

Office of Regulatory Management
Economic Review Form

Agency name	Virginia Soil and Water Conservation Board
Virginia Administrative Code (VAC) Chapter citation(s)	4VAC 50-20
VAC Chapter title(s)	Impounding Structure Regulations
Action title	Periodic Review of Impounding Structure Regulations
Date this document prepared	November 15, 2023
Regulatory Stage (including Issuance of Guidance Documents)	Periodic Review

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)	<i>This table is not required to be completed for a periodic review.</i>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Net Monetized Benefit		
(4) Other Costs & Benefits (Non-Monetized)		
(5) Information Sources		

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

(1) Direct & Indirect Costs & Benefits (Monetized)	<i>This table is not required to be completed for a periodic review.</i>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Net Monetized Benefit		
(4) Other Costs & Benefits (Non-Monetized)		
(5) Information Sources		

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

(1) Direct & Indirect Costs & Benefits (Monetized)	<i>This table is not required to be completed for a periodic review.</i>	
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(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Net Monetized Benefit		
(4) Other Costs & Benefits (Non-Monetized)		
(5) Information Sources		

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)	<p>Direct Costs: These regulations establish the criteria required of dam owners to “ensure that impounding structures in the Commonwealth are properly and safely constructed, maintained and operated” (§10.1-605 of the <i>Code of Virginia</i>). There are approximately 2,600 impounding structures (“dam”) that meet the thresholds established in the Dam Safety Act (§10.1-604.1 et seq of the <i>Code of Virginia</i>); of these dams, 200 are owned or maintained by local governments. There are several categories of costs associated with owning and maintaining a dam. The Board is authorized to establish and collect fees for certain administrative activities by §10.1-613.5 of the Code of Virginia; those activities include the issuance of operation and maintenance certificates, alteration permits, construction permits, and certain engineering analysis. Costs are associated with the development of the necessary engineering documents such as dam break inundation zone mapping, hazard potential classification, emergency action plan development, and inspection reports conducted by professional engineers. The costs for the initial development of these engineering documents varies tremendously from dam to dam but the average estimated cost is \$36,000. There are additional routine maintenance costs such as mowing and the removal of trees and woody vegetation. If a dam does not meet the performance standards established in 4VAC50-20-50 (performance standards required for impounding structures), rehabilitation of the dam may be needed. These structural improvements may require significant financial contributions from the owner. The costs vary dramatically based on</p>
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	<p>individual conditions at each dam; however, these rehabilitations can cost from thousands to millions of dollars to the owner.</p> <p>Indirect Costs: There are no known indirect costs to local partners related to this regulation.</p> <p>Direct Benefits: Complying with this regulation ensures that dams are maintained and operated in a safe manner, ensuring public safety. Additional information about a dam that assists with determining the dam’s potential risks enables local first responders to react appropriately during a storm event or other disaster.</p> <p>Indirect Benefits: There are no known indirect benefits to local partners related to this regulation.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Other Costs & Benefits (Non-Monetized)		
(4) Assistance		
(5) Information Sources		

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)	<p>Direct Costs: There are no direct costs to families as a result of this regulatory action.</p> <p>Indirect Costs: There are no indirect costs to families as a result of this regulatory action.</p> <p>Direct Benefits: There are no direct benefits to families as a result of this regulatory action.</p>
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	Indirect Benefits: There are no indirect benefits to families as a result of this regulatory action.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Other Costs & Benefits (Non-Monetized)		
(4) Information Sources		

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: There are no direct costs to small businesses as a result of this regulatory action.</p> <p>Indirect Costs: There are no indirect costs to small businesses as a result of this regulatory action.</p> <p>Direct Benefits: Many engineering and consulting firms are small businesses. These regulations require engineering documents and studies related to the development of hazard inundation maps, hazard classification potential, emergency action plan development, and inspection reports conducted by a professional engineer. These requirements may present opportunities for certain small businesses.</p> <p>Indirect Benefits: There are no indirect benefits to small businesses as a result of this regulatory action.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Other Costs & Benefits (Non-Monetized)		

(4) Alternatives	
(5) Information Sources	

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	Net Change
	Statutory:				
	Discretionary:				
				Total Net Change of Statutory Requirements:	
				Total Net Change of Discretionary Requirements:	

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

Length of Guidance Documents (only applicable if guidance document is being revised)

Title of Guidance Document	Original Length	New Length	Net Change in Length

*If the agency is modifying a guidance document that has regulatory requirements, it should report any change in requirements in the appropriate chart(s).