

results from today's rule. NHTSA would issue a Federal Register document asking for public comment on the request for extension of OMB Control Number 2127-0052.

Pursuant to the Paperwork Reduction Act of 1995 and OMB's regulations at 5 CFR 1320.5(b)(2), NHTSA informs the potential persons who are to respond to the collection of information that such persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. The currently valid OMB control number is displayed above and in NHTSA's regulations at 49 CFR part 509 *OMB Control Numbers for Information Collection Requirements*.

List of Subjects in 49 CFR Part 571

Imports, Motor vehicle safety, Motor vehicles, Rubber and rubber products, Tires.

In consideration of the foregoing, the agency has decided to amend Standard No. 106, *Brake Hoses*, in Title 49 of the Code of Federal Regulations at part 571 as follows:

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

1. The authority citation for part 571 continues to read as follows:

Authority: 49 U.S.C. 322, 30111, 30115, 30117, and 30166; delegation of authority at 49 CFR 1.50.

2. Section 571.106 is amended by revising S5.1, adding S5.2.3, revising S6.3.2(a) and adding S6.3.2(d) to read as follows:

§ 571.106 Standard No. 106; Brake Hoses.

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S5.1 *Construction*. (a) Each hydraulic brake hose assembly shall have permanently attached brake hose end fittings which are attached by deformation of the fitting about the hose by crimping or swaging.

(b) Each hydraulic brake hose assembly that is equipped with a permanent supplemental support integrally attached to the assembly and is manufactured as a replacement for use on a vehicle not equipped, as an integral part of the vehicle's original design, with a means of attaching the support to the vehicle shall be equipped with a bracket that is integrally attached to the supplemental support and that adapts the vehicle to properly accept this type of brake hose assembly.

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S5.2.3 *Package labeling for brake hose assemblies designed to be used with a supplemental support* (a) Each hydraulic brake hose assembly that is equipped with a permanent

supplemental support integrally attached to the assembly and is manufactured as a replacement assembly for a vehicle equipped, as an integral part of the vehicle's original design, with a means of attaching the support to the vehicle shall be sold in a package that is marked or labeled as follows: "FOR USE ON [*insert Manufacturer, Model Name*] ONLY";

(b) Each hydraulic brake hose assembly that is equipped with a permanent supplemental support integrally attached to the assembly and is manufactured as a replacement for use on a vehicle not equipped, as an integral part of the vehicle's original design, with a means of attaching the support to the vehicle shall comply with paragraphs (a) (1) and (2) of this section:

(1) Be sold in a package that is marked or labeled as follows: "FOR USE ONLY WITH A SUPPLEMENTAL SUPPORT."

(2) Be accompanied by clear, detailed instructions explaining the proper installation of the brake hose and the supplemental support bracket to the vehicle and the consequences of not attaching the supplemental support bracket to the vehicle. The instructions shall be printed on or included in the package specified in paragraph (a)(1) of this section.

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S6.3.2 *Preparation*. (a) Except for the supplemental support specified in S6.3.2(d), remove all external appendages including, but not limited to, hose armor, chafing collars, mounting brackets, date band and spring guards.

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(d) In the case of a brake hose assembly equipped with a permanent supplemental support integrally attached to the assembly, the assembly may be mounted using the supplemental support and associated means of simulating its attachment to the vehicle. Mount the supplemental support in the same vertical and horizontal planes as the stationary header end of the whip test fixture described in S6.3.1(b). Mount or attach the supplemental support so that it is positioned in accordance with the recommendation of the assembly manufacturer for attaching the supplemental support on a vehicle.

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Issued on: August 5, 1996.
Ricardo Martinez,
Administrator.
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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 222

[Docket No. 960723205-6205-01; I.D. 040694C]

Endangered and Threatened Species; Endangered Status for Umpqua River Cutthroat Trout in Oregon

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule.

SUMMARY: NMFS is issuing a final determination that the Umpqua River cutthroat trout (*Oncorhynchus clarki clarki*) is a "species" under the Endangered Species Act of 1973, as amended (ESA) and will be listed as endangered. Extremely low, and declining, numbers of adult cutthroat trout counted at Winchester Dam on the North Umpqua River signal a high risk of extinction for the species. Habitat degradation, recreational fishing, and inadequate regulatory mechanisms are factors that have contributed to the species' decline. Habitat degradation and inadequate regulatory mechanisms continue to represent a potential threat to the Umpqua River cutthroat trout's existence.

NMFS will reconsider this determination in 2 years (or as new scientific information becomes available) and will continue to assess the degree to which ongoing Federal, state, and local conservation initiatives reduce the risks faced by Umpqua River cutthroat trout.

EFFECTIVE DATE: September 9, 1996.

ADDRESSES: Garth Griffin, NMFS, Environmental and Technical Services Division, 525 NE Oregon St.—Suite 500, Portland, OR 97232-2737, telephone (503/231-2005); or Marta Nammack, NMFS, Office of Protected Resources, 1315 East-West Highway, Silver Spring, MD 20910, telephone (301/713-1401).

FOR FURTHER INFORMATION CONTACT: Garth Griffin, telephone (503/231-2005), or Marta Nammack, telephone (301/713-1401).

SUPPLEMENTARY INFORMATION:

Background

The Umpqua River cutthroat trout is a "distinct population segment" under the ESA (hereinafter referred to as an Evolutionarily Significant Unit or ESU (56 FR 58612; November 20, 1991)) of the coastal cutthroat trout

(*Oncorhynchus clarki clarki*). The coastal cutthroat trout subspecies is native to western North America and is found in the coastal temperate rainforests from southeast Alaska to northern California (Trotter 1989). The Umpqua River cutthroat trout ESU inhabits a large coastal basin (drainage area over 12,200 km²) in the southwestern Oregon coast. Spawning sites are located in the North and South Umpqua Rivers and their tributaries, of which Smith River and Calapooya, Elk, and Scholfield Creeks are major tributaries. The estuary of the Umpqua River is one of the largest on the Oregon coast.

Coastal cutthroat trout differ from all other trout by their profusion of small to medium-size spots of irregular shape (Behnke 1992). In addition, they do not develop the brilliant colors associated with inland cutthroat trout (a separate subspecies). In the sea-run (anadromous) form of the coastal cutthroat trout, spots and colors are further obscured by the silvery skin deposit common to anadromous salmonids. Non-anadromous (resident) fish tend to be darker, with a "coppery or brassy" sheen (Behnke 1992).

The life history of this subspecies is probably the most complex and flexible of any Pacific salmonid. Unlike other anadromous salmonids, sea-run forms of the coastal cutthroat trout do not overwinter in the ocean and only rarely make long extended migrations across large bodies of water. They migrate in the nearshore marine habitat and usually remain within 10 km of land (Giger 1972; Sumner 1972; Jones 1976; Johnston 1981). While most anadromous cutthroat trout enter seawater as 2- or 3-year olds, some may remain in fresh water up to 5 years before entering the sea (Giger 1972; Sumner 1972). Other cutthroat trout may never outmigrate at all, but remain as residents of small headwater tributaries. Still other cutthroat trout may migrate only into rivers and lakes (Nicholas 1978; Tommasson 1978; Moring et al. 1986; Trotter 1989), even when they have access to the ocean (Tommasson 1978). In the Umpqua River, anadromous, resident, and potamodromous (river-migrating) life-history forms have been reported (Trotter 1989; Loomis and Anglin 1992; Loomis et al. 1993). Details of the coastal cutthroat trout life history and ecology, including aspects particular to the various life forms, can be found in published reviews by Pauley et al. (1989), Trotter (1989), Behnke (1992), and Johnson et al. (1994).

Previous Federal Action

On April 1, 1993, the Secretary of Commerce received a petition from the Oregon Natural Resources Council, Umpqua Valley Audubon Society, and the Wilderness Society to list Umpqua River cutthroat trout as threatened or endangered, and to designate critical habitat under the ESA (16 U.S.C. 1531 *et seq.*). On July 19, 1993, NMFS published a notice indicating its intent to conduct a status review of Umpqua River cutthroat trout (58 FR 38554). To ensure a comprehensive review, NMFS solicited information and data regarding the present and historic status of Umpqua River cutthroat trout and whether this stock qualifies as a "species" under the ESA. NMFS also requested information on areas that may qualify as critical habitat for Umpqua River cutthroat trout.

On August 19, 1993, NMFS received a petition from the Oregon Natural Resources Council and the Steamboaters for an emergency listing of Umpqua River cutthroat trout. On December 17, 1993, NMFS published a notice that an emergency listing was not warranted at that time (58 FR 65961).

In June 1994, NMFS published a technical paper entitled "Status Review for Oregon's Umpqua River Sea-run Cutthroat Trout" (Johnson et al. 1994), and subsequently published a proposed rule on July 8, 1994 (59 FR 35089) to list Umpqua River cutthroat trout as an endangered species. NMFS cited the precarious status of the remaining anadromous cutthroat trout in the Umpqua River Basin (and possibly other life forms), which have demonstrated a steady decline since at least the mid-1970s. In this finding, NMFS proposed that all cutthroat trout life forms (i.e., resident, anadromous, potamodromous) should be included in the listed Umpqua River cutthroat trout ESU. On September 2, 1994, NMFS published a notice of public hearing and an extension of public comment period (59 FR 45661); a public hearing on the proposed rule was held on September 29, 1994, in Roseburg, OR.

Pursuant to a joint policy issued by NMFS and U.S. Fish and Wildlife Service (USFWS) on July 1, 1994, regarding implementation of the ESA, state government co-managers were involved in the preparation of this final rule.

Summary of Comments

Twenty-two individuals presented testimony at the NMFS public hearing on the proposed rule. During the 90-day public comment period, NMFS received seventeen written comments on the

proposed rule from government agencies, non-government organizations, the scientific community, and other individuals. The majority of comments opposed listing Umpqua River cutthroat trout under the ESA. Opposition to the proposed rule was primarily focused on the amount and quality of information on which the proposed rule was based. This final rule takes into account comments received during the public comment period and public hearing. A summary of major comments received during the public comment period and public hearing is presented below.

Issue 1: Sufficiency of Scientific Information

Many individuals commented that there is a general lack of data concerning a variety of factors pertaining to the Umpqua River cutthroat trout (e.g., minimum viable population size, age structure, absolute abundance of juveniles or adults, distribution, redd counts, average time of spawning, genetic evidence of distinctness). Some commenters recommended that listing be delayed until more information can be developed to better support a listing decision.

NMFS recognizes that available information regarding the Umpqua River cutthroat trout is limited. However, the ESA requires that a listing determination be made based "solely on the basis of the best available commercial and scientific data (16 USC 1533(b)(1); 50 CFR 424.11(b))." Such a determination must be made in accordance with the time frames set forth in the ESA. The status review reflects the best scientific information presently available regarding cutthroat trout in the Umpqua River Basin, and indicates that Umpqua River cutthroat trout is an ESU that is endangered. NMFS believes that it would not be prudent to delay listing and risk possible extinction of this species due to the lack of more complete information. Therefore, in accordance with the ESA, NMFS finds it appropriate to make a listing determination at this time. As new scientific information becomes available, NMFS will reconsider the listing status of Umpqua River cutthroat trout.

Issue 2: Life History and Distribution

Several commenters stated that the literature indicates that cutthroat trout exhibit a variety of migratory behaviors: Anadromy, potamodromy, and residency. Other comments suggested that the existence of multiple life forms in the Umpqua River Basin warrants

further study before concluding that listing is warranted.

NMFS concurs that three life forms presently exist in the Umpqua River. Anadromy, a life history characteristic common to Pacific salmonids, is exemplified by a species that migrates from fresh water to the ocean, then returns to fresh water as an adult to spawn. Potamodromy, a relatively uncommon life history trait, is exemplified by a species that undertakes freshwater migrations of varying length without entering the ocean. Residency, a relatively common life history trait, is exemplified by a species that remains within a relatively small freshwater range throughout its entire life cycle. The Oregon Department of Fish and Wildlife (ODFW) stated that recent radio tagging evidence verifies the existence of a potamodromous life form of Umpqua River cutthroat trout.

NMFS believes that recent studies conducted by ODFW represent substantial progress in documenting the life history of cutthroat trout in the Umpqua River Basin and strongly indicate that some cutthroat trout do exhibit the potamodromous life history trait. Although the relationship between the various life forms is currently not well-defined, and further research will be needed to clarify this issue, the best available scientific data indicate that it is unlikely that these life forms are completely isolated reproductively. Therefore, NMFS has determined that all cutthroat trout life forms (i.e., resident, anadromous, potamodromous) should be included in the listed Umpqua River cutthroat trout ESU.

One commenter indicated that the historical range of anadromous fish, including cutthroat trout, extended up to Toketee Falls on the North Umpqua River, not merely to the Soda Springs dam site as indicated in the status review. NMFS agrees with this comment and notes that a more detailed analysis of migrational barriers will be conducted during the designation of critical habitat for Umpqua River cutthroat trout.

Although the NMFS status review reports that historical cutthroat trout runs (upstream migrations) extended from June through January, one comment stated that currently migration is only possible during late July and August. This commenter expressed concern that this was detrimental to the trout because it is the period of highest water temperatures in the Umpqua River, and that the status review does not adequately address this restriction in run timing. NMFS agrees that adult cutthroat trout experience delays during the spawning migration from the lower

Umpqua River estuary to the North and South Umpqua Rivers and concurs with the commenter that elevated water temperatures in the mainstem Umpqua River in late July and August may have had a significant impact on the survival and time of arrival of cutthroat trout at Winchester Dam. Ongoing ODFW radio-tagging studies are expected to provide more insight into this problem.

Issue 3: Status of the Umpqua River Cutthroat Trout

Some commenters stated that cutthroat trout are a good indicator of habitat quality and that their existence in areas of the Umpqua River Basin considered to be severely degraded suggests that habitat alterations are not significant risk factors.

While it is possible that cutthroat trout may be "an indicator of habitat quality," NMFS has found no published studies to support this characterization. Although exceptions may exist, NMFS believes that available research has established that cutthroat trout and other salmonids have declined throughout their range due to logging and other forest and rangeland management practices (for an extensive treatment, see Meehan 1991). For example, Connolly and Hall (1994) found that the abundance of cutthroat trout in logged areas of coastal Oregon streams varied considerably based upon differences in scour and cover afforded by large woody debris and by the differences in light and nutrient inputs afforded by deciduous versus conifer trees in the riparian zone. These authors found that woody debris left in streams in logged areas often resulted in significant increases in resident cutthroat trout abundance for up to 30 years. However, because prospects for future recruitment of large woody debris decrease after this period, the period between 40 to 60 years after logging appears to be a time during which cutthroat trout abundances are likely to decline as a result of degraded habitat conditions. Therefore, short-term increases in cutthroat trout abundance may be expected after logging because of associated increases in large woody debris (if the increases are not offset by other impacts such as siltation, scouring, high water temperatures). However, over the long-term, logging would likely lead to cutthroat trout population declines.

Several commenters stated that Winchester Dam counts are not representative of the status of migrating Umpqua River cutthroat trout, because they only account for those fish entering the North Umpqua River and ignore fish in the South and mainstem Umpqua

River. In contrast, one commenter stated that the abundance trend information provided by Winchester Dam counts is probably as good as any information available on the West Coast for cutthroat trout.

NMFS has determined that Winchester Dam counts are currently the best quantitative measures of cutthroat trout abundance in the Umpqua River Basin. Although the dam is located on the North Umpqua River, there are several reasons to believe that the North Umpqua River has larger and healthier populations of cutthroat trout than the South Umpqua River.

For example, while no long-term surveys of cutthroat trout were conducted in the South Umpqua River prior to 1993, a U.S. Forest Service (USFS) report states that "a very small, wild cutthroat trout population probably exists in the South Umpqua River system" and that this run was once "widespread" and "dramatically larger than at present" (United States Department of Agriculture (USDA) 1992).

Several factors have tended to make the South Umpqua River less conducive to cutthroat trout production than the North Umpqua River. The North Umpqua River begins farther inland and flows for a substantial distance at a higher elevation than most other Oregon coastal rivers, including the South Umpqua River. As a result, the North Umpqua River has historically had cooler water temperatures and larger summer water flows than other local rivers. Although the South Umpqua River also begins at a relatively high altitude, it rapidly drops in elevation; consequently, it tends to exhibit higher water temperatures and lower summer flows compared to the North Umpqua River.

In addition to the geomorphological differences in the North and South Umpqua Rivers, different levels of riparian habitat loss have also contributed to temperature differences in these rivers. Beginning in the mid-1950's, summer water temperatures and the frequency of winter flooding increased in the Umpqua River watershed, presumably as a result of poor logging practices. Summer water temperatures were often above the preferred range for cutthroat trout and other salmonid populations (about 7 to 16°C) in portions of the river (Bell 1986). In recent years, the riparian forest canopy has begun to recover in the North Umpqua River watershed, but maximum water temperatures are still higher than those preferred by cutthroat trout. This recovery has been slower in the South Umpqua River watershed and

conditions for cutthroat trout have remained poorer than in the North Umpqua River.

Based on these factors, NMFS believes that historically, the South Umpqua River has been less conducive to cold-water dependent species such as cutthroat trout, relative to the North Umpqua River. In addition, NMFS believes that present conditions in the North Umpqua River are more favorable for cutthroat trout production than those found in the South Umpqua River.

Several commenters stated that resident (nonmigratory) populations of cutthroat trout are healthy in the Umpqua River, and recommended that the condition of these populations be taken into account when determining whether to list the species. ODFW stated that "resident cutthroat trout populations above natural barriers (e.g., high waterfalls) are in relatively healthy condition and do not warrant an endangered listing (ODFW 1994)."

NMFS notes that there have been no recently published population surveys of cutthroat trout in the Umpqua River Basin. Furthermore, there have been no published population surveys of cutthroat trout above natural barriers to confirm the assertion that resident cutthroat trout populations above natural barriers are healthy. However, Kostow (1995) states that available information has "raised concerns that anadromous populations in Oregon may be experiencing a widespread decline" and that resident cutthroat appear to "remain relatively abundant, even in streams where the abundance of searun fish has sharply declined."

Anecdotal information suggests that the resident component of the cutthroat trout ESU may be relatively healthy; however, few published scientific data exist to support this conclusion. Furthermore, ladder counts from Winchester Dam indicate that the anadromous component of this ESU has declined to precipitously low levels. These ladder counts represent one of the best long-term data sets for cutthroat trout on the West Coast. Anadromy is considered an important component in the evolutionary legacy of *O. clarki clarki*, therefore inclusion of both the anadromous and resident life history forms in the ESU is warranted (61 FR 2639), based on the present status of the anadromous cutthroat trout life form and the fact that listing of the resident form may increase the anadromous form's chances of survival.

In addition to stating that resident populations of cutthroat trout above natural barriers are healthy, ODFW also stated that "natural barriers form gene flow barriers," resulting in a distinction

between resident cutthroat trout populations above natural barriers and migrating populations below such barriers (ODFW 1994). Recent research indicates that some gene flow may occur from cutthroat trout above barriers to below-barrier populations; however, the amount and role of this contribution is presently unknown (Johnston 1981; Behnke 1979; Griswold 1996).

In most cases, genetic flow between cutthroat trout populations above and below barriers would be limited to a one-way flow (fish traveling downstream over falls). The genetic contribution of this flow is not thought to be an important factor for populations separated by long-standing natural barriers, since there would likely be strong selection in the resident populations above barriers against individuals with a tendency to migrate downstream. Therefore, based on available data, NMFS concludes that resident populations of Umpqua River cutthroat trout residing above natural impassable barriers for long periods of time (several hundreds or thousands of years) are not included in the cutthroat trout ESU presently being listed under the ESA.

With respect to manmade impassable barriers, NMFS believes that historically, anadromous cutthroat trout populations inhabited areas above both Soda Springs and Galesville Dams (completed in 1952 and 1987, respectively). While the construction of these dams has resulted in the isolation of cutthroat trout populations for the past several decades, recent studies with sockeye salmon (another salmonid with resident and anadromous life forms) suggest that the anadromous life history trait can be retained by populations above barriers after decades of isolation (Kaeriyama et al. 1992). Based on this, NMFS believes that cutthroat trout species residing above artificial barriers for a period of decades have probably remained genetically similar to those species residing below such barriers. Therefore, NMFS has determined that cutthroat trout populations residing above Galesville and Soda Springs Dams are included in the Umpqua River cutthroat trout ESU and are thus being listed at this time.

Issue 4: Factors Contributing to the Decline of Umpqua River Cutthroat Trout

Many commenters recommended that NMFS consider other factors for decline in addition to those identified in the proposed rule, i.e., recreational fishing and habitat degradation as a result of logging. Additional factors identified by commenters include the following:

Predation by marine mammals, birds, and native and non-native fish species; adverse environmental conditions resulting from natural factors such as droughts, floods, and poor ocean conditions; non-point and point source pollution caused by agriculture and urban development; disease outbreaks caused by hatchery introductions and warm water temperatures; mortality resulting from unscreened irrigation inlets; competition in estuaries between native and hatchery cutthroat trout; cumulative loss and alteration of estuarine areas; and loss of habitat caused by the construction of dams.

NMFS acknowledges that there are many factors in addition to logging and recreational fishing that have contributed to the decline of Umpqua River cutthroat trout. However, extensive scientific literature exists regarding the adverse effects of these two activities on anadromous fish populations and their habitat (see references). Further, it is well documented that both of these activities have historically occurred extensively throughout the Umpqua River Basin. Based on available information, NMFS believes that these two activities have significantly contributed to the decline of the cutthroat trout in the Umpqua River Basin. Furthermore, recent legislation, i.e., the "salvage timber rider" provisions of the July 1995 Emergency Supplemental Appropriations Act; § 20010 *et seq.* of Public Law 104-19, which suspended certain logging restrictions on Federal lands, has resulted in increased timber harvest in the Umpqua River watershed. NMFS will address these and other factors for decline during the development of a cutthroat trout recovery plan.

Several commenters specifically stated that poor ocean conditions (for example, conditions resulting in reduced marine forage or increased predation) associated with El Niño events may have contributed to the decline of this species. Although available literature is limited regarding the importance of the marine component of cutthroat trout, it appears that this species spends a limited amount of time in the marine environment, spending only 2 to 5 months in salt water before returning to fresh water (Behnke 1992). While in the marine environment, cutthroat trout typically stay close to shore, near bays, estuaries and beaches (Pauley et al. 1989; Behnke 1992); however, they have been found as far as 31 km offshore (Loch and Miller 1988).

Based on these estuarine and marine life history characteristics, ocean

conditions would likely have a lesser impact on cutthroat trout than on salmon species that spend more time at sea. However, this is not to say that cutthroat trout do not receive important benefits from marine residence. Poor ocean conditions are likely to impact cutthroat trout abundance; however, during periods of low ocean productivity, the availability of productive freshwater habitat becomes increasingly important to buffer such ocean conditions.

Several commenters stated that current logging practices have dramatically improved over those of the past, decreasing the impact of present-day logging on habitat. Present-day logging practices have improved over those of the past; however, timber harvest is still a major land use in the Umpqua River Basin (currently comprising nearly 70 percent Federal, state, or private timber land) and fish habitat is still recovering from past logging practices. In addition, the incremental impacts of present-day land management practices, when added to impacts of past land management practices and other risk factors, continue to pose a serious threat to Umpqua River cutthroat trout.

One commenter provided data indicating that pH levels in various tributaries of the Umpqua River Basin exceed the State of Oregon's water quality standards and argued that these pH levels can be attributed to the effects of logging. Although limited in scope, these water quality results suggest a possible factor in the decline of cutthroat trout in the Umpqua River Basin. These data warrant further consideration during recovery planning.

Several commenters stated that recreational fishing has had a minimal impact on naturally spawning cutthroat trout stocks and that no basis exists for the statement that recreational fishing has likely contributed to the general decline in Umpqua River cutthroat trout populations. One commenter stated that the scientific literature is replete with studies documenting recreational fishing as having great potential for impacts on native fish stocks.

NMFS agrees that there is no specific documentation that indicates recreational fishing has contributed to the decline of cutthroat trout populations in the Umpqua River Basin. However, there has been a long-standing fishery in the lower mainstem Umpqua River aimed at plants of "catchable" Alsea River hatchery-reared cutthroat trout. While there are no studies on the possible impact of these hatchery fish or the fishery for them on native cutthroat trout, there is considerable literature on

the susceptibility of cutthroat trout to angling and the potential impacts of recreational fishing on native fish stocks (Behnke 1992; Pauley et al. 1989; Trotter 1989). Furthermore, ODFW has recognized the potential adverse impacts of harvest on this species and closed the Umpqua River to cutthroat trout fishing effective January 1, 1995 (ODFW 1994). NMFS expects that this action will greatly facilitate the species' recovery.

One commenter stated that cutthroat trout are known to interbreed with hatchery rainbow trout and, as a result, introgression has been the major cause of decline of cutthroat trout throughout the western United States. NMFS reviewed information from Behnke (1992), which noted that mass hybridization has occurred in interior portions of the cutthroat trout range (where the species evolved in isolation from other salmonids) following the introduction of rainbow trout. However, meristic and phenotypic assessments suggest that the coastal subspecies of cutthroat trout (which includes Umpqua River cutthroat trout) is far more resistant to hybridization than the interior cutthroat trout subspecies (Behnke 1992). Hence, NMFS does not believe that hybridization has been the major cause of decline of Umpqua River cutthroat trout. Nonetheless, hatchery practices should be reviewed during recovery planning to ensure that there are no adverse effects on cutthroat trout in the future.

One commenter stated that, since cutthroat trout in the Umpqua River Basin are at the southern end of their range, there may be a greater tendency for natural fluctuations in population abundance compared with species at the center of their range. While Umpqua River cutthroat trout are in the southern portion of this species' historic range, cutthroat trout populations have historically occurred as far south as the Eel River in California (Behnke 1992; Trotter 1987). Therefore, NMFS believes Umpqua River cutthroat trout populations are well within the species' range and would not tend to exhibit natural population fluctuations often associated with "fringe" populations.

Issue 5: Consideration of Umpqua River Cutthroat Trout as a Species

Several commenters indicated that the historical introduction of Alsea River hatchery-reared cutthroat trout may have resulted in the loss of the native component of cutthroat trout in the Umpqua River.

The effect of Alsea River cutthroat trout hatchery releases from 1961 to 1975 on native cutthroat trout in the

Umpqua River is unknown. Counts of adult cutthroat trout crossing Winchester Dam show that the number of fish declined to nearly zero in the mid-1950's, increased dramatically from about 1961 to 1975, and rapidly declined again after about 1976. The period of increase coincides almost exactly with releases of cutthroat trout from the Alsea River Hatchery into the Umpqua River. Although other explanations are possible, the most parsimonious is that the cutthroat trout increases during 1961-75 represent predominantly Alsea River hatchery fish straying to areas above Winchester Dam. Alsea River fish have a slightly later run-timing than the Umpqua River fish, and a shift toward later run-timing can be detected in fish returning to Winchester Dam after 1960. However, there is also evidence of a shift back toward the original run-timing after cessation of the hatchery program.

Although the pattern of abundance and tag-recovery data during this period of supplementation indicate that Alsea River hatchery fish returned as adults to Winchester Dam in some numbers, it is apparent that 15 years of hatchery releases did not result in a viable, self-sustaining population of naturally spawning fish. One possible explanation of this result is that Alsea River hatchery fish are poorly adapted to conditions in the North Umpqua River. This explanation supports NMFS' conclusion of a cutthroat trout ESU in the Umpqua River. Other possible explanations include: (1) The effects of hatchery rearing, rather than poor adaptation, are responsible for the lack of long-term survival of Alsea River hatchery fish, and (2) the decline in Winchester Dam counts following the end of the hatchery program merely reflect deteriorating conditions for cutthroat trout in the North Umpqua River. The relationship of the existing cutthroat trout population to the original population and the introduced hatchery fish is uncertain; however, available evidence from population abundance and run-timing data suggests that a component of the native run persists.

One commenter stated that since cutthroat trout co-evolved with other salmonid species, there should be similarity in the organization of their ESU's. NMFS believes that each salmonid species has had a unique evolutionary history and utilizes ecological niches different from all other species. While there may be similarities across species in salmonid ESU's, there is no reason that this will always be the case. This may be especially true for cutthroat trout, which have a more

complex life history than most Pacific salmonids.

One commenter stated that the amount of straying in cutthroat trout may suggest a greater degree of genetic exchange in coastal populations, thus potentially widening the ESU. While little information is available on straying rates of cutthroat trout, that which is available suggests that most movement of fish into non-natal streams occurs with immature fish. NMFS is not aware of any evidence to suggest that sexually mature, native cutthroat trout wander or stray at a level higher than is typical of native populations of other species of Pacific salmonids.

In reviewing cutthroat trout life history, Pauley et al. (1989) reported that "homing of native cutthroat trout is extremely precise (Campton and Utter 1987), although hatchery planted fish may stray as much as 30 percent, making survival rates impossible to determine (Johnston and Mercer 1976)." Giger (1972) found that tagged native fish from streams in the Alsea River did not stray and were recaptured only in their natal streams. However, Giger (1972) also found that over 30 percent of the tagged hatchery fish entered streams up to 133 km from the release stream. Therefore, based on available data, straying is not thought to affect the genetic distinctiveness of the native, naturally spawning fish identified in this ESU.

One commenter stated that coastal cutthroat trout (*Oncorhynchus clarki clarki*), the anadromous component of the cutthroat trout species, is morphologically similar throughout its range and shows no evidence of clinal variation. As reported by Behnke (1992), cutthroat trout populations with direct access to the sea are morphologically similar throughout their range. However, the few genetic studies that have been conducted on cutthroat trout (e.g., Campton and Utter 1987; Currens et al. 1992) show that there can be substantial genetic differentiation even among local populations.

Issue 6: Existing Regulatory Mechanisms

Several commenters maintained that existing regulatory mechanisms and management initiatives (e.g., the Oregon Forest Practices Act and the Umpqua River Basin Fisheries Restoration Initiative) are sufficient for the protection of Umpqua River cutthroat trout. Two commenters stated that existing management initiatives are unproven and lack technical support.

Although several commenters describe the Oregon Forest Practices Act (OFPA) as being capable of protecting cutthroat trout, maintaining fish

populations, and preventing the take of any fish, there is little evidence to support these claims. While the OFPA presently endorses fish habitat protection (Oregon Department of Forestry (ODF) 1994), NMFS is concerned that the level of habitat protection may be insufficient to conserve Umpqua River cutthroat trout. However, the OFPA itself provides a process "to adopt additional basin-specific protection rules for water quality-limited streams or streams with threatened or endangered aquatic species" (ODF 1994). This process could be employed to great effect in the Umpqua River Basin, which presently has more than 80 river reaches (many spanning from river mouth to headwaters) currently designated as water-quality limited by the Oregon Department of Environmental Quality (Oregon Department of Environmental Quality 1995). Therefore, in response to the listing of cutthroat trout, the Oregon Department of Forestry, in cooperation with Federal land management agencies, could provide special emphasis to habitat areas containing listed cutthroat trout to promote their recovery.

The Umpqua River Basin Fisheries Restoration Initiative (UBFRI) referenced by several commenters is also described as a measure which will aid in the recovery of cutthroat trout. In 1993 the Douglas County Board of Commissioners chartered this initiative to address restoration projects in the Umpqua River Basin. Members of the initiative include county, state, and Federal government, and private industry. Since its inception, the initiative has sponsored extensive habitat surveys in the watershed. Restoration efforts have focused primarily on construction and placement of instream habitat structures. NMFS believes that the UBFRI is a good example of how local groups can work together to restore Pacific salmon. The initiative has made great strides in assessing habitat conditions in the basin. This information will be extremely useful in formulating a recovery plan for this species.

NMFS is also encouraged by Oregon's recent development of a Coastal Salmon Restoration Initiative (CSRI). If successful, this ambitious initiative could provide all stakeholders with a better means by which to achieve the purposes of the ESA; protecting and restoring native fish populations and the ecosystems upon which they depend. While the CSRI is initially focusing on the needs of coastal coho salmon populations (currently proposed as

threatened), NMFS expects that significant benefits could also accrue to other salmonids, including Umpqua River cutthroat trout. NMFS encourages the continuation of this and local initiatives as important components of recovery planning for this species.

Summary of Factors Affecting the Species

Section 2(a)(1) 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 NMFS listing regulations (50 CFR part 424) set forth procedures for listing species. The Secretary of Commerce 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 educational purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms; or (5) other natural or human-made factors affecting its continued existence.

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

In general, land use practices have reduced salmonid production in Oregon by decreasing habitat diversity and complexity, and accelerating the frequency and magnitude of natural events such as flooding and drought (Bottom et al. 1985). Extensive documentation regarding the impacts of land use practices on the Umpqua River cutthroat trout is not presently available. However, a recent report from the USFS identifies a close relationship between various fish habitat parameters and the land management history of streams in the Umpqua National Forest (USDA 1995). The report summarizes habitat quality in 28 streams used by anadromous salmonids; 17 streams were rated as having "low" or "very low" habitat quality. It noted that "a habitat rating of 'good' or 'very good' is found primarily in drainages that have had relatively little or no history of timber harvest and road construction. Conversely, habitat ratings of 'low' or 'very low' are found in moderately to heavily roaded and harvested watershed." Major factors contributing to the latter habitat ratings include a variety of land management-related conditions, such as increased peak flows during storm events, increased

debris torrents, and impacts from valley bottom roads.

These findings, coupled with the fact that silviculture is the predominant land use in the basin (approximately 70 percent of the area) and more than 80 of the basin's river reaches are designated as water quality limited, strongly suggest that silviculture and related activities have degraded water quality and have, therefore, likely contributed to the decline of Umpqua River cutthroat trout. This conclusion is strengthened by reasonable inferences from an array of other scientific studies, including research in other Oregon basins. (For an extensive review, see Meehan 1991).

Removal of forest canopy can cause an increase in both the maximum and the diurnal fluctuation of water temperatures, leading to disease outbreaks, altered timing of migration, and accelerated maturation. The removal of streamside vegetation can deplete the bank area of potential new woody debris that provides cover for cutthroat trout. In addition, loss of riparian areas can result in decreased invertebrate production and detritus sources, both of which are key components of the species' food chain. Siltation is another result of some logging practices, is known to hinder fry emergence from the gravel, and may limit production of benthic invertebrates. Dissolved oxygen content of both surface and intragravel water can decrease as a result of logging operations. Logging can also cause changes in stream flow regimes, resulting in potentially adverse water velocity and depth characteristics.

Degradation of estuarine habitats has likely also contributed to the decline of this species. Estuarine areas are highly productive habitats and play a role in the life cycle of cutthroat trout (Trotter 1989). Dredging, filling, and diking of estuarine areas for agricultural, commercial, or municipal uses have resulted in the loss of many estuarine habitats.

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

Cutthroat trout are not harvested commercially, and scientific and educational programs have probably had little or no impact on Umpqua River cutthroat trout populations. However, the cutthroat trout is a popular gamefish throughout the Pacific Northwest and available information indicates that recreational fishing has likely contributed to the general decline in Umpqua River cutthroat trout populations. Given the susceptibility of

cutthroat trout to angling and the potential impacts of recreational fishing to native fish stocks (Behnke 1992; Pauley et al. 1989; Trotter 1989), it is likely that a long standing fishery in the lower mainstem Umpqua River aimed at hatchery-reared cutthroat trout also promoted an incidental harvest of native Umpqua River cutthroat trout. In response to NMFS' concern regarding harvest mortalities, ODFW has closed the Umpqua River to cutthroat trout fishing effective January 1, 1995 (ODFW 1994). However, undocumented illegal harvest is believed to occur on Umpqua River cutthroat trout. While the severity of this source of mortality is unclear, it may pose a significant threat to depressed populations of cutthroat trout in the Umpqua River. Continued enforcement of existing harvest regulations and increased public outreach and awareness should substantially reduce this threat.

C. Disease or Predation

Disease is not believed to be a factor contributing to the decline of cutthroat trout populations in the Umpqua River. Several non-native fish species introduced to the Umpqua River are known to prey on or compete with salmonids; however, there is no specific information regarding predation impacts by these or native fishes on Umpqua River cutthroat trout.

Abundance of pinnipeds, especially harbor seals and California sea lions, is increasing on the West Coast. However, the extent to which predation is a factor causing the decline of Umpqua River cutthroat trout is unknown.

D. Inadequacy of Existing Regulatory Mechanisms

The significant decline in numbers of cutthroat trout passing Winchester Dam suggests that management plans and practices followed by various state and Federal agencies have not provided adequate protection for this species. Although the State of Oregon listed the Umpqua River cutthroat trout as a sensitive species in 1990, the decline of this species has not been reversed since the designation. Furthermore, the designation has not resulted in protections from adverse effects on the species resulting from Federal actions.

A Federal interagency cooperative program, the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Spotted Owl (the Northwest Forest Plan, April 1994) has recently been implemented to provide a coordinated management direction for the lands administered by USFS and the U.S.

Bureau of Land Management (BLM). The Northwest Forest Plan's region-wide management direction amends existing management plans, including regional guides, forest plans, and resource management plans for lands within the range of the northern spotted owl (including the Umpqua River Basin). As part of the Northwest Forest Plan, implementation of an aquatic conservation strategy is intended to ultimately reverse the trend of aquatic ecosystem degradation and contribute toward recovery of fish habitat; however, this result has yet to be demonstrated. NMFS encourages a continued strong commitment among the action agencies to thoroughly implement the Aquatic Conservation Strategy in order to improve spawning and rearing habitat conditions for listed Umpqua River cutthroat trout. Furthermore, NMFS continues to encourage USFS and BLM to work toward avoiding identified cumulative effects of timber sales sold or awarded prior to implementation of the Northwest Forest Plan.

Recent increased timber harvest on Federal land heightens NMFS' concern regarding the health of aquatic resources in the Umpqua River Basin. The "emergency salvage timber sale" provisions of a 1995 appropriations act, P.L. 104-19, have resulted in harvest of at least seven timber sales in the Umpqua River Basin. Prior to this legislation, these sales were unawarded or withdrawn for a variety of reasons. While efforts were made to reduce the direct adverse impacts of these timber sales, NMFS remains concerned about cumulative effects and their impact on baseline environmental quality in the Umpqua River Basin. The impacts of such sales are especially great in the South Umpqua River Basin since existing habitat and water quality conditions are recognized as poor in this area.

NMFS recognizes that the impacts of this legislation have been reduced in some instances by the land management agencies' ability to find replacement timber volume for sales such as these. Furthermore, NMFS recognizes the willingness of some purchasers to accept such replacement harvest in lieu of previously designated sales and encourages USFS, BLM, and private industry to continue these efforts to avoid adverse impacts on native salmonid species. An Inter-agency Revisions Act Team has been convened to study the effects of timber sales in the Basin.

Current ODFW hatchery practices may also play a role in the decline of native cutthroat trout. Extensive releases

of Alsea River hatchery-reared cutthroat trout have occurred near the Umpqua River estuary in the Smith River from 1975 to 1994, and in Scholfield Creek from 1983 to present. Until recently, approximately 12,000 hatchery-reared cutthroat trout per year have been released into the Smith River. Releases of approximately 4,000 hatchery-reared cutthroat trout per year continue to occur into Scholfield Creek. According to ODFW, these fish are released as smolts and as legal-sized, catchable cutthroat trout prior to or during the fishing season. ODFW has suggested that the majority of these fish are caught by anglers, but no data are available to confirm this hypothesis. There is also no information on the possible impact of these fish (or the fishery for them) on native cutthroat trout from the North and South Umpqua Rivers. However, considering the life history of cutthroat trout, their susceptibility to angling (Pauley et al. 1989), and their extensive use of estuaries, the impact of these releases could be substantial.

E. Other Natural or Manmade Factors Affecting its Continued Existence

Drought is the principal natural condition that may have contributed to reduced Umpqua River cutthroat trout production. Drought conditions have prevailed in Oregon for the 7 years prior to 1996, leading to decreased streamflows and increased water temperatures during the summer months.

Determination

Based on its assessment of available scientific and commercial information, NMFS is issuing a final determination that the Umpqua River cutthroat trout (*Oncorhynchus clarki clarki*) constitute a "species" under the ESA and should be listed as endangered. The listed ESU for Umpqua River cutthroat trout is defined as all naturally spawning population(s) of cutthroat trout in the mainstem Umpqua River, the North Umpqua River, and the South Umpqua River, and their respective tributaries, residing below long-term, naturally impassable barriers (e.g., natural waterfalls in existence for hundreds or thousands of years). The natural population consists of all fish that are progeny of naturally spawning fish. The offspring of all fish taken from the natural population after the date of listing (for example, for research or enhancement purposes) are also part of the listed ESU.

Conservation Measures

Conservation measures provided to species listed as endangered or

threatened under the ESA include recognition, recovery actions, Federal agency consultation requirements, and prohibitions on taking. Recognition through listing promotes public awareness and conservation actions by Federal, state, and local agencies, private organizations, and individuals.

Several recovery efforts are underway that may slow or reverse the decline of Umpqua River cutthroat trout. These include the Northwest Forest Plan, Coastal Salmon Restoration Initiative, and Umpqua River Basin Fisheries Restoration Initiative (all described previously in this document). NMFS is encouraged by these significant efforts, which could provide all stakeholders with a better means by which to achieve the purposes of the ESA by protecting and restoring native fish populations and the ecosystems upon which they depend. NMFS will continue to encourage and support these initiatives as important components of recovery planning for this species and other salmonids in the Umpqua River Basin.

NMFS will reconsider this determination in 2 years (or as new scientific information becomes available) and will continue to assess the degree to which ongoing Federal, state, and local conservation initiatives reduce the risks faced by Umpqua River cutthroat trout. If these or future initiatives clearly ameliorate risk factors and demonstrate that the species is recovering, NMFS will reconsider the listing status of Umpqua River cutthroat trout. Information regarding the efficacy of conservation efforts and any new scientific data regarding Umpqua cutthroat trout should be submitted to NMFS (see ADDRESSES).

For listed species, section 7(a)(2) of the ESA requires Federal agencies to ensure that activities they authorize, fund, or conduct are not likely to jeopardize the continued existence of a listed species or to destroy or adversely modify its critical habitat. If a Federal action could affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with NMFS.

Examples of Federal actions most likely to affect Umpqua River cutthroat trout include authorized land management activities of the USFS and BLM, as well as authorized purposes of Umpqua River hydroelectric and storage projects. Such authorized activities include timber sales and harvest, hydroelectric power generation, and flood control. Federal actions, including the U.S. Army Corps of Engineers (COE) section 404 permitting activities under the Clean Water Act, COE permitting activities under the River and Harbors

Act and Federal Energy Regulatory Commission licenses for non-Federal development and operation of hydropower, may also require consultation.

NMFS is aware that there are likely to be Federal actions ongoing in the range of the Umpqua River cutthroat trout at the time that this listing becomes effective. Consequently, NMFS is currently reviewing with the Federal agencies all ongoing actions that may affect the listed species, and for which consultation has been requested, and will complete formal or informal consultations for such actions as appropriate, pursuant to ESA section 7(a)(2). Furthermore, NMFS, in conjunction with USFS, BLM and USFWS, plans to complete a programmatic consultation on the Federal Land and Resource Management Plans within the range of the Umpqua River cutthroat trout prior to the listing's effective date.

Section 9(a) of the ESA contains specific prohibitions that apply to all endangered fish and wildlife. With respect to the Umpqua River cutthroat trout, these prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to "take" (including harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt any such conduct), import or export, transport in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. It also is illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of NMFS and state conservation agencies.

Sections 10(a)(1)(A) and 10(a)(1)(B) of the ESA provide NMFS with authority to grant exceptions to the ESA's "taking" prohibitions. Section 10(a)(1)(A) scientific research and enhancement permits may be issued to entities (Federal and non-Federal) conducting research that involves a directed take of listed species. A directed take refers to the intentional take of listed species. NMFS has issued section 10(a)(1)(A) research/enhancement permits for other listed species (e.g., Snake River chinook salmon) for a number of activities, including trapping and tagging, electroshocking to determine population presence and abundance, removal of fish from irrigation ditches, and collection of adult fish for artificial propagation programs. NMFS is aware of several trapping efforts currently underway in the Umpqua River Basin where juvenile cutthroat trout are being

collected for population inventory. Since little scientific research has been conducted on this species, these and other research efforts could provide critical information regarding cutthroat trout life history and population abundance.

Section 10(a)(1)(B) incidental take permits may be issued to non-Federal entities performing activities that may incidentally take listed species. The types of activities potentially requiring a section 10(a)(1)(B) incidental take permit include the operation and release of artificially propagated fish by state operated and funded hatcheries, state or university research not receiving Federal authorization or funding, and the implementation of state fishing regulations.

NMFS requires several months to review permit applications (including a 30-day public comment period) and assess the issuance of section 10 permits. In the fall of 1996, NMFS will hold a workshop to explain the application process for section 10 permits. Prospective applicants should submit permit applications to NMFS at least 120 days prior to the expected start date of their activities. If there are research activities whose interruption would harm efforts to conserve the species, NMFS will consider issuing a permit under the emergency procedure (50 CFR 222.24(e)). Regulations regarding application, issuance and administration of permits are found at 50 CFR parts 217–222.

It is the policy of NMFS and the USFWS, published in the Federal Register on July 1, 1994 (59 FR 34272), to identify to the maximum extent practicable at the time a species is listed those activities that would or would not constitute a violation of section 9 of the ESA. The intent of this policy is to increase public awareness of the effect of this listing on proposed and ongoing activities within the species' range. NMFS believes that, based on the best available information, the following actions will not result in a violation of section 9:

(1) Possession of Umpqua River cutthroat trout acquired lawfully by permit issued by NMFS pursuant to section 10 of the ESA, or by the terms of an incidental take statement pursuant to section 7 of the ESA.

(2) Federally approved projects that involve activities such as silviculture, grazing, mining, road construction, dam construction and operation, discharge of fill material, stream channelization or diversion for which consultation has been completed, and when such activity is conducted in accordance with any terms and conditions given by NMFS in

an incidental take statement accompanied by a biological opinion.

Activities that NMFS believes could potentially harm the Umpqua River cutthroat trout and result in "take", include, but are not limited to:

(1) Unauthorized collecting or handling of the species. Permits to conduct these activities are available for purposes of scientific research or to enhance the propagation or survival of the species.

(2) Unauthorized destruction/alteration of the species' habitat such as removal of large woody debris or riparian shade canopy, dredging, discharge of fill material, draining, ditching, diverting, blocking, or altering stream channels or surface or ground water flow.

(3) Discharges or dumping of toxic chemicals or other pollutants (i.e., sewage, oil and gasoline) into waters or riparian areas supporting the species.

(4) Violation of discharge permits.

(5) Pesticide applications in violation of label restrictions.

(6) Interstate and foreign commerce (commerce across State lines and international boundaries) and import/export without prior obtainment of an endangered species permit.

This list is not exhaustive. It is provided to give the reader some examples of the types of activities that would be considered by the NMFS as constituting a "take" of Umpqua River cutthroat trout under the ESA and regulations. Questions regarding whether specific activities will constitute a violation of section 9, and general inquiries regarding prohibitions and permits, should be directed to NMFS (see ADDRESSES).

Critical Habitat

Section 4(a)(3)(A) of the ESA requires that, to the extent prudent and determinable, critical habitat be designated concurrently with the listing of a species. At the present time, NMFS is placing a higher priority on listings than on critical habitat designations due to staffing and workload constraints resulting from the lifting of the recent listing moratorium. In most cases the substantive protections of critical habitat designations are duplicative of those of listings, however, in cases in which critical habitat designation is deemed essential to the conservation of the species, such a designation could warrant a higher priority. It is NMFS' intention to develop and publish a critical habitat designation for Umpqua River cutthroat trout as time and workload permit.

Classification

The 1982 amendments to the ESA, in section 4(b)(1)(A), restrict the information that may be considered when assessing species for listing. Based on this limitation of criteria for a listing decision and the opinion in *Pacific Legal Foundation v. Andrus*, 675 F. 2d 825 (6th Cir., 1981), NMFS has categorically excluded all ESA listing actions from environmental assessment requirements of NEPA (48 FR 4413; February 6, 1984).

As noted in the Conference Report on the 1982 amendments to the ESA, economic considerations have no relevance to determinations regarding the status of the species. Therefore, the economic analysis requirements of the Regulatory Flexibility Act are not applicable to the listing process. Similarly, this final rule is exempt from review under E.O. 12866.

References

The complete citations for the references used in this document can be obtained by contacting Garth Griffin, NMFS (see ADDRESSES).

List of Subjects in 50 CFR Part 222

Administrative practice and procedure, Endangered and threatened species, Exports, Imports, Reporting and record keeping requirements, Transportation.

Dated: July 29, 1996.

Charles Karnella,
Acting Program Management Officer,
National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 222 is amended as follows:

PART 222—ENDANGERED FISH OR WILDLIFE

1. The authority citation of part 222 continues to read as follows:

Authority: 16 U.S.C. 1531–1543 et seq.

§ 222.23 [Amended]

2. In § 222.23, paragraph (a), the second sentence is amended by adding the phrase "Umpqua River cutthroat trout (*Oncorhynchus clarki clarki*);" immediately after the phrase "Snake River sockeye salmon (*Oncorhynchus nerka*);".

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