



*Cost-Benefit and Regulatory Flexibility Analyses:  
Proposed Revisions to Sport Hunting and Trapping Regulations in  
National Preserves in Alaska*

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## Introduction

This report presents the cost-benefit and regulatory flexibility analyses of the proposed regulatory action to amend regulations for sport hunting and trapping in national preserves in Alaska. This proposed rule would remove a regulatory provision issued by the National Park Service in 2015 that prohibited certain sport hunting practices that are otherwise permitted by the State of Alaska. These proposed changes are consistent with Secretary of the Interior Orders 3347 and 3356. Quantitative analyses were not conducted due to a lack of available data, and because the additional cost of conducting quantitative analyses was not considered to be reasonably related to the expected increase in the quantity and/or quality of relevant information. Nevertheless, the NPS believes that these analyses provide an adequate assessment of all relevant costs and benefits associated with the regulatory action.

The results of the cost-benefit analysis indicate negligible costs and negligible benefits would be associated with the proposed regulatory action. Additionally, this proposed regulatory action will not have an annual economic effect of \$100 million, and will not adversely affect an economic sector, productivity, jobs, the environment, or other units of the federal government.

The results of the regulatory flexibility analysis indicate no adverse impacts for any sector of the economy or unit of government, including small entities. Given those findings, the proposed regulatory action will not impose a significant economic impact on a substantial number of small entities.

## Cost-Benefit Analysis

### Background

On October 23, 2015, the NPS published a final rule (Final Rule) to amend its regulations for sport hunting and trapping in national preserves in Alaska (80 FR 65325). The Final Rule codified prohibitions on certain types of harvest practices that are otherwise permitted by the State of Alaska. The practices are: taking any black bear, including cubs and sows with cubs, with artificial light at den sites; harvesting brown bears over bait; taking wolves and coyotes (including pups) during the denning season (between May 1 and August 9); taking swimming caribou; taking caribou from motorboats under power; taking black bears over bait; and using dogs to hunt black bears.

Since the publication of the Final Rule, the Secretary of the Interior issued two Secretarial Orders (3347 and 3356) regarding how the Department of the Interior should manage recreational hunting and trapping in the lands and waters it administers, and directing greater collaboration with state, tribe, and territorial partners in doing so.

The purpose of this proposed rule is to align sport hunting regulations in national preserves in Alaska with State of Alaska regulations and to enhance consistency with harvest regulations on surrounding non-federal lands and waters in furtherance of Secretarial Orders 3347 and 3356. The proposed rule would apply the State of Alaska's hunting regulations to national preserve lands, with limited exceptions found elsewhere in NPS regulations (see, e.g., 36 C.F.R. 13.42(d)).

## **Statement of Need for the Proposed Plan**

Executive Order 12866 (58 FR 51735) directs Federal agencies to demonstrate the need for the regulations they promulgate. In general, regulations should be promulgated only when a “market failure” exists that cannot be resolved effectively through other means. A market failure exists when private markets fail to allocate resources in an economically efficient manner. A significant cause of market failure is an “externality,” which occurs when the actions of one party impose uncompensated impacts on others.

The proposed rule would apply the State of Alaska's hunting regulations to national preserve lands, with limited exceptions found elsewhere in NPS regulations (see, e.g., 36 C.F.R. 13.42(d)). The current NPS rule prohibits the practices described because NPS found those practices: (1) to have intent or potential to alter or manipulate natural predator-prey dynamics, and associated natural ecological processes for the purpose of increasing harvest of ungulates by man; (2) to adversely impact public safety; or (3) to be inconsistent with federal law authorizing sport hunting in national preserves in Alaska. NPS has broad discretion in managing wildlife on national preserves under applicable laws, policies, and regulations. Taking into account the Secretarial Orders 3347 and 3356, NPS has re-considered its earlier conclusions and determined that these practices can be allowed consistent with the goal of aligning its rules with those of the State. The proposed NPS action would improve economic efficiency by enhancing consistency between harvest regulations in national preserves and surrounding non-federal lands and waters.

## **Alternatives Considered in the Current Analysis**

### ***Proposed Action***

The NPS proposes to remove paragraphs (f) and (g) of 36 CFR 13.42. Paragraph (f) states that State of Alaska management actions or laws or regulations that authorize taking of wildlife are not adopted in park areas if they are related to predator reduction efforts, which is defined as efforts with the intent or potential to alter or manipulate natural predator-prey dynamics and associated natural ecological processes, in order to increase harvest of ungulates by humans. Paragraph (g) sets forth a table of prohibited methods of taking wildlife for sport purposes in national preserves in Alaska. Most of these prohibited methods are also prohibited by the State of Alaska. Some of them, however, conflict with authorizations by the State of Alaska as explained above. The NPS believes that removing paragraphs (f) and (g) would implement the direction announced in Secretarial Orders 3347 and 3356 by increasing hunting opportunities in national preserves and promoting consistency between federal regulations and state wildlife harvest regulations. In addition, the proposed rule would remove the definitions of “Big game”, “Cub bear”, “Fur animal”, and “Furbearer” from section 13.1 because those terms are only used in paragraphs (f) and (g).

### **Baseline Conditions**

The costs and benefits of a regulatory action are measured with respect to its baseline conditions. Baseline describes conditions that would exist without the proposed regulatory action. Therefore, all costs and benefits included in this analysis are incremental to the baseline conditions. That is, any future impacts that would occur without the proposed action, as well as any past impacts that have already occurred, are not included in this analysis.

For this analysis, the baseline conditions would continue the Final Rule codified prohibitions on certain types of harvest practices in national preserves that are otherwise permitted by the State of Alaska. The practices are: taking any black bear, including cubs and sows with cubs, with artificial light at den sites; harvesting brown bears over bait; taking wolves and coyotes (including pups) during the denning season (between May 1 and August 9); taking swimming caribou; taking caribou from motorboats under power; taking black bears over bait; and using dogs to hunt black bears.

## **Benefits and Costs of the Proposed Regulatory Action**

### ***Benefits***

Compared to baseline conditions, it is anticipated that this proposed regulatory action could generate benefits by expanding hunting opportunities in national preserves and promoting consistency between federal regulations and state wildlife harvest regulations. Certain types of harvest practices permitted by the State of Alaska but prohibited by current NPS regulations would now be allowed in national preserves. These additional hunting opportunities could possibly result in an overall increase in the number of hunting participants and/or the number of days spent hunting in national preserves, thus generating additional economic benefits. The net economic benefit (or consumer surplus) of recreational hunting is defined as the amount of money an individual is willing to pay for the recreation experience above and beyond any costs actually paid (Loomis & Walsh, 1997). According to a database of the existing literature, the net economic benefit of a day spent hunting big game in Alaska is \$81.84 per person (in 2014 dollars; USGS Benefit Transfer Toolkit).

Alternatively, some hunters may simply shift the location or season that they hunt in, resulting in no change in the number of days spent hunting. A portion of hunters in Alaska could also experience a marginal increase in the net economic benefit per day spent hunting as a result of the additional hunting opportunities in national preserves. However, there is a lack of data available to forecast and quantify these potential effects. Further analysis would require more intensive research and study.

Compared to baseline conditions, the benefits of expanded hunting opportunities in national preserves resulting from this proposed rule are expected to be negligible. The harvest practices are already permitted on non-federal lands and waters in Alaska, and sport hunting and trapping in national preserves account for less than 6% of the lands in Alaska open to these activities. For instance, though authorized from the 1980s until the Final Rule was published in October 2015, the practice of hunting black bear over bait in NPS preserves was relatively uncommon. On average, less than two black bears per year were harvested over bait on NPS lands (Hilderbrand, Rabinowitch, & Mills 2013). Guides are not required for residents or nonresidents to hunt bears over bait, and therefore impacts on guiding services are not anticipated.

This proposed regulatory action also has the potential to generate economic benefits that are independent of any current on-site use of NPS resources. For instance, individuals may derive benefits from simply knowing that current and future generations have the option to engage in additional hunting opportunities in national preserves. Overall, it is anticipated that this action could impose negligible positive benefits on hunters and the general public.

## **Costs**

Compared to baseline conditions, this proposed regulatory action could result in an increase in the number of bear bait stations in national preserves. Although the quantity of additional stations is unknown, they would likely occur in national preserves with more extensive road networks, such as Wrangell St. Elias National Park and Preserve, as opposed to more rural and roadless units. It is recognized that food-conditioned bears may present a greater safety concern (Herrero 1970, 1976, 2002). Further, the possible addition of bear bait stations in national preserves could result in the occasional exclusion of some recreational visitors from small areas around bait stations, resulting in minor decreases in other public uses and enjoyment of these areas.

Increased hunting opportunities resulting from this proposed action also has the potential to impact wildlife viewing opportunities in national parks in Alaska. For instance, research conducted in Denali National Park and Preserve and Yellowstone National Park has found that the harvest of wolves is one of several factors that potentially affects wildlife viewing opportunities in these parks. By examining data on wolf sightings, pack sizes, den site locations, and harvest adjacent to the parks, Borg et al. (2016) find that “the harvest of wolves adjacent to protected areas can reduce sightings within those areas despite minimal impacts on the size of protected wolf populations.”

A decrease in the number of wildlife viewing participants or the number of days visitors come to national parks to view wildlife would result in a loss of economic benefits. According to a database of the existing literature, the net economic benefit of a day spent viewing wildlife in Alaska is \$83.05 per person (in 2014 dollars; USGS Benefit Transfer Toolkit). Park visitors could also experience a marginal decrease in the net economic benefit per day spent viewing wildlife if there are fewer sightings.

Compared to baseline conditions, the extent to which the proposed action could impact wildlife viewing opportunities in national parks in Alaska is unknown. Hunting is already permitted in national preserves, and the addition of certain types of harvest practices, such as the taking of bears over bait and the taking of wolves and coyotes during the denning season, could have no impact on wildlife viewing opportunities. There is a lack of data available to forecast and quantify the potential effects, however, it is anticipated that the costs to wildlife viewers of this proposed action would be negligible.

This proposed regulatory action also has the potential to generate economic costs that are independent of any current on-site use of NPS resources. For instance, some members of the general public may place a value on knowing that certain types of harvest practices, such as the taking of bears over bait, are prohibited in national preserves, resulting in a loss of economic benefits. Passive use values associated with ecosystem preservation may be affected if individuals believe that the permitted harvest practices have the potential to alter natural ecological processes.

Compared to baseline conditions, this action does not involve any additional fees or other measures that would increase the monetary costs to visitors, businesses, or communities. Overall,

it is anticipated that this action could impose negligible costs on park visitors and the general public.

### **Summary**

To estimate the total benefits and costs generated by the proposed regulatory action, the resulting change in hunters, wildlife viewers, and other visitors, as well as the marginal change in value experienced by visitors and the general public would require more intensive research and study. The data required to estimate these factors are not available. Therefore, the NPS was not able to quantify the total change in net economic value generated by this action. Since this action is expected to generate negligible benefits to hunters and negligible costs to non-hunting user groups, the total change in net economic value generated by this action to affected user groups is anticipated to be close to zero.

### **Uncertainty**

The overall change in hunters, wildlife viewers, and other visitors as well as the marginal change in value experienced by visitors and the general public resulting from the proposed regulatory action are unknown. Therefore, the total costs and benefits generated by this action cannot be estimated. Nevertheless, it is anticipated that negligible costs and negligible benefits would be associated with the proposed regulatory action. NPS is not aware of any other sources of uncertainty.

### **Conclusion**

The results of this cost-benefit analysis indicate that the total change in net economic value generated by this action to affected user groups is anticipated to be close to zero. Further, this proposed regulatory action is not expected to have an annual economic effect of \$100 million, or to adversely affect an economic sector, productivity, jobs, the environment, or other units of government. This proposed regulatory action will improve economic efficiency by enhancing consistency between harvest regulations in national preserves and surrounding non-federal lands and waters.

## **Regulatory Flexibility Analysis**

The Regulatory Flexibility Act of 1980, as amended in 1996 requires agencies to analyze impacts of regulatory actions on small entities (businesses, non-profit organizations, and governments), and to consider alternatives that minimize such impacts while achieving regulatory objectives. Agencies must first conduct a threshold analysis to determine whether regulatory actions are expected to have significant economic impact on a substantial number of small entities. If the threshold analysis indicates a significant economic impact on a substantial number of small entities, an initial regulatory flexibility analysis must be produced and made available for public review and comment along with the proposed regulatory action. A final regulatory flexibility analysis that considers public comments must then be produced and made publicly available with the final regulatory action. Agencies must publish a certification of no

significant impact on a substantial number of small entities if the threshold analysis does not indicate such impacts.

This threshold analysis relies on the cost-benefit analysis, which concludes that the total change in net economic value associated with this proposed regulatory action is anticipated to be close to zero. No costs to businesses or local communities are anticipated. In addition, this action will not impose restrictions on local businesses in the form of fees, training, record keeping, or other measures that would increase costs. Given those findings, this proposed regulatory action will not impose a significant economic impact on a substantial number of small entities.

## References

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