



AUGUST 2024

# INITIATIVE 91: BIG CAT HUNTING BAN

AUTHORS: DJ SUMMERS, JAKE SMITH

## ABOUT THE AUTHORS



### DJ Summers – Director of Policy and Research

DJ Summers is Common Sense Institute's Director of Policy and Research. He oversees the stages of CSI's fellows and research staff, coordinates with partners, iterates and analyzes projects, and breaks down findings for the public, legislators, and commercial leaders. Prior to CSI, DJ attended the University of Utah and Syracuse University. He worked as a journalist, investigator, and political researcher across the U.S. from Washington, D.C. to Alaska.

### Jake Smith – CSI Research Analyst Intern

Jake is a senior at the University of Denver majoring in accounting and planning to receive his master's degree in finance. Jake is from Raleigh, North Carolina and is excited to play his part in informing Coloradans about policy and legislation impacts.

## ABOUT COMMON SENSE INSTITUTE

**Common Sense Institute** is a non-partisan research organization dedicated to the protection and promotion of Colorado's economy. CSI is at the forefront of important discussions concerning the future of free enterprise and aims to have an impact on the issues that matter most to Coloradans. CSI's mission is to examine the fiscal impacts of policies, initiatives, and proposed laws so that Coloradans are educated and informed on issues impacting their lives. CSI employs rigorous research techniques and dynamic modeling to evaluate the potential impact of these measures on the economy and individual opportunity.

## TEAMS & FELLOWS STATEMENT

CSI is committed to independent, in-depth research that examines the impacts of policies, initiatives, and proposed laws so that Coloradans are educated and informed on issues impacting their lives. CSI's commitment to institutional independence is rooted in the individual independence of our researchers, economists, and fellows. At the core of CSI's mission is a belief in the power of the free enterprise system. Our work explores ideas that protect and promote jobs and the economy, and the CSI team and fellows take part in this pursuit with academic freedom. Our team's work is informed by data-driven research and evidence. The views and opinions of fellows do not reflect the institutional views of CSI. CSI operates independently of any political party and does not take positions.

# TABLE OF CONTENTS

---

About the Authors .....	1
About Common Sense Institute .....	1
Teams & Fellows Statement.....	1
Introduction .....	3
Key Findings.....	4
What's Proposed.....	5
What Would the Impacts Be? .....	6
Modeling Analysis .....	8

## INTRODUCTION

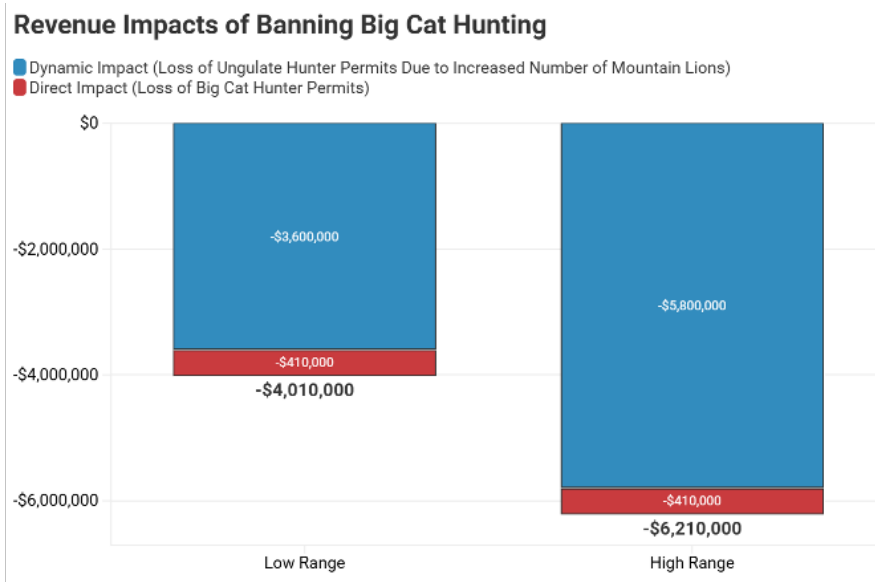
Initiative 91, “Prohibit Bobcat, Lynx, and Mountain Lion Hunting,” was started by an advocacy committee out of Grand Lake, Colorado known as CATs (Cats Aren’t Trophies) which seeks to ban the intentional killing, wounding, pursuing, or entrapping of mountain lions, bobcats, and lynx.

The Fiscal Impact Statement and the Second Draft Ballot Analysis conclude that the economic impact of Initiative 91 would be a decrease in revenue of \$410,000 for Colorado Parks & Wildlife (CPW) by June 2025 and a decrease in expenditures of \$39,000 for FY 2024–25. These estimates only include the direct or static impacts resulting from the measure. There are broader economic impacts likely to come from Initiative 91 as an increase in the mountain lion predator population will have impacts on other animal populations and habitats.

## KEY FINDINGS:

- **\$4.0 million–\$6.2 million in lost Colorado Parks and Wildlife revenue** – The fiscal impact in the state ballot analysis concludes that CPW’s revenue would decline by \$410,000 resulting from direct loss of hunting licenses for mountain lions and bobcats. The dynamic impact ranges from \$3.6 million to \$5.8 million—9 to 14 times larger—when accounting for lost elk and mule deer permit revenue affected by an increase in mountain lion population.
- **\$61.65 million in lost economic output** – The decline in mountain lion, bobcat, deer, and elk hunting would amount to an 8% reduction in total industry economic activity.
- **Current state costs related to compensating Coloradans for mountain lion attacks on livestock and other property damage would shift to landowners as the measure removes mountain lions from definition of big game.**

Other state expenses would likely increase, however, if the state hires more hunters to harvest mountain lions, as have other states after enacting bans.



## WHAT'S PROPOSED?

Initiative 91 aims to ban the intentional killing, wounding, pursuing, or entrapping of a mountain lion, bobcat, or lynx, as well as the discharge or release of any deadly weapon at these animals. This is the definition of trophy hunting that Initiative 91 uses in its text, which can easily be misunderstood in light of other understandings of trophy hunting, such as how SPCA International defines it: “the hunting of wild animals for sport, not for food.”

Several of the proposals in the measure are already prohibited by Colorado law. These include hunting and trapping lynx and mountain lions solely for trophies; failing to properly dress and prepare edible meat from a harvested mountain lion is against Colorado's existing regulations.

## WHAT WOULD THE IMPACTS BE?

### Colorado Parks and Wildlife Revenue Impact

The direct impact of Initiative 91 would target CPW's revenue from license sales related to bobcats and mountain lions. To legally hunt a mountain lion in Colorado, hunters must purchase a mountain lion hunting license and an annual habitat stamp. Based on the most recent CPW fees, a hunting license for mountain lion and an annual habitat stamp totals \$72.20 for residents and \$513.90 for nonresidents. From 2022-2023, CPW sold 2,114 resident licenses and 500 nonresident licenses, resulting in estimated revenue of \$410,000 (Figure 2). If Initiative 91 were to pass, CPW would be prohibited from selling these licenses, resulting in \$410,000 less revenue.

To legally hunt a bobcat in Colorado, hunters, both resident and nonresident, must purchase furbearer licenses for \$35.76. A furbearer license allows a hunter to legally take any of the listed animals: coyotes, beavers, badgers, bobcats, foxes, minks, muskrats, opossums, pine martens, raccoons, ring-tailed cats, skunks, and weasels. From 2022 to 2023, an estimated 10,000 hunters purchased furbearer licenses, with bobcat hunting making up an estimated 4.26%. This amounts to about \$15,000 of revenue allocated to bobcat hunting, all of which would be lost if Initiative 91 were to pass.

Other states have implemented similar bans but did not entirely prevent mountain lion hunting. In 1990, California voters passed Proposition 117, which classified mountain lions as specially protected mammals and permanently banned lion hunting in the state. Over the past decade, however, an average of 65 mountain lions, based on annual reports from California Department of Fish and Wildlife, have been intentionally harvested per year to protect private property such as livestock and domestic animals. As California and Colorado have similar mountain lion populations, an estimated 4,500 and 4,100 respectively, we can assume that Colorado would experience similar lethal take rates if Initiative 91 were to pass.

The depredation of ungulates resulting from just a single year increase in mountain lions would reduce CPW revenue by an additional \$3.6 million to \$5.8 million beyond the direct loss in big cat license revenue of \$410,000. Figure 6 shows details.

## Economic Output Impact

Initiative 91 would result in an estimated decrease of \$61.65 million of economic output in 2024 dollars. \$6.28 million of this amount comes directly from lost mountain lion hunting and \$55.37 million comes from its indirect impact on elk/deer hunting.

The 2017 Economic Contributions of Outdoor Recreation in Colorado (Figure 6) identifies that total economic output of big game hunting by residents and non-residents was \$602.4 million in 2017. For this analysis, CSI assumed an individual big game hunt would have the same economic output regardless of the species being hunted.

## Property Owners

Under current law, CPW can reimburse landowners for damage to livestock, private property, fences, crops, nurseries, or orchards caused by any big game species. Initiative 91 would remove mountain lions from the definition of big game, making landowners who suffer mountain lion damages ineligible for reimbursements. Based on CPW's game damage annual reports, the average yearly mountain lion expenditures from 2023 through 2019 was \$64,700. If the mountain lion population increases by 443, the estimated cost for landowners will grow to \$71,600.



# MODELING ANALYSIS

Figure 1 shows harvesting data from 2019 to 2023 by animal that CPW defines as big game. On average, 508 mountain lions were harvested annually between 2019 and 2023.

**FIGURE 1 – 2019-2023 CPW BIG GAME ANNUAL HARVEST REPORT DATA**

Year	Mountain Lion	Elk	Mule Deer	Bear	Desert Big Horn Sheep	Moose	Mountain Goat	Pronghorn	Rocky Mountain Big Horn Sheep
2023	502	29,793	31,590	1,299	14	473	199	7,639	232
2022	486	40,425	38,049	1,508	14	458	201	9,844	230
2021	526	35,230	40,561	1,475	13	401	177	10,256	209
2020	483	39,014	38,899	1,561	12	334	170	11,206	188
2019	541	37,095	36,389	1,367	11	353	180	10,992	192
Average Harvest	508	36,311	37,098	1,442	13	404	185	9,987	210

Figure 2 shows CPW's estimated revenue from sales of mountain lion licenses based on 2023 issuances and 2024 license fees.

**FIGURE 2 – ESTIMATED 2024 REVENUE FROM MOUNTAIN LION LICENSES**

Mountain Lion Licenses Sold	Resident Licenses	Non-resident Licenses	Estimated Revenue from Residents	Estimated Revenue from Non-residents	Total Estimated Revenue
2,614	2,114	500	\$152,631	\$256,950	\$409,581

Figure 3 shows CPW’s estimated revenue from furbearer license sales based on 2023 harvest reports and 2024 license fees.

**FIGURE 3 – ESTIMATED 2024 REVENUE FROM FURBEARER LICENSES**

Furbearer Animal	Number of Hunters	Number of Animals Harvested
Coyote	6,412	26,530
Beaver	651	1,501
Badger	615	513
Bobcat	427	738
Fox	1,605	2,063
Mink	91	100
Muskrat	n/a	n/a
Opossum	n/a	n/a
Pine Marten	162	220
Raccoon	n/a	n/a
Ring-tailed Cat	74	79
Skunk	n/a	n/a
Weasel	n/a	n/a
<b>Total</b>	<b>10,037</b>	<b>5,214</b>
Bobcat Share of Total Hunting	4.26%	
Total Furbearer License Revenue		\$ 358,937
Revenue from Bobcat Hunting		\$ 15,284

Figure 4 shows the numbers of licenses issued to residents and non-residents by big-game animal in 2023. 75% of elk and mule deer licenses are issued to Colorado residents, in accordance with new CPW regulation.

**FIGURE 4 – 2023 LICENSE DISTRIBUTION**

	Mountain Lion	Elk	Mule Deer	Bear	Desert Big Horn Sheep	Moose	Mountain Goat	Pronghorn	Rocky Mountain Big Horn Sheep	Total
<b>Resident</b>	2,114	135,884	62,621	20,238	14	576	253	13,273	306	235,279
<b>Non-resident</b>	500	45,295	20,874	11,842	1	61	27	4,424	33	83,057
<b>Total</b>	<b>2,614</b>	<b>181,179</b>	<b>83,495</b>	<b>32,080</b>	<b>15</b>	<b>637</b>	<b>280</b>	<b>17,697</b>	<b>339</b>	<b>318,336</b>

Figure 5 shows estimates of what CPW's revenue would be from the sale of licenses in Figure 4, based on 2024 license fees.

**FIGURE 5 – ESTIMATED 2024 REVENUE FROM BIG GAME LICENSE SALES (IN DOLLARS)**

	Mountain Lion	Elk	Mule Deer	Bear	Desert Big Horn Sheep	Moose	Mountain Goat	Pronghorn	Rocky Mountain Big Horn Sheep	Total
<b>Resident</b>	152,631	8,984,667	3,000,184	1,215,292	5,126	210,891	92,631	635,897	112,036	14,409,354
<b>Non-resident</b>	256,950	36,389,349	10,051,128	2,981,224	2,686	163,848	72,523	2,130,365	88,639	52,136,713
<b>Total</b>	409,581	45,374,016	13,051,312	4,196,515	7,812	374,739	165,154	2,766,262	200,675	66,546,067

Figure 6 shows estimated lost revenue to CPW resulting from the depredation of ungulates from an additional 443 mountain lions. This figure represents just a single year increase in mountain lion based on recent average harvest statistics and more limited continuation of harvesting based on official reports from California.

CSI arrives at this estimated 443 increase in mountain lion population by assuming the 508 average harvested mountain lions from hunters in Colorado will no longer be able to be harvested if Initiative 91 were to pass. Of the recent annual average of 508 mountain lions that would not be harvested by licensed hunters, we assume that 65 would continue to be killed as evidenced in California, resulting in a net single-year increase of 443 mountain lions.

Based on a study in Oregon, mountain lions kill, on average, 1.03 elk/deer per week. The additional ungulates mountain lions kill per year equates to a lost opportunity for CPW to sell a license. This lost opportunity would result in a loss of CPW revenue ranging from \$3.6 million to \$5.8 million; combined with the potential losses from mountain lion and furbearer license sales, CPW could lose between \$4 million and \$6.2 million of revenue. The compounding annual impact of fewer mountain lions killed each year is not accounted for in these estimates, and therefore make them more conservative.

The first scenario assumes that the extra mountain lions kill only elk and the second scenario assumes that they kill only mule deer.

**FIGURE 6 – ESTIMATED LOST REVENUE DUE TO 443 MOUNTAIN LIONS' DIETS**

	Range of animals killed by Mountain Lion	Resident Lost Revenue	Non-resident Lost Revenue	Total Lost Revenue
<b>Elk</b>	23,036	\$ 1,142,355	\$ 4,626,723	\$ 5,769,078
<b>Mule Deer</b>	23,036	\$ 827,741	\$ 2,773,074	\$ 3,600,815

Figure 7 estimates each animal's contribution to Colorado's total economic output from big game hunting based on CPW's 2017 report and the values shown in Figure 3.

**FIGURE 7 – ESTIMATED 2024 BIG GAME ECONOMIC OUTPUT BY ANIMAL (IN MILLIONS)**

	Mountain Lion	Elk	Mule Deer	Bear	Desert Big Horn Sheep	Moose	Mountain Goat	Pronghorn	Rocky Mountain Big Horn Sheep	Total Output	Percentage of Total Economic Output
Resident	\$3.9	\$270.6	\$124.7	\$47.9	\$0.02	\$0.95	\$0.42	\$26.43	\$0.51	\$475.4	62%
Non-resident	\$2.4	\$164.9	\$76.0	\$29.2	\$0.01	\$0.58	\$0.25	\$16.11	\$0.31	\$289.7	38%
<b>Total</b>	<b>\$6.3</b>	<b>\$435.5</b>	<b>\$200.7</b>	<b>\$77.1</b>	<b>\$0.04</b>	<b>\$1.53</b>	<b>\$0.67</b>	<b>\$42.53</b>	<b>\$0.81</b>	<b>\$765.1</b>	<b>100%</b>

Figure 8 shows the estimated loss of economic output from Initiative 91 allocated to mountain lions, elk, and mule deer assuming the same economic output per 1 animal regardless of species.

**FIGURE 8 – ESTIMATED LOSS OF ECONOMIC OUTPUT (IN \$ MILLION)**

	Resident Loss	Non-resident Loss	Total Loss
Mountain Lion	\$3.90	\$2.38	\$6.28
Elk and Mule Deer	\$34.40	\$20.96	\$55.37
<b>Total</b>	<b>\$38.31</b>	<b>\$23.34</b>	<b>\$61.65</b>

Figure 9 shows the range of total mountain lion depredation expenses based on the 5-year average of \$64,711 alongside the estimated increase due to the elevated mountain lion population.

**FIGURE 9 – ESTIMATED MOUNTAIN LION DAMAGE EXPENDITURES IF INITIATIVE 91 PASSES**

	Low	High
Colorado Mountain Lion Population	3,800	4,400
Increase in Mountain Lion Population	443	443
Percent Increase of Population	12%	10%
<b>Estimated Total Mountain Lion Expenditures</b>	<b>\$ 72,255</b>	<b>\$ 71,226</b>

## SOURCES

---

- i. [https://leg.colorado.gov/sites/default/files/initiatives/2024%252391FIS\\_00.pdf](https://leg.colorado.gov/sites/default/files/initiatives/2024%252391FIS_00.pdf)
- ii. [https://leg.colorado.gov/sites/default/files/initiative%2520referendum\\_2023-2024%2091v2.pdf](https://leg.colorado.gov/sites/default/files/initiative%2520referendum_2023-2024%2091v2.pdf)
- iii. [https://leg.colorado.gov/sites/default/files/initiative%2520referendum\\_91final.pdf](https://leg.colorado.gov/sites/default/files/initiative%2520referendum_91final.pdf)
- iv. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=220064&inline>
- v. <https://cpw.state.co.us/Documents/Trails/SCORP/Final-Plan/SCORP-AppendixF-EconomicContributions.pdf>
- vi. <https://cpw.state.co.us/Documents/LandWater/PrivateLandPrograms/GameDamage/Annual-Report.pdf>
- vii. <https://cpw.state.co.us/thingstodo/Pages/BigGameDatesandFees.aspx>
- viii. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=220064&inline>
- ix. [https://dfw.state.or.us/wildlife/research/docs/Cougar\\_Kill\\_Rates\\_Clark\\_et\\_al\\_2014.pdf](https://dfw.state.or.us/wildlife/research/docs/Cougar_Kill_Rates_Clark_et_al_2014.pdf)