

# Summary of Regulatory and Voluntary Programs for Protecting Bull Trout on Forest Lands within Plum Creek's Aquatic Habitat Conservation Planning Area

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## Overview

Throughout the last 190 years of western European settlement in the northwestern United States, various events have impacted water quality and native fish, including bull trout (*Salvelinus confluentus*). From trappers in the early 1800s to 20th-century livestock grazing, fish harvest, and timber practices, the needs of native fish were historically ignored.

During the past 25 years, timber harvest practices and other land uses began to be regulated in the United States. The objective of Technical Report #6 is to summarize and evaluate regulatory and voluntary programs for protecting bull trout habitat on forestlands in the vicinity of Plum Creek's ownership.

## Key Points

Four major points emerged from the analysis of current regulations:

- The Forest Service manages most bull trout streams.
- About half of the bull trout streams that cross Plum Creek lands are "less sensitive" to forest management. This means that these stream segments are used by bull trout for foraging, migratory, and over-wintering habitat. Spawning and juvenile rearing habitat would be considered "more sensitive" to forest management.

- National Forests in Plum Creek's bull trout watersheds have conservative aquatic resource protection strategies.
- Numerous aquatic resource protection measures are already embodied in Plum Creek's management.

## Supporting Technical Information

Various state forest practice rules, federal laws, Best Management Practices, and aquatic resource protection strategies have created a patchwork of regulations surrounding bull trout habitat on Plum Creek's lands. These regulations are summarized in Technical Report #6. The following discussion summarizes the key points that can be made from an analysis of these regulations.

## *Forest Service Management*

Plum Creek has significant ownership in bull trout drainages throughout the Pacific Northwest. However, these are a fraction of the total lands within bull trout watersheds, and the Forest Service manages most of the remainder. Because of the checkerboard pattern of Plum Creek ownership, management of bull trout watersheds is tightly interwoven with Forest Service policy. If the amount of land owned by Plum Creek is compared to the amount owned by the Forest Service, the federal government's role is larger than

Plum Creek's in protecting bull trout habitat.

### ***Less Sensitive Stream Miles***

Although the raw acreage of Plum Creek lands compared to Forest Service lands is important in understanding the regulatory environment, it is also necessary to review the type of bull trout habitat present on Plum Creek property. About half the total miles of bull trout streams that cross Plum Creek's land provide foraging, migratory, and over-wintering habitat. These kinds of habitat are typically less sensitive to the kinds of forest management activities that can potentially affect spawning and juvenile rearing habitat. For example, sediment input that may result from forest management is more critical in spawning than non-spawning areas.

### ***Conservative Protection Strategies***

After reviewing the regulations currently in place on lands in the Plum Creek Project Area, it appears that adjacent National Forests in the Planning Area have recently adopted highly conservative aquatic resource protection strategies. This provides an opportunity for Plum Creek to complement the federal strategies of maximizing benefits to bull trout while maintaining profitability and shareholder value.

### ***Numerous Protection Measures***

Plum Creek's environmental management system already incorporates numerous aquatic protection measures. These measures include state forest practice rules, Environmental Principles, watershed analysis, and formal conservation

agreements with the federal government. Collectively, these measures help address bull trout habitat needs during forest management activities.

### **Conclusion and Implications**

The legacy of past land use and its management impacts on bull trout has undoubtedly contributed to the current depressed state of many stocks. Included in these are past impacts from forest management activities. Current BMPs now provide considerable protection for aquatic resources. However, current science does not provide high certainty of the cause and effect relationships between forest practices and resource conditions. Continued experimentation with different land management approaches is still needed. Plum Creek has a demonstrated commitment to the use of best available science for developing innovative solutions to challenging resource management problems. This philosophy will be crucial for identifying remaining bull trout sensitivities not covered under current forest management systems, and for developing workable management approaches to address these sensitivities.