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second or third rotations. Within the Puget Sound area, the acreage of land managed for forest products has actually declined, as timberlands are converted to residential and non-forest commercial uses.

In the marine environment, increasing inputs from point and non-point discharge of pollutants and surface runoff affect water quality and the status of the marine ecosystem as a whole. Concentrations of sediment-associated chemical contaminants and disease prevalence in fish from heavily industrialized sites in Puget Sound are among the highest in the nation.

NMFS has determined that, relative to the other coho salmon ESUs, populations in the Puget Sound/Strait of Georgia ESU are abundant, and with some exceptions, run sizes and natural spawning escapements have been generally stable. However, artificial propagation of coho salmon may have had a substantial impact on native, naturally-reproducing coho salmon populations, to the point that it is difficult to identify self-sustaining, native stocks within this region. In addition, the continuing loss of habitat, extremely high harvest rates, and a potentially severe, recent decline in average size of spawners indicate that there are substantial risks to the remaining native production in this ESU.

However, each of these concerns is based as much on professional judgement as on hard data. Although the magnitude of artificial propagation in the Puget Sound region ensures that there are ample opportunities for adverse effects on natural populations, few studies have been conducted to determine the extent to which such effects actually occur. Similarly, because virtually no information is available on size of naturally spawning coho salmon in Puget Sound, NMFS' evaluation of the decline in adult size is based on data for terminal, in-river fisheries, which primarily target hatchery fish. Although harvest rates on natural populations appear to be high, whether fishing mortality is too high for natural populations to sustain has not been formally evaluated. Finally, during the course of this status review, only limited life history and abundance information was gathered for the substantial portion of this ESU that occurs in British Columbia.

Because of the general lack of definitive information on the identified risk factors, and because the number of naturally-reproducing fish within the ESU is fairly large and apparently stable, NMFS concludes that a listing is not warranted for the Puget Sound/

Strait of Georgia ESU at this time. However, there is sufficient concern regarding the overall health of this ESU, and therefore, NMFS is adding the Puget Sound/Strait of Georgia ESU to the Candidate List. During the period between this proposed rule and publication of any final rule, NMFS will conduct a thorough reevaluation of the status of this ESU and will reconsider the present decision that a listing is not warranted. In the event that this reevaluation establishes that listing the Puget Sound/Strait of Georgia ESU is warranted, NMFS would issue a proposed rule to list this ESU as threatened or endangered.

Summary of Factors Affecting the Species

Section 2(a) of the ESA states that various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation. Section 4(a)(1) of the ESA and the listing regulations (50 CFR part 424) set forth procedures for listing species. NMFS must determine, through the regulatory process, if a species is endangered or threatened based upon any one or a combination of the following factors: (1) The present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or education purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms; or (5) other natural or human-made factors affecting its continued existence.

The factors threatening naturallyreproducing coho salmon populations are numerous and varied. Given the vast geographic scope of NMFS' status review, it is difficult to determine which factors are primarily responsible for the decline of a specific ESU. For most of the coho salmon ESUs proposed for protection under the ESA, the present condition of the population is a result of long-standing, human-induced conditions (e.g., harvest, habitat degradation and artificial propagation) that serve to exacerbate the negative effects of adverse environmental conditions (e.g., drought, poor ocean conditions). The following examples provide an overview of the types of activities and conditions that threaten the conservation of these ESUs over a significant portion of their ranges.

A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

Logging, agricultural activities, urbanization, stream channelization, dams, wetland loss, water withdrawals and unscreened diversions for irrigation, and mining have contributed to the decline of numerous West Coast populations of coho salmon. Logging activities, and the associated road networks, often result in soil erosion and stream sedimentation such that spawning habitat is seriously degraded. Removal of trees within the riparian zone of coastal streams has resulted in increased summer water temperatures, eliminated the potential for trees to fall into streams, and altered the natural hydrograph. Decreases in large woody material in streams reduces habitat complexity and contributes to the loss of cover, shade, and pools; these habitat features are required by juvenile coho salmon. Livestock grazing can damage streambanks and eliminate streamside vegetation, thereby preventing riparian species from growing to maturity and has resulted in shallow, warm streams that are not suitable for juvenile and adult coho salmon. Agricultural activities and urbanization often result in pollution from both point and nonpoint sources, and stream channelization (e.g., for flood control) can alter the physical and hydrographic properties of streams such that the quality and amount of habitat available to coho salmon is reduced. Water withdrawals reduce stream flow and the amount of available habitat, sometimes during critical drought periods, and can contribute to high water temperatures.

B. Overutilization for Commercial, Recreational, Scientific, or Education Purposes

This species has historically been a staple of Pacific Northwest Indian tribes, and has been targeted in recreational and commercial fisheries since the early 1800's. Marine harvest of coho salmon in the range of this status review occurs primarily in nearshore waters off British Columbia, Washington, Oregon, and California. Recreational fishing for coho salmon is pursued in numerous streams when adults return on their fall spawning migration. Due to low escapements and increased concern for protecting coho and chinook salmon runs, recent regulations on ocean and river harvest have resulted in the closure or severe curtailment of fisheries along much of the West Coast. Unfortunately, the confounding effects of habitat deterioration, drought, and poor ocean