

Office of Regulatory Management
Economic Review Form

Agency name	Board of Wildlife Resources
Virginia Administrative Code (VAC) Chapter citation(s)	4 VAC 15-350
VAC Chapter title(s)	Fish: Gigs, Grab Hooks, Trotlines, Snares, Etc.
Action title	Limblime requirements and bowfishing
Date this document prepared	October 11, 2022

Cost Benefit Analysis

Table 1a must be completed for all actions. Tables 1b and 1c must be completed for actions (or portions thereof) where the agency is exercising discretion, including those where some of the changes are mandated by state or federal law or regulation. Tables 1b and 1c are not needed if **all** changes are mandated, and the agency is not exercising any discretion. In that case, enter a statement to that effect.

- (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"> • Requiring that limblines be removed from the water, the shoreline, and tree limbs when not in use. <p>Direct Costs: No direct economic cost is believed to be experienced from this change.</p> <p>Direct Benefits: No direct economic benefit is believed to be experienced from this change.</p> <ul style="list-style-type: none"> • Modifying bag limits on gar and bowfin taken with archery tackle during the spawning period. <p>Direct Costs: No direct economic cost is believed to be experienced from this change.</p> <p>Direct Benefits: No direct economic benefit is believed to be experienced from this change.</p> <ul style="list-style-type: none"> • Prohibiting discarding fish commonly taken by bowfishing into public waters or on public property. <p>Direct Costs: No direct economic cost is believed to be experienced from this change.</p> <p>Direct Benefits: No direct economic benefit is believed to be experienced from this change.</p>	
<p>(2) Quantitative Factors</p>	<p>Estimated Dollar Amount</p>	<p>Present Value</p>
<p>Direct Costs</p>	<p>(a) Indeterminate</p>	<p>(c) Indeterminate</p>

Direct Benefits	(b) Indeterminate	(d) Indeterminate	
(3) Benefits-Costs Ratio	Indeterminate	(4) Net Benefit	Indeterminate
(5) Indirect Costs & Benefits	Indirect benefits of removing limblines when not in use include reducing the amount of left fishing equipment (i.e. litter) that needs to be picked up. Imposing creel limits on gar and bowfin take during spawning periods benefits those species and thus has an indirect benefit on the quality of that fishery and the public's enjoyment of it. Likewise, prohibiting fish from being discarded in public waters or on public lands helps promote a better experience for the public on the water, and thus has an indirect benefit on fishing and boating recreational activities. There are not believed to be indirect costs to these actions.		
(6) Information Sources	Department of Wildlife Resources freshwater fisheries management data		
(7) Optional			

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

This table addresses current requirements and the implications of not making any changes. In other words, describe the costs and benefits of maintaining the current regulatory requirements as is.

(1) Direct Costs & Benefits	<ul style="list-style-type: none"> • Requiring that limblines be removed from the water, the shoreline, and tree limbs when not in use. <p>Direct Costs: No direct economic cost is believed to be experienced from the status quo.</p> <p>Direct Benefits: No direct economic benefit is believed to be experienced from the status quo.</p> <ul style="list-style-type: none"> • Modifying bag limits on gar and bowfin taken with archery tackle during the spawning period. <p>Direct Costs: No direct economic cost is believed to be experienced from the status quo.</p> <p>Direct Benefits: No direct economic benefit is believed to be experienced from the status quo.</p>
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	<ul style="list-style-type: none"> • Prohibiting discarding fish commonly taken by bowfishing into public waters or on public property. <p>Direct Costs: No direct economic cost is believed to be experienced from the status quo.</p> <p>Direct Benefits: No direct economic benefit is believed to be experienced from the status quo.</p>		
(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) Indeterminate	(c) Indeterminate	
Direct Benefits	(b) Indeterminate	(d) Indeterminate	
(3) Benefits-Costs Ratio	Indeterminate	(4) Net Benefit	Indeterminate
(5) Indirect Costs & Benefits	Litter, whether in the form of limblines left after use or discarded fish from bowfishing, does have an indirect cost to public enjoyment of their recreational experiences on the water, and in the worst cases, poses the potential for injury to persons or wildlife associated with discarded limblines. Not managing the gar or bowfin populations in accordance with the best biological interests of those species likewise has an indirect cost to the Department's ability to provide qualify freshwater fishing opportunities and public enjoyment of those opportunities. The only indirect benefit of the status quo is enhanced opportunity for gar and bowfin harvest even during the spawning period, which may provide some short term additional opportunity, but at the cost of the long term best interests of the fishery.		
(6) Information Sources	Department of Wildlife Resources freshwater fisheries management data		
(7) Optional			

Table 1c: Costs and Benefits under an Alternative Approach

This table addresses an alternative approach to accomplishing the objectives with different requirements. These alternative approaches may include the use of reasonably available alternatives in lieu of regulation, or information disclosure requirements or performance standards instead of regulatory mandates.

(1) Direct Costs & Benefits	<ul style="list-style-type: none"> Requiring that limblines be removed from the water, the shoreline, and tree limbs when not in use. <p>Direct Costs: No alternatives other than the change or the status quo are believed to have any alternative economic impacts.</p> <p>Direct Benefits: No alternatives other than the change or the status quo are believed to have any alternative economic impacts.</p> Modifying bag limits on gar and bowfin taken with archery tackle during the spawning period. <p>Direct Costs: No alternatives other than the change or the status quo are believed to have any alternative economic impacts.</p> <p>Direct Benefits: No alternatives other than the change or the status quo are believed to have any alternative economic impacts.</p> Prohibiting discarding fish commonly taken by bowfishing into public waters or on public property. <p>Direct Costs: No alternatives other than the change or the status quo are believed to have any alternative economic impacts.</p> <p>Direct Benefits: No alternatives other than the change or the status quo are believed to have any alternative economic impacts.</p> 		
(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) Indeterminate	(c) Indeterminate	
Direct Benefits	(b) Indeterminate	(d) Indeterminate	
(3) Benefits-Costs Ratio	Indeterminate	(4) Net Benefit	Indeterminate
(5) Indirect Costs & Benefits	Indeterminate		

(6) Information Sources	Department of Wildlife Resources freshwater fisheries management data
(7) Optional	

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	Local partners are not anticipated to be affected by these regulatory changes.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) N/A
Direct Benefits	(b) N/A
(3) Indirect Costs & Benefits	N/A

(4) Information Sources	Department of Wildlife Resources freshwater fisheries management data
(5) Assistance	N/A
(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	Families are not anticipated to be affected directly by these regulatory changes.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) N/A
Direct Benefits	(b) N/A

(3) Indirect Costs & Benefits	No indirect costs and benefits are anticipated.
(4) Information Sources	Department of Wildlife Resources freshwater fisheries management data
(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	No direct impacts on small businesses are anticipated.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) Indeterminate
Direct Benefits	(b) Indeterminate

(3) Indirect Costs & Benefits	Indeterminate
(4) Alternatives	Indeterminate
(5) Information Sources	Indeterminate
(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	Additions	Subtractions	Net Change
4 VAC 15-350-60	3 (requirements for trotlines, juglines, limblines)	0	0	0
4 VAC 15-350-70	3 (bowfishing requirements)	1	0	1