

Office of Regulatory Management
Economic Review Form

Agency name	Board of Wildlife Resources
Virginia Administrative Code (VAC) Chapter citation(s)	4VAC15-90
VAC Chapter title(s)	Game: Deer
Action title	Open season; either-sex hunting days; elk hunting program
Date this document prepared	June 14, 2023
Regulatory Stage (including Issuance of Guidance Documents)	Exempt 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)

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<ul style="list-style-type: none"> • Extend the firearms deer seasons in counties where the deer population exceeds publicly desired population levels. <p>Direct Costs: There are no anticipated direct costs associated with this proposal.</p> <p>Indirect Costs: There are no anticipated indirect costs associated with this proposal.</p> <p>Direct Benefits: Increasing the length of the deer firearms season will increase hunting opportunity for this species and may stimulate additional revenue generation for local businesses and localities through hunter expenditures on gas, groceries, and lodging.</p> <p>Indirect Benefits: Expansion of the deer firearms seasons is designed to reduce deer population levels in these localities consistent with those levels outlined in the department’s publicly generated deer management plan. While not a direct relationship, increased hunting opportunities and deer harvests will help mitigate human-deer conflicts by removing deer involved in such conflicts from the population. Removal of these deer should result in lower instances of crop damage, deer vehicle collisions, and residential property damage.</p> <ul style="list-style-type: none"> • Increase harvest opportunities for antlerless deer in areas where the deer population exceeds publicly desired population levels. <p>Direct Costs: There are no anticipated direct costs associated with this proposal.</p> <p>Indirect Costs: There are no anticipated indirect costs associated with this proposal.</p> <p>Direct Benefits: There are no anticipated direct benefits associated with the proposal.</p> <p>Indirect Benefits: Expansion of harvest opportunities for antlerless deer is designed to reduce deer population levels in these localities consistent with those levels outlined in the department’s publicly generated deer management plan. While not a direct relationship, increased harvest of antlerless deer will help mitigate human-deer conflicts by reducing potential population growth and removing deer involved in such conflicts from the population. Removal of these deer should result in lower instances of crop damage, deer vehicle collisions, and residential property damage.</p>
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- **Eliminate requirement that hunters harvest antlered deer with a specified number of antler points (i.e. antler point restriction).**

Direct Costs: There are no anticipated direct costs associated with this proposal.

Indirect Costs: There are no anticipated indirect costs associated with this proposal.

Direct Benefits: Eliminating the antler point restriction is intended to discourage the occurrence of older, antlered deer (i.e. bucks) on the landscape and help reduce transmission of Chronic Wasting Disease (CWD) within the deer population. Older, antlered bucks exhibit the highest prevalence of CWD infection in the deer population, and their presence in the population amplifies transmission of the disease.

Indirect Benefits: Growing research and management experience indicates the presence of CWD within a deer herd can lead to future deer population reductions. Actions to control the spread of CWD should help ensure long-term health of the deer population and continuation of the economic benefits of deer hunting.

- **Increase flexibility of department programs that facilitate hunting elk in the Elk Management Zone (EMZ).**

Direct Costs: There are no anticipated direct costs associated with this proposal.

Indirect Costs: Staff time will be required to implement changes associated with this proposal. However, staff time should be limited to adjustments in timing and administration of existing program activities rather than developing and implementing additional activities.

Direct Benefits: Increased flexibility in programs to hunt elk in the EMZ will enable additional private landowners to enroll in a department program that encourages public elk hunting on private lands. In exchange for allowing public elk hunting on their lands, private landowners are awarded points which can be used to secure a special elk hunting license for their property in future years. Hunting elk in the EMZ can provide an additional source of revenue for the economic challenges in Buchanan, Dickenson, and Wise Counties.

Indirect Benefits: There are no anticipated indirect benefits associated with this proposal.

(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Indeterminate	(b) Indeterminate
(3) Net Monetized Benefit	Indeterminate	
(4) Other Costs & Benefits (Non-Monetized)	Hunting contributes nearly \$900 million dollars to Virginia’s economy, of which hunting for deer is a very significant economic contributor. In addition to economic benefits, hunting also generates personal benefits such as physical exercise, mental wellness and preparedness, and a healthy source of protein. Increased flexibility of programs that facilitate elk hunting in the Elk Management Zone will help maximize the number of individuals annually selected to hunt elk in this area.	
(5) Information Sources	2011 National Survey of Hunting, Fishing, and Wildlife-Based Recreation, Michigan State University, and department elk management program data	

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

(1) Direct & Indirect Costs & Benefits (Monetized)	<ul style="list-style-type: none"> Maintaining the firearms deer seasons in counties where the deer population exceeds publicly desired population levels. <p>Direct Costs: The status quo is not anticipated to have any direct costs.</p> <p>Indirect Costs: Maintaining the status quo would result in increased deer populations with resulting increases in human-deer conflicts that damage crops and residential property as well as cause deer vehicle collisions.</p> <p>Direct Benefits: The status quo is not anticipated to have any direct benefits.</p> <p>Indirect Benefits: The status quo is not anticipated to have any indirect benefits.</p> <ul style="list-style-type: none"> Increase harvest opportunities for antlerless deer in areas where the deer population exceeds publicly desired population levels. <p>Direct Costs: The status quo is not anticipated to have any direct costs.</p> <p>Indirect Costs: Maintaining the status quo would result in increased deer populations with resulting increases in human-deer conflicts that damage crops and residential property as well as cause deer vehicle collisions.</p>
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	<p>Direct Benefits: The status quo is not anticipated to have any direct benefits.</p> <p>Indirect Benefits: The status quo is not anticipated to have any indirect benefits.</p> <ul style="list-style-type: none"> • Eliminate requirement that hunters harvest antlered deer with a specified number of antler points (i.e. antler point restriction). <p>Direct Costs: The status quo is not anticipated to have any direct costs.</p> <p>Indirect Costs: Maintaining the status quo would encourage older, antlered bucks on the landscape and amplify the transmission of CWD within the deer population, compromising the long-term health of the deer population and maintenance of the economic benefits of deer hunting opportunities.</p> <p>Direct Benefits: The status quo is not anticipated to have any direct benefits.</p> <p>Indirect Benefits: The status quo is not anticipated to have any indirect benefits.</p> <ul style="list-style-type: none"> • Increase flexibility of department programs that facilitate hunting elk in the Elk Management Zone. <p>Direct Costs: The status quo is not anticipated to have any direct costs.</p> <p>Indirect Costs: The status quo is not anticipated to have any indirect costs.</p> <p>Direct Benefits: The status quo is not anticipated to have any direct benefits.</p> <p>Indirect Benefits: The status quo is not anticipated to have any indirect benefits.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Indeterminate	(b) None
(3) Net Monetized Benefit	Indeterminate	

(4) Other Costs & Benefits (Non-Monetized)	None
(5) Information Sources	N/A

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

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p>Alternative Approach – modify the extent to which the deer firearms season is expanded.</p> <p>Direct Costs: The department maintains a traditional, specified season structure for the deer firearms seasons. The proposal is consistent with the traditional structure. Novel modifications to the traditional season structure would require outreach and education efforts to ensure hunters were familiar with the new season structure and requirements.</p> <p>Indirect Costs: Lack of familiarity with novel deer firearm season structure could lead to inadvertent regulation violations by deer hunters.</p> <p>Direct Benefits: There is no anticipated direct benefits to the alternative approach.</p> <p>Indirect Benefits: There is no anticipated indirect benefits to the alternative approach.</p> <p>Alternative Approach – modify the extent to which the antlerless deer harvest opportunities are expanded.</p> <p>Direct Costs: The department maintains a traditional, specified structure for the number of days of the season during which antlerless deer may be taken. The proposal is consistent with the traditional structure. Novel modifications to the traditional structure would require outreach and education efforts to ensure hunters were familiar with the new season structure and requirements.</p> <p>Indirect Costs: Lack of familiarity with novel antlerless deer harvest opportunity structures could lead to inadvertent regulation violations by deer hunters.</p> <p>Direct Benefits: There is no anticipated direct benefits to the alternative approach.</p> <p>Indirect Benefits: There is no anticipated indirect benefits to the alternative approach.</p>
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	<ul style="list-style-type: none"> Alternative Approach - There is no reasonable alternative approach to eliminating the requirement that hunters harvest antlered deer with a specified number of antler points (i.e. antler point restriction). Hunters either are or are not required to restrict the harvest of certain antlered deer. <p>Direct Costs: N/A</p> <p>Indirect Costs: N/A</p> <p>Direct Benefits: N/A</p> <p>Indirect Benefits: N/A</p> <ul style="list-style-type: none"> Alternative Approach – The intent of increasing the flexibility of department programs that facilitate hunting elk in the Elk Management Zone is to specifically allow the department to adaptively respond to new biological and sociological data associated with the elk population in the EMZ. Specific alternatives will not be determined until those data are available in early 2024. <p>Direct Costs: N/A</p> <p>Indirect Costs: N/A</p> <p>Direct Benefits: N/A</p> <p>Indirect Benefits: N/A</p>	
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(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Indeterminate	(b) None
(3) Net Monetized Benefit	Indeterminate	
(4) Other Costs & Benefits (Non-Monetized)	None	
(5) Information Sources	N/A	

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>	<ul style="list-style-type: none"> • Extend the firearms deer seasons in counties where the deer population exceeds publicly desired population levels. <p>Direct Costs: There are no anticipated direct costs to local partners.</p> <p>Indirect Costs: There are no anticipated indirect costs to local partners.</p> <p>Direct Benefits: There are no anticipated direct benefits to local partners.</p> <p>Indirect Benefits: Through reduced deer populations, local law enforcement agencies may see reduced costs associated with responding to certain human-deer conflicts, particularly deer vehicle collisions.</p> <ul style="list-style-type: none"> • Increase harvest opportunities for antlerless deer in areas where the deer population exceeds publicly desired population levels. <p>Direct Costs: There are no anticipated direct costs to local partners.</p> <p>Indirect Costs: There are no anticipated indirect costs to local partners.</p> <p>Direct Benefits: There are no anticipated direct benefits to local partners.</p> <p>Indirect Benefits: Through reduced deer populations, local law enforcement agencies may see reduced costs associated with responding to certain human-deer conflicts, particularly deer vehicle collisions.</p> <ul style="list-style-type: none"> • Eliminate requirement that hunters harvest antlered deer with a specified number of antler points (i.e. antler point restriction). <p>Direct Costs: There are no anticipated direct costs to local partners.</p> <p>Indirect Costs: There are no anticipated indirect costs to local partners.</p> <p>Direct Benefits: There are no anticipated direct benefits to local partners.</p> <p>Indirect Benefits: There are no anticipated indirect benefits to local partners.</p>
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	<ul style="list-style-type: none"> • Increase flexibility of department programs that facilitate hunting elk in the Elk Management Zone (EMZ). <p>Direct Costs: There are no anticipated direct costs to local partners.</p> <p>Indirect Costs: There are no anticipated indirect costs to local partners.</p> <p>Direct Benefits: Increased flexibility to administer elk hunting programs in the EMZ is intended to maximize the annual allocation of special elk hunting licenses available for this zone. Maximizing license allocation will also help maximize local revenue generation in an economically challenged area.</p> <p>Indirect Benefits: There are no anticipated indirect benefits to local partners..</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) None	(b) Indeterminate
(3) Other Costs & Benefits (Non-Monetized)	None	
(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)	<p>Direct Costs: The proposals are not anticipated to have a direct cost for families.</p> <p>Indirect Costs: The proposals are not anticipated to have an indirect cost for families.</p> <p>Direct Benefits: The proposals are not anticipated to have a direct benefit to families.</p>
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	Indirect Benefits: Through reduced deer population levels, families may realize a reduced probability of deer vehicle collisions.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) None	(b) Indeterminate
(3) Other Costs & Benefits (Non-Monetized)	None	
(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: The proposals are not anticipated to have any direct costs to small businesses.</p> <p>Indirect Costs: The proposals are not anticipated to have any indirect costs to small businesses.</p> <p>Direct Benefits: Through increasing deer harvest opportunities, taxidermists and businesses which process game meat should benefit from increased customers.</p> <p>Indirect Benefits: The proposal is not anticipated to have any indirect benefits for small businesses.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) None	(b) Indeterminate
(3) Other Costs & Benefits (Non-Monetized)	None	
(4) Alternatives	N/A	

(5) Information Sources	N/A
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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
4VAC15-90-10 (extend firearms season)	0	0	0	0
4VAC15-90-80, 4VAC15-90-89, and 4VAC15-90-91 (increase harvest opportunity for antlerless deer)	10	0	2	-2
4VAC15-90-90 (eliminate antler point restriction)	10	0	0	0
4VAC15-90-530 And 4VAC15-90-540 (increase flexibility of elk hunting programs)	19	0	0	0

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
4VAC15-90-10 (extend firearms season)	Extend the firearms deer seasons in counties where the deer population exceeds publicly desired population levels.	Indeterminate	Indeterminate	Indeterminate

4VAC15-90-80, 4VAC15-90-89, and 4VAC15-90-91 (increase harvest opportunity for antlerless deer)	Increase harvest opportunities for antlerless deer in areas where the deer population exceeds publicly desired population levels.	Indeterminate	Indeterminate	Indeterminate
4VAC15-90-90 (eliminate antler point restriction)	Eliminate requirement that hunters harvest antlered deer with a specified number of antler points (i.e. antler point restriction).	Indeterminate	Indeterminate	Indeterminate
4VAC15-90-530 And 4VAC15-90-540 (increase flexibility of elk hunting programs)	Increase flexibility of department programs that facilitate hunting elk in the Elk Management Zone (EMZ).	Indeterminate	Indeterminate	Indeterminate

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
4VAC15-90-10 (extend firearms season)	Extend the firearms deer seasons in counties where the deer population exceeds publicly desired population levels.	Expansion of the deer firearms season will increase the number of days of firearms deer hunting opportunity in Virginia from 5,686 days to 6,022 days (5.9% regulatory relaxation)
4VAC15-90-80, 4VAC15-90-89, and 4VAC15-90-91 (increase harvest opportunity for antlerless deer)	Increase harvest opportunities for antlerless deer in areas where the deer population exceeds publicly desired population levels.	Expansion of the deer firearms either-sex deer hunting days will increase the number of firearms either-sex deer hunting day opportunities from 4,607 days to 4,842 days (5.1% regulatory relaxation)

4VAC15-90-90 (eliminate antler point restriction)	Eliminate requirement that hunters harvest antlered deer with a specified number of antler points (i.e. antler point restriction).	This action removes 1 of 5 counties (20% regulatory relaxation) from the requirement that hunters must harvest antlered deer with a specified number of antler points.
4VAC15-90-530 And 4VAC15-90-540 (increase flexibility of elk hunting programs)	Increase flexibility of department programs that facilitate hunting elk in the Elk Management Zone (EMZ).	The proposal does not impact the regulatory burden. The regulation requirements remain but the language has been generalized to allow the department greater flexibility in administering the elk hunt programs in the EMZ.

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

Title of Guidance Document	Original Length	New Length	Net Change in Length
N/A			