



# Fisheries Management Plan

*Public Scoping Newsletter - May 2016*



## Purpose of the Plan

Consistent with Management Policies (NPS 2006) and the Bull Trout Recovery Plan (USFWS 2015), the NPS proposes to manage native fish populations in Mount Rainier National Park by reducing or eliminating nonnative fish populations to the extent possible and by addressing other threats to native fish in the park, while providing for continued recreational fishing opportunities and other related visitor experiences.

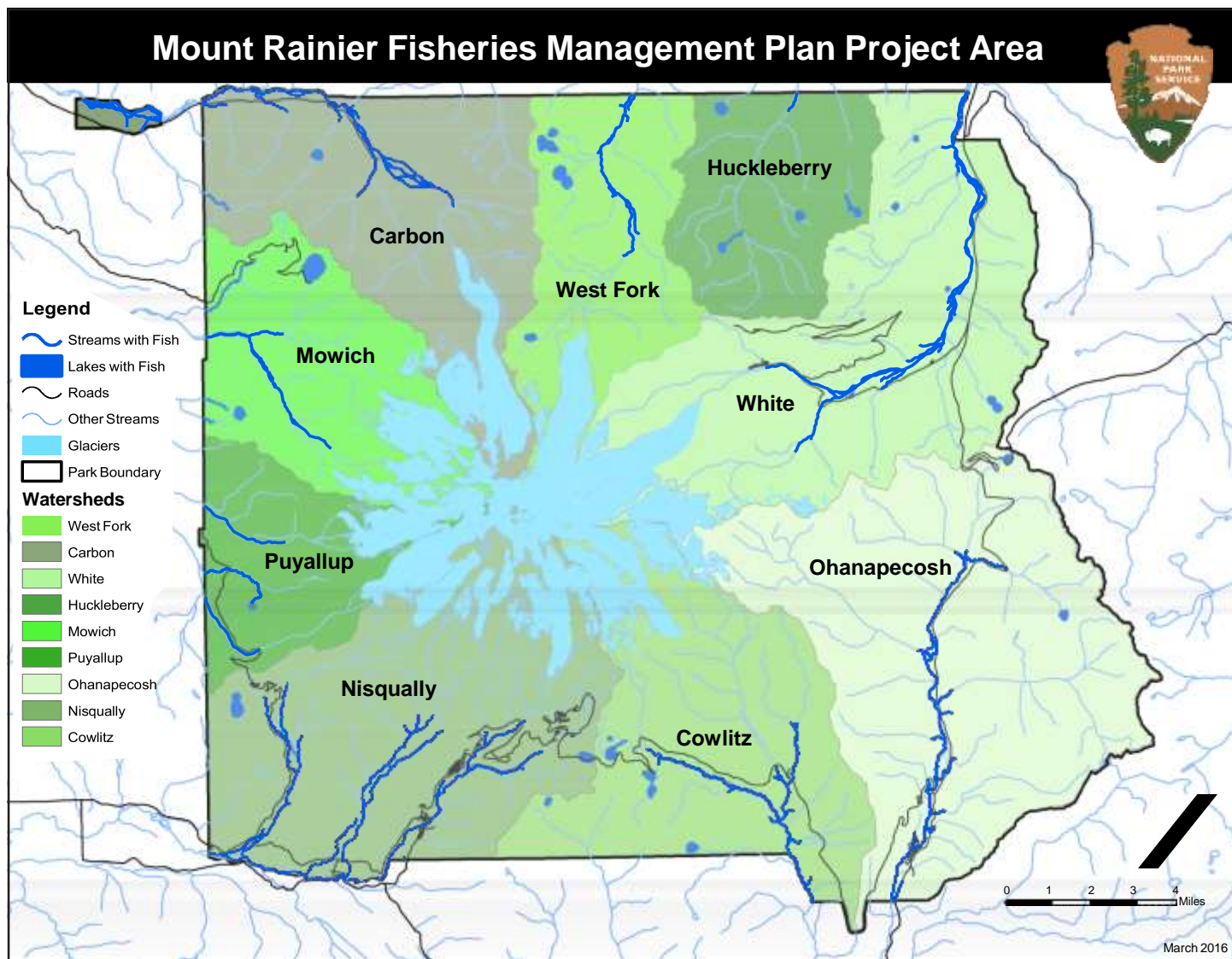
The Fisheries Management Plan (FMP) would direct future long-term management for fish populations within all lakes, rivers and streams in the park. The plan is intended to provide a programmatic framework for meeting fisheries management goals and objectives in all park waters. Long-term fisheries management goals and objectives would be developed to allow the park to manage fish populations and fishing consistent with the mission and management policies of the NPS, and its obligation to recover threatened and endangered species, especially where recovery plans have been developed. Fisheries management goals identified by the NPS include:



- Protect and manage native (including threatened and endangered) fish populations consistent with the biological management policies of the NPS that promote the conservation of native biological integrity, and to build resilience in native fish populations that will help them to withstand the effects of climate change.
- Implement actions within the park identified in the bull trout recovery plan (USFWS 2015).
- Manage and control nonnative fish to ensure that they do not create unacceptable impacts to native fish and other wildlife, such as amphibians.
- Provide and regulate recreational fishing opportunities and visitor experiences that promote goals

consistent with the plan.

- Restore the natural abundance, diversity, dynamics, distribution, habitats and behaviors of native animal populations that were present prior to the introduction of nonnative fish to the extent possible.
- Collaborate with the Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service (USFWS), and tribes to conserve fish that migrate beyond the borders of the park.



## Background

Fish Presence in the Park: Fifteen fish species are present in Mount Rainier National Park streams and lakes. Of these nine are native and six are nonnative. Fish species include three sculpins (Cottidae), one stickleback (Gasterosteidae), and 12 salmonids (Salmonidae).

Historically, there were no fish in any of the approximately 380 mapped lakes and ponds in Mount Rainier National Park. Early in the park's history, the National Park Service (NPS) and Washington State introduced nonnative stocks of rainbow trout (*Oncorhynchus mykiss*), cutthroat trout (*Oncorhynchus clarki*), brook trout (*Salvelinus fontinalis*), and kokanee salmon (*Oncorhynchus nerka*) in many of the park lakes. According to unpublished park records, official recorded stocking in the park occurred from 1915 through 1964 in streams, and from 1915 through 1972 in lakes. In addition, sculpin (*Cottus* spp.) were introduced into Mowich Lake and Lake George, most likely as bait fish. Recently, threespine sticklebacks (*Gasterosteus*

*aculeatus*) were introduced in Deadwood Lake. Currently, there are approximately 31 lakes with reproducing introduced fish populations.

Most of the 470 mapped rivers and streams were also historically fishless. Exceptions include the nine valley bottom large rivers and their tributary junctions up to natural fish barriers. These rivers then and now bear native fish populations of bull trout (*Salvelinus confluentus*), cutthroat trout (*Oncorhynchus clarki*), coho salmon (*Oncorhynchus kisutch*) rainbow (steelhead) trout (*Oncorhynchus mykiss*), chinook salmon (*Oncorhynchus tshawytscha*), pink salmon (*Oncorhynchus gorbuscha*), and shorthead sculpin (*Cottus confusus*), and mountain whitefish (*Prosopium williamsonii*) (Samora 2013).

There are also nonnative fish in the rivers and streams. Eastern brook trout (*Salvelinus fontinalis*) are present in the Ohanapecosh, Carbon, Cowlitz, Mowich, Nisqually and White and Huckleberry watersheds. Introduced cutthroat trout, including west slope (*Oncorhynchus clarkii lewisi*) and Yellowstone cutthroat (*O. clarkii bouvieri*) are present in the Ohanapecosh, Carbon, Cowlitz, West Fork, White and Huckleberry watersheds. Introduced stocks of rainbow trout (*Oncorhynchus mykiss*) are also found in the Ohanapecosh, Cowlitz, White, West Fork and Huckleberry watersheds.

Status of Fish Species Found in the Park: The USFWS and National Marine Fisheries Service have identified populations of bull trout, chinook salmon, and steelhead as threatened within Mount Rainier National Park. In 2010, the USFWS designated approximately 30 miles of streams in the park as bull trout critical habitat. Designated chinook critical habitat exists outside the park boundary. Proposed critical habitat for steelhead is also identified outside the park boundary (NOAA 2016).

National Park Service Fisheries Management Guidance: Section 4.4.1 of Management Policies: The Guide to Managing the National Park System offers guidance to parks related to managing native and nonnative fish and recreational fishing (NPS 2006). This section identifies the following actions that parks can undertake to preserve fisheries resources unimpaired for the enjoyment of future generations, consistent with the mission of the NPS.

Among these include:

- Reintroduce threatened and endangered fish species to historically occupied reaches;
- Recover threatened and endangered fish species;
- Use natural fish barriers to protect pure strains of native fish;
- Establish native fish populations in historically unoccupied lakes and river reaches, within historically occupied basins, when deemed necessary for conservation purposes;
- Protect fish habitat;
- Remove barriers to migration into historically occupied habitat; and
- Reduce or eradicate invasive and introduced nonnative fish species.

Management Policies also provides for recreational fishing that:

- Preserves and restores the natural abundance, diversity, dynamics, distribution, habitats and behaviors of native animal populations and the communities and ecosystems in which they occur.
- Is conducted in a manner that minimizes human impacts on native animal populations.

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## Need for the Plan

- Manage native and nonnative fish and recreational fishing to allow for the recovery of threatened bull trout, chinook salmon, and steelhead within the park, consistent with the Endangered Species Act (ESA) and Bull Trout Recovery Plan designated critical habitat within the park (USFWS 2015).
- Manage native and nonnative fish and recreational fishing consistent with the NPS mission and current NPS management policies to protect native, including threatened and endangered species.

- Change current park specific federal fishing regulations, to better align with USFWS and NPS goals for native fish species recovery and Washington State fishing regulations.
- Apply the results of long-term research and monitoring to assess, and where possible eliminate, the ecological impacts of historic fish stocking on native fish and wildlife populations as directed by the Assistant Secretary of the Interior for Fish and Wildlife and Parks and NPS directives and policies.

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## Preliminary Alternatives

- Alternative 1: No Action (Continue Current Management)
- Alternative 2: Native Species Management
- Alternative 3: Intensive Native Species Management

These alternatives are intended to achieve short- and long-term fisheries management goals consistent with NPS native species management policies (see “NPS Fisheries Management Guidance” section in “Background”).

Alternative 1. No Action (Continue Current Management): This alternative would continue existing fisheries management practices in Mount Rainier National Park. Nonnative introduced fish would continue to compete with, displace, and hybridize with native and threatened fish species in all of the nine major watersheds in the park.

Alternative 1 would include:

- Current fishing regulations would continue to be inconsistent with NPS and Washington state native species management policies
- Current fishing regulations would not fully protect threatened species, such as bull trout, from harvest.
- Nonnative introduced fish would continue to adversely affect native aquatic species abundance and distribution because they occur in historically fishless alpine lakes and streams.
- The park would continue to remove barriers to migration into historically occupied fish habitat for all native fish.



Alpine Lake (rainbow trout (*Oncorhynchus mykiss*))



Coho salmon (*Oncorhynchus kisutch*)

Alternative 2. Native Species Management: This alternative would implement revised fishing regulations consistent with NPS and ESA policy, while providing for continued recreational fishing opportunities. This alternative would partially meet NPS and ESA policies for managing fish in the park.

Alternative 2 would include:

- New fishing regulations, including release of native fish species and retention of nonnative fish species.
- Nonnative fish control and/or eradication from selected lakes and streams using gillnetting and electrofishing.
- Implementation of actions called for in the Bull Trout Recovery Plan for Mount Rainier National Park. Among these include nonnative fish control and habitat protection measures, citizen science angling<sup>1</sup>, targeted fish weirs, and electrofishing. The plan also calls for assessment of how best to enhance bull trout populations in the Puyallup and Mowich watersheds.
- Development of a monitoring program to determine whether monitoring goals for native and nonnative fish populations are being met. Under an adaptive management strategy, existing actions would continue unless they are not meeting the goals for native and/or nonnative fish populations. If implementation shows fish management actions are not meeting the goals, additional management actions, such as those identified in alternative 3, could be implemented.

Alternative 3. Intensive Native Species Management: Actions would be the same as Alternative 2. In addition, by including the elements described below, this alternative would fully meet NPS and ESA direction for managing fish in the park.

In addition to actions described in Alternative 2, Alternative 3 would also include:

- Expanded implementation of nonnative fish control and/or eradication from all feasible park lakes and streams where nonnative fish populations occur. Methods could include gillnetting, and electrofishing (as in Alternative 2) as well as limited use of chemical piscicides.
- Reintroduction (to the extent feasible) of steelhead, chinook and coho salmon where these are documented to have been extirpated from suitable habitat.
- Translocation of bull trout into the Puyallup and Mowich watersheds to enhance existing populations.



Bull trout (*Salvelinus confluentus*)

<sup>1</sup> Citizen science angling may include supervised fishing trips for young people to help them identify and fish for nonnative species in sensitive fish habitat and/or collaborative data collection when nonnative fish are caught.

