1) which account for instream attenuation that occurs prior to reaching tidal waters.</p> <p>This regulatory change allows the delivery factors used to reduce the number of nonpoint source nutrient credits generated by a nutrient bank located outside of the Chesapeake Bay watershed to be based on either i) the average of the delivery factors within the Chesapeake Bay watershed (the current practice) or ii) a delivery factor that is deemed by the DEQ Director to be based on the best available scientific and technical information (the new option allowed by the underlying statutory change). Depending on the scientific and technical information presented to DEQ, this regulatory change may result in a larger or smaller delivery factor for nonpoint source nutrient credits generated outside of the Chesapeake Bay watershed. Therefore, the direct costs, if any, are unknown.</p> <p>Indirect Costs: Any change to the delivery factors would be based on scientific and technical information presented to DEQ, and it is unknown whether this scientific and technical information would support larger or smaller delivery factors. Therefore, the indirect costs, if any, are unknown. If there are indirect costs, such as due to delivery factors that reduce the number of credits available it could lead to increases in the price of credits, which would be passed on to regulated entities that choose to purchase credits for compliance purposes.</p> <p>Direct Benefits: This regulatory change allows the delivery factors used to reduce the number of nonpoint source nutrient credits generated by a nutrient bank located outside of the Chesapeake Bay watershed to be based on either i) the average of the delivery factors within the Chesapeake Bay watershed (the current practice) or ii) a delivery factor that is deemed by the DEQ Director to be based on the best available scientific and technical information (the new option allowed by the underlying statutory change). Depending on the scientific and technical information presented to DEQ, this regulatory change may result in a larger or smaller delivery factor for nonpoint source nutrient credits generated outside of the Chesapeake Bay watershed. Therefore the direct benefits, if any, are unknown.</p>
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	<p>Indirect Benefits: Any change to the delivery factors would be based on scientific and technical information presented to DEQ, and it is unknown whether this scientific and technical information would support larger or smaller delivery factors. Therefore, the indirect benefits, if any, are unknown. If there are indirect benefits, such as due to delivery factors that increase the number of credits available, it could lead to decreases in the price of credits, which would benefit regulated entities that choose to purchase credits for compliance purposes.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	<p>(a) Any change to the delivery factors would be based on scientific and technical information presented to DEQ, and it is unknown whether this scientific and technical information would support larger or smaller delivery factors. Therefore, the indirect costs, if any, are unknown. If there are indirect costs, such as due to delivery factors that reduce the number of credits available it could lead to increases in the price of credits, which would be passed on to regulated entities that choose to purchase credits.</p>	<p>(b) Any change to the delivery factors would be based on scientific and technical information presented to DEQ, and it is unknown whether this scientific and technical information would support larger or smaller delivery factors. Therefore, the indirect benefits, if any, are unknown. If there are indirect benefits, such as due to delivery factors that increase the number of credits available, it could lead to decreases in the price of credits, which would benefit regulated entities that choose to purchase credits.</p>
(3) Net Monetized Benefit	<p>No conclusive statement can be made about specific net monetized benefits. Depending on the scientific and technical information presented to DEQ, this regulatory change may result in a larger or smaller delivery factors for nonpoint source nutrient credits generated outside of the Chesapeake Bay watershed. Therefore, the net benefits are unknown.</p>	
(4) Other Costs & Benefits (Non-Monetized)	<p>No conclusive statement can be made about specific non-monetized costs and benefits, however, the Commonwealth and its local partners generally benefits from the protection of the Commonwealth's</p>	

	environment and natural resources from pollution, impairment, or destruction. This law and resulting regulation are beneficial to human health and the environment through the protection of Virginia’s waterways. As a result, benefits include recreational uses of Virginia’s waterways such as fishing and economic uses of Virginia’s waterways such as use by the shellfish industry and tourism.
(5) Information Sources	N/A

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

(1) Direct & Indirect Costs & Benefits (Monetized)	<p>Direct Costs: Nonpoint source nutrient credits are reduced by the use of delivery factors (0 to 1) which account for instream attenuation that occurs prior to reaching tidal waters. Currently the delivery factors used for calculating the number of nonpoint source nutrient credits generated by nutrient banks outside of the Chesapeake Bay watershed are based on an average of the delivery factors for the watersheds in the Chesapeake Bay Program watershed model. Current average delivery factor values for Total Nitrogen, Total Phosphorous, and Sediment are 0.56, 0.51, and 0.29, respectively.</p> <p>It is unknown whether these delivery factors are larger or smaller than alternative delivery factors, therefore direct costs of the status quo are unknown.</p> <p>Indirect Costs: Regulated entities may purchase nonpoint source nutrient credits for compliance purposes. The price of those credits depends on market factors (i.e., supply and demand) and the delivery factors are one factor that influences the supply of nonpoint source nutrient credits available for purchase.</p> <p>It is unknown whether these delivery factors are larger or smaller than alternative delivery factors, therefore indirect costs of the status quo are unknown.</p> <p>Direct Benefits: Nonpoint source nutrient credits are reduced by the use of delivery factors (0 to 1) which account for instream attenuation that occurs prior to reaching tidal waters. Currently the delivery factors used for calculating the number of nonpoint source nutrient credits generated by nutrient banks outside of the Chesapeake Bay watershed are based on an average of the delivery factors for the watersheds in the Chesapeake Bay Program watershed model. Current average delivery factor values for</p>
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	<p>Total Nitrogen, Total Phosphorous, and Sediment are 0.56, 0.51, and 0.29, respectively.</p> <p>It is unknown whether these delivery factors are larger or smaller than alternative delivery factors, therefore direct benefits of the status quo are unknown.</p> <p>Indirect Benefits: Regulated entities may purchase nonpoint source nutrient credits for compliance purposes. The price of those credits depends on market factors (i.e., supply and demand) and the delivery factors are one factor that influences the supply of nonpoint source nutrient credits available for purchase.</p> <p>It is unknown whether these delivery factors are larger or smaller than alternative delivery factors, therefore indirect benefits of the status quo are unknown.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) The direct and indirect costs are indeterminate.	(b) The direct and indirect benefits are indeterminate.
(3) Net Monetized Benefit	No conclusive statement can be made about specific net monetized benefits.	
(4) Other Costs & Benefits (Non-Monetized)	The regulation is protective of the environment, and the Commonwealth generally benefits from the protection of the Commonwealth's environment and natural resources from pollution, impairment, or destruction.	
(5) Information Sources	N/A	

Agency Note: This final exempt regulatory action is mandated by state statute effective July 1, 2023. Therefore, Table 1c is not required and has been removed.

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

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p>Direct Costs: N/A</p> <p>Indirect Costs: Depending on the scientific and technical information presented to DEQ, this regulatory change may result in a delivery factor for nonpoint source nutrient credits generated outside of the Chesapeake Bay watershed that decreases the supply of nonpoint source nutrient credits outside of the Chesapeake Bay watershed, which would increase the price of those nonpoint source nutrient credits for entities, which could include local governments, that choose to purchase nonpoint source nutrient credits as a compliance option. There is uncertainty concerning any resulting changes to the price of nonpoint source nutrient credits associated with the regulatory change.</p> <p>Direct Benefits: N/A</p> <p>Indirect Benefits: Depending on the scientific and technical information presented to DEQ, this regulatory change may result in a delivery factor for nonpoint source nutrient credits generated outside of the Chesapeake Bay watershed that increases the supply of nonpoint source nutrient credits outside of the Chesapeake Bay watershed. If so, this would decrease the price of those nonpoint source nutrient credits for entities, which could include local governments, that choose to purchase nonpoint source nutrient credits as a compliance option. There is uncertainty concerning any resulting changes to the price of nonpoint source nutrient credits associated with the regulatory change.</p>
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<p>(2) Present Monetized Values</p>	<p>Direct & Indirect Costs</p> <p>(a) Any change to the delivery factors would be based on scientific and technical information presented to DEQ, and it is unknown whether this scientific and technical information would support larger or smaller delivery factors. Therefore, the indirect costs, if any, are unknown. If there are indirect costs, such as due to delivery factors that reduce the number of credits available it could lead to increases in the price of</p>	<p>Direct & Indirect Benefits</p> <p>(b) Any change to the delivery factors would be based on scientific and technical information presented to DEQ, and it is unknown whether this scientific and technical information would support larger or smaller delivery factors. Therefore, the indirect benefits, if any, are unknown. If there are indirect benefits, such as due to delivery factors that increase the number of credits available it could lead to decreases in the price</p>
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	credits, which would be passed on to regulated entities, which could include local governments, that choose to purchase credits.	of credits, which would benefit regulated entities, which could include local governments, that choose to purchase credits.
(3) Other Costs & Benefits (Non-Monetized)	No conclusive statement can be made about specific non-monetized costs and benefits, however, the Commonwealth and its local partners generally benefits from the protection of the Commonwealth’s environment and natural resources from pollution, impairment, or destruction. This law and resulting regulation are beneficial to human health and the environment through the protection of Virginia’s waterways. As a result, benefits include recreational uses of Virginia’s waterways such as fishing and economic uses of Virginia’s waterways such as use by the shellfish industry and tourism.	
(4) Assistance	N/A	
(5) Information Sources	N/A	

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: N/A Indirect Costs: N/A Direct Benefits: N/A Indirect Benefits: N/A	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) N/A	(b) N/A

(3) Other Costs & Benefits (Non-Monetized)	N/A
(4) Information Sources	N/A

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)	<p>Direct Costs: N/A</p> <p>Indirect Costs: Depending on the scientific and technical information presented to DEQ, this regulatory change may result in a delivery factor for nonpoint source nutrient credits generated outside of the Chesapeake Bay watershed that decreases the supply of nonpoint source nutrient credits outside of the Chesapeake Bay watershed, which would increase the price of those nonpoint source nutrient credits for entities, which could include small businesses, that choose to purchase nonpoint source nutrient credits as a compliance option. There is uncertainty concerning any resulting changes to the price of nonpoint source nutrient credits associated with the regulatory change.</p> <p>Direct Benefits: N/A</p> <p>Indirect Benefits: Depending on the scientific and technical information presented to DEQ, this regulatory change may result in a delivery factor for nonpoint source nutrient credits generated outside of the Chesapeake Bay watershed that increases the supply of nonpoint source nutrient credits outside of the Chesapeake Bay watershed. If so, this would decrease the price of those nonpoint source nutrient credits for entities, which could include small businesses, that choose to purchase nonpoint source nutrient credits as a compliance option. There is uncertainty concerning any resulting changes to the price of nonpoint source nutrient credits associated with the regulatory change.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits

	<p>(a) Any change to the delivery factors would be based on scientific and technical information presented to DEQ, and it is unknown whether this scientific and technical information would support larger or smaller delivery factors. Therefore, the indirect costs, if any, are unknown. If there are indirect costs, such as due to delivery factors that reduce the number of credits available it could lead to increases in the price of credits, which would be passed on to regulated entities, which could include small businesses, that choose to purchase credits.</p>	<p>(b) Any change to the delivery factors would be based on scientific and technical information presented to DEQ, and it is unknown whether this scientific and technical information would support larger or smaller delivery factors. Therefore, the indirect benefits, if any, are unknown. If there are indirect benefits, such as due to delivery factors that increase the number of credits available it could lead to decreases in the price of credits, which would benefit regulated entities, which could include local governments, that choose to purchase credits.</p>
<p>(3) Other Costs & Benefits (Non-Monetized)</p>	<p>No conclusive statement can be made about specific non-monetized costs and benefits; however, the Commonwealth generally benefits from the protection of the Commonwealth’s environment and natural resources from pollution, impairment, or destruction. This law and resulting regulation are beneficial to human health and the environment through the protection of Virginia’s waterways. As a result, benefits include recreational uses of Virginia’s waterways such as fishing and economic uses of Virginia’s waterways such as use by the shellfish industry and tourism, which could include small businesses.</p>	
<p>(4) Alternatives</p>	<p>N/A</p>	
<p>(5) Information Sources</p>	<p>N/A</p>	

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	Initial Count	Additions	Subtractions	Net Change
9VAC25-900-110	2	0	0	0