The temporal pattern recognized is again highly cyclic, and time explains 82.5 percent of the variation in abundance data for non-age 0 (''adult'') splittail. Because even the CDFG fall midwater trawl survey did not separate catch data into age classes until about 1975, there is not enough data to illustrate either a complete trough to trough or peak to peak iteration of the oscillation cycle. However, if the two ''flat'' data points at the end of the data set are indeed the top of a second peak, then the nominal change from the nine-year moving average centered on 1984 and the putative peak centered on 1994–95, is about negative18 percent, and the second peak would be low enough to be below the lower 95 percent confidence interval of the first peak (see horizontal dashed line in Figure 3) indicating a statistically significant decline between peaks. None of the other sets of abundance data yet cover a long enough time span to allow productive use of polynomial regression pattern recognition.

Summary of the Service's New Analysis

Focusing on Abundance Data for Non-age 0 Splittail

Updated, and improved Mann-Whitney U-testing of a composite scores data set, that equally incorporates data from five different splittail survey programs, suggests a 60 to 76 percent chance that the observed 17 to 18 percent decrease in average composite scores post-1986 and post-1984, respectively, are biologically real (as opposed to statistical artifacts). Statistical power analysis reveals that due to extraordinary low power, the odds (85.5 percent) of type II error (falsely rejecting the declining trend in the data) are much greater than the odds (24 percent) of type I error (falsely accepting the declining trend in the data).

Temporal pattern recognition via polynomial regression reveals that splittail abundance data, transformed to nine year moving averages, strongly fit 3rd and 4th order polynomial models and are highly cyclic. One regression highly influenced by age 0 data exhibited a nominal 74.2 percent trough to trough increase in splittail abundance, but that increase was not enough to be statistically significant, as data sets including age 0 fish are highly variable. Another regression, of non-age 0 fish, putatively suggests a significant nominal 18 percent peak to peak decline for the same CDFG fall MWT data that did not test out significantly via the statistically low power Mann-Whitney U-test approach. If the observed pattern holds true as more data are collected, it would suggest a decline on the order of about 20 percent over about a 10 year period (e.g., a mean exponential annual rate of decline of about 2.2 percent).

Perhaps the most important conclusion to note from the polynomial regression analyses is that although time can be shown to explain a very high proportion of the variability in splittail abundance, on the order of 80 percent, the splittail populations have not been monitored long enough through time (relative to the species life span) to make a statistically strong argument one way or the other regarding the presence or absence of directional temporal trends.

In addition to the aforementioned analysis, the Service, in response to comments received by California Division of Water Resources (CDWR) and California Department of Fish and Game (CDFG) analyzed the data presented in their comments using a simple exponential decay model (i.e., $N_t = N_0 e^{-kt}$; see Paveglio et al. (1997) for a similar application). CDWR recognizes CDFG as the pre-eminent compilers of the ''official'' abundance indices, and CDFG's submitted comments revealed apparent trends of decline for adult splittail (age 2+) abundance in 5 of 6 surveys ranging from negative 15 percent to negative 69 percent and averaging negative 35.8 percent (including data from Central Valley Project pump salvage counts [negative 26 percent] and State Water Project pump salvage counts [negative 68 percent] not considered above by the Service). Until enough abundance monitoring has been completed to provide adequately powerful statistical testing, the above apparent trends constitute best available information regarding splittail population status. An average apparent trend of negative 35.8 percent over approximately 15 years corresponds to an average annual exponential rate of decline of 2.9 percent, which in turn suggests that 90 percent decline of the population (from mid-1980's levels) would be reached in about 63 years from present. Similar exponential decay rates associated with the five surveys reported by CDFG as exhibiting apparent declines yield times to 90 percent decline ranging from 14 to 198 years from present with a median estimate of 20 years from present (i.e., 3 of the 5 projections estimate 90 percent decline in 20 years or less from present).

The Service recognizes that projections based on a simple exponential decay model represent a fairly crude first cut at a ''population depletion'' analysis. However, given, the relatively undeveloped state of available data series, the Service believes that simple models currently provide the best available, albeit approximate, guidance.

Public Comments Solicited

We will accept written comments during this re-opened comment period, and comments should be submitted to the Sacramento Fish and Wildlife Office as found in the **ADDRESSES** section.

You may send comments by electronic mail (e-mail) to: fw1splittail@fws.gov. If you submit comments by e-mail, please submit them as an ASCII file and avoid the use of special characters and any form of encryption. Please also include ''Attn: [*RIN number*]'' and return address in your e-mail message. If you do not receive a confirmation from the system that we have received your e-mail message, contact us directly by calling our Sacramento Fish and Wildlife Office at telephone number 916/414–6600, during normal business hours.

Author(s)

The primary authors of this notice are Joseph Skorupa and Stephanie Brady (see **ADDRESSES** section).

Authority: The authority for this action is the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Dated: August 9, 2001.

Mary Ellen Mueller,

Manager, California/Nevada Operations Office, Region 1, Fish and Wildlife Service.

[FR Doc. 01–20713 Filed 8–16–01; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 223

[Docket No. 010521133-1133-01 ; I.D. No. 050101B]

RIN 0648–AP17

Endangered and Threatened Species; Proposed Rule Governing Take of Four Threatened Evolutionarily Significant Units (ESUs) of West Coast Salmonids: California Central Valley Spring-run Chinook; California Coastal Chinook; Northern California Steelhead; Central California Coast Coho

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

ACTION: Proposed rule; request for comments.

SUMMARY: Under the Endangered Species Act (ESA), the Secretary of Commerce (Secretary) is required to adopt such regulations as he deems necessary and advisable for the conservation of species listed as threatened. This proposed ESA 4(d) rule would apply the take prohibitions enumerated in section 9(a)(1) of the ESA in most circumstances to California Central Valley Chinook, California Coastal Chinook and Northern California steelhead that do not currently have 4(d) protective regulations in place. However, for these three threatened ESUs, NMFS is proposing 10 categories of activities for which the take prohibitions would not apply. NMFS believes that these activities contribute to conserving the listed salmonids or are governed by certain programs that adequately limit impacts on the ESUs. For the threatened Central California Coast coho salmon ESU, a 4(d) rule is currently in place which generally applies the take prohibitions enumerated in section 9(a)(1) of the ESA to this ESU. For this ESU, NMFS is proposing to amend its existing regulations to allow the same 10 limits on the application of the take prohibitions which are proposed for the chinook and steelhead ESUs described here.

DATES: Comments on this proposed rule must be received at the appropriate address (see **ADDRESSES**), no later than 5 p.m., Pacific standard time, on October 1, 2001. The dates and locations of public hearings regarding this proposal will be published in a susequent **Federal Register** document.

ADDRESSES: Written comments and requests for information should be sent to the Assistant Regional Administrator, Protected Resources Division, NMFS, Southwest Region, 501 W. Ocean Blvd., Suite 4200, Long Beach, CA 90802–4213. Comments will not be accepted if submitted via e-mail or Internet. For copies of guidance documents see Appendix A to 50 CFR 223.203.

FOR FURTHER INFORMATION CONTACT: Craig Wingert at 562–980–4021, Miles Croom at 707–575–6068, Diane Windham at 916–930–3601, or Chris Mobley at 301–713–1401.

SUPPLEMENTARY INFORMATION:

Background

On September 16, 1999, NMFS published a final rule listing the California Central Valley (CCV) Spring-run Chinook and California Coastal (CC) Chinook ESUs (*Oncorhynchus tshawytscha* or *O. tshawytscha*) as threatened species (64 FR 50394). In a final rule published on June 7, 2000, NMFS also listed the Northern California (NC) steelhead ESU (*O. mykiss*) as a threatened species (65 FR 36074). These final rules describe the background of the listing actions and provide a summary of NMFS' conclusions regarding the status of these three ESUs. NMFS has not previously proposed any protective regulations, pursuant to section 4(d) of the ESA, for these three ESUs.

On October 31, 1996, NMFS listed the Central California Coast (CCC) coho salmon (*O. kisutch*) ESU as a threatened species (61 FR 56138). The final rule describes the background for this coho salmon listing action and also provides a summary of NMFS' conclusions regarding the status of the ESU. In conjunction with this final listing notice for the CCC coho salmon ESU, NMFS published a final ESA 4(d) rule which put in place the prohibitions of section 9(a)(1) of the ESA for this ESU. The 4(d) rule for this ESU did not contain any of the limitations on the take prohibitions which NMFS included in its July 10, 2000, rule for 14 other threatened ESUs of salmon and steelhead (65 FR 42422).

Section 4(d) of the ESA provides that whenever a species is listed as threatened, the Secretary of Commerce (Secretary) shall issue such regulations as he deems necessary and advisable to provide for the conservation of the species. Such protective regulations may include any or all of the prohibitions that apply automatically to protect endangered species under ESA section 9(a). Those section 9(a) 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, or collect; or to attempt any of these), import or export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any wildlife species listed as endangered, unless with written authorization for incidental take. It is also illegal under section 9 of the ESA to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Section 11 of the ESA provides for civil and criminal penalties for violation of section 9 or of regulations issued under the ESA.

Whether take prohibitions or other protective regulations are necessary or advisable is in large part dependent upon the biological status of the species and potential impacts of various activities on the species. The salmon and steelhead ESUs that are covered by this proposed rule have survived for thousands of years through cycles in ocean conditions and weather; therefore, NMFS has concluded that they are at risk of extinction primarily because their populations have been reduced by human ''take''. These ESUs have declined in abundance due to take of fish from harvest, past and ongoing destruction or damage to freshwater and estuarine habitats, hatchery practices, hydropower development, and other causes. Two reports prepared by NMFS (NMFS 1996 and 1998) reviewed the factors which have contributed to the decline of west coast steelhead and chinook populations, including these ESUs, and both conclude that all of the factors identified in section 4(a)(1) of the ESA have played some role in their decline. The reports identify destruction and modification of habitat, over-utilization, and hatchery effects as significant reasons for the species' declines. While the most influential factors differ from species to species and among ESUs depending on their geographic location, loss and degradation of habitat conditions, harvest impacts, and in some instances hatchery impacts are factors that have affected all of the ESUs. Accordingly, NMFS is proposing in most circumstances to apply the section 9 take prohibitions to the threatened ESUs covered in this proposed rule, in order to provide for their conservation.

Although the primary purpose of state, local and other non-Federal programs is generally to further some activity such as maintaining roads, controlling development, ensuring clean water or harvesting trees, rather than conserving salmon or steelhead, some entities have modified one or more of these programs to protect and conserve listed salmonids and protect their habitat. NMFS believes that with appropriate safeguards, many state, local and other non-Federal activities can be specifically tailored to minimize impacts on listed salmonid ESUs such that additional Federal protections are unnecessary for their conservation.

NMFS, therefore, is proposing a mechanism for the salmon and steelhead ESUs covered by this proposed rule whereby state, local and other non-Federal entities can be assured that certain activities they conduct or permit are consistent with ESA requirements and avoid or minimize the risk of take of listed fish. When such a program provides sufficient conservation for these listed salmonid ESUs, NMFS does not find it necessary and advisable to apply take prohibitions to activities governed by those programs. In those circumstances, as described in more detail herein, additional Federal ESA regulation through the section 9(a) take

prohibitions is not necessary and advisable because it would not meaningfully contribute to the conservation of the listed ESUs. In fact, not applying take prohibitions to programs that meet such standards may result in even greater conservation gains for a listed ESU than would the blanket application of take prohibitions, through implementation of the program itself and by demonstrating to similarly situated jurisdictions or entities that practical and realistic salmonid protection measures exist. An additional benefit of this approach is that NMFS can focus its enforcement efforts on activities and programs that have not yet adequately addressed the conservation needs of these threatened ESUs.

Substantive Content of Proposed Regulation

NMFS has not previously proposed any ESA 4(d) protective regulations for the CCV spring chinook salmon, CC chinook salmon or NC steelhead ESUs which are addressed in this proposed rule. However, when the CCC coho salmon ESU was listed in 1996, NMFS did adopt a 4(d) protective regulation which applied the section 9(a) take prohibitions to that ESU, but did not incorporate the take limitations which were recently adopted for 14 other threatened salmonids ESUs (65 FR 42422) and are proposed in this rule. To ensure that the 4(d) rule for the CCC coho salmon ESU is consistent with existing or proposed 4(d)rules for threatened salmonids which have overlapping distributions (i.e., CCC steelhead, NC steelhead, and CC chinook ESUs), NMFS proposes to modify the existing 4(d) rule for CCC coho salmon by incorporating the take limitations which are described in this proposed rule.

NMFS believes that the section 9(a) take prohibitions, which are applicable for endangered species, are necessary and advisable for conservation of the threatened salmon and steelhead ESUs covered by this proposed rule, but that take of listed fish in these ESUs need not be prohibited when it results from the activities described herein if specified conservation standards or criteria are met. Such activities are those which are conducted in a way that contributes to conserving the threatened ESUs, or are governed by a program that limits impacts on the threatened ESUs to an extent that makes added protection through Federal regulation unnecessary and unadvisable for their conservation. NMFS, therefore, proposes to apply ESA section 9(a) prohibitions to the CCV spring chinook, CC chinook, and NC steelhead ESUs, but not to apply the take prohibitions to the 10 programs, or take limitations, described in this proposed rule that meet the necessary level of protection and conservation. In addition, NMFS is proposing to apply the same 10 take limitations described herein to the CCC coho salmon ESU which currently has all the section 9(a) take prohibitions in place. As an alternative to utilizing the 10 limitations on the take prohibitions described in this proposed rule, responsible entities may choose to seek an ESA section 10 permit from NMFS.

NMFS has identified several programs for which it is not necessary and advisable to impose take prohibitions because they contribute to conserving the threatened ESUs or are governed by a program that adequately limits impacts on listed salmonids. Under specified conditions and in appropriate geographic areas, these include: (1) activities conducted in accord with ESA incidental take authorization; (2) ongoing scientific research activities, for a period of 6 months; (3) emergency actions related to injured, stranded, or dead salmonids; (4) fishery management activities; (5) hatchery and genetic management programs; (6) scientific research activities permitted or conducted by the State of California; (7) state, local, and private habitat restoration activities that are part of approved watershed conservation plans; (8) properly screened water diversion devices (i.e., screening devices per NMFS' guidelines or equivalent configurations); (9) routine road maintenance activities; and (10) municipal, residential, commercial, and industrial (MRCI) development activities. These take limitations are described in more detail in following sections. In most instances, these take limitations and criteria are for future programs where NMFS will limit the application of the ESA section 9(a)(1) take prohibitions. More comprehensive descriptions of each limit are contained in ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000) which can be obtained at the NMFS Southwest Region' web site (*http://swr.nmfs.noaa.gov*). NMFS anticipates that new take limits may be added to these regulations in the future for additional activities that are found to be necessary and sufficient for the conservation of the threatened ESUs.

NMFS emphasizes that these take limits are not prescriptive regulations. The fact that an activity is not conducted within the specified criteria for a take limit does not necessarily mean that the activity violates the ESA or this regulation. Many activities do not affect the threatened ESUs covered by this proposed rule, and, therefore, do not need to be conducted within any of the ten limits listed previously to avoid section 9 take violations. Nevertheless, an entity can be certain it is not at risk of violating the section 9 take prohibitions or at risk of enforcement actions if it conducts its activities in accordance with the take limits since the take prohibitions would not be applied to programs or activities conducted within the limits. Jurisdictions, entities, and individuals are encouraged to evaluate their practices and activities to determine the likelihood of whether take is occurring. NMFS can provide ESA coverage through section 4(d) rules, section 10 research, enhancement, and incidental take permits, or through section 7 consultation with Federal agencies. If take is likely to occur, then the jurisdiction, entity or individual should modify its practices to avoid the take of these threatened salmonid ESUs or seek protection from potential ESA liability through section 7, section 10, or section 4(d) procedures.

Jurisdictions, entities, and individuals are not required to seek coverage under an ESA 4(d) limit from NMFS. In order to reduce its liability, a jurisdiction, entity, or individual may also informally comply with a limit by choosing to modify its programs to be consistent with the evaluation considerations described in the individual limits. Finally, a jurisdiction, entity, or individual may seek to qualify its plans or ordinances for inclusion under a take limit by obtaining a 4(d) take limit authorization from the NMFS Southwest Region Administrator.

NMFS will continue to work collaboratively with all affected governmental entities to recognize existing management programs that conserve and meet the biological requirements of listed salmonids, and to strengthen other programs toward the conservation of listed salmonids. Any final rule resulting from this proposal may be amended to add new limits on the take prohibitions, or to amend or delete adopted take limits as circumstances warrant.

Following is a section entitled ''Notice of Availability'' which lists four documents referred to in this proposed regulation. The purpose of making these documents available to the public is to inform governmental entities and other interested parties of the technical components expected to be addressed in programs submitted for NMFS' review. These technical documents provide guidance to entities as they consider whether to submit a program for an ESA 4(d) limit. The documents represent several kinds of guidance, and are not

binding regulations requiring particular actions by any entity or interested party.

For example, NMFS' technical report entitled: ''Viable Salmonid Populations (VSP) and the Recovery of ESUs'', which is referenced in the fishery and harvest management take limits, provides a framework for identifying populations and their status as a component of developing adequate harvest or hatchery management plans. The proposed rule indicates that Fishery Management and Evaluation Plans (FMEPs) and Hatchery and Genetic Management Plans (HGMPs) utilize the concepts of 'viable' and 'critical' salmonid population thresholds, consistent with the concepts contained in NMFS's VSP technical report. The California Department of Fish and Game, therefore, is put on notice about the technical analysis needed to develop an FMEP or HGMP that NMFS can approve as being within the take limit criteria. Similarly, NMFS' fish screening criteria explicitly recognize that they are general in nature and that site constraints or particular circumstances may require adjustments in design, which must be developed with a NMFS staff member, or authorized officer, to address site specific considerations and conditions. Finally, research involving electrofishing comes within the scientific research limit only if conducted in accordance with NMFS' guidelines for electrofishing. The guidelines recognize that other techniques may be appropriate in particular circumstances, and NMFS can recognize those as appropriate during the approval process.

The Oregon Department of Transportation's (ODOT) road maintenance program for governing routine maintenance activities is an existing program currently being implemented that NMFS has found adequate for threatened ESU conservation, and, therefore, has been established as a take limitation in a previous ESA 4(d) rule (65 FR 42422). Other jurisdictions may come within the road maintenance limit if they use the ODOT program or provide other practices found by NMFS to be more or equally as protective of salmonids.

In sum, where the rule cites a document, a program's consistency with the guidance is ''sufficient'' to demonstrate that the program meets the particular purpose for which the guidance is cited. However, the entity or individual wishing a program to be accepted as within a particular limit has the latitude to show that its variant or approach is, in the circumstances where it will apply and affect listed fish, equivalent or better.

NMFS will continue to review the applicability and technical content of its own documents as they are used in the future and make revisions, corrections, or additions as needed. NMFS will accept comments on revisions of any of the referenced state programs. If any of these documents are revised and NMFS relies on the revised version to provide guidance in continued implementation of the rule, NMFS will publish in the **Federal Register** a notice of its availability stating that the revised document is now the one referred to in 50 CFR 223.203(b).

Notice of Availability

The following is a list of documents cited in the regulatory text of this proposed rule. Copies of these documents may be obtained upon request (see Appendix A to 50 CFR 223.203).

1. Oregon Department of Transportation (ODOT) Maintenance Management System Water Quality and Habitat Guide (July, 1999).
2. Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act (NMFS, 2000a).
3. Fish Screening Criteria for Anadromous Salmonids, National Marine Fisheries Service, Southwest Region, 1997.
4. Viable Salmonid Populations and the Recovery of Evolutionarily Significant Units. (June 2000).

Copies of all references, reports, related documents and the ESA 4(d) rule supplementary document entitled: ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000) are also available upon request (see **ADDRESSES**). Some of these documents are also available on the Southwest Region's web site (*http://swr.nmfs.noaa.gov*).

The limits on the take prohibitions in this proposed rule do not relieve Federal agencies of their duty under section 7 of the ESA to consult with NMFS if actions they fund, authorize, or carry out may affect the ESUs covered by this proposed rule or any other listed species. To the extent that actions subject to section 7 consultation are consistent with a circumstance for which NMFS has limited the take prohibitions, a letter of concurrence from NMFS will greatly simplify the consultation process, provided the program is still consistent with the terms of the limit.

Take Guidance

The threatened salmonid ESUs addressed in this proposed rule are in danger of becoming extinct in the foreseeable future. They have been depleted by over-fishing, past and ongoing freshwater and estuarine habitat destruction, hydropower development, hatchery practices, and other causes. It is, therefore, necessary and advisable to put into place ESA section 9(a)(1) prohibitions to aid in their conservation. Section 9(a)(1) prohibitions make it illegal for any person subject to the United States' jurisdiction to ''take'' these species without written authorization. ''Take'' is defined to occur when a person engages in activities that harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect a species or attempt to do any of these. Impacts on a protected species' habitat may harm members of that species and, therefore, constitute a ''take'' under the ESA. Such acts may include significant habitat modification or degradation that actually kills or injures listed fish by significantly impairing essential behavioral patterns including breeding, spawning, rearing, migrating, feeding or sheltering (64 FR 60727, November 8, 1999).

On July 1, 1994 (59 FR 34272), NMFS and the U.S. Fish and Wildlife Service (FWS) published a policy committing both agencies to identify, to the extent possible, those activities that would or would not violate section 9 of the ESA. The intent of this policy is to increase public awareness about ESA compliance and focus public attention on those actions needed to protect species.

Based on available information, NMFS believes the categories of activities listed here are those activities which as a general rule may be most likely to result in injury or harm to listed salmonids. NMFS wishes to emphasize at the outset that whether injury or harm results from a particular activity is entirely dependent upon the facts and circumstances of each case. The mere fact that an activity may fall within one of these categories does not at all mean that the specific activity is causing harm or injury. These types of activities are, however, those that may be most likely to cause harm and thus violate this rule. NMFS' ESA enforcement will, therefore, focus on these categories of activities.

Activities listed in A thru J here are as cited in NMFS' harm rule (64 FR 60727, November 8, 1999).

A. Constructing or maintaining barriers that eliminate or impede a listed species' access to habitat or ability to migrate.

B. Discharging pollutants, such as oil, toxic chemicals, radioactivity, carcinogens, mutagens, teratogens or organic nutrient-laden water including sewage water into a listed species' habitat.

C. Removing, poisoning, or contaminating plants, fish, wildlife, or other biota required by the listed species for feeding, sheltering, or other essential behavioral patterns.

D. Removing or altering rocks, soil, gravel, vegetation or other physical structures that are essential to the integrity and function of a listed species' habitat.

E. Removing water or otherwise altering stream flow when it significantly impairs spawning, migration, feeding or other essential behavioral patterns.

F. Releasing non-indigenous or artificially propagated species into a listed species' habitat or where they may access the habitat of listed species.

G. Constructing or operating dams or water diversion structures with inadequate fish screens or fish passage facilities in a listed species' habitat.

H. Constructing, maintaining, or using inadequate bridges, roads, or trails on stream banks or unstable hill slopes adjacent to or above a listed species' habitat.

I. Conducting timber harvest, grazing, mining, earth-moving, or other operations which result in substantially increased sediment input into streams.

J. Conducting land-use activities in riparian areas and areas susceptible to mass wasting and surface erosion, which may disturb soil and increase sediment delivered to streams, such as logging, grazing, farming, and road construction.

K. Illegal fishing. Harvest in violation of fishing regulations will be a top enforcement concern.

L. Various streambed disturbances may trample eggs or trap adult fish preparing to spawn. The disturbance could be mechanical disruption caused by constructing push-up dams, removing gravel, mining, or other work in a stream channel. It may also take the form of egg trampling or smothering by livestock in the streambed or by vehicles or equipment being driven across or down the streambed (as well as any similar physical disruptions).

M. Interstate and foreign commerce dealing in listed salmonids and importing or exporting listed salmonids may harm the fish unless it can be shown through an ESA permit— that they were harvested in a manner that complies with ESA requirements.

N. Altering lands or waters in a manner that promotes unusual concentrations of predators.

O. Shoreline and riparian disturbances (whether in the riverine, estuarine, marine, or floodplain environment) may retard or prevent the development of certain habitat characteristics upon which the fish depend (e.g., removing riparian trees reduces vital shade and cover, floodplain gravel mining, development, and armoring shorelines reduces the input of critical spawning substrates, and bulkhead construction can eliminate shallow water rearing areas).

P. Filling or isolating side channels, ponds, and intermittent waters (e.g., installing tide gates and impassable culverts) can destroy habitats that the fish depend upon for refuge areas during high flows.

The list provides examples of the types of activities that could have a high risk of causing take, but it is by no means exhaustive. It is intended to help people avoid violating the ESA and to encourage efforts to save the threatened ESUs addressed in this proposed rule. Determination of whether take has actually occurred depends on the circumstances of a particular case.

Many activities that may kill or injure salmonids such as fill and removal authorities, National Pollutant Discharge Elimination System or other water quality permitting, and pesticide use are regulated by state and/or Federal processes. For those types of activities, NMFS would not concentrate enforcement efforts on those who operate in conformity with current permits. Rather, if the regulatory program does not provide adequate salmonid protection, NMFS intends to work with the responsible agency to make necessary changes in the program.

For instance, concentrations of pesticides may affect salmonid behavior and reproductive success. Current EPA label requirements were developed in the absence of information about some of these subtle but real impacts on aquatic species such as salmonids. Where new information indicates that pesticide label requirements are not adequately protective of salmonids, NMFS will work with EPA through the section 7 consultation process to develop more protective use restrictions and, thereby, provide the best possible guidance to all users. Similarly, where water quality standards or state authorizations lead to pollution loads that may cause take, NMFS intends to work with the state water quality agencies and EPA to bring those standards or permitting programs to a point that does protect salmonids.

Persons or entities concluding that their activity is likely to injure or kill protected fish are encouraged to immediately adjust that activity to avoid take (or adequately limit any impacts on the species) and seek NMFS' authorization for incidental take under: (a) an ESA section 10 incidental take permit; (b) an ESA section 7 consultation; or (c) a limit on the take prohibitions provided in this proposed rule. The public is encouraged to contact NMFS (see **FOR FURTHER INFORMATION CONTACT**) for assistance in determining whether circumstances at a particular location (involving these activities or any others) would constitute a violation of this rule if finalized.

Impacts on listed salmonids resulting from actions in compliance with a permit issued by NMFS pursuant to section 10 of the ESA would not constitute a violation of this proposed rule if finalized. Section 10 permits may be issued for research activities, enhancement of a species' survival, or to authorize incidental take occurring in the course of an otherwise lawful activity. NMFS consults on a broad range of activities conducted, funded, or authorized by Federal agencies. These include fisheries harvest, hatchery operations, silviculture activities, grazing, mining, road construction, dam construction and operation, discharge of fill material, and stream channelization and diversion. Federally funded or approved activities that affect listed salmonids and for which ESA section 7 consultations have been completed will not constitute violations of this proposed rule provided the activities are conducted in accord with all reasonable and prudent measures and terms and conditions contained in any biological opinion or incidental take statement issued by NMFS.

Aids for Understanding the Limits on the Take Prohibitions

Issue 1: Population and Habitat Concepts

This proposed rule references scientific concepts that NMFS proposes to use in determining whether particular programs would not be subject to the ESA section 9 take prohibitions. One of these concepts allows for identifying populations that may warrant individual management within established ESUs for some activities or programs. The second concept involves identifying relevant biological parameters to evaluate the status of these populations and identifying ''critical thresholds'' and ''viable thresholds'' for these populations. NMFS has developed a scientific and policy paper entitled ''Viable Salmonid Populations and the Recovery of ESUs'' (NMFS, 2000b) that addresses the biological concepts surrounding viable salmonid populations in more detail. This paper will provide additional guidance for entities evaluating their

programs under this proposed rule if it is finalized. A third concept describes the freshwater habitat biological requirements of salmonids in terms of whether habitat is functioning properly.

Identifying Populations within ESUs

NMFS proposes to define populations following Ricker's (1972) definition of ''stock'': a population is a group of fish of the same species spawning in a particular lake or stream (or portion thereof) at a particular season which to a substantial degree do not interbreed with fish from any other group spawning in a different place or in the same place at a different season. This definition is widely accepted and applied in the field of fishery management. An independent population is an aggregation of one or more local breeding units that are closely linked by exchange of individuals among themselves, but are sufficiently isolated from other independent populations that exchanges of individuals among populations do not appreciably affect the population dynamics or extinction risk of the populations over a 100-year time frame. Such populations will generally be smaller than the whole ESU, and will generally inhabit geographic ranges on the scale of whole river basins or major sub-basins that are relatively isolated from outside migration. Using this definition, it is biologically meaningful to evaluate and discuss the extinction risk of one population independently of other populations within the same ESU.

Several types of information may be used to identify independent salmonid populations within existing ESUs, including: (1) geographic indicators; (2) estimates of adult dispersal; (3) abundance correlations; (4) habitat characteristics; (5) genetic markers; and (6) quantitative traits. States and other groups involved in salmonid management have defined groups of fish for management purposes based on some or all of this information, and many of the definitions already used by managers are similar to the population definitions proposed here. Further, while the types of information identified above may be useful in defining independent populations within ESUs, other methods may exist for identifying biologically meaningful population units consistent with the definitions adopted here. Therefore, NMFS will evaluate proposed population boundaries on a case-by-case basis to determine if such boundaries are biologically supportable and consistent with the population definition in this proposed rule.

NMFS believes it important to identify population units within established ESUs for several reasons. Identifying and assessing impacts on such units will enable greater consideration of the important biological diversity contained within each ESU, a factor considered in NMFS' ESU policy (Waples, 1991). Further, assessing impacts on a population level is typically a more practical undertaking given the scale and complexity of ESUs. Finally, assessing impacts on a population level will help ensure consistent treatment of listed salmonids across a diverse geographic and jurisdictional range.

Assessing Population Status

NMFS proposes to evaluate population status through four primary biological parameters: (1) Abundance; (2) productivity; (3) population substructure; and (4) genetic diversity. A discussion of the relevance of these parameters to salmonid population status may be found in a variety of scientific documents (e.g., Nehlsen *et al.*, 1991; Burgman *et al.*, 1993; Huntington *et al.*, 1996; Caughley and Gunn, 1996; Myers *et al.*, 1998).

Population abundance is important to evaluate due to potential impacts associated with genetic and demographic risks. Genetic risks associated with low population size include inbreeding depression and loss of genetic diversity. Demographic risks associated with low population size include random effects associated with stochastic environmental events. Population size may be assessed and estimated from dam and weir counts, redd counts, spawner surveys, and other means. Viable abundance levels may be determined, based on historic abundance levels or habitat capacity of the population.

Population productivity may be thought of as the population's ability to increase or maintain its abundance. It is important to assess productivity since negative trends in productivity over sustained periods may lead to genetic and demographic impacts associated with small population sizes. However, trends in other parameters such as survival between life stages, age structure, and fecundity may also be useful in assessing productivity. In general, viable population trends should be positive unless the population is already at or above viable abundance levels. In that case, neutral or negative population trends may be acceptable so long as such declines will not lead the population to decline below viable abundance levels in the foreseeable future.

Population structure reflects the number, size and distribution of remaining habitat patches and the condition of migration corridors that provide linkages among these habitat types. Population structure affects evolutionary processes and may impact the ability of populations to respond to environmental changes or stochastic events. Habitat deficiencies, such as loss of migration corridors between habitat types, can lead to a high risk of extinction and may not become readily apparent through evaluating population sizes or productivity. Determining whether viable population structure exists may require comparison of existing and historic habitat conditions.

Population diversity is important because variation among populations is likely to buffer them against short term environmental change and stochastic events. Population diversity may be assessed by examining life history traits such as age, and run and spawn timing distributions. Further, more direct analysis of genetic diversity through DNA analysis may provide an indication of diversity. Viable population diversity will likely be determined through comparisons to historic information or comparisons to other populations existing in relatively undisturbed conditions. Ultimately, population diversity must be sufficient to buffer the population against normal environmental variation.

Establishing Population Thresholds

In applying the concepts discussed in this section to harvest and artificial propagation activities, NMFS relies on two functional thresholds of population status: (1) Critical population threshold, and (2) viable population threshold. The critical population threshold refers to a minimal functional level below which a population's risk of extinction increases exponentially in response to any additional genetic or demographic risks.

The viable population threshold refers to a condition where the population is self-sustaining, and not at risk of becoming endangered in the foreseeable future. This threshold reflects the desired condition of individual populations and of their contribution to recovery of the ESU as a whole. Activities should not preclude populations from attaining this condition.

Evaluating Habitat Conditions

This proposed rule limits application of the take prohibitions for certain categories of activities that are conducted in a way that will help attain or protect properly functioning habitat. Properly functioning habitat conditions

create and sustain the physical and biological features that are essential to conservation of the species, whether important for spawning, breeding, rearing, feeding, migration, sheltering, or other functions. Such features include water quantity; water quality attributes such as temperature, pH, oxygen content, etc; suitability of substrate for spawning; freedom from passage impediments; and availability of pools and other shelter. These features are not static; the concept of proper function recognizes that natural patterns of habitat disturbance, such as flooding, landslides and wildfires, will continue. Properly functioning habitat conditions are conditions that sustain a watershed's natural habitat-affecting processes (bedload transport, riparian community succession, precipitation runoff patterns, channel migration, etc.) over the full range of environmental variation, and that support salmonid productivity at a viable population level. Specific criteria associated with achieving these conditions are listed with each habitat-related limit on take prohibitions.

Issue 2: Direct and Incidental Take

Section 4(d) of the ESA requires that regulations be adopted as are ''necessary and advisable to provide for the conservation of'' the listed species. In discussing the limits on the take prohibitions, NMFS does not generally distinguish ''incidental'' from ''direct'' take because that distinction is not relevant under section 4(d). The biological impact of take on the ESU is the same, whether a particular number of listed fish are lost as a result of incidental impacts or directed impacts. Hence the following descriptions of harvest and artificial propagation programs for which NMFS does not find it necessary and advisable to impose take prohibitions do not, as a general rule, make the distinction between incidental or direct take. Rather, these descriptions and criteria focus on the impacts of all take associated with a particular activity on the biological status of the listed ESU. (The distinction is retained in the discussion of scientific research targeting listed fish, because the limit on take prohibitions applies in that situation only to research by agency personnel or agency contractors.)

Issue 3: Applicability of Proposed Rule to Specific ESUs

In the regulatory language in this proposed rule, the limits on applicability of the take prohibitions to specific ESUs are accomplished through citation to the Code of Federal Regulations' (CFRs') enumeration of threatened marine and anadromous species, 50 CFR 223.102. For the convenience of readers of this document, 50 CFR 223.102 refers to the threatened salmonid ESUs covered in this proposed rule through the following designations:

(a)(3) Central California Coast coho salmon

(a)(20) Central Valley spring-run chinook salmon

(a)(21) California Coastal chinook salmon

(a)(22) Northern California steelhead

Issue 4: Regular Evaluation of Limits on Take Prohibitions

In making a determination that it is not necessary and advisable to impose take prohibitions on certain programs or activities that are adequately covered by one of the take limits in this proposed rule, NMFS recognizes that new information may require a reevaluation of that conclusion at any time. For any of the limits on the take prohibitions described in this proposed rule, NMFS will evaluate on a regular basis the effectiveness of the program in protecting and achieving a level of salmonid productivity and/or of habitat function consistent with conservation of the listed salmonids. If the program is deficient, NMFS will identify ways in which it needs to be altered or strengthened. For habitat-related limits on the take prohibitions, changes may be required if the program is not achieving desired habitat functions, or where even with the habitat characteristics and functions originally targeted, habitat is not supporting population productivity levels needed to conserve the ESU.

If the responsible agency does not make changes to respond adequately to the new information, NMFS will publish notification in the **Federal Register** announcing its intention to impose take prohibitions on activities associated with that program. Such an announcement will provide for a comment period of not less than 30 days, after which NMFS will make a final determination whether to extend all ESA section 9 take prohibitions to the activities.

Issue 5: Coordination with United States Fish and Wildlife Service (FWS)

This proposed rule applies only to listed salmonids under NMFS' jurisdiction. However, as it evaluates any program against the criteria in this rule to determine whether the program is covered under a limitation on take prohibitions, NMFS will coordinate closely with the appropriate FWS office.

Summary of Take Limitations Proposed in This Rule

1. Permit/ESA Limit on the Take Prohibitions

This limit on the ESA section 9 take prohibitions recognizes that those holding permits under section 10 of the ESA or coming within other exceptions under the ESA are free of the take prohibitions so long as they are acting in accord with the permit or applicable law. Examples of activities for which a section 10 permit may be issued are research or land management activities associated with a habitat conservation plan.

2. Continuity of Scientific Research Take Limit

This limit on the take prohibitions would not restrict ongoing scientific research activities affecting listed CCV Spring-run chinook; CC chinook; and NC steelhead for up to 6 months after its effective date, provided that an application for a permit for scientific purposes or to enhance the conservation or survival of the species is received by the Assistant Administrator for Fisheries, NOAA (AA), within 30 days from the effective date of a final rule. This take limit would not be applied to the CCC coho salmon because the ESA section 9 take prohibitions have been in place for this ESU since 1996; therefore, sufficient time has elapsed for entities to obtain section 10 scientific research permits. The ESA section 9 take prohibitions would extend to these activities upon the AA's rejection of the application as insufficient, upon issuance or denial of a permit, or 6 months from effective date of any final rule, whichever occurs earliest. It is in the interest of salmonid conservation not to disrupt ongoing research and conservation projects, some of which are of long-term duration. This limit on the take prohibitions assures there will be no unnecessary disruption of those activities, yet provides NMFS with tools to halt the activity through denial of a permit if the research is judged to have unacceptable impacts on a listed ESU. For these reasons, NMFS does not find imposition of additional Federal protections in the form of take prohibitions necessary and advisable.

3. Limit on the Take Prohibitions for Rescue and Salvage Actions

This limit on the take prohibitions applies to all four threatened ESUs covered by this proposed rule and would relieve certain agency and official personnel or their designees from the take prohibition when they are acting to aid an injured or stranded

salmonid, or to salvage a dead individual for scientific study. Each agency acting under this limitation must annually report to NMFS the numbers of fish handled and their status. This limit on the take prohibitions will result in conservation of the threatened salmonid ESUs by preserving life or furthering our understanding of the species. By the very nature of the circumstances that trigger these actions (the listed fish is injured or stranded and in need of immediate help, or is already dead and may benefit the species if available for scientific study), NMFS concludes that imposition of additional Federal protections through a take prohibition is not necessary and advisable.

4. Fishery Management Limit on the Take Prohibitions

This take limit would apply to all four threatened ESUs covered by this proposed rule. NMFS believes that fisheries for non-listed salmonids and resident game fish species can be managed in a manner that protects listed salmon and steelhead ESUs and allows them to recover. Therefore, this proposed rule provides a mechanism whereby NMFS may limit application of take prohibitions to such fisheries when a state fishery management agency develops and implements, in accordance with a letter of concurrence, a NMFS-approved FMEP. Some benefits of this approach are long-term management planning, more public involvement, a more streamlined administrative process, and more certainty that there will be fishing opportunities in the future.

Process for Developing and Approving FMEPs

Prior to determining that a state's new or amended FMEP is sufficient to eliminate the need for added Federal ESA protection, NMFS must find that the plan is effective in addressing the criteria described in the following section. If NMFS finds that an FMEP meets those criteria, it will approve the plan following public review and comment on the FMEP and after making any revisions resulting from such review and comment. NMFS will communicate its approval to the state fishery agency with a letter of concurrence which will set forth the terms of the FMEP's implementation and the duties of the parties pursuant to the FMEP, including monitoring and reporting requirements.

NMFS recognizes the importance of providing meaningful opportunities for public review of FMEPs. Therefore, prior to approving new or amended FMEPs, NMFS will make such plans available for public review and comment for a period of not less than 30 days. Notice of the availability of these plans will be published in the **Federal Register**.

Criteria for Evaluating FMEPs

NMFS will approve an FMEP only if it meets the following criteria, which are designed to minimize and adequately limit take and promote the conservation of all life stages of threatened salmonids. Specifically, the FMEP must:

(1) Provide a clear statement of the scope of the proposed action. The statement must include a description of the proposed action, a description of the area of impact, a statement of the management objectives and performance indicators for the proposed action, and anticipated effects of the proposed action on management objectives (including recovery goals) for affected populations. This information will provide objectives and indicators by which to assess management strategies, design monitoring and evaluation programs, measure management performance, and coordinate with other resource management actions in the ESU.

(2) Identify populations within affected listed ESUs, taking into account: (A) spatial and temporal distribution; (B) genetic and phenotypic diversity; and (C) other appropriate identifiable unique biological and life history traits, as discussed under Issue 2. Populations may be aggregated for management purposes when dictated by information scarcity, if consistent with survival and recovery of the listed ESU. In identifying management units, the plan shall describe the reasons for using such units in lieu of population units and describe how such units are defined such that they are consistent with the principles discussed under Issue 2.

(3) Utilize the concepts of viable and critical salmonid population thresholds, consistent with the concepts contained in NMFS' ''Viable Salmon Populations and the Recovery of ESUs'' technical report (NMFS, 2000b), for any population or management unit intended to be managed separately within the ESU.

Proposed management actions must recognize the significant differences in risk associated with these two thresholds and respond accordingly in order to minimize the risks to the long-term sustainability of the population(s). Harvest actions impacting populations that are functioning at or above the viable threshold must be designed to maintain the population or management unit at or above that level. For populations shown with a high degree of confidence to be above critical levels but not yet viable, harvest management must not appreciably slow the population's achievement of viable function. Harvest actions impacting populations that are functioning at or below critical threshold must not appreciably increase the genetic and demographic risks facing the population and must be designed to permit the population's achievement of viable function, unless the plan demonstrates that such an action will not appreciably reduce the likelihood of survival and recovery of the ESU as a whole despite any increased risks to the individual population.

(4) Set escapement objectives or maximum exploitation rates for each management unit or population based on its status, and a harvest program that assures not exceeding those rates or objectives. Maximum exploitation rates must not appreciably reduce the likelihood of survival and recovery of the listed ESU. Management of fisheries where artificially propagated fish predominate must not compromise the management objectives for commingled naturally spawned populations (those supported primarily by natural production) by reducing the likelihood that those populations will maintain or attain viable functional status, or by appreciably slowing attainment of viable function.

(5) Display a biologically based rationale demonstrating that the harvest management strategy will not appreciably reduce the likelihood of survival and recovery of the listed ESU. The effects must be assessed over the entire period of time the proposed harvest management strategy would affect the population, including effects reasonably certain to occur after the proposed action ceases.

(6) Include effective monitoring and evaluation programs to assess compliance, effectiveness, and parameter validation. At a minimum, harvest monitoring programs must collect catch and effort data, information on escapements, and information on biological characteristics such as age, fecundity, size and sex data, and migration timing.

(7) Provide for the evaluation of monitoring data and any needed revisions of assumptions, management strategies, or FMEP objectives based on monitoring data that is collected.

(8) Provide for effective enforcement and education. Coordination among involved jurisdictions is an important element in ensuring regulatory effectiveness and coverage.

(9) Include restrictions on resident and anadromous species fisheries that

minimize any take of listed fish, including time, size, gear, and area restrictions.

5. Artificial Propagation Limit on the Take Prohibitions

This take limit would apply to all four threatened ESUs covered by this proposed rule. NMFS believes that artificial propagation, or hatchery programs can be managed in a manner that conserves and recovers listed salmon and steelhead ESUs, including the use of listed salmonids as hatchery broodstock, as long as the programs are managed in accordance with specific criteria. Under such circumstances, NMFS believes it is not necessary and advisable to prohibit the take of listed ESUs in conjunction with these programs. This limit on the take prohibitions proposes a mechanism whereby state or Federal hatchery managers may obtain assurance that a hatchery and genetic management program adequately protects and conserves threatened salmon and steelhead ESUs. In addition, the proposed rule provides a mechanism whereby NMFS may limit the application of take prohibitions to broodstock collection.

Under this take limit, the state or Federal agency develops a Hatchery and Genetic Management Plan (HGMP) containing specific management measures that will minimize and adequately limit impacts on listed fish and promote the conservation of the listed ESU. Following an opportunity for public comment and upon NMFS' approval of the HGMP, NMFS would provide the state or Federal agency with a letter of concurrence specifying implementation requirements, including monitoring and reporting. NMFS believes that with an approved HGMP in place, additional Federal ESA protection through imposition of take prohibitions on artificial propagation activities is unnecessary.

Process for Developing Hatchery and Genetic Management Plans

NMFS will evaluate the effectiveness of state or Federal HGMPs by addressing the criteria described in the following section. If NMFS determines that the evaluation criteria have been adequately addressed in the state HGMP, then it will approve the plan following public comment and any necessary modification, and provide the state agency with a concurrence letter specifying implementation, monitoring and reporting requirements. For Federally operated or funded hatcheries, an ESA section 7 consultation with the Federal agency will achieve this purpose and that ensure implementation, monitoring and reporting requirements are met.

NMFS recognizes the importance of providing meaningful opportunities for public review of draft HGMPs. Therefore, prior to approving new or amended HGMPs, NMFS will make such plans available for public review and comment for a period of not less than 30 days. Notice of the availability of such draft plans will be published in the **Federal Register**.

Criteria for Evaluating Hatchery and Genetic Management Plans

NMFS will evaluate salmonid HGMPs on the basis of criteria that are designed to minimize and adequately limit take and promote the conservation of the listed species. The criteria by which draft HGMPs will be evaluated include the following:

(1) *Goals and Objectives for the Propagation Program.* Each hatchery program HGMP must have clearly stated goals, performance objectives, and performance indicators that indicate the purpose of the program, its intended results, and measurements of its performance in meeting those results. Goals should address whether the program is intended to meet conservation objectives, contribute to the ultimate sustainability of natural spawning populations, and/or intended to augment tribal, recreational, or commercial fisheries. Objectives should enumerate the results desired from the program that will be used to measure the program's success or failure.

(2) The HGMP utilizes the concepts of viable and critical salmonid population threshold, consistent with the concepts contained in NMFS' technical document report entitled: ''Viable Salmonid Populations and the Recovery of ESUs'' (NMFS, 2000b). Listed salmon or steelhead may be taken for broodstock purposes only if: (A) the donor population is currently at or above viable thresholds and the collection will not impair the population's function, (B) the donor population is not currently viable but the sole current objective of the collection program is to enhance the propagation or survival of the listed ESU; or (C) the donor population is shown with a high degree of confidence to be above critical threshold but not yet viable, and the collection will not appreciably slow the attainment of viable status for that population.

(3) The HGMP considers the health, abundance and trends in the donor population in establishing broodstock collection priorities. The primary purpose of broodstock collection of listed salmon or steelhead is to reestablish indigenous populations for conservation purposes. Such programs include restoration of similar, at-risk populations within the same ESU and reintroduction of at-risk populations to underseeded habitat. After salmonid ESU conservation needs are met and when consistent with survival and recovery of the listed ESU, broodstock collection programs may be authorized by NMFS for secondary purposes such as to sustain tribal, recreational or other fisheries.

(4) The HGMP includes protocols to address fish health, broodstock collection, broodstock spawning, rearing and release of juveniles, deposition of hatchery adults, and catastrophic risk management.

(5) The HGMP evaluates, minimizes and accounts for the artificial propagation program's genetic and ecological effects on natural populations, including disease transfer, competition, predation, and genetic introgression caused by straying of hatchery fish.

(6) The HGMP describes interrelationships and interdependencies with fisheries management. The combination of artificial propagation programs and harvest management must be designed to provide as many benefits and as few biological risks as possible for the listed ESUs. HGMPs for programs whose purpose is to sustain fisheries must not compromise the ability of FMEPs or other management plans to achieve management objectives for associated listed populations.

(7) Adequate artificial propagation facilities exist to properly rear progeny of naturally spawned and listed broodstock to maintain population health, maintain population diversity, and to avoid hatchery-influenced selection or domestication.

(8) Adequate monitoring and evaluation exist to detect and evaluate the success of the hatchery program and any risks potentially impairing recovery of the listed ESU.

Take of Progeny Resulting from Hatchery/Naturally-Spawned Crosses

NMFS' ''Interim Policy on Artificial Propagation of Pacific Salmon Under the Endangered Species Act,'' (58 FR 17573, April 5, 1993) provides guidance on the treatment of hatchery stocks in the event of a listing. Under this policy, ''progeny of fish from listed species that are propagated artificially are considered part of the listed species and are protected under the ESA.'' According to the interim policy, the progeny of such hatchery/naturally spawned crosses or naturally spawned-

naturally spawned crosses would also be listed.

In its final listing decisions for the CCV Spring-run chinook salmon, CC chinook salmon and NC steelhead ESUs that are covered by this proposed rule, NMFS determined that it was not necessary to consider the artificially propagated progeny of intentional hatchery/naturally spawned and naturally spawned/naturally spawned crosses to be listed fish (except in cases where NMFS has listed the hatchery population as well) when the collection and use of listed fish as broodstock was part of an approved conservation plan such as an HGMP. NMFS believes it may be desirable to incorporate naturally spawned (i.e., listed) fish into hatchery populations in these ESUs to ensure that their genetic and life history characteristics do not diverge significantly from the naturally spawned populations; however, prior to any intentional use of threatened salmon or steelhead for hatchery broodstock, an approved HGMP must be in place to ensure that native, naturally spawned populations are conserved.

6. Limits on the Take Prohibitions for Scientific Research

This take limit applies to all four threatened ESUs covered by this proposed rule. In carrying out their fishery management responsibilities, the California Department of Fish and Game (CDFG) conducts or permits a wide range of scientific research activities on various fisheries, including monitoring and other studies which occur within the geographic areas occupied by the four threatened salmon and steelhead ESUs considered in this proposed rule. NMFS finds these activities: (1) vital for improving our understanding of the status and risks facing these threatened ESUs, as well as non-listed salmonids and other species that occur within these geographic areas; and (2) provide critical information for assessing the effectiveness of current and future management practices. In general, NMFS concludes such activities will help to conserve the threatened ESUs considered in this proposed rule by furthering our understanding of their (and other species) life history and biological requirements, and that state biologists and cooperating agencies carefully consider the benefits and risks of proposed research before approving or undertaking such projects. For these reasons, NMFS concludes that it is not necessary or advisable to impose additional protections on such research through imposition of Federal ESA section 9 take prohibitions.

Research activities that involve the planned sacrifice or manipulation of salmonids or that will necessarily result in the injury or death of salmonids in the threatened ESUs considered in this proposed rule will come within this limitation only if the state submits an annual report listing all scientific research activities involving such activities planned for the coming year to NMFS for review and approval. Such reports shall contain: (1) an estimate of the total take of threatened salmonids anticipated from such research; (2) a description of study designs, including a justification for taking the salmonids; (3) a description of the techniques to be used; and (4) a point of contact. For this type of research to come within the take limitation, it must be conducted by employees or contractors of the CDFG or be part of a coordinated monitoring and research program overseen by that agency. Any research using electrofishing gear in waters known or expected to contain listed salmonids from the threatened ESUs considered in this proposed rule will come within this take limitation only if it complies with ''Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act'' (NMFS, 2000a). Otherwise, electrofishing research that will affect listed salmonids will require an ESA section 10 research permit from NMFS prior to commencing operations.

CDFG must also annually provide NMFS with the results of their scientific research activities which are directed at the threatened ESUs considered in this proposed rule, including a report of the amount of direct take resulting from the research and a summary of the results of such research.

Research activities conducted by CDFG, or authorized by the CDFG for non-state entities, that may result in incidental take of listed salmonids can be covered under this limit in the following manner. CDFG must submit to NMFS annually, for its review and approval, a report listing all scientific research activities it conducts or permits that may incidentally take listed salmonids from the threatened ESUs covered by this rule for the coming year. In this annual report, CDFG must also report the amount of incidental take of listed salmonids occurring in the previous year's scientific research activities, and provide a summary of the results of such research. Interested parties may request a copy of these annual reports from NMFS (see **ADDRESSES**).

7. Habitat Restoration Limits on the Take Prohibitions

This take limit applies to all four threatened ESUs covered by this proposed rule. NMFS considers a ''habitat restoration activity'' to be an activity whose primary purpose is to restore natural aquatic or riparian habitat processes or conditions; it is an activity which would not be undertaken but for its restoration purpose.

Certain habitat restoration activities are likely to contribute to conserving listed salmonids without significant risks, and NMFS concludes that it is not necessary and advisable to impose take prohibitions on those activities when conducted in accordance with appropriate standards and guidelines. Projects planned and carried out based on at least a watershed-scale analysis and conservation plan, and, where practicable, a sub-basin or basin-scale analysis and plan, are likely to be the most beneficial. NMFS strongly encourages local efforts to conduct watershed assessments to identify what problems are impairing watershed function, and to plan for watershed restoration or conservation based on that assessment. Without the overview a watershed-level approach provides, habitat efforts are likely to focus on ''fixes'' that may prove short-lived, or even detrimental, because the underlying processes that are causing a particular problem have not been addressed.

This proposed rule, therefore, provides that ESA section 9(a) take prohibitions will not apply to habitat restoration activities that are part of, and conducted pursuant to, a watershed conservation plan that the State of California has certified is consistent with State watershed conservation plan guidelines. For this take limitation to apply to habitat restoration activities contained in a watershed conservation plan, NMFS must first find the State of California's watershed conservation plan guidelines will generate plans that: (1) take into account the potential direct, indirect, and cumulative impacts of proposed activities on the threatened salmonids affected by the plan activities; (2) will not reduce the likelihood of either survival or recovery of listed species in the wild; (3) will ensure that any taking of threatened salmonids is incidental to the plan activities; (4) minimize and mitigate any adverse impacts from plan activities; (5) provide effective monitoring and adaptive management; (6) use the best available science and technology, including watershed analysis; (7) provide for public and scientific review

and input; (8) include any measures that NMFS determines are necessary or appropriate; 9) include provisions that clearly identify those activities that are part of plan implementation; and 10) ensure funding and implementation of the plan components listed here.

Before approving any watershed conservation plan guidelines, NMFS will publish a notice in the **Federal Register** announcing the availability of the proposed guidelines for public review and comment. Such an announcement will provide for a comment period of not less than 30 days. NMFS will periodically review the state's watershed conservation plan certifications to ensure they adhere to NMFS' approved guidelines.

8. Water Diversion Screening Limit on the Take Prohibitions

This take limit applies to all four threatened ESUs covered by this proposed rule. A widely recognized cause of mortality among anadromous fish is operation of water diversions without adequate screening. Juveniles may be entrained or attracted into diversions where they later die from a variety of causes, including stranding. Adult and juvenile migration may be impaired by diversion structures, including push-up dams. Juveniles are often injured and killed through entrainment in pumping facilities or impingement on inadequate screens, where water pressure and mechanical forces are often lethal.

State laws and Federal programs have recognized these problems in varying ways, and have encouraged or required adequate screening of diversions to prevent much of the anadromous fish loss attributable to this cause. Nonetheless, many diversions are not adequately screened and remain a threat, particularly to juvenile salmonids, and elimination of that source of injury or death is essential to the conservation of listed salmonids.

For these reasons, this proposed rule encourages all water diverters to move quickly to provide adequate screening or other protections for their diversions by not applying ESA section 9 take prohibitions to any diversion that is screened, maintained, and operated in accordance with NMFS' Southwest Region Fish Screening Criteria for Anadromous Salmonids (see **ADDRESSES**). Compliance with these criteria will address the problems associated with water diversions lacking adequate screening. If a diversion is screened, maintained and operated consistent with these screening criteria, NMFS concludes that adequate safeguards will be in place such that imposition of the section 9 take prohibitions is neither necessary or advisable for the conservation of the threatened salmonid ESUs considered in this proposed rule. Coverage under this take limitation requires that NMFS' Southwest Region engineering staff, or any resource agency or tribal representative NMFS designates as an authorized officer, agrees in writing that the diversion facility is screened, maintained, and operated in compliance with the screening criteria.

On a case-by-case basis, this take limitation may be applied in situations where NMFS' engineering staff (or a NMFS-authorized officer) have approved a juvenile fish screen design, construction plan, and schedule that a water diverter proposes for screen installation. Such a plan must also describe interim operations measures that will reduce the likelihood of taking the threatened salmonids considered by this proposed rule. NMFS may require a commitment of compensatory mitigation if implementation of the plan is terminated prior to its completion. If the NMFS-approved plan and schedule are not met, or if a schedule modification is made that is not pre-approved, the water diversion would be subject to the section 9 take prohibitions.

Under this take limitation, the proposed take prohibitions would not apply to physical impacts to listed salmonids covered by this rule due to entrainment or similar impacts of the act of diverting, provided the diversion facility has been screened according to NMFS criteria and is being properly maintained. However, this limit does not cover impacts or take resulting from reduced flows resulting from operation of the diversion or impacts caused by construction and/or installation of the diversion structure. Such activities and impacts would be subject to the proposed take prohibitions.

9. Routine Road Maintenance Limit on the Take Prohibitions

This take limit applies to all four threatened ESUs covered by this proposed rule. Routine road maintenance activities, in certain specified circumstances, can be conducted in a manner that will not further degrade or otherwise restrict attainment of properly functioning conditions for threatened salmonids. Specifically, NMFS determined in its July 2000 4(d) rule (65 FR 42422) that routine road maintenance activities conducted in accordance with the Oregon Department of Transportation's (ODOT) Maintenance Management System Water Quality and Habitat Guide (June, 1999) will contribute to the attainment of properly functioning habitat conditions, and therefore, the conservation of threatened salmonids. Because the ODOT road maintenance program was found to contribute to the attainment of properly functioning habitat conditions and thereby limit impacts on threatened salmonids and their habitat, NMFS concluded in its July 2000 4(d) rule (65 FR 42422) that application of the section 9 take prohibitions to these activities was unnecessary for the conservation of the threatened ESUs covered by that rule.

Under the take limitation in this proposed rule, NMFS does not find it necessary or advisable to apply the ESA section 9 take prohibitions to routine road maintenance activities in California provided that: (1) they are conducted by the employees or agents of the state or any county, city, or port under a program that complies with a program that is substantially similar to that contained in the ODOT Guide and has been determined by NMFS to meet or exceed the protections provided by the ODOT guide, or that (2) they are conducted by employees or agents of the State or any county, city, or port in a manner that has been found by NMFS to contribute to properly functioning habitat conditions for the threatened salmonid ESUs considered in this proposed rule.

NMFS' determination and approval that any state, city, county, or port program is equivalent to the ODOT road maintenance program, and, therefore, qualifies under this take limit, will be in the form of a written approval by the NMFS Southwest Regional Administrator. Any jurisdiction desiring its road maintenance program activities to qualify under this limit based on equivalence to the ODOT program must have adopted road maintenance guidelines equivalent to or better than that of the ODOT program and commit in writing to apply those management practices.

NMFS' determination and approval that any state, city, county, or port program contributes to the attainment and maintenance of properly functioning habitat conditions, and, therefore, qualifies under this take limit, will be in the form of a written approval from the Southwest Regional Administrator. NMFS' determination in this case will be based on an assessment of the extent to which the program contributes to attaining and maintaining properly functioning habitat conditions. For the purposes of this assessment, NMFS will define properly functioning habitat conditions as the sustained presence of natural habitat-forming

processes that are necessary for the long-term survival of salmonids through the full range of environmental variation. In order to contribute to properly functioning habitat conditions, actions that affect salmonid habitat must not impair habitat that is already properly functioning, appreciably reduce the functioning of already impaired habitat, or retard the long-term progress of impaired habitat toward a properly functioning condition. NMFS will periodically evaluate an approved road maintenance program to determine its effectiveness in maintaining and achieving properly functioning habitat conditions.

Prior to approving any state, city, county or port program under this take limit, NMFS will publish a notification in the **Federal Register** announcing the availability of the program or any revisions to the program for public review and comment. Such an announcement will provide for a comment period of not less than 30 days.

10. Municipal, Residential, Commercial and Industrial (MRCI) Development and Redevelopment Limit on Take Prohibitions

This take limit will apply to all four threatened ESUs covered by this proposed rule. MRCI development and redevelopment have a significant potential to injure or kill threatened salmonids or degrade salmonid habitat in a variety of ways. NMFS believes that with appropriate safeguards, new MRCI development and redevelopment can be specifically tailored to minimize impacts on listed salmonids to an extent that makes additional Federal ESA protections unnecessary for the conservation of threatened salmonids. In this rule, NMFS has proposed a mechanism whereby jurisdictions can be assured that development and redevelopment authorized within their areas avoids or minimizes impacts and the risk of taking threatened salmonids, and is thereby consistent with the requirements of the ESA. Both developers and jurisdictions controlling development would benefit from assurances that their approvals and development actions contribute to the conservation of threatened salmonids.

Under this take limitation, NMFS proposes that the ESA section 9 take prohibitions will not be applied to MRCI development and redevelopment governed by and conducted in accord with city, county, or regional government ordinances or plans that have been found to adequately protect the threatened species considered in this proposed rule. In making a determination whether city, county, or regional government ordinances or plans adequately conserve threatened salmonids covered under this proposed rule, NMFS will assess and evaluate whether the ordinances or plans will contribute to maintaining and restoring properly functioning habitat conditions. For this assessment, NMFS will define properly functioning habitat conditions as the sustained presence of natural habitat-forming processes that are necessary for the long-term survival of salmonids through the full range of environmental variation. In order to contribute to properly functioning habitat conditions, activities that affect salmonid habitat must not impair habitat that is already properly functioning, appreciably reduce the functioning of already impaired habitat, or retard the long-term progress of impaired habitat toward a properly functioning condition.

When making an assessment as to whether or not a MRCI development or redevelopment ordinance or plan adequately conserves threatened salmonids, NMFS will individually apply 12 evaluation considerations. Many of these principles are derived from Spence, An Ecosystem Approach to Salmonid Conservation (NMFS, 1996) and citations therein. NMFS recognizes that some of these principles require integrated planning for placement of buildings, transportation or storm water management and that these 12 considerations will have to be applied in the context within which the development is addressed in the ordinance or plan. The 12 evaluation considerations are as follows:

(1) The MRCI development or redevelopment ordinance or plan ensures that development will not take place in inappropriate areas such as unstable slopes, wetlands, areas of high habitat value, and similarly constrained sites.

(2) The MRCI development or redevelopment ordinance or plan adequately avoids stormwater discharge impacts to water quality and quantity or to stream flow patterns (i.e., hydrograph) in the watershed, including peak and base flows in perennial streams. Stormwater management programs should require development activities to avoid impairing water quality and quantity, and should preserve or enhance flow patterns so that they mimic historic stream flow patterns (e.g. peak flows, base flows, durations of flow, volumes and velocities. This can be accomplished by reducing impervious surfaces and maintaining natural vegetation cover and soils to the maximum extent possible.

(3) The MRCI development or redevelopment ordinance or plan provides adequate protective riparian area management requirements in order to attain or maintain properly functioning habitat conditions adjacent to all rivers, streams, intermittent streams, and estuaries. Where necessary, compensatory mitigation is provided to offset unavoidable impacts to properly functioning habitat conditions in riparian habitat areas resulting from MRCI development or redevelopment.

Limiting development activities in riparian areas helps protect or restore the condition and quality of soil and ensure that a diversity of vegetation is well distributed within a riparian area. Such conditions contribute to natural vegetation succession and help protect the water quality and flow conditions necessary to meet salmonid habitat requirements. The available scientific evidence indicates that the essential habitat functions of the riparian zone are affected to varying degrees by stream side development activities that occur within a distance equal to the height of the tallest tree that can grow on that site. This distance, however, can vary substantially and should be determined on a site-specific basis which takes into account the conditions of the site and the type of habitat that may be affected by the development.

(4) The MRCI development or redevelopment ordinance or plan avoids stream crossings by road, utilities and other linear development whenever possible, and where such crossings must be provided, impacts are minimized. Where crossings are unavoidable, ordinances or plans should consider minimizing their impacts by indicating a preference for bridges rather than culverts, and design both bridges and culverts to pass at least the 100-year flow level and debris associated with a 100-year flood event. In addition, the ordinance or plan should indicate that crossings and culverts meet NMFS' Southwest Region Guidelines for Salmonid Passage at Stream Crossings, May 2000. The ordinance or plan should also assure that all crossings are regularly monitored and maintained.

(5) The MRCI development or redevelopment ordinance or plan should adequately protect historic stream meander patterns and channel migration zones, and avoid hardening stream banks and shorelines wherever possible. Development activities should be designed to protect conditions that allow for gradual bank erosion, flooding, and channel meandering within the zone where meandering would naturally

occur. This more natural channel promotes gravel recruitment, geomorphic diversity, and habitat development. When bank erosion must be controlled, it should be accomplished through vegetation or bioengineered solutions wherever possible. Rip-rap blankets or other hardening techniques should be limited to those situations where vegetation and bioengineering solutions are not possible.

(6) The MRCI development or redevelopment ordinance or plan should adequately protect wetlands, wetland buffers, and wetland function. Protection of wetlands and the vegetation surrounding them will avoid or minimize soil, vegetation, and hydrology disturbances which can affect wetland succession and function, and, therefore, salmonid habitat and food availability.

(7) The MRCI development or redevelopment ordinance or plan adequately preserves the hydrologic capacity of permanent and intermittent streams to pass peak flows. Preserving hydrologic capacity provides conditions on the landscape necessary for maintaining essential habitat processes such as water quantity and quality, stream bank and channel stability, groundwater flows, and riparian vegetation succession.

(8) The MRCI development or redevelopment ordinance or plan includes adequate provisions for landscaping with native vegetation to reduce the need for watering and the application of herbicides, pesticides, and fertilizer. These provisions will maintain essential habitat processes by helping to conserve water and reduce demands on instream flows that compete with fish needs. In addition, they will reduce the amount of chemicals that contribute to water pollution.

(9) The MRCI development or redevelopment ordinance or plan includes provisions that prevent run-off during and after construction, thereby preventing sediment and pollutant discharges to streams and other water bodies that support salmonids. These provisions may include detention of flow, stabilizing soils, protecting slopes, stabilizing channels and outlets, protecting drain inlets, controlling pollutants, and maintaining best management practices.

(10) The MRCI development or redevelopment ordinance or plan ensures that water supply demands can be met without impacting instream flows needed for salmonids, and that any new water diversions are sited and screened in a manner that prevent injury and death of salmonids.

(11) The MRCI development or redevelopment ordinance or plan includes mechanisms to ensure that funding, enforcement, implementation monitoring, and reporting occur as the ordinance or plan is implemented, and that the ordinance or plan is re-evaluated at least once every 5 years.

(12) The MRCI development or redevelopment ordinance or plan demonstrates that it is in compliance with all other state and Federal environmental and natural resource laws and permits.

NMFS' determination that city, county, or regional jurisdictional MRCI development or redevelopment ordinances or plans contribute to the attainment and maintenance of properly functioning habitat conditions, and thereby fall within this take limitation, will be in the form of a written approval from the Southwest Regional Administrator. As a condition of approval and to continue within this take limitation, city, county, or regional jurisdictions with approved ordinances or plans must provide NMFS with annual reports regarding the implementation and effectiveness of the ordinances or plans. NMFS will review these reports and evaluate approved ordinances or plans for their effectiveness in maintaining and achieving habitat conditions and function that provide for the conservation of threatened salmonids. As necessary, NMFS will work with the jurisdiction to modify ordinances or plans to achieve the desired habitat conditions.

Prior to approving a city, county, or regional government ordinance or plan for development or redevelopment under this take limitation, NMFS will publish a notification in the **Federal Register** announcing the availability of the ordinance or plan for public review and comment. Such an announcement will provide for a comment period of not less than 30 days.

Public Comments Solicited

NMFS is soliciting comments, information, and/or recommendations on any aspect of this proposed rule from all concerned parties (see **DATES** and **ADDRESSES**). NMFS will consider all information, comments, and recommendations received before reaching a final decision on 4(d) protections for the threatened salmonid ESUs covered in this proposed rule.

Public Hearings

In a forthcoming **Federal Register** notification, NMFS will announce the dates and locations of public hearings on this proposed rule to provide the opportunity for the public to give comments and to permit an exchange of information and opinion among interested parties. NMFS encourages the public's involvement in such ESA matters.

References

A list of references cited in this proposed rule is available upon request (see **ADDRESSES**).

Classification

Regulatory Flexibility Act

When an agency proposes regulations, the Regulatory Flexibility Act (RFA) (5 U.S.C. 601-612) requires the agency to prepare and make available for public comment an initial regulatory flexibility analysis (IRFA) that describes the impact of the proposed rule on small businesses, nonprofit enterprises, local governments, and other small entities, unless the agency is able to certify that the action will not have a significant impact on a substantial number of small entities. The IRFA is to aid the agency in considering all reasonable regulatory alternatives that would minimize the economic impact on affected small entities. The RFA was designed to ensure that agencies carefully assess whether aspects of a proposed regulatory scheme (record keeping, safety requirements, etc.) can be tailored to be less burdensome for small businesses while still achieving the agency's statutory responsibilities.

In accordance with the requirements of the RFA, therefore, NMFS has prepared an IRFA for this proposed ESA 4(d) rule. The IRFA is available upon request (see **ADDRESSES**). A summary of the IRFA follows.

This proposed ESA 4(d) rule has no specific requirements for regulatory compliance; instead, it essentially sets an enforceable performance standard (i.e., do not take listed fish) that applies to all entities and individuals within the ESU unless that activity is within a carefully circumscribed set of activities on which NMFS proposes not to impose the take prohibitions. Hence, the universe of entities reasonably expected to be directly or indirectly impacted by the prohibition is potentially broad.

The number of entities potentially affected by imposition of the ESA section 9 take prohibitions contained in the proposed rule is large and covers a large geographic which includes the Sacramento River basin in California's central valley, as well as coastal watersheds ranging from just north of the Russian River to Redwood Creek.

Activities potentially affecting salmon and steelhead ESUs covered by the proposed rule are those associated with agriculture, fishing, hatcheries, mining, heavy construction, highway and street construction, logging, wood and paper mills, electric services, water transportation, and other industries. As many of these activities involve local, state, and Federal oversight, including permitting, governmental activities from the smallest towns or planning units to the largest cities may potentially be impacted. The activities of some nonprofit organizations may also be affected by these regulations.

NMFS examined the potential impact of the regulation on a sector-by-sector basis. Unavailable or inadequate data leaves a high degree of uncertainty surrounding both the numbers of entities likely to be affected, and the characteristics of any impacts on particular entities. The problem is complicated by differences among entities even in the same sector as to the nature and size of their current operations, contiguity to waterways, individual strategies for dealing with the take prohibitions, etc. Finally, many of the activities that would be subject to the take prohibitions in the proposed rule are already subject to the take prohibitions imposed by existing 4(d) rules that protect other salmonid ESUs utilizing the same habitat. Thus, determining the incremental cost of this rule would require information concerning regulated entities' response to previous 4(d) rules, some of which have been in effect for only a year.

Examination of the geographical aspects of overlapping ESUs, and consideration of differences in the distribution of the different ESUs within river systems revealed three subareas composing the geographic extent of the four ESUs combined. Subarea 1 consists of that area within which the only change due to the proposed rule would be to allow more take limitations than are presently allowed by the existing 4(d) rule for the threatened Central California coast coho salmon ESU. The section 9 take prohibitions are already in place for this ESU and would not be changed by the proposed rule.

Subarea 2 consists of that area where the proposed take prohibitions for the Northern California steelhead and California coastal chinook ESUs would be superimposed on the existing take prohibitions for portions of two threatened coho salmon ESUs (Central California coast and Southern Oregon/Northern California coho ESUs). Since steelhead are more widely distributed than coho salmon within watersheds in this region, the proposed take prohibitions are expected to have some impact on a wide variety of activities.

Subarea 3 consists of that area where the proposed take prohibitions for Central Valley spring chinook and California coastal chinook would be superimposed on existing take prohibitions for threatened steelhead and endangered winter-run chinook salmon ESUs. In this region only a small variety of activities involving deliberate take of chinook salmon is expected to be affected.

The largest economic impacts from the proposed rule, therefore, are expected to occur in subarea 2 which lies almost entirely in Humboldt, Trinity, Lake, and Mendocino counties. These four counties account for only 5% of the population and 4% of the personal income from all the counties that occur within the geographic range of the four ESUs covered by this proposed rule.

There are no record keeping or reporting requirements associated with imposition of the take prohibition; therefore, it is not possible to simplify or tailor record keeping or reporting to be less burdensome for small entities. However, some programs for which NMFS may in the future find it is unnecessary to prohibit take because they fall under one of the proposed take limitations would involve recordkeeping and/or reporting to support that continuing determination. NMFS has attempted to minimize any burden associated with these programs.

In formulating this proposed rule, NMFS considered several alternative approaches which are described in the IRFA. These included: (1) Enacting a ''global'' ESA 4(d) protective regulation for threatened species through which NMFS would automatically apply the section 9 take prohibitions to all threatened species at the time of listing; (2) enacting ESA 4(d) protective regulations that include the take prohibitions, but contain no take limits, or only a few limits, on the application of the take prohibitions for relatively uncontroversial activities such as fish rescue/salvage; (3) enacting ESA 4(d) regulations which include the take prohibitions in combination with detailed prescriptive requirements applicable to one or more sectors of activity; (4) enacting ESA 4(d) protective regulations similar to the existing interim 4(d) protective regulations for Southern Oregon/Northern California coast coho salmon which includes four additional limitations on the extension of the take prohibitions, for harvest plans, hatchery plans, scientific research, and habitat restoration projects, when in conformance with specified criteria; (5) enacting ESA 4(d) regulations similar to the interim rule for Southern Oregon/Northern California coast coho, but with recognition of more programs and circumstances in which application of take prohibitions is neither necessary or advisable, and (6) enacting no ESA 4(d) protective regulations for the threatened salmonid ESUs. This latter approach would leave the threatened ESUs without any protection other than provided by ESA section 7 consultations for actions with some Federal nexus, and would not be consistent with NMFS' obligation to enact such protective regulations that are ''necessary and advisable to provide for the conservation of'' threatened salmon and steelhead.

The approach taken in this proposed rule is alternative 5 which would impose the section 9 take prohibition and also create 10 limits to the take prohibitions for specific circumstances or categories of activity (see discussion of take limitations in this proposed rule). This approach is fundamentally the same as that taken in NMFS's July 2000 4(d) rule for 14 threatened salmonids (65 FR 42422). For several of these activity categories (i.e., recreational harvest, artificial propagation, habitat restoration, road maintenance, and municipal, residential, commercial and industrial development) the regulation is structured so that it allows plans or programs developed after promulgation of the rule to be submitted to NMFS for review and approval under criteria described in the rule.

All of the other alternatives which provide take prohibitions for the threatened ESUs, may result in unnecessary impacts on economic activity of small entities, given NMFS' judgment that more limited protections would suffice to conserve the species. NMFS believes the proposed rule provides the greatest latitude for individual entities and regulatory agencies to tailor activities and programs to fit individual circumstances while avoiding or minimizing take of threatened salmonids. At present, NMFS concludes that there are no legally viable alternative rules that would have less impact on small entities and still fulfill the agency's obligations to protect these threatened salmonid ESUs.

If the proposed rule or any of the other alternatives described in the IRFA will impact your economic activity, please comment on whether there is a preferable alternative (including any alternatives not described herein) that would meet the statutory requirements

of ESA section 4(d). Please describe the impact that the alternative would have on your economic activity and why the alternative is preferable.

Executive Order (E.O.) 12866

Pursuant to E.O. 12866 (58 FR 51735, October 4, 1993), NMFS has prepared a draft Regulatory Impact Review (RIR) which considers costs and benefits of the ESA 4(d) regulatory alternatives that were considered, including the approach taken in this proposed rule. Copies of the draft RIR are available for review and comment upon request (see **ADDRESSES**).

Costs and benefits of the proposed rule and other alternative rule making approaches include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits where estimates cannot be meaningfully made for impacts that are essential to consider. The benefit provided by the proposed rule, as well as each of the 4(d) alternatives considered by NMFS which affords sufficient protection for the threatened ESUs, is its contribution to the recovery of the threatened ESUs. No precise measure of the benefit of recovery is available. NMFS is requesting comments and information (e.g. data sets, studies) that will enable quantification of the benefits of the proposed rule.

Many of the costs of recovering the ESUs addressed by the proposed rule (or alternatives that afford equal protection) are shared jointly with other listed ESUs that have overlapping geographic distributions and must also be recovered. It is not possible to determine what share of these joint costs is attributable to adoption of the take prohibitions which are in the proposed rule and the alternatives. NMFS is requesting comments and information (e.g. data sets, studies) that will enable disentangling and quantification of the costs of the proposed rule.

Because the proposed rule would limit application of the section 9 take prohibition to those State or local programs or activities that fall within defined take limit criteria, those programs will contribute to the conservation of the threatened ESUs covered by the rule and NMFS' involvement will be more collaborative and less often require enforcement actions. This approach has the greatest probability that compliance burdens will be equally shared, that economic incentives will be employed in appropriate cases, and that practical standards adapted to the particular characteristics of the State or region will aid citizens in reducing the risks of take in an efficient way. For these reasons, it is likely that the proposed rule will minimize the cost to the public of avoiding or minimizing take over the long term among the alternatives considered.

In order to assess the economic effect of this rule, NMFS is seeking to assess the economic effects of the imposition of the take prohibitions contained in the July 2000 4(d) rule. This rule became effective on September 8, 2000, and January 8, 2001 for the steelhead and salmon ESUs respectively, covered by that rule.

In the absence of 4(d) rules, NMFS provided ESA coverage through section 10 research, enhancement, and incidental take permits with private entities, or through section 7 consultation with Federal agencies. Since implementation of the July 2000 4(d) rule NMFS has received plans from various entities in Oregon, Washington, Idaho and California for approval under the limits to the take prohibitions. States can now send a list of research activities they expect to authorize for the following year instead of sending individual section 10 applications. During promulgation of the July 2000 rule NMFS did not have a complete understanding of the economic impacts entities would incur as a result of imposition of the take prohibitions. To gain some insight as to how entities may have changed their activities in response to implementation of the take prohibitions, we have summarized the numbers of plans submitted and their status under the July 4(d) rule in the following table. While portions of these plans were developed independently of the July 4(d) rule, they may have been modified in order to qualify for the take limits of the rule, as opposed to undergoing ESA section 7 or 10 procedures. Authorization under the rescue/salvage limit, City of Portland, Oregon Parks and Recreation Department's Pest Management Program and Washington's Forest Practices became effective September 8, 2000, and January 8, 2001, for the steelhead and salmon ESUs respectively, and are not listed in the table. Oregon Department of Transportation's (ODOT's) Routine Road Maintenance program also became effective with the effective dates, but other entities can qualify for ESA coverage under this limit if they use ODOT's program or an equivalent program.

Limit	Number of Plans Received to Date	Number of Plans Pending Approval	Number of Plans Approved	Number of Plans Expected in Next Year
Research	3	0	3	4 yearly (Oregon Washington Idaho, California)
Fishery Management Plans	13	12	1	33
Hatchery Genetic Management Plans	9	9	0	61
Joint State/Tribal Plans	2	0	2	12
Habitat Restoration Activities	0	0	0	4
Diversion Screening	20	2	0	100
Oregon Department of Transportation's (ODOT's) Routine Road Maintenance or Equivalent Plan	0	0	0	7–10
Municipal, Residential, Commercial, and Industrial Plans	0	0	0	10

Entities that are now subject to the July 4(d) rule fall into 4 categories: (1) Those entities who have sought or are actively seeking ESA coverage via the July 4(d) rule limits; (2) those who are not sure if their activities will harm

salmonids, but are seeking guidance from NMFS; (3) those who are actively seeking ESA coverage via the section 10 or section 7 process; and (4) those entities that are taking salmon but are not seeking ESA coverage.

NMFS believes that among the alternative regulatory approaches that were considered, the approach taken in this proposed rule will be the least costly.

Executive Order 13084—Consultation and Coordination with Indian Tribal Governments

E.O. 13084 requires that if NMFS issues a regulation that significantly or uniquely affects the communities of Indian tribal governments and imposes substantial direct compliance costs on those communities, NMFS must consult with those governments or the Federal government must provide the funds necessary to pay the direct compliance costs incurred by the tribal governments. This proposed rule does not impose substantial direct compliance costs on the communities of Indian tribal governments. Accordingly, the requirements of section 3(b) of E.O. 13084 do not apply to this proposed rule.

Nonetheless, NMFS intends to inform potentially affected tribal governments and solicit their input on the proposed rule. NMFS will continue to give careful consideration to all written and oral comments received on the proposed rule and will continue its coordination and discussions with interested tribes as the agency moves forward toward a final 4(d) rule.

Executive Order 13132—Federalism

E.O. 13132 requires agencies to take into account any federalism impacts of regulations under development. It includes specific consultation directives for situations where a regulation will preempt state law, or impose substantial direct compliance costs on state and local governments (unless required by statute). Neither of those circumstances is applicable to this proposed rule. In fact, this proposed rule provides a mechanism by which NMFS may defer to state and local government programs, where they provide necessary protections for threatened salmonids.

NMFS' July 2000 4(d) rule for 14 threatened salmonids (65 FR 42422), including three steelhead ESUs in California, was the first instance in California where the agency defined some reasonably broad categories of activities, both public and private, for which take prohibitions were not considered necessary and advisable when specified criteria were met. Since that rule was promulgated, NMFS has engaged in discussions with various State and local agencies and other organizations in California wishing to pursue development of programs that would qualify under the various take limits contained in that final rule. In addition, NMFS has sought working relationships with other governmental and non-governmental organizations, and endeavored to promote use of the 4(d) rule. Because some of the threatened ESUs addressed in this proposed rule overlap with the ESUs addressed in the July 2000 4(d) rule (65 FR 42422), working relationships have already been established with many agencies and organizations that will be affected by this proposed rule.

In addition to these efforts, NMFS staff have given presentations to interagency forums, community groups, and others, and served on a number of interagency advisory groups or task forces considering conservation measures. Many cities, counties and other local governments have sought guidance and consideration of their planning efforts from NMFS, and staff have met with them whenever possible. Lastly, NMFS staff have continued coordination with CDFG aimed at developing recreational fisheries and artificial propagation management plans and other programs that will be protective of threatened salmonids and ultimately may be recognized within the July 2000 rule or this 4(d) rule.

Paperwork Reduction Act

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act (PRA), unless that collection of information displays a currently valid Office of Management and Budget (OMB) control number. This proposed rule contains additional collection-of-information requirements subject to review and approval by OMB under control number 0648–0399. These requirements have been submitted to OMB for approval.

The public reporting burden per response for these collections of information is estimated to average 5 hours for a submission on screening of a water diversion or for a report on salmonids assisted, disposed of, or salvaged; 20 hours to prepare a road maintenance agreement; 30 hours for an urban ordinance development package; and 10 hours for an urban development annual report.

This proposed rule also contains a collection-of-information requirement associated with habitat restoration activities conducted under watershed plans that has received PRA approval from OMB under control number 0648–0230. The public reporting burden for the approval of Watershed Plans is estimated to average 10 hours.

These estimates include any time required for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection-of-information.

Public comment is sought regarding whether this proposed collection-of-information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; the accuracy of the burden estimate; ways to enhance the quality, utility, and clarity of the information to be collected; and ways to minimize the burden of the collection, including the use of automated collection techniques or other forms of information technology. Send comments on these or any other aspects of the collection of information to NMFS (see **ADDRESSES**), and to OMB at the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC. 20503 (Attention: NOAA Desk Officer). Comments must be received by October 1, 2001.

National Environmental Policy Act

NMFS prepared Environmental Assessments (EAs), as defined under the authority of the National Environmental Policy Act (NEPA) of 1969, addressing each threatened ESU covered by this proposed rule. Based on a review and evaluation of the information contained in the EA, NMFS has determined that the proposal to promulgate protective regulations for four threatened salmonid ESUs, including the creation of limitations on the applicability of the prohibition on taking any of those salmonids, would not be a major Federal action that would significantly affect the quality of the human environment within the meaning of section 102(2)(c) of NEPA of 1969. NMFS believes these EAs examined appropriate alternatives, and that preparation of an Environmental Impact Statement is not required. Copies of the EAs are available on request (see **ADDRESSES**).

List of Subjects in 50 CFR Part 223

Endangered and threatened species, Exports, Imports, Marine mammals, Transportation.

Dated: August 10, 2001.

Bruce. C. Morehead,

Acting Assistant Administrator for Fisheries, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 223 is proposed to be amended as follows:

PART 223—THREATENED MARINE AND ANADROMOUS SPECIES

1. The authority citation for part 223 continues to read as follows:

Authority: 16 U.S.C. 1531–1543; subpart B, § 223.12 also issued under 16 U.S.C. 1361 *et seq.*

2. In § 223.203, paragraphs (a), (b)(1), and (c) are revised and introductory text to this section, paragraphs (b)(14) through (b)(22), and Appendix A to this section are added to read as follows:

§ 223.203 Anadromous fish.

Available guidance documents cited in the regulatory text are listed in Appendix A to this section.

(a) *Prohibitions.* The prohibitions of section 9(a)(1) of the ESA (16 U.S.C. 1538(a)(1)) relating to endangered species apply to the threatened species of salmonids listed in § 223.102(a)(1) through (a)(10), and (a)(12) through (a)(22), except as provided in paragraph (b) of this section and § 223.209(a).

(b) *Limits on the prohibitions.* (1) The exceptions of section 10 of the ESA (16 U.S.C. 1539) and other exceptions under the Act relating to endangered species, including regulations in part 222 of this chapter implementing such exceptions, also apply to the threatened species of salmonids listed in § 223.102(a)(1) through (a)(10), and (a)(12) through (a)(22).

* * * * *

(14) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102 (a)(20) through (a)(22) do not apply to activities specified in an application for a permit for scientific purposes or to enhance the conservation or survival of the species, provided that the application has been received by the Assistant Administrator for Fisheries, NOAA (AA), no later than [90 days after date of publication of the final rule in the FEDERAL REGISTER]. The prohibitions of paragraph (a) of this section apply to these activities upon the AA's rejection of the application as insufficient, upon issuance or denial of a permit, or [8 months after date of publication of the final rule in the FEDERAL REGISTER], whichever occurs earliest.

(15) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102 (a)(3), and (a)(20) through (a)(22) do not apply to any employee or designee of NMFS, the United States Fish and Wildlife Service, any Federal land management agency, the California Department of Fish and Game (CDFG), or of any other governmental entity that has co-management authority for the listed salmonids, when the employee or designee, acting in the course of his or her official duties, takes a threatened salmonid without a permit if such action is necessary to:

(i) Aid a sick, injured, or stranded salmonid,

(ii) Dispose of a dead salmonid, or

(iii) Salvage a dead salmonid which may be useful for scientific study.

(iv) Each agency acting under this limit on the take prohibitions of paragraph (a) of this section is to report to NMFS the numbers of fish handled and their status, on an annual basis. A designee of the listed entities is any individual the Federal or state fishery agency or other co-manager has authorized in writing to perform the listed functions.

(16) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102 (a)(3), and (a)(20) through (a)(22) do not apply to fishery harvest activities provided that:

(i) Fisheries are managed in accordance with a NMFS-approved Fishery Management and Evaluation Plan (FMEP) and implemented in accordance with a letter of concurrence from NMFS. NMFS will approve an FMEP only if it clearly defines its intended scope and area of impact and sets forth the management objectives and performance indicators for the plan. The plan must adequately address the following criteria:

(A) Define populations within affected listed ESUs, taking into account spatial and temporal distribution, genetic and phenotypic diversity, and other appropriate identifiably unique biological and life history traits. Populations may be aggregated for management purposes when dictated by information scarcity, if consistent with survival and recovery of the listed ESU. In identifying management units, the plan shall describe the reasons for using such units in lieu of population units, describe how the management units are defined, given biological and life history traits, so as to maximize consideration of the important biological diversity contained within the listed ESU, respond to the scale and complexity of the ESU, and help ensure consistent treatment of listed salmonids across a diverse geographic and jurisdictional range.

(B) Utilize the concepts of ''viable'' and ''critical'' salmonid population thresholds, consistent with the concepts contained in NMFS's technical report entitled ''Viable Salmonid Populations and the Recovery of ESUs'' (NMFS, 2000b). This report provides a framework for identifying the biological requirements of listed salmonids, assessing the effects of management and conservation actions, and ensuring that such actions provide for the survival and recovery of listed species. Proposed management actions must recognize the significant differences in risk associated with viable and critical population threshold states and respond accordingly to minimize the long-term risks to population persistence. Harvest actions impacting populations that are functioning at or above the viable threshold must be designed to maintain the population or management unit at or above that level. For populations shown with a high degree of confidence to be above critical levels but not yet at viable levels, harvest management must not appreciably slow the population's achievement of viable function. Harvest actions impacting populations that are functioning at or below critical threshold must not be allowed to appreciably increase genetic and demographic risks facing the population and must be designed to permit the population's achievement of viable function, unless the plan demonstrates that the likelihood of survival and recovery of the entire ESU in the wild would not be appreciably reduced by greater risks to that individual population.

(C) Set escapement objectives or maximum exploitation rates for each management unit or population based on its status and on a harvest program that assures that those rates or objectives are not exceeded. Maximum exploitation rates must not appreciably reduce the likelihood of survival and recovery of the ESU. Management of fisheries where artificially propagated fish predominate must not compromise the management objectives for commingled naturally spawned populations.

(D) Display a biologically based rationale demonstrating that the harvest management strategy will not appreciably reduce the likelihood of survival and recovery of the ESU in the wild, over the entire period of time the proposed harvest management strategy affects the population, including effects reasonably certain to occur after the proposed actions cease.

(E) Include effective monitoring and evaluation programs to assess compliance, effectiveness, and

parameter validation. At a minimum, harvest monitoring programs must collect catch and effort data, information on escapements, and information on biological characteristics, such as age, fecundity, size and sex data, and migration timing.

(F) Provide for evaluating monitoring data and making any revisions of assumptions, management strategies, or objectives that data show are needed.

(G) Provide for effective enforcement and education. Coordination among involved jurisdictions is an important element in ensuring regulatory effectiveness and coverage.

(H) Include restrictions on resident and anadromous species fisheries that minimize any take of listed species, including time, size, gear, and area restrictions.

(I) Be consistent with plans and conditions established within any Federal court proceeding with continuing jurisdiction over tribal harvest allocations.

(ii) The state monitors the amount of take of listed salmonids occurring in its fisheries and provides to NMFS on a regular basis, as defined in NMFS' letter of concurrence for the FMEP, a report summarizing this information, as well as the implementation and effectiveness of the FMEP. The state shall provide NMFS with access to all data and reports prepared concerning the implementation and effectiveness of the FMEP.

(iii) The state confers with NMFS on its fishing regulation changes affecting listed ESUs to ensure consistency with the approved FMEP. Prior to approving a new or amended FMEP, NMFS will publish notification in the **Federal Register** announcing its availability for public review and comment. Such an announcement will provide for a comment period on the draft FMEP of not less than 30 days.

(iv) NMFS provides written concurrence of the FMEP which specifies the implementation and reporting requirements. NMFS' approval of a plan shall be a written approval by the NMFS' Southwest Regional Administrator. On a regular basis, NMFS will evaluate the effectiveness of the program in protecting and achieving a level of salmonid productivity commensurate with conservation of the listed salmonids. If the program is deficient, NMFS will identify ways in which the program needs to be altered or strengthened. If the responsible agency does not make changes to respond adequately to the new information, NMFS will publish notification in the **Federal Register** announcing its intention to withdraw the limit for activities associated with that FMEP. Such an announcement will provide for a comment period of not less than 30 days, after which NMFS will make a final determination whether to withdraw the limit so that the prohibitions would then apply to those fishery harvest activities. A template for developing FMEPs is available from NMFS' Southwest Region web site (*http://swr.nmfs.noaa.gov*).

(v) The prohibitions of paragraph (a) of this section relating to threatened species listed in § 223.102 (a)(20) do not apply to fishery harvest activities managed solely by the State of California until [180 days after date of publication of the final rule in the FEDERAL REGISTER].

(17) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102 (a)(3) and (a)(20) through (a)(22) do not apply to activity associated with artificial propagation programs provided that:

(i) A state or Federal Hatchery and Genetics Management Plan (HGMP) has been approved by NMFS as meeting the following criteria:

(A) The HGMP has clearly stated goals, performance objectives, and performance indicators that indicate the purpose of the program, its intended results, and measurements of its performance in meeting those results. Goals shall address whether the program is intended to meet conservation objectives, contribute to the ultimate sustainability of natural spawning populations, and/or is intended to augment tribal, recreational, or commercial fisheries. Objectives should enumerate the results desired from the program that will be used to measure the program's success or failure.

(B) The HGMP utilizes the concepts of viable and critical salmonid population threshold, consistent with the concepts contained in NMFS' technical report entitled: ''Viable Salmonid Populations and Recovery of ESUs'' (NMFS, 2000b). Listed salmonids may be purposefully taken for broodstock purposes only if the donor population is currently at or above the viable threshold and the collection will not impair its function; if the donor population is not currently viable but the sole objective of the current collection program is to enhance the propagation or survival of the listed ESU; or if the donor population is shown with a high degree of confidence to be above critical threshold although not yet functioning at viable levels, and the collection will not appreciably slow the attainment of viable status for that population.

(C) Broodstock collection programs reflect appropriate priorities taking into account health, abundances, and trends in the donor population. The primary purpose of broodstock collection programs of listed species is to re-establish indigenous salmonid populations for conservation purposes. Such programs include restoration of similar, at-risk populations within the same ESU, and reintroduction of at-risk populations to underseeded habitat. After the species' conservation needs are met and when consistent with survival and recovery of the ESU, broodstock collection programs may be authorized by NMFS for secondary purposes such as to sustain tribal, recreational, and commercial fisheries.

(D) The HGMP includes protocols to address fish health, broodstock collection, broodstock spawning, rearing and release of juveniles, deposition of hatchery adults, and catastrophic risk management.

(E) The HGMP evaluates, minimizes, and accounts for the propagation program's genetic and ecological effects on natural populations, including disease transfer, competition, predation, and genetic introgression caused by the straying of hatchery fish.

(F) The HGMP describes interrelationships and interdependencies with fisheries management. The combination of artificial propagation programs and harvest management must be designed to provide as many benefits and as few biological risks as possible for the listed species. For those programs of which the purpose is to sustain fisheries, HGMPs must not compromise the ability of FMEPs or other management plans to conserve listed salmonids.

(G) The HGMP provides for adequate artificial propagation facilities to properly rear progeny of naturally spawned broodstock, to maintain population health and diversity, and to avoid hatchery-influenced selection or domestication.

(H) The HGMP provides for adequate monitoring and evaluation to detect and evaluate the success of the hatchery program and any risks potentially impairing the recovery of the listed ESU.

(I) The HGMP provides for evaluating monitoring data and making any revisions of assumptions, management strategies, or objectives that data show are needed;

(J) NMFS provides written concurrence of the HGMP which specifies the implementation and reporting requirements. For federally operated or funded hatcheries, the ESA

section 7 consultation will achieve this purpose.

(ii) The state monitors the amount of take of listed salmonids occurring in its hatchery program and provides to NMFS on a regular basis a report summarizing this information, and the implementation and effectiveness of the HGMP as defined in NMFS' letter of concurrence. The state shall provide NMFS with access to all data and reports prepared concerning the implementation and effectiveness of the HGMP.

(iii) The state confers with NMFS on a regular basis regarding intended collections of listed broodstock to ensure consistency with the approved HGMP.

(iv) Prior to final approval of an HGMP, NMFS will publish notification in the **Federal Register** announcing its availability for public review and comment for a period of at least 30 days.

(v) NMFS' approval of an HGMP shall be a written approval by NMFS' Southwest Regional Administrator.

(vi) On a regular basis, NMFS will evaluate the effectiveness of the HGMP in protecting and achieving a level of salmonid productivity commensurate with the conservation of the listed salmonids. If the HGMP is not effective, NMFS will identify to the responsible agency ways in which the program needs to be altered or strengthened. If the responsible agency does not make changes to respond adequately to the new information, NMFS will publish notification in the **Federal Register** announcing its intention to withdraw the limit on activities associated with that program. Such an announcement will provide for a comment period of not less than 30 days, after which NMFS will make a final determination whether to withdraw the limit so that take prohibitions would then apply to that program. A template for developing HGMPs is available from NMFS Northwest Region's web site (www.nwr.noaa.gov).

(vii) The prohibitions of paragraph (a) of this section relating to threatened species listed in § 223.102 (a)(20) do not apply to artificial propagation programs managed solely by the State of California until [180 days after date of publication of the final rule in the FEDERAL REGISTER].

(18) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102(a)(3) and (a)(20) through (a)(22) do not apply to scientific research activities provided that:

(i) Scientific research activities involving purposeful take are conducted by employees or contractors of CDFG or as a part of a monitoring and research program overseen by or coordinated with CDFG.

(ii) CDFG provides for NMFS' review and approval a list of all scientific research activities involving direct take planned for the coming year, including an estimate of the total direct take that is anticipated, a description of the study design, including a justification for taking the species and a description of the techniques to be used, and a point of contact.

(iii) CDFG annually provides to NMFS the results of scientific research activities directed at threatened salmonids, including a report of the direct take resulting from the studies and a summary of the results of such studies.

(iv) Scientific research activities that may incidentally take threatened salmonids are either conducted by CDFG personnel, or are in accord with a permit issued by the CDFG.

(v) CDFG provides NMFS annually, for its review and approval, a report listing all scientific research activities it conducts or permits that may incidentally take threatened salmonids during the coming year. Such reports shall also contain the amount of incidental take of threatened salmonids occurring in the previous year's scientific research activities and a summary of the results of such research.

(vi) Electrofishing in any body of water known or suspected to contain threatened salmonids is conducted in accordance with NMFS' Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act (NMFS 2000a).

(vii) NMFS' approval of a research program shall be a written approval by NMFS' Southwest Regional Administrator.

(19) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102(a)(3) and (a)(20) through (a)(22) do not apply to habitat restoration activities, as defined in paragraph (b)(19)(iv), provided that the activity is part of a watershed conservation plan, and:

(i) The watershed conservation plan has been certified by the State of California to be consistent with the state's watershed conservation plan guidelines.

(ii) The State's watershed conservation plan guidelines have been found by NMFS to provide for plans that:

(A) Take into account the potential severity of direct, indirect, and cumulative impacts of proposed activities in light of the status of affected species that are listed as threatened.

(B) Will not reduce the likelihood of either survival or recovery of listed species in the wild.

(C) Ensure that any taking will be incidental.

(D) Minimize and mitigate any adverse impacts.

(E) Provide for effective monitoring and adaptive management.

(F) Use the best available science and technology, including watershed analysis.

(G) Provide for public and scientific review and input.

(H) Include any measures that NMFS determines are necessary or appropriate.

(I) Include provisions that clearly identify those activities that are part of plan implementation.

(J) Control risk to listed species by ensuring funding and implementation of the above plan components.

(iii) NMFS will periodically review State certifications of watershed conservation plans to ensure adherence to approved watershed conservation plan guidelines.

(iv) *Habitat restoration activity* is defined as an activity whose primary purpose is to restore natural aquatic or riparian habitat conditions or processes. *Primary purpose* means the activity would not be undertaken but for its restoration purpose.

(v) Prior to approving state watershed conservation plan guidelines under paragraph (b)(19)(ii) of this section, NMFS will publish notification in the **Federal Register** announcing the availability of the proposed guidelines for public review and comment. Such an announcement will provide for a comment period on the draft guidelines of not less than 30 days.

(20) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102(a)(3) and (a)(20) through (a)(22) do not apply to the physical diversion of water from a stream or lake, provided that:

(i) NMFS' engineering staff or any resource agency or tribe NMFS designates (authorized officer) has agreed in writing that the diversion facility is screened, maintained, and operated in compliance with NMFS' Southwest Region ''Fish Screening Criteria for Anadromous Salmonids, January 1997'' or with any subsequent revision.

(ii) The owner or manager of the diversion allows any NMFS engineer or authorized officer access to the diversion facility for purposes of inspection and determination of continued compliance with the criteria.

(iii) On a case-by-case basis, NMFS or an Authorized Officer will review and may approve a juvenile fish screen design and construction plan and schedule that the water diverter proposes for screen installation. The plan and schedule will describe interim operation measures to avoid take of threatened salmonids. NMFS may require a commitment of compensatory mitigation if implementation of the plan and schedule is terminated prior to completion. If the plan and schedule are not met, or if a schedule modification is made that is not approved by NMFS or the Authorized Officer, or if the screen installation deviates from the approved design, the water diversion will be subject to take prohibitions and mitigation.

(iv) This limit on the prohibitions of paragraph (a) of this section does not include any impacts or take caused by reduced flows resulting from the diversion or impacts caused during installation of the diversion device. These impacts are subject to the prohibition on take of listed salmonids.

(21) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102 (a)(3) and (a)(20) through (a)(22) do not apply to routine road maintenance activities provided that:

(i) The activity results from routine road maintenance conducted by employees or agents of the State of California, or any county, city or port in California, that complies with a program substantially similar to that contained in the Oregon Department of Transportation's (ODOT) Transportation Maintenance Management System Water Quality and Habitat Guide (July, 1999) or that is determined to meet or exceed the protections provided by the ODOT Guide; or by employees or agents of the State of California or any county, city or port in California that complies with a routine road maintenance program that meets proper functioning habitat conditions as described further in paragraph (a)(21)(ii) of this section. NMFS' approval of state, city, county, or port programs that are equivalent to the ODOT program, or of any amendments, shall be a written approval by NMFS' Southwest Regional Administrator. Any jurisdiction desiring its routine road maintenance activities to be considered within this limit must first commit in writing to apply management practices that result in protections equivalent to or better than those provided by the ODOT Guide, detailing how it will assure adequate training, tracking, and reporting, and describing in detail any dust abatement practices it requests to be covered.

(ii) NMFS finds the routine road maintenance activities of the State of California, or any city, county, or port, to be consistent with the conservation of threatened salmonids' habitat when it contributes to the attainment and maintenance of properly functioning condition (PFC). NMFS defines PFC as the sustained presence of natural habitat-forming processes that are necessary for the long-term survival of salmonids through the full range of environmental variation. Actions that affect salmonid habitat must not impair properly functioning habitat, appreciably reduce the functioning of already impaired habitat, or retard the long-term progress of impaired habitat toward PFC. Periodically, NMFS will evaluate an approved program for its effectiveness in maintaining and achieving habitat function that provides for conservation of the listed salmonids. Whenever warranted, NMFS will identify ways in which the program needs to be altered or strengthened. Changes may be identified if the program is not protecting desired habitat functions, or where even with the habitat characteristics and functions originally targeted, habitat is not supporting population productivity levels needed to conserve the threatened ESUs. If any jurisdiction within the limit does not make changes to respond adequately to the new information in the shortest amount of time feasible, but not longer than one year, NMFS will publish notification in the **Federal Register** announcing its intention to withdraw the limit so that take prohibitions would then apply to the program. Such an announcement will provide for a comment period of no less than 30 days, after which NMFS will make a final determination whether to subject the activities to the ESA section 9(a)(1) prohibitions.

(iii) Prior to implementing any changes to a program within this limit the jurisdiction provides NMFS a copy of the proposed change for review and approval as to being within this limit.

(iv) Prior to approving any State of California, city, county, or port program as being within this limit, or approving any substantive change in a program as being within this limit, NMFS will publish notification in the **Federal Register** announcing the availability of the program or the draft changes for public review and comment. Such an announcement will provide for a comment period of not less than 30 days.

(v) Pesticide and herbicide spraying is not included within this limit, even if in accord with the ODOT guidance.

(22) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102 (a)(3) and (a)(20) through (a)(22) do not apply to municipal, residential, commercial, and industrial (MRCI) development (including redevelopment) activities provided that:

(i) Such development occurs pursuant to city, county, or regional government ordinances or plans that NMFS has determined are adequately protective of threatened species by maintaining or restoring properly functioning habitat conditions. NMFS approval or determinations about any MRCI development ordinances or plans shall be a written approval by the NMFS Southwest Regional Administrator. NMFS will apply the following 12 evaluation considerations when reviewing MRCI development ordinances or plans to assess whether they adequately conserve threatened salmonids by maintaining and restoring properly functioning habitat conditions:

(A) The MRCI development ordinance or plan ensures that development will avoid inappropriate areas such as unstable slopes, wetlands, areas of high habitat value, and similarly constrained sites.

(B) The MRCI development ordinance or plan adequately avoids stormwater discharge impacts to water quality and quantity or to the hydrograph of the watershed, including peak and base flows of perennial streams.

(C) The MRCI development ordinance or plan provides adequately protective riparian area management requirements to attain or maintain PFC around all rivers, estuaries, streams, lakes, deepwater habitats, and intermittent streams. Compensatory mitigation is provided, where necessary, to offset unavoidable damage to properly functioning habitat conditions caused by MRCI development impacts to riparian management areas.

(D) The MRCI development ordinance or plan avoids stream crossings by roads, utilities, and other linear development wherever possible, and, where crossings must be provided, minimizes impacts through choice of mode, sizing, and placement.

(E) The MRCI development ordinance or plan adequately protects historical stream meander patterns and channel migration zones and avoids hardening of stream banks and shorelines.

(F) The MRCI development ordinance or plan adequately protects wetlands and wetland functions, including isolated wetlands.

(G) The MRCI development ordinance or plan adequately preserves the

hydrologic capacity of permanent and intermittent streams to pass peak flows.

(H) The MRCI development ordinance or plan includes adequate provisions for landscaping with native vegetation to reduce need for watering and application of herbicides, pesticides, and fertilizer.

(I) The MRCI development ordinance or plan includes adequate provisions to prevent erosion and sediment run-off during construction.

(J) The MRCI development ordinance or plan ensures that water supply demands can be met without impacting flows needed for threatened salmonids either directly or through groundwater withdrawals and that any new water diversions are positioned and screened in a way that prevents injury or death of salmonids.

(K) The MRCI development ordinance or plan provides necessary enforcement, funding, reporting, and implementation mechanisms and formal plan evaluations at intervals that do not exceed 5 years.

(L) The MRCI development ordinance and plan complies with all other state and Federal environmental and natural resource laws and permits.

(ii) The city, county or regional government provides NMFS with annual reports regarding implementation and effectiveness of the ordinances, including: any water quality monitoring information the jurisdiction has available; aerial photography (or some other graphic display) of each MRCI development or MRCI expansion area at sufficient detail to demonstrate the width and vegetation condition of riparian set-backs; information to demonstrate the success of stormwater management and other conservation measures; and a summary of any flood damage, maintenance problems, or other issues.

(iii) NMFS finds the MRCI development activity to be consistent with the conservation of threatened salmonids' habitat when it contributes to the attainment and maintenance of properly functioning habitat conditions. For this purpose, NMFS defines properly functioning habitat conditions as the sustained presence of a watershed's habitat-forming processes that are necessary for the long-term survival of salmonids through the full range of environmental variation. To contribute to the attainment and maintenance of properly functioning habitat conditions, activities that affect salmonid habitat must not impair properly functioning habitat, appreciably reduce the functioning of already impaired habitat, or retard the long-term progress of impaired habitat toward achieving properly functioning habitat conditions. Periodically, NMFS will evaluate an approved program for its effectiveness in maintaining and achieving habitat function that provides for conservation of the listed salmonids. Whenever warranted, NMFS will identify to the jurisdiction ways in which the program needs to be altered or strengthened. Changes may be identified if the program is not protecting desired habitat functions, or where even with the habitat characteristics and functions originally targeted, habitat is not supporting population productivity levels needed to conserve the threatened species. If any jurisdiction within the limit does not make changes to respond adequately to the new information in the shortest amount of time feasible, but not longer than 1 year, NMFS will publish notification in the **Federal Register** announcing its intention to withdraw the limit so that take prohibitions would then apply to the program. Such an announcement will provide for a comment period of not less than 30 days, after which NMFS will make a final determination whether to subject the activities to the ESA section 9(a)(1) prohibitions.

(iv) Prior to approving any city, county, or regional government ordinances or plans as being within this limit, or approving any substantive change in an ordinance or plan as being within this limit, NMFS will publish notification in the **Federal Register** announcing the availability of the ordinance or plan or the draft changes for public review and comment. Such an announcement will provide for a comment period of no less than 30 days.

(c) *Affirmative defense.* In connection with any action alleging a violation of the prohibitions of paragraph (a) of this section with respect to the threatened species of salmonids listed in § 223.102 (a)(3), (a)(5) through (a)(10) and (a)(12) through (a)(22), any person claiming the benefit of any limit listed in paragraph (b) of this section or § 223.209(a) shall have a defense where the person can demonstrate that the limit is applicable and was in force, and that the person fully complied with the limit at the time of the alleged violation. This defense is an affirmative defense that must be raised, pleaded, and proven by the proponent. If proven, this defense will be an absolute defense to liability under section 9(a)(1)(G) of the ESA with respect to the alleged violation.

* * * * *

Appendix A to § 223.203—List of Guidance Documents

The following is a list of documents cited in the regulatory text. Copies of these documents may be obtained upon request from the Northwest or Southwest Regional Administrators (see Table 1 in § 600.502 of this title).

1. Oregon Department of Transportation (ODOT) Maintenance Management System Water Quality and Habitat Guide (July, 1999).
2. Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act.
3. Fish Screening Criteria for Anadromous Salmonids, National Marine Fisheries Service, Southwest Region, 1997.
4. Viable Salmonid Populations and the Recovery of Evolutionarily Significant Units. (June 2000).

[FR Doc. 01–20570 Filed 8–16–01; 8:45 am]

BILLING CODE 3510–22–S