



***Cost-Benefit and Regulatory Flexibility Threshold Analyses:
Proposed Rule to Remove Special Regulations for Fishing at
Mount Rainier National Park***

National Park Service

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Introduction

This report presents the cost-benefit analysis and regulatory flexibility threshold analysis of the proposed rule to remove from the Code of Federal Regulations special fishing regulations for Mount Rainier National Park (the park), including those that restrict the take of nonnative species. Instead, the National Park Service (NPS) would publish closures and restrictions related to fishing in the Superintendent's Compendium for the park. The NPS believes that these analyses provide an adequate assessment of all relevant costs and benefits associated with the proposed rule.

The results of the cost-benefit analysis indicate that the costs of the proposed rule are justified by the associated benefits. Additionally, this proposed rule would not have an annual economic effect of \$100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities.. This proposed rule would improve visitor access while protecting the fundamental resources and values of the park.

The results of the regulatory flexibility threshold analysis indicate no adverse impacts for any sector of the economy or unit of government, including small entities. Given those findings, the NPS certifies that the proposed rule would not impose a significant economic impact on a substantial number of small entities. Therefore, an initial regulatory flexibility analysis is not required.

Cost-Benefit Analysis

Background

Mount Rainier National Park encompasses 236,381 acres in west central Washington, on the western and eastern slopes of the Cascade Range. The Carbon, Mowich, White, West Fork White, Nisqually, South Puyallup, and North Puyallup rivers and their tributaries carry water from Mount Rainier to the Puget Sound. The Ohanapecosh and Muddy Fork Cowlitz flow into the Cowlitz River and on into the Columbia River. There are approximately 470 mapped rivers and streams, including approximately 383 perennial streams and 84 intermittent streams. With very few exceptions, park rivers and streams originate within the park. Fifteen fish species are present in the streams and lakes within the park. Of these, eight are native and seven are nonnative. Prior to stocking efforts, there were no naturally occurring fish populations in any of the approximately 382 mapped lakes and ponds in the park and most of the mapped streams were also originally fishless. Early in the park's history, the NPS and others, including the state, introduced nonnative stocks of rainbow trout (*O. mykiss*), cutthroat trout (*O. clarkia clarkii*), brook trout (*Salvelinus fontinalis*), and kokanee salmon (*O. nerka*) to enhance recreational fishing. Stocking fish resulted in reproducing populations of nonnative fish in naturally fishless lakes, as well as in some rivers and streams, where they compete with native fish. Additional unauthorized introductions of nonnative fish, including three-spined sticklebacks (*Gasterosteus aculeatus*), have occurred since stocking ended. Reproducing populations of nonnative fish are now present in approximately 35 lakes and all of the park watersheds, including many streams and the nine major rivers.

The presence of nonnative fish in the park has had widespread adverse effects on the distribution, abundance, age structure, genetics and behavior of native fish species, amphibians and other aquatic life. Nonnative fish prey on and compete with native fish, particularly bull trout. As a result, over time, populations of native fish within and outside the park have likely diminished where brook trout and other nonnative fish populations have been established. The U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) have listed populations of bull trout, Chinook salmon, and steelhead within the park as threatened under the Endangered Species Act (ESA). In 2010, the USFWS designated approximately 30 miles of streams in the park as bull trout critical habitat. In 2015, the USFWS issued a Bull Trout Recovery Plan that identified actions the NPS should take to protect bull trout within the park.

Special fishing regulations for Mount Rainier National Park are found in 36 CFR 7.5(a). These regulations were issued in 1969 (34 FR 17520) and last amended in 1976 (41 FR 14863). They close the following areas of the park to all fishing: (i) Tipsoo Lake; (ii) Shadow Lake; (iii) Klickitat Creek above the White River entrance water supply intake; (iv) Laughingwater Creek above the Ohanapecosh water supply intake; (v) Frozen Lake; (vi) Reflection Lakes; and (vii) Ipsut Creek above the Ipsut Creek Campground water supply intake. 36 CFR 7.5(a)(1). Except for artificial fly fishing, the special regulations also close the Ohanapecosh River and its tributaries to all fishing. 36 CFR 7.5(a)(2). The regulations state that there shall be no minimum size limit on fish that may be possessed (36 CFR 7.5(a)(3)) and that the daily catch and possession limit for fish taken from park waters shall be six pounds and one fish, not to exceed 12 fish. 36 CFR 7.5(a)(4). Other closures and restrictions related to fishing appear in the Superintendent's Compendium for the park. Several of these closures and restrictions are intended to conserve native fish species and reduce or eliminate nonnative species. The Compendium establishes fishing seasons for streams and rivers to protect the spawning season of listed, native species. Where fishing is allowed in lakes, there are no seasonal closures because fish are not native to lakes within the park.

In September 2017, the NPS published a Fish Management Plan / Environmental Assessment (EA). The purpose of the EA is to direct long-term management for fish within lakes, rivers and streams within the park. On August 28, 2018, the Regional Director for Department of the Interior Unified Regions 8, 9, and 10 (formerly the Pacific West Region) approved a Finding of No Significant Impact (FONSI) selecting Alternative 2 in the EA for implementation. This alternative implements site-specific management actions to encourage recreational fishing opportunities for nonnative species and to protect native fish and habitat. In addition to increasing recreational angling opportunities for nonnative species, the alternative calls for suppressing or eradicating nonnative fish populations through administrative actions such as gillnetting, seining, electrofishing, and piscicides in selected locations. The selected alternative is consistent with actions required by the 2015 Bull Trout Recovery Plan issued by the USFW.

The proposed rule would implement elements of the preferred alternative in the EA by removing special fishing regulations for the park that interfere with the successful implementation of the fish management strategy identified in the FONSI. These include the following closures and restrictions that limit the take of nonnative fish: (1) closures at Ipsut Creek and (except for artificial flyfishing) the Ohanapecosh River; and (2) a daily catch and possession limit of six

pounds and one fish, not to exceed 12 fish. Removing these closures and restrictions would create new angling opportunities for nonnative species that are currently not authorized by 36 CFR 7.5. The other closures and restrictions currently codified in the park's special regulations will be relocated to and maintained in the Superintendent's Compendium.

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. Consistent with the NPS Organic Act, the ESA and the Bull Trout Recovery Plan, the NPS has a responsibility to restore and protect native fish populations and other native aquatic species and to avoid unacceptable impacts to park resources, , including designated critical habitat within the park. Currently, the presence of nonnative fish and their impact and potential impact on threatened and endangered fish in the park is inconsistent with the NPS's mission and management policies to protect native species, including those that are threatened and endangered. Park-specific NPS fishing regulations do not align with USFWS and NPS goals for native fish species management and recovery.

The purpose of the proposed rule is to remove from the Code of Federal Regulations special fishing regulations for the park, including those that restrict the take of nonnative species. Instead, the NPS would publish closures and restrictions related to fishing in the Superintendent's Compendium for the park that are consistent with the fish management strategy identified in the FONSI. This action would help implement the preferred alternative in the EA that aims to conserve native fish populations and restore aquatic ecosystems by reducing or eliminating nonnative fish.

Alternatives Considered in the Current Analysis

The EA examined three alternatives for management of native and nonnative fish populations in the park (NPS, 2017). Alternative 1, the no-action alternative, would continue existing fish management policies, goals and actions. Alternative 2, the preferred alternative and selected alternative in the FONSI, would implement revised fishing closures and restrictions consistent with NPS, Washington State, and Endangered Species Act policy, while providing for continued recreational fishing opportunities. Park rivers, streams and lakes would be managed to reduce nonnative fish populations. Nonnative fish would eventually be removed from two streams and from 10 of 35 lakes with reproducing fish populations. Alternative 3 would include all of the Alternative 2 actions, plus the NPS would remove nonnative fish in ten additional lakes and two additional streams that have more complex habitat. In addition, the NPS would reintroduce native salmon and bull trout to stream reaches.

The *proposed rule* would remove from the Code of Federal Regulations special fishing regulations for the park, including those that restrict the take of nonnative species. This would have occurred whether the NPS had selected Alternative 2 or Alternative 3. The *proposed actions* evaluated under Alternatives 2 and 3 also include suppressing or eradicating nonnative fish populations through administrative actions such as gillnetting, seining, electrofishing, and

piscicides in selected locations. These administrative actions would never be implemented through rulemaking and therefore are not included in this analysis. Complete descriptions of all of the alternatives can be found in the Fish Management Plan, Environmental Assessment (NPS 2017).

Baseline Conditions

The costs and benefits of a regulatory action are measured with respect to its baseline conditions. Guidance from the Office of Management and Budget (OMB) for a regulatory analysis suggests that the baseline should represent the agency's best assessment of the way the world would look absent the proposed action (OMB, 2003). 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 proposed rule, the baseline conditions are described in Alternative 1, the No-Action Alternative, in the EA (NPS, 2017). Under Alternative 1, the NPS would continue existing fish management policies and practices at the park (NPS, 2017). Current fishing regulations would continue to be inconsistent with NPS native species management policies and would not fully protect threatened species, such as bull trout, from harvest.

Benefits and Costs

Benefits to Visitor Use and Experience

The proposed rule would remove from the Code of Federal Regulations special fishing regulations for the park, including those that restrict the take of nonnative species. These include the following restrictions that limit the take of nonnative fish: (1) closures at Ipsut Creek and (except for artificial flyfishing) the Ohanapecosh River; and (2) a daily catch and possession limit of six pounds and one fish, not to exceed 12 fish. Removing these closures would create new angling opportunities for nonnative species that are currently not authorized by 36 CFR 7.5.

Therefore, the proposed rule would have beneficial impacts to visitor use and experience by providing additional opportunities for recreational fishing. About two million people visit the park annually, with most visitation (75 percent) occurring between June and September. As summarized in the EA (NPS, 2017), visitor survey data indicates fishing is one of the least reported recreational activities in the park. Because more than 97 percent of the park is comprised of wilderness, most of the fishing that occurs (approximately 13,000 anglers per year), takes place in wilderness (NPS, 2017). The impact from the proposed rule would be small but beneficial in the context of enhancing the experience and may slightly increase park visitation.

The appropriate measure of benefits to characterize changes in recreational opportunities (and other goods and services that do not have a market price) is *consumer surplus*,¹ which can be measured through *benefit transfer*. This approach, summarized in OMB (2003), uses existing

¹ Consumer surplus, also called net economic value, is the amount an individual is willing to pay for a recreation experience above and beyond any costs actually paid.

benefit estimates from previously conducted site-specific studies in new contexts. Numerous economic studies have quantified the value of freshwater fishing opportunities in Washington state. Taking an average of these existing estimates, which are summarized in Rosenberger (2016), results in a consumer surplus value of \$58 per visitor-day (in 2020 dollars). Based on this estimate, each additional visitor-day of fishing in the park resulting from the proposed rule is expected to generate \$58 in consumer surplus benefits. Current visitors, on the other hand, could experience a marginal increase in consumer surplus if they have an enhanced quality of the visitor experience due to the new angling opportunities.

Other closures currently codified in the park's special regulations will be relocated to and maintained in the Superintendent's Compendium. Consolidating all fishing closures and restrictions in the Compendium will make the information more accessible and user-friendly for the public. Instead of having to look in two different places (the special regulations in 36 CFR 7.5 and the Superintendent's Compendium on the park's website), the public would be able to find all closures and restrictions related to fishing in one place. Centralizing this information in the Compendium would increase compliance, strengthen enforcement, and decrease public confusion and frustration. The administrative flexibility offered by the Superintendent's Compendium, which in most circumstances can be modified without notice and comment rulemaking (see 36 CFR 1.5(b)), provides a feasible and responsive method to meet the strategic goals identified in the FONSI to utilize adaptive management to alter management activities when needed based on monitoring and best available science. Placing all fishing closures and restrictions in the Compendium would generate economic benefits by simplifying the regulatory framework and providing greater clarity to the public.

To quantify the benefits generated by the proposed rule, the resulting number of new visitors and the marginal increase in value experienced by current visitors would have to be estimated. However, the information required to estimate those factors is not available, and the NPS was not able to estimate the total consumer surplus generated by this proposed rule. Nevertheless, due to an expected slight increase in visitation, improved visitor experience associated with the additional opportunities for recreational fishing, and simplifying the process to access fishing information, positive benefits would be generated by this proposed rule.

Costs

Over time, the requirement to retain nonnative fish caught via angling throughout the park would likely reduce the number of nonnative fish in lakes and slightly reduce nonnative fish in streams and rivers. A few small lakes with small fish populations have the potential to be fished out by anglers. Because fishing has consistently been rated low on the scale of recreational activities that visitors engage in during visitor surveys (ranked by between one and two percent of park visitors as important or accomplished during a park visit), this loss would likely be imperceptible to most park visitors (NPS, 2017). Those visitors primarily engaging in fishing in the park could be negatively impacted if preferred fishing areas are affected by the proposed rule. These slight changes are expected to have negligible impacts on angler enjoyment, since other areas throughout the park would continue to be open to fishing. This proposed rule does not involve fees, or additional measures that would increase costs to visitors, businesses, or local communities.

Summary of Benefits and Costs

The results of this cost-benefit analysis indicate that there would be positive benefits generated by the slight increase in park visitation and enhanced visitor experience expected from additional angling opportunities and a simplified process for accessing fishing information. Over time, there could be negligible costs associated with reductions in nonnative fishing opportunities. As a result, the NPS concludes that the proposed rule would generate positive net benefits compared to baseline conditions.

Uncertainty

The number of new visitors and the marginal increase in value experienced by current visitors resulting from the proposed rule is not known with certainty. The total benefits generated by this proposed rule were estimated with the best available data. Results indicate that positive net benefits would be generated, as illustrated in the cost-benefit analysis above. Any uncertainty involved in this analysis is associated only with the magnitude of those benefits. NPS is not aware of any other sources of uncertainty.

Conclusion

The results of this cost-benefit analysis indicate that positive net benefits would likely be generated by promulgation of the proposed rule. Given that, NPS concludes that the benefits associated with the proposed rule justify the associated costs. Further, this proposed rule is not expected to have an annual economic effect of \$100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities. This proposed rule would improve economic efficiency.

Regulatory Flexibility Threshold Analysis

The Regulatory Flexibility Act, as amended, requires agencies to analyze impacts of regulatory actions on small entities (businesses, nonprofit organizations, and governments), and to consider alternatives that minimize such impacts while achieving regulatory objectives (Small Business Administration, 2012). 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 this proposed rule would generate positive benefits and no costs to visitors, businesses, or local communities. In addition, this proposed rule would not impose restrictions on local businesses in the form of fees, training, record keeping, or other measures that would increase costs. Rather, this proposed rule could reasonably increase park visitation and thereby generate benefits for businesses, including small entities, through increased visitor spending. Given those findings, the NPS certifies that, if made final, this proposed rule would not impose a significant economic impact on a substantial number of small entities. Therefore, an initial regulatory flexibility analysis is not required.

References

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