NOTICE OF OFFICE OF MANAGEMENT AND BUDGET ACTION

Date 12/15/2009

Department of Commerce
National Oceanic and Atmospheric Administration
FOR CERTIFYING OFFICIAL: Suzanne Hilding
FOR CLEARANCE OFFICER: Diana Hynek

In accordance with the Paperwork Reduction Act, OMB has taken action on your request received 07/09/2009

ACTION REQUESTED: Extension without change of a currently approved collection
TYPE OF REVIEW REQUESTED: Regular
ICR REFERENCE NUMBER: 200906-0648-011
AGENCY ICR TRACKING NUMBER:
TITLE: Limits on Application of Take Prohibitions
LIST OF INFORMATION COLLECTIONS: See next page

OMB ACTION: Approved without change
OMB CONTROL NUMBER: 0648-0399
The agency is required to display the OMB Control Number and inform respondents of its legal significance in accordance with 5 CFR 1320.5(b).

EXPIRATION DATE: 12/31/2012 DISCONTINUE DATE:

BURDEN:	RESPONSES	HOURS	COSTS
Previous	401	1,705	1,000
New	401	1,705	580
Difference			
Change due to New Statute	0	0	0
Change due to Agency Discretion	0	0	0
Change due to Agency Adjustment	0	0	-420
Change Due to Potential Violation of the PRA	0	0	0

TERMS OF CLEARANCE:

OMB Authorizing Official: Kevin F. Neyland
Deputy Administrator,
Office Of Information And Regulatory Affairs

List of ICs			
IC Title	Form No.	Form Name	CFR Citation
Research and other applications	NA	Authorizations and Permits for Protected Species (APPS)	50 CFR 223.203
Annual reports			50 CFR 223.203
Reports of aided/rescued salmon			50 CFR 223.203

PAPERWORK REDUCTION ACT SUBMISSION

Please read the instructions before completing this form. For additional forms or assistance in completing this form, contact your agency's Paperwork Clearance Officer. Send two copies of this form, the collection instrument to be reviewed, the supporting statement, and any additional documentation to: Office of Information and Regulatory Affairs, Office of Management and Budget, Docket Library, Room 10102, 725 17th Street NW, Washington, DC 20503.

1. Agency/Subagency originating request
DOC/NOAA/NMFS

2. OMB control number b. [ ] None
a. 0648 - 0399

3. Type of information collection (*check one*)
a. [ ] New Collection
b. [ ] Revision of a currently approved collection
c. [✔] Extension of a currently approved collection
d. [ ] Reinstatement, without change, of a previously approved collection for which approval has expired
e. [ ] Reinstatement, with change, of a previously approved collection for which approval has expired
f. [ ] Existing collection in use without an OMB control number
For b-f, note Item A2 of Supporting Statement instructions

4. Type of review requested (*check one*)
a. [✔] Regular submission
b. [ ] Emergency - Approval requested by ____/____/____
c. [ ] Delegated

5. Small entities
Will this information collection have a significant economic impact on a substantial number of small entities? [ ] Yes [✔] No

6. Requested expiration date
a. [✔] Three years from approval date b. [ ] Other Specify:____/____

7. Title Limits on Application of Take Prohibitions

8. Agency form number(s) (*if applicable*)

9. Keywords "Endangered and Threatened Species," "Fish"

10. Abstract

In accordance with Section 4(d) of the Endangered Species Act (ESA), the National Oceanic and Atmospheric Administration (NOAA) promulgates regulations that would prohibit "take" (e.g., harassment or harm) of threatened salmonids. These regulations identify conservation-oriented programs or circumstances in which the ESA's take prohibitions would not apply. States, local governments, and other entities may submit information to demonstrate that a program qualifies to be within those specified programs or circumstances (and therefore would not be subject to the prohibitions).

11. Affected public (*Mark primary with "P" and all others that apply with "x"*)
a. ___ Individuals or households d. ___ Farms
b. x Business or other for-profit e. ___ Federal Government
c. ___ Not-for-profit institutions f. P State, Local or Tribal Government

12. Obligation to respond (*check one*)
a. [ ] Voluntary
b. [ ] Required to obtain or retain benefits
c. [✔] Mandatory

13. Annual recordkeeping and reporting burden
a. Number of respondents 301
b. Total annual responses 401
1. Percentage of these responses collected electronically 50 %
c. Total annual hours requested 1,705
d. Current OMB inventory 1,705
e. Difference 0
f. Explanation of difference
1. Program change
2. Adjustment

14. Annual reporting and recordkeeping cost burden (*in thousands of dollars*)
a. Total annualized capital/startup costs 0
b. Total annual costs (O&M) 1
c. Total annualized cost requested 1
d. Current OMB inventory 1
e. Difference 0
f. Explanation of difference
1. Program change
2. Adjustment

15. Purpose of information collection (*Mark primary with "P" and all others that apply with "X"*)
a. ___ Application for benefits e. ___ Program planning or management
b. ___ Program evaluation f. x Research
c. ___ General purpose statistics g. P Regulatory or compliance
d. ___ Audit

16. Frequency of recordkeeping or reporting (*check all that apply*)
a. [ ] Recordkeeping b. [ ] Third party disclosure
c. [✔] Reporting
1. [✔] On occasion 2. [ ] Weekly 3. [ ] Monthly
4. [ ] Quarterly 5. [ ] Semi-annually 6. [✔] Annually
7. [ ] Biennially 8. [ ] Other (describe) ____

17. Statistical methods
Does this information collection employ statistical methods
[ ] Yes [✔] No

18. Agency Contact (person who can best answer questions regarding the content of this submission)
Name: Steve Stone
Phone: (503) 231-2317

19. Certification for Paperwork Reduction Act Submissions

On behalf of this Federal Agency, I certify that the collection of information encompassed by this request complies with 5 CFR 1320.9

NOTE: The text of 5 CFR 1320.9, and the related provisions of 5 CFR 1320.8(b)(3), appear at the end of the instructions. *The certification is to be made with reference to those regulatory provisions as set forth in the instructions.*

The following is a summary of the topics, regarding the proposed collection of information, that the certification covers:

(a) It is necessary for the proper performance of agency functions;

(b) It avoids unnecessary duplication;

(c) It reduces burden on small entities;

(d) It used plain, coherent, and unambiguous terminology that is understandable to respondents;

(e) Its implementation will be consistent and compatible with current reporting and recordkeeping practices;

(f) It indicates the retention period for recordkeeping requirements;

(g) It informs respondents of the information called for under 5 CFR 1320.8(b)(3):

- (i) Why the information is being collected;
- (ii) Use of information;
- (iii) Burden estimate;
- (iv) Nature of response (voluntary, required for a benefit, mandatory);
- (v) Nature and extent of confidentiality; and
- (vi) Need to display currently valid OMB control number;

(h) It was developed by an office that has planned and allocated resources for the efficient and effective management and use of the information to be collected (see note in Item 19 of instructions);

(i) It uses effective and efficient statistical survey methodology; and

(j) It makes appropriate use of information technology.

If you are unable to certify compliance with any of the provisions, identify the item below and explain the reason in Item 18 of the Supporting Statement.

Signature of Senior Official or designee	Date

Agency Certification (signature of Assistant Administrator, Deputy Assistant Administrator, Line Office Chief Information Officer, head of MB staff for L.O.s, or of the Director of a Program or StaffOffice)	
Signature signed by Helen Golde	Date 06/10/2009
Signature of NOAA Clearance Officer	
Signature signed by Sarah Brabson	Date 06/17/2009

SUPPORTING STATEMENT
LIMITS ON APPLICATION OF TAKE PROHIBITIONS
OMB CONTROL NO. 0648-0399

A. JUSTIFICATION

1. Explain the circumstances that make the collection of information necessary.

Section 4(d)[1] of the Endangered Species Act of 1973 (ESA) requires the National Marine Fisheries Service (NMFS) to adopt such regulations as it "deems necessary and advisable to provide for the conservation of" threatened species. Those regulations may include any or all of the prohibitions provided in section 9(a)(1) of the ESA, which specifically prohibits "take" of any endangered species ("take" includes actions that harass, harm, pursue, kill, or capture). There are presently 22 separate Evolutionarily Significant Units (ESU) of west coast salmonids listed as threatened, covering a large percentage of the land base in California, Oregon, Washington and Idaho. On June 28, 2005 (70 FR 37160), February 1, 2006 (71 FR 5178), and September 25, 2008 (73 FR 55451), NMFS issued final regulations which makes ESA section 9 prohibitions generally applicable to these threatened ESUs except in 14 programs and circumstances.

The final regulations at 50 CFR 223.203 describe 14 programs or circumstances that contribute to the conservation of, or are being conducted in a way that adequately limits impacts on, listed salmonids. Certain of these 14 "limits" on the take prohibitions entail voluntary submission of a plan(s) to NMFS and require annual or occasional reports by entities wishing to take advantage of these limits, or continue within them.

Each of the 14 limits applies to a different sector of activity, and to different potential populations of responders. The sectors include: Tribal Resource Management Plans (Joint State and Tribal Resource Management Plans); Fishery Harvest and Hatchery Plans; Scientific Research Activities; Diversion Screening; Routine Road Maintenance (in which any city, state, county or port or regional government therein may adopt the Oregon Department of Transportation (ODOT)'s program or submit an equally protective program); Urban Development; Reports of Salmonids Assisted, Disposed of, or Salvaged; Artificial Propagation; and Annual Reports. A brief description of the Limits that may involve the collection of information follows, and the burdens associated with each of these is discussed in Questions 12-14).

Reports of Salmonids Assisted, Disposed of, or Salvaged: This limit (Limit 3) relieves certain agency (including tribes) and official personnel (or their designees) from the take prohibitions when they are acting to: (1) aid a sick, injured, or stranded salmonid, (2) to dispose of a dead salmonid, or (3) to salvage a dead salmonid for scientific study. Each agency, acting under this

[1] Section 4(d) of the Endangered Species Act, 16 U.S.C. et seq., states: "Whenever any species is listed as a threatened species pursuant to subsection (c) of this section, the Secretary shall issue such regulations as he deems necessary and advisable to provide for the conservation of such species. The Secretary may by regulation prohibit with respect to any threatened species any act prohibited under section 9(a)(1) ...."

limit on the take prohibition must annually report to NMFS on the numbers of fish handled and their status.

Fishery Management (Harvest/Hatchery) Plans: These plans (Limits 4 and 5) are mainly used by states. The state would prepare a plan that addresses fishery harvest and submits it to NMFS. NMFS evaluates the plan for its completeness and impact on the listed species and agrees or disagrees with the action. If NMFS disagrees, the plan is returned to the state for revision. If NMFS agrees, the plan is approved.

Artificial Propagation: The artificial propagation section (Limit 5) of the 4(d) rule provides a way to continue to conserve listed species while implementing a variety of hatchery purposes. To qualify for limitation on take prohibitions under Limit 5, a state or Federal hatchery management agency must develop a Hatchery and Genetics Management Plan (HGMP) that meets the criteria of Limit 5 and seek NMFS' approval of the plan. Some of the benefits of the HGMP approach are long-term management planning, more public involvement, and less government paperwork.

Tribal Resource Management Plans and Joint State and Tribal Resource Management Plans: This (Limit 6) is available to any tribe, tribal member, tribal permittee, tribal employee, or tribal agent provided the Secretary determines their action will not appreciably reduce the likelihood of survival and recovery of that species. The applicant would prepare a plan that addresses fishery harvest, artificial propagation, research, or water or land management and submit it to NMFS. NMFS evaluates the plan for its completeness and impact on the listed species and agrees or disagrees with the action. If NMFS disagrees, the plan is returned to the applicant for revision.

Scientific Research Activities: Research activities involving listed salmonids have typically been authorized solely in the context of the ESA's section 7 and section 10 processes. While these processes remain valid (and in many cases necessary) pathways for researchers, the new "research limit" is significant in that it provides both NMFS and the state fishery agencies with a way to streamline the ESA's traditional authorization processes in a manner that allows the state fishery agencies to maintain key oversight and coordination roles. Specifically, coverage under the limit (Limit 7) requires that the state fishery agencies either conduct or oversee research/monitoring efforts, or become involved in coordinating those efforts. In addition, compliance with the limit will require that the state fishery agencies submit annual reports describing research-related take for each of the affected ESUs. These provisions have intentionally been crafted to provide state fishery agencies with considerable discretion in determining eligibility under the research limit. However, they also underscore the fact that NMFS and the state fishery agencies will share the responsibility of ensuring that authorized research involving listed salmonids is both coordinated and conducted in a manner that prevents overutilization of the resource. NMFS works closely with the state fishery agencies to develop a 4(d) research review process that adapts existing state permit processes to the ESA's accountability requirement for research-related take of listed species.

Diversion Screening Limit: Water diversion structures (gravity flow or pumps) that have not been screened to prevent fish from being injured or diverted into fields are a significant source of injury and mortality to listed salmonids, particularly to juveniles. State laws and Federal programs have long recognized these problems in varying ways, and encouraged or required adequate screening of diversion ditches, structures, and pumps to prevent much of the anadromous fish loss attributable to this cause. Nonetheless, large numbers of diversions are not

adequately screened and elimination of that source of injury or death is vital to conservation of listed salmonids. This limit, (Limit 9) should prompt diverters to move quickly to provide adequate screening or other protections for their diversions, because once so screened, take prohibitions would not apply. The diversion must be screened in accord with NMFS' Southwest Region "Fish Screening Criteria for Anadromous Salmonids, January 1997" or any subsequent revision (available by contacting NMFS). The operator would need to provide documentation for the screening installed, including plans, for a written acknowledgment from NMFS' engineering staff or designated agent that the screens are in compliance with the above criteria.

Routine Road Maintenance: This limit (Limit 10) is available to any city, state, county or port or regional government therein, provided that: (1) maintenance activities are conducted by the employees or agents of the state or any county, city, or port under a program that is substantially similar to that contained in the ODOT Guide or under a program that has been determined by NMFS to meet or exceed the protections provided by the ODOT guide, or that (2) maintenance activities 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 the rule. The city or county would need to prepare an agreement detailing how it will assure adequate training and compliance with the ODOT or equivalent guidance, and describing any dust abatement practices it wishes to be within the limit.

The ODOT guide governs the manner in which crews should proceed on a wide variety of routine maintenance activities, including surface and shoulder work, ditch, bridge, and culvert maintenance, snow and ice removal, emergency maintenance, mowing, brush control and other vegetation management. The program directs activity toward favorable weather conditions, increases attention to erosion control, prescribes appropriate equipment use, governs disposal of vegetation or sediment removed from roadsides or ditches, and includes other improved protections for listed salmonids, as well as improving habitat conditions generally. Routine road maintenance conducted in compliance with the ODOT program or an equivalent program will adequately address the problems potentially associated with such activity.

Urban Development: This limit (Limit 12) would be available to any city or county affected by the take prohibitions, if it has land development ordinances in a sufficiently comprehensive form that they could satisfy the criteria set out in the regulation. The jurisdiction would need to provide NMFS with copies of those comprehensive ordinances, and provide any necessary explanatory materials showing how the ordinances meet those standards.

Annual Reports: Some form of a reporting requirement is built into all programs or limits that are approved by NMFS. These reports help NMFS to determine: (1) that the conditions or activities under that limit are being followed, (2) the impact of the activities on the listed species, and (3) new information about the species which may then help NMFS to better manage it.

2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines.

NMFS will review plans submitted to determine whether they provide sufficient biological protections to warrant not applying the take prohibitions to activities governed by that plan.

NMFS' biologists will review the plans against the criteria associated with the applicable limit on take prohibitions. Those criteria have been carefully crafted to assure that plans meeting them will adequately limit impacts on threatened salmonids, such that additional protections in the form of a federal take prohibition are not necessary or advisable.

The annual reporting associated with approved limits would aid NMFS in understanding the cumulative impacts of each action on listed ESUs, and to determine whether additional protections are required to provide for the conservation of the species (or, alternatively, whether some additional limits on federal protections may be warranted). Annual reporting also provides NMFS with the numbers of threatened salmonids being affected by such actions. This information is necessary as part of the tracking of the status of the affected threatened species. Many plans/programs have been submitted to NMFS since the rules first became effective (July 10, 2000, 65 FR 42422, and January 9, 2002, 67 FR 1116 (Correction: November 12, 2002, 67 FR 68725)). NMFS expects more programs to be submitted in the future. Reports are required for limits each year.

The practical utility of these submissions is that, assuming a plan or program is found to meet the criteria associated with the particular limit in the 4(d) rule, the state or other entity submitting the plan, and individuals acting in compliance with the plan, can carry on with its activity knowing that it is in full compliance with the ESA and need not be concerned with any possibility of ESA enforcement of take prohibitions.

It is anticipated that the information collected will be disseminated to the public or used to support publicly disseminated information. As explained in the preceding paragraphs, the information gathered has utility. NMFS will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with NOAA standards for confidentiality, privacy, and electronic information. See response to Question 10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines. Prior to dissemination, the information will be subjected to quality control measures and a pre-dissemination review pursuant to Section 515 of Public Law 106-554.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.

There is no requirement for method of submission of plans or reports. However, NMFS, in conjunction with the state of Oregon, has developed a web-based system for applicants to use in applying for a scientific research permit (Limit 7), the most frequently requested permits. Historically researcher applications varied considerably in quality and level of detail. The web-based system has helped streamline the application and authorization processes for researchers and the review process for NOAA biologists.

4. Describe efforts to identify duplication.

NMFS has not identified any examples where the 4(d) rule involves duplication with other collections of information. This information collection is unique. As NMFS gains experience

with this approach to 4(d) protections, it is likely that many of the plans or reports submitted may serve to relieve the take prohibitions for an even broader range of listed species.

In the absence of 4(d) rules, NMFS provides ESA coverage through Section 10 research, enhancement, and incidental take permits with private entities, or through Section 7 consultation with Federal agencies. The Section 7 and Section 10 processes have their own specific reporting requirements associated with them.

5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.

None of these collections will have a significant economic impact on small entities.

6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.

If NMFS were not to provide the opportunity for entities to seek a limit on take prohibitions, those entities would in all cases remain subject to the take prohibitions. Before embarking on an activity that may impact threatened salmonids, those entities would need to assess the risk of actual take, and determine whether to seek an ESA Section 10 permit. Unless the entity procured a Section 10 Permit or a completed ESA Section 7 Consultation, the entity would remain at risk of ESA enforcement for violation of the take prohibitions. Less than annual reporting would hinder NMFS' ability to monitor and conserve listed species.

7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.

This collection is consistent with OMB guidelines.

8. Provide information on the PRA Federal Register Notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

A Federal Register Notice published April 2, 2009 (74 FR 14961) solicited public comment. No comments were received.

9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.

No payments, gifts or remuneration are associated with these voluntary collections of information.

10. Describe any assurance of confidentiality provided to respondents and the basis for assurance in statute, regulation, or agency policy.

There are no assurances of confidentiality associated with these voluntary collections of information. The information supplied would be a matter of public record.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.

No sensitive questions are asked.

12. Provide an estimate in hours of the burden of the collection of information.

The number of hours varies depending on the particular limit, ranging from 20 hours for reports involving salmon rescue/salvage to 300 hours for packages developed under the Urban Development limit (see Table 1 at the end of this section). Total estimated annual responses are 401, and hours, 1,705. We anticipate approximately 301 respondents.

13. Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection (excluding the value of the burden hours in Question 12 above).

The annual costs to respondents vary depending on the particular limit, ranging from $360 for salmon rescue/salvage to $5,400 for packages developed under the Urban Development limit (see Table 1 at the end of this section). Total estimated annual recordkeeping/reporting costs are $620.

14. Provide estimates of annualized cost to the Federal government.

The annual costs to the Federal government vary depending on the particular limit, ranging from $360 for salmon rescue/salvage to $13,500 for packages developed under the Diversion Screening limit (see Table 1 at the end of this section).

15. Explain the reasons for any program changes or adjustments.

No changes or adjustments are needed. NOTE: when the previous renewal was migrated into ROCIS, the recordkeeping/reporting costs were rounded up to $1,000. Therefore, it appears in ROCIS that the costs were reduced by $420, when they remained the same.

16. For collections whose results will be published, outline the plans for tabulation and publication.

There are no plans to publish the data.

17. <u>If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate</u>.

NA.

18. <u>Explain each exception to the certification statement.</u>

.

NA.

Table 1. Burden and Costs to Public and Government Relating to Information Collection for NMFS' Limits on ESA Take Prohibitions

Cost to Public										
	Diversion Screens	**Road Maint. Agreemt.**	**Urban Dev. Ordinance Pkgs.**	**Tribal Plans & Joint State/Tribe Plans**	**Fishery Harvest & Hatchery Plans**	**Report Aided/ Rescued Salmon**	**Research Permits**	**Artificial Prop.**	**Annual Reports[2]**	**TOTAL**
Annual # of Responses	50	10	10	10	10	4	200	7	100	401[3]
# of Hours per Response	5	20	30	20	10	5	2	5	2	
Total Annual Hours	250	200	300	200	100	20	400	35	200	1,705
Labor Cost per Response (@18/hr)	$90	$360	$540	$360	$180	$90	$36	$90	$36	
Burden Hour Costs (Annual)	$4,500	$3,600	$5,400	$3,600	$1,800	$360	$7,200	$630	$3,600	$30,690
O&M Costs - Printing, Mailing (Annual)	$50	$50	$70	$50	$80	$20	$40	$20	$200	$580
Cost to Government										
Processing: Federal Government Hours per Response	15	20	70	40	20	5	3	15	8	
Total Annual Hours	750	200	700	400	200	20	600	105	800	3,775
Cost Per Response (@ $18/hr)	$270	$360	$1,260	$720	$360	$90	$54	$270	$144	
Total Annual Cost	$13,500	$3,600	$12,600	$7,200	$3,600	$360	$10,8000	$1,890	$14,400	$67,950

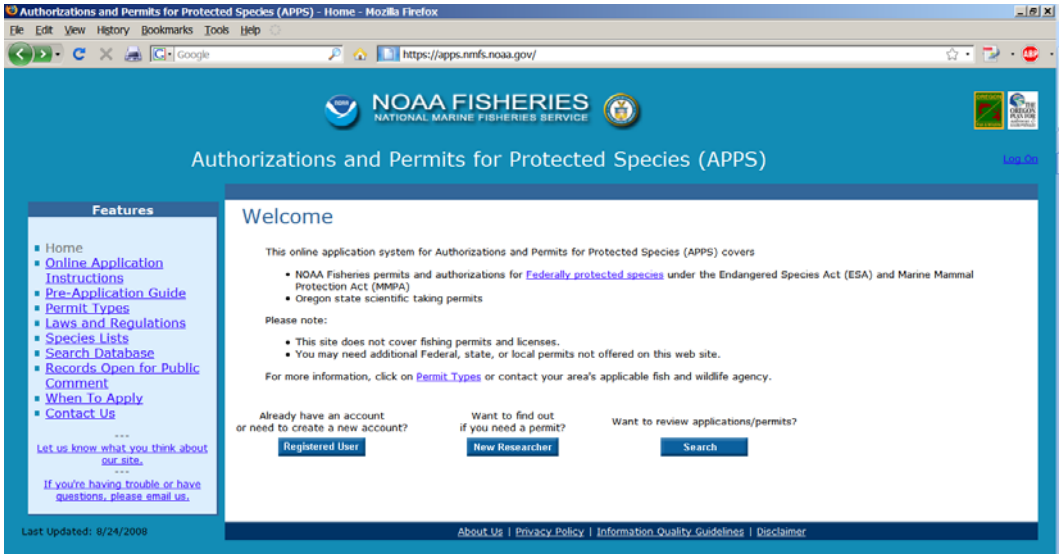
B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

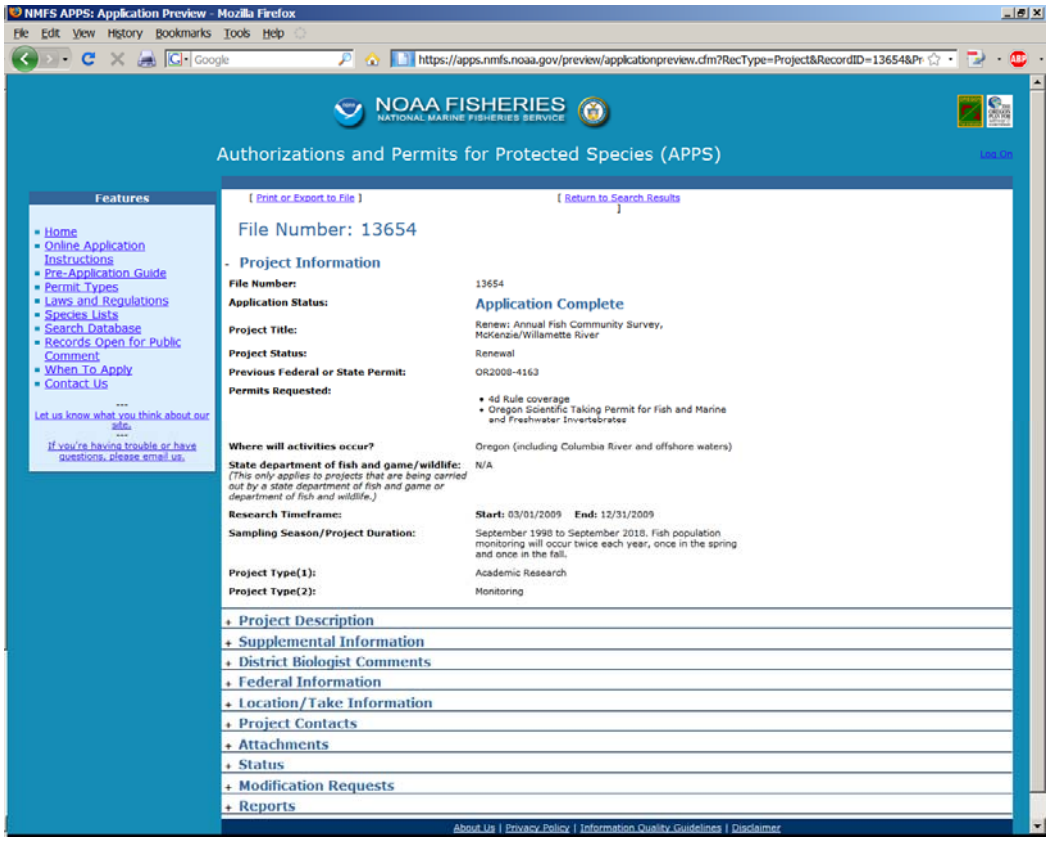
Not applicable. The collection will not employ statistical methods.

[2] Does not include reports related to aided/rescued salmon which are recorded separately in this table.

[3] The actual number of respondents is expected to be approximately 301 (i.e., each can submit multiple responses).

Screen captures from web-based application developed in support of Scientific Research Limit (Limit 7).





Title 50: Wildlife and Fisheries

PART 223—THREATENED MARINE AND ANADROMOUS SPECIES
Subpart B—Restrictions Applicable to Threatened Marine and Anadromous Species

§ 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 fish with an intact adipose fin that are part of the threatened species of salmonids listed in §223.102(c)(3) through (c)(24).

(b) *Limits on the prohibitions.* The limits to the prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in §223.102(c)(3) through (c)(24) are described in the following paragraphs (b)(1) through (b)(13):

(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).

(2) The prohibitions of paragraph (a) of this section relating to threatened Puget Sound steelhead listed in §223.102(c)(23) do not apply to:

(i) 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 November 14, 2008. The prohibitions 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 June 1, 2009, whichever occurs earliest, or

(ii) Steelhead harvested in tribal or recreational fisheries prior to June 1, 2009, so long as the harvest is authorized by the State of Washington or a tribe with jurisdiction over steelhead harvest. If NMFS does not receive a fishery management plan for Puget Sound steelhead by November 14, 2008, subsequent take by harvest will be subject to the take prohibitions.

(3) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in §223.102(a) do not apply to any employee or designee of NMFS, the United States Fish and Wildlife Service, any Federal land management agency, the Idaho Department of Fish and Game (IDFG), Washington Department of Fish and Wildlife (WDFW), the Oregon Department of Fish and Wildlife (ODFW), 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.

(4) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in §223.102(a) 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 the technical document entitled “Viable Salmonid Populations (NMFS, 2000b).” The VSP paper 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 NMFS Southwest or Northwest Regional Administrator, as appropriate. 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 it is not, 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 Northwest Region's website (*www.nwr.noaa.gov*).

(v) The prohibitions of paragraph (a) of this section relating to threatened species of steelhead listed in §223.102 (a)(5) through (a)(9), (a)(14), and (a)(15) do not apply to fisheries managed solely by the states of Oregon, Washington, Idaho, and California until January 8, 2001.

(5) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in §223.102(a) 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 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 the technical document entitled “Viable Salmonid Populations” (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) Taking into account health, abundances, and trends in the donor population, broodstock collection programs reflect appropriate priorities. The primary purpose of broodstock collection programs of listed species is to reestablish 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 such for secondary purposes, 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 programs whose purpose is to sustain fisheries, HGMPs must not compromise the ability of FMEPs or other management plans to conserve listed salmonids.

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

(H) Adequate monitoring and evaluation exist 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.

(K) The HGMP is consistent with plans and conditions set 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 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 congruity 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 a plan shall be a written approval by NMFS Southwest or Northwest Regional Administrator, as appropriate.

(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, the NMFS will identify to the jurisdiction 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 no less than 30 days, after which NMFS will make a final determination whether to withdraw the limit so that take prohibitions, like all other activity not within a limit, would then apply to that program. A template for developing HGMPs is available from NMFS Northwest Region's website (*www.nwr.noaa.gov*).

(6) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in §223.102(a) do not apply to actions undertaken in compliance with a resource management plan developed jointly by the States of Washington, Oregon and/or Idaho and the Tribes (joint plan) within the continuing jurisdiction of *United States* v. *Washington* or *United States* v. *Oregon,* the on-going Federal court proceedings to enforce and implement reserved treaty fishing rights, provided that:

(i) The Secretary has determined pursuant to 50 CFR 223.209 and the government-to-government processes therein that implementing and enforcing the joint tribal/state plan will not appreciably reduce the likelihood of survival and recovery of affected threatened ESUs.

(ii) The joint plan will be implemented and enforced within the parameters set forth in *United States* v. *Washington* or *United States* v. *Oregon.*

(iii) In making that determination for a joint plan, the Secretary has taken comment on how any fishery management plan addresses the criteria in §223.203(b)(4), or on how any hatchery and genetic management plan addresses the criteria in §223.203(b)(5).

(iv) The Secretary shall publish notice in the Federal Register of any determination whether or not a joint plan, will appreciably reduce the likelihood of survival and recovery of affected threatened ESUs, together with a discussion of the biological analysis underlying that determination.

(v) On a regular basis, NMFS will evaluate the effectiveness of the joint plan in protecting and achieving a level of salmonid productivity commensurate with conservation of the listed salmonids. If the plan is not effective, then NMFS will identify to the jurisdiction ways in which the joint plan 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 joint plan. 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 withdraw the limit so that take prohibitions would then apply to that joint plan as to all other activity not within a limit.

(7) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in §223.102(a) do not apply to scientific research activities provided that:

(i) Scientific research activities involving purposeful take is conducted by employees or contractors of the ODFW, WDFW (Agencies), IDFG, or CDFG (Agencies), or as a part of a monitoring and research program overseen by or coordinated with that Agency.

(ii) The Agencies provide 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) The Agencies annually provide 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 agency personnel, or are in accord with a permit issued by the Agency.

(v) The Agencies provide 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 Northwest or Southwest Regional Administrator.

(8) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in §223.102(a) do not apply to habitat restoration activities, as defined in paragraph (b)(8)(iv) of this section, provided that the activity is part of a watershed conservation plan, and:

(i) The watershed conservation plan has been certified by the State of Washington, Oregon, Idaho, or California (State) 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 and populations.

(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 watershed conservation plan guidelines under paragraph (b)(8)(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 no less than 30 days.

(9) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in §223.102(a) 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 Juvenile Fish Screen Criteria, National Marine Fisheries Service, Northwest Region, Revised February 16, 1995, with Addendum of May 9, 1996, or in California 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 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 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 encompass any impacts of 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.

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

(i) The activity results from routine road maintenance activity conducted by ODOT employees or agents that complies with ODOT's Transportation Maintenance Management System Water Quality and Habitat Guide (July, 1999); or by employees or agents of a state, county, city or port that complies with a program substantially similar to that contained in the ODOT Guide that is determined to meet or exceed the protections provided by the ODOT Guide; or by employees or agents of a state, county, city or port that complies with a routine road maintenance program that meets proper functioning habitat conditions as described further in subparagraph (ii) following. 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 Northwest or Southwest Regional Administrator, whichever is appropriate. Any jurisdiction desiring its routine road maintenance activities to be 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 any state, city, county, or port to be consistent with the conservation of listed salmonids' habitat when it contributes, as does the ODOT Guide, 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 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 ESU. 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 as to all other activity not within a limit. 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 within this limit.

(iv) Prior to approving any state, city, county, or port program as within this limit, or approving any substantive change in a program 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.

(11) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in §223.102(a) do not apply to activities within the City of Portland, Oregon Parks and Recreation Department's (PP&R) Pest Management Program (March 1997), including its Waterways Pest Management Policy updated December 1, 1999, provided that:

(i) Use of only the following chemicals is included within this limit on the take prohibitions: Round Up, Rodeo, Garlon 3A, Surfactant LI–700, Napropamide, Cutrine Plus, and Aquashade.

(ii) Any chemical use is initiated in accord with the priorities and decision processes of the Department's Pest Management Policy, including the Waterways Pest Management Policy, updated December 1, 1999.

(iii) Any chemical use within a 25 ft. (7.5 m) buffer complies with the buffer application constraints contained in PP&R's Waterways Pest Management Policy (update December 1, 1999).

(iv) Prior to implementing any changes to this limit, the PP&R provides NMFS with a copy of the proposed change for review and approval as within this limit.

(v) Prior to approving any substantive change in a program 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 no less than 30 days.

(vi) NMFS' approval of amendments shall be a written approval by NMFS Northwest Regional Administrator.

(vii) NMFS finds the PP&R Pest Management Program activities to be consistent with the conservation of listed salmonids' habitat by contributing to the attainment and maintenance of properly functioning condition (PFC). NMFS defines PFC as the sustained presence of a watershed's 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 the effectiveness of an approved program 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 ESU. 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 as to all other activity not within a limit. 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.

(12) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in §223.102(a) 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 listed species; or within the jurisdiction of the Metro regional government in Oregon and pursuant to ordinances that Metro has found comply with its Urban Growth Management Functional Plan (Functional Plan) following a determination by NMFS that the Functional Plan is adequately protective. NMFS approval or determinations about any MRCI development ordinances or plans, including the Functional Plan, shall be a written approval by NMFS Northwest or Southwest Regional Administrator, whichever is appropriate. NMFS will apply the following 12 evaluation considerations when reviewing MRCI development ordinances or plans to assess whether they adequately conserve listed salmonids by maintaining and restoring properly functioning habitat conditions:

(A) 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) 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) 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 PFC due to MRCI development impacts to riparian management areas.

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

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

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

(G) MRCI development ordinance or plan adequately preserves the hydrologic capacity of permanent and intermittent streams to pass peak flows.

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

(J) 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) 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) 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 listed salmonids' habitat when it contributes to the attainment and maintenance of PFC. NMFS defines PFC 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. 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 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 ESU. 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 as to all other activity not within a limit. 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.

(iv) Prior to approving any city, county, or regional government ordinances or plans as within this limit, or approving any substantive change in an ordinance or plan 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.

(13) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in §223.102(a) do not apply to non-Federal forest management activities conducted in the State of Washington provided that:

(i) The action is in compliance with forest practice regulations adopted and implemented by the Washington Forest Practices Board that NMFS has found are at least as protective of habitat functions as are the regulatory elements of the Forests and Fish Report dated April 29, 1999, and submitted to the Forest Practices Board by a consortium of landowners, tribes, and state and Federal agencies.

(ii) All non-regulatory elements of the Forests and Fish Report are being implemented.

(iii) Actions involving use of herbicides, pesticides, or fungicides are not included within this limit.

(iv) Actions taken under alternative plans are included in this limit provided that the Washington Department of Natural Resources (WDNR) finds that the alternate plans protect physical and biological processes at least as well as the state forest practices rules and provided that NMFS, or any resource agency or tribe NMFS designates, has the opportunity to review the plan at every stage of the development and implementation. A plan may be excluded from this limit if, after such review, WDNR determines that the plan is not likely to adequately protect listed salmon.

(v) Prior to determining that regulations adopted by the Forest Practice Board are at least as protective as the elements of the Forests and Fish Report, NMFS will publish notification in the Federal Register announcing the availability of the Report and regulations for public review and comment.

(vi) NMFS finds the activities to be consistent with the conservation of listed salmonids' habitat by contributing to the attainment and maintenance of PFC. NMFS defines PFC as the sustained presence of a watershed's 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. Programs must meet this biological standard in order for NMFS to find they qualify for a habitat-related limit. NMFS uses the best available science to make these determinations. NMFS may review and revise previous findings as new scientific information becomes available. NMFS will evaluate the effectiveness of the program in maintaining and achieving habitat function that provides for conservation of the listed salmonids. If the program is not adequate, 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 ESU. If Washington 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 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) take prohibitions.

(vii) NMFS approval of regulations shall be a written approval by NMFS Northwest Regional Administrator.

(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), any person claiming the benefit of any limit listed in paragraph (b) of this section or §223.204(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.

(d) *Severability.* The provisions of this section and the various applications thereof are distinct and severable from one another. If any provision or the application thereof to any person or circumstances is stayed or determined to be invalid, such stay or invalidity shall not affect other provisions, or the application of such provisions to other persons or circumstances, which can be given effect without the stayed or invalid provision or application.

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).

[65 FR 42475, July 10, 2000, as amended at 67 FR 1129, Jan. 9, 2002; 67 FR 68725, Nov. 12, 2002; 70 FR 37202, 37203, June 28, 2005; 71 FR 5180, Feb. 1, 2006; 73 FR 7843, Feb. 11, 2008; 73 FR 55455, Sept. 25, 2008]

ENDANGERED SPECIES ACT OF 1973

TABLE OF CONTENTS

			Page
Sec.	2.	Findings, purposes, and policy	1
Sec.	3.	Definitions	2
Sec.	4.	Determination of endangered species and threatened species	4
Sec.	5.	Land acquisition	11
Sec.	6.	Cooperation with the States	11
Sec.	7.	Interagency cooperation	15
Sec.	8.	International cooperation	23
Sec.	8A.	Convention implementation	24
Sec.	9.	Prohibited Acts	25
Sec.	10.	Exceptions	28
Sec.	11.	Penalties and enforcement	34
Sec.	12.	Endangered Plants	39
Sec.	13.	Conforming Amendments	39
Sec.	14.	Repealer	40
Sec.	15.	Authorization of appropriations	40
Sec.	16.	Effective date	41
Sec.	17.	Marine Mammal Protection Act of 1972	41
Sec.	18.	Annual cost analysis by the Fish and Wildlife Service	41

ENDANGERED SPECIES ACT OF 1973*

FINDINGS, PURPOSES, AND POLICY

SEC. 2. (a) FINDINGS.—The Congress finds and declares that—

(1) various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation;

(2) other species of fish, wildlife, and plants have been so depleted in numbers that they are in danger of or threatened with extinction;

(3) these species of fish, wildlife, and plants are of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people;

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(A) migratory bird treaties with Canada and Mexico;

(B) the Migratory and Endangered Bird Treaty with Japan;

(C) the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere;

(D) the International Convention for the Northwest Atlantic Fisheries;

(E) the International Convention for the High Seas Fisheries of the North Pacific Ocean;

(F) the Convention on International Trade in Endangered Species of Wild Fauna and Flora; and

(G) other international agreements; and

(5) encouraging the States and other interested parties, through Federal financial assistance and a system of incentives, to develop and maintain conservation programs which meet national and international standards is a key to meeting the Nation's international commitments and to better safeguarding, for the benefit of all citizens, the Nation's heritage in fish, wildlife, and plants.

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section.

(c) POLICY.—(1) It is further declared to be the policy of Congress that all Federal

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*As amended by P.L. 94-325, June 30, 1976; P.L. 94-359, July 12, 1976; P.L. 95-212, December 19, 1977; P.L. 95-632, November 10, 1978; P.L. 96-159, December 28, 1979; P.L. 97-304, October 13, 1982; P.L. 98-327, June 25, 1984; and P.L. 100-478, October 7, 1988; P.L. 107-171, May 13, 2002; P.L. 108-136, November 24, 2003.

departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act.

(2) It is further declared to be the policy of Congress that Federal agencies shall cooperate with State and local agencies to resolve water resource issues in concert with conservation of endangered species.

DEFINITIONS

SEC. 3. For the purposes of this Act—

(1) The term "alternative courses of action" means all alternatives and thus is not limited to original project objectives and agency jurisdiction.

(2) The term "commercial activity" means all activities of industry and trade, including, but not limited to, the buying or selling of commodities and activities conducted for the purpose of facilitating such buying and selling: *Provided, however*, That it does not include exhibition of commodities by museums or similar cultural or historical organizations.

(3) The terms "conserve", "conserving", and "conservation" mean to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

(4) The term "Convention" means the Convention on International Trade in Endangered Species of Wild Fauna and Flora, signed on March 3, 1973, and the appendices thereto.

(5)(A) The term "critical habitat" for a threatened or endangered species means—

(i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of this Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and

(ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of this Act, upon a determination by the Secretary that such areas are essential for the conservation of the species.

(B) Critical habitat may be established for those species now listed as threatened or endangered species for which no critical habitat has heretofore been established as set forth in subparagraph (A) of this paragraph.

(C) Except in those circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which can be occupied by the threatened or endangered species.

(6) The term "endangered species" means any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose protection under the provisions of this Act would present an overwhelming and overriding risk to man.

(7) The term "Federal agency" means any department, agency, or instrumentality of the United States.

(8) The term "fish or wildlife" means any member of the animal kingdom, including without limitation any mammal, fish, bird (including any migratory, nonmigratory, or endangered bird for which protection is also afforded by treaty or other international agreement), amphibian, reptile, mollusk, crustacean, arthropod or other invertebrate, and includes any part, product, egg, or offspring thereof, or the dead body or parts thereof.

(9) The term "foreign commerce" includes, among other things, any transaction—

(A) between persons within one foreign country;

(B) between persons in two or more foreign countries;

(C) between a person within the United States and a person in a foreign country; or

(D) between persons within the United States, where the fish and wildlife in question are moving in any country or countries outside the United States.

(10) The term "import" means to land on, bring into, or introduce into, or attempt to land on, bring into, or introduce into, any place subject to the jurisdiction of the United States, whether or not such landing, bringing, or introduction constitutes an importation within the meaning of the customs laws of the United States.

(11) [Repealed]

(12) The term "permit or license applicant" means, when used with respect to an action of a Federal agency for which exemption is sought under section 7, any person whose application to such agency for a permit or license has been denied primarily because of the application of section 7(a) to such agency action.

(13) The term "person" means an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign government; any State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States.

(14) The term "plant" means any member of the plant kingdom, including seeds, roots and other parts thereof.

(15) The term "Secretary" means, except as otherwise herein provided, the Secretary of the Interior or the Secretary of Commerce as program responsibilities are vested pursuant to the provisions of Reorganization Plan Numbered 4 of 1970; except that with respect to the enforcement of the provisions of this Act and the Convention which pertain to the importation or exportation of terrestrial plants, the term also means the Secretary of Agriculture.

(16) The term "species" includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature.

(17) The term "State" means any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, the Virgin Islands, Guam, and the Trust Territory of the Pacific Islands.

(18) the term "State agency" means any State agency, department, board, commission, or other governmental entity which is responsible for the management and conservation of fish, plant, or wildlife resources within a State.

(19) The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

(20) The term "threatened species" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

(21) The term "United States," when used in a geographical context, includes all States.

DETERMINATION OF ENDANGERED SPECIES AND THREATENED SPECIES

SEC. 4. (a) GENERAL.—(1) The Secretary shall by regulation promulgated in accordance with subsection (b) determine whether any species is an endangered species or a threatened species because of any of the following factors:

(A) the present or threatened destruction, modification, or curtailment of its habitat or range;

(B) overutilization for commercial, recreational, scientific, or educational purposes;

(C) disease or predation;

(D) the inadequacy of existing regulatory mechanisms; or

(E) other natural or manmade factors affecting its continued existence.

(2) With respect to any species over which program responsibilities have been vested in the Secretary of Commerce pursuant to Reorganization Plan Numbered 4 of 1970—

(A) in any case in which the Secretary of Commerce determines that such species should—

(i) be listed as an endangered species or a threatened species, or

(ii) be changed in status from a threatened species to an endangered species, he shall so inform the Secretary of the Interior, who shall list such species in accordance with this section;

(B) in any case in which the Secretary of Commerce determines that such species should—

(i) be removed from any list published pursuant to subsection (c) of this section, or

(ii) be changed in status from an endangered species to a threatened species, he shall recommend such action to the Secretary of the Interior, and the Secretary of the Interior, if he concurs in the recommendation, shall implement such action; an(C) the Secretary of the Interior may not list or remove from any list any such species, and may not change the status of any such species which are listed, without a prior favorable determination made pursuant to this section by the Secretary of Commerce.

(3)(A) The Secretary, by regulation promulgated in accordance with subsection (b) and to the maximum extent prudent and determinable—

(i) shall, concurrently with making a determination under paragraph (1) that a species is an endangered species or a threatened species, designate any habitat of such species which is then considered to be critical habitat; and

(ii) may, from time-to-time thereafter as appropriate, revise such designation.

(B)(i) The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101of the Sikes Act (16 U.S.C. 670a), if the Secretary determines

in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.

(ii) Nothing in this paragraph affects the requirement to consult under section 7(a)(2) with respect to an agency action (as that term is defined in that section).

(iii) Nothing in this paragraph affects the obligation of the Department of Defense to comply with section 9, including the prohibition preventing extinction and taking of endangered species and threatened species.

(b) BASIS FOR DETERMINATIONS.—(1)(A) The Secretary shall make determinations required by subsection (a)(1) solely on the basis of the best scientific and commercial data available to him after conducting a review of the status of the species and after taking into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction, or on the high seas.

(B) In carrying out this section, the Secretary shall give consideration to species which have been—

(i) designated as requiring protection from unrestricted commerce by any foreign nation, or pursuant to any international agreement; or

(ii) identified as in danger of extinction, or likely to become so within the foreseeable future, by any State agency or by any agency of a foreign nation that is responsible for the conservation of fish or wildlife or plants.

(2) The Secretary shall designate critical habitat, and make revisions thereto, under subsection (a)(3) on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impact, of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned.

(3)(A) To the maximum extent practicable, within 90 days after receiving the petition of an interested person under section 553(e) of title 5, United States Code, to add a species to, or to remove a species from, either of the lists published under subsection (c), the Secretary shall make a finding as to whether the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted. If such a petition is found to present such information, the Secretary shall promptly commence a review of the status of the species concerned. The Secretary shall promptly publish each finding made under this subparagraph in the Federal Register.

(B) Within 12 months after receiving a petition that is found under subparagraph (A) to present substantial information indicating that the petitioned action may be warranted, the Secretary shall make one of the following findings:

(i) The petitioned action is not warranted, in which case the Secretary shall promptly publish such finding in the Federal Register.

(ii) The petitioned action is warranted, in which case the Secretary shall promptly publish in the Federal Register a general notice and the complete text of a proposed regulation to implement such action in accordance with paragraph (5).

(iii) The petitioned action is warranted, but that—

(I) the immediate proposal and timely promulgation of a final regulation implementing the petitioned action in accordance with paragraphs (5) and (6) is precluded by pending proposals to determine whether any species is an endangered species or a threatened species, and

(II) expeditious progress is being made to add qualified species to either of the lists published under subsection (c) and to remove from such lists species for which the protections of the Act are no longer necessary,

in which case the Secretary shall promptly publish such finding in the Federal Register, together with a description and evaluation of the reasons and data on which the finding is based.

(C)(i) A petition with respect to which a finding is made under subparagraph (B)(iii) shall be treated as a petition that is resubmitted to the Secretary under subparagraph (A) on the date of such finding and that presents substantial scientific or commercial information that the petitioned action may be warranted.

(ii) Any negative finding described in subparagraph (A) and any finding described in subparagraph (B)(i) or (iii) shall be subject to judicial review.

(iii) The Secretary shall implement a system to monitor effectively the status of all species with respect to which a finding is made under subparagraph (B)(iii) and shall make prompt use of the authority under paragraph 7 to prevent a significant risk to the well being of any such species.

(D)(i) To the maximum extent practicable, within 90 days after receiving the petition of an interested person under section 553(e) of title 5, United States Code, to revise a critical habitat designation, the Secretary shall make a finding as to whether the petition presents substantial scientific information indicating that the revision may be warranted. The Secretary shall promptly publish such finding in the Federal Register.

(ii) Within 12 months after receiving a petition that is found under clause (i) to present substantial information indicating that the requested revision may be warranted, the Secretary shall determine how he intends to proceed with the requested revision, and shall promptly publish notice of such intention in the Federal Register.

(4) Except as provided in paragraphs (5) and (6) of this subsection, the provisions of section 553 of title 5, United States Code (relating to rulemaking procedures), shall apply to any regulation promulgated to carry out the purposes of this Act.

(5) With respect to any regulation proposed by the Secretary to implement a determination, designation, or revision referred to in subsection (a)(1) or (3), the Secretary shall—

(A) not less than 90 days before the effective date of the regulation—

(i) publish a general notice and the complete text of the proposed regulation in the Federal Register, and

(ii) give actual notice of the proposed regulation (including the complete text of the regulation) to the State agency in each State in which the species is believed to occur, and to each county or equivalent jurisdiction in which the species is believed to occur, and invite the comment of such agency, and each such jurisdiction, thereon;

(B) insofar as practical, and in cooperation with the Secretary of State, give notice of the proposed regulation to each foreign nation in which the species is believed to occur or whose citizens harvest the species on the high seas, and invite the comment of such nation thereon;

(C) give notice of the proposed regulation to such professional scientific organizations as he deems appropriate;

(D) publish a summary of the proposed regulation in a newspaper of general circulation in each area of the United States in which the species is believed to occur; and

(E) promptly hold one public hearing on the proposed regulation if any person files a request for such a hearing within 45 days after the date of publication of general notice.

(6)(A) Within the one-year period beginning on the date on which general notice is published in accordance with paragraph (5)(A)(i) regarding a proposed regulation, the Secretary shall publish in the Federal Register—

(i) if a determination as to whether a species is an endangered species or a threatened species, or a revision of critical habitat, is involved, either—

(I) a final regulation to implement such determination,

(II) a final regulation to implement such revision or a finding that such revision should not be made,

(III) notice that such one-year period is being extended under subparagraph (B)(i), or

(IV) notice that the proposed regulation is being withdrawn under subparagraph (B)(ii), together with the finding on which such withdrawal is based; or

(ii) subject to subparagraph (C), if a designation of critical habitat is involved, either—

(I) a final regulation to implement such designation, or

(II) notice that such one-year period is being extended under such subparagraph.

(B)(i) If the Secretary finds with respect to a proposed regulation referred to in subparagraph (A)(i) that there is substantial disagreement regarding the sufficiency or accuracy of the available data relevant to the determination or revision concerned, the Secretary may extend the one-year period specified in subparagraph (A) for not more than six months for purposes of soliciting additional data.

(ii) If a proposed regulation referred to in subparagraph (A)(i) is not promulgated as a final regulation within such one-year period (or longer period if extension under clause (i) applies) because the Secretary finds that there is not sufficient evidence to justify the action proposed by the regulation, the Secretary shall immediately withdraw the regulation. The finding on which a withdrawal is based shall be subject to judicial review. The Secretary may not propose a regulation that has previously been withdrawn under this clause unless he determines that sufficient new information is available to warrant such proposal.

(iii) If the one-year period specified in subparagraph (A) is extended under clause (i) with respect to a proposed regulation, then before the close of such extended period the Secretary shall publish in the Federal Register either a final regulation to implement the determination or revision concerned, a finding that the revision should not be made, or a notice of withdrawal of the regulation under clause (ii), together with the finding on which the withdrawal is based.

(C) A final regulation designating critical habitat of an endangered species or a threatened species shall be published concurrently with the final regulation implementing the determination that such species is endangered or threatened, unless the Secretary deems that—

(i) it is essential to the conservation of such species that the regulation implementing such determination be promptly published; or

(ii) critical habitat of such species is not then determinable, in which case the Secretary, with respect to the proposed regulation to designate such habitat, may extend the one-year period specified in subparagraph (A) by not more than one additional year, but not later than the close of such additional year the Secretary must publish a final regulation, based on such data as may be available at that time, designating, to the maximum extent prudent, such habitat.

(7) Neither paragraph (4), (5), or (6) of this subsection nor section 553 of title 5, United States Code, shall apply to any regulation issued by the Secretary in regard to any emergency posing a significant risk to the well-being of any species of fish or wildlife or plants, but only if—

(A) at the time of publication of the regulation in the Federal Register the Secretary publishes therein detailed reasons why such regulation is necessary; and

(B) in the case such regulation applies to resident species of fish or wildlife, or plants, the Secretary gives actual notice of such regulation to the State agency in each State in which such species is believed to occur.

Such regulation shall, at the discretion of the Secretary, take effect immediately upon the publication of the regulation in the Federal Register. Any regulation promulgated under the authority of this paragraph shall cease to have force and effect at the close of the 240-day period following the date of publication unless, during such 240-day period, the rulemaking procedures which would apply to such regulation without regard to this paragraph are complied with. If at any time after issuing an emergency regulation the Secretary determines, on the basis of the best appropriate data available to him, that substantial evidence does not exist to warrant such regulation, he shall withdraw it.

(8) The publication in the Federal Register of any proposed or final regulation which is necessary or appropriate to carry out the purposes of this Act shall include a summary by the Secretary of the data on which such regulation is based and shall show the relationship of such data to such regulation; and if such regulation designates or revises critical habitat, such summary shall, to the maximum extent practicable, also include a brief description and evaluation of those activities (whether public or private) which, in the opinion of the Secretary, if undertaken may adversely modify such habitat, or may be affected by such designation.

(c) Lists.—(1) The Secretary of the Interior shall publish in the Federal Register a list of all species determined by him or the Secretary of Commerce to be endangered species and a list of all species determined by him or the Secretary of Commerce to be threatened species. Each list shall refer to the species contained therein by scientific and common name or names, if any, specify with respect to each such species over what portion of its range it is endangered or threatened, and specify any critical habitat within such range. The Secretary shall from time to time revise each list published under the authority of this subsection to reflect recent determinations, designations, and revisions made in accordance with subsections (a) and (b).

(2) The Secretary shall—

(A) conduct, at least once every five years, a review of all species included in

a list which is published pursuant to paragraph (1) and which is in effect at the time of such review; and

(B) determine on the basis of such review whether any such species should—

(i) be removed from such list;

(ii) be changed in status from an endangered species to a threatened species; or

(iii) be changed in status from a threatened species to an endangered species.

Each determination under subparagraph (B) shall be made in accordance with the provisions of subsections (a) and (b).

(d) PROTECTIVE REGULATIONS.—Whenever any species is listed as a threatened species pursuant to subsection (c) of this section, the Secretary shall issue such regulations as he deems necessary and advisable to provide for the conservation of such species. The Secretary may by regulation prohibit with respect to any threatened species any act prohibited under section 9(a)(1), in the case of fish or wildlife, or section 9(a)(2), in the case of plants, with respect to endangered species; except that with respect to the taking of resident species of fish or wildlife, such regulations shall apply in any State which has entered into a cooperative agreement pursuant to section 6(c) of this Act only to the extent that such regulations have also been adopted by such State.

(e) SIMILARITY OF APPEARANCE CASES.—The Secretary may, by regulation of commerce or taking, and to the extent he deems advisable, treat any species as an endangered species or threatened species even though it is not listed pursuant to section 4 of this Act if he finds that—

(A) such species so closely resembles in appearance, at the point in question, a species which has been listed pursuant to such section that enforcement personnel would have substantial difficulty in attempting to differentiate between the listed and unlisted species;

(B) the effect of this substantial difficulty is an additional threat to an endangered or threatened species; and

(C) such treatment of an unlisted species will substantially facilitate the enforcement and further the policy of this Act.

(f)(1) RECOVERY PLANS.—The Secretary shall develop and implement plans (hereinafter in this subsection referred to as "recovery plans") for the conservation and survival of endangered species and threatened species listed pursuant to this section, unless he finds that such a plan will not promote the conservation of the species. The Secretary, in developing and implementing recovery plans, shall, to the maximum extent practicable—

(A) give priority to those endangered species or threatened species, without regard to taxonomic classification, that are most likely to benefit from such plans, particularly those species that are, or may be, in conflict with construction or other development projects or other forms of economic activity;

(B) incorporate in each plan—

(i) a description of such site-specific management actions as may be necessary to achieve the plan's goal for the conservation and survival of the species;

(ii) objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of this section, that the species be removed from the list; and

(iii) estimates of the time required and the cost to carry out those measures needed to achieve the plan's goal and to achieve intermediate steps toward that goal.

(2) The Secretary, in developing and implementing recovery plans, may procure the services of appropriate public and private agencies and institutions, and other qualified persons. Recovery teams appointed pursuant to this subsection shall not be subject to the Federal Advisory Committee Act.

(3) The Secretary shall report every two years to the Committee on Environment and Public Works of the Senate and the Committee on Merchant Marine and Fisheries of the House of Representatives on the status of efforts to develop and implement recovery plans for all species listed pursuant to this section and on the status of all species for which such plans have been developed.

(4) The Secretary shall, prior to final approval of a new or revised recovery plan, provide public notice and an opportunity for public review and comment on such plan. The Secretary shall consider all information presented during the public comment period prior to approval of the plan.

(5) Each Federal agency shall, prior to implementation of a new or revised recovery plan, consider all information presented during the public comment period under paragraph (4).

(g) MONITORING.—(1) The Secretary shall implement a system in cooperation with the States to monitor effectively for not less than five years the status of all species which have recovered to the point at which the measures provided pursuant to this Act are no longer necessary and which, in accordance with the provisions of this section, have been removed from either of the lists published under subsection (c).

(2) The Secretary shall make prompt use of the authority under paragraph 7 of subsection (b) of this section to prevent a significant risk to the well being of any such recovered species.

(h) AGENCY GUIDELINES.—The Secretary shall establish, and publish in the Federal Register, agency guidelines to insure that the purposes of this section are achieved efficiently and effectively. Such guidelines shall include, but are not limited to—

(1) procedures for recording the receipt and the disposition of petitions submitted under subsection (b)(3) of this section;

(2) criteria for making the findings required under such subsection with respect to petitions;

(3) a ranking system to assist in the identification of species that should receive priority review under subsection (a)(1) of this section; and

(4) a system for developing and implementing, on a priority basis, recovery plans under subsection (f) of this section. The Secretary shall provide to the public notice of, and opportunity to submit written comments on, any guideline (including any amendment thereto) proposed to be established under this subsection.

(i) If, in the case of any regulation proposed by the Secretary under the authority of this section, a State agency to which notice thereof was given in accordance with subsection (b)(5)(A)(ii) files comments disagreeing with all or part of the proposed regulation, and the Secretary issues a final regulation which is in conflict with such comments, or if the Secretary fails to adopt a regulation pursuant to an action petitioned by a State agency under subsection (b)(3), the Secretary shall submit to the State agency a written justification for his failure to adopt regulations consistent with the agency's comments or petition.

LAND ACQUISITION

SEC. 5. (a) PROGRAM.—The Secretary, and the Secretary of Agriculture with respect to the National Forest System, shall establish and implement a program to conserve fish, wildlife, and plants, including those which are listed as endangered species or threatened species pursuant to section 4 of this Act. To carry out such a program, the appropriate Secretary—

(1) shall utilize the land acquisition and other authority under the Fish and Wildlife Act of 1956, as amended, the Fish and Wildlife Coordination Act, as amended, and the Migratory Bird Conservation Act, as appropriate; and

(2) is authorized to acquire by purchase, donation, or otherwise, lands, waters, or interests therein, and such authority shall be in addition to any other land acquisition authority vested in him.

(b) ACQUISITIONS.—Funds made available pursuant to the Land and Water Conservation Fund Act of 1965, as amended, may be used for the purpose of acquiring lands, waters, or interest therein under subsection (a) of this section.

COOPERATION WITH THE STATES

SEC. 6. (a) GENERAL.—In carrying out the program authorized by this Act, the Secretary shall cooperate to the maximum extent practicable with the States. Such cooperation shall include consultation with the States concerned before acquiring any land or water, or interest therein, for the purpose of conserving any endangered species or threatened species.

(b) MANAGEMENT AGREEMENTS.—The Secretary may enter into agreements with any State for the administration and management of any area established for the conservation of endangered species or threatened species. Any revenues derived from the administration of such areas under these agreements shall be subject to the provisions of section 401 of the Act of June 15, 1935 (49 Stat. 383; 16 U.S.C. 715s).

(c) COOPERATIVE AGREEMENTS.—(1) In furtherance of the purposes of this Act, the Secretary is authorized to enter into a cooperative agreement in accordance with this section with any State which establishes and maintains an adequate and active program for the conservation of endangered species and threatened species. Within one hundred and twenty days after the Secretary receives a certified copy of such a proposed State program, he shall make a determination whether such program is in accordance with this Act. Unless he determines, pursuant to this paragraph that the State program is not in accordance with this Act, he shall enter into a cooperative agreement with the State for the purpose of assisting in implementation of the State program. In order for a State program to be deemed an adequate and active program for the conservation of endangered species and threatened species, the Secretary must find, and annually thereafter reconfirm such finding, that under the State program —

(A) authority resides in the State agency to conserve resident species of fish or wildlife determined by the State agency or the Secretary to be endangered or threatened;

(B) the State agency has established acceptable conservation programs, consistent with the purposes and policies of this Act, for all resident species of fish or

wildlife in the State which are deemed by the Secretary to be endangered or threatened, and has furnished a copy of such plan and program together with all pertinent details, information, and data requested to the Secretary;

(C) the State agency is authorized to conduct investigations to determine the status and requirements for survival of resident species of fish and wildlife;

(D) the State agency is authorized to establish programs, including the acquisition of land or aquatic habitat or interests therein, for the conservation of resident endangered or threatened species of fish or wildlife; and

(E) provision is made for public participation in designating resident species of fish or wildlife as endangered or threatened; or that under the State program—

(i) the requirements set forth in subparagraphs (C), (D), and (E) of this paragraph are complied with, and

(ii) plans are included under which immediate attention will be given to those resident species of fish and wildlife which are determined by the Secretary or the State agency to be endangered or threatened and which the Secretary and the State agency agree are most urgently in need of conservation programs; except that a cooperative agreement entered into with a State whose program is deemed adequate and active pursuant to clause (i) and this clause shall not affect the applicability of prohibitions set forth in or authorized pursuant to section 4(d) or section 9(a)(1) with respect to the taking of any resident endangered or threatened species.

(2) In furtherance of the purposes of this Act, the Secretary is authorized to enter into a cooperative agreement in accordance with this section with any State which establishes and maintains an adequate and active program for the conservation of endangered species and threatened species of plants. Within one hundred and twenty days after the Secretary receives a certified copy of such a proposed State program, he shall make a determination whether such program is in accordance with this Act. Unless he determines, pursuant to this paragraph, that the State program is not in accordance with this Act, he shall enter into a cooperative agreement with the State for the purpose of assisting in implementation of the State program. In order for a State program to be deemed an adequate and active program for the conservation of endangered species of plants and threatened species of plants, the Secretary must find, and annually thereafter reconfirm such finding, that under the State program—

(A) authority resides in the State agency to conserve resident species of plants determined by the State agency or the Secretary to be endangered or threatened;

(B) the State agency has established acceptable conservation programs, consistent with the purposes and policies of this Act, for all resident species of plants in the State which are deemed by the Secretary to be endangered or threatened, and has furnished a copy of such plan and program together with all pertinent details, information, and data requested to the Secretary;

(C) the State agency is authorized to conduct investigations to determine the status and requirements for survival of resident species of plants; and

(D) provision is made for public participation in designating resident species of plants as endangered or threatened; or that under the State program—

(i) the requirements set forth in subparagraphs (C) and (D) of this paragraph are complied with, and

(ii) plans are included under which immediate attention will be given to

those resident species of plants which are determined by the Secretary or the State agency to be endangered or threatened and which the Secretary and the State agency agree are most urgently in need of conservation programs; except that a cooperative agreement entered into with a State whose program is deemed adequate and active pursuant to clause (i) and this clause shall not affect the applicability of prohibitions set forth in or authorized pursuant to section 4(d) or section 9(a)(1) [16 USCS § § 1533(d), 1538(a)(1)] with respect to the taking of any resident endangered or threatened species.

(d) ALLOCATION OF FUNDS.—(1) The Secretary is authorized to provide financial assistance to any State, through its respective State agency, which has entered into a cooperative agreement pursuant to subsection (c) of this section to assist in development of programs for the conservation of endangered and threatened species or to assist in monitoring the status of candidate species pursuant to subparagraph (C) of section 4(b)(3) and recovered species pursuant to section 4(g). The Secretary shall allocate each annual appropriation made in accordance with the provisions of subsection (i) of this section to such States based on consideration of—

(A) the international commitments of the United States to protect endangered species or threatened species;

(B) the readiness of a State to proceed with a conservation program consistent with the objectives and purposes of this Act;

(C) the number of endangered species and threatened species within a State;

(D) the potential for restoring endangered species and threatened species within a State;

(E) the relative urgency to initiate a program to restore and protect an endangered species or threatened species in terms of survival of the species;

(F) the importance of monitoring the status of candidate species within a State to prevent a significant risk to the well being of any such species; and

(G) the importance of monitoring the status of recovered species within a State to assure that such species do not return to the point at which the measures provided pursuant to this Act are again necessary.

So much of the annual appropriation made in accordance with provisions of subsection (i) of this section allocated for obligation to any State for any fiscal year as remains unobligated at the close thereof is authorized to be made available to that State until the close of the succeeding fiscal year. Any amount allocated to any State which is unobligated at the end of the period during which it is available for expenditure is authorized to be made available for expenditure by the Secretary in conducting programs under this section.

(2) Such cooperative agreements shall provide for (A) the actions to be taken by the Secretary and the States; (B) the benefits that are expected to be derived in connection with the conservation of endangered or threatened species; (C) the estimated cost of these actions; and (D) the share of such costs to be borne by the Federal Government and by the States; except that—

(i) the Federal share of such program costs shall not exceed 75 percent of the estimated program cost stated in the agreement; and

(ii) the Federal share may be increased to 90 percent whenever two or more States having a common interest in one or more endangered or threatened species, the conservation of which may be enhanced by cooperation of such States, enter jointly into an agreement with the Secretary.

The Secretary may, in his discretion, and under such rules and regulations as he may prescribe, advance funds to the State for financing the United States pro rata share agreed upon in the cooperative agreement. For the purposes of this section, the non-Federal share may, in the discretion of the Secretary, be in the form of money or real property, the value of which will be determined by the Secretary, whose decision shall be final.

(e) Review of State Programs.—Any action taken by the Secretary under this section shall be subject to his periodic review at no greater than annual intervals.

(f) Conflicts Between Federal and State Laws.—Any State law or regulation which applies with respect to the importation or exportation of, or interstate or foreign commerce in, endangered species or threatened species is void to the extent that it may effectively (1) permit what is prohibited by this Act or by any regulation which implements this Act, or (2) prohibit what is authorized pursuant to an exemption or permit provided for in this Act or in any regulation which implements this Act. This Act shall not otherwise be construed to void any State law or regulation which is intended to conserve migratory, resident, or introduced fish or wildlife, or to permit or prohibit sale of such fish or wildlife. Any State law or regulation respecting the taking of an endangered species or threatened species may be more restrictive than the exemptions or permits provided for in this Act or in any regulation which implements this Act but not less restrictive than the prohibitions so defined.

(g) Transition.—(1) For purposes of this subsection, the term "establishment period" means, with respect to any State, the period beginning on the date of enactment of this Act and ending on whichever of the following dates first occurs: (A) the date of the close of the 120-day period following the adjournment of the first regular session of the legislature of such State which commences after such date of enactment, or (B) the date of the close of the 15-month period following such date of enactment.

(2) The prohibitions set forth in or authorized pursuant to sections 4(d) and 9(a)(1)(B) of this Act shall not apply with respect to the taking of any resident endangered species or threatened species (other than species listed in Appendix I to the Convention or otherwise specifically covered by any other treaty or Federal law) within any state—

(A) which is then a party to a cooperative agreement with the Secretary pursuant to section 6(c) of this Act (except to the extent that the taking of any such species is contrary to the law of such State); or

(B) except for any time within the establishment period when—

(i) the Secretary applies such prohibition to such species at the request of the State, or

(ii) the Secretary applies such prohibition after he finds, and publishes his finding, that an emergency exists posing a significant risk to the well-being of such species and that the prohibition must be applied to protect such species. The Secretary's finding and publication may be made without regard to the public hearing or comment provisions of section 553 of title 5, United States Code, or any other provision of this Act; but such prohibition shall expire 90 days after the date of its imposition unless the Secretary further extends such prohibition by publishing notice and a statement of justification of such extension.

(h) REGULATIONS.—The Secretary is authorized to promulgate such regulations as may be appropriate to carry out the provisions of this section relating to financial assistance to States.

(i) APPROPRIATIONS.—(1) To carry out the provisions of this section for fiscal years after September 30, 1988, there shall be deposited into a special fund known as the cooperative endangered species conservation fund, to be administered by the Secretary, an amount equal to 5 percent of the combined amounts covered each fiscal year into the Federal aid to wildlife restoration fund under section 3 of the Act of September 2, 1937, and paid, transferred, or otherwise credited each fiscal year to the Sport Fishing Restoration Account established under 1016 of the Act of July 18, 1984.

(2) Amounts deposited into the special fund are authorized to be appropriated annually and allocated in accordance with subsection (d) of this section.

INTERAGENCY COOPERATION

SEC. 7. (a) FEDERAL AGENCY ACTIONS AND CONSULTATIONS.—(1) The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act.

(2) Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section. In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available.

(3) Subject to such guidelines as the Secretary may establish, a Federal agency shall consult with the Secretary on any prospective agency action at the request of, and in cooperation with, the prospective permit or license applicant if the applicant has reason to believe that an endangered species or a threatened species may be present in the area affected by his project and that implementation of such action will likely affect such species.

(4) Each Federal agency shall confer with the Secretary on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under section 4 or result in the destruction or adverse modification of critical habitat proposed to be designated for such species. This paragraph does not require a limitation on the commitment of resources as described in subsection (d).

(b) OPINION OF SECRETARY.—(1)(A) Consultation under subsection (a)(2) with respect to any agency action shall be concluded within the 90-day period beginning on the date on which initiated or, subject to subparagraph (B), within such other period of time as is mutually agreeable to the Secretary and the Federal agency.

(B) In the case of an agency action involving a permit or license applicant, the Secretary and the Federal agency may not mutually agree to conclude consultation within

a period exceeding 90 days unless the Secretary, before the close of the 90th day referred to in subparagraph (A)—

(i) if the consultation period proposed to be agreed to will end before the 150th day after the date on which consultation was initiated, submits to the applicant a written statement setting forth—

(I) the reasons why a longer period is required,

(II) the information that is required to complete the consultation, and

(III) the estimated date on which consultation will be completed; or

(ii) if the consultation period proposed to be agreed to will end 150 or more days after the date on which consultation was initiated, obtains the consent of the applicant to such period.

The Secretary and the Federal agency may mutually agree to extend a consultation period established under the preceding sentence if the Secretary, before the close of such period, obtains the consent of the applicant to the extension.

(2) Consultation under subsection (a)(3) shall be concluded within such period as is agreeable to the Secretary, the Federal agency, and the applicant concerned.

(3)(A) Promptly after conclusion of consultation under paragraph (2) or (3) of subsection (a), the Secretary shall provide to the Federal agency and the applicant, if any, a written statement setting forth the Secretary's opinion, and a summary of the information on which the opinion is based, detailing how the agency action affects the species or its critical habitat. If jeopardy or adverse modification is found, the Secretary shall suggest those reasonable and prudent alternatives which he believes would not violate subsection (a)(2) and can be taken by the Federal agency or applicant in implementing the agency action.

(B) Consultation under subsection (a)(3), and an opinion issued by the Secretary incident to such consultation, regarding an agency action shall be treated respectively as a consultation under subsection (a)(2), and as an opinion issued after consultation under such subsection, regarding that action if the Secretary reviews the action before it is commenced by the Federal agency and finds, and notifies such agency, that no significant changes have been made with respect to the action and that no significant change has occurred regarding the information used during the initial consultation.

(4) If after consultation under subsection (a)(2), the Secretary concludes that—

(A) the agency action will not violate such subsection, or offers reasonable and prudent alternatives which the Secretary believes would not violate such subsection;

(B) the taking of an endangered species or a threatened species incidental to the agency action will not violate such subsection; and

(C) if an endangered species or threatened species of a marine mammal is involved, the taking is authorized pursuant to section 101(a)(5) of the Marine Mammal Protection Act of 1972;

the Secretary shall provide the Federal agency and the applicant concerned, if any, with a written statement that—

(i) specifies the impact of such incidental taking on the species,

(ii) specifies those reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize such impact,

(iii) in the case of marine mammals, specifies those measures that are necessary to comply with section 101(a)(5) of the Marine Mammal Protection Act of 1972 with regard to such taking, and

(iv) sets forth the terms and conditions (including, but not limited to, reporting requirements) that must be complied with by the Federal agency or applicant (if any), or both, to implement the measures specified under clauses (ii) and (iii).

(c) BIOLOGICAL ASSESSMENT.—(1) To facilitate compliance with the requirements of subsection (a)(2), each Federal agency shall, with respect to any agency action of such agency for which no contract for construction has been entered into and for which no construction has begun on the date of enactment of the Endangered Species Act Amendments of 1978, request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action. If the Secretary advises, based on the best scientific and commercial data available, that such species may be present, such agency shall conduct a biological assessment for the purpose of identifying any endangered species or threatened species which is likely to be affected by such action. Such assessment shall be completed within 180 days after the date on which initiated (or within such other period as is mutually agreed to by the Secretary and such agency, except that if a permit or license applicant is involved, the 180-day period may not be extended unless such agency provides the applicant, before the close of such period, with a written statement setting forth the estimated length of the proposed extension and the reasons therefor) and, before any contract for construction is entered into and before construction is begun with respect to such action. Such assessment may be undertaken as part of a Federal agency's compliance with the requirements of section 102 of the National Environmental Policy Act of 1969 (42 U.S.C. 4332).

(2) Any person who may wish to apply for an exemption under subsection (g) of this section for that action may conduct a biological assessment to identify any endangered species or threatened species which is likely to be affected by such action. Any such biological assessment must, however, be conducted in cooperation with the Secretary and under the supervision of the appropriate Federal agency.

(d) LIMITATION ON COMMITMENT OF RESOURCES.—After initiation of consultation required under subsection (a)(2), the Federal agency and the permit or license applicant shall not make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures which would not violate subsection (a)(2).

(e)(1) ESTABLISHMENT OF COMMITTEE.—There is established a committee to be known as the Endangered Species Committee (hereinafter in this section referred to as the "Committee").

(2) The Committee shall review any application submitted to it pursuant to this section and determine in accordance with subsection (h) of this section whether or not to grant an exemption from the requirements of subsection (a)(2) of this section for the action set forth in such application.

(3) The Committee shall be composed of seven members as follows:

(A) The Secretary of Agriculture.

(B) The Secretary of the Army.

(C) The Chairman of the Council of Economic Advisors.

(D) The Administrator of the Environmental Protection Agency.

(E) The Secretary of the Interior.

(F) The Administrator of the National Oceanic and Atmospheric Administration.

(G) The President, after consideration of any recommendations received pur-

suant to subsection (g)(2)(B) shall appoint one individual from each affected State, as determined by the Secretary, to be a member of the Committee for the consideration of the application for exemption for an agency action with respect to which such recommendations are made, not later than 30 days after an application is submitted pursuant to this section.

(4)(A) Members of the Committee shall receive no additional pay on account of their service on the Committee.

(B) While away from their homes or regular places of business in the performance of services for the Committee, members of the Committee shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed expenses under section 5703 of title 5 of the United States Code.

(5)(A) Five members of the Committee or their representatives shall constitute a quorum for the transaction of any function of the Committee, except that, in no case shall any representative be considered in determining the existence of a quorum for the transaction of any function of the Committee if that function involves a vote by the Committee on any matter before the Committee.

(B) The Secretary of the Interior shall be the Chairman of the Committee.

(C) The Committee shall meet at the call of the Chairman or five of its members.

(D) All meetings and records of the Committee shall be open to the public.

(6) Upon request of the Committee, the head of any Federal agency is authorized to detail, on a nonreimbursable basis, any of the personnel of such agency to the Committee to assist it in carrying out its duties under this section.

(7)(A) The Committee may for the purpose of carrying out its duties under this section hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence, as the Committee deems advisable.

(B) When so authorized by the Committee, any member or agent of the Committee may take any action which the Committee is authorized to take by this paragraph.

(C) Subject to the Privacy Act, the Committee may secure directly from any Federal agency information necessary to enable it to carry out its duties under this section. Upon request of the Chairman of the Committee, the head of such Federal agency shall furnish such information to the Committee.

(D) The Committee may use the United States mails in the same manner and upon the same conditions as a Federal agency.

(E) The Administrator of General Services shall provide to the Committee on a reimbursable basis such administrative support services as the Committee may request.

(8) In carrying out its duties under this section, the Committee may promulgate and amend such rules, regulations, and procedures, and issue and amend such orders as it deems necessary.

(9) For the purpose of obtaining information necessary for the consideration of an application for an exemption under this section the Committee may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents.

(10) In no case shall any representative, including a representative of a member designated pursuant to paragraph (3)(G) of this subsection, be eligible to cast a vote on behalf of any member.

(f) REGULATIONS.—Not later than 90 days after the date of enactment of the En-

dangered Species Act Amendments of 1978, the Secretary shall promulgate regulations which set forth the form and manner in which applications for exemption shall be submitted to the Secretary and the information to be contained in such applications. Such regulations shall require that information submitted in an application by the head of any Federal agency with respect to any agency action include, but not be limited to —

(1) a description of the consultation process carried out pursuant to subsection (a)(2) of this section between the head of the Federal agency and the Secretary; and

(2) a statement describing why such action cannot be altered or modified to conform with the requirements of subsection (a)(2) of this section.

(g) Application for Exemption and Report to the Committee.—(1) A Federal agency, the Governor of the State in which an agency action will occur, if any, or a permit or license applicant may apply to the Secretary for an exemption for an agency action of such agency if, after consultation under subsection (a)(2), the Secretary's opinion under subsection (b) indicates that the agency action would violate subsection (a)(2). An application for an exemption shall be considered initially by the Secretary in the manner provided for in this subsection, and shall be considered by the Committee for a final determination under subsection (h) after a report is made pursuant to paragraph (5). The applicant for an exemption shall be referred to as the "exemption applicant" in this section.

(2)(A) An exemption applicant shall submit a written application to the Secretary, in a form prescribed under subsection (f), not later than 90 days after the completion of the consultation process; except that, in the case of any agency action involving a permit or license applicant, such application shall be submitted not later than 90 days after the date on which the Federal agency concerned takes final agency action with respect to the issuance of the permit or license. For purposes of the preceding sentence, the term "final agency action" means (i) a disposition by an agency with respect to the issuance of a permit or license that is subject to administrative review, whether or not such disposition is subject to judicial review; or (ii) if administrative review is sought with respect to such disposition, the decision resulting after such review. Such application shall set forth the reasons why the exemption applicant considers that the agency action meets the requirements for an exemption under this subsection.

(B) Upon receipt of an application for exemption for an agency action under paragraph (1), the Secretary shall promptly (i) notify the Governor of each affected State, if any, as determined by the Secretary, and request the Governors so notified to recommend individuals to be appointed to the Endangered Species Committee for consideration of such application; and (ii) publish notice of receipt of the application in the Federal Register, including a summary of the information contained in the application and a description of the agency action with respect to which the application for exemption has been filed.

(3) The Secretary shall within 20 days after the receipt of an application for exemption, or within such other period of time as is mutually agreeable to the exemption applicant and the Secretary—

(A) determine that the Federal agency concerned and the exemption applicant have—

(i) carried out the consultation responsibilities described in subsection (a) in good faith and made a reasonable and responsible effort to develop and

fairly consider modifications or reasonable and prudent alternatives to the proposed agency action which would not violate subsection (a)(2);

(ii) conducted any biological assessment required by subsection (c); and

(iii) to the extent determinable within the time provided herein, refrained from making any irreversible or irretrievable commitment of resources prohibited by subsection (d); or

(B) deny the application for exemption because the Federal agency concerned or the exemption applicant have not met the requirements set forth in subparagraph (A)(i), (ii), and (iii).

The denial of an application under subparagraph (B) shall be considered final agency action for purposes of chapter 7 of title 5, United States Code.

(4) If the Secretary determines that the Federal agency concerned and the exemption applicant have met the requirements set forth in paragraph (3)(A)(i), (ii), and (iii) he shall, in consultation with the Members of the Committee, hold a hearing on the application for exemption in accordance with sections 554, 555, and 556 (other than subsection (b)(1) and (2) thereof) of title 5, United States Code, and prepare the report to be submitted pursuant to paragraph (5).

(5) Within 140 days after making the determinations under paragraph (3) or within such other period of time as is mutually agreeable to the exemption applicant and the Secretary, the Secretary shall submit to the Committee a report discussing—

(A) the availability of reasonable and prudent alternatives to the agency action, and the nature and extent of the benefits of the agency action and of alternative courses of action consistent with conserving the species or the critical habitat;

(B) a summary of the evidence concerning whether or not the agency action is in the public interest and is of national or regional significance;

(C) appropriate reasonable mitigation and enhancement measures which should be considered by the Committee; and

(D) whether the Federal agency concerned and the exemption applicant refrained from making any irreversible or irretrievable commitment of resources prohibited by subsection (d).

(6) To the extent practicable within the time required for action under subsection (g) of this section, and except to the extent inconsistent with the requirements of this section, the consideration of any application for an exemption under this section and the conduct of any hearing under this subsection shall be in accordance with sections 554, 555, and 556 (other than subsection (b)(3) of section 556) of title 5, United States Code.

(7) Upon request of the Secretary, the head of any Federal agency is authorized to detail, on a nonreimbursable basis, any of the personnel of such agency to the Secretary to assist him in carrying out his duties under this section.

(8) All meetings and records resulting from activities pursuant to this subsection shall be open to the public.

(h) EXEMPTION.—(1) The Committee shall make a final determination whether or not to grant an exemption within 30 days after receiving the report of the Secretary pursuant to subsection (g)(5). The Committee shall grant an exemption from the requirements of subsection (a)(2) for an agency action if, by a vote of not less than five of its members voting in person—

(A) it determines on the record, based on the report of the Secretary, the

record of the hearing held under subsection (g)(4) and on such other testimony or evidence as it may receive, that—

(i) there are no reasonable and prudent alternatives to the agency action;

(ii) the benefits of such action clearly outweigh the benefits of alternative courses of action consistent with conserving the species or its critical habitat, and such action is in the public interest;

(iii) the action is of regional or national significance; and

(iv) neither the Federal agency concerned nor the exemption applicant made any irreversible or irretrievable commitment of resources prohibited by subsection (d); and

(B) it establishes such reasonable mitigation and enhancement measures, including, but not limited to, live propagation, transplantation, and habitat acquisition and improvement, as are necessary and appropriate to minimize the adverse effects of the agency action upon the endangered species, threatened species, or critical habitat concerned.

Any final determination by the Committee under this subsection shall be considered final agency action for purposes of chapter 7 of title 5 of the United States Code.

(2)(A) Except as provided in subparagraph (B), an exemption for an agency action granted under paragraph (1) shall constitute a permanent exemption with respect to all endangered or threatened species for the purposes of completing such agency action—

(i) regardless whether the species was identified in the biological assessment; and

(ii) only if a biological assessment has been conducted under subsection (c) with respect to such agency action.

(B) An exemption shall be permanent under subparagraph (A) unless—

(i) the Secretary finds, based on the best scientific and commercial data available, that such exemption would result in the extinction of a species that was not the subject of consultation under subsection (a)(2) or was not identified in any biological assessment conducted under subsection (c), and

(ii) the Committee determines within 60 days after the date of the Secretary's finding that the exemption should not be permanent.

If the Secretary makes a finding described in clause (i), the Committee shall meet with respect to the matter within 30 days after the date of the finding.

(i) Review by Secretary of State.—Notwithstanding any other provision of this Act, the Committee shall be prohibited from considering for exemption any application made to it, if the Secretary of State, after a review of the proposed agency action and its potential implications, and after hearing, certifies, in writing, to the Committee within 60 days of any application made under this section that the granting of any such exemption and the carrying out of such action would be in violation of an international treaty obligation or other international obligation of the United States. The Secretary of State shall, at the time of such certification, publish a copy thereof in the Federal Register.

(j) Notwithstanding any other provision of this Act, the Committee shall grant an exemption for any agency action if the Secretary of Defense finds that such exemption is necessary for reasons of national security.

(k) Special Provisions.—An exemption decision by the Committee under this section shall not be a major Federal action for purposes of the National Environ-

mental Policy Act of 1969 (42 U.S.C. 4321 et seq.): *Provided,* That an environmental impact statement which discusses the impacts upon endangered species or threatened species or their critical habitats shall have been previously prepared with respect to any agency action exempted by such order.

(l) COMMITTEE ORDERS.—(1) If the Committee determines under subsection (h) that an exemption should be granted with respect to any agency action, the Committee shall issue an order granting the exemption and specifying the mitigation and enhancement measures established pursuant to subsection (h) which shall be carried out and paid for by the exemption applicant in implementing the agency action. All necessary mitigation and enhancement measures shall be authorized prior to the implementing of the agency action and funded concurrently with all other project features.

(2) The applicant receiving such exemption shall include the costs of such mitigation and enhancement measures within the overall costs of continuing the proposed action. Notwithstanding the preceding sentence the costs of such measures shall not be treated as project costs for the purpose of computing benefit-cost or other ratios for the proposed action. Any applicant may request the Secretary to carry out such mitigation and enhancement measures. The costs incurred by the Secretary in carrying out any such measures shall be paid by the applicant receiving the exemption. No later than one year after the granting of an exemption, the exemption applicant shall submit to the Council on Environmental Quality a report describing its compliance with the mitigation and enhancement measures prescribed by this section. Such a report shall be submitted annually until all such mitigation and enhancement measures have been completed. Notice of the public availability of such reports shall be published in the Federal Register by the Council on Environmental Quality.

(m) NOTICE.—The 60-day notice requirement of section 11(g) of this Act shall not apply with respect to review of any final determination of the Committee under subsection (h) of this section granting an exemption from the requirements of subsection (a)(2) of this section.

(n) JUDICIAL REVIEW. —Any person, as defined by section 3(13) of this Act, may obtain judicial review, under chapter 7 of title 5 of the United States Code, of any decision of the Endangered Species Committee under subsection (h) in the United States Court of Appeals for (1) any circuit wherein the agency action concerned will be, or is being, carried out, or (2) in any case in which the agency action will be, or is being, carried out outside of any circuit, the District of Columbia, by filing in such court within 90 days after the date of issuance of the decision, a written petition for review. A copy of such petition shall be transmitted by the clerk of the court to the Committee and the Committee shall file in the court the record in the proceeding, as provided in section 2112, of title 28, United States Code. Attorneys designated by the Endangered Species Committee may appear for, and represent the Committee in any action for review under this subsection.

(o) Notwithstanding sections 4(d) and 9(a)(1)(B) and (C), sections 101 and 102 of the Marine Mammal Protection Act of 1972, or any regulation promulgated to implement any such section—

(1) any action for which an exemption is granted under subsection (h) shall not be considered to be a taking of any endangered species or threatened species with respect to any activity which is necessary to carry out such action; and

(2) any taking that is in compliance with the terms and conditions specified in

a written statement provided under subsection (b)(4)(iv) shall not be considered to be a prohibited taking of the species concerned.

(p) EXEMPTIONS IN PRESIDENTIALLY DECLARED DISASTER AREAS.—In any area which has been declared by the President to be a major disaster area under the Disaster Relief and Emergency Assistance Act, the President is authorized to make the determinations required by subsections (g) and (h) of this section for any project for the repair or replacement of a public facility substantially as it existed prior to the disaster under section 405 or 406 of the Disaster Relief and Emergency Assistance Act, and which the President determines (1) is necessary to prevent the recurrence of such a natural disaster and to reduce the potential loss of human life, and (2) to involve an emergency situation which does not allow the ordinary procedures of this section to be followed. Notwithstanding any other provision of this section, the Committee shall accept the determinations of the President under this subsection.

INTERNATIONAL COOPERATION

SEC. 8. (a) FINANCIAL ASSISTANCE.—As a demonstration of the commitment of the United States to the worldwide protection of endangered species and threatened species, the President may, subject to the provisions of section 1415 of the Supplemental Appropriation Act, 1953 (31 U.S.C. 724), use foreign currencies accruing to the United States Government under the Agricultural Trade Development and Assistance Act of 1954 or any other law to provide to any foreign country (with its consent) assistance in the development and management of programs in that country which the Secretary determines to be necessary or useful for the conservation of any endangered species or threatened species listed by the Secretary pursuant to section 4 of this Act. The President shall provide assistance (which includes, but is not limited to, the acquisition, by lease or otherwise, of lands, waters, or interests therein) to foreign countries under this section under such terms and conditions as he deems appropriate. Whenever foreign currencies are available for the provision of assistance under this section, such currencies shall be used in preference to funds appropriated under the authority of section 15 of this Act.

(b) ENCOURAGEMENT OF FOREIGN PROGRAMS.—In order to carry out further the provisions of this Act, the Secretary, through the Secretary of State, shall encourage—

(1) foreign countries to provide for the conservation of fish or wildlife and plants including endangered species and threatened species listed pursuant to section 4 of this Act;

(2) the entering into of bilateral or multilateral agreements with foreign countries to provide for such conservation; and

(3) foreign persons who directly or indirectly take fish or wildlife or plants in foreign countries or on the high seas for importation into the United States for commercial or other purposes to develop and carry out with such assistance as he may provide, conservation practices designed to enhance such fish or wildlife or plants and their habitat.

(c) PERSONNEL.—After consultation with the Secretary of State, the Secretary may—

(1) assign or otherwise make available any officer or employee of his department for the purpose of cooperating with foreign countries and international organizations in developing personnel resources and programs which promote the conservation of fish or wildlife or plants; and

(2) conduct or provide financial assistance for the educational training of foreign personnel, in this country or abroad, in fish, wildlife, or plant management, research and law enforcement and to render professional assistance abroad in such matters.

(d) INVESTIGATIONS.—After consultation with the Secretary of State and the Secretary of the Treasury, as appropriate, the Secretary may conduct or cause to be conducted such law enforcement investigations and research abroad as he deems necessary to carry out the purposes of this Act.

CONVENTION IMPLEMENTATION

SEC. 8A. (a) MANAGEMENT AUTHORITY AND SCIENTIFIC AUTHORITY.—The Secretary of the Interior (hereinafter in this section referred to as the "Secretary") is designated as the Management Authority and the Scientific Authority for purposes of the Convention and the respective functions of each such Authority shall be carried out through the United States Fish and Wildlife Service.

(b) MANAGEMENT AUTHORITY FUNCTIONS.—The Secretary shall do all things necessary and appropriate to carry out the functions of the Management Authority under the Convention.

(c) SCIENTIFIC AUTHORITY FUNCTIONS.—(1) The Secretary shall do all things necessary and appropriate to carry out the functions of the Scientific Authority under the Convention.

(2) The Secretary shall base the determinations and advice given by him under Article IV of the Convention with respect to wildlife upon the best available biological information derived from professionally accepted wildlife management practices; but is not required to make, or require any State to make, estimates of population size in making such determinations or giving such advice.

(d) RESERVATIONS BY THE UNITED STATES UNDER CONVENTION.—If the United States votes against including any species in Appendix I or II of the Convention and does not enter a reservation pursuant to paragraph (3) of Article XV of the Convention with respect to that species, the Secretary of State, before the 90th day after the last day on which such a reservation could be entered, shall submit to the Committee on Merchant Marine and Fisheries of the House of Representatives, and to the Committee on the Environment and Public Works of the Senate, a written report setting forth the reasons why such a reservation was not entered.

(e) WILDLIFE PRESERVATION IN WESTERN HEMISPHERE.—(1) The Secretary of the Interior (hereinafter in this subsection referred to as the "Secretary"), in cooperation with the Secretary of State, shall act on behalf of, and represent, the United States in all regards as required by the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (56 Stat. 1354, T.S. 982, hereinafter in this subsection referred to as the "Western Convention"). In the discharge of these responsibilities, the Secretary and the Secretary of State shall consult with the Secretary of Agriculture, the Secretary of Commerce, and the heads of other agencies with respect to matters relating to or affecting their areas of responsibility.

(2) The Secretary and the Secretary of State shall, in cooperation with the contracting parties to the Western Convention and, to the extent feasible and appropriate, with the participation of State agencies, take such steps as are necessary to implement the Western Convention. Such steps shall include, but not be limited to—

(A) cooperation with contracting parties and international organizations for

the purpose of developing personnel resources and programs that will facilitate implementation of the Western Convention.

(B) identification of those species of birds that migrate between the United States and other contracting parties, and the habitats upon which those species depend, and the implementation of cooperative measures to ensure that such species will not become endangered or threatened; and

(C) identification of measures that are necessary and appropriate to implement those provisions of the Western Convention which address the protection of wild plants.

(3) No later than September 30, 1985, the Secretary and the Secretary of State shall submit a report to Congress describing those steps taken in accordance with the requirements of this subsection and identifying the principal remaining actions yet necessary for comprehensive and effective implementation of the Western Convention.

(4) The provisions of this subsection shall not be construed as affecting the authority, jurisdiction, or responsibility of the several States to manage, control, or regulate resident fish or wildlife under State law or regulations.

PROHIBITED ACTS

SEC. 9. (a) GENERAL.—(1) Except as provided in sections 6(g)(2) and 10 of this Act, with respect to any endangered species of fish or wildlife listed pursuant to section 4 of this Act it is unlawful for any person subject to the jurisdiction of the United States to—

(A) import any such species into, or export any such species from the United States;

(B) take any such species within the United States or the territorial sea of the United States;

(C) take any such species upon the high seas;

(D) possess, sell, deliver, carry, transport, or ship, by any means whatsoever, any such species taken in violation of subparagraphs (B) and (C);

(E) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species;

(F) sell or offer for sale in interstate or foreign commerce any such species; or

(G) violate any regulation pertaining to such species or to any threatened species of fish or wildlife listed pursuant to section 4 of this Act and promulgated by the Secretary pursuant to authority provided by this Act.

(2) Except as provided in sections 6(g)(2) and 10 of this Act, with respect to any endangered species of plants listed pursuant to section 4 of this Act, it is unlawful for any person subject to the jurisdiction of the United States to—

(A) import any such species into, or export any such species from, the United States;

(B) remove and reduce to possession any such species from areas under Federal jurisdiction; maliciously damage or destroy any such species on any such area; or remove, cut, dig up, or damage or destroy any such species on any other area in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law;

(C) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species;

(D) sell or offer for sale in interstate or foreign commerce any such species; or

(E) violate any regulation pertaining to such species or to any threatened species of plants listed pursuant to section 4 of this Act and promulgated by the Secretary pursuant to authority provided by this Act.

(b)(1) SPECIES HELD IN CAPTIVITY OR CONTROLLED ENVIRONMENT.—The provisions of subsections (a)(1)(A) and (a)(1)(G) of this section shall not apply to any fish or wildlife which was held in captivity or in a controlled environment on (A) December 28, 1973, or (B) the date of the publication in the Federal Register of a final regulation adding such fish or wildlife species to any list published pursuant to subsection (c) of section 4 of this Act: *Provided*, That such holding and any subsequent holding or use of the fish or wildlife was not in the course of a commercial activity. With respect to any act prohibited by subsections (a)(1)(A) and (a)(1)(G) of this section which occurs after a period of 180 days from (i) December 28, 1973, or (ii) the date of publication in the Federal Register of a final regulation adding such fish or wildlife species to any list published pursuant to subsection (c) of section 4 of this Act, there shall be a rebuttable presumption that the fish or wildlife involved in such act is not entitled to the exemption contained in this subsection.

(2)(A) The provisions of subsection (a)(1) shall not apply to—

(i) any raptor legally held in captivity or in a controlled environment on the effective date of the Endangered Species Act Amendments of 1978; or

(ii) any progeny of any raptor described in clause (i); until such time as any such raptor or progeny is intentionally returned to a wild state.

(B) Any person holding any raptor or progeny described in subparagraph (A) must be able to demonstrate that the raptor or progeny does, in fact, qualify under the provisions of this paragraph, and shall maintain and submit to the Secretary, on request, such inventories, documentation, and records as the Secretary may by regulation require as being reasonably appropriate to carry out the purposes of this paragraph. Such requirements shall not unnecessarily duplicate the requirements of other rules and regulations promulgated by the Secretary.

(c) VIOLATION OF CONVENTION.—(1) It is unlawful for any person subject to the jurisdiction of the United States to engage in any trade in any specimens contrary to the provisions of the Convention, or to possess any specimens traded contrary to the provisions of the Convention, including the definitions of terms in article I thereof.

(2) Any importation into the United States of fish or wildlife shall, if —

(A) such fish or wildlife is not an endangered species listed pursuant to section 4 of this Act but is listed in Appendix II to the Convention,

(B) the taking and exportation of such fish or wildlife is not contrary to the provisions of the Convention and all other applicable requirements of the Convention have been satisfied,

(C) the applicable requirements of subsections (d), (e), and (f) of this section have been satisfied, and

(D) such importation is not made in the course of a commercial activity, be presumed to be an importation not in violation of any provision of this Act or any regulation issued pursuant to this Act.

(d) IMPORTS AND EXPORTS.—

(1) In general.—It is unlawful for any person, without first having obtained permission from the Secretary, to engage in business—

(A) as an importer or exporter of fish or wildlife (other than shellfish and fishery products which (i) are not listed pursuant to section 4 of this Act as endangered species or threatened species, and (ii) are imported for purposes of human or animal consumption or taken in waters under the jurisdiction of the United States or on the high seas for recreational purposes) or plants; or

(B) as an importer or exporter of any amount of raw or worked African elephant ivory.

(2) Requirements.—Any person required to obtain permission under paragraph (1) of this subsection shall—

(A) keep such records as will fully and correctly disclose each importation or exportation of fish, wildlife, plants, or African elephant ivory made by him and the subsequent disposition made by him with respect to such fish, wildlife, plants, or ivory;

(B) at all reasonable times upon notice by a duly authorized representative of the Secretary, afford such representative access to his place of business, an opportunity to examine his inventory of imported fish, wildlife, plants, or African elephant ivory and the records required to be kept under subparagraph (A) of this paragraph, and to copy such records; and

(C) file such reports as the Secretary may require.

(3) Regulations.—The Secretary shall prescribe such regulations as are necessary and appropriate to carry out the purposes of this subsection.

(4) Restriction on Consideration of Value or Amount of African Elephant Ivory Imported or Exported.—In granting permission under this subsection for importation or exportation of African elephant ivory, the Secretary shall not vary the requirements for obtaining such permission on the basis of the value or amount of ivory imported or exported under such permission.

(e) Reports.—It is unlawful for any person importing or exporting fish or wildlife (other than shellfish and fishery products which (1) are not listed pursuant to section 4 of this Act as endangered or threatened species, and (2) are imported for purposes of human or animal consumption or taken in waters under the jurisdiction of the United States or on the high seas for recreational purposes) or plants to fail to file any declaration or report as the Secretary deems necessary to facilitate enforcement of this Act or to meet the obligations of the Convention.

(f) Designation of Ports.— (1) It is unlawful for any person subject to the jurisdiction of the United States to import into or export from the United States any fish or wildlife (other than shellfish and fishery products which (A) are not listed pursuant to section 4 of this Act as endangered species or threatened species, and (B) are imported for purposes of human or animal consumption or taken in waters under the jurisdiction of the United States or on the high seas for recreational purposes) or plants, except at a port or ports designated by the Secretary of the Interior. For the purpose of facilitating enforcement of this Act and reducing the costs thereof, the Secretary of the Interior, with approval of the Secretary of the Treasury and after notice and opportunity for public hearing, may, by regulation, designate ports and change such designations. The Secretary of the Interior, under such terms and conditions as he may prescribe, may permit the importation or exportation at nondesignated ports in the interest of the health or safety of the fish or wildlife or plants, or for other

reasons if, in his discretion, he deems it appropriate and consistent with the purpose of this subsection.

(2) Any port designated by the Secretary of the Interior under the authority of section 4(d) of the Act of December 5, 1969 (16 U.S.C. 666cc-4(d)), shall, if such designation is in effect on the day before the date of the enactment of this Act, be deemed to be a port designated by the Secretary under paragraph (1) of this subsection until such time as the Secretary otherwise provides.

(g) VIOLATIONS.—It is unlawful for any person subject to the jurisdiction of the United States to attempt to commit, solicit another to commit, or cause to be committed, any offense defined in this section.

EXCEPTIONS

SEC. 10. (a) PERMITS.—(1) The Secretary may permit, under such terms and conditions as he shall prescribe—

(A) any act otherwise prohibited by section 9 for scientific purposes or to enhance the propagation or survival of the affected species, including, but not limited to, acts necessary for the establishment and maintenance of experimental populations pursuant to subsection (j); or

(B) any taking otherwise prohibited by section 9(a)(1)(B) if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

(2)(A) No permit may be issued by the Secretary authorizing any taking referred to in paragraph (1)(B) unless the applicant therefor submits to the Secretary a conservation plan that specifies—

(i) the impact which will likely result from such taking;

(ii) what steps the applicant will take to minimize and mitigate such impacts, and the funding that will be available to implement such steps;

(iii) what alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized; and

(iv) such other measures that the Secretary may require as being necessary or appropriate for purposes of the plan.

(B) If the Secretary finds, after opportunity for public comment, with respect to a permit application and the related conservation plan that—

(i) the taking will be incidental;

(ii) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking;

(iii) the applicant will ensure that adequate funding for the plan will be provided;

(iv) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and

(v) the measures, if any, required under subparagraph (A)(iv) will be met;

and he has received such other assurances as he may require that the plan will be implemented, the Secretary shall issue the permit. The permit shall contain such terms and conditions as the Secretary deems necessary or appropriate to carry out the purposes of this paragraph, including, but not limited to, such reporting requirements as the Secretary deems necessary for determining whether such terms and conditions are being complied with.

(C) The Secretary shall revoke a permit issued under this paragraph if he finds that the permittee is not complying with the terms and conditions of the permit.

(b) HARDSHIP EXEMPTIONS.—(1) If any person enters into a contract with respect to a species of fish or wildlife or plant before the date of the publication in the Federal Register of notice of consideration of that species as an endangered species and the subsequent listing of that species as an endangered species pursuant to section 4 of this Act will cause undue economic hardship to such person under the contract, the Secretary, in order to minimize such hardship, may exempt such person from the application of section 9(a) of this Act to the extent the Secretary deems appropriate if such person applies to him for such exemption and includes with such application such information as the Secretary may require to prove such hardship; except that (A) no such exemption shall be for a duration of more than one year from the date of publication in the Federal Register of notice of consideration of the species concerned, or shall apply to a quantity of fish or wildlife or plants in excess of that specified by the Secretary; (B) the one-year period for those species of fish or wildlife listed by the Secretary as endangered prior to the effective date of this Act shall expire in accordance with the terms of section 3 of the Act of December 5, 1969 (83 Stat. 275); and (C) no such exemption may be granted for the importation or exportation of a specimen listed in Appendix I of the Convention which is to be used in a commercial activity.

(2) As used in this subsection, the term "undue economic hardship" shall include, but not be limited to:

(A) substantial economic loss resulting from inability caused by this Act to perform contracts with respect to species of fish and wildlife entered into prior to the date of publication in the Federal Register of a notice of consideration of such species as an endangered species;

(B) substantial economic loss to persons who, for the year prior to the notice of consideration of such species as an endangered species, derived a substantial portion of their income from the lawful taking of any listed species, which taking would be made unlawful under this Act; or

(C) curtailment of subsistence taking made unlawful under this Act by persons (i) not reasonably able to secure other sources of subsistence; and (ii) dependent to a substantial extent upon hunting and fishing for subsistence; and (iii) who must engage in such curtailed taking for subsistence purposes.

(3) The Secretary may make further requirements for a showing of undue economic hardship as he deems fit. Exceptions granted under this section may be limited by the Secretary in his discretion as to time, area, or other factor of applicability.

(c) NOTICE AND REVIEW.—The Secretary shall publish notice in the Federal Register of each application for an exemption or permit which is made under this section. Each notice shall invite the submission from interested parties, within thirty days after the date of the notice, of written data, views, or arguments with respect to the application; except that such thirty-day period may be waived by the Secretary in an emergency situation where the health or life of an endangered animal is threatened and no reasonable alternative is available to the applicant, but notice of any such waiver shall be published by the Secretary in the Federal Register within ten days following the issuance of the exemption or permit. Information received by the Secretary as a part of any application shall be available to the public as a matter of public record at every stage of the proceeding.

(d) Permit and Exemption Policy.—The Secretary may grant exceptions under subsections (a)(1)(A) and (b) of this section only if he finds and publishes his finding in the Federal Register that (1) such exceptions were applied for in good faith, (2) if granted and exercised will not operate to the disadvantage of such endangered species, and (3) will be consistent with the purposes and policy set forth in section 2 of this Act.

(e) Alaska Natives.—(1) Except as provided in paragraph (4) of this subsection the provisions of this Act shall not apply with respect to the taking of any endangered species or threatened species, or the importation of any such species taken pursuant to this section, by—

(A) any Indian, Aleut, or Eskimo who is an Alaskan Native who resides in Alaska; or

(B) any non-native permanent resident of an Alaskan native village;

if such taking is primarily for subsistence purposes. Non-edible byproducts of species taken pursuant to this section may be sold in interstate commerce when made into authentic native articles of handicrafts and clothing; except that the provisions of this subsection shall not apply to any non-native resident of an Alaskan native village found by the Secretary to be not primarily dependent upon the taking of fish and wildlife for consumption or for the creation and sale of authentic native articles of handicrafts and clothing.

(2) Any taking under this subsection may not be accomplished in a wasteful manner.

(3) As used in this subsection—

(i) The term "subsistence" includes selling any edible portion of fish or wildlife in native villages and towns in Alaska for native consumption within native villages or towns; and

(ii) The term "authentic native articles of handicrafts and clothing" means items composed wholly or in some significant respect of natural materials, and which are produced, decorated, or fashioned in the exercise of traditional native handicrafts without the use of pantographs, multiple carvers, or other mass copying devices. Traditional native handicrafts include, but are not limited to, weaving, carving, stitching, sewing, lacing, beading, drawing, and painting.

(4) Notwithstanding the provisions of paragraph (1) of this subsection, whenever the Secretary determines that any species of fish or wildlife which is subject to taking under the provisions of this subsection is an endangered species or threatened species, and that such taking materially and negatively affects the threatened or endangered species, he may prescribe regulations upon the taking of such species by any such Indian, Aleut, Eskimo, or non-Native Alaskan resident of an Alaskan native village. Such regulations may be established with reference to species, geographical description of the area included, the season for taking, or any other factors related to the reason for establishing such regulations and consistent with the policy of this Act. Such regulations shall be prescribed after a notice and hearings in the affected judicial districts of Alaska and as otherwise required by section 103 of the Marine Mammal Protection Act of 1972, and shall be removed as soon as the Secretary determines that the need for their impositions has disappeared.

(f)(1) As used in this subsection—

(A) The term "pre-Act endangered species part" means—

(i) any sperm whale oil, including derivatives thereof, which was lawfully

held within the United States on December 28, 1973, in the course of a commercial activity; or

(ii) any finished scrimshaw product, if such product or the raw material for such product was lawfully held within the United States on December 28, 1973, in the course of a commercial activity.

(B) The term "scrimshaw product" means any art form which involves the substantial etching or engraving of designs upon, or the substantial carving of figures, patterns, or designs from, any bone or tooth of any marine mammal of the order Cetacea. For purposes of this subsection, polishing or the adding of minor superficial markings does not constitute substantial etching, engraving, or carving.

(2) The Secretary, pursuant to the provisions of this subsection, may exempt, if such exemption is not in violation of the Convention, any pre-Act endangered species part from one or more of the following prohibitions:

(A) The prohibition on exportation from the United States set forth in section 9(a)(1)(A) of this Act.

(B) Any prohibition set forth in section 9(a)(1)(E) or (F) of this Act.

(3) Any person seeking an exemption described in paragraph (2) of this subsection shall make application therefor to the Secretary in such form and manner as he shall prescribe, but no such application may be considered by the Secretary unless the application—

(A) is received by the Secretary before the close of the one-year period beginning on the date on which regulations promulgated by the Secretary to carry out this subsection first take effect;

(B) contains a complete and detailed inventory of all pre-Act endangered species parts for which the applicant seeks exemption;

(C) is accompanied by such documentation as the Secretary may require to prove that any endangered species part or product claimed by the applicant to be a pre-Act endangered species part is in fact such a part; and

(D) contains such other information as the Secretary deems necessary and appropriate to carry out the purposes of this subsection.

(4) If the Secretary approves any application for exemption made under this subsection, he shall issue to the applicant a certificate of exemption which shall specify—

(A) any prohibition in section 9(a) of this Act which is exempted;

(B) the pre-Act endangered species parts to which the exemption applies;

(C) the period of time during which the exemption is in effect, but no exemption made under this subsection shall have force and effect after the close of the three-year period beginning on the date of issuance of the certificate unless such exemption is renewed under paragraph (8); and

(D) any term or condition prescribed pursuant to paragraph (5)(A) or (B), or both, which the Secretary deems necessary or appropriate.

(5) The Secretary shall prescribe such regulations as he deems necessary and appropriate to carry out the purposes of this subsection. Such regulations may set forth—

(A) terms and conditions which may be imposed on applicants for exemptions under this subsection (including, but not limited to, requirements that applicants register inventories, keep complete sales records, permit duly authorized agents of the Secretary to inspect such inventories and records, and periodically file appropriate reports with the Secretary); and

(B) terms and conditions which may be imposed on any subsequent purchaser of any pre-Act endangered species part covered by an exemption granted under this subsection;

to insure that any such part so exempted is adequately accounted for and not disposed of contrary to the provisions of this Act. No regulation prescribed by the Secretary to carry out the purposes of this subsection shall be subject to section 4(f)(2)(A)(i) of this Act.

(6)(A) Any contract for the sale of pre-Act endangered species parts which is entered into by the Administrator of General Services prior to the effective date of this subsection and pursuant to the notice published in the Federal Register on January 9, 1973, shall not be rendered invalid by virtue of the fact that fulfillment of such contract may be prohibited under section 9(a)(1)(F).

(B) In the event that this paragraph is held invalid, the validity of the remainder of the Act, including the remainder of this subsection, shall not be affected.

(7) Nothing in this subsection shall be construed to—

(A) exonerate any person from any act committed in violation of paragraphs (1)(A), (1)(E), or (1)(F) of section 9(a) prior to the date of enactment of this subsection; or

(B) immunize any person from prosecution for any such act.

(8)(A)(i) Any valid certificate of exemption which was renewed after October 13, 1982, and was in effect on March 31, 1988, shall be deemed to be renewed for a six-month period beginning on the date of enactment of the Endangered Species Act Amendments of 1988. Any person holding such a certificate may apply to the Secretary for one additional renewal of such certificate for a period not to exceed 5 years beginning on the date of such enactment.

(B) If the Secretary approves any application for renewal of an exemption under this paragraph, he shall issue to the applicant a certificate of renewal of such exemption which shall provide that all terms, conditions, prohibitions, and other regulations made applicable by the previous certificate shall remain in effect during the period of the renewal.

(C) No exemption or renewal of such exemption made under this subsection shall have force and effect after the expiration date of the certificate of renewal of such exemption issued under this paragraph.

(D) No person may, after January 31, 1984, sell or offer for sale in interstate or foreign commerce, any pre-Act finished scrimshaw product unless such person holds a valid certificate of exemption issued by the Secretary under this subsection, and unless such product or the raw material for such product was held by such person on October 13, 1982.

(g) In connection with any action alleging a violation of section 9, any person claiming the benefit of any exemption or permit under this Act shall have the burden of proving that the exemption or permit is applicable, has been granted, and was valid and in force at the time of the alleged violation.

(h) Certain Antique Articles.—(1) Sections 4(d), 9(a), and 9(c) do not apply to any article which—

(A) is not less than 100 years of age;

(B) is composed in whole or in part of any endangered species or threatened species listed under section 4;

(C) has not been repaired or modified with any part of any such species on or after the date of the enactment of this Act; and

(D) is entered at a port designated under paragraph (3).

(2) Any person who wishes to import an article under the exception provided by this subsection shall submit to the customs officer concerned at the time of entry of the article such documentation as the Secretary of the Treasury, after consultation with the Secretary of the Interior, shall by regulation require as being necessary to establish that the article meets the requirements set forth in paragraph (1)(A), (B), and (C).

(3) The Secretary of the Treasury, after consultation with the Secretary of the Interior, shall designate one port within each customs region at which articles described in paragraph (1)(A), (B), and (C) must be entered into the customs territory of the United States.

(4) Any person who imported, after December 27, 1973, and on or before the date of the enactment of the Endangered Species Act Amendments of 1978, any article described in paragraph (1) which—

(A) was not repaired or modified after the date of importation with any part of any endangered species or threatened species listed under section 4;

(B) was forfeited to the United States before such date of the enactment, or is subject to forfeiture to the United States on such date of enactment, pursuant to the assessment of a civil penalty under section 11; and

(C) is in the custody of the United States on such date of enactment;

may, before the close of the one-year period beginning on such date of enactment, make application to the Secretary for return of the article. Application shall be made in such form and manner, and contain such documentation, as the Secretary prescribes. If on the basis of any such application which is timely filed, the Secretary is satisfied that the requirements of this paragraph are met with respect to the article concerned, the Secretary shall return the article to the applicant and the importation of such article shall, on and after the date of return, be deemed to be a lawful importation under this Act.

(i) Noncommercial Transshipments.—Any importation into the United States of fish or wildlife shall, if—

(1) such fish or wildlife was lawfully taken and exported from the country of origin and country of reexport, if any;

(2) such fish or wildlife is in transit or transshipment through any place subject to the jurisdiction of the United States en route to a country where such fish or wildlife may be lawfully imported and received;

(3) the exporter or owner of such fish or wildlife gave explicit instructions not to ship such fish or wildlife through any place subject to the jurisdiction of the United States, or did all that could have reasonably been done to prevent transshipment, and the circumstances leading to the transshipment were beyond the exporter's or owner's control;

(4) the applicable requirements of the Convention have been satisfied; and

(5) such importation is not made in the course of a commercial activity,

be an importation not in violation of any provision of this Act or any regulation issued pursuant to this Act while such fish or wildlife remains in the control of the United States Customs Service.

(j) Experimental Populations.—(1) For purposes of this subsection, the term "experimental population" means any population (including any offspring arising solely therefrom) authorized by the Secretary for release under paragraph (2), but only when,

and at such times as, the population is wholly separate geographically from nonexperimental populations of the same species.

(2)(A) The Secretary may authorize the release (and the related transportation) of any population (including eggs, propagules, or individuals) of an endangered species or a threatened species outside the current range of such species if the Secretary determines that such release will further the conservation of such species.

(B) Before authorizing the release of any population under subparagraph (A), the Secretary shall by regulation identify the population and determine, on the basis of the best available information, whether or not such population is essential to the continued existence of an endangered species or a threatened species.

(C) For the purposes of this Act, each member of an experimental population shall be treated as a threatened species; except that—

(i) solely for purposes of section 7 (other than subsection (a)(1) thereof), an experimental population determined under subparagraph (B) to be not essential to the continued existence of a species shall be treated, except when it occurs in an area within the National Wildlife Refuge System or the National Park System, as a species proposed to be listed under section 4; and

(ii) critical habitat shall not be designated under this Act for any experimental population determined under subparagraph (B) to be not essential to the continued existence of a species.

(3) The Secretary, with respect to populations of endangered species or threatened species that the Secretary authorized, before the date of the enactment of this subsection, for release in geographical areas separate from the other populations of such species, shall determine by regulation which of such populations are an experimental population for the purposes of this subsection and whether or not each is essential to the continued existence of an endangered species or a threatened species.

PENALTIES AND ENFORCEMENT

SEC. 11. (a) CIVIL PENALTIES.— (1) Any person who knowingly violates, and any person engaged in business as an importer or exporter of fish, wildlife, or plants who violates, any provision of this Act, or any provision of any permit or certificate issued hereunder, or of any regulation issued in order to implement subsection (a)(1)(A), (B), (C), (D), (E), or (F), (a)(2)(A), (B), (C), or (D), (c), (d) (other than regulation relating to recordkeeping or filing of reports), (f) or (g) of section 9 of this Act, may be assessed a civil penalty by the Secretary of not more than $ 25,000 for each violation. Any person who knowingly violates, and any person engaged in business as an importer or exporter of fish, wildlife, or plants who violates, any provision of any other regulation issued under this Act may be assessed a civil penalty by the Secretary of not more than $ 12,000 for each such violation. Any person who otherwise violates any provision of this Act, or any regulation, permit, or certificate issued hereunder, may be assessed a civil penalty by the Secretary of not more than $ 500 for each such violation. No penalty may be assessed under this subsection unless such person is given notice and opportunity for a hearing with respect to such violation. Each violation shall be a separate offense. Any such civil penalty may be remitted or mitigated by the Secretary. Upon any failure to pay a penalty assessed under this subsection, the Secretary may request the Attorney General to institute a civil action in a district court of the United States for any district in which such person is

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Part II

Department of Commerce

National Oceanic and Atmospheric Administration

50 CFR Part 223

Endangered and Threatened Species; Salmon and Steelhead; Final Rules

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 223

[Docket No. 991207324–0148–02; I.D. 081699C]

RIN 0648–AK94

Endangered and Threatened Species; Final Rule Governing Take of 14 Threatened Salmon and Steelhead Evolutionarily Significant Units (ESUs)

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

ACTION: Final rule.

SUMMARY: Under section 4(d) of 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. NMFS now issues a final ESA 4(d) rule adopting regulations necessary and advisable to conserve fourteen listed threatened salmonid ESUs. This final rule applies the prohibitions enumerated in section 9(a)(1) of the ESA to one coho salmon ESU, three chinook salmon ESUs, two chum salmon ESUs, one sockeye salmon ESU and seven steelhead ESUs. NMFS does not find it necessary and advisable to apply the take prohibitions described in section 9(a)(1)(B) and 9(a)(1)(C) to specified categories of activities that contribute to conserving listed salmonids or are governed by a program that adequately limits impacts on listed salmonids. This final rule includes 13 such limits on the application of the ESA section 9(a)(1) take prohibitions.

DATES: Effective September 8, 2000. Applicability dates: In § 223.203 for the Snake River Basin, Lower Columbia River, Middle Columbia River, Upper Willamette River, Central Valley, California, Central California Coast, and South-Central California Coast steelhead ESUs, this final rule is applicable September 8, 2000. In § 223.203 for the Snake River spring/summer, Snake River fall, Puget Sound, Lower Columbia River and Upper Willamette River chinook, Oregon Coast, Central California Coast, and South/Central California Coast coho, Hood Canal summer-run and Columbia River chum, and Ozette Lake sockeye ESUs, this final rule is applicable January 8, 2001.

ADDRESSES: Branch Chief, NMFS, Northwest Region, Protected Resources Division, 525 NE. Oregon St., Suite 500, Portland, OR 97232–2737; Regional Administrator, Northwest Region, 7600 Sand Point Way, NE, BIN C15700, Building 1, Seattle, WA 98115–0070; Assistant Regional Administrator, Protected Resources Division, NMFS, Southwest Region, 501 West Ocean Blvd., Suite 4200, Long Beach, CA 90802-4213; Regional Administrator, NMFS, Southwest Region, 501 West Ocean Blvd., Long Beach, CA 90802–4213; Salmon Coordinator, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910.

FOR FURTHER INFORMATION CONTACT: Garth Griffin at 503-231-2005 or Craig Wingert at 562–980–4021.

Electronic Access

Reference materials regarding this rule can also be obtained from the internet at www.nwr.noaa.gov.

SUPPLEMENTARY INFORMATION:

Background

On August 18, 1997, NMFS published a final rule listing the Snake River Basin (SRB), Central California Coast (CCC), and South/Central California Coast (SCCC) steelhead (*Onchorynchus mykiss*) ESUs as threatened species under the ESA (62 FR 43937). On March 19, 1998, NMFS published a final rule listing the Lower Columbia River (LCR) and Central Valley, California (CVC) steelhead ESUs as threatened species under the ESA (63 FR 13347). On March 25, 1999, NMFS published a final rule listing the Middle Columbia River (MCR) and Upper Willamette River (UWR) steelhead ESUs as threatened (64 FR 14517). Those final listing documents describe the background of the steelhead listing actions and provide summaries of NMFS' conclusions regarding the status of the listed steelhead ESUs. On August 10, 1998 (63 FR 42587), NMFS, on behalf of the Secretary, published a final rule listing the Oregon Coast (OC) ESU of coho salmon (*Oncorhynchus kisutch*, or *O. kisutch*) as threatened. By a final rule published on March 24, 1999 (64 FR 14308), NMFS listed as threatened the Puget Sound (PS), Lower Columbia River (LCR) and Upper Willamette River (UWR) ESUs of west coast chinook salmon (*Oncorhynchus tshawytscha*, or *O. tshawytscha*) in Washington and Oregon. By a final rule published on March 25, 1999 (64 FR 14508), NMFS listed as threatened the Hood Canal Summer-run (HCS) and Columbia River (CR) chum salmon ESUs (*Oncorhynchus keta*, or *O. keta*) in Washington and Oregon. By a final rule published on March 25, 1999 (64 FR 14528), NMFS listed as threatened the Ozette Lake ESU of sockeye salmon (*Oncorhynchus nerka*, or *O. nerka*) in Washington. Those final rule listing notifications describe the background of the listing actions and provide a summary of NMFS' conclusions regarding the status of the threatened coho, chinook, chum, and sockeye salmon ESUs.

Section 4(d) of the ESA provides that whenever a species is listed as threatened, the 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)(1). Those section 9(a)(1) prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take (including harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, 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, without written authorization. It is also illegal under ESA section 9(a)(1) 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 section 9(a)(1) prohibitions or other protective regulations are necessary and advisable is in large part dependent upon the biological status of the species and potential impacts of various activities on the species. These threatened species are likely to become endangered species within the foreseeable future. Their current threatened status cannot be explained by natural cycles in ocean and weather conditions. NMFS has concluded that threatened chinook, coho, chum, sockeye, and steelhead are at risk of extinction primarily because their populations have been reduced by human ''take''. West Coast populations of these salmonids have been depleted by take resulting from harvest, past and ongoing destruction of freshwater and estuarine habitats, hydropower development, hatchery practices, and other causes. ''Factors for Decline: A Supplement to the Notice of Determination for West Coast Steelhead'' (NMFS, 1996) and ''Factors Contributing to the Decline of Chinook Salmon: An Addendum to the 1996 West Coast Steelhead Factors for Decline Report'' (NMFS, 1998)

concludes that all of the factors identified in section 4(a)(1) of the ESA have played some role in the decline of the species. It is necessary and advisable then to apply the ESA section 9(a)(1) prohibitions to these listed ESUs, in order to provide for their conservation.

These listings have created a great deal of interest among states, counties, and others in adjusting their programs that may affect the listed species to ensure they are consistent with salmonid conservation. Although the primary purpose of state, local, and other programs is generally to further some activity other than conserving salmon, such as maintaining roads, controlling development, ensuring clean water or harvesting trees, some entities have adjusted one or more of these programs to protect and conserve listed salmonids. NMFS believes that with appropriate safeguards, many such activities can be specifically tailored to minimize impacts on listed threatened salmonids to an extent that makes additional Federal protections unnecessary for conservation of the listed ESU.

NMFS, therefore, proposes a mechanism whereby entities can be assured that an activity they are conducting or permitting is consistent with ESA requirements and avoids or minimizes the risk of take of listed threatened salmonids. When such a program provides sufficient conservation for listed salmonids, NMFS does not find it necessary and advisable to apply ESA section 9(a)(1) take prohibitions to activities governed by those programs. In those circumstances (see descriptions to follow), additional Federal ESA regulation through imposing the take prohibitions is not necessary and advisable because it would not enhance the conservation of the listed ESUs. In fact, declining to apply take prohibitions to such programs likely will result in greater conservation gains for a listed ESU than would blanket application of section 9(a)(1) prohibitions, through the program itself and by demonstrating to similarly situated entities that practical and realistic salmonid protection measures exist. NMFS will monitor the activities under a program where NMFS has granted a ''limit'' on the application of the ESA take prohibitions for unexpected harm, as well as for harmful activities resulting in take that do not obey the requirements of the limit and, therefore, are subject to NMFS ESA enforcement. 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 listed ESUs.

Substantive Content of Final Regulation

NMFS had previously proposed protective regulations for three of the salmonid ESUs subject to this final rule. When NMFS first proposed the Oregon Coast coho for listing (60 FR 38026, July 25, 1995), it proposed to apply the prohibitions of ESA section 9(a)(1) to that ESU. When NMFS first proposed the LCR and SRB steelhead ESUs for listing (61 FR 41541, August 9, 1996), it also proposed to apply the prohibitions of ESA section 9(a)(1) to those ESUs. These proposed protective regulations, however, were never finalized. NMFS has since proposed application of the section 9(a)(1) prohibitions for seven listed steelhead ESUs (64 FR 73479, December 30, 1999), and seven listed salmonid ESUs (65 FR 170, January 3, 2000). This final rule applies the prohibitions of ESA section 9(a)(1) to all 14 listed ESUs.

NMFS concludes that the prohibitions generally applicable for endangered species are necessary and advisable for conservation of these listed ESUs. Additionally, NMFS determines that section 9(a)(1) prohibitions on listed salmonids in the 14 listed ESUs need not be applied when it results from a specified subset of activities described herein. These are activities that are conducted in a way that contributes to conserving the listed ESUs and where NMFS determines that added protection through Federal regulation is not necessary and advisable for conservation of an ESU. Therefore, NMFS will now apply ESA section 9(a)(1) prohibitions to these 14 threatened salmonid ESUs, but will not apply the take prohibitions to the 13 programs described in this document as meeting that level of protection. Of course, the entity responsible for any habitat-related programs might equally choose to seek an ESA section 10(a)(1)(b) permit, or be required to satisfy ESA section 7 consultation if Federal funding, management or approval is involved. This final rule does not impose restrictions beyond those applied in other sections of the ESA, but provides another option beyond the section 7 and 10 tools to authorize incidental take.

Working with state and local jurisdictions and other resource managers, NMFS has identified 13 programs and criteria for future programs for which it is not necessary and advisable to impose ESA section 9(a)(1) prohibitions because they contribute to conserving the ESU. Under specified conditions and in appropriate geographic areas, these programs and criteria include: (1) activities conducted in accord with ESA incidental take authorization; (2) ongoing scientific research activities, for a period of 6 months from the publication of this final rule; (3) emergency actions related to injured, stranded, or dead salmonids; (4) fishery management activities; (5) hatchery and genetic management programs; (6) activities in compliance with joint tribal/state plans developed within *United States* (U.S.) v. *Washington* or *U.S.* v. *Oregon*; (7) scientific research activities permitted or conducted by the states; (8) state, local, and private habitat restoration activities; (9) properly screened water diversion devices; (10) routine road maintenance activities; (11) certain park pest management activities; (12) certain municipal, residential, commercial, and industrial (MRCI) development and redevelopment activities; and (13) forest management activities on state and private lands within the State of Washington. The language which follows describes each limit. These are programs or criteria for future programs where NMFS will limit the application of the section 9(a)(1) prohibitions. More comprehensive descriptions of each limit and discussions regarding the scientific basis for this final rule are contained in ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000). In the future, NMFS anticipates adding new limits for more activities that are deemed necessary and sufficient for the conservation of the species.

NMFS emphasizes that these limits are not prescriptive regulations. The fact of not being within a limit does not mean that a particular action necessarily violates the ESA or this regulation. Many activities do not affect these species, and thus, need not be included in the 13 limits listed earlier. The limits describe circumstances in which an entity or actor can be certain it is not at risk of violating the take prohibitions or of consequent enforcement actions, because the take prohibitions would not apply to programs or activities within those limits. Jurisdictions, entities, and individuals are encouraged to evaluate their practices and activities to determine the likelihood of take occurring. NMFS can provide ESA coverage through section 4(d) rules, section 10 research and enhancement permits, or incidental take permits; or through section 7 consultations with Federal agencies. If take is likely to occur, then the jurisdiction, entity or individual should modify its practices to avoid take of a threatened species or seek protection from potential ESA

liability through section 7, section 10, or section 4(d) processes.

Jurisdictions, entities, and individuals are not required to seek inclusion in a section 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 an individual limit. Finally, a jurisdiction, entity, or individual may seek to qualify its plans or ordinances for inclusion in a limit by obtaining the 4(d) limit authorization from the appropriate NMFS Regional Administrator (see **ADDRESSES**).

NMFS wishes to continue to work collaboratively with all affected jurisdictions, entities, and individuals to recognize management programs that conserve and meet the biological requirements of salmonids, and to strengthen other programs toward conservation of listed salmonids. This final rule may be amended to add new limits on the take prohibitions, or to amend or delete limits as circumstances warrant.

State, county and local efforts such as Clark, Cowlitz, Kitsap, the Puget Sound Tri-County Initiative in Washington state; and the City of Portland and Clackamas County in Oregon are working with NMFS to make their ordinances and practices fish friendly and to be adopted in future 4(d) rulemaking. NMFS also acknowledges the important progress being made by Metro, the directly-elected regional government in Portland, Oregon. NMFS is enthusiastic about Metro's current planning efforts and encourages its progress in regional planning to address salmonid conservation.

NMFS acknowledges, and is participating in, the State of Washington's Agricultural, Fish, and Water negotiation process currently underway in Washington State. The process currently underway is intended to address the requirements of the ESA and the Clean Water Act (CWA). The negotiations are designed to address agricultural practices and processes including but not limited to: Field Office Technical Guides (FOTGs), Comprehensive Irrigation District Management Plans (CIDMP), Ditch Maintenance Plans (DMPs) and Pesticide Management as needed to comply with ESA and CWA. It is anticipated that completed FOTGs, CIDMPs, DMPs, and Pesticide Management, if acceptable to NMFS, will be included in future ESA 4(d) rulemaking.

NMFS strongly encourages comprehensive conservation planning for programs at the state level. State level conservation programs can be one of the most efficient methods to implement effective conservation practices across the board and achieve comprehensive benefits for listed fish and their habitats. Other examples of these state-based conservation programs include the completed forestry agreement in Washington state; ongoing reviews of Oregon and California forestry practices; and development of coastal states' shoreline management programs. NMFS is working with Washington State Department of Ecology on development of a model shoreline program. Alternatively, a local jurisdiction seeks inclusion in a limitation of the take prohibition by adopting this model program, NMFS expects to address the potential ''take'' issues associated with the shorelines program through an ESA section 7 consultation with the National Ocean Service in the coming months. This may obviate the need for a 4(d) limit for shoreline-related activities under the authority of the Department of Ecology.

Concurrent with this final rule, NMFS is publishing a final rule describing a limit on the section 9(a)(1) prohibitions for actions in accord with any tribal resource management plan that the Secretary has determined will not appreciably reduce the likelihood of survival and recovery of a threatened ESU (published elsewhere in this **Federal Register** issue).

Following is a section entitled ''Notice of Availability'' which lists seven documents referred to in the regulation. The purpose of making these documents available to the public is to inform governmental entities and other interested parties of the technical components NMFS expects to be addressed in programs submitted for its review. These technical documents provide guidance to entities as they consider whether to submit a program for a 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' Viable Salmonid Policy (VSP) paper referenced in the fishery and harvest management limits provides a framework for identifying populations and their status as a component of developing adequate harvest or hatchery management plans. This rule asks that FMEPs and HGMPs ''utilize the concepts of 'viable' and 'critical' salmonid population thresholds, consistent with the concepts contained in the [VSP paper].'' Thus, state fishery agencies preparing such programs are put on notice of the technical analysis needed to support decisions within a program. 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 the 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.

Of the state or local documents referenced in the rules, two (Oregon Department of Transportation's (ODOT) road maintenance program to govern routine maintenance activities and Portland Parks' integrated pest management program) are existing programs already being implemented that NMFS has found adequate and made effective as limits. Those entities, thus, need no further approval for the programs. Other jurisdictions may come within the road maintenance limit if they use the ODOT program or provide other practices found by NMFS to be equivalent or more protective of salmonids. The State of Washington's Forests and Fish Report will not trigger a limit until the Washington Board of Forestry adopts regulations that NMFS finds are at least as protective as the report. Thus, the report indicates a set of conditions that will allow NMFS to approve the limit, but recognizes that the Board may design regulations that are not identical to, but are at least as protective as, the report language.

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 use the mechanisms of the rule to take comment on revisions of any of the referenced state programs. If any of

these documents is 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 the specified 223.203(b) subsection.

Notice of Availability

The following is a list of documents cited in the regulatory text of this final rule. Copies of these documents may be obtained upon request (see **ADDRESSES**).

1. Oregon Department of Transportation (ODOT) Maintenance Management System Water Quality and Habitat Guide (June, 1999).
2. City of Portland, Oregon Parks and Recreation Department Pest Management Program (March 1997) with Waterways Pest Management Policy updated December 1, 1999.
3. State of Washington, Forests and Fish Report (April 29, 1999).
4. Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act (NMFS, 2000a).
5. Juvenile Fish Screen Criteria, National Marine Fisheries Service, Northwest Region, Revised February 16, 1995, with Addendum of May 9, 1996.
6. Fish Screening Criteria for Anadromous Salmonids (January 1997).
7. Viable Salmonid Populations and the Recovery of Evolutionarily Significant Units. (NMFS, 2000b).

Copies of all references, reports, related documents and ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000) are also available upon request (see **ADDRESSES**).

The limits on the take prohibitions 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 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.

Applicability to Specific ESUs

In the regulatory language in this final rule, the limits on applicability of the take prohibitions to a given ESU 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 notice, 50 CFR 223.102 refers to threatened salmonid ESUs through the following designations:

(a) (1) Snake River spring/summer chinook
(a) (2) Snake River fall chinook
(a) (3) Central California Coast coho
(a) (4) Southern Oregon/Northern California Coast coho
(a) (5) Central California Coast steelhead
(a) (6) South-Central California Coast steelhead
(a) (7) Snake River Basin steelhead
(a) (8) Lower Columbia River steelhead
(a) (9) Central Valley, California steelhead
(a) (10) Oregon Coast coho
(a) (12) Hood Canal summer-run chum
(a) (13) Columbia River chum
(a) (14) Upper Willamette River steelhead
(a) (15) Middle Columbia River steelhead
(a) (16) Puget Sound chinook
(a) (17) Lower Columbia River chinook
(a) (18) Upper Willamette River chinook
(a) (19) Ozette Lake sockeye

Summary of Comments in Response to the Proposed Rules

Between January 10, 2000, and February 22, 2000, NMFS held 25 public hearings to solicit comments on the proposed ESA 4(d) rules: 7 in Washington, 8 in Oregon, 3 in Idaho, and 7 in California (64 FR 73479, December 30, 1999; 65 FR 170, January 3, 2000; 65 FR 7346, February 14, 2000; 65 FR 7819, February 16, 2000). During the 65-day public comment period, NMFS received 1,146 written comments on the proposed rules from Federal, state, and local government agencies; Indian tribes; non-governmental organizations; the scientific community; and individuals. In addition, numerous individuals provided oral testimony at the public hearings.

Based on these public hearings and comments, NMFS now issues its final protective regulations for these 14 salmon and steelhead ESUs. The preamble section of this rule refers to the prohibitions of ESA section 9(a)(1). In addition to the commonly referred to take prohibitions of section 9(a)(1)(B) and 9(a)(1)(C), section 9(a)(1), also includes prohibitions on the import, export, sale, delivery, or transport in interstate commerce of endangered species. The public comments NMFS received almost exclusively focused on the section 9 take prohibitions. The following comments and responses, therefore, refer to the ''take'' prohibitions of section 9(a)(1)(B) and 9(a)(1)(C), not to the other prohibitions described in section 9(a)(1). Accordingly, for the rest of this preamble and in the regulation, the term ''prohibition'' refers to the prohibition of take within the 13 specified limits.

New information and a summary of comments received in response to the proposed rules are summarized as follows.

Comments and Responses

Take Guidance

Comment 1: Some commenters stated that a primary focus of the proposal was to encourage development of local tailor-made measures that protect salmonids and they requested further guidance on how their programs could be included in future ESA 4(d) rules.

Response: Credible local initiatives are indeed needed to help save these species, and guidance on how local programs can be included in 4(d) rules is available in *The ESA and Local Governments: Information on 4(d) Rules, May 7, 1999*. In addition, NMFS staff will be available to offer advice and otherwise help individual jurisdictions and entities ensure that their actions do not take listed fish.

Comment 2: Some commenters wanted a simplified process (e.g., a ''letter of approval'' from NMFS staff) for including local programs in future ESA 4(d) rules.

Response: NMFS worked with state and local authorities to identify several categories of activities where local programs can be certified to comply with ESA requirements if they meet the conditions described in the rule. This simplified process would be available for land-use development activities, water diversion screening, road maintenance, hatchery operations, fisheries harvest, fisheries related research, and habitat restoration activities. Other governmental entities are encouraged to step forward and work with NMFS. First, to ensure that local programs meet the salmon's biological requirements and the mandates of the ESA, and second, to streamline the administration of any program.

Comment 3: A number of commenters stated that the proposed take guidance was too vague (e.g., guidance in the limit for new urban density development). Others commented that the guidance was too prescriptive, and still others stated that the guidance was less stringent for some categories of activities and more stringent for others.

Response: To be approved for a limit from ESA take prohibitions, a program

must conserve salmon and meet their biological requirements. This criterion is the same for all programs. These species span the entire west coast from coastal rainforests to arid inland areas to high mountain regions nearly a thousand miles from the ocean and, thus, specific requirements will naturally differ from place to place. Some jurisdictions have asked for NMFS' help in learning how to avoid or limit adverse impacts on these species. General guidance is provided in this rule. This final 4(d) rule addresses concerns about vague guidance by providing additional specificity and by requiring that once specific programs designed to meet NMFS' criteria are produced (and before determining whether they are adequate), NMFS will publish the proposed program for review and comment.

Comment 4: Some commenters stated that NMFS must wait to apply take prohibitions until more specific guidance is published on how other programs can qualify for a limit on the take prohibitions. Others requested that NMFS delay take prohibitions until many more local programs were ready to be included in an ESA 4(d) rule, or that NMFS phase in the take prohibitions as programs qualify for a limit.

Response: These species are, by definition, likely to become endangered in the foreseeable future and undue delay in protecting them would likely increase the difficulty and expense of recovering them. At the same time, NMFS recognizes these rules are novel and complicated and some time is needed for regulated parties to better understand them. NMFS has balanced these considerations by adopting a final rule that puts needed regulations in place within 60 days for the steelhead ESUs and within 180 days for the salmon ESUs, which allows a reasonable period before they become effective (6 months).

Comment 5: A few commenters wanted NMFS to grant a grace period from the take prohibitions to those jurisdictions making good faith efforts to conserve the species.

Response: The proposed rule already states that while enforcement may be initiated against activities that take protected salmonids, NMFS' clear preference is to work with persons or entities to promptly shape their programs and activities to include credible and reliable conservation measures.

Comment 6: Some commenters asked NMFS to apply prohibitions against take to all programs without exception.

Response: Any jurisdiction or individual under United States authority is subject to the take prohibitions. Jurisdictions or individuals wanting assurance that an activity they are conducting or permitting is consistent with ESA requirements can be covered under a section 7 consultation (if Federal funding, authorization, or management is involved), seek an ESA section 10 permit, or qualify for a limit under a 4(d) rule. To qualify for any of these options, the activity must show that it sufficiently conserves the listed species.

Comment 7: Some commenters wanted NMFS to define the action types and magnitudes that would constitute illegal take. Others held that the array of activities described in the proposed rule that are ''likely to injure or kill listed salmonids'' was overly inclusive and discussed actions that exceeded NMFS' authority to regulate. Still others requested that NMFS assert that state and local governments are not required to use their regulatory authorities to satisfy ESA requirements.

Response: It is NMFS' policy to increase public awareness of and identify those activities that would or would not likely injure or kill a protected species. Take guidance appearing at the end of this document does just that. It is only possible in this final rule to describe categories of actions that may have adverse impacts on fish and describe their consequences (e.g., blocking fish from reaching their spawning grounds, dewatering incubating eggs, etc.). NMFS understands that there is considerable interest in knowing as much as possible about what constitutes ''take'' and changes have been incorporated in this final rule to accommodate this interest. Determining whether an individual local program or activity is likely to injure or kill a protected species will require credible assessments that take into account local factors and conditions. Regarding the issue of authority, regulations against killing or injuring protected species apply to any person subject to the jurisdiction of the United States (section 9(a)(1) of the ESA). The term ''person'' means an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign government; and State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States (ESA section 3(12)).

Comment 8: A few commenters requested that NMFS make clear that ''take'' prohibitions would not be violated unless a protected species were injured or killed, and that determinations of whether ''take'' is likely to occur will be handled on a case-by-case basis.

Response: The term ''take'' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, a listed species or to attempt to engage in any such conduct (ESA section 3(18)). The term ''harm'' refers to an act that actually kills or injures a protected species (64 FR 215 (November 8, 1999). Harm can arise from significant habitat modification or degradation where it actually kills or injures protected species by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, or sheltering. After conducting a self- assessment to determine whether an activity is likely to ''take'' a listed species, persons or entities may choose to adjust their program to avoid take, or pursue ESA coverage through a section 10 permit, a section 7 consultation with Federal agencies, or through a 4(d) rule.

Comment 9: Commenters requested that adequate monitoring and oversight be required to ensure that programs included in an ESA 4(d) rule are effective.

Response: A program is incomplete without a mechanism to track its implementation and effectiveness. NMFS reiterates language in the proposed rule which states that for any program included in an ESA 4(d) rule, ''NMFS will evaluate on a regular basis the effectiveness of the program in protecting and achieving a level of salmonid productivity and/or habitat function consistent with the conservation of the listed salmonids.'' If a program does not meet its objectives, NMFS will work with the relevant jurisdiction to adjust the program accordingly. If the responsible entity chooses not to adjust the program accordingly, NMFS will publish notification in the **Federal Register** and announce that the program will no longer be free from ESA take prohibitions because it does not sufficiently conserve listed salmonids.

Comment 10: There were a number of requests for NMFS to grant limits on the take prohibitions to additional programs. Examples included, the Natural Resources Conservation Service's FOTGs, California's Lake and Streambed Alteration Program, Oregon Concrete and Aggregate Producer's suggestions for a limit focused on Department of Geology regulation, Washington's Tri-County initiative, and

The Oregon Plan for Salmon and Watersheds.

Response: The ESA 4(d) rule provides an option for state and other jurisdictions to assume leadership for species conservation at the state and local level over and above the conventional tools for processing state and local conservation planning under the ESA through section 7 consultations and section 10 permitting. NMFS is assembling all the Federal, tribal, state, and local programs needed to save salmonids and has offered to collaborate with any entity interested in this 4(d) option. NMFS is especially interested in state-level conservation efforts because state-level programs tailored to meet the needs of the listed stocks can be a very efficient and comprehensive method to provide for the conservation of listed stocks and their habitat. A number of state and local entities have stepped forward to work with NMFS and we are anxious to work with them. However, limits that were not outlined in the proposed rule for public comment will have to be dealt with in a future amendment.

Comment 11: Commenters requested that NMFS clarify that activities conducted pursuant to an approved state or Federal permit are free from the ESA section 9 take prohibitions.

Response: Activities conducted pursuant to an approved state or Federal permit are subject to take prohibitions. Individual programs can seek relief from any take liability through a section 7 consultation, a section 10 permit process, or a program approved under a 4(d) limit.

Comment 12: Commenters argued that the nature of some programs (e.g., road construction, gravel mining, water withdrawals, levee construction, and certain development) should disqualify them from consideration for limits on take prohibitions under an ESA 4(d) rule.

Response: Under the proposal, all programs must fulfill the same standard to be included in an ESA 4(d) rule (i.e., they must conserve the species and meet their biological requirements). The important issue here is that threatened salmonids need meaningful, practical, and reliable conservation measures. Some programs will naturally have more difficulty meeting that standard than others. The ESA 4(d) rule simply applies the take prohibitions and allows for the development and implementation of conservation measures.

Comment 13: Several commenters suggested that the use of pesticides and herbicides should be considered a resource management tool and, therefore, be included as a limit by NMFS in the 4(d) rule. Several commenters argued that the proposed take guidance violates the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and, thereby, trespasses unlawfully into Environmental Protection Agency (EPA) authorities and violates the take exemption provided for FIFRA-registered pesticides.

Response: NMFS acknowledges that some view the current use of pesticides as essential to successful commercial crop production on agricultural lands, certain types of habitat restoration projects, and dealing with invasive exotic species. NMFS does not currently have specific information on the potential effects on listed salmonids of the very large number of pesticide products currently in use. Accordingly, NMFS is not able to conclude that the otherwise lawful use of these products is sufficiently benign to warrant an explicit limitation of the take prohibition in this rule. NMFS, therefore, has not incorporated such a limit.

For the same reason, NMFS is also unable to make an affirmative finding that the otherwise-lawful use of these products may cause harm to listed salmonids in potential violation of this final rule.

NMFS will continue to conduct scientific research into the potential for adverse effects upon salmonids of a variety of pesticides. NMFS intends to work closely with EPA and state authorities which have primary responsibility for ensuring the proper use of these products under relevant Federal and state regulatory regimes. Should information come forward to suggest that the otherwise lawful use of a pesticide harms or injures listed salmonids and might be in violation of this rule, NMFS anticipates addressing the concern through a section 7 consultation with EPA, NRCS, or United States Fish and Wildlife Service (FWS) as appropriate, or corresponding discussions with responsible state authorities. NMFS prefers this approach rather than use its enforcement authorities against an individual applicator for the otherwise-lawful use of the pesticide. Similarly, if NMFS, with due consideration of any more restrictive state requirements for a pesticide's use, finds that a limitation on the prohibition against take for the use of selected pesticides is necessary and advisable for the conservation of listed salmonids, it may amend this rule accordingly. Through such a programmatic approach, NMFS believes that it will be able to achieve an orderly and comprehensive analysis of the use of pesticides and their effects on listed salmonids.

Comment 14: A few commenters argued that ESA Habitat Conservation Plans (HCPs) should not be free from take prohibitions under a 4(d) rule.

Response: A section 10 incidental take permit (issued after analyzing the accompanying habitat conservation plan) authorizes a specified level of take. Including incidental take permits in the first limit of this rule is, thus, consistent with the structure and intent of the ESA.

Comment 15: A few commenters requested that NMFS prescribe standards (temporary or otherwise) for agricultural activities to be included in an ESA 4(d) rule.

Response: Different entities (including agricultural interests) have expressed a strong preference for standards developed at the local level (not one-size-fits-all standards). The 4(d) rule was written to foster local interest and support tailor-made programs and NMFS stands ready to work with any interested entity in forging such standards. On the issue of agricultural practices in particular, NMFS is working with a number of agricultural entities to explore conservation practices which might contribute to the conservation of salmonids and their habitats, and is hopeful that these discussions will yield further details on proper conservation practices to help conserve salmon.

Comment 16: A few commenters asked NMFS to work closely with FWS to clarify each other's roles to establish universal standards that cover all listed species.

Response: The two services do work closely together on ESA implementation. For example, NMFS and FWS share identical definitions of ''harm'' and the proposed rule does state that ''as it evaluates any program against the criteria in this rule to determine whether the program warrants a limitation on take prohibitions, NMFS will coordinate closely with FWS regional staffs.'' This comment, however, is well taken and NMFS will continue to work closely with FWS to coordinate and streamline ESA implementation. NMFS notes that it is commonly requested to distinguish biological requirements of salmonids from biological requirements of other species (some under the jurisdiction of FWS).

Comment 17: Commenters asked NMFS to establish a funding mechanism (e.g., an escrow account) to support habitat restoration activities.

Response: Millions of dollars in Federal funding have been granted to

state programs that fund specific habitat restoration projects. NMFS will continue to support funding for these programs in the future.

Comment 18: Several commenters argued that current conditions are a result of past practices, not current practices. They believed that NMFS has failed to justify why the little remaining habitat is important to listed fish and failed to provide detailed scientific rationale to support the agency's contention that certain activities (e.g., urban development) result in take.

Response: NMFS disagrees. The list of examples in this final rule (see Take Guidance) as well as those provided in the proposed rule give general guidance on the types of current activities that are very likely to take threatened salmonids. While not exhaustive, this list was based on direct experience with managing salmonid populations in their natural environment and a thorough understanding of the scientific literature. The ESA listing process for these threatened salmonids has documented the decline of salmonid populations in the four western states and has identified the historic and current causes of these declines. The commenters correctly note that past practices have caused the decline of salmonid populations; however, current human activity can also kill or injure listed salmonids. Development and other human activities within riparian areas or elsewhere in the watershed alter the properly functioning condition of riparian areas. These activities can alter shading (and hence stream temperature), sediment transport and supply, organic litter and large wood inputs, bank stability, seasonal streamflow regimes, and flood dynamics. The natural functions of riparian areas and the ways in which human activities affect those processes and functions are described in the publication entitled ''An Ecosystem Approach to Salmonid Conservation'' (NMFS, 1996).

Comment 19: Some commenters requested maps of ''sensitive resource sites'' at a large scale so local jurisdictions that deal with small land parcels may use them. Some commenters stated that NMFS should focus on areas where redds or fish are actually present, not on general definitions such as ''spawning gravels.''

Response: NMFS acknowledges the value of producing maps that identify resource sites important for the different salmonid life cycle stages. NMFS will continue to work with state entities, local jurisdictions, co-managers and citizens to increase our knowledge of threatened salmonids. NMFS will also continue to increase its own capabilities for mapping resource areas and watersheds. Because there were so many comments requesting that NMFS identify which activities have a high likelihood of resulting in take and will be priorities for enforcement action, the take guidance has been revised to focus on high risk activities. The language referring to ''spawning gravels'' has, therefore, been removed.

Comment 20: One commenter requested that NMFS add the word ''intentional'' to clarify the take guidance regarding promotion of predator populations associated with habitat alterations.

Response: NMFS must respectfully disagree. Whether the action is intentional or unintentional, NMFS considers habitat alterations that promote predation on listed species to be undesirable. Such actions may in fact cause injury or harm to listed salmonids.

Comment 21: Several commenters recommended adding sediment discharge to the list of toxic chemicals and other pollutants that are very likely to injure or kill salmonids. Other commenters requested that NMFS clarify which chemicals and pollutants it is referring to in this section.

Response: NMFS refers to toxic chemicals or other pollutants being discharged or dumped and then gives examples by listing sewage, oil, gasoline, and others. Sedimentation from timber harvest and other land use activities may plug the interstitial spaces in gravel spawning areas reducing salmon egg survival during their incubation period as well as many other deleterious effects. Based on these comments and the fact that sediment discharge may harm listed salmonids by physically disturbing or blocking streambed gravels, NMFS added soil disturbances to the list of actions that are likely to kill or injure salmonids.

Comment 22: One commenter urged NMFS to add language in the activity category dealing with the chemical and pollutant discharge or dumping to recognize that take can also occur when these activities are carried out with a valid permit. Another commenter recommended that NMFS clarify which permits are considered ''valid,'' and one commenter stated that this potential ''take'' should only apply to waters supporting the listed salmonids.

Response: NMFS agrees that chemical and pollutant discharge may take listed fish whether or not there is a valid permit for the discharge. In order to clarify this point, NMFS has deleted the words ''particularly when done outside of a valid permit for the discharge'' from the take guidance. Regarding the suggestion that take prohibitions should only be applied to waters supporting listed salmonids, the take guidance applies throughout the ESU for the listed species whether or not there are salmonids present in individual rivers or streams.

Comment 23: One commenter noted that the introduction of non-native species likely to prey upon or displace listed species should be expanded to include non-native species that may adversely affect salmonid habitat.

Response: NMFS agrees that non-native species may alter salmonid habitat to such an extent that the habitat may no longer provide all the functions and characteristics that support listed salmonids. The take guidance language now reflects this suggestion.

Comment 24: Numerous commenters argued for language changes and refinements in the descriptions of actions that may injure or kill listed salmonids. The first suggestion is to expand the list of ways fish passage can be blocked to include human-induced physical, chemical, and thermal blockages.

Response: NMFS has revised the take guidance to address this comment and to clarify its enforcement priorities.

Comment 25: Several commenters suggested adding language to the list of activities ''very likely to injure or kill salmonids'' to address activities that further contribute to or maintain water quality impairments in those water bodies on the 303(d) list of the CWA.

Response: NMFS agrees that this is an important issue and that activities that degrade water quality or maintain degraded conditions can injure listed species. This issue is already addressed in the section on discharging or dumping toxic chemicals or other pollutants into water or riparian areas and in the language changes discussed in the previous comment.

Comment 26: Some commenters urged NMFS to state that water withdrawals can affect salmonids in more ways than adversely modifying spawning and rearing habitat. One commenter also requested that NMFS note that water withdrawals can adversely affect groundwater by capturing flow that might otherwise discharge to surface waters.

Response: NMFS considers ''spawning, rearing, and migrating'' to be ''essential behavioral patterns.'' The word ''migrating'' will be added to the take guidance regarding water withdrawals. Regarding the second comment about the potential impact of water withdrawals on groundwater and surface water, NMFS cannot provide

further detail in this take guidance because the actual impacts of a given act depend on situation-specific conditions.

Comment 27: Several commenters asked NMFS to expand the discussion of impacts arising from water diversion and flow discharges to include impacts other than changes in stream temperature.

Response: NMFS agrees that water diversions and discharge may have other deleterious effects on salmonid habitat. These may include impacts on sediment transport, turbidity, and stream flow alterations. The actual likelihood that these actions would result in take depends on situation-specific conditions. Based on public comments, the take guidance in the final rule has been revised to clarify NMFS' intent regarding which activities are very likely to injure or kill salmonids and to identify priorities for NMFS enforcement action.

Comment 28: Several commenters recommended moving the topics ''water withdrawals'' and ''violation of federal or state CWA discharge permits'' from the section where actions may injure or kill listed fish to the section where actions are ''very likely to injure or kill salmonids.''

Response: NMFS has revised the take guidance. One change is that water withdrawals have been added to the list of activities that are very likely to injure or kill salmonids. However, the likelihood that take will actually occur depends on the individual action. The issue of actions that violate Federal and state CWA discharge permits is not specifically addressed in the new take guidance language.

Comment 29: One commenter urged NMFS to consider land use activities that affect more than just salmonid habitat. They highlighted the fact that adverse effects include impacts on floodplain function, natural hydrologic patterns, riparian function, and water quality. They also recommended expanding the list of land use activities identified in the proposed rule.

Response: In a section of the preamble of the proposed rule entitled Aids for Understanding the Limits on the Take Prohibition, under Issue 2: Population and Habitat Concepts, NMFS describes properly functioning habitat conditions that create and sustain the physical and biological features essential to conserving the species. These habitat conditions recognize the importance of floodplain function and channel migration and emphasize the dynamic nature of natural systems. NMFS intends the term ''salmonid habitat'' to be consistent with the habitat functions and processes described in the Habitat Concepts preamble language. NMFS recognizes that different types of land use activities can impact salmonid habitat to such an extent that take may occur. Language has been added to the revised take guidance to address floodplain gravel mining and floodplain development.

Comment 30: Several commenters argued that the take guidance needs to be clarified so that the public can understand what NMFS means in its different categories of take.

Response: NMFS agrees that the take guidance language in the proposed rule caused confusion about which activities can result in take and what actions will be priorities for enforcement. NMFS has revised the take guidance section to focus on those activities that are very likely to injure or kill salmonids.

Comment 31: One commenter suggested amending the proposed language concerning take due to water withdrawals by using Oregon Department of Fish and Wildlife (ODFW) minimum flows to regulate water withdrawals.

Response: NMFS does not reference specific state, local, or private regulations or programs that might prevent take because there is such a large number of programs (and partial programs) in the different states that could be cited. Absent a program approved under section 7 or 10 of the ESA or under this rule, individual jurisdictions and private entities will need to develop, adopt, and implement programs that prevent take.

Comment 32: One commenter suggested that NMFS clarify its intent by using the language ''actually impact water quality'' in the context of take occurring due to violations of Federal or state CWA discharge permits.

Response: NMFS notes the comment. However, due to changes in the final rule's take guidance language, this specific category of activity has been eliminated.

Comment 33: Some commenters asserted that rural areas were unfairly singled out for engaging in activities that take listed species while urban areas were given ESA 4(d) limits.

Response: NMFS applies the prohibition against take uniformly across the landscape encompassed by the threatened species' ESUs. This take prohibition applies equally to rural areas and urban areas and the take guidance identifies activities that can occur in urban and rural areas. Limits on the take prohibitions were given to complete programs that were shown to conserve salmon and steelhead.

Comment 34: One commenter asked that NMFS clarify the relationship between take avoidance and the designation of critical habitat.

Response: Critical habitat is a geographic description of the areas essential for a species' conservation. These designations highlight important habitat features as well as management actions that may require special management considerations. Take avoidance relates to critical habitat in that special management actions taken (or authorized) by Federal agencies must avoid adversely modifying critical habitat.

Viable Salmonid Populations (VSP)

Comment 35: Several commenters said that NMFS should not base policy on a document that is not complete and has not been reviewed in its final form.

Response: Comments on the December 13, 1999, VSP draft were solicited from over 50 peer reviewers plus tribal and state co-managers. In addition, the document has been available for public comment since the draft ESA 4(d) rules were released. We have received approximately 20 peer and co-manager reviews, plus numerous public comments. These reviews, particularly those from peer-reviewers, have generally been very positive, and the document will require little substantive revision before publication as a NOAA Technical Memorandum in June of 2000.

Comment 36: Several commenters stated that populations are generally smaller than a ''distinct population segment'' as defined in the ESA and NMFS has ''gone too far'' in proposing protection of individual populations.

Response: In applying the VSP principles, NMFS does not mean to require equal protection of every single population. The unit requiring protection under the ESA is a ''distinct population segment'' (i.e., ESU). Therefore, it is the ESU that NMFS must ensure has a minimal risk of extinction. A population is the appropriate biological unit for scientifically evaluating salmonid extinction risk. The status of an ESU can be determined in large part by analyzing the individual populations that constitute the ESU, and determining how their individual statuses combine to affect ESU viability.

Comment 37: Many commenters said that VSP is too vague to be implemented.

Response: Where possible, NMFS has endeavored to provide numerical guidelines for viability thresholds. However, VSP generally does not provide generic quantitative criteria that can be applied to all salmonid populations because the thresholds vary by species and location. This means that

applying the VSP principles will require population- and ESU-specific evaluations. This will not be very satisfying to managers looking to VSP for ''the answer,'' but is the only scientifically sound course at this time. NMFS will continue to explore whether generic guidelines (or modeling approaches) may be appropriate for some criteria (e.g., minimum population size), but this requires further analysis and will not be a part of the VSP paper finalized in June. As geographically-specific VSP applications are completed, more general numerical guidelines may be possible.

Comment 38: Several commenters noted that NMFS does not define the relationship of the VSP terms ''viable'' and ''critical'' to the ESA terms ''threatened'' and ''endangered.''

Response: The VSP paper does not attempt to define ''threatened'' and ''endangered'' under the ESA. Defining ''threatened'' and ''endangered'' requires policy decisions about the acceptable levels of risk to an ESU that the VSP concept does not address. It is also important to note that the terms viable and critical in VSP are often applied to populations, whereas the unit of interest with regard to the ESA is the ESU.

Comment 39: Several commenters wanted the effects of potential actions to be evaluated on scales other than the population (some desired smaller, some larger).

Response: Although a population is the appropriate unit for studying many biological processes, it may also be appropriate to evaluate management actions that affect units at smaller or larger spatial and temporal scales. For example, ocean harvest plans may affect multiple populations, while a habitat restoration plan only affects a small portion of a single population's habitat. The VSP concept does not preclude establishing goals at these different scales. However, management actions ultimately need to be related to population and ESU viability.

Comment 40: Several commenters said that VSP does not adequately consider the importance of freshwater habitat.

Response: VSP does not attempt to establish the habitat requirements for recovering populations. Habitat criteria are captured, generally, in the concept of Properly Functioning Conditions (PFC) discussed within this rule.

Comment 41: A few commenters said that VSP does not consider important components of recovery planning, such as ecological interactions.

Response: The VSP concept attempts to describe the population level attributes of viable salmonid populations; it does not prescribe how to recover populations. Recovery will require the entire suite of factors that impact salmon throughout their life cycle to be considered and evaluated—including ecological interactions and habitat needs. These are important issues that will need to be dealt with during recovery planning.

Comment 42: Several commenters said that data needed to evaluate VSP parameters will not be available and, therefore, VSP concepts cannot be applied.

Response: Data will generally not be available to thoroughly evaluate every VSP parameter. In developing the VSP guidelines, NMFS tried to consider all the processes that need to be evaluated in order to determine a population's status. If all of these processes cannot be evaluated, the VSP guidelines suggest the type of data that need to be collected. If a VSP guideline cannot be evaluated, managers must explicitly recognize the uncertainty associated with current management decisions because of a data-poor environment. The fact that VSP facilitates this recognition is, in itself, a valuable contribution.

Comment 43: A few commenters said that VSP makes several references to ''historic conditions'' for evaluating population status, but does not define the time frame for ''historic.''

Response: Historic conditions are used as a reference point in evaluating population status because under historic conditions populations were assumed to have been viable. The time frame, then, refers to a period in time where the population or ESU was considered self-sustaining and may represent different eras for different groups of fish. However, it should be noted that while historical data can be a valuable tool in evaluating population status, it should not suggest that NMFS will require all populations to be at historic levels in order to be viable. The value placed on historic data and the relationship between recovery goals and historic levels will be ESU- and population-specific.

Comment 44: One commenter argued that given the high levels of uncertainty associated with the ESU viability guidelines, the default assumption should be that all populations need to be viable in order to produce a viable ESU.

Response: This seems to be an appropriately precautionary approach, but responses to uncertainty entail policy decisions that can only be made after carefully analyzing a specific situation.

Comment 45: One commenter said that by defining populations, VSP claims that straying always has negative effects on viability.

Response: In the process of identifying populations, there is no blanket assumption that straying has a negative effect on viability. Straying is a natural process, and appropriate levels of straying within and among viable populations will depend on a balance between the risks and benefits of straying. Indeed, the VSP document acknowledges the potentially critical role that straying plays in extinction and recolonization dynamics among salmonid subpopulations and populations. It should also be noted that human factors (such as stock transfers, blockage of migratory routes, and other habitat alterations) have the potential to increase rates of genetic exchange by one to two orders of magnitude over historic levels. These changes are unlikely to be beneficial.

Comment 46: Several commenters stated that VSP does not consider certain factors to be important when evaluating population status. These factors included (1) marine-derived nutrients, (2) diversity, (3) temporal and spatial structure, and (4) genetic drift.

Response: These topics are covered in the current draft of the VSP document, and some topics may be clarified or expanded during the revision process.

Comment 47: A few commenters said that in evaluating VSP parameters, juvenile fish counts should be considered as well as (or instead of) adult spawner counts.

Response: Although the VSP paper discusses using juvenile fish counts, the guidelines generally focus on adult spawners counts—and not other life stages—because spawner count data sets are prevalent throughout the region and they can be related to the extensive body of conservation biology principles with relative ease. However, NMFS does not go into great detail on monitoring and evaluation programs and should consider any scientifically defensible strategy that allows population status to be evaluated. In some cases, it may be more feasible to collect data on juveniles than adults and it may be possible to assess population viability based primarily on juvenile counts. However, the population evaluation would still need to address the principles outlined in VSP regarding all four parameters (i.e., abundance, productivity, spatial structure, and diversity).

Comment 48: One commenter said NMFS does not take an ''ecosystem approach.''

Response: It is true that VSP focuses only on Pacific salmonid populations and the ecological processes that directly or indirectly affect them. The paper does not deal explicitly with other species or ecosystem processes that do not affect salmonids. However, given the large geographic scale and the presumed keystone role of salmonids in many ecosystems, an ''ecosystem approach'' is likely to emerge. Defining the management processes that may support an ''ecosystem approach'' is outside VSP's scope and intent.

Comment 49: One commenter said that VSP is a framework, not a benchmark, and asserted that the states should have the latitude to develop some of their own benchmarks within this framework.

Response: As noted in a previous response, VSP generally does not provide generic quantitative criteria. Quantitative criteria will be required in setting recovery goals for specific ESUs. In some contexts (often in reference to broad landscapes), the standard is expressed as ''seeking to attain or maintain PFC.'' ''Contribute to PFC'' is a phrase often used in reference to near-term actions that put habitat on a course to attain PFC over time and is consistent with the standard. Finally, in some circumstances (often in referring to more site-scale decisions), the standard may be expressed as ''not precluding PFC.'' There is no distinction in practice between these expressions of the standard.

Evaluating Habitat Conditions–Properly Functioning Conditions (PFC)

Comment 50: Several commenters opined that PFC should be more clearly defined. Others suggested that specific numeric criteria be included.

Response: Both the preamble and rule texts have been modified to more clearly define PFC and its central role in habitat evaluations. Proper functioning conditions create and sustain over time the physical and biological characteristics that are essential to conservation of the species, whether important for spawning, breeding, rearing, feeding, migration, sheltering, or other functions. Habitat-affecting processes include, but are not limited to vegetation growth, bedload transport through rivers and streams, rainfall runoff patterns, and river channel migration. The concept of proper function recognizes that natural patterns of habitat disturbance, such as through floods, landslides and wildfires, will continue.

NMFS measures conditions on the landscape to evaluate whether and how PFC is likely to be affected, attained or maintained by an activity. The indicators vary between different landscapes based on unique physiographic, geologic or other features. Although the indicators used to assess functioning condition may entail instantaneous measurements, they are chosen, using the best available science, to detect the health of underlying processes, not static characteristics.

The scope of any given activity is important to NMFS' analysis. The scope of the activity may be such that only a portion of the habitat forming processes in a watershed are affected by it. For NMFS to find that an activity is consistent with the conservation of the listed salmonids, only the effects on habitat functions that are within the scope of that activity will be evaluated. For example, an integrated pest management program may affect habitat forming processes related to clean water, but have no effect on physical barriers preventing access by fish to a stream.

NMFS' evaluation of an activity includes an analysis of both direct and indirect effects of the action. ''Indirect effects'' are those that are caused by the action and are later in time but are still reasonably certain to occur. They include the effects on species or critical habitat of future activities that are induced by the original action and that occur after the action is completed. The analysis also takes into account direct and indirect effects of activities that are interrelated or interdependent with the proposed action. ''Interrelated actions'' are those that are part of a larger action and depend on the larger action for their justification. ''Interdependent actions'' are those that have no independent utility apart from the action under consideration. NMFS has published an extensive discussion of the effects of activities in its Consultation Handbook—Procedures for Conducting Consultation and Conference Activities Under section 7 of the Endangered Species Act (March, 1998).

Though there is more than one valid analytical framework for determining effects of an activity, NMFS has developed an analytic methodology it has documented in a Matrix of Pathways and Indicators (MPI; often called ''The Matrix''). The MPI can help NMFS and others identify any risks to PFC. The pathways for determining the effects of an action are represented as six conceptual groupings (e.g., water quality, channel condition, and dynamics) of 18 habitat condition indicators (e.g., temperature, width/depth ratio). Default indicator criteria (mostly numeric, though some are narrative) are laid out for three levels of environmental baseline condition: properly functioning, at risk, and not properly functioning. The effect of the action upon each indicator is classified by whether it will restore, maintain, or degrade the indicator.

The MPI provides a consistent, but geographically adaptable, framework for effects determinations. The pathways and indicators, as well as the ranges of their associated criteria, are amenable to alteration through the process of watershed analysis. The MPI, and variations on it, are widely used in consultations under Section 7 of the ESA on the effects of federal actions and will be similarly used to evaluate activities pursuant to this rule. The MPI is also used in other venues to determine baseline conditions, identify properly functioning condition, and estimate the effects of individual management prescriptions. While this assessment tool originally was developed to address forestry activities, NMFS intends to work with state, tribal, and other experts to facilitate its use in other ecological settings such as lakes, estuaries and urban settings.

Comment 51: One commenter objected that the conservation standard for PFC was ''jeopardy'' or survival, which is inadequate for ESA 4(d) rules and for recovery.

Response: PFC is not calibrated to provide for population persistence at some level less than full recovery, nor does NMFS believe that the best available science holds out the possibility of such an incremental approach to habitat conservation. Land and resource managers are required to demonstrate that their proposed activities will allow for the recovery of all essential functions of salmon habitat.

Comment 52: Several letters addressed the applicability of the ''properly functioning conditions'' concept to urban settings and questioned whether PFC could ever be attained in urban environments.

Response: It is widely recognized that urbanization alters the hydrologic behavior of once unpaved, undeveloped lands. Within this context, common goals for the management of urban landscapes include controlling stormwater runoff and protecting water quality. An urban watershed can become properly functioning if the ecological functions essential for listed salmonids within the watershed–such as storage, attenuation of peak flows, and water quality mitigation—can be restored by increasing watershed storage and providing buffers to attenuate water quality problems emanating from urban landscapes. In this context, the PFC goal

is to restore the hydrologic function in the urban watershed by modifying peak flow events, providing storage, protecting water quality and habitat, and allowing passage.

Comment 53: One commenter stated that the draft VSP concept and NMFS' established PFC approach were inconsistent.

Response: The VSP concept is being developed to serve as a population management analog to PFC's role in evaluating habitat-affecting actions. The intent of VSP is to serve as a consistent conservation standard, equivalent to PFC, that can be applied in diverse analyses. The VSP emphasizes measurable fish population parameters because that is how fish harvest and culture activities' environmental effects are most immediately and evidently expressed. Conversely, PFC indicators are typically physical habitat characteristics because they most readily and measurably show the effects of land and water management regimes. In essence, PFC is a description of conditions that support salmonid productivity at a viable level. However, because the standards are applied at widely different geographic scales, NMFS cannot currently describe the quantitative relationships between fine-scale habitat characteristics and salmon population levels. Though the two approaches measure effects on different salmonid biological requirements, they consistently strive toward the same end: determining the effects of various activities, placing them in the context of the species' life histories, and using that data to ascertain the best means of recovering the salmon.

Legal/National Environmental Policy Act (NEPA)/Reg Flex/Direct Take

Comment 54: Commenters asserted that the proposed rule exceeds NMFS' authority, either by reaching too far in protections or failing to meet ESA mandates by not being protective enough. Many commenters raised questions about the legal standards underlying limits and about the relationship between section 4(d) and section 7 consultations or section 10 habitat conservation plans. Several asserted that the standards for all three functions should be the same; others emphasized that the standard for 4(d) is more protective, stating that it must conserve the listed species.

Response: Many of those comments focus more on the limits provided than on the legally enforceable outcome of the rule (the take prohibitions). This response will first set forth in a general fashion the basis for this final rule, and then respond to the remainder of legal issues that are not included in the overall description.

First, section 4(d) regulations are those ''necessary and advisable to provide for conservation'' of the threatened salmonids. This final rule imposes one major regulatory prohibition (in addition to the less significant prohibitions of section 9(a)(1) or interstate commerce and import/export): that is, that actors are to avoid taking threatened salmonids of the 14 listed ESUs. The take prohibitions are what the ESA imposes by statute to protect endangered species and, if perfectly implemented, would provide the most protection possible. There is no question but that take prohibitions ''provide for the conservation'' of the species.

Nor can there be any real question about the advisability of imposing take prohibitions at all. NMFS' listings were based on findings that the ESUs are at risk and specifically that there are factors (set forth in ESA section (4(a)(1)) that have caused and are continuing to cause the listed ESUs' populations to decline. See ''Factors for Decline: A Supplement to the Notice of Determination for West Coast Steelhead'' (NMFS, 1996); Coastal Coho Habitat Factors for Decline and Protective Efforts in Oregon'' (NMFS, 1997), and ''Factors Contributing to the Decline of Chinook Salmon: An Addendum to the 1996 West Coast Steelhead Factors for Decline Report'' (NMFS, 1998). Many of these factors (habitat destruction, overutilization, inadequate regulatory systems) are state, local, or private, and have no link to Federal actions. Prohibiting take for these ESUs is, therefore, the most direct way of protecting the listed species. NMFS listed two additional chinook ESUs as threatened in September of 1999 and will be proposing ESA 4(d) protections for them in the near future.

This final rule also establishes 13 circumstances in which NMFS does not find it necessary and advisable to apply the take prohibitions. NMFS believes that by describing (wherever possible) a program or the components of a program that will adequately protect the species, it provides valuable guidance to agencies or individuals wishing to play a part in salmonid protection and will minimize their legal risks under the ESA as well. NMFS further believes that it is appropriate to limit the take prohibitions for such programs provided that NMFS' salmonid conservation goal (and legal responsibility) is not compromised—that is, so long as the rule provides for conservation of the listed ESUs. Thus, this final rule limits the application of the take prohibitions selectively. NMFS is confident that given the stringency of the fish protections in the programs receiving limits on the take prohibitions, this final rule meets the section 4(d) conservation standard.

In determining that take prohibitions are not necessary and advisable for a particular program, NMFS has ensured that each program—including programs that NMFS will evaluate in the future to determine whether they fit within one of the 13 limits—will not jeopardize the species. That is, none will appreciably reduce the likelihood of survival and recovery of any of the ESUs in the wild.

Further, for some programs involving sectors which have had particularly destructive impacts on habitat or bear other significant responsibility for decline of the species, there must be a demonstration above and beyond ''not jeopardizing.'' Just as a Federal agency has a responsibility not only to conduct its affairs in a way that does not jeopardize but also to use its authorities in furtherance of the conservation of the species, ESA 4(d) regulations as a whole must provide measures necessary and appropriate to conserve the species. Hence, while for many actions or programs ''not jeopardizing'' may be equivalent to not precluding or impairing recovery, for others it may be necessary to include commitments for specific positive contributions that are vital to recovery because of past impacts from those sectors. NMFS has taken those considerations into account when evaluating potential programs (or establishing approval criteria) to determine if they qualify for inclusion in one of the limits.

By statutory definition, species conservation equates to those methods and procedures that will bring a species to the point at which it no longer needs the protections of the ESA and may be delisted. Those methods and procedures encompass the full array of actions that will contribute to recovery: Federal efforts to avoid jeopardy and conserve the species under section 7; efforts taken in accord with section 10 conservation plans; state, tribal, local, or private initiatives undertaken to improve the prospects of listed fish quite independent of any ESA requirement; efforts to avoid taking listed species; and habitat improvements accomplished under numerous regulatory programs for protecting other resources, such as the CWA, state and Federal regulations governing fill and removal in waterways, and the like.

NMFS believes this final rule reflects the necessary and appropriate level of protections for conserving these threatened ESUs given our current

knowledge. As the preamble to the proposed rule noted, NMFS recognizes that new information may lead to changes in the final rule. NMFS has not yet completed recovery planning for the species subject to this final rule, nor does the ESA command that recovery planning precede enactment of 4(d) regulations. Once recovery planning is complete, NMFS may amend the 4(d) protections with any combination of new or amended limits, impose the take prohibitions if a limit were found not to be consistent with a necessary and appropriate recovery measure, or require enhancements or prescriptions.

Comment 55: A few commenters asserted that NMFS gives no indication that it intends to comply with ESA sections 7 or 10 in promulgating or implementing these rules.

Response: Promulgation of a section 4(d) rule is a Federal action requiring consultation under section 7 of the ESA. NMFS must ensure through its internal consultation process that the 4(d) rule being promulgated is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of their critical habitat. NMFS completed the required consultation and concluded that promulgation of this rule greatly improves protections for threatened salmonids and their habitat, and is not likely to adversely affect either those ESUs or other listed species. NMFS has complied with its section 7 consultation requirements.

Where take prohibitions are imposed, those pursuing actions that may take listed salmonids may choose to apply for a section 10 permit at any time. Section 10 permits are issued on a case-by-case basis supported by individual analysis and section 7 consultation. Where NMFS has found it not necessary to impose take prohibitions, there would be no basis for issuing research or enhancement or incidental take permits through section 10, provided the action is carried out in accordance with the requirements of the applicable limit.

Comment 56: One commenter urged that NMFS make clear that no state or local rule shall hinder NMFS or citizens from taking legal actions to ensure salmon recovery. Another asked that NMFS provide for citizen enforcement and appeal of local government permits re ESA issues. A third commenter suggested that the limits be revised to reflect the idea that they extend only so far as local governments' reasonable interpretation and application of its own rules.

Response: This final rule does not in any way alter the ESA's enforcement provisions, including the rights of third parties to enforce under appropriate circumstances. Second, NMFS believes the proposed rules clearly established that in any enforcement proceeding where there is a question whether an action is ''in compliance with'' one of the described limits, it is ultimately the defendant's (or respondent's) responsibility to assert that issue as an affirmative defense and establish facts that show compliance. In order to dispel any confusion by the public on this point, NMFS has added a subsection, ''Affirmative defense,'' to spell out that it will be the defendant's or respondent's obligation to plead application of and compliance with a limit as an affirmative defense. This approach is consistent with the structure of the proposed rule and with ESA section 1539(g) which states ''In connection with any action alleging a violation of section 1538 [the section 9 prohibitions] of this title, any person claiming the benefit of any exemption or permit under this chapter shall have the burden of proving that the exemption or permit is applicable, has been granted, and was valid and in force at the time of the alleged violation.'' NMFS anticipates that in most cases, the applicability of individual limits will be resolved early in an enforcement investigation. Enforcement personnel will make reasonable efforts to attempt to rule out the applicability of 4(d) limits by, for example, evaluating circumstantial evidence, or through direct contact with the potential violator and subsequent confirmation through reliable third party sources. However, ultimately it is not the agency's responsibility to determine the existence or nonexistence of every exculpatory fact relating to an alleged ESA violation. This clarification is also consistent with existing case law, which generally holds that the burden of raising and proving affirmative defenses rests with the defendant, not with the government (see, e.g., *Patterson* v. *New York*, 97 S.Ct. 2319 (1977)).

As to the third comment, once a state or local government program comes within a limit (for instance, local development ordinances found by NMFS to meet the standards of the rule), it will be up to the local government to implement that ordinance, including any necessary exercise of reasonable judgement. If monitoring or other information indicates that the ordinance, as implemented, is not providing adequate protections, then the adaptive mechanisms in the 4(d) rule will trigger changes in the ordinance, imposition of the take prohibitions, or imposition under the ESA of affirmative requirements.

Comment 57: One commenter suggested that the standards set in the 4(d) rule to qualify for a limit are higher than landowners would otherwise be required to meet to avoid take. Another stated that there was no consistent conservation standard applied in evaluating potential limits.

Response: NMFS must respectfully disagree. The limits described in this final rule do not in every circumstance avoid all take. To do so would require much more stringent steps in some cases. Rather, the limits reflect NMFS' judgement that activities in compliance with such a program or approach are what current information indicates will be necessary and advisable for that activity sector to conserve the ESUs. Activities in compliance with such a program or approach will not appreciably reduce the likelihood of survival and recovery of the species in the wild and, where necessary, will include other conservation measures to repair or improve conditions. Nonetheless, it is expected—and in some cases demonstrable—that activities satisfying the conditions for inclusion within one of the limits will still take listed salmonids.

In evaluating fishery management programs to determine if they qualify for a limit, NMFS relies on the concept of viable salmonid populations and its associated use of viable and critical thresholds for management decisions. The limits require that relevant biological parameters be identified so individual population status can be evaluated and the program may be placed in an appropriate context for determining whether it will support population viability. Land management related programs being considered for limits are assessed according to their ability to help attain or maintain properly functioning conditions (i.e., those conditions NMFS considers necessary for supporting viable salmonid populations).

Comment 58: Several commenters noted that NMFS had not made the case that take prohibitions (or any ESA 4(d) rules) are needed for these ESUs, or for specific sectors of activity. Some assert that NMFS should first demonstrate that conservation activities applicable to Federal activities have been fully tapped before applying 4(d) rules to private lands.

Response: NMFS must respectfully disagree. While the contribution of non-Federal actions to the overall decline of the ESUs affected by this final rule varies, depending in part on the ratio of Federal to non-Federal lands and in part

on the concentration of habitat modifications and non-Federal hatchery or harvest impacts, NMFS could not justify placing all hope of sustaining and recovering these ESUs on Federal agency actions alone. The record upon which NMFS listed these ESUs is abundantly clear that the decline of the ESUs is substantially influenced by actions other than those with some Federal nexus. While section 4(d) provides the Secretary some discretion in determining what protective regulations are necessary and advisable in a given circumstance, the structure of the section strongly supports the appropriateness of a determination to impose take prohibitions.

Comment 59: At least one commenter, while agreeing that the limits are not prescriptive rules, states that the rule making record does not support ''this wide-ranging prescriptive rule'' which the commenter believes prohibits ''a very wide variety of activities that might occasionally ''take'' listed species'' without NMFS' permission.

Response: To repeat the preamble text from the proposed rules, ''[t]he fact of not being within a limit would not mean that a particular action necessarily violates the ESA or this regulation.'' NMFS has attempted to make even clearer in this final rule that activities that are not within a limit are not prohibited. What is prohibited is taking a threatened salmonid through any activities not within a limit. Those conducting activities that are not within a limit are subject to liability only if it can be demonstrated that their activities in fact have taken a threatened salmonid. An actor believing that its actions result in incidental take may apply for an incidental take permit under ESA section 10 to ensure that no enforcement liability accrues.

Comment 60: Two commenters noted that they had requested the decision-making record (for the proposed rule) and were told that it was ''unavailable for public review.''

Response: Both proposed 4(d) rules included a ''References'' section that offered a list of the references relied on. These documents were available to the public. That is all that informal rulemaking requires.

Comment 61: A few commenters noted that it is inconsistent with the ESA to apply the ''jeopardy'' standard (to not appreciably reduce the likelihood of survival and recovery in the wild) in a 4(d) rule; also, doing so for tribal plans is inconsistent with the standard applied for other ''exemptions.'' One commenter urged that NMFS model all of the limits after the limit for tribal plans, which provides a process for NMFS to determine a plan's consistency with ESA standards, but does not set out specific requirements or standards.

Response: NMFS believes that none of the limits will jeopardize the listed species' survival or recovery and that each habitat-related limit will contribute to placing habitat on a trajectory toward proper function and populations on a trajectory toward viability. It is worth noting that in practical application, distinctions between what is needed for survival and recovery and between providing for recovery and not jeopardizing the likelihood of survival and recovery are speculative at best and perhaps specious. The limit for tribal plans applies that same standard but without specific requirements or standards, in deference to tribal sovereignty and the government-to-government basis on which NMFS interacts with tribes. It is important to note that while there is less specific guidance with respect to tribal resource management plans, they will be assessed against the fundamental ESA standard (whether they will appreciably reduce the likelihood of survival and recovery in the wild), as have the other limits, and that any determination regarding tribal resource management plans will be accompanied by a description of the biological rationale for its outcome.

Comment 62: One commenter believed that the ESA 4(d) limits are ''negotiated,'' ''second class'' HCPs appropriate only to larger governmental entities and that they consign jurisdictions with smaller population bases to the fringes of the process. Another urged that all limits should be drafted so that they are made available to any government wanting to participate and get coverage under the limit.

Response: While NMFS does not agree with the commenter's characterization of the limits, we have broadened some of the limits' availability and modified others in such a way that they are more adaptable for smaller or more rural jurisdictions. For instance, the development limit no longer targets only to ''urban density'' development, and the road maintenance limit is available to any jurisdiction. These sorts of adjustments are the very heart of the 4(d) limit process—they illustrate NMFS' intention to create an open process of public review and adapt our proposals (when we may) in accordance with the feedback we receive.

Comment 63: One commenter suggested that NMFS should create ''categorical exclusions'' for activities not requiring the ongoing review and monitoring required in the proposed rules. The commenter points to FWS regulations that permit the Utah prairie dog to be taken under Utah state permits.

Response: In this final rule NMFS has made a number of adjustments to make limits more broadly available and to minimize requirements for oversight. However, the prairie dog provision the commenter cites makes very clear that if those takings interfere with conserving the species, FWS may immediately prohibit further such takings. Similarly, NMFS believes that the level of ''tracking'' required in this final rule will ensure that impacts from non-prohibited activities are consistent with conserving the threatened salmonids.

Comment 64: Some commenters asserted that the ''proposed requirement'' for protecting flows for listed species should be addressed in a local government's ordinance is beyond the scope and authority of a local government.

Response: Evaluation consideration ''J'' for the MRCI limit asks that the local government ordinances ensure that [new] development-related water supply demands can be met without impacting flows needed for threatened salmonids. This request does not require local government to regulate water rights or otherwise control flows; it asks only that new development demonstrate that its new water demands can be satisfied without undercutting flows required by threatened salmonids.

Comment 65: One commenter suggested NMFS should delegate to state and local officials authority to limit the take prohibition or provide a ''certificate of safe harbor.'' Another commenter suggested that ESA section 9 take prohibitions cannot apply within a state unless the state has also adopted those regulations. This comment relies on the reference within 4(d) to section 6(c)(" ...such regulations shall apply in any State which has entered into a cooperative agreement pursuant to section 6(c) of this Act only to the extent that such regulations have also been adopted by such State'').

Response: The approach NMFS takes in this final rule aims to recognize and encourage state and local programs wherever NMFS finds them adequate. Nothing within the ESA would give NMFS the authority to delegate the functions suggested, unless a state had the full set of authorities required under section 6 of the ESA for state ''assumption'' of a program. No state has as yet met those qualifications, which would include having all authorities necessary to conserve the listed species

(such as the ESA provides through section 9, etc.). Therefore, the cited text of section 4(d) does not apply.

Comment 66: Another commenter suggested NMFS lacked authority to ''delegate'' scientific research permit authority to the states.

Response: As discussed in response to an earlier comment, this final rule does not delegate permit authority to states. For a subset of all research activities, this final rule does not apply take prohibitions, leaving those research activities subject only to state permitting. For other research, ESA constraints are still in place and researchers should seek ESA section 10 permits (for instance, for research in which private parties intentionally take listed fish.)

Comment 67: Several comments assert that the ESA 4(d) rules will result in takings of private property. One asked that the rule provide greater flexibility for redevelopment to prevent takings of private property.

Response: The legal effect of this final rule is to prohibit take of threatened salmonids. Complying with that mandate will certainly cause some changes in land management and use and that may affect the economic value of certain activities on the land to a greater or lesser extent—depending on the circumstance. This final rule does not, on its face, prohibit property use in any way that would rise to the level of a constitutional taking, nor does NMFS believe that the adjustments necessary to avoid taking threatened salmonids will be so draconian as to amount to a constitutional taking in any case.

Although NMFS does not agree that this final rule would likely cause a constitutional taking of property, NMFS did intend that the development limit should be broadly available and has amended and clarified the regulation to accomplish that purpose, including specifically naming redevelopment as one of the activities that individual ordinances could cover within the limit.

Comment 68: Many commenters desired that NMFS clarify the status of the limits: either wanting to be sure they are not prescriptive, or believing they should be hard requirements. Commenters also wanted to know if activities outside a limit constituted a violation of the rule.

Response: The limits are not prescriptive. They are not even enforceable requirements; rather, an entity wishing assurance that its actions are consistent with the ESA may take the necessary steps—as outlined in the regulations—to come within a limit on the take prohibitions. No enforcement action can be taken based on a charge that someone has failed to follow a limit. Enforcement actions must allege (and ultimately prove) that a listed fish has been taken.

NMFS understands that some commenters would prefer the agency to promulgate specific, detailed regulations to govern particular sectors of activity. For a variety of reasons, NMFS has not chosen that course at this time. Specific proscriptions are an effective protective mechanism where, as with threatened sea turtles, a very specific cause of mortality can be addressed with precision. In the case of Pacific salmonids, where impacts are caused by a large array of activities and where the circumstances leading those impacts to constitute a take are extremely site- or circumstance-specific, NMFS believes it extremely difficult to design a single set of prescriptive rules to cover all of those situations. In addition, prescriptive regulations would likely impose unnecessary costs on some individuals. This is because state, local and individual strategies for avoiding take can be more closely adapted to the local geography or fishery opportunities than can rules that cover an entire landscape. Thus they are equally as effective (or more so) at avoiding take of listed species and less costly than regionwide, blanket prescriptions. The approach taken in this final rule, recognizing limits but not requiring all entities or actors to be within a limit, offers an opportunity to test particular combinations of approaches without requiring everyone to invest in them immediately. Finally, as noted elsewhere in these responses, once recovery planning is complete it may identify specific areas needing more prescriptive attention.

Comment 69: Numerous comments suggested that the rule intrudes impermissibly on state water law. Commenters questioned NMFS' understanding of western water law and authority to regulate water.

Response: First, as discussed elsewhere, this rule does not directly regulate water use or water rights in any way. Rather, water diversion was identified as an activity likely to result in take under particular circumstances. There is nothing in the ESA that would carve water use out of the bundle of activities that might lead to an enforceable take of salmonids, nor that would excuse senior water users from responsibility for any take that occurs as a result of their actions. NMFS does not disagree that on a case-by-case basis, questions or priority may be germane to determining causal responsibility for particular impacts. In ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000), NMFS provides more information on how water users may evaluate the level of risk of take associated with their diversions and explores options for reducing that risk.

Comment 70: One commenter asked NMFS to clarify whether ESA section 7 compliance ''is a substitute for'' compliance under the rule. Another requested that NMFS include an explicit limit for any entity whose actions have been the subject of an informal consultation in which NMFS has concurred that the action is not likely to adversely affect the threatened species.

Response: Section 7 compliance is an adequate substitute for compliance under this rule. So long as an entity is acting within a completed formal ESA section 7 consultation and compliant with terms and conditions imposed, if any, then section 7(o)(2) provides an exception to the prohibitions on taking. Actions subject to informal consultation have a very low probability of take and are thus in the category of activities that do not need to pursue a limit.

Comment 71: Take prohibitions should be applied to California's Central Valley, especially the Yuba River area.

Response: The Central Valley steelhead ESU is subject to this final rule. NMFS expects to propose ESA 4(d) protections for the Central Valley spring chinook ESU (listed in September of 1999) within the coming months. Meanwhile, that ESU will benefit from habitat protection afforded by steps taken to avoid taking Central Valley steelhead.

Comment 72: One commenter stated that contrary to the Executive Order on Federalism (E.O. 13132), this final rule's intervention (monitoring and reporting/adjustment of limitations) in state and local land use governance exceeds NMFS' authority by unnecessarily infringing on state sovereignty. Another suggested that the final rule should state that NMFS is not requiring consistency between state and local regulatory programs and objectives of the ESA.

Response: NMFS does not agree that this rule intrudes upon state or local authorities or sovereignty. This rule does not require states to undertake any particular set of actions. It requires that states (like all other actors) refrain from taking threatened salmonids. It provides one mechanism that actors (including states for some of the limits) may pursue to ensure that they do not violate take prohibitions. A state could instead choose to pursue ESA section 10 permits. Where there is a Federal nexus, state actions may receive ESA scrutiny and legal assurance through an ESA section 7 consultation initiated by the action agency. Or, in appropriate cases,

a state may determine in its own judgement that particular activities do not carry a risk of taking listed fish, or it may modify its activities in such a way as to reduce any risk of take to an acceptable level.

Comment 73: One commenter argues that the VSP paper is inconsistent with the statutory requirements of the ESA, because of the statement in the preamble to the proposed rules that a ''viable population threshold refers to a condition where the population is self sustaining, and not at risk of becoming endangered in the foreseeable future.'' The commenter suggests this implies a threatened species can be allowed to remain in threatened condition perpetually, and still be considered viable.

Response: The commenter has identified an imprecise characterization that was included in the preamble to the proposed rules. This statement has been removed. As explained in response to other comments on VSP, the VSP paper does not attempt to define ''threatened'' or ''endangered'' under the ESA.

Comment 74: Some commenters stated that NMFS is abusing its discretion by not invoking section 9 prohibitions, and instead relying upon promised conservation efforts and future actions that are not currently operational.

Response: This final rule relies upon a determination that a conservation program approved for a limit of the take prohibition has a high degree of certainty that it will be implemented. NMFS may require a commitment to mitigate if implementation of a program is terminated prior to completion.

Comment 75: One commenter asserted that NMFS should not or cannot incorporate guidance by reference unless it has undergone ESA section 7 analysis.

Response: First, because of modifications made in response to comments, this final rule incorporates far fewer documents by reference. Second, while there is no requirement for a section 7 consultation on such documents, those referenced in the final rule have been analyzed to ensure that actions under them will not appreciably reduce the likelihood of survival and recovery of the listed ESUs in the wild.

Comment 76: One commenter wanted the rules modified to prohibit Federal agencies from activities that ''take'' threatened salmonids.

Response: In most cases this final rule does not specifically address Federal agency actions. Once take prohibitions are in effect, they apply to all actors—Federal and non-Federal alike. Second, the ESA requires that Federal actions be assessed under section 7(a)(2), and nothing written in a 4(d) rule would excuse that obligation. Once NMFS has issued a biological opinion and incidental take statement for Federal agency actions, section 7(o) of the ESA relieves the agency of liability for take.

Comment 77: One commenter asserted that the rules could make the controllers of certain activities (such as noxious weed control) vulnerable to third-party lawsuits. Commenters expressed concern about municipal and irrigation district liability for issuing permits that result in take. One commenter stated that municipal entities cannot be held liable for take if the entity does not have discretion in issuing a permit.

Response: The first commenter is correct that under the ESA the take prohibitions are enforceable by NMFS or by third parties. This final rule does not create any enforcement routes not specified in the ESA. The take prohibitions apply to all actors, so municipalities and irrigation districts certainly face the possibility of liability; actual liability would depend on specific factual circumstances and the degree of connection between the permit and the take that actually occurs. As to the suggested legal interpretation that a municipal entity's lack of discretion in deciding to issue a permit would be an absolute defense to liability, NMFS believes that question must be addressed in the specific enforcement context in which it arises.

Comment 78: One commenter noted that in cases where documents create new legal rights or duties, they are considered ''substantive rules'' and must be either published in the **Federal Register** or be incorporated by reference through the Director of the Federal Register. Therefore, NMFS should clarify how subsequent amendments to these referenced documents will be treated.

Response: There are seven documents referred to in the regulatory text of this final rule. The purpose of making these documents available to the public is to inform governmental entities and other interested parties of the technical components NMFS expects to be addressed in programs submitted for its review. These technical documents provide guidance to entities as they consider whether to submit a program for a 4(d) limit. The documents represent several kinds of guidance, and are not binding regulations requiring particular actions by any entity or interested party. 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 use the mechanisms of this final rule to take comment on revisions of any of the referenced state programs. If any of these documents is 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 the specified 223.203(b) subsection.

Comment 79: One commenter suggested that NMFS clarify the regulation regarding withdrawal of a take limit, believing those in the proposed rule to be unnecessarily harsh.

Response: NMFS has modified the language throughout this final rule to clarify this point.

Comment 80: One commenter stated that the final rule should be non-severable, so that if any or all limits are overturned in a legal challenge, the take prohibitions will not remain in effect. Another suggested that no take prohibition should be imposed until broad limits are available for virtually all sectors of human activity.

Response: A fundamental precept of this final rule is NMFS' determination that the subject ESUs require 4(d) protections. Given that, it would be inconsistent with NMFS' ESA responsibilities to the threatened fish to defer any protections in that manner. NMFS has clarified this point by making it explicit that the agency intends the provisions of this rule to be severable.

Comment 81: Because NMFS broadly applies PFC as standards with a regulatory effect, PFC guidance and supporting science should be subject to public notice and comment before it is formally applied to ESA 4(d) limitation approvals.

Response: PFC requires the maintenance of habitat functions essential to the survival and recovery of listed salmonids. As such, the use of the PFC approach as an analytical tool adds no standard to that already established in the ESA, but rather assists NMFS and the users in evaluating effects of activities on conservation of the species.

Comment 82: One commenter asked NMFS to clarify whether the take prohibition applies throughout the range of the ESUs or only in designated critical habitat. Another asserted that NMFS has created a de facto extension of critical habitat.

Response: The take prohibition applies throughout the range of the affected ESUs. Critical habitat designation gives guidance to Federal agencies, and is not directly linked to ESA section 4(d) in any way. As to the

assertion that the rule creates ''de facto'' critical habitat, NMFS must respectfully disagree. Contrary to the commenter's perception, this rule does not suggest that ''highly burdensome and expensive 'safe harbors' are what it takes to avoid ESA section 9 take liability.'' The rule provides one method of ensuring that no ESA section 9 take liability accrues, but there are other methods such as section 10 permits. Or, an actor may determine in its own judgement that particular activities do not carry a risk of taking listed fish, or modify its activities in such a way as to reduce any risk of take to an acceptable level.

Direct Take

Comment 83: Some commenters contended that under the ESA, and court decisions interpreting it, NMFS does not have the discretion to ''allow'' or ''authorize'' direct take of listed species through 4(d). The commenters cite cases in which the courts have determined that FWS could not authorize hunting of threatened wolves or grizzly bears unless it had first determined that ''population pressures within the animal's ecosystem cannot otherwise be relieved.''

Response: In these rules the Secretary is making an initial determination as to what protective regulations are ''necessary and advisable to provide for the conservation of'' the listed salmonids. In making that determination, the Secretary is not required to impose take prohibitions. In fact, section 4(d) goes on to state that ''[t]he Secretary may by regulation prohibit with respect to any threatened species any act prohibited under section 9(a)(1)...'' Thus, the Secretary has discretion to assess the status of the listed ESUs and to determine, as he has here, that blanket application of the take prohibitions is not necessary and advisable, and to describe the circumstances in which take prohibitions will not be applied. The Secretary has found that in certain circumstances, activities are sufficiently regulated by other entities or processes that Federal take prohibitions are not necessary and advisable.

In a variety of circumstances, take prohibitions might not be found necessary and advisable to provide for the conservation of a threatened species. For instance, if a threatened species is located almost exclusively on Federal lands and impacted largely by a Federal activity on those lands, the Secretary might determine that section 7 consultations will provide all the protections necessary to allow the species to recover. Or, a threatened species might be threatened because of negative impacts from a narrow class of human activity. In that circumstance, the Secretary might choose to impose prescriptive regulations tailored specifically to alter those activities in a manner that would allow the species to recover.

More importantly, 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 intentional (directed) impacts. Situations in which this final rule would limit the application of take prohibitions for intentional taking of threatened salmonids are extremely limited and consistent with the conservation and recovery goals of the ESA. Scientific research activities conducted by fisheries experts, in accord with specific guidance, and permitted by a state, can be within the limit. Harvest activity will have direct impacts in very few situations—generally where the status of the affected population is already considered viable, even though the status of the larger ESU is not. Taking listed broodstock for artificial propagation might occur for conservation purposes (or, only after the species' conservation needs are met, for secondary purposes such as fisheries).

Comment 84: A few commenters stated that in excusing direct take through harvest, NMFS is placing a far more demanding burden on other sectors (such as land use) in terms of minimizing and avoiding incidental take. They asserted that the demands/standards should be equivalent.

Response: This final rule is far from ''excusing direct take through harvest'' in any blanket fashion, as the comment may be read to suggest. Rather, in setting out the standards by which any fishery harvest program will be judged, NMFS has emphasized the means by which a management scheme maintains or achieves viable status for a population rather than on the specific mechanism by which that impact may be incurred. This final rule does not give a pass to any specific management plan at this time; each plan must be made available for public comment and reviewed against the standards for an Fishery Management and Evaluation Plan (FMEP). NMFS anticipates few instances, especially in the early stages of recovery, where such plans will include impacts targeted on threatened salmonids.

The standards by which NMFS will judge the suitability of any program for a limit are the same, whether the program manages fishery harvest or some type of land management activity. In both instances, such a program may have some impact on the listed ESU, but at a level that will not appreciably reduce the likelihood of its survival and recovery in the wild. Because current habitat conditions are in most cases far below those needed to support viable populations in the wild, additional impacts on habitat must be carefully constrained and in many cases, accompanied by mitigative measures.

Comment 85: One commenter stated that the proposed rule does not (but should) address commercial harvest and noted that NMFS recently increased the allowable commercial take of salmon which will unavoidably include some listed fish.

Response: The prohibition against take applies to all activities subject to U.S. jurisdictions, including commercial, recreational, and tribal harvest. The commenter refers to commercial harvest in the marine context, which is evaluated through section ESA 7 consultations. Any commercial activity in non-ocean fisheries would have to be governed by an FMEP in compliance with all of the standards of these rules.

NEPA

Comment 86: Some commenters wanted NMFS to clarify the extent to which NEPA applies to the ESA 4(d) rules.

Response: NEPA applies to the ESA 4(d) rules and, as the proposed rule states, NMFS completed environmental assessments (EAs) for this action. Those EAs were made available upon request and on NMFS' web site during the comment period.

Comment 87: Several commenters suggested that the EAs failed to examine a full range of alternatives (such as the Oregon Plan) or that they did not adequately discuss and evaluate the impacts of the proposed action.

Response: While none of the alternatives focus specifically on the Oregon Plan by name, Alternative B contemplates that a state ''would have developed a fully adequate comprehensive salmon conservation plan ...to ameliorate all factors for decline for ...an ESU.'' The EA assesses what impacts a fully adequate plan would have on the environment, assuming that NMFS recognized such a plan by not applying the take prohibitions to actions in conformance with it. NMFS has reexamined the EAs in light of these comments and believes they explored an appropriate set of alternatives.

Comment 88: One commenter noted that NEPA requires a quantitative assessment of consequences of the proposed rule and that agencies should

ensure the scientific integrity of discussions and analyses in NEPA documentation—including explicit reference to the sources relied upon in making the determination.

Response: The comment would be appropriate to an Environmental Impact Statement (EIS). However, an EA should not contain long descriptions or detailed data. Rather, it should contain a brief discussion of the need for the proposal, alternatives, and the environmental impacts of the proposed action and the alternatives. Hence, NMFS believes the level of detail provided is adequate for an EA, which is expected to be a concise, brief document.

Comment 89: Some commenters asserted that the ESA 4(d) rules will allow significant negative impacts from logging, water withdrawal, agriculture, etc. to continue; hence, NMFS should draft an EIS disclosing these significant impacts. Others stated that the simple act of proposing the 4(d) rules required documentation in an EIS and that the final rules should be delayed until such an EIS has been written.

Response: While such activities may have significant negative impacts on the human environment, they do not occur as a result of the ESA 4(d) rules. The comment argues for regulations that will reduce those negative impacts. As the EAs reflect, the take prohibitions will do that. While the commenters may question whether the take prohibitions are the best tool for reining in those negative impacts, the final 4(d) rules as written do not cause any of those impacts. Therefore, no EIS is required for the 4(d) rules.

Take prohibitions are the sole legally enforceable component of these 4(d) rules, and will impact the environment in a positive manner, phasing in over a long period of time (especially with regard to habitat impacts). The Council of Environmental Quality regulations make clear that the fact that an action will have net beneficial environmental impacts does not excuse preparation of an EIS where there are also significant negative impacts (40 CFR 1508.27—definition of ''significantly''). In this case the EAs reveal no significant negative environmental impacts, and NMFS believes the EAs satisfactorily address NEPA. Economic impacts need be evaluated only when required as part of the process of preparing an EIS, not as a reason for doing one. (See 40 CFR 1508.14, ''This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.'') Finally, a belief that the take prohibitions do not go far enough to stop activities that harm the environment is not an argument for an EIS.

Comment 90: One commenter stated that NMFS incorrectly asserts in the EAs that all environmental effects resulting from actions that respond to the ESA 4(d) rule are the independent analytical burden of state and local governments and NMFS will not need to consider or address them. They further stated that NMFS must grapple with the environmental effects of its proposed actions, many of which will be negative for irrigation, noxious weed control, use of pesticides, livestock grazing, etc.

Response: NMFS agrees that this statement in the EAs should have been drafted more clearly. It must be read in the context in which it appeared. The immediately preceding sentence stated ''In addition, any future regulation, policy, program, or plan that NMFS feels is protective of [listed salmonids] and for which NMFS limits the section 9(a) prohibitions, will further reduce the impacts of the 4(d) rule.'' In that context, the following modified statement would have been clearer: ''All of the potential impacts attributable to any future limits will be due to those state or other governmental regulations, policies, programs, or plans, rather than to the 4(d) take prohibitions.''

Economics/Regulatory Flexibility Analysis

Comment 91: Several commenters raised issues related to E.O. 12866, and stated that NMFS should do a cost/benefit analysis on the promulgation of this rule.

Response: NMFS has prepared a Regulatory Impact Review (RIR), which is available on our web site at www.nwr.noaa.gov. Some of the comments, however, were based on a misunderstanding of the legal effect of this 4(d) rule and were made in the belief that the rule mandated compliance with particular limits. That is not so; this 4(d) rule does not (for instance) mandate watershed conservation plans. This final rule provides a limit on the take prohibitions for habitat restoration activities consistent with watershed conservation plans that meet certain standards, but does not require any person or entity to prepare watershed plans or pursue that limit; they may avoid violating the take prohibition by whatever mechanism they choose.

Comment 92: One commenter stated that in addition to demonstrating how each limit contributed to recovery, NMFS should discuss economic and social impacts of each limit.

Response: It is NMFS' responsibility to assess the economic impacts of the regulation overall; those impacts accrue from the take prohibition, not from the limits. NMFS completed an initial regulatory flexibility analysis (IRFA) and made it available for public comment through the proposed rules. Based on comments received, NMFS has broadened many of the limits to make them available to more jurisdictions, or to simplify the processes associated with them. For instance, the road maintenance limit is now available to any state, city, county or port. The development limit is available for any city, county, or regional ordinances or plans that cover development, or categories such as wetland or shoreline regulation. NMFS has supplemented the IRFA to consider some additional categories of economic activity, such as real estate, as well. The Final Regulatory Flexibility Act concludes that at the present time there is no legally viable alternative to the modified rule that would have less impact on small entities and still fulfill the agency's obligations to protect listed salmon and steelhead.

Comment 93: One commenter stated that NMFS should (and failed to) consult with every state and local entity regarding effects of the rules on those entities.

Response: The huge number of such entities within the geographic range covered by this rule makes such consultation far beyond NMFS' resources. However, NMFS held 25 public hearings, accepted comment on the rules for 60 days, and after publishing the proposed rules, held three workshops for state and local government officials in Olympia and the Tri-Cities in Washington and in Salem, Oregon. More than 150 city, county, and state jurisdictions participated in these workshops.

Comment 94: One commenter stated that the IRFA was inadequate in its analysis of alternatives, and that it ''fails to even list'' the small businesses related to residential and commercial development in its Table of Sectors.

Response: NMFS stands by the IRFA and affirms that it presents as much information on the possible effects of the take prohibition as could be obtained through any reasonable means. Moreover, comments were solicited on the proposed rules, but NMFS received none suggesting additional sources of relevant data. The IRFA Table of Sectors

included Heavy Construction and Highway and Street Construction, which would encompass a large proportion of the activity related to residential and commercial development. We have also added information on real estate and rental leasing to the Final Regulatory Flexibility Analysis. In addition, the RIR discusses the implications of the 4(d) rule in the urban setting—including activities associated with residential and commercial development.

Comment 95: One commenter stated that an independent third party should perform an analysis of the ESA 4(d) rules' economic impacts using economic information developed by the Federal Reserve. The commenter further stated that provisions for landowner compensation and exemption from property tax assessments must also be included as part of this rule.

Response: There is no requirement for third party analyses, nor that NMFS use information from any particular source in its analyses. In fact, NMFS has searched broadly for economic information that might provide more quantitative estimates of the potential costs of avoiding take. The Federal Reserve does not develop such data. NMFS has no authority to provide for landowner compensation or to alter property tax assessments. One of the reasons for the approach taken in this final rule is NMFS' hope that by working with local and state government entities toward comprehensive ESA solutions, there will be smaller impacts on individual actors than might accrue from take-avoidance strategies they might otherwise adopt. Also, as is the case for small landowners under the Forests and Fish Report strategy adopted by Washington and recognized in this final rule, in some circumstances local or state governments may elect to provide offsetting compensation.

Comment 96: Several commenters disagreed with aspects of the IRFA prepared for the proposed rules. A major concern was that the rule requires extensive reporting and paperwork.

Response: This final rule requires only one thing: that actors refrain from taking listed fish. That performance standard does not require reporting. While taking advantage of a limit does require some level of paperwork, that course is not required; an individual or entity may choose simply to modify its actions to avoid take. Nonetheless, NMFS is aware that in some circumstances the paperwork burden is likely to increase and we stand ready to help streamline the process, give technical advice, and in general decrease that burden wherever we can.

Recovery/Delisting

Comment 97: Many commenters raised issues regarding the timing of and relationships between ESA 4(d) rules and recovery planning. Several stated that NMFS should move forward quickly to develop recovery plans for listed species. Some requested that NMFS publish de-listing goals concurrent with the publication of the final 4(d) rules or withdraw the 4(d) rules until a recovery plan was complete. Related comments questioned whether, in the absence of recovery goals, NMFS could adequately assess the contribution to recovery made by the programs approved as limits on the take prohibition. Other commenters wondered whether the establishment of de-listing goals would require NMFS to reevaluate limits already approved or change the standards for evaluating additional limits. One commenter expressed concern that future recovery plans would simply ''rubber stamp'' 4(d) rules and their limits.

Response: Recovery planning, as required by ESA section 4(f), is one of NMFS' highest priorities, and NMFS agrees that it is important to move forward quickly to establish recovery plans for listed species. NMFS does not agree that it is either necessary or advisable to publish de-listing goals and final recovery plans concurrently with, or prior to, the final 4(d) rules.

There are no statutory or regulatory requirements regarding the timing or relationships between 4(d) rules and section 4(f) recovery plans. In fact, the basic structure of the ESA itself provides that the protective mechanisms of sections 7 and 10 take effect upon the listing of a species as threatened or endangered while recovery planning follows its course through subsequent activities. Recovery plans will provide biological goals for recovery and identify an entire suite of actions needed for recovery. Thus, they may provide a more specific framework for future 4(d) rules or amendments, but the essential protective function of 4(d) rules is independent of recovery plans; that function is to prohibit take of listed species where needed. If the 4(d) rules were not promulgated until de-listing goals were developed or recovery plans completed, the species would be placed at unacceptable risk, and more stringent and costly measures would be necessary to save them.

Moreover, by applying the VSP and PFC concepts it is possible to make judgments about the contributions certain programs make to recovery. These judgments will not prejudice the comprehensive recovery planning process.

For habitat actions, NMFS may find that it is not necessary or advisable to apply the take prohibition to programs that will help attain or protect properly functioning habitat. For FMEPs, NMFS may find it is not necessary or advisable to apply the take prohibition when the program contains specific management measures that adequately limit take and otherwise protect the ESU. For Hatchery and Genetic Management Plans (HGMPs), NMFS may find that it is not necessary or advisable to apply the take prohibition when a plan is designed to minimize and adequately limit take and promote species conservation. NMFS believes that these standards are all consistent with recovery, and expects that most programs approved as limits will provide a foundation for later recovery planning measures. NMFS also anticipates that the VSP and PFC concepts will continue to evolve and provide the analytical framework for evaluating potential limits and recovery measures.

Through the process of recovery planning, NMFS may develop more specific information about measures needed for recovery or about specific areas needing more prescriptive attention. In addition, each take limit incorporated into the 4(d) rules includes provisions for continued review of its implementation and effectiveness. Thus, NMFS intends to continually reevaluate the limits. If these evaluations, or information developed through recovery planning, or any other information, indicates that a limit is inadequate for recovery, NMFS will revisit the limit.

Finally, NMFS is moving forward as quickly as resources allow to develop recovery plans. NMFS has appointed Technical Recovery Teams (TRTs) for Puget Sound and for the Willamette/Lower Columbia River Basins and Southwest Washington. These teams have begun to identify delisting goals. To conduct the more policy-oriented aspects of recovery planning, NMFS will work with state, local, tribal, and private entities to craft a recovery planning process suited to specific areas and situations. Formal recovery planning efforts will be expanded to additional geographic domains as resources permit.

Comment 98: Several commenters addressed the issue of federal trust responsibilities to tribes in developing protection and conservation goals, plans, and measures. These commenters held that NMFS needs to make every effort to ensure that treaty rights and trust responsibilities are met through its

regulatory actions, and that thresholds, goals, and recovery plans support healthy, productive, and harvestable fish populations.

Response: NMFS approaches the ESA 4(d) rules as a vital component of conserving the species until the protections of the ESA are no longer needed. These protections will no longer be needed only if the abundance of fish is sufficient to satisfy treaty fishing rights and to fulfill the trust obligations of the United States.

Cumulative Impacts

Comment 99: A number of commenters questioned the reasoning behind NMFS including in the take guidance a category of activities that, while individually unlikely to injure or kill listed salmonids, may collectively have significant detrimental impacts. Commenters asserted that regulating such activities was beyond NMFS' purview. Others questioned how NMFS would enforce the prohibitions when take resulted from such activities.

Response: NMFS agrees somewhat with this comment. The discussion of activities that do not cause take individually but that cumulatively may have significant detrimental impacts on salmonids was intended to be advisory and informative in nature and no enforcement actions in response on these activities were being contemplated. The category of activities raised a number of concerns however, and the language has been struck from the rule. Nonetheless, it is important to note that a myriad of decisions made by individuals and institutions on a daily basis, while negligible in the individual case, may have, in the aggregate, a significant detrimental impact on the ecosystem processes that support salmon and steelhead.

Comment 100: Many commenters raised the issue of cumulative impacts. Some expressed concern that the 4(d) proposed rules did not assess the cumulative impact of all the take limits combined. Some also expressed concern that the individual take limits did not address cumulative impacts of activities covered under that limit. Several commenters requested that the final rules include an analysis of cumulative impacts as well as a mechanism for evaluating cumulative impacts caused by any future take limits. One commenter asked how and when NMFS would provide opportunities for the public to review and comment on ESU-wide assessments of cumulative take.

Response: The suggestions regarding cumulative impacts have great merit, and NMFS is moving toward implementing a method for assessing total take across broad sectors. That function, however, would not be specific to the 4(d) context. Impacts on listed species accumulate from natural conditions as well as from illegal and unauthorized take and from actions to which the take prohibition does not apply because they fall in the realm of some other ESA mechanism (section 10 permits; section 7 consultations, or specific provisions of a 4(d) rule). Cumulative impact assessment is problematic because there are very few methods for adequately assessing cumulative impacts of habitat-modifying activities. Nonetheless, NMFS has explicitly incorporated consideration of cumulative impacts into the 4(d) rules where feasible. For example, FMEPs will evaluate the cumulative mortality of all fisheries, and HGMPs will track the number of listed fish taken as broodstock. In addition, NMFS believes that by requiring habitat-modifying activities within a limit to attain or maintain properly functioning condition, and all activities within a limit to contribute to viable salmonid populations, cumulative impacts are, to an extent, accounted for. Moreover, during the process of developing comprehensive recovery plans, NMFS and recovery teams will address the issue of cumulative impacts more systematically. The public will have the opportunity to comment on ESU-wide assessments of cumulative levels of take during the recovery plan public review process.

Comment 101: A number of commenters recommended ways for NMFS to assess cumulative effects. One commenter asserted that meaningful assessments of cumulative risk at the ESU level would require linkage between VSP and PFC and development of a common method for evaluating the effects various activities have on populations and habitats. Another urged that NMFS adopt comprehensive habitat productivity standards to evaluate cumulative effects of habitat programs granted limits on the take prohibition. One commenter suggested that NMFS require all habitat-modifying activities to account for habitat-modification-related mortality. Another suggested that NMFS focus on cumulative take rather than dealing with take in its various permutations individually. Another suggested that the rules should mandate an annual cumulative take assessment (based on life cycle stages) for each population in an ESU. In addition, they desired that NMFS (a) examine mortality in the various populations and determine whether take from a particular sector is placing them at risk, and (b) separate human-induced mortality from that attributable to fluctuating environmental conditions and thereby adjust take regulations to provide more protection during times of environmental stress.

Response: NMFS agrees that all of these suggestions have great merit and, as mentioned previously, NMFS is moving toward implementing a method for assessing total take across broad sectors. Also, as mentioned earlier, assessing cumulative impacts is a difficult process. In most cases, there are no adequate standards for habitat productivity and developing them is a complex and long-term task. NMFS intends to work with co-managers to develop the necessary standards and assessment techniques. In addition, during the ESA recovery planning process, NMFS will assess the mortality burdens for each ESU and life-cycle stage.

Comment 102: One commenter asserted that limits for urban development should be analyzed within the cumulative impact context.

Response: NMFS agrees that cumulative effects should be an important consideration in analyzing the effects of MRCI development and redevelopment. To the extent that NMFS must prioritize the evaluation process, comprehensive MRCI plans with relatively broader scopes of activities, authorities, effects, and geography (and therefore greater cumulative effects) will generally be evaluated before plans with relatively smaller scopes. Applicants with smaller-scale plans should take particular care that their effects analyses take cumulative impacts into account.

Comment 103: Several commenters questioned whether NMFS had completed requisite cumulative effects analysis under ESA section 7 and NEPA.

Response: NMFS has complied with section 7 consultation requirements on the adoption of the 4(d) rules by consulting both internally and with FWS. In addition, NMFS has completed an EA for this action pursuant to NEPA.

Comment 104: One commenter asserted that the cumulative impacts consideration required by § 223.203(b)(8)(iii)(A) is unreasonable due to lack of clear scientific consensus on how to do so.

Response: Cumulative impacts analysis has been routinely required by NEPA, ESA, and many other Federal and state authorities for several decades and NMFS does not believe it presents an insurmountable obstacle to development of acceptable watershed

conservation plans (WCPs). In fact, it would be difficult to complete an adequate watershed analysis without having considered cumulative impacts. NMFS is confident that state WCP guidelines will be able to offer sufficient technical advice so that entities developing WCPs will be able to meet the cumulative impacts requirement.

Comment 105: Some commenters held that the rules failed to regulate activities consistent with their incremental effects, and that the effect of the rules would be to focus NMFS staff time on urbanized areas, while greater benefit could be gained by identifying habitat areas where the most good could be achieved at the least cost, and then bringing Federal, state, and local resources to bear upon those areas. Other commenters expressed concern that the rules would disproportionately regulate the impacts of habitat modification compared to the impacts of harvest activities.

Response: NMFS does not believe that the 4(d) rules fail to regulate activities consistent with their incremental effects. The 4(d) rules ''regulate'' primarily by putting into place the ESA section 9 take prohibitions. This take prohibition applies to all activities, regardless of their incremental impact on a listed species. The rules then identify certain activities that already conserve the species and for which no additional ESA regulation (i.e., take prohibitions) are necessary. These activities span a broad range and include research, aiding stranded salmonids, managing harvest and hatcheries, and land uses such as forestry, development, and road maintenance. NMFS hopes to continually expand the scope of these limits to encompass additional activities not currently addressed by limits, wherever such efforts are biologically warranted.

Limits for Scientific Research and Rescue/Salvage

Comment 106: Several commenters stated that the ESA 4(d) limit for scientific research activities (research limit) would place excessive reporting requirements on state fisheries agencies and that these agencies lacked the funding and staffing to accommodate the additional workload.

Response: NMFS acknowledges that, as a result of promulgating the take prohibitions, state fisheries agencies will now have a higher level of accountability for reporting take of listed salmonids and that some ESA-related reporting will be new for these agencies. However, all of the affected agencies currently oversee research permit processes for fish sampling in state waters and NMFS believes that the workload associated with this limit should be comparable with state reporting/recordkeeping requirements already in place. Much of the information NMFS is requiring under the research limit is currently generated by the state's permit process, which presently covers all entities (e.g., Federal, academic, private, and other state agency researchers) other than biologists employed by the state fisheries agency. However, these agency biologists typically produce research summaries that NMFS believes could be efficiently translated into the annual state reports supporting this limit.

Moreover, a major impetus for providing the research limit is to allow the state fisheries agencies to continue to oversee and coordinate research efforts for listed salmonids. The ESA's section 10 permitting process does not always facilitate state oversight/coordination and NMFS believes that it is advisable to minimize research impacts by streamlining the research review process in a manner that fosters active participation by state fisheries agencies. It is worth noting that as a result of previous 4(d) rulemaking (50 CFR 223.204(a)(4)), ODFW has successfully coordinated and reported scientific takings per a 1997 research limit involving listed coho salmon in southern Oregon. NMFS will work closely with all of the affected states and research entities to expand on this success while minimizing the reporting workload by incorporating existing state processes into those supporting the 4(d) limit for scientific research.

Comment 107: Some commenters asked whether research involving direct take of listed salmon and steelhead would still require a section 10 permit and whether incidental take would be covered under the ESA 4(d) rule.

Response: Research and monitoring activities involving either directed or incidental take of the 14 ESUs identified in this rule are covered by this 4(d) limit. Therefore, state-approved activities covered by this limit would not need to go through a separate section 10 permit process. However, if the research is not covered by the research limit, then an applicant would need to obtain an ESA section 10 permit before conducting research that could take a listed salmonid.

Comment 108: Several commenters were confused by the language describing provisions under ''Continuity of Scientific Research'' and requested clarification as to what applications were needed and when take prohibitions would become effective.

Response: As described in the proposed rules, NMFS is concerned with the potential for disrupting ongoing scientific research, monitoring, and conservation activities, especially during the coming summer/fall field seasons. Therefore, the agency is providing a temporary limit on the take prohibitions to allow such activities to continue until March 7, 2001 so that the necessary paperwork can be processed. However, to qualify for this ''temporary'' limit, researchers must submit a section 10 permit application to the Assistant Administrator for Fisheries (AA), NOAA by October 10, 2000 for research activities affecting listed fish in any of the 14 salmon or steelhead ESUs identified in this rule. Applicants would be subject to take prohibitions only after their permit application is denied, rejected as insufficient, or the ''temporary'' limit period expires, whichever occurs earliest. Researchers failing to submit an application by October 10, 2000 would be subject to take prohibitions beginning on September 8, 2000 for the seven steelhead ESUs and on January 8, 2001 for the seven salmon ESUs. NMFS will make every effort to respond to applicants in a timely fashion. However, researchers are advised to prepare for unavoidable delays that may result from the anticipated load of section 10 permit applications that will be presented to NMFS.

Parties requesting coverage under the ESA 4(d) limit on scientific research activities should consult with the ODFW, the California Department of Fish and Game (CDFG), the Idaho Department of Fish and Game (IDFG), or the Washington Department of Fish and Wildlife (WDFW) to determine when related applications are due to these oversight/coordination agencies. By October 10, 2000, NMFS will expect these agencies to submit a letter of intent to the AA, NOAA, summarizing the types of research to be covered under the 4(d) limit for any of the 14 salmon or steelhead ESUs identified in this rule. This letter will serve as a placeholder for these agencies (and the entities identified in their letter) until they can submit to NMFS a more comprehensive assessment of scientific research activities planned for the 2001 research season. Take prohibitions for these applicants would become effective after their application for the 4(d) limit is either rejected by NMFS or the ''temporary'' limit period expires, whichever occurs earliest. Applicants failing to submit a letter of intent by October 10, 2000 would be subject to take prohibitions beginning on

September 8, 2000 for the seven steelhead ESUs and on January 8, 2001 for the seven salmon ESUs. NMFS will work closely with the affected state agencies and researchers to select suitable reporting time frames and minimize the disruption of research efforts.

Comment 109: Several commenters requested that NMFS expand the ESA 4(d) limit on scientific research activities to include research by tribal fisheries biologists. Others requested that NMFS include a regulatory obligation for the states and NMFS to include tribes in reviewing scientific research and monitoring efforts subject to the ESA 4(d) limit.

Response: NMFS has provided a separate 4(d) rule for Tribal Plans (including research and monitoring activities) (published elsewhere in this **Federal Register** issue) the purpose of which is to establish a process that will meet the conservation needs of listed species while respecting tribal rights, values, and needs. A tribe intending to conduct research-related actions that may take threatened salmonids could submit a Tribal Plan to NMFS for consideration under the 4(d) rules. In addition, tribes have the opportunity to have tribal research activities covered under the research limit for salmon and steelhead, so long as the activities are in accord with state reporting requirements specified in that limit.

NMFS does not believe it is necessary to include a regulatory obligation under 4(d) that requires states to include a tribal co-manager review and concurrence process for research/monitoring activities. There are ample opportunities—both formal and informal—for Federal, state, and tribal co-managers to coordinate salmonid research and monitoring efforts and NMFS will continue to encourage such collaborative efforts. In addition, NMFS recognizes its responsibilities to confer with the tribes on ESA issues and will use this dialogue to ensure that tribal concerns are addressed. NMFS will make available to interested parties the documents describing the research and monitoring conducted under either the tribal 4(d) limit or the salmon/steelhead research limit.

Comment 110: Some commenters stated that the research limit was too narrowly defined and should be expanded to apply to other state and non-governmental entities (e.g., state water quality agencies, watershed councils, and sportsman groups). Others requested that NMFS clarify what is meant in the research limit by ''oversight'' and ''coordinated.''

Response: NMFS believes that the state fisheries agencies are in the best position to oversee and coordinate scientific research and monitoring efforts involving listed salmonids. While other entities (e.g., other state agencies, academics, consultants, etc.) have considerable expertise in fisheries research, none have the clear management responsibility for salmonids that is vested with the state fisheries agencies. Moreover, NMFS is concerned that expanding this limit to include numerous entities would hinder the coordination of research efforts. NMFS encourages coordination as a means to minimize research impacts on listed salmonids while facilitating data exchange and interpretation.

NMFS agrees that minor modifications to this limit's description will help clarify the agency's intent for ''oversight'' and ''coordination.'' For example, with respect to ''oversight,'' NMFS does not believe that a state fishery agency must directly supervise or inspect every research project. Instead, NMFS intended that research efforts covered by the ESA 4(d) limit should merely be identified and approved by the appropriate state fishery agency. The identification and approval processes should constitute nominal extensions of the pre-existing system for obtaining a state research/collection permit. In addition, NMFS' emphasis on ''coordination'' was to encourage the state fisheries agencies to establish and improve upon mechanisms for organizing research and monitoring of listed salmonids. Such coordination could occur at a state-wide level (e.g., the Oregon Plan for Salmon and Watersheds), at a level addressing a particular ESU (e.g., Washington's Hood Canal and Eastern Strait of Juan de Fuca Summer Chum Recovery Plan), or watershed. No matter what the level, however, the state fisheries agencies will still need to provide NMFS with the requisite annual reports. NMFS will continue to work with the affected states to better define the reporting requirements supporting this limit, maximize the information being gathered on fish and wildlife species (while minimizing impacts on threatened and endangered species), and ensure that sound research proceeds unencumbered by regulatory/permitting requirements.

Comment 111: Some requested that this limit be made available to Federal researchers and asked for clarification on the relationship between this limit and ESA section 10 permits.

Response: NMFS clarifies that Federal research and monitoring activities could be covered under the research limit. Federal lands encompass vast areas of salmonid habitat in the Pacific Northwest and California, and Federal research efforts contribute vital information about these species. Therefore, NMFS believes it is necessary and advisable to provide the opportunity for Federal researchers to receive coverage under the research limit. Such coverage would obviate the need for an ESA section 10 permit for these Federal researchers. Still, in deference to the need for close coordination with state and other efforts (plus the fact that Federal researchers will still need research and collection permits from the state fisheries agencies), Federal research will only be covered under the ESA 4(d) limit when that research is overseen by or coordinated with a state fisheries agency that is willing and able to report on the Federal research effort. Also, it is important to note that coverage under the research limit would 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 listed species.

Comment 112: Some commenters contended that NMFS was placing unnecessary constraints on electrofishing as a sampling technique. Several requested clarifications and revisions to specific protocols described in NMFS' ''Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act'' (NMFS, 2000a), in particular they sought revisions in the guidelines pertaining to numeric standards/settings and documenting crew experience and sampling history. One commenter requested that NMFS expand the limit and guidelines to address electrofishing from boats.

Response: NMFS contends that the guidelines are both reasonable and necessary for the conservation of listed salmon and steelhead ESUs. The literature is replete with evidence to support NMFS' concerns that electrofishing can be particularly harmful to salmonids and other fishes (see review by Nielsen, 1998). Before distributing the existing guidelines in 1998, NMFS held a workshop and distributed the subsequent guidelines for peer review. The resulting guidelines reflect reasonable and prudent measures for minimizing the adverse effects of electrofishing. NMFS will continue to encourage researchers to use other less invasive techniques (e.g., traps and snorkeling surveys), but recognizes that electrofishing has utility, or is the only practical alternative in certain study designs.

With respect to specific concerns about the electrofishing guidelines, NMFS disagrees with most of the issues raised and believes that only minor modifications are warranted in these protocols. For example, the agency disagrees with several commenters that requiring conductivity measurements would impose an onerous and costly burden on researchers. It is well known that water conductivity is one of the most critical parameters determining electrofishing impacts and conductivity meters are both inexpensive and readily available. The concerns that NMFS is requiring too much documentation (e.g., logging crew experience and data on sampling results) are also unsound. Most, if not all, researchers record the time spent (e.g., time counters are an integral part of most backpack units) and results of electrofishing surveys (e.g., numbers of fish encountered, injuries observed, site conditions, etc.). These logs aid fish by helping to improve the researcher's technique and can form the basis for training new operators.

With respect to boat electrofishing, NMFS has serious concerns with this technique because it has even greater potential for seriously injuring listed salmonids. For example, the technique can employ electrical output that is an order of magnitude greater than backpack electrofishing units, and environmental conditions can seriously limit a researcher's ability to minimize impacts on listed fish (e.g., adult salmonids in large and turbid stream reaches). NMFS has not developed suitable guidelines for this sampling technique and will continue to request that researchers desiring to employ electrofisher boats apply to NMFS via the ESA section 10 permit process.

Comment 113: Some commenters requested that NMFS clarify which entities would be covered under the limit for rescue and salvage actions and better define what constitutes an ''emergency'' under this limit. One commenter requested that NMFS specifically allow electrofishing under the rescue/salvage limit.

Response: The regulations pertaining to this limit state that rescue/salvage can be conducted by ''any employee or designee of NMFS, FWS, any Federal land management agency, IDFG, WDFW, ODFW, CDFG, or any Tribe.'' A designee of the listed entities is any individual that the Federal or state fishery agency, or other co-manager has authorized in writing to perform the rescue/salvage.

While it is not possible to characterize all scenarios constituting an ''emergency'' for listed salmonids, fish strandings resulting from natural or human-induced events are probably the most common type encountered. For example, an emergency condition may exist as a result of dewatering (e.g., for irrigation), damming, drought conditions, or when listed fish become stranded in channels or ponds following a flood event, landslide, or debris torrent. Chemical spills associated with industrial effluents or vehicular accidents (e.g., train or automobile accidents) have also been known to create an emergency for salmon and steelhead. These are just a few examples of scenarios that the employees or designees might face. Obviously professional judgement will need to be applied at the scene of an emergency to determine if and how listed fish should be rescued.

NMFS concurs that electrofishing is permissible when there is no better technique for safely removing stranded fish under the rescue/salvage limit. However, the electrofishing should be conducted in accordance with NMFS' backpack electrofishing guidelines.

Fishery, Hatchery, and Genetic Management Activities

Comment 114: Some commenters stated that the proposed ESA 4(d) rules potentially grant broad exemptions for taking listed species in hatchery programs and fisheries and that these limitations should be omitted or tightened to better control hatchery and harvest practices.

Response: The final rules establish explicit criteria and standards that hatcheries and harvest activities must adhere to in order for them to be eligible for limitations on section 9 take prohibitions. The criteria include detailed plans, risk assessments, and monitoring and evaluation and are similar to what has been required for section 10 permits in the past. The Fishery Management Evaluation Plans (FMEPs) and Hatchery Genetic Management Plans (HGMPs) will be evaluated using the same standards used to examine section 10 permit applications. The limits for hatcheries and harvest will not decrease the level of protection for listed species.

Comment 115: There was general support for the concepts detailed in the technical document ''Viable Salmonid Populations.'' However, there was much concern over how to apply these concepts in actuality. A number of commenters stated that in most cases there would not be enough information to determine population structure and abundance thresholds. Many commenters thought VSP should be implemented through NMFS' recovery planning efforts.

Response: NMFS realizes that a substantial amount of information needs to be generated in order for FMEPs and HGMPs to be consistent with the ''Viable Salmon Populations'' technical document. Ideally, that information would arise out of the technical phase of the recovery planning process. However, even if all the data are not yet available, the concepts contained in VSP are valid and will still be used to help develop and evaluate FMEPs and HGMPs. Determining ''critical'' and ''viable'' thresholds in the management plans allows actions to be tied to the status of listed fish in a particular population or management unit. If a population or management unit is at critical levels, actions must be strictly controlled and not impede recovery. At viable levels, the population or management unit is healthy and more flexibility exists for fisheries and hatchery management. NMFS will work with the co-managers to apply VSP to the greatest extent possible for any given management unit. As additional monitoring and evaluation are completed in the future and as recovery plans are developed, the FMEPs and HGMPs will be revised.

Comment 116: Some commenters suggested that no progeny of listed fish that were spawned in a hatchery should be considered listed under the ESA.

Response: Listed fish may be taken into a hatchery for spawning as a last resort to conserve the species. Before this can occur, an approved HGMP or ESA section 10 permit must be obtained. The HGMP or section 10 permit specifies the number of listed fish that can be taken into the hatchery. The status of the (artificially propagated) progeny of these fish is determined at the time the species is listed (i.e., stated in the final listing determination). If the hatchery program is part of an ESU where the progeny of listed fish spawned in a hatchery are considered to be listed, NMFS may proceed through rulemaking to delist hatchery progeny once an HGMP or section 10 permit is in place.

Comment 117: Some commenters questioned the strategy of restricting steelhead fisheries to areas where only hatchery-marked steelhead are expected to occur and prohibiting the retention of listed steelhead. It was asserted that this policy could be a disincentive for local recovery efforts because healthy, naturally reproducing populations of fish could not be utilized if the population recovers.

Response: NMFS agrees that recreational fisheries should not be

limited to streams where only hatchery fish are present. NMFS intends to manage fisheries based upon a listed ESU's status and a given fisheries' impacts on that status. The ultimate goal is to recover and maintain natural, self-sustaining ESUs so that ESA protections are no longer necessary. Under the VSP concept, if a steelhead population has recovered to viable abundance levels, more harvest impacts could be allowed than would be advisable for an adjacent population whose status is poor.

Comment 118: Several commenters requested clarification on the meaning and purpose of sanctuary areas, and some questioned the rationale for not requiring the designation of sanctuary areas in FMEPs under the salmon ESA 4(d) rule, but requiring them in FMEPs under the steelhead 4(d) rule. (Note: the proposed 4(d) rule for salmon (65 FR 170, January 3, 2000) was published separately from the proposed rule for steelhead (64 FR 73479, December 30, 1999). The two proposed rules have been combined in this final rule.)

Response: NMFS defines sanctuary areas in the FMEPs as areas that are closed to fishing. NMFS' intent is to provide areas where juvenile and adult fish are not exposed to any fishing-related pressure or mortality (including catch and release fisheries, which can have an associated incidental mortality). Tributary streams or stream reaches that are the primary, core areas where listed fish spawn and rear in a given watershed would be good areas to designate as sanctuaries.

Establishing sanctuary areas is especially important for species (like steelhead) that can spend several years rearing in fresh water and may be exposed to multiple fishing seasons. Juvenile salmon are generally less vulnerable to fishing because they typically emigrate to the ocean by the time they are one year old. However, some juvenile salmon (e.g., sockeye) can also exhibit extended freshwater residence. NMFS agrees that sanctuaries should also be included in the FMEPs developed for the listed salmon ESUs. The extent of the existing (and future) sanctuary areas for juvenile and adult fish will be evaluated on an ESU-by-ESU basis when the FMEPs are reviewed.

Comment 119: One commenter contended that sanctuaries may be difficult to establish in many California river systems (e.g., Central Valley streams) and asked how many sanctuaries would be needed to get NMFS' approval of an FMEP.

Response: NMFS agrees that it may be difficult to designate sanctuaries in the Central Valley system given that the majority of historical habitat is now inaccessible to fish. However, there are other accessible river systems inhabited by the three steelhead ESUs covered by this ESA 4(d) rule that currently do not offer sanctuary protection in critical spawning and rearing habitats. The FMEP process will allow NMFS to work with co-managers in establishing angling sanctuaries in these areas to further protect and conserve steelhead while still allowing appropriate angling opportunities to proceed. The appropriate numbers of sanctuaries will arise out of the FMEP development process.

Comment 120: Some commenters questioned whether the FMEP process is necessary for sport angling and contended that developing elaborate FMEPs is not the best use of limited technical and restoration resources.

Response: The FMEP process will make it easier to work with the co-managers in making sure that sport fishing activities comply with the intent of this limit. While the amount of information that NMFS requires for FMEP approval will be similar to information required for an ESA section 10 incidental take permit, the FMEP route provides a longer-term framework for fisheries management and is thus more efficient over time in addressing recreational fishing impacts on listed species.

Comment 121: Some commenters requested that recreational fisheries in California receive a limit on the take prohibitions because they are likely to have only minor impacts on listed species.

Response: NMFS recognizes that CDFG has instituted conservative fishing regulations in many of the steelhead-bearing streams found in California. These regulations allow for continued angling opportunities, where appropriate, while providing some level of protection for listed steelhead through gear, season, and area restrictions. Although take associated with modern recreational fisheries has not been identified as a major reason for the depressed status of many California steelhead ESUs (NMFS, 1996), there is still a general lack of monitoring from which to derive reliable quantitative estimates of impacts in selected steelhead streams (e.g., Antelope, Deer, and Mill Creeks in the Central Valley steelhead ESU). In addition, take provisions and angling regulations may need to be more restrictive in areas where habitat conditions are not properly functioning and angling pressure would exacerbate the risks faced by a listed population. An approved FMEP would provide the means to identify these monitoring gaps and open the way for agreements with co-managers on instituting appropriate measures and securing funding sources.

Comment 122: NMFS should not require FMEP monitoring that is physically or fiscally impractical.

Response: NMFS agrees with this comment and will make every effort to work cooperatively with co-managers to identify resource monitoring and assessment requirements on an ESU-by-ESU basis. The required level of monitoring will be tied to a population's status and the degree to which a specific fishery poses risks to that population. There is sufficient flexibility in the ESA 4(d) rule to accommodate the immediate staffing and funding shortfalls. One of the integral parts of the FMEP process, however, will be to identify the level of monitoring and assessment needed to adequately address the impacts of recreational angling on listed species in a given ESU. Strategies for prioritizing monitoring needs based on funding and staffing capabilities will be stipulated in letter of concurrence NMFS crafts in response to an approved FMEP.

Comment 123: Several comments addressed the use of barbed hooks in recreational fisheries for trout and steelhead. One commenter questioned the scientific basis for disallowing barbed hooks in adult steelhead fisheries. Other commenters believed that catch and release mortality could be significantly reduced by requiring the use of barbless hooks.

Response: The available scientific data have not shown that using barbless hooks consistently or significantly reduces catch and release mortality in trout and steelhead fisheries, and the ESA 4(d) rule does not require barbless hooks in recreational fisheries. However, NMFS believes certain fishery situations could warrant the use of barbless hooks to minimize potential impacts on listed fish.

Comment 124: Several commenters were concerned with language in the ESA 4(d) rules relating to restrictions on resident species fisheries. Some contended that restrictions should be placed on any fishery (resident or anadromous species) that substantially affects listed fish. Others believed the restrictions to be excessive and stated that NMFS should more fully assess the impacts of resident species fisheries on listed salmon and steelhead.

Response: All fisheries that potentially affect listed salmon and steelhead must be evaluated in the appropriate FMEP. NMFS' intent is to point out the fact that some resident species fisheries can affect listed fish. In these circumstances, the FMEP must

include angling regulations for resident species fisheries that minimize any take of listed species. An FMEP may also include restrictions on anadromous fisheries to ensure that listed species are conserved.

Comment 125: One commenter stated the need to clarify certain definitions used in relation to the hatchery programs. It was asserted that several hatchery programs still have definitions of ''natural'' fish that seriously obscure the differences between wild and hatchery-produced fish. The commenter stated that the HGMPs should address this problem.

Response: NMFS agrees with this comment. Therefore, to clarify, NMFS generally uses the terms ''natural'' and ''hatchery'' to describe the origin of anadromous fish following the definitions found in Bjornn and Steward (1990): hatchery fish are those that, regardless of parent stock, have been spawned, incubated, hatched or reared in a hatchery or other artificial production facility. Naturally produced fish are those that result from natural spawning in streams. As Waples (1991) stated, the terms wild and natural are used synonymously to refer to naturally produced fish without regard to the origin of the parent stock.

Comment 126: The HGMP and FMEP templates should be referenced in the 4(d) rules.

Response: This suggestion has merit and language in this final rule has been duly altered. The templates are available on NMFS' Northwest Region website (www.nwr.noaa.gov).

Comments related to the criteria established for FMEPs and HGMPs

Comment 127: Some commenters questioned the assertion in the harvest limit that at critical threshold levels, harvest actions must not appreciably increase the genetic and demographic risks facing the population. They stated that this policy does not ensure the conservation of listed species and that any populations that are at critical threshold levels should not be put at risk. They asserted that harvest should be very restricted or totally eliminated when a population reaches critical levels.

Response: When a population within a listed ESU is at critical levels, impacts from fisheries must be strictly controlled. No fishery will be allowed under the ESA which jeopardizes the continued existence of an ESU. In some cases it may be necessary to close or curtail fisheries to protect listed fish. The intent of this language was to realize that incidental harvest may occur even under a tightly regulated fishery regime. Anadromous salmonids have a vast migratory distribution and may be incidentally intercepted in fisheries occurring in other regions. NMFS will evaluate FMEPs to ensure that the harvest regime will protect individual populations and allow the ESU to recover before being approved.

Population-level assessments under the ESA are meant to provide information on abundance, productivity, structure and diversity specific to each population, and are essential to determining an ESU's overall health. However, under some circumstances the ESU as a whole may be viable even though some individual populations have not fully recovered. NMFS and the TRTs appointed to help develop de-listing criteria will determine which, where, and to what degree populations within an ESU must have ''viable salmonid population'' status to render adequate ESA protection at the ESU level.

Comment 128: One commenter stated that no transgenic or genetically engineered fish should be allowed in waters where listed fish reside.

Response: No action that jeopardizes the continued existence of listed species is permitted under the proposed 4(d) rules or any other section of the ESA. If NMFS assumes that ''transgenic or genetically engineered fish'' are not native species and determines that their introduction into waters where listed fish reside would not help recover listed species, these fish would likely be prohibited.

Comment 129: Some commenters believed that the final rules should contain citations that demonstrate the validity (including associated risks) of supplementation as a tool for recovery. Some organizations are doubtful that supplementation is effective.

Response: There is considerable scientific uncertainty regarding the extent to which benefit can be derived from supplementing naturally spawning populations with hatchery-produced fish. There are well-publicized examples of domesticated, hatchery-produced salmon and steelhead having negative effects on natural production (Kalama River-Skamania summer steelhead). There are also examples where artificial propagation of the local, indigenous, stock appears to have increased or sustained the number of naturally spawning fish (Imnaha and South Fork Salmon River summer chinook, Upper Columbia steelhead, Rogue River coho). The proposed HGMPs require programs to be designed using the best current scientific knowledge in order to identify and manage risks and provide benefits to the listed species. The HGMPs are required to identify goals, adopt performance standards, and conduct comprehensive monitoring and evaluation in order to help evaluate supplementation success and resolve any uncertainties about the practice.

Comment 130: Some commenters stated that artificial propagation has failed to maintain wild fish populations and all hatchery programs should be discontinued.

Response: Few of the original artificial propagation programs were designed to maintain wild populations. By developing and implementing HGMPs under the ESA, these programs will address wild population conservation and recovery. The risks and negative effects associated with artificial propagation programs are being identified and managed. It is true that artificial propagation has not been able to maintain wild anadromous fish when dam building, habitat loss, and fishing has continued at the established pace. Reforming hatchery practices is advisable, but discontinuing all artificial propagation is not necessary to restore natural fish under all circumstances. In many cases, hatchery programs are managed to minimize risks to wild populations while providing other benefits, such as supplying harvestable numbers of fish to meet treaty trust responsibilities.

Comment 131: One commenter stated that NMFS should not use HGMPs to police compliance with court orders.

Response: NMFS cannot approve an HGMP that does not comply with legal mandates established by statute or court order. This criterion is intended to remind the applicants that an HGMP must be legally as well as biologically complete.

Comment 132: Several comments addressed the experimental nature of supplementation programs and the need for hatchery program goals to protect genetic diversity and individual wild fish stocks. Furthermore, specific concerns were raised about the need to ensure that monitoring and evaluation activities adequately protect listed fish.

Response: NMFS agrees with the general thrust of these comments. Supplementation programs are viewed as being experimental; they can vary from program to program depending on the purpose of the program, the species targeted, stock status, and location. Because of supplementation's experimental nature, HGMPs assume an adaptive management approach for such programs by requiring extensive monitoring and evaluation. These activities must be able to identify deleterious effects on listed fish so the program can be modified. Furthermore,

HGMPs are designed to protect genetic diversity in wild populations (both listed and non-listed) by improving hatchery management, monitoring, and evaluation.

Comment 133: Some commenters questioned how mining wild fish populations for broodstock contributes to recovery when a population is at or below the critical threshold.

Response: When populations reach critical levels and the best available scientific information indicates that the demographic risks are greater than the genetic risks, using artificial propagation to prevent imminent extinction may be the least risky alternative. When populations are at or below the critical level, the only hatchery programs NMFS is likely to approve would be for the sole objective of enhancing the listed species' propagation and survival. If the cause of the decline is short-term, then the hatchery program could be reduced once the population exceeds the critical threshold. If the cause for the decline cannot be remedied in the short-term, the hatchery can act as a genetic broodstock bank and maintain the population until the causes for decline can be addressed.

Comment 134: Some commenters had concerns about NMFS' decision making process in determining whether an HGMP adequately avoids or minimizes any deleterious effects. They desired to know how the standards for this determination would be set and sought an exact description of the monitoring program.

Response: NMFS has developed a detailed HGMP template in collaboration with scientists from the other state and Federal agencies and treaty Indian tribes. The template is available on the NMFS Northwest Region's website at www.nwr.nmfs.gov. The template references many documents that provide guidance on artificial propagation in terms of setting performance objectives, identifying, evaluating, and managing risks, and monitoring results. NMFS' fishery scientists will review the HGMPs for completeness and adequacy. The HGMPs are also being used in sub-basin planning and in the Northwest Power Planning Council (NPPC) funding process where they may be subject to review by fishery scientists employed by Council staff as well as one or more layers of independent scientific review. The HGMPs will be available for public comment and peer review before they are approved. NMFS believes this process will help ensure deleterious effects are being adequately managed. However, all hatchery programs pose some degree of unavoidable risk to natural populations.

Comment 135: One commenter suggested that hatcheries should produce as many fish as possible and held that there is no scientific basis for favoring natural fish over hatchery fish.

Response: NMFS strongly disagrees. Hatchery fish have been identified as one of the factors causing population declines in a number of ESUs. There is a substantial body of scientific evidence to show that hatchery fish can harm natural fish by preying on them, competing with them for food, shelter and mates, displacing them from their native habitats, and creating other effects.

Comment 136: One commenter stated that NMFS failed to address the issue of hatchery structures that can block fish passage.

Response: Each HGMP will include a section describing the hatchery facilities. It will identify passage issues and water withdrawals and screening facilities. If passage is an issue, it can be addressed through HGMP implementation. Passage is also evaluated in ESA section 10 permits for hatcheries.

Comment 137: One commenter recommended that hatchery fish be protected in the 4(d) rules, not just wild fish.

Response: The ESA emphasizes the restoration of listed species in their natural habitats. However, section 3(3) of the ESA specifically recognizes the potential for artificial propagation to help achieve rebuilding objectives. Specific protections for hatchery and natural fish reared in a hatchery are detailed in the HGMPs, especially if the hatchery program is used to supplement natural populations. In certain cases, NMFS has determined hatchery fish stocks to be essential to recovering the ESU and has listed them under the ESA.

Comment 138: One commenter questioned how NMFS will determine whether a catch and release fishery is allowable.

Response: Any selective fishery proposal, including those requiring that listed fish be released after being caught, will be evaluated based on its impacts on listed ESUs. The sum total of all fishery-related impacts on a listed ESU will be considered in terms of its effects on population viability and, when applicable, within the structure of any existing HCP or recovery plan. No fishery that jeopardizes an ESU's continued existence or poses risk to key populations in that ESU will be allowed.

Specific Comments Related to FMEPs

Comment 139: Several commenters desired to know how fishery mortality would be allocated and asked what the mechanism would be for treating ocean, mainstem river, and tributary harvest consistently. They asserted that all fishery related mortality should be accounted for.

Response: Once take prohibitions are in effect, any fishery with the potential to impact listed fish is subject to NMFS' ESA review and approval process. All agencies proposing fisheries that have a potential to affect listed stocks are required to quantify these impacts. These agencies are required to comply with ESA review requirements and obtain take authorization through a 4(d) rule limit, a section 7 consultation, or section 10 permit application. Compliance is determined by tallying all fishery related incidental take from all agencies. Rigorous monitoring and evaluation programs ensure that impacts remain within acceptable limits.

The FMEPs will specify adult escapement targets and harvest rates for each ESU. The purpose of the ESA 4(d) rules is to accommodate the listed species' biological needs, not to allocate harvestable surplus. That is a co-manager responsibility and is undertaken in a number of different venues.

Comment 140: Numerous comments related to specific information and requirements included in actual FMEPs. The comments mainly addressed specific gear and season restrictions and the need to regularly review the FMEPs to ensure that they protect listed species.

Response: The FMEPs will be evaluated under the same standard used for ESA section 10 permits: the proposed action(s) must not jeopardize the continued existence of the listed ESU. The FMEPs will specify the maximum exploitation rates—depending on listed fish abundance—or will specify escapement levels. Each FMEP will include the time frames for regularly reviewing it. Depending on the fishery's location and circumstance, specific angling regulations may be detailed in the FMEP (e.g., minimum length and bag limits for trout fisheries). In other cases (e.g., some salmon fisheries), the specific regulations may be adopted once the exploitation rate or catch quota is determined by examining pre-season run forecasts.

Comment 141: Some commenters stated that maximum escapement objectives and reasonable exploitation rates should be specified in the FMEPs.

Response: NMFS strongly agrees that escapement objectives must be determined for each fish stock and those objectives must be the fundamental drivers of fishery harvest management. Parties to *U.S.* v *Washington* and *U.S.* v *Oregon* should develop—through regional management plans and based on biological requirements and fishery needs—escapement objectives and exploitation rate targets for each stock or management unit.

Comment 142: Several commenters suggested that all hatchery chinook should be marked and that selective fisheries should be required.

Response: From an ESA perspective, several obvious and significant benefits derive from applying a visual mark to hatchery chinook—most notably the ability to easily monitor hatchery stray rates and differentiate hatchery fish from natural fish for stock assessment purposes. In addition, marking all hatchery fish can help managers evaluate productivity among hatchery and wild fish—an important piece of data for recovery planning. Because it now can be accomplished with machines on a massive scale and with relatively little impact on survival, the adipose fin clip achieves these benefits in a very cost-effective and efficient manner.

By enabling selectivity, mass marking may also provide the means for sustainable fisheries—clearly a very important objective. However, because a number of critical issues related to ongoing coded wire tag (CWT) programs remain unresolved, NMFS shares the view of its co-managers that decisions made now to mass mark hatchery chinook are separate from decisions to be made later regarding selective fisheries. Even in cases where NMFS has required that a hatchery production run be mass-marked because of ESA concerns, this does not imply that a selective fishery will subsequently be endorsed. It is not NMFS' policy to require that all hatchery production be mass marked. Rather, our policy is that mass marking must be decided on a case-by-case basis after taking into account, among other things, the specific objectives of the hatchery production, the intended purposes of the mark, and the effect the hatchery production would have on fish listed under the ESA.

Comment 143: One commenter asserted that any rulemaking must ensure that treaties will be respected and that harvestable numbers of fish result.

Response: NMFS agrees. As several court cases have found, conserving and recovering listed stocks under the ESA to the point where they no longer need the protections of the ESA is entirely consistent with the long-term objective of having healthy harvestable populations and the exercise of treaty rights to fish and hunt. From a larger perspective, the greatest improvements in tribal fishing opportunity will not accrue over the short term but through the long-term recovery of the populations. Federal trust responsibility is best fulfilled at this time by engaging in conservative fisheries management. At the same time, hatchery production can be used to provide harvestable fish if such programs can be shown to be consistent with recovering wild fish.

Comments Related to the Time Frame for Developing and Commenting on FMEPs and HGMPs

Comment 144: Numerous agencies, organizations, and individuals commented that enough time must be allowed to develop and review the FMEPs and HGMPs. Several commenters suggested providing a grace period from several months to several years after the final rules are published for developing and approving FMEPs and HGMPs.

Response: NMFS realizes the significant amount of work and time required to develop and process FMEPs and HGMPs. Therefore, NMFS is providing 6 months until take prohibitions go into effect for the listed steelhead ESUs to allow additional time to develop and approve FMEPs and HGMPs.

In addition, NMFS has also provided a transition period of 6 months for recreational fisheries that affect listed steelhead. NMFS has assessed the angling regulations currently in effect for juvenile and adult steelhead in California, Oregon, Washington, and Idaho and has concluded that listed steelhead will be sufficiently protected during this 6-month period. This will allow additional time to develop and approve FMEPs for the steelhead ESUs. Some fisheries and hatchery programs will not need ESA coverage immediately after take prohibitions go into effect because the actions do not affect listed species. NMFS will work with the co-managers to prioritize fisheries and hatchery programs on the basis of how urgently each needs ESA coverage.

Comments Related to the Process of Reviewing/approving/implementing FMEPs and HGMPs

Comment 145: Some commenters suggested that NMFS include a provision for independent scientific review of the FMEPs and memorandum of agreement (MOAs) between NMFS and the action agency.

Response: As stated in the rules, the public will have the opportunity to review and comment on FMEPs and HGMPs for at least 30 days before NMFS acts on them. During this comment period, independent scientific entities are invited to review and comment on FMEPs and HGMPs. NMFS intends to address the public comments with the appropriate co-manager before approving any plan.

Comment 146: Some commenters wanted NMFS to define the ''regular basis'' on which limits will be evaluated. They also wanted to know what the time frames for reporting would be.

Response: NMFS and the individual co-manager will decide on a case-by-case basis the review and evaluation requirements for an approved FMEP or HGMP. The FMEPs and HGMPs will specify the time frames for regularly reviewing the plans and that information will be included in NMFS' letter of concurrence on the management plans. Depending on the circumstances, management plans may be evaluated every year or after analyses are complete. This will reasonably accommodate the time needed to prepare post-season catch and effort reports as well as any analyses the co-managers need for adjusting fishing regulations. However, whenever practical, the evaluation and review process should embrace an annual time frame so that appropriate adjustments may be made before the next fishing season.

Comment 147: Some commenters were concerned that a final HGMP was not available at the time of the proposed rules and that the final criteria for HGMPs may be substantially different from those cited in the proposed ESA 4(d) rules.

Response: The final draft of the HGMP template has been available to co-managers and posted on NMFS' web site since January of 2000. This template includes the information that must be included in the HGMPs for approval. Based on the public comments received, the criteria and the template for HGMPs have not changed substantially in the final rule.

Comment 148: A few commenters stated that the process for approving a hatchery broodstock program should be clearly described.

Response: NMFS believes the process is clearly described in the proposed and final rules. A state or Federal co-manager who wishes to utilize the ESA 4(d) process rather than the section 10 process must develop a detailed HGMP.

The HGMP must address the criteria in the 4(d) rule and follow the template NMFS has provided. The draft HGMP will be made available for public comment for at least 30 days. If NMFS determines the HGMP adequately addresses the established criteria, we will issue a written concurrence or, in the case of a Federal action, we will conduct a section 7 consultation. NMFS believes this process allows the public an adequate amount of time to review and evaluate a hatchery broodstock program before it is approved.

Comment 149: One commenter pointed out that the assumption that average hooking mortality is less than 5 percent is based on only one study (Hooton,1987). Based on the scientific literature, they felt this rate to be low and recommended that NMFS further evaluate hook and release mortality rates in the literature.

Response: NMFS agrees that hooking mortality deserves further investigation and we are committed to doing so. However, for now the 5 percent rate reported in Hooton (1987) seems to constitute a reasonable average. Other studies do show higher mortality rates for salmonids when stream temperatures are elevated (Klein, 1965; Dotson, 1982; Titus and Vanicek, Taylor and Barnharnt, 1997), but for most conditions, Hooton's estimates are reasonably accurate.

Habitat Restoration Activities

Comment 150: One commenter stated that NMFS itself should develop the WCP guidelines.

Response: NMFS believes that the states are in the best position to perform the lead role in developing these guidelines. The geographic scope of this rule covers four states, an area over which biological and geological factors vary considerably. Even more importantly, each state's agencies, regulations, and conservation programs are unique and the WCP guidelines, to be effective, should be designed to fit within that unique context. The states' natural resource agencies have relatively large and expert staffs that are better prepared to interact with the entities that will use these guidelines. For these reasons, this limit remains founded upon the development of state WCP guidelines.

Comment 151: Numerous commenters stated that the interim provisions of § 223.203(b)(8)(ii) (in the proposed rule, 65 FR 170, January 3, 2000) should be extended beyond 2 years, or were too permissive, or too restrictive. Many of these commenters proposed inclusion of specific activities that were not included in the six proposed interim provisions.

Response: NMFS observes that the interim provisions of § 223.203(b)(8)(ii) have been misunderstood to such an extent that NMFS has dropped these provisions from the final rule. The intent of these proposed interim provisions was to acknowledge that getting WCP guidelines and plans in place will require time, and the potential benefit to listed salmonids of allowing certain relatively low risk habitat restoration projects to proceed in the near term might outweigh the risk entailed by those activities not being part of a WCP.

However, the interim provisions had been widely misperceived as detailed regulation of habitat restoration activities. NMFS did not intend to provide for the direct regulation of habitat restoration activities under the terms of this rule and regrets that the earlier proposal created this false impression. Accordingly, NMFS now deems it advisable to simply drop the interim provisions from this final rule. Many low risk activities (e.g., riparian exclosure fencing or native vegetation planting), simply do not carry an appreciable risk of taking. Activities involving instream construction or modification of the streambed or banks require CWA section 404 permits which carry ESA section 7 coverage. All habitat restoration activities will entail less risk and more benefit if they are part of an approved WCP, and NMFS encourages the timely development of WCP guidelines and plans. Habitat restoration projects are less likely to be successful if undertaken without supporting analyses that disclose habitat impairments and absent resource management adjustments within the watershed to redress the underlying causes of those impairments.

NMFS strongly encourages jurisdictions, entities, and citizens to use the habitat restoration guidelines and technical manuals referenced in ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000) as readily available techniques to reduce the risks of harm or injury to the listed stocks. In the event that an allegation arose about a potential ESA section 9 violation, NMFS would furthermore take into account the efforts of the watershed group or entity to adhere to the relevant guidelines. Where injury or harm was resulting in such a circumstance, NMFS believes that the proper and most effective remedy would be an orderly adjustment in the relevant guidelines and not the prosecution of a section 9 violation against an individual project.

Comment 152: Several commenters had questions regarding what entities are responsible for developing and implementing WCPs and what state agency is responsible for certifying the plans.

Response: This final rule intentionally leaves these questions unanswered. There are potentially many different entities that may be responsible for developing WCPs in different circumstances—watershed councils, soil and water conservation districts, city or county governments, regional authorities, and so forth. NMFS finds it unnecessary to limit by rule what types of entities may produce and carry out WCPs. Likewise, NMFS leaves it to the individual states to determine the appropriate agencies for developing guidelines and certifying plans.

Comment 153: Many commenters had concerns about the clarity and intent of the approval criteria for the WCP guidelines.

Response: The criteria have been modified in this final rule to make them clearer and more effective.

Comment 154: Some commenters suggested that Federal activities—particularly habitat restoration activities—should receive a limit on the take prohibitions. CDFG suggested that restoration activities conducted under the Department's Fishery Habitat Restoration Program are already covered by their incidental take permit associated with their Corps of Engineer (COE) 404 permit consultation.

Response: Federal agencies that engage in, permit, or fund activities that may affect listed species are required under section 7 of the ESA to consult with NMFS. The ESA contains no provision to exempt Federal actions that involve habitat restoration activities from their section 7 obligations. Habitat restoration activities would only need to seek approval under this limit if they have more than a negligible likelihood of taking listed salmonids, and are not covered by any section 10 permit or section 7 incidental take statement.

Comment 155: Several commenters were concerned that neither the states nor NMFS will have the necessary resources to handle such a large number of written approvals; also, some stated that it was inappropriate for a state or NMFS to review individual projects after having approved an overall plan.

Response: NMFS agrees that the workload associated with approving all individual restoration projects and activities could overwhelm state and NMFS staff resources. In addition, activity-level review could defeat much of the process efficiency gained in the WCP approach. This final rule has been

changed to require only state certification of WCPs, and NMFS' approval of the state guidelines (with a periodic review of the state certification process to ensure that WCPs are adequately analyzed). Provisions for clearly identifying whether particular activities are part of an approved plan must be part of the plans themselves and need not necessarily involve state or NMFS staff directly.

Comment 156: One commenter asserted that it is unclear which criteria NMFS will use in concurring with a state certification of a WCP.

Response: NMFS has amended the final version of this rule to drop the requirement of NMFS concurrence with the certification of individual WCPs. NMFS expects the criteria for the relevant state certifications will be contained in the state restoration guidelines anticipated by this final rule, and will periodically review the states' certification process for appropriate rigor.

Comment 157: One commenter proposed a stepwise approach toward making the transition from the specified activities of § 223.203(b)(8)(ii) interim period to allow development of state guidelines and WCP to the WCP context of § 223.203(b)(8)(i).

Response: NMFS agrees with the commenter, and in response the interim provisions proposed as 223.203(b)(8)(ii) have been deleted from the rule.

Comment 158: One commenter suggested integrating FMEPs and WCPs. Another stated that WCPs should be a part of the recovery planning process and not be evaluated piecemeal.

Response: In essence, the first commenter is suggesting recovery plans, which NMFS agrees are necessary for the conservation of the species and intends to develop for listed salmon. However, NMFS does not believe that completed recovery plans are a necessary prerequisite for all habitat restoration activities. While the existence of an overarching recovery plan could make constituent watershed conservation planning both easier and more effective, it does not follow that adequate watershed conservation planning cannot be done prior to the existence of a recovery plan.

Comment 159: Numerous commenters suggested that local governments should be recognized and allowed to develop guidelines and WCPs without state or Federal approval or the 2-year time line. A few commenters further questioned the scope and scale of the plans or pointed out the burden the process would place on local governments.

Response: The 2-year interim period has been deleted from this final rule, so the time line for developing guidelines and WCPs is now entirely up to the states and the entities desiring to perform habitat restoration activities. NMFS recognizes and appreciates the efforts local authorities are putting forth in watershed planning and habitat restoration projects. Nevertheless, NMFS is not prepared to individually review and approve WCPs, and has dropped that requirement from the final rule. State technical guidance can certainly assist localities in watershed conservation planning, and local governments having the wherewithal to independently develop and implement WCPs should not have undue difficulty navigating the revised approval process.

Comment 160: Several commenters suggested that NMFS should give more recognition to local watershed restoration efforts.

Response: NMFS recognizes the importance of local efforts, and will, by accepting approved watershed assessments, WCPs, and restoration projects developed through cooperative local efforts, acknowledge the contributions made by local watershed conservation groups. These efforts, in conjunction with regional and ESU-specific recovery efforts, will be crucial components of species recovery.

Comment 161: Several commenters pointed out that the assured funding criterion § 223.203(b)(8)(i)(A)(10) could present difficulties for some local governments and watershed councils.

Response: NMFS recognizes that securing funding to reliably implement the WCPs will be a challenging undertaking for many entities. Therefore, NMFS remains open to trying different means to flexibly deal with any difficulties that may arise—particularly with regard to funding.

Comment 162: One commenter objected to a requirement that WCPs be monitored to determine whether they increase listed salmonid productivity. The commenter was concerned that the cost and difficulty of monitoring fish populations would discourage local efforts at habitat restoration.

Response: NMFS realizes it is difficult and expensive to monitor population response and that acceptable methods have generally not been developed. While increased fish productivity is the ultimate goal (from NMFS' perspective) of a WCP, NMFS recognizes that monitoring programs will focus on habitat functions and processes as indicators of watershed health.

Comment 163: One commenter suggested that the **Federal Register** document and comment period prior to NMFS' approval of watershed conservation plan guidelines was unrealistic and contrary to the goal of salmon recovery.

Response: NMFS considers it necessary to provide for appropriate public review of the guidelines that NMFS expects to be addressed in programs submitted for its review. Ensuring complete and open public scrutiny will improve the guidelines through broad input and enhance their value through dissemination to all parties interested in the role of the guidelines in salmon recovery.

Comment 164: A number of commenters suggested there was a need for greater clarification in the scope and purpose of WCPs and watershed analyses, and that more specific direction was required in order to identify the information needs of the plans and analyses.

Response: Analyses and plans must ensure that habitat restoration activities will help place the overall habitat on a trajectory towards a self sustaining condition that provides high quality ecosystem function. NMFS believes that projects planned and carried out based on a watershed-scale analysis and conservation plan are likely to be the most beneficial. Watershed analyses identify problems that are impairing watershed processes and functions and supply base information needed to develop watershed plans and restoration activities. Without the context provided by watershed analyses, habitat restoration efforts are likely to focus on symptoms rather than on the underlying impaired ecosystem processes. NMFS identified 10 standards in the ESA 4(d) rule that characterize the WCPs' scope and intent.

Comment 165: Two commenters indicated that the restoration programs receiving limits on the ESA section 9 prohibitions should be expanded, and further, that the guidance should be made ESU-specific.

Response: NMFS works with state and local jurisdictions and other resource managers to identify programs for which it is not necessary and advisable to impose take prohibitions because they contribute to conserving the ESU or are governed by a program that adequately limits impacts on listed salmonids. This ESA 4(d) rule may be amended to add new limits on the take prohibitions or to alter or delete limits as circumstances warrant. NMFS wishes to continue to work collaboratively with state and local jurisdictions and other resource managers to recognize existing and potential management programs that conserve listed salmonids and meet their biological requirements. As more programs that meet these objectives are developed or identified, greater

geographic and ESU specificity may be possible.

Comment 166: One commenter suggested that WCPs should be required to protect existing high quality habitat.

Response: NMFS agrees that the best available science supports the concept of protecting existing high quality habitat as a cornerstone of a WCP (provided there is high quality habitat within the scope of the WCP). But the criteria provided at § 223.203(b)(8)(iii) will be used only to evaluate state WCP guidelines, which will include much more technical detail. Those guidelines will then be used to evaluate WCPs.

Comment 167: One commenter stated that conservation plans should not be limited to salmonid recovery but must be broad enough to encompass other watershed functions and goals.

Response: In freshwater ecosystems, NMFS' legal authorities are limited to the conservation and recovery of listed anadromous salmonids and their habitats. To help conserve listed salmonids, restoration actions should put the aquatic habitat on a trajectory towards such a naturally self sustaining system (i.e., properly functioning habitat). Properly functioning habitat condition consists of the sustained presence of the natural processes that provide high quality ecosystem function. This complex system is composed of the stream, the riparian area, and upslope areas. All three components of this system are interconnected. The WCPs that guide restoration activities intended to conserve salmonids will also benefit other aquatic, riparian dependent, and upland species and their habitats.

Comment 168: Two commenters suggested that WCPs should also serve as CWA section 303 Total Maximum Daily Loads (TMDLs) for waters listed as impaired. Another suggested that NMFS work with the Oregon Department of Agriculture to coordinate the SB 1010 water quality management process with the watershed conservation planning process.

Response: NMFS believes these are excellent ideas and recommends the approach. However, NMFS does not deem it necessary for the conservation of the species to require such a consolidation of mandates in this final rule. Incorporating water quality management plans, such as SB 1010 plans or TMDL Water Quality Management plans, into the watershed conservation planning effort is a logical and pragmatic approach towards watershed-scale recovery.

Comment 169: Numerous commenters stated that the habitat restoration portion of the rule was too permissive and unclear in its objectives, definition, criteria, and implementation. One commenter believed it would create new programs that would divert attention from the loss of viable habitat which is the root cause of salmonid decline. Others cautioned against allowing state programs a limit on the take prohibitions because existing state programs have proven to be poorly designed and implemented. Several commenters noted general loopholes in the limits section.

Response: The six specific interim provisions of the proposed rule were intended to strike a balance between the possible benefit to listed salmonids of allowing incidental take associated with some habitat restoration activities (while WCPs were being developed) against the risk that those activities might have deleterious consequences that a WCP context would have prevented. To accomplish this, NMFS selected six categories of common and relatively low risk restoration activities, and provided specific guidance and a list of references to further reduce the risk. In light of the numerous comments asserting that the interim provisions were both too permissive and too restrictive, NMFS now concedes that attempting to strike this balance was overly ambitious, and so has deleted the interim provisions from the limit for habitat restoration. Instead, NMFS offers three approaches for individuals who are contemplating habitat restoration actions but are concerned about their take liability: (1) Many of the most effective long-term restoration activities (e.g., riparian livestock exclosure fencing, native vegetation planting, cessation of ground or vegetation disturbing activities, cessation of water diversion) have extremely low probabilities of take, and the actors should not be concerned about take liabilities; (2) most higher-risk activities (e.g., instream construction activities, modification of stream bed or banks) require a CWA 404 permit from COE which provides incidental take permission through section 7 of the ESA; and (3) NMFS recommends the habitat restoration limit on take prohibition included in this rule as the best solution for encouraging effective restoration activities consistent with science based guidelines.

Comment 170: A commenter suggested that the rule holds habitat restoration to a much higher standard (in some cases so high as to render such activities impossible) in terms of avoiding impacts than it requires for development activities.

Response: NMFS disagrees. As stated in the rule, all 13 of the limits contribute to the conservation of listed salmon or are governed by programs that adequately limit their impacts. Moreover the same standard applies to both habitat restoration and development activities; they must achieve PFC of the habitat.

Comment 171: Several commenters believe that NMFS' approach with this limit is to treat habitat restoration activities as a significant threat to the very species they are trying to protect. They believe that NMFS is overreaching its authority and this approach is bureaucratic, unrealistic, unnecessary, and will, as a result, be counterproductive to species recovery. Many stated that NMFS should give a limit to any activity carried out in accordance with state and Federal Laws. Another general sentiment was that NMFS should take a ''hands-off'' approach to restoration activities and simply provide landowners with technical expertise.

Response: We agree that bureaucracy should be kept to a minimum wherever possible and we will consistently seek ways to streamline all the processes this final rule entails. Nonetheless, the final rule includes a limit for habitat restoration activities because, absent the limit, some of these activities could result in prohibited taking. NMFS does indeed want to avoid the tragic irony of having a protective regulation impede habitat restoration that might otherwise contribute to recovery. However, good intentions alone will not adequately protect listed salmonids from the unintended negative consequences of poorly designed habitat restoration projects. Such projects often entail physical modification of currently used habitat of listed salmonids, and have significant potential to further damage impaired habitats and populations. The probability and consequences of project failure can be particular severe when projects attempt to redress the symptoms of habitat impairments before the underlying causes have been reversed. NMFS does not believe that it can disengage from its ESA responsibilities and simply rely on other state and Federal laws for approval to carry out restoration activities.

Comment 172: A few commenters stated that emergency exemptions and a specific scope of rules should be included for bank stabilization and flood repair operations.

Response: NMFS believes altering and hardening stream banks, removing riparian vegetation, constricting channels and flood plains, and regulating flows are primary causes of anadromous fish declines. Section 404 of the CWA—implemented through COE

regulatory authority—provides conditions for permitting stream channel and bank activities. Section 7 of the ESA provides emergency consultation procedures which allow Federal action agencies to incorporate endangered species concerns into their actions during the response to an emergency (50 CFR 402.05). For these reasons, NMFS asserts that existing regulations are sufficiently flexible to enable emergency work without limiting take prohibitions for flood control or repair activities.

Comment 173: One commenter suggested that ''artificial bank stabilization'' should be defined.

Response: We agree that the usage in the proposed rule may have been confusing. The term is meant to be read in context with ''primary purpose'' of the habitat restoration activity definition. The primary purpose of the vast majority of bank stabilization projects is not to restore natural aquatic or riparian habitat processes or conditions, but to protect economic development and then try to ''fix'' habitat remnants in an artificial manner. Such use of artificial materials and means in a piecemeal approach to control a river (or enhance an already controlled river) clearly fits the definition of artificial bank stabilization.

Comment 174: Numerous commenters stated that marine and estuarine habitats should be included in the habitat protections and that connectivity issues and restoration activities should receive similar attention.

Response: NMFS agrees estuarine habitats should be protected, but believes the rule adequately prohibits take and destruction of habitat in marine and estuarine areas. This final rule text provides sufficient examples (i.e., destruction of freshwater and estuarine habitat, altering stream or tidal channels, altering habitat) as take guidance. Lists of how prohibited take may occur are not designed to be exhaustive. Regarding limits for habitat restoration activities in marine/estuarine areas, NMFS believes such projects are of large enough scale and complexity to require project by project technical review at least until watershed planning is complete. NMFS not only agrees with the commenters stating that near shore marine and estuarine habitats should be included in watershed planning but expects that these areas will be included in applicable state guidelines and WCPs.

Comment 175: A number of commenters requested that NMFS define the spatial scales appropriate for watershed analyses and conservation plans.

Response: NMFS recognizes that the four states covered by the ESA 4(d) rule delineate watershed boundaries using different hydrologic and administrative criteria. Consequently, the size of individual watersheds varies among the states and often across programs within a state, though there are a number of basic similarities in terms of watershed function and boundary. Each state's regulations and conservation programs are unique and the WCPs will most effectively conserve anadromous fish and their habitats if watershed boundaries are delineated within each administrative context.

Comment 176: A number of commenters indicated that the state guidance documents developed to help steer restoration activities were not complete or were not ESA compliant.

Response: NMFS recognizes that some of the identified state guidance documents are not finalized, and that some of the included activities may have an appreciable risk of taking. However, NMFS notes that these documents do provide guidance that will reduce risk and increase benefits of habitat restoration activities. Therefore, NMFS still recommends use of the guidance documents: Oregon Aquatic Habitat Restoration and Enhancement Guide (1999); A Guide to Placing Large Wood in Streams, Oregon Department of Forestry and Department of Fish and Wildlife (May, 1995); WDFW's Fish Passage Design at Road Culverts (March 3, 1999); and Oregon Road/Stream Crossing Restoration Guide (Spring 1999). Further, NMFS encourages the states to compile and expand these valuable guidance documents into WCP guidelines which NMFS may find qualifying under § 223.203(b)(8)(iii) of this rule.

Comment 177: Some comments reflected a concern that a report cited by NMFS in the proposed rule, ''Steelhead Restoration and Management Plan for California'' was not a peer-reviewed document and should not be included as guidance.

Response: The report cited in these comments has been adopted as an integral part of the Cal-Fed ecosystem plan, and was subject to extensive peer review before being adopted.

Comment 178: Several commenters questioned how the rule affected Indian Tribes' habitat restoration efforts. Most comments were directed at tribal participation in watershed planning, the potential for conflict between state guidelines and tribal restoration plans, and the lack of specific limits for tribal habitat restoration projects.

Response: As co-managers, the Tribes may participate in any forum for developing conservation guidelines and specific WCPs. Tribes may also submit their own watershed conservation guidelines and plans under the Tribal plan limit. This final rule text describes a process wherein four western states are tasked because NMFS believes the states are responsible for conserving natural resources and native species within their geographic boundaries, and that sufficient infrastructure is in place to expeditiously develop guidelines. No further or specific limits for tribal restoration projects were included in the rule because limits for tribal trust resource management actions that take threatened salmonids are promulgated in a separate rulemaking (65 FR 108, January 3, 2000).

Comment 179: One commenter requested that the removal of sinker logs (which can sometimes constitute a navigational hazard) should receive a limit on the take prohibitions.

Response: Removal of navigational hazards is under the authority of COE and it is their responsibility to consult with NMFS when they propose to engage in an activity that may affect listed salmonids. Federal projects that are approved through ESA section 7 consultation need not also qualify under a 4(d) rule limit.

Comment 180: One commenter suggested that physical fish habitat is not being fully utilized now, and questions the need to create more.

Response: NMFS respectfully disagrees and believes the commenter may have oversimplified the multifaceted problem of habitat productivity as being only a matter of finite capacity. This is a less-than-accurate portrayal of the habitat factors for decline which include both pervasive loss of habitat quality and loss of access to historic habitat because of barriers. It is NMFS' position that habitat degradation and loss have contributed substantially to the decline of anadromous salmonids, and opportunities to regain both habitat function and extent should be sought.

Comment 181: Some commenters felt NMFS should recognize that it may not be advisable or possible to protect or restore historic stream channels/processes, especially in urban settings.

Response: NMFS recognizes that, especially in the urban setting, stream channel habitats are often impaired and are not functioning properly. NMFS would further acknowledge that not all stream segments may be recoverable. However, NMFS maintains that all tools for salmon recovery must be retained in the toolbox. Urban development, open space, or green space designations provide opportunity to protect

important riparian settings. Likewise, urban redevelopment may provide future opportunities for communities to protect or restore historically important stream channel settings.

Properly Screened Water Diversions

Comment 182: One commenter wanted to know who determines whether fish screens are adequate.

Response: The proposed rule states that NMFS' engineering staff will agree in writing that a diversion facility is screened, maintained, and operated in compliance with NMFS- approved Juvenile Fish Screen Criteria. The proposed limit has been revised based on public comments and by the fact that the projected workload associated with approving potentially thousands of water diversion facilities in four states has the potential to overwhelm NMFS staff resources. Consequently, this final rule has been changed to allow NMFS-authorized state agency engineers and screen inspectors to review and recommend screen design certifications and to allow NMFS-authorized screen inspectors to check screens for operational and maintenance compliance. This approval process will augment NMFS staff review. NMFS' Northwest Region (NWR) Juvenile Fish Screen Criteria have been adopted by the Columbia Basin Fish and Wildlife Authority (with participants from the states of Oregon, Washington, and Idaho) for use in waters with anadromous salmonids. NMFS' Southwest Region (SWR) Juvenile Fish Screen Criteria was developed in close coordination with CDFG criteria and the two sets of criteria are compatible. As a result, in all four states affected by this final rule, NMFS' Juvenile Fish Screen Criteria will form the basis for a design review and inspection program. It is proposed that a design specification check-off form and an operational screen inspection report form be developed and used consistently in the four states. NMFS will establish and maintain a data base to record who reviewed a particular screen design, when it was inspected, any problems associated with poorly designed screens being approved, and other relevant information. A key component of this process will be important training to certify inspectors and design reviewers. New language has been added to the regulation to reflect this change.

Comment 183: Some commenters stated that the final rule should acknowledge other screen technologies, especially non-conforming technologies, that have been demonstrated to meet or exceed levels of protection provided by technologies that do meet NMFS screen criteria.

Response: NMFS' engineering staff is frequently asked to assess other screen technologies that are not compliant with NMFS' screen criteria. As a result, NMFS staff has developed a standard protocol for evaluating non-conforming technologies, and has published an agency position paper titled ''Experimental Fish Guidance Devices,'' November 1994, that can be found on the NMFS web page at www.nwr.noaa.gov/1hydrop/exp__tech1.htm. This position paper describes the process NMFS requires for a proponent of experimental technology to demonstrate that a particular non-conforming technology meets or exceeds the level of protection offered by a facility designed using NMFS' Juvenile Fish Screen Criteria. We are not aware of any non-conforming technology that demonstrably protects fish as well as or better than NMFS' criteria for the variety of operating conditions present at any typical water diversion site. If evidence is provided that a non-conforming technology exceeds the level of protection provided by NMFS criteria (as described in the position paper referenced above), NMFS would welcome and approve this technology.

Comment 184: One commenter stated that water withdrawal and diversion activities that take listed salmon should not be granted limits.

Response: The intent of the limit for a water diversion equipped with a screen constructed to NMFS' standard is to minimize take associated with diversion activities once water is diverted from the stream. NMFS intends to enforce the take prohibition for other forms of take that may be associated with water diversions (e.g., dewatering streams, building gravel push-up dams, or creating other passage impediments).

Comment 185: A few commenters stated that requiring screens on all diversions in the Sacramento Delta regardless of whether or not the particular diversion affects steelhead is unjustified.

Response: The intent of providing juvenile fish screen facilities is to minimize the prospect of take once the water has been diverted. It is extremely unlikely that it can be conclusively demonstrated that any particular diversion in a river basin containing listed steelhead will never entrain a listed steelhead. It may sometimes be true that listed fish are not present at a diversion site. It is more likely that—due to a variety of circumstances—the listed fish simply escape observation at a given site. This should not be construed as a total absence of listed fish at a site. It should also be remembered that fish are at critically low levels now and that their presence at diversions and other sites is likely to increase as we proceed with their recovery.

Comment 186: Some commenters asserted that agencies and individuals making good faith efforts to install screens should receive a grace period during which take prohibitions would not be enforced.

Response: NMFS acknowledges that certain complex screen facilities can take several years to finance, design, and construct. NMFS will, therefore, change the proposed rule to include a provision for addressing selected facilities on a case-by-case basis. In these instances, a facility will be eligible for approval under the limit if it has an approved design construction plan and schedule that includes interim operation measures to minimize take. In the event that this schedule is not met, or if a schedule modification is made that is not approved by NMFS engineering staff, or if the screen installation deviates from the approved design, the water diversion will be subject to take prohibitions. In all other cases, as stated in the proposed rule, NMFS will apply the prohibition against take and the limit is available to those who have their diversion facility approved and inspected as stated in this final rule.

Comment 187: One commenter stated that diversion activities that substantially benefit the public should be included in the limit.

Response: It can be argued that any diversion activity confers public benefit to one degree or another. However, water diversions are screened to protect fish and allow them safe egress from the diverted flow—an activity which has little to do with how much the diversion itself benefits the public. Therefore, it is not possible to grant a blanket approval for water diversions—regardless of the amount of benefit that may putatively accrue from an individual facility.

Comment 188: Several commenters asserted that NMFS' screening criteria are not well defined, have not received enough scientific review, and are not flexible enough.

Response: On the contrary, NMFS' juvenile fish screen criteria are extensively detailed and do include sufficient flexibility to deal with site-specific constraints and other concerns. There is no set of juvenile fish screen criteria in the world that is as well defined, or has undergone a higher degree of scientific scrutiny. In addition, NMFS' juvenile fish screen criteria are based on decades of operational

experience that have yielded the best screen designs for salmonid protection in existence. Several state agencies have adopted NMFS' screen criteria and use them in water bodies containing anadromous fish. Lastly, extensive biological screen evaluations have revealed little or no injury to fish when testing screen facilities constructed to NMFS' criteria. This is a primary indicator that NMFS' juvenile fish screen criteria are the best option for protecting listed fish entrained by a water diversion.

Comment 189: One commenter suggested that screened diversions approved under the limit should be reviewed annually as to their physical condition.

Response: This is a good suggestion. NMFS agrees with this comment, and will seek to incorporate this issue into the check-off form and inspection process for a screen design and inspection program that NMFS be developed with the states.

Comment 190: One commenter stated that there should be no violation of the rule for inadequately screened diversions if no take can be proven.

Response: There are no liabilities under ESA if take does not occur.

Comment 191: One commenter thought that ''enforcement official'' should be replaced with ''authorized officer.''

Response: NMFS agrees with this recommendation and has made this language change.

Comment 192: One commenter stated that unscreened agricultural diversions in the Sacramento River delta are not the problem, and that NMFS should concentrate its efforts on the export pumps that dry up the river.

Response: Water diversions in critical habitat have the potential to take listed salmonids and, are therefore, subject to take prohibitions. Even properly screened diversions may take fish by drying up the river. NMFS intends to enforce take prohibitions against diversions that dewater river beds.

Comment 193: One commenter wanted to know if the limit applies to all diversions or just irrigation diversions.

Response: As stated previously, diversion of water in critical habitat has the potential to take listed salmonids and is therefore subject to take prohibitions. Thus the limit applies to all diversions that may affect the listed species.

Comment 194: One commenter identified the need for detailed operation and maintenance guidance if maintenance is to be a requirement in this limit.

Response: NMFS' engineering staff will provide this guidance in general for all juvenile fish screens and will develop site-specific operations and maintenance plans for sites with particular concerns. Our intent is to develop this guidance in conjunction with regional forums on screen activities (e.g., the Fish Screen Oversight Committee of the Columbia Basin Fish and Wildlife Authority). Both the general and the site-specific guidance will be included in the proposed training program for state-authorized officers.

Comment 195: One commenter wanted to know if the ESA 4(d) rule applies to temporary diversions during construction.

Response: NMFS will need to review each situation on a case-by-case basis and the answer will depend on the nature of the diversion. Some construction activities provide a temporary diversion around a construction site, and safely return fish and flow to the stream downstream of the site. Other activities may be required to provide a screen and bypass for a temporary diversion if biological review determines that the activity will place the fish at risk. These decisions will be made when developing a Biological Opinion on a particular in-stream activity.

Comment 196: One commenter urged NMFS not to apply the ESA 4(d) rule take prohibitions in areas upstream of fish barriers.

Response: The ESA 4(d) rule take prohibition applies to the land and ocean area within the 14 designated ESUs. All operators of water diversions within these ESUs need to review their activities and modify any activity that may take a threatened species.

Comment 197: One commenter noted that NMFS does not credit compliance with existing fish protection requirements, but appears to require continual updating to new fish screen standards and individual sign-off from NMFS staff that the screen complies. The commenter also stated that individual screen certification creates certain practical obstacles and NMFS should use this as an incentive and limit the take prohibitions on water use in general, not just on the physical diversion structure.

Response: The intent of the ESA 4(d) water diversion screening limit is to allow a water diversion to be made as safe as possible for listed fish species. Therefore, as new biological information becomes available, it may drive a modification in the screen criteria. Nonetheless, NMFS recognizes that it is unnecessary to retro-fit all existing screen facilities with new features every time new information comes to light because the criteria that are currently in place do an excellent job protecting all salmonid life stages. NMFS has updated their juvenile fish screen criteria only once in the last 11 years. The change came about as a result of new biological evidence that certain previously untested aspects of the old criteria did not adequately protect certain life stages of fish. While this set a standard for new installations, NMFS did not expect retro-fits of recently constructed facilities. NMFS intends to certify screen designs that meet the criteria in place at the time of construction—providing there is no evidence to show that the device is actively taking listed species. In addition, NMFS intends that when screen components need to be replaced due to wear, materials will be used consistent with current criteria. However, if a screen is installed that is out of compliance with NMFS criteria, no limit from the take prohibition will be allowed.

Comment 198: One commenter argued that the practical effect of the ESA 4(d) rules with respect to water diversions is to eliminate incentives for water users to screen their diversions.

Response: The intent of this limit is to offer diverters protection from take enforcement when fish are protected by a properly installed, well-designed, and well-maintained screen. There are clearly other issues (e.g., stream dewatering) that can not be solved by screen installation, and these activities will continue to diminish critical habitat and take listed fish and thus be subject to take prohibition.

Comment 199 : One commenter urged NMFS to apply this limit to water pumping devices as well as diversions.

Response: Water pumping devices are included in this limit.

Comment 200: One commenter wanted to know the details of NMFS' enforcement strategy for non-compliant screens and diversions.

Response: NMFS' enforcement strategy is specified in the section of this final rule entitled ''Take Guidance.'' Unscreened water diversions that cause take of a threatened species are subject to NMFS take enforcement action.

Road Maintenance Activities

Comments Relating to the Oregon Department of Transportation (ODOT) Limit

Comment 201: Several commenters wanted the limit provided to the ODOT for the Routine Road Maintenance Water Quality and Habitat Guide Best Management Practices July 1999 (Guide)

to apply to other cities and counties as well so they would not have to develop their own. Many of these commenters also requested that the limit be expanded to other jurisdictions and departments of transportation—with appropriate revisions to the best management practices (BMPs).

Response: There are two issues reflected in this and other road maintenance comments and NMFS has organized its responses accordingly. The first is that some local jurisdictions would like to adopt the ODOT manual without modification with the understanding that it will provide proper functioning habitat conditions. NMFS agrees that local jurisdictions can adopt the BMPs in the manual; however, the local maintenance programs will need to be examined further to assess any differences between them and ODOT's program and determine how those differences would affect the success in contributing to Properly Functioning Condition (PFC). Also, NMFS and ODOT have spent several years evaluating this program so that NMFS has a clear understanding of ODOT's ability to fulfill training, tracking, and reporting requirements. Other jurisdictions wishing to be covered under this limit would have to demonstrate their ability to make similar commitments and would also need to define the circumstances under which an individual BMP would not be followed.

The second issue pertains to the potential application of the limit to similar activities of other jurisdictions besides ODOT and Oregon cities and counties. NMFS agrees that under the conditions that meet or exceed those described above, the limit for routine road maintenance could be applied to other jurisdictions such as ports, other state transportation agencies, and cities and counties in other states which also, like ODOT, have programs that are determined to meet PFC. This final rule describes the procedure for public comment and determination of inclusion within the limitation on the take prohibition.

Comment 202: One commenter focused on how NMFS would respond if the ODOT program had compliance problems or if new information demonstrated that the program no longer provided sufficient protection. They stated that allowing ODOT to correct the matter ''within a mutually determined period of time'' was too vague a standard.

Response: NMFS agrees, and the wording of the rule has been changed to reflect this comment.

Comment 203: Some reviewers stated that the ODOT guide is completely inadequate to the task of protecting fish in that it allows far too many potentially harmful activities and contains far too much ambiguous language. Similarly a number of commenters asked that ODOT remove the ''hedge'' words (''where feasible,'' etc.) from the road maintenance limit.

Response: NMFS believes that the ODOT program, as designed, will adequately protect the listed species and their habitat. NMFS also intends this final rule to be somewhat flexible in terms of allowing combinations of measures that avoid or sufficiently minimize take. Further, this final rule has been designed to take into account a range of circumstances wherein hard constraints relating to physical, safety, weather, equipment, or other project aspects make it impossible to follow the BMP to the letter. In addition, ODOT has stated that the discretionary language will not be used for convenience or for ease of operation. Therefore, based on NMFS' working relationship with ODOT, we expect that the standard BMPs will be used in most circumstances and situations. To help ensure that this occurs, the ODOT crews will be extensively trained and NMFS will regularly review the program.

Comment 204: One commenter stated that the ODFW, not the ODOT regional environmentalist, should review ODOT activities and decide if they need a biological assessment. The commenter was concerned by the fact that the proposed rule seemed to mandate consultation with the regional environmental coordinator for any in-water work and that the regional environmental coordinator would not have the specialized knowledge to make good decisions during in-water work.

Response: The ODOT coordinates with the ODFW on all in-water work for ODOT bridge repairs, and usually the regional environmental coordinator is involved in the discussions as well. The ''and/or'' language is not intended to exclude the ODFW, but rather to exclude the regional environmental coordinator in instances where that office's participation is deemed unnecessary. Two ODFW biologists are assigned to coordinate exclusively with ODOT on transportation issues and work closely with ODOT regional environmental coordinators. In addition, district biologists assist ODOT on a variety of construction and road maintenance issues and projects.

Comment 205: One commenter stated that the final rule should allow NMFS to approve minor variations from ODOT procedures.

Response: NMFS will exercise reasonable judgement as to whether any minor adjustment in the ODOT road maintenance guidance requires formal approval from NMFS and, therefore, also warrants **Federal Register** publication and public comment. However to stay consistent with the spirit of the limit, any change that would affect the substantive protections the program provides for the environment will require a written approval. NMFS has clarified this point by adjusting the language in the rule.

Comment 206: One commenter provided multiple, detailed, suggestions and critiques of the ODOT program. Each suggestion (in quotations) is covered in the following discussion unless it is discussed in another response.

(1) ''To the maximum extent possible, the manual should contain enforceable standards.'' *Response*: Based on NMFS' extensive review of the ODOT manual, we believe the standards described are enforceable. For example, the first BMP for surface work requires (a) eliminating diesel as a releasing or cleaning agent and using only environmentally sensitive agents, (b) using heat sources to clean tack nozzles, (c) carrying adequate erosion control supplies to keep materials out of water bodies, and (d) disposing of excess material at appropriate sites. All these are enforceable. The same is true for the great majority of the BMPs for other activities.

(2) ''Protective and mitigation measures for work conducted outside of the BMPs should be required, and they should be described.'' *Response*: We agree with portions of this statement. NMFS is continuing to work with ODOT on its maintenance BMPs. In most cases, the changes would have only minor (short-term) or no effects on habitat or fish. In situations where not following the BMPs would adversely affect fish or their habitat, NMFS will work with ODOT to ensure appropriate alternative protective measures and mitigation are applied.

(3) ''The manual should describe an effective, proactive, monitoring program for maintenance projects.'' *Response*: Page 3 of the guide describes ODOT's monitoring program and it is also described in the draft rule. Research is being conducted on several high-risk activities such as culvert cleaning, culvert replacements, and winter maintenance in order to gain more information about maintenance project impacts and develop better BMPs.

(4) ''The manual should contain specific timetables for project reviews and manual updates.'' *Response*: The

manual can be revised by ODOT in consultation with NMFS at any time. The draft rule states that ODOT has committed to review the guide and revise as necessary, at least every 5 years. In addition, ODOT will annually make any necessary BMP modifications.

(5) ''Terms not in common usage should be clearly defined.'' *Response*: Uncommon terms are defined at the beginning of the guide (pages ii through iv).

(6) ''Effective erosion controls and a list of specific techniques should be defined, including a description of methods to be used during emergencies.'' *Response*: Erosion control measures are described as BMPs under each activity. Erosion control measures for emergencies are being developed under a programmatic biological assessment.

(7) ''Mandatory work windows should be defined to protect vulnerable life stages of salmonids.'' *Response*: As stated in the guide (e.g., pages 8, 12, and 13), ODOT must use in-water work windows for all in-water work, unless the ODFW specifically agrees otherwise. The ODFW's in-water work guidelines are part of the guide, in Appendix C.

(8) ''Criteria for the use of bioengineering methods should be described.'' *Response*: The guide states that bioengineering will be used where possible. The ODOT currently has multiple research projects focusing on the use of bioengineering to stabilize slopes; as the results of the research become known, NMFS and ODOT will develop criteria.

(9) ''Riparian management zones should be defined by water type or the criteria used to determine riparian buffer widths [should be] identified.'' *Response*: Standard buffer widths are defined on page iv of the guide. NMFS determined that these widths provide sufficient protection from road maintenance activities. The standard buffers also are implementable by maintenance staff without requiring detailed knowledge of fish presence/absence. Also, ODOT is developing detailed maps that identify sensitive resource areas based on criteria described in the draft rule; they will include information on overstory values, salmonid presence, spawning habitat, off-channel areas, etc. The maps will thus delineate areas where only certain activities may be allowed and the ODOT maintenance staff will modify their activities accordingly.

Comment 207: One commenter asked whether ODOT standards apply to all streams, just water quality limited streams, or just fish-bearing streams.

Response: The ODOT standards apply to all streams. The guide is a statewide document for all maintenance areas, even where no listed fish are present.

Comment 208: Several commenters stated that any routine road maintenance program should have been included in this limit. In particular, routine road maintenance under the Oregon Department of Forestry's Forest Practices Act was suggested.

Response: In the final rule, the limit for road maintenance is broadened beyond the ODOT and Oregon cities and counties to include other jurisdictions within and outside of Oregon based upon the ODOT's manual or which otherwise contribute to achieving or maintaining PFC. However, road maintenance for forestry roads will not be included because the road use and required BMPs are very different for this type of road.

Comment 209: One commenter stated that ODOT should provide criteria and steps to avoid, minimize, and mitigate all impacts when their guidance cannot be followed.

Response: The ODOT's manual is intended to avoid, minimize, and mitigate all impacts. NMFS chose to preserve ODOT's flexibility in choosing the most practicable methods for avoiding, minimizing, and mitigating for impacts because of ODOT's demonstrated commitment to protecting aquatic resources.

Comment 210: Several commenters requested the elimination of the requirement to prohibit any sediment input into the stream resulting from routine road maintenance activities.

Response: The ODOT routine road maintenance program does not prohibit sediment input into streams, although it presents measures to minimize and avoid the input.

Comment 211: One commenter stated that ODOT needs to allow for road repair during winter/wet seasons if emergency conditions dictate.

Response: The ODOT will implement BMPs when practicable, and is responsible for coordinating repair and mitigation measures with appropriate resource agencies in the event fishery or water resources are damaged during a response to an emergency.

Comment 212: One commenter requested that ODOT's program be removed as a limit because the tribes had not been given an opportunity to review it. They stated that the guide was not available for review through the notice.

Response: There were a total of 52 days to review the ODOT guide. It was available through the ODOT web site and the NMFS Northwest Region's website. This was cited in the **Federal Register** document within the section titled Electronic Access. Moreover, it is NMFS' intent to work closely with the tribes of the region to develop improved information exchange and consultation opportunities.

Comments on the Potential Application of the Limit to Other Jurisdictions

Comment 213: One commenter stated that the limit's requirements for developing an Memorandum of Agreement (MOA) under which road maintenance programs for other jurisdictions would be approved are not specific and should be revised to provide clear direction.

Response: NMFS intentionally did not provide a detailed description of what the MOA should include or how it should be prepared. The MOA was intended to provide the mechanism for negotiating with various jurisdictions about how to make sure that their program is equivalent to the effectiveness of ODOT program in contributing to achieving or maintaining PFC, including the tasks of training, tracking, and reporting, and how to best apply comparable measures identified in the ODOT guide. Based on this and other comments, NMFS has revised the regulatory language to require ''a written agreement'' rather than a formal MOA. That written agreement is intended to be flexible enough so there is no need to recreate a new maintenance program or amend the rule.

Comment 214: One commenter suggested that each jurisdiction seeking coverage under the limit for routine road maintenance should be able to develop its own BMPs.

Response: NMFS does not object to the use of BMPs that may be different from those presented in the ODOT guide. NMFS is satisfied that road maintenance activities in compliance with the ODOT guide and program contribute to achieving or maintaining PFC. NMFS expects that each jurisdiction seeking to apply the routine road maintenance limit to its program will clearly demonstrate how that program either applies equivalent measures to those specified in the ODOT guide or how it otherwise contributes to PFC. NMFS does not necessarily expect each jurisdiction to adopt the ODOT guide.

Comment 215: One commenter indicated that compliance and effectiveness monitoring and adaptive management are essential to ensure adequate protection of listed species. This commenter expressed concern that the monitoring may not be adequate and that without specific monitoring criteria

and protocols, the ability to evaluate and modify conservation measures would be limited.

Response: NMFS agrees that monitoring is essential for assuring that the routine road maintenance programs are being properly implemented and that the outcomes are as expected (i.e., contributing to PFC). The monitoring and feedback approach contained in the ODOT program, while being somewhat non-specific, is practicable and can provide enough information to assess compliance and effectiveness.

Comment 216: NMFS received one comment requesting that the limit set standards for road restoration and maintenance, as well as goals for maximum road densities.

Response: This comment is referring to forested watersheds and watershed conservation plans. NMFS is addressing those areas primarily through ESA mechanisms other than the road maintenance limits of the rule (i.e., application of ESA sections 7 and 10 for Federal and non-Federal land management practices, respectively).

Comment 217: One comment stated that there should be no specific limits for roads—just the normal section 9 prohibitions. The commenter was concerned that erosion caused by steep slopes and incorrectly built roads could potentially harm listed salmon populations.

Response: NMFS agrees that soil erosion from road projects can have adverse effects on salmon populations and their habitats. However, the limit only applies to routine road maintenance activities; that is, road repairs that increase the material profile are not covered under the rule. Any activity for which a COE permit is required is not covered by the routine maintenance program and would, in any event, require a section 7 consultation. The ODOT's manual recognizes the problems associated with erosion and addresses erosion repair (MMS 122). To minimize impacts, ODOT requires that erosion repair work consider bioengineering solutions. The maintenance program requires that ODOT maintenance staff take precautionary measures on identified erodible areas—provided the measures can be safely applied. Taken together with other measures ODOT is carrying out (e.g., mapping landslide-prone areas throughout the Oregon coast), the routine road maintenance program protects threatened salmon and steelhead adequately to warrant a limit.

Integrated Pest Management (IPM) Activities in Portland, Oregon

Comment 218: Several commenters indicated that NMFS led them to believe that pesticides would not be considered in this rulemaking and that it was, therefore, unfair to proceed with a limit that accounts solely for the Portland Parks and Recreation (PP&R) program. It was generally expressed that various states, local entities, and agencies should be allowed their own limit on take prohibitions as they relate to pesticide use. Other commenters stated that the PP&R IPM program was inadequate because it was too ambiguous, did not list the actual amounts of pesticide being used, allowed broadcast spraying in riparian buffers, and did not adequately address all potential pathways of contamination.

Response: The PP&R IPM program received a limit at this time because it is a fully-formed, conservative program. NMFS' decision process was based on careful scientific review, investigation of potential pathways of contamination (specific to PP&R-planned activities), and analysis. NMFS concluded that PP&R's plan addresses potential impacts and protects listed salmonids to an adequate degree. A subsequent review process will be conducted one year after PP&R's plan is adopted, additional reviews will occur every two years, and appropriate adjustments will be made throughout the process. As NMFS noted in the preamble to the proposed rule rates of application in buffer strips under the PP&R IPM program range from 8 percent to 100 percent of the individual chemical label restrictions. Moreover, these chemicals are not applied annually, rather only as needed and only as the last resort for controlling unwanted vegetation. Use of the term ''broadcast spraying'' may be misleading. The listed chemicals must be applied at low pressure (which results in large droplets to reduce airborne mists), by hand wand, and only in the area where a dense broadleaf outbreak is occurring—not the entire buffer area.

NMFS believes that with restrictions such as the ones cited here, and looking at the program as a whole, it sufficiently protects the listed salmonids.

Comment 219: One commenter asked if the PP&R IPM was intended to apply to maintenance activities adjacent to all streams, just water quality limited streams, or just fish-bearing streams.

Response: The PP&R IPM applies to all waters—regardless of their designation (moving, water quality compromised, fish/non-fish-bearing)—associated with PP&R managed lands. The use of pesticides near flowing waters is more restricted than near still water (isolated ponds).

Comment 220: One commenter stated that the PP&R IPM should require public notice 48 hours before spraying.

Response: Currently PP&R does notify the public of tree spraying by posting signs in the affected area 24 hours in advance. Also, on any day other types of pesticides are being applied, signs are placed in the park and remain there until the application is complete and any product has dried. It should be noted, however, that this is essentially a public health issue and is, therefore, outside the scope of a rule making for threatened salmon and steelhead.

Comment 221: Several commenters stated that data generated by Oregon's pesticide tracking law should be integrated with the limit.

Response: We agree that it would be useful information. The PP&R's IPM requires an annual report to NMFS. When NMFS reviews PP&R's annual report it will take into account new scientific data on pesticides and their effects on listed fish (and the habitats that support them) when making its decision whether to continue with the program as written or require changes. Over the next year, NMFS will examine the question of whether incorporating the information collected through Oregon's pesticide tracking law (ORS 192.502, ORS 634.306, and ORS 634.372) into the review process would improve that annual analysis.

Comment 222: One commenter requested that NMFS clarify that the PP&R IPM applies only to city parks managed by PP&R.

Response: The commenter is correct. The PP&R IPM program limit applies only to activities conducted by PP&R in Portland city parks.

Comment 223: One commenter expressed concern that the list of chemicals does not appear to take into account chemicals already present in surface waters. It was also stated that NMFS needs to do more research on the impacts pesticides have on anadromous fish.

Response: NMFS agrees with the need for more research in this area. The NMFS Northwest Fisheries Science Center (NWFSC) has recently begun a research program to evaluate in greater detail the effects of pesticides in the environment and their effects on anadromous fish. This program will expand on earlier investigations by the NWFSC and will look at the sublethal effects, synergistic effects, cumulative effects, and effects of inert ingredients in pesticides in the aquatic environment. NMFS will work closely

with EPA and state authorities which have primary responsibility for ensuring the proper use of these products under relevant Federal and state regulatory regimes. Should information come forward to suggest that the otherwise-lawful use of a pesticide harms listed salmonids and is in violation of section 9 or this rule, NMFS anticipates addressing the concern through amendment of this rule, a section 7 consultation with EPA, or corresponding discussions with responsible state authorities. NMFS will employ this approach rather than favor enforcement actions against an individual applicator for the otherwise lawful use of the pesticide. Similarly, if NMFS finds that a limitation on the prohibition against take for the use of selected pesticides is necessary and advisable for the conservation of listed salmonids, it may amend this rule accordingly. Through such a programmatic approach NMFS believes that it will be able to achieve an orderly and comprehensive analysis of the use of pesticides and their effects on listed salmonids.

Comment 224: One commenter suggested that the best approach to evaluating pesticide use under the ESA was a toxicological risk assessment protocol based principally on the dose-response theory. Under this approach, the commenter concludes that ''there is no evidence that take of salmon or steelhead has actually occurred as a result of pesticide use.'' The commenter further asserts that under a program managed by the California EPA's Department of Pesticide Regulation (DPR), ''there should be zero take of any listed fish, including salmonids under NMFS' jurisdiction'' if the protocols developed by the DRP are followed.

Response: NMFS disagrees. The NWFSC has been actively investigating the sublethal effects of pesticides on listed salmonids for more than two years. This research is specifically tailored to examine pesticide effects on the life histories of anadromous fish in California and the Pacific Northwest, and is designed to reduce the considerable scientific uncertainty associated with pesticides. NMFS will use the data arising out of this process to guide future decision making under the ESA.

Comment 225: Several commenters felt the rules may unduly restrict the critical function of noxious weed control. It was suggested that NMFS may be discouraging lawful and environmentally beneficial use of pesticides and herbicides.

Response: NMFS recognizes the importance of noxious weed control. The final rule encourages development of local programs that conserve fish while placing priority on preventing pests (weeds, insects, disease) through non-chemical means. Noxious weeds may be controlled in a number of ways—both with and without the use of herbicides.

Comment 226: Some commenters asserted that a regional invasive species prevention program is needed—one that includes a protocol for addressing expedited responses to invasive species.

Response: NMFS agrees that a regional invasive species prevention program that includes response protocols would be beneficial. Such a program should be developed in cooperation with state and local government agencies, FWS, and EPA.

Comment 227: Several commenters stated that if a pesticide is used according to the directions on the label, or in compliance with various other state or Federal regulations, the applicator should receive a limit on the take prohibitions.

Response: Please see earlier responses on the same general subject. Currently, EPA has not consulted with NMFS on the use of pesticides and their impact on listed anadromous fish and their habitat. Therefore, applying pesticides in accordance with current label directives, EPA guidelines, or interim state measures for pesticide use, is not, de facto, exempt from the possibility of ''take.'' EPA's Office of Pesticides Program will initiate consultation on a limited number of EPA-registered pesticides with NMFS SWR later this year and, depending on the outcome of that process, NMFS will continue to seek such consultations on registered pesticides. NMFS also hopes to begin consultations on those pesticides being considered for registration. In any case, NMFS recognizes that the above restrictions (labels, state guidance, etc.) constitute the only protective guidelines currently available to applicators. Therefore, NMFS will work with the responsible agencies to determine the extent to which restrictions on pesticide use need to be adapted to meet listed salmonid needs and, as that process goes forward, individual applicators may look to those agencies and NMFS to provide appropriate guidance in the future.

Comment 228: Two commenters suggested that NMFS should not rely on local solutions for pesticides, since three of the four states have laws preempting local pesticide regulation.

Response: The PP&R IPM program does not regulate pesticides. It directs the limited application of pesticides by a local government agency. NMFS is confident that PP&R has the authority to direct its application program.

Comment 229: One commenter asked that NMFS clarify its definition of a pesticide to include any substance that is considered an herbicide.

Response: The commenter is correct about the definition of a pesticide. According to EPA, the term ''pesticide'' includes all herbicides, insecticides, fungicides, rodenticides, repellents, disinfectants, and other compounds that kill, control, or otherwise affect pests. The final 4(d) rule will incorporate this definition for the term ''pesticide.''

Municipal, Residential, Commercial, and Industrial Development Limit

a. Clarification of Where and How This Limit Applies

Comment 230: Many commenters requested that the final rule clarify where and how ''this limit'' applies. One commenter asserted that the rule was so unclear as to require that the limit be removed entirely.

Response: NMFS has attempted to remove vague and confusing language from this final rule and to clarify where the limit applies. This particular limit is intended to apply to a broad range of planning efforts, ordinances, regulations, and programs (promulgated by city, county, and regional governments) that conserve listed salmon and steelhead by regulating or otherwise limiting activities associated with MRCI development. Some examples are wetland protection ordinances, shoreline management and development programs, and urban growth management plans. Such activities are not necessarily limited to ''urban'' areas, because city, county, and regional governmental jurisdictions extend to suburban and rural areas as well. NMFS has, therefore, clarified the intended scope of this limit by replacing the term ''new urban density development'' with ''municipal, residential, commercial and industrial (MRCI) development'' to signify activities undertaken by cities, counties, and regional governmental entities in urban, suburban, and rural areas.

Comment 231: One commenter requested that the ESA 4(d) limit for urban development be more streamlined than the process for developing and approving an HCP.

Response: Once local ordinances or plans are approved, the process of implementing MRCI development activities will be very streamlined. The responsibility for subsequent project review, approval compliance, monitoring, and enforcement will rest with the local jurisdiction. NMFS will

review each project's monitoring plans; however, we will not have a role in individual project reviews. In addition, any subsequent ESA section 7 consultations for individual projects for which there is a Federal nexus should be greatly simplified because the consultation will be able to tier off the local jurisdiction's initial analysis. The initial ordinance approval process, while subject to the same review standard as a section 7 consultation or section 10 permit application (i.e., individual ordinances must allow for properly functioning habitat conditions) should be considerably more streamlined than the HCP process because the procedural requirements are less complex (e.g., implementing agreements and NEPA analysis are not required for programs under the take limit).

Comment 232: Several commenters questioned whether the limit applies to the redevelopment of areas that no longer support salmon, and recommended that development along piped segments of low gradient streams should receive a limit on the take prohibitions. Others contended that the rule should address current and ongoing impacts from urban developments.

Response: If a stream segment or aquatic feature does not currently and has not historically supported salmonids, the limit only applies to the extent that downstream areas which do support salmonids rely on appropriate input of ecological element (litter fall, gravel recruitment, cold water, large wood, etc.) from above to achieve PFC. As a local project goes through the permit process, the existing condition of a stream segment within a watershed and its contribution to the ecological conditions essential to listed fish must be taken into account when determining whether and how a redevelopment project meets the local ordinances. It is the local jurisdiction's responsibility to determine how ordinances are implemented during the redevelopment of degraded areas. At a minimum, the ordinances must delineate the process for considering the redevelopment of degraded areas.

Comment 233: Several commenters observed that recovering PFC in large urban core areas is unrealistic.

Response: PFC requires the maintenance of habitat functions essential to the survival and recovery of listed salmonids, wherever those requirements may be found. NMFS agrees that many of the rivers and streams that flow through heavily industrialized or otherwise developed city centers cannot practically be expected in the near-term to resemble a rural river reach in PFC. The concept of PFC recognizes and accommodates the fact that essential ecological functions may be different in spawning and rearing habitats often found in forested environments, for instance, than in migratory corridors, often found in urban settings. Nevertheless, the highly modified habitat in urban settings still must maintain certain ecological functions that remain crucial to the listed species' survival and recovery. In the long run, most parcels in existing urban areas will eventually be redeveloped and restoration opportunities pursued. Urban rivers and streams will thus gradually recover more and more habitat functions over the upcoming decades.

Comment 234: Many commenters contended that the rules should include any (not just new) development (or redevelopment) inside or outside of the Urban Growth Boundary (UGB) or Urban Reserve Area (URA) in any of the affected states. In addition, many others stated that the proposed rule does not adequately distinguish between what is expected of the various kinds of development and redevelopment.

Response: NMFS agrees with the commenters that it is the activity, not necessarily the jurisdiction, that must contribute to achieving or maintaining PFC and has renamed and modified this limit to apply to MRCI development.

Comment 235: Some commenters questioned the need to treat development limits for urban and rural landscapes differently. They argued for the need to accommodate mature urban areas to protect the rural areas.

Response: NMFS agrees that properly functioning habitat, as described in section § 223.203(b)(12)(ii) of the regulatory language of this final rule, must be found in both urban and rural landscapes and is the foundation of this limit. NMFS also understands, however, that development in rural landscapes often requires different considerations than it does in urban landscapes. It is true that some rural developments, such as destination resorts or high-density residential development along rural shorelines, are quasi-urban in nature and have similar effects on salmonids and their habitats. The reverse can also be true. Conserving and restoring functional habitats depends largely on allowing natural processes to increase their ecological function, while at the same time removing adverse impacts from current practices. Those functional requirements apply regardless of where or how development takes place.

Comment 236: Some commenters requested that NMFS make clear that simply because the rule references the Metro Functional Plan, it does not mean that local jurisdictions must follow that proprietary program.

Response: Metro's Urban Growth Management Functional Plan applies only to the Metro region, that is Clackamas, Multnomah, and Washington Counties and the 24 cities in the Portland, Oregon metropolitan area. In order to accomplish the Plan's goals, local jurisdictions will have to take a number of actions—primarily by changing local government comprehensive plans and implementing ordinances. Other jurisdictions wishing to apply for an ESA 4(d) limit must craft their own plans in the context of local circumstances. NMFS notes that Metro has not yet submitted its Urban Growth Management Functional Plan to NMFS for consideration as a limit to the take prohibition, nor has NMFS approved it for that purpose. If Metro applies for a limit under this final rule, it will be evaluated at that time using the review process described in this rule.

Comment 237: Some commenters stated that NMFS should not allow this limit for the Tri-County planning effort in Washington State because Tri-County's proposal is ''business as usual,'' and because the Tri-County implementation process would take too long to provide for salmonid recovery. Others felt linkages should be created between the Urban Development limit and the watershed plans in the proposed Tri-County framework.

Response: NMFS strongly disagrees with the general tenor of this comment and continues to actively support and encourage the Tri-County process. Certainly the negotiations are addressing difficult and complex issues. NMFS remains hopeful that these negotiations will yield agreements consistent with the requirements of the ESA and the listed fish. If Tri-County applies for a limit under this final rule, it will be evaluated at that time using the review process published in this final rule.

Comment 238: One commenter urged NMFS to include a limit for the CALFED-Bay Delta Program and other California programs.

Response: Applying for a limit under the ESA 4(d) rule is a voluntary process. Any jurisdiction or organization may negotiate with NMFS to create a plan and submit that plan for consideration under the MRCI limit. Such entities are also encouraged to bring to the table other types of limits that could be covered in a subsequent 4(d) rule and develop other plans to conserve the listed species.

b. Local Government Cost and Staffing Resources

Comment 239: One commenter expressed concern that the cost of mandatory setbacks would discourage redevelopment of brownfield areas.

Response: Different jurisdictions have the flexibility to tailor riparian management areas in urban brownfield areas to match local needs and conditions, provided they result in properly functioning habitat conditions.

Comment 240: Many commenters expressed concern that smaller jurisdictions do not have the staff and resources needed to comply with the urban development limits. One commenter asked for an explanation of ''adequate funding.''

Response: Ordinances or plans under which activities will be evaluated must be shown to meet PFC as illustrated by the applicable 12 considerations listed in this final rule, including the fact that the jurisdiction in question must demonstrate that it has the ability to enforce, monitor, and fund its obligations under the ordinance.

c. Implementation of the 12 Considerations

Comment 241: Many commenters asked NMFS to clarify how the 12 considerations are to be implemented or applied. Some thought the rule was too cumbersome and onerous, and, therefore, should be delayed or phased in. Others requested that NMFS not allow a phase-in approach.

Response: As the rule describes, NMFS evaluates activities that produce or result in conditions on the landscape that contribute to properly functioning (habitat) condition. Under this limit, NMFS will analyze MRCI ordinances and plans and determine if they will affect a condition on the landscape that is important to essential habitat functions. NMFS will then determine if that effect actually results in conditions that are likely to provide essential habitat functions; if it does, then the ordinance or plan may qualify for a limitation of the take prohibition.

The 12 considerations described in the MRCI development limit describe specific considerations that NMFS will evaluate when looking at MRCI development ordinances and plans. They are based on current scientific understanding of salmonid biological requirements (e.g., Spence *et al.*, 1996; NMFS, 1996). By assessing these 12 considerations, NMFS expects to evaluate the ordinances' efficacy in attaining (or maintaining) essential habitat functions or properly functioning conditions in various physical settings.

Comment 242: Several commenters questioned whether the proposed rule requires compliance with all 12 considerations. Some stated that NMFS should not require that all 12 considerations in the urban limit be satisfied at once.

Response: NMFS acknowledges that in addition to the comprehensive Functional Plan being developed by the Metro regional government in Oregon, other local planning entities are making significant progress in developing innovative MRCI ordinances and programs (e.g., the efforts by the Tri Counties and Kitsap County in Washington State). Not all local or regional governments have the resources to assemble all of their relevant ordinances and planning provisions into a comprehensive MRCI growth management program. NMFS is willing to assist such entities by reviewing individual ordinances or regulations that local governments may choose to submit for consideration under this MRCI limit. NMFS will still apply the 12 considerations in evaluating the likelihood that any given ordinance or regulation will achieve properly functioning conditions for salmonid habitat, but will recognize that some criteria may be less relevant than others—depending on the scope of the particular ordinance.

Because NMFS has a relatively limited number of staff members to review a potentially significant number of individual MRCI planning ordinances, plans, and regulations, NMFS strongly encourages local and regional governments to assemble comprehensive planning packages such as Metro's Functional Plan. Not only is this a more expeditious and efficient approach, it results in a greater likelihood that the MRCI growth management program will protect the full suite of essential habitat functions. In any case, because staff resources are limited NMFS will generally give comprehensive plans rather than individual ordinances priority in the review process.

Comment 243: One commenter requested that NMFS state whether the Metro plan meets the 12 considerations.

Response: Metro has not yet submitted its Urban Growth Management Functional Plan to NMFS for consideration as a limit to the take prohibition, nor has NMFS approved it for that purpose. If Metro applies for a limit under this final rule, it will be evaluated at that time using the review process described in this final rule.

d. NMFS' Approval

Comment 244: Many commenters wanted to know how NMFS would approve applications for inclusion in the take limit. Some commenters suggested that NMFS needs to establish a rule with a minimum set of clear and objective performance standards. Other comments suggested that NMFS should work with state agencies to develop state programs that meet some or all of the limit in order to help small, financially challenged jurisdictions.

Response: The 12 considerations represent evaluation considerations that, if addressed, will help conserve listed salmonids. When a local jurisdiction has an MRCI ordinance or plan it believes will attain or maintain properly functioning conditions, it is encouraged to pursue approval. NMFS will work directly with that entity to develop a product that meets the listed species' needs. However, as noted earlier, local jurisdictions are strongly encouraged to assemble, to the greatest extent practicable, all relevant MRCI development ordinances, regulations, or plans into comprehensive packages that NMFS can review in total. Such an approach is not only more efficient, it has a much greater likelihood of ensuring adequate conservation of salmonid habitat conservation than do individual ordinances. Before approving any application, NMFS will publish a notice in the **Federal Register** announcing the availability of the application for public review and comment. The comment period will be not less than 30 days.

Comment 245: Some commenters desired to know what NMFS meant when it said it would evaluate the limit on a regular basis.

Response: NMFS anticipates that each limit will be monitored during the life of the plan to ensure that management actions are meeting their intended purposes. Specific management actions arising under the plan will be compared with the conservation objectives to ensure consistency with the intent of the plan. Annual monitoring reports will be required and formal plan evaluations will take place at broader intervals—though not greater than 5 years. These evaluations will assess the progress of the plan toward meeting PFC, determine if the management actions are making satisfactory progress toward achieving the stated objectives, ensure that the actions are consistent with current policy, check the original assumptions to see if they were correctly applied, assess whether the impacts were correctly predicted, ensure that the mitigation measures are

satisfactory, and determine whether new data are available that would require altering the plan.

e. Level of Protection Provided

Comment 246: Many commenters asked NMFS to clarify what parts of the limit are binding and what are not.

Response: The final rule does not establish any binding requirements or regulations on any prospective applicants with respect to measures that must be followed to qualify for the take limit. Instead, the final rule defines both the considerations and the process NMFS will use when reviewing any particular ordinance or plan. Once NMFS has reviewed and approved a proposal for inclusion in the limit, the applicant is bound by the substantive requirements established in the subject ordinance or plan; these will be documented in the relevant monitoring, reporting, and enforcement provisions. The final rule clearly describes NMFS' authority to withdraw the limit in instances where the applicant does not diligently implement the approved measures.

Comment 247: Many stated that the Metro Functional Plan was far too restrictive; many others thought it not restrictive enough.

Response: The limit does not hold out the Metro Functional Plan as a standard. Metro has not yet submitted its Urban Growth Management Functional Plan to NMFS for consideration as a limit to the take prohibition, nor has NMFS approved it for that purpose. In fact, NMFS understands that the plan is not yet complete. If Metro applies for a limit under this rule, it will be evaluated at that time using the review process described in this final rule.

Comment 248: One commenter asked NMFS to identify and give take prohibition limits to land development activities that will not harm listed salmonids.

Response: Development actions that do not harm salmonids or their habitats are not affected by the take prohibition. It is not within the scope of this final rule to identify the vast number of activities (including many development activities) that do not harm listed species. However, unmanaged development activities could frequently frustrate attempts to meet the 12 evaluation considerations within this rule and commonly are among those that have historically destroyed or adversely modified critical habitats. On the other hand, activities that are carried out according to limits provided by this final rule are expected to adequately protect listed salmonids and contribute to their conservation.

Comment 249: One commenter expressed concern that giving local jurisdictions a ESA 4(d) limit would not, by itself, help enforce local actions necessary to conserve listed salmonids.

Response: Local jurisdictions are charged with developing and carrying out land use programs within the range of listed salmonids. Although those plans can be revised to be consistent with scientific information used to develop this limit, those same plans are still defined and administered through laws and regulations. Ensuring compliance with these laws and regulations is a key factor in making the plans successful. Eligibility for this limit, therefore, requires those plans to include effective enforcement programs and measures to educate local citizens, encourage voluntary compliance, and detect and address violations.

Comment 250: One commenter asserted that limits for urban development should be analyzed within the cumulative impact context.

Response: NMFS agrees that cumulative effects should be an important consideration in MRCI effects analyses. NMFS is aware that comprehensive MRCI development plans frequently will rely upon watershed scale efforts to achieve PFC by managing rural and agricultural activities in coordination with the cumulative effects of more-urban development. To the extent that NMFS must prioritize the evaluation process, comprehensive MRCI plans with relatively broader scopes of activities, authorities, effects, and geography (and therefore greater flexibility in dealing with cumulative effects) will generally be evaluated before plans with relatively smaller scopes. Applicants with smaller-scale plans should take particular care that their effects analyses take cumulative impacts into account.

f. Habitat Restoration

Comment 251: One commenter felt the new urban density development limit should require local governments to address habitat restoration and rehabilitation.

Response: This limit applies to jurisdictions that carry out development in a way that adequately limits impacts on listed salmonids or contributes to their conservation. Habitat restoration would be applicable when it is necessary to rehabilitate former poorly designed or implemented practices to achieve properly functioning conditions for listed salmonids within that jurisdiction. A specific limit for habitat restoration activities is provided in this final rule.

g. Scientific Justification

Comment 252: Some commenters assert that NMFS has not provided adequate scientific justification for this limit. For example, one comment requested that NMFS justify why the little remaining habitat is important to listed fish, and specifically, what evidence exists to support the need for vegetative cover for the entire length of a stream.

Response: Neither **Federal Register** documents nor U.S. Code is written in scientific style, with its thorough support of factual assertions through citations. Nevertheless, NMFS is confident that its conservation approach in the MRCI limit (and elsewhere in this final rule) is scientifically credible. As starting points for investigators, NMFS recommends Simenstad *et al*, 1982, NRCC, 1996, Palmisano *et al*, 1993, Gregory and Bisson, 1997, Spence *et al*, 1996. Essential features of salmonid habitats include adequate substrate, water quality, water quantity, water temperature, water velocity, cover/shelter, food, riparian vegetation, space and safe passage conditions In designating critical habitats, NMFS considers the following requirements of the species: (1) Space for individual and population growth, and for normal behavior; (2) food, water, air, light, mineral, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, or rearing of offspring; and, generally, (5) habitats that are protected from disturbance or are representative of the historical geographical and ecological distributions of the species (65 FR 7764, February 16, 2000).

Vegetative cover is good for a number of essential habitat features such as water quality, water temperature, bank stability, stream complexity, cover/shelter, and food. In MRCI environments, the loss of riparian vegetation, coupled with reduced base flows, causes streams to heat up more during summer. In addition, the lack of large wood recruitment combined with increased peak flows heightens the severity of streambed scouring and downstream wood transport. This causes stream channel simplification and greater instability. In order to reverse the downward population trend for listed salmonids and steelhead, the structure and function of their aquatic habitats must be restored to whatever degree possible.

h. Specific Comments on the 12 Considerations

12.i.A. Siting Development

Comment 253: One commenter requested a definition of ''area of high habitat value.''

Response: This phrase refers to an area in a PFC, one that is better functioning than neighboring sites, or one with the potential to be fully restored. To achieve properly functioning condition and high habitat values within an MRCI area, new and existing riparian management areas need to be connected across land ownerships and political jurisdictions whenever land is developed or redeveloped, or brought into an urban growth boundary.

Development activities should be sited in appropriate areas. They should avoid unstable slopes, wetlands, areas already in a PFC, areas that are more functional than neighboring sites, and areas with the potential to be fully restored. A description of particularly sensitive areas is included in the Fish and Forest Report cited elsewhere in this final rule. Such sites include, but are not limited to, soils perennially saturated from a headwall or a sideslope seep or spring, permanent initiation points of perennial (stream) flow, alluvial fans, the intersections of two perennial streams. Development activities in any particular jurisdiction need to be open to coordination with adjacent jurisdictions to ensure landscape-scale conditions are providing essential habitat function.

12.i.B. Stormwater Management

Comment 254: Many commenters asserted that the stormwater consideration was poorly defined and urged that NMFS establish stronger and more specific stormwater standards. Others felt that NMFS should allow flexibility in regional performance standards and in areas where avoiding stormwater impacts is not feasible. One comment suggested replacing stormwater discharge language with specific methods for reducing development effects.

Response: NMFS believes that applying the same standards and considerations to all jurisdictions will not provide the most effective stormwater management because different methods will be more effective in different jurisdictions—depending on factors such as the existing land use in the subbasin or watershed, soil types, rainfall patterns, the degree to which the natural stream hydrograph has been altered, etc. NMFS will consider these factors, methodologies, and standards when reviewing city, county, and regional government ordinances for approval.

Comment 255: Some commenters stated that in an urban setting, it may not be advisable or feasible to protect or restore historic stream hydrographs and meandering processes. They asserted that the phrase ''where feasible'' should be added to stormwater and meander provisions.

Response: It is NMFS' intention to use the best available technologies to determine the most economic means to contribute to the achievement and maintenance of properly functioning conditions. NMFS believes this provision is justified by the need to significantly improve habitat conditions in a given MRCI area and thereby reduce the risks to listed species and ensure that they have an adequate potential for recovery. This can be accomplished by guiding land use practices on the watershed scale in order to reduce impervious surfaces, maintain forest cover, and natural soils. These conditions will, in turn, maintain essential habitat processes such as natural water infiltration rates, transpiration rates, stormwater run-off rates, sediment filtering, and provide hydrographic conditions that maintain and sustain listed salmonids. Where stream hydrographs cannot be restored, compensatory mitigation should be provided to offset the loss of habitat function. Mitigation may include stream corridor restoration by reestablishing pre-development hydrological regimes, controlling pollution sources, stabilizing channel morphologies, engaging in sediment remediation, restoring instream structure, and reestablishing riparian cover. Many of these activities may be guided by watershed scale planning and analysis which includes management of rural and agricultural activities.

Comment 256: Some commenters requested further clarification on peak flows and desired that NMFS place emphasis on biologically significant flows (i.e., water velocities suitable for juvenile fish) instead of peak flows.

Response: Changes in hydrological processes associated with the effects of MRCI development typically result in a flow regime that is more episodic and generates higher peak flows, faster runoff, and reduced base flows during periods without precipitation. Peak flows and base flows are both ecologically significant. Peak flows are primary agents of instream and riparian habitat change during storm events. Base flows sustain aquatic life during dry portions of the year. Other hydrological characteristics are also significant in the design of stormwater systems, for example, the need for water velocities suitable for juvenile salmonids.

Stormwater management programs associated with MRCI development activities should avoid impairing water quality and quantity. Such programs should preserve or move stream flow patterns (hydrograph) closer to historic hydrologic conditions (e.g., peak flows, base flows, durations, volumes, and velocities) that maintain properly functioning habitat conditions. This can be accomplished by guiding land-use practices at the watershed scale in order to reduce impervious surfaces, maintain forest cover, and retain natural soils. These conditions will, in turn, maintain essential habitat processes such as natural water infiltration rates, transpiration rates, stormwater run-off rates, sediment filtering, and provide hydrographic conditions that sustain aquatic life. NMFS will evaluate the effects that city and county ordinances (submitted for approval under this limit) have on relevant hydrologic processes.

12.i.C. Riparian Management Areas

Comment 257: Many commenters were concerned that the riparian management requirements were vague and uncertain. Some viewed this as creating opportunities to evade the intent of the riparian provision, while others wanted NMFS to make clear the fact that the intent was to be flexible and non prescriptive.

Response: The goal of MRCI riparian management is to protect and restore properly functioning riparian condition. To achieve this goal, programs must protect and restore soil quality—including controlling erosion and conserving soil productivity—and ensure that a diverse plant community with a vigorous age class distribution is well-distributed across a riparian management area. This contributes to the natural succession of riparian vegetation, produces habitat features essential to fish health, and protects water quality and flow conditions needed to meet fish habitat needs downstream. In MRCI areas, where riparian areas are usually subject to frequent and pervasive disturbance, the overland movement of nutrients, pesticides, and sediment can be pervasive. Thus, properly functioning MRCI riparian areas must also intercept and immobilize large pollutant loads, reduce runoff energy, and decrease the amount of nutrients being delivered to the streams. NMFS is not able to define the specific management strategies needed to achieve PFC in every conceivable situation involving a

riparian area, particularly where a restoration component is necessary. The basic goal of riparian management is to establish management that allows the riparian area to proceed on a growth and succession pathway toward a mature riparian condition. As noted earlier, mitigation should be developed for functions that cannot be maintained or restored at the site level and may likely require watershed-scale planning. As several commenters requested, this allows different jurisdictions the flexibility to tailor riparian and wetland management to match local needs and conditions.

Comment 258: A large number of commenters addressed the appropriate width of urban riparian management areas. Many comments focused on management area width without regard for location, riparian composition, or management strategy. One comment noted that the width of the urban riparian management area was greater than for lands affected by the Washington forest practice limit.

Response: There are differences in ecological function among riparian areas in the MRCI and forest management settings. These include the relative importance of pollutant and runoff control, the distribution of nutrient cycling and energy flow, and the efficiency of natural recovery mechanisms. However, the need to define properly functioning condition based on the salmon's biological requirements does not vary by land use type.

NMFS' evaluations of MRCI development are significantly influenced by a body of science indicating that essential habitat functions are affected to varying (but significant) degrees by streamside activities conducted within a distance equal to the height of the tallest tree that can grow on that site (known as the site potential tree height). This was the basis for the example in the preamble to the proposed rule that used 200 feet (60.9 meters) as the approximate span of a site potential tree height. The distance is measured not from the stream itself, but from the edge of the area within which a stream naturally migrates back and forth over time (the channel migration zone).

NMFS believes that the most effective way to ensure PFC is to manage MRCI development activities in riparian areas so that their impacts on habitat functions are minimal at the streamside, but may gradually increase with distance from the stream. For example, the riparian area is often managed with two zones, an inner zone that has the highest level of protection and is managed primarily to provide stream function by avoiding disturbance, and an outer zone managed for both stream function and as a transition to more heavily used upland areas. The width of each zone should be commensurate with the functions they are intended to provide and, in MRCI settings, reflect the need to buffer an upland disturbance regime that may be more severe than in forest lands; e.g., more frequent entry by humans and domestic animals or exposure to large amounts of nutrients, pesticides, and sediment.

Comment 259: Several commenters supported a preference for using native riparian vegetation.

Response: NMFS agrees that to meet the final rule's intent, existing native trees and other native vegetation in riparian areas should be protected and native vegetation should be used for restoration plantings wherever appropriate native stock are available to meet the project needs. Non-native stock or seed should only be used after a good faith attempt has been made to locate native materials. If native materials are unavailable, ecologically functional equivalents that are known not to be aggressive colonizers may be substituted. When the scope of an MRCI redevelopment activity may include modifying a riparian site with existing, non-native vegetation, it may be important to restore native vegetation on the site in order to generate the essential habitat functions discussed above.

12.i.D. Stream Crossings

Comment 260: Several commenters requested clearer criteria for culvert installation and bridge crossings. Some wanted the referenced guidance document to be included in the final rule.

Response: Activities such as road and stormwater system design and construction or placement of utility corridors should avoid stream crossings wherever possible in order to prevent soil disturbance and sediment and flow problems in the stream. Where a crossing is unavoidable, the condition of the crossing should minimize its affect by preferring bridges over culverts; sizing bridges to a minimum width; designing bridges and culverts to pass at least the flow level and debris associated with a 100-year flood event; and meet ODFW or WDFW criteria (ODFW's Oregon Road/Stream Crossing Restoration Guide, Spring, 1999 and WDFW's Fish Passage Design at Road Culverts, March 3, 1999). These two documents will be included in a guidance document to be published by NMFS at the same time as this final rule.

Comment 261: Many commenters stated that new and existing linear facilities—such as utility corridors—that cross rivers and streams should be included in this section. Other commenters wanted the language ''wherever possible'' used in the sentence ''avoid stream crossings by roads wherever possible'' to be strengthened or deleted because it creates a loophole. In general, they desired that NMFS establish criteria to determine if a crossing is necessary.

Response: Linear facilities will be included in the stream crossing section of this final rule. As to the necessity of individual crossings, NMFS believes the city or county jurisdictions should perform the lead role in developing these criteria. The applicable state fish and wildlife agency can provide considerable guidance in developing these criteria—both through their existing codes and regulations and in their guidance documents (listed previously in this rule).

12.i.E. Channel Migration Zones

Comment 262: One commenter requested an explanation of the term ''channel migration zone'' (CMZ) and asked that it be linked to landscape features that developers and planners can understand.

Response: A CMZ is defined by the lateral extent of active channel movement along a stream reach over the past 100 years. Evidence of active movement over the 100-year time frame can be inferred from aerial photos or from specific channel and valley bottom characteristics and it was chosen for that reason. Also, this time span typically represents the time it takes to grow mature trees that can provide functional large woody debris to streams. A CMZ is not typically present if the valley width is generally less than two bankfull widths, is confined by terraces, no current or historical aerial photographic evidence exists of significant channel movement, and there is no field evidence of secondary channels with recent scour from stream flow or progressive bank erosion at meander bends.

Comment 263: One commenter requested that no bank hardening be allowed within the CMZ.

Response: Gradual bank erosion and meander migration within the CMZ are important ecological processes that provide geomorphic diversity and enable habitat development. Constructing rigid bank protection structures within the CMZ can prevent properly functioning conditions from being attained because it disrupts natural channel processes and initiates

a cycle of altered erosion patterns flanked by new bank protection measures. The end result can be an entire reach being lined with rigid bank protection.

Where erosion within a CMZ is an issue, bank erosion should be controlled through vegetation, carefully bioengineered solutions, or other innovative ''soft'' bank protection techniques that allow eventual deformation by channel forming processes. Rip-rap blankets or similar hardening techniques should be avoided unless bioengineered solutions are not possible because of particular site constraints. NMFS finds that WDFW's publication, Integrated Streambank Protection Guidelines'' (June, 1998) can provide sound guidance with respect to controlling bank erosion, particularly in the area of mitigation for gravel recruitment.

Comment 264: One commenter supported the concept of protecting the CMZ in streams and floodplains, and requested that the same protection be extended to prevent bank hardening in lake, estuarine, and marine shorelines.

Response: NMFS agrees that natural geomorphic diversity and habitat development are important in all fish-bearing waters, including estuarine and marine systems where the habitat formation processes of many wetlands, shorelines, and waterways have been impaired by the construction of dikes, levees, breakwaters, sea walls, shore protection systems, ports, moorages, and other hardened structures. While the CMZ concept itself is only applicable to systems with a definable channel, it is NMFS' intent to address, avoid, and minimize these habitat threats whenever such structures are constructed or maintained.

12.i.F. Wetlands

Comment 265: One commenter recommended that some wetlands be excluded from the take prohibitions and suggested that not every disturbance in a wetland management area should be prohibited.

Response: Take is prohibited. In general, MRCI development activities should protect wetlands and the vegetation surrounding them and thereby conserve natural wetland succession and function. The reason for this is that wetlands and their associated ecotypes support salmonid food chains, protect shorelines, purify water, store water during flood events, recharge groundwater, and provide specialized habitat for rearing and migrating salmonids.

Drained hydric soils that are now incapable of supporting hydrophytic vegetation because of a change in a water regime are not considered wetlands. The basic goal is to establish management that allows wetlands to maintain ecological functions, not to exclude all disturbances. Activities conducted in a wetland management area are generally subject to the COEs' permitting process under section 404 of the CWA and are necessarily subject to ESA section 7 consultation.

12.i.G. Hydrologic Capacity

Comment 266: Some commenters requested that NMFS clarify its intent in protecting hydrologic capacity.

Response: MRCI development activities should preserve intermittent and perennial streams' hydrologic capacity to pass peak flows. Decreasing the hydrologic capacity of stream systems by filling in the stream channel for road crossings or other development can increase water velocities, flood potential, and channel erosion, degrade water quality, disturb soils and groundwater flows, and alter vegetation adjacent to the stream. Preserving hydrologic capacity provides conditions needed to maintain essential habitat processes such as water quantity and quality, streambank and channel stability, groundwater flows, and riparian vegetation succession. Filling and dredging in stream channels should be avoided unless they occur in conjunction with an unavoidable stream crossing.

Comment 267: One commenter referred to the need to strengthen the Metro Title 3 flood management standards and ensure that riverine and floodplain systems are reconnected and historic floodplain functions are restored.

Response: Metro is currently seeking to improve Title 3 as part of a broader effort to comply with Oregon's statewide Planning Goal 5—the state's land use goal for natural resource and open space protection, and Oregon Administrative Rule 660, Division 23 (the ''Goal 5 rule''). This effort is focused specifically on strengthening Title 3 by adding a program to protect, restore, and enhance fish and wildlife habitat functions in urban riparian corridors. NMFS is participating in a technical advisory role. Metro has not yet submitted its Urban Growth Management Functional Plan to NMFS for consideration as a limit to the take prohibition, nor has NMFS approved it for that purpose. If Metro applies for a limit under this final rule, it will be evaluated at that time using the review process described in this final rule.

12.i.H. Landscaping

Comment 268: Two commenters suggested more stringent standards for landscaping. One commenter proposed that watering, as well as fertilizers, pesticides, and herbicides, be eliminated in urban landscapes; the second proposed regulations requiring the use of native vegetation to reduce water use.

Response: Residential and commercial landscaping can be designed, installed, and maintained to reduce the need for water, herbicides, pesticides and fertilizer. Doing so will help maintain essential habitat processes by conserving water, reducing flow demands that compete with fish needs, and decreasing the amount of chemicals that contribute to water pollution in streams and other water bodies that support salmonids. NMFS relies on local ordinances to address planting and water use.

12.i.I. Erosion/Sedimentation

Comment 269: One commenter asked that NMFS clarify its expectations for erosion control measures.

Response: MRCI development activities should prevent erosion and sediment run-off during and after construction and thus prevent sediment and pollutant discharges. At a minimum, these activities should include detaining flows, stabilizing soils, protecting slopes, stabilizing channels and outlets, protecting drain inlets, maintaining BMPs, and controlling pollutants. This can be accomplished by applying seasonal work limits, phasing land clearing, maintaining undisturbed native top soil and vegetation, etc.

12.i.J. Water Supply/Screening

Comment 270: Several comments called for caution and flexibility concerning water supply development and water diversion screening; others wanted specific restrictions not identified in the proposed rule or mandatory conservation measures for existing developments.

Response: Water supply development can profoundly affect surface and groundwater hydrological processes. Water supply demands should be met without impacting flows needed for threatened salmonids—either through direct withdrawals from the streams or through groundwater withdrawals. Water diversions should be positioned and screened to prevent salmonid injury or death. When existing regulations do not protect the stream flows that salmon need, appropriate additional measures will need to be identified before NMFS

approves an MRCI development ordinance.

12.i.K. Enforcement, Funding, Reporting, etc.

Comment 271: Several commenters supported the monitoring provisions and requested that specific monitoring and implementation programs be described. In contrast, others concluded that by including all necessary enforcement, reporting, and implementation mechanisms NMFS has the potential to be arbitrary in its review of programs. It was suggested that NMFS make the reporting requirement biennial instead of annual.

Response: During the ordinance or plan development and approval process, NMFS will work closely with the local jurisdiction to identify and develop those monitoring mechanisms applicable to the listed species, their habitat, and the local jurisdiction. The existing condition of the salmonid habitat in the watersheds, the rate of projected growth, and other factors will be used as a baseline for the monitoring.

12.i.L. Comply with Other State and Federal Laws

Comment 272: Some commenters wanted to exclude this provision because they believed it exceeded NMFS' authority and because other programs exist to assure compliance.

Response: This subsection notifies applicants of the continuing obligation to ensure that their developments comply with existing state and Federal rules and regulations, as well as with this final rule in order to be eligible for the limit to the take prohibition. Further, an applicant should automatically assume that compliance with the this final rule necessarily meets existing regulatory requirements of local and state agencies.

Forest Management Activities in Washington

Comment 273: Many commenters wanted to know how the April 29, 1999, Forest and Fish Report (FFR) process under section 4(d) of the ESA compares with the process for issuing an incidental take permit issued under section 10. Some of these commenters misunderstood the intent of the FFR and others mistakenly believed that the proposed limit could result in issuing an incidental permit, or could be in effect for 50 years.

Response: While an ESA section 10 HCP may be developed by a non-Federal entity using many of the elements of the FFR, that process has not yet progressed to the point that NMFS has become involved. In other words, it would be many months before anyone applies for an HCP based on the FFR. At this time, NMFS is simply describing the circumstances in which an entity or actor can be certain it is not at risk of violating the take prohibition or of consequent enforcement actions, because the take prohibition would not apply to programs within those limits. And, unlike an HCP with ''No Surprises'' assurances, under the 4(d) limit NMFS may require FFR to be adjusted in the future. 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.

Comment 274: Some commenters wanted to know what role NMFS played in developing the FFR. Some commenters believed that NMFS had already approved the Washington State Forest Practice Emergency Rules without following the National Environmental Policy Act (NEPA), and other commenters wanted to know how NMFS interacted with other resource agencies.

Response: Along with other natural resource agencies at the state, tribal, and Federal levels, NMFS participated in multi-party negotiations with representatives of the commercial forest managers in Washington State from about April of 1997 through April of 1999. NMFS staff provided technical assistance to several of the work groups tasked with providing the scientific underpinnings for various elements of the FFR. Also, NMFS staff helped explain ESA procedures and implications to the entire negotiating group.

While NMFS considers the product of those negotiations—the FFR—to form the core of the ESA 4(d) limit for forestry on non-Federal lands in Washington State, the report will continue to be worked on for at least another year as various sections are refined and completed. Since the FFR was initially published in April of 1999, NMFS staff have made technical and policy contributions to many sections of the report. These include, but are not limited to, FFR ''Schedules'' (essentially, technical appendices) for Channel Migration Zones, Road Management, Placement of Large Woody Debris, Conversion of Hardwood Riparian Zones, Adaptive Management, and Resource Objectives. Some of these products are formalized as Washington Forest Practice Board (WFPB) Manuals associated with the Emergency Forest Practice Rules (that became effective March 20, 2000) and have been evaluated by the Department of Natural Resources (DNR) in their State Environmental Policy Act Draft Environmental Impact Statement (SEPA DEIS). This document may be found on the web at www.wa.gov/dnr/htdocs/fp/fpb/pdfiles/>.

Comment 275: Many commenters stated that the FFR was severely flawed. As evidence, they pointed to a critique organized by the Society for Ecological Restoration.

Response: Four individual scientists participated in a review of the FFR that the Society for Ecological Restoration (SER) organized. The American Fisheries Society (AFS) was solicited to review SER's material, but contrary to purported statements on behalf of SER, AFS did not review or endorse any of the reviewers' work products. The AFS repeatedly asked the SER to retract and correct this inappropriate attribution. NMFS believes that, while there are useful parts of the report, the Society's critique of the FFR was flawed by: (1) a limited understanding of the policies, regulations and intent of the ESA (2) an incomplete understanding of all the elements of FFR, which led to (3) overstatements of the perceived weaknesses in the FFR.

Specifically, the report claimed the FFR could result in: too-warm waters flowing from some non-fish bearing streams into fish-bearing waters; a failure to identify some small fish-bearing streams; inadequate assessment of some potentially unstable slopes; potential increases in peak-flows that could generally harm incubating fish eggs; a potential reduction in future recruitment of woody material from some non-fish-bearing streams into fish-bearing streams; excessive disturbance and potential delivery of sediments from some non-fish-bearing streams into fish-bearing streams; and, inadequate identification of impaired watershed conditions that may need extra protection. NMFS has assessed all these concerns in light of the best available scientific and commercial information and generally agrees with the environmental analysis summarized in the SEPA DEIS. The moderate environmental risks and levels of uncertainty associated with the FFR are directly addressed by the adaptive management program and the adjustable nature of the ESA 4(d) limit.

Comment 276: Several commenters wanted pesticide application covered in the FFR 4(d) limitation while another commenter did not.

Response: The FFR proposes certain guidelines for pesticide applications

which can be found at: www.wa.gov/dnr/htdocs/fp/fpb/forests&fish.html#APPE. Due to the lack of information on specific pesticides proposed for use under the FFR and their potential for lethal and sub-lethal effects on fish or, as one commenter put it, an uncertainty that needs to be addressed, the limitation associated with the FFR does not include pesticide application.

Comment 277: Many commenters questioned how NMFS could ensure that the riparian conditions essential to listed fish survival and recovery would continue to function properly. Other commenters asked for a clear description of Desired Future Condition for riparian forests. Some commenters asked that NMFS prepare forest management standards for watersheds.

Response: The riparian conservation elements in the FFR are expected to play a major role in conserving salmonids and creating properly functioning conditions on non-Federal forest lands in Washington State. The FFR offers detailed, protective management strategies for three different forest land ecotypes in Washington as well as for fish- and non-fish-bearing streams throughout the state. NMFS has carefully examined these protections and management strategies and has determined that they sufficiently conserve the listed salmonids and will promote properly functioning habitat condition wherever they are applied. The best place to examine these management measures is in the FFR itself.

Comment 278: Many commenters expressed the need to improve forest road management and desired to know how the question was addressed in the FFR.

Response: Forest roads have the potential to affect aquatic ecosystems primarily by: generating and delivering fine sediments from road surfaces and ditches; delivering catastrophic sediment inputs as a result of road-related slope failures; blocking fish passage; disrupting the downstream routing of sediments and organic materials; reducing floodplain function; and modifying hydrologic patterns (e.g., the timing and intensity of peak flows). The FFR addresses all of these effects through a revised set of BMPs that govern road construction and maintenance. The BMPs require road maintenance and abandonment plans, set a functional resource objective for hydrology that virtually disconnects road drainage from stream systems, and describe a functional resource objective for road-related fine sediment that limits the length of ditch line that can deliver sediment to streams. Moreover, the FFR addresses existing road problems by requiring every forest landowner to produce a Washington State DNR-approved Road Maintenance and Abandonment Plan by 2005.

Comment 279: Many commenters did not believe that FFR or the Emergency Rules offered enough protection with regard to unstable slopes to meet the intent of the proposed limit.

Response: The goal for managing unstable slopes is to avoid increasing or accelerating the naturally occurring landslide rate (and volume) in forested watersheds, while still recognizing that mass-wasting is an essential watershed process element that helps route large woody debris through the stream system. The FFR provides general guidance about slope hazard by identifying four primary groups of land forms generally understood to be at risk for failure and potential sediment delivery: (1) Inner gorges, convergent headwalls, and bedrock hollows steeper than 70 percent; (2) toes of deep-seated landslides with slopes steeper than 65 percent; (3) groundwater recharge areas for deep-seated landslides in glacially formed terrain; and (4) the outer bends of meandering channels. The FFR lays out a detailed process for scrutinizing any proposed forest management activities in such areas and commits to support a team of geologists that will map any other potentially unstable areas in the state. NMFS has carefully considered these and the other basic protections set forth in the FFR and believes that the overall approach fits with the limit. Moreover, the risk from unstable slopes is expected to decrease as the adaptive management process moves forward and more and better tools are brought to bear on the problem of avoiding sediment inputs.

Comment 280: Some commenters stated that the FFR used a faulty system of stream-typing. They were concerned that an out dated system would continue to be used and, as a result, some fish-bearing streams might not be identified for protection.

Response: The FFR classifies streams and dictates levels of riparian and other protections based on the potential for a given channel to support fishes of any species at any time of the year. Seasonal fish-bearing streams are protected as if they were perennial. This habitat-based stream typing will replace the current emergency rule as GIS-based stream habitat models are developed (they are expected to be complete by June of 2001). For now, the older stream typing system—based on fish presence—will continue to be used; though it will also be upgraded through the WFPB Emergency Rule (March 20, 2000). Both of these stream-typing systems are based on judgements of the geographic threshold of perennial flow. These are considered to be: a sub-watershed of 13 acres in western coastal Washington, 52 acres in all other regions of Western Washington, and 300 acres in eastern Washington.

Comment 281: How does the FFR address potential changes in watershed hydrology resulting from forest practices? Some commenters thought NMFS should add provisions that would help maintain natural hydrology by limiting clear cut areas. Others urged NMFS to set standards for tree regrowth to aid watershed recovery after logging.

Response: The FFR proposed that forested watersheds be managed to meet a functional Resource Objective (Schedule L–1, in the FFR) that limits increases in peak flows and other consequences of altered hydrology. This Hydrology Resource Objective is still undergoing development. When complete, it will provide both a quantitative approach (based on changes in peak flow intensity or duration) and an objective based on the actual streambed effects arising from altered hydrology to choose from—depending on which is appropriate to the area in question. In both cases the emphasis will be on those watershed portions susceptible to rain-on-snow events, which are widely considered to have the greatest potential to alter peak stream flows and cause scour.

The BMPs for roads are also closely related to this issue (see earlier discussion for road-related hydraulic and sediment effects). In addition, the parties to the FFR committed to revising the Hydrology Module in the Washington Forest Practice Board's (FPB's) Watershed Analysis Methodology in order to more accurately assess hydrologic effects. Finally, the DNR also maintains authority to place conditions on any proposed Forest Practice if there is cause to believe that altered hydrologic conditions are of concern. Therefore, NMFS does not believe it necessary at this time to proposed additional conservation measures relating to watershed hydrology.

Comment 282: Many commenters wanted to know how NMFS would monitor activities under the FFR and use that data to determine whether rule adjustments were necessary.

Response: The FFR proposes an elaborate process for designing and implementing a monitoring and research program that will be used to adapt forestry activities through changes in the Washington Forest Practice Rules.

The adaptive management process is presented in Appendix L of the FFR. Essentially, the protocols and procedures for conducting adaptive management research and monitoring must be approved by Washington's FPB. An administrator employed by Washington DNR will oversee the program and assist the FPB in its task.

Comment 283: Many commenters stated that the FFR was too cumbersome for the Washington DNR to be able to implement.

Response: The Washington Forest Practices Board described their version of FFR, as Alternative 2, in the space of about 18 pages in the SEPA DEIS. The agency responsible for ensuring compliance with state Forest Practices—the Washington DNR—was a full participant in the negotiating process that led to FFR development. Part of their role was to codify and implement the proposed conservation measures. The first step of that codification was completed in February, 2000, when the FFR was substantially instituted as ''emergency rules'' for state forest practices. All necessary Washington DNR staff have undergone extensive training to implement the Emergency Rules.

Comment 284: Several commenters were concerned about the level of protection provided to wetlands, specifically forested wetlands. Other wetland concerns revolved around potential impacts on hydrology and water temperature as a result of effects on groundwater in up-slope areas. Also, some commenters indicated that the CMZ definition was too narrow and would not provide adequate protection.

Response: NMFS agrees there is uncertainty associated with forest management activities near wetlands in terms of how those activities might impact fish habitat. NMFS generally agrees with the analysis provided in the Washington State SEPA DEIS, section 3.5.2. That document can provide commenters with further information about the effects certain activities may have on wetland areas. In addition, the rule outlines the process for adjusting itself—a process that may be necessary as new information on the effects of specific forest practices comes to light.

The March 2000, Board Manual for Emergency Rules, section 2, explains the standard method for measuring CMZs and offers revised Standard Methods guidance. In it, several different ways of determining the CMZ are described, e.g., using historic aerial photographs, intensive field exercises, and field review by a channel expert.

Comment 285: Several commenters wanted the limit to include alternative plans that would give landowners managing areas less than 20 acres in size more operational flexibility. One commenter asked for clarification and requested that the limit include alternative plans that would help avoid any take liability.

Response: Within the construct of the FFR, alternate plans for forest management are allowed provided that the effect of these actions, as judged by the Washington DNR, conserves physical and biological processes at least as well as the base prescriptions. The purpose of this allowance was to address unique sites and operational configurations that required some departure from standard approaches. The alternative plan management strategy must protect public resources at least as effectively as the basic rules. If approved, the prescriptions set forth in an alternative plan would be substituted for the prescriptions in the corresponding basic rules. NMFS includes in this limit only those alternative plans in the FFR that have been demonstrated to adequately protect listed salmon, and that provide NMFS—or any resource agency or tribe NMFS designates—review opportunity at every stage of development and implementation. Such review may cause a plan to be excluded from this limit.

Comment 286: Many commenters asserted that NMFS had no scientific basis to expect that the limit would contribute to salmon recovery.

Response: As the proposed rule states, ''this proposed rule restricts application of the take prohibitions when land and water management activities 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. 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.'' After carefully evaluating the various components of the FFR—as described in the proposed rule and discussed in pervious responses, NMFS has concluded that applying the FFR will help maintain and attain properly functioning habitat conditions and will, therefore, contribute to recovery.

Comment 287: A number of commenters suggested that NMFS should include the state forest practice rules from Oregon, California, and Idaho in the limit.

Response: At the time the limit was proposed for the FFR in Washington state, NMFS had not been presented with any other forest practices regulatory framework that was designed to conserve listed anadromous fish. For several years, NMFS has been discussing with state agencies in Oregon and California ways to strengthen the fish conservation aspect of forest practice rules in those states. NMFS wishes to continue working with all affected governmental entities in strengthening, identifying, and creating management programs that fulfill the listed salmonids' biological requirements. For programs that meet those needs, NMFS can provide ESA coverage through 4(d) rules, section 10 research and enhancement permits or incidental take permits, or through section 7 consultations with Federal agencies. A 4(d) rule may be amended to add new limits on the take prohibitions, or to amend or delete limits as circumstances warrant.

General

Comment 288: A broad array of interests asserted that their activities were, at most, only minimally harmful to salmonids and that natural environmental fluctuations and activities being conducted by others were responsible for the recent drastic declines in salmonid numbers throughout the Northwest and California. Among the activities and causes listed as most harmful were logging, grazing and other agricultural practices, pesticide use, various habitat-altering actions, urban development, sport fishing, commercial fishing, drift net fishing, tribal fishing, recreational fishing, ocean and estuarine conditions, hydropower development, marine mammals, avian predators, other predators, and so forth.

Response: Comments of this nature have been made in response to essentially every listing and critical habitat proposal NMFS has put forth over the last decade. As a result there is a great deal of information on these factors available in any one of a number of **Federal Register** documents and it need not be repeated in detail here. Nonetheless, it should be pointed out that the very number of commenters and the range of the causes cited are themselves indicative of the breadth and depth of the problems facing Pacific salmonids. Therefore, NMFS acknowledges that all of these factors have played a role in the species' recent declines; as evidence, most of the factors that commenters identified were

specifically cited as risk agents in the West Coast Chinook Salmon Status Review (Myers *et al.*, 1998).

The two primary themes that repeatedly arise in these comments revolve around whether the massive declines in salmonid abundance are brought on by natural conditions or human alteration of the environment. NMFS recognizes that natural environmental fluctuations and increasing numbers of natural predators have recently had negative impacts on the species. However, NMFS believes human-induced impacts (e.g., harvest and widespread habitat modification) have played at least an equally significant role in the salmonid declines up and down the West Coast. And because the very nature of this rule-making—the codification of take prohibitions and the limits placed on them—cannot apply to natural processes (by definition, the ocean cannot not ''take'' species), the rules necessarily address human activities.

Comment 289: Many commenters stated that the language of the rules needed to be more clear in a number of respects, particularly with regard to the terms found in the take guidance sections. Others felt there was too much detail in the rules and that NMFS should simply stick to principles and not offer too much in the way of specific guidance.

Response: In publishing the proposed rules, NMFS tried to strike a balance between these opposing views. The point was to avoid making the rules overly prescriptive—and thus allow local initiative to play a strong role—yet still give valuable guidance on how to proceed with numerous human activities in the areas inhabited by threatened salmonids. To continue in this spirit, NMFS has gone to some lengths to clarify the guidance language and it may be found in this final rule.

Comment 290: Several commenters requested clarification on NMFS' use of the term ''stock,'' the definition of population segments, and the implications of these concepts for species conservation.

Response: The use of the term ''stock,'' following Ricker's definition, is critical because it defines the appropriate management units for conserving the species. According to Ricker, stocks are made up of numerous populations which become uniquely adapted to specific environmental conditions, leading to local variations in morphology, behavior, and life history traits. As amended in 1978, the ESA allows the listing of ''distinct population segments'' where groups of populations are assembled for conservation management purposes. NMFS' policy states that a salmon population is considered ''distinct'' for purposes of the ESA if it represents an ESU of the biological species, where an ESU represents an important component of the evolutionary legacy of the species. Thus the health of an ESU depends upon the health of its component parts. This argues for developing protective regulations across an ESU's entire range, even though some local populations may be thriving. The ESA 4(d) protective approach offers the flexibility to develop local protection programs which are cognizant of the species condition in the area.

Comment 291: A large number of commenters voiced general and specific support for and opposition to various rules.

Response: The proposed ESA 4(d) rules generated an amount of substantive public comment unprecedented since NMFS first began rule-making activities for salmonids on the West Coast 10 years ago. Many thousands of individual comments contained within the letters from well over one thousand respondents reflected the broadest possible spectrum of feeling—from full support to total opposition to the proposed rules. Though the very nature of the questions surrounding salmonid management in the Northwest and California precludes any possibility of pleasing everyone, NMFS has striven to use this public comment period—as well as every other input avenue at our disposal—to adapt the rules in a manner that more fully reflects the basic objectives to encourage state and local conservation efforts and to clear up the substantial confusions associated with certain elements of the earlier proposed rule.

Comment 292: Several commenters stated that NMFS should consult with tribal governments regarding actions by non-tribal entities, particularly those actions and limits contained in the salmon and steelhead ESA 4(d) rules.

Response: Throughout the development of the tribal and salmon/steelhead 4(d) rules NMFS has made a concerted effort to notify and confer with tribal representatives and technical staff throughout the Pacific Northwest and California. Contact regarding these rules goes back to before December of 1998, when draft rules were submitted for review by the affected tribes well in advance of the proposed rules. During that review, NMFS coordinated and attended a number of meetings and working sessions with tribal governments and representatives (including staff from inter-tribal fisheries commissions) to discuss particular aspects of the ESA 4(d) rules. These meetings allowed NMFS to develop proposed ESA 4(d) rules that the agency believes address a wide range of issues highlighted by the tribes. Similar efforts were made to discuss the proposed 4(d) rules with key staff and tribal council members after the rules were published.

Clearly, NMFS recognizes the need to work closely with the tribes of the region to develop and improve upon information exchange and consultation opportunities relating to salmon and steelhead conservation. Since beginning work on these 4(d) rules NMFS has added a tribal liaison position to its staff to focus on improving communications with the tribes and developing consultation procedures that will meet both NMFS and tribal needs. It is the agency's intent to continue working with tribal governments to develop regularly scheduled meetings between NMFS and tribal technical staff and policy makers to both provide more timely notice regarding NMFS activities and discuss how consultation might occur for future fisheries issues and ESA rulemaking. There remains the opportunity for the tribes and the agency to hold future discussions on applying the ESA 4(d) rules. Such future discussions can include identifying cultural and economic issues requiring the agency's attention and ideas about how such analyses should be conducted. In response to tribal requests, NMFS will correspond with each commenting tribal government, clarify how its comments were addressed, and identify the need for additional meetings to discuss potential rule amendments and modifications.

Comment 293: Many people stated that any activities conducted in accordance with the Oregon Plan for Salmon and Watersheds should receive a specific limitation on the take prohibitions.

Response: NMFS has carefully reviewed the various versions of the Oregon Plan since its genesis over 4 years ago and remains a strong supporter of it as a hugely ambitious and comprehensive effort. While many portions of the Plan may sufficiently protect the salmon resource as they now stand, other components need further work and refinements, as is widely understood and altogether understandable. Therefore, because certain parts of the Plan do not offer the salmon enough protection, NMFS cannot adopt it wholesale as a limitation on the take prohibitions.

Comment 294: Several commenters requested that NMFS clarify how it will

add new limits and adjust programs that are already within a limit.

Response: NMFS will continue to work with local jurisdictions and other entities to develop and adopt new ESA 4(d) rule limits. In general, local entities will develop a proposed limit based on the guidance set forth in the rule and will bring it to NMFS for technical assistance and to undergo a negotiation and approval process. The approach is a flexible one and there are different time frames and administrative procedures for each limit—depending on the type being proposed (see the regulatory text of this final rule). Existing limits will be reviewed and evaluated according to the schedule established at the time the limit is finalized.

Comment 295: One commenter requested that NMFS identify in the final rules the ''replicable'' elements of any of the agency-specific programs.

Response: There are two types of limits available through the ESA 4(d) rule: (1) Stand alone programs, and (2) a set of criteria that will form the basis for future programs that NMFS will evaluate for further limits on the take prohibition. The first category of limits is made up of programs that can be adopted or adapted as ''replicable'' elements for other jurisdictions or entities. The criteria in the latter type of limit also serve as replicable elements that other programs can adapt to meet.

Comment 296: A number of respondents expressed a general concern that the ESA 4(d) rules were too coercive. They stated that the rules would engender third-party lawsuits or simply fragment and undermine local efforts rather than bolster them. A recurring theme was that NMFS should be more flexible in its approach than the rules would seem to indicate.

Response: One of the primary reasons NMFS has taken this ground-breaking approach in publishing ESA 4(d) rules is to allow for a maximum of local input and Federal flexibility. Rather than simply impose blanket take prohibitions of the sort normally promulgated under a final rule listing a species, NMFS has attempted to create a regulatory environment within which local initiatives and programs have sufficient leeway to remain focused on their own goals while simultaneously working toward the ultimate end of preserving salmonid stocks—both now and in the future. No agency can alter the simple fact that certain activities that harm listed salmonids must be regulated. Nonetheless, as the rules themselves demonstrate, NMFS is committed to an approach that focuses more on aiding local efforts that conserve listed salmon and steelhead.

Comment 297: Some commenters stated that local entities should have little or no authority to carry out the measures because local initiatives have a very poor track record with respect to protecting salmonids.

Response: The task of protecting salmonids in the Pacific Northwest and California is perhaps the most complicated and far-reaching attempt to restore a species ever undertaken. In practical terms, the Federal government alone, using only Federal authorities and dollars, cannot hope to accomplish this ambitious task of salmon recovery without the additional active efforts of state and local authorities and the private sector. A wide mosaic of activities affect salmon habitat. Those activities fall under the responsibility of a range of Federal, state and local authorities. The practical ability to make changes in those activities will depend in part upon the willingness and ability of those separate authorities to encourage change. Therefore, NMFS is attempting, to the greatest extent practicable, to build opportunities for state and local initiatives in the implementation of the ESA program. This strategy has already proven successful in a few areas where watershed councils and other local bodies have made great strides in salmon conservation through habitat rehabilitation, community awareness seminars, and other projects. NMFS anticipates and welcomes further expansions of these efforts over time.

Comment 298: Many commenters stated that individual landowners should receive assurances in the rules that if they cooperated and followed the measures outlined, they would be free from any further restrictions under the ESA.

Response: As a matter of law, listed species may not be taken without legal authorization. Therefore, it is incumbent upon every individual and organization to be vigilant in terms of minimizing the impacts their activities have on listed salmonids. The 4(d) rules establish take prohibitions; that is their purpose. Secondarily they are an attempt to allow landowners and every other interested party a path by which they can have some assurance that their activities are in concert with the letter and intent of the ESA. It should be noted that no one will be forced to seek a 4(d) limitation, and no one need necessarily follow the limitations laid out in the rule. They are optional, flexible methods for ensuring that individual entities adhere to the mandated take prohibitions. The other routes for complying with the ESA are still open; for example, landowners may still seek ESA section 10 incidental take permits through the process of developing habitat conservation plans—a process that offers them a good deal of assurance that their activities will continue to be in compliance with the ESA. Any program or activity that adheres to the criteria found in the limits described in these rules will receive a similar sort of assurance. Further, it is very likely that other programs will come forth in the future that similarly protect the salmon and, as a consequence, will receive their own limitations on the take prohibitions. Nonetheless, it must be stressed that the primary purpose of these rules is to fulfill the mandate of the ESA in issuing regulations deemed necessary and advisable to provide for the conservation of threatened species.

Comment 299: A number of commenters asserted that the original listings were in error—most the reasons given fell into two categories: either (a) the science was inaccurate, or (b) the concept of listing ESUs is faulty.

Response: Section 4(b)(1)(A) of the ESA requires that NMFS make its listing determinations solely on the basis of the best available scientific and commercial data after reviewing the status of the species and taking into account any efforts being made to protect such species. NMFS believes that information contained in the agency's status review (Myers *et al.*, 1998), together with information cited in the final rule (NMFS, 1998a), represent the best scientific information presently available for the ESUs addressed in this final rule. NMFS made every effort to conduct an exhaustive review of all available information and solicited information and opinion from all interested parties in making the listing decisions. If in the future new data become available to change these conclusions, NMFS will act accordingly.

As to the validity of listing ESUs in the first place, general issues relating to ESUs and the ESA have been discussed extensively in past **Federal Register** documents—most recently in the final rule listing 4 ESUs of chinook salmon (64 FR 14308, September 9, 1999) and they need not be reiterated at length here. Nonetheless, the utility of the ESU concept is laid out in a 1991 document in which NMFS describes how it will apply the ESA definition of ''species'' to Pacific salmon (56 FR 58612, November 20, 1991). Guidance on applying this policy is contained in a NOAA Technical Memorandum entitled ''Definition of 'Species' Under the Endangered Species Act: Application to Pacific Salmon'' (Waples, 1991) and in

a recent scientific paper by Waples (1995). It should also be pointed out that the National Research Council generally endorses the concept (NRC, 1995).

Comment 300: Several commenters were concerned about the scientific standards used to justify the inclusion of the 13 limits and to judge future limits, and suggested the generation of uniform standards.

Response: NMFS evaluated the current limits based on best available science and the concepts of VSP and PFC, and will evaluate any future limit using the same and other, more site specific guidelines. Recognizing the variable nature of the geologic, hydrologic and aquatic ecosystems across all ESUs, and the consequent variability in strategies for salmon recovery, NMFS proposes an approach that allows local innovation through the development of local and regional programs that are protective of salmon and steelhead. These programs are monitored and evaluated for their effectiveness in meeting the conservation goal of the survival and recovery of the species. While NMFS offers general guidelines, the 13 limitations and new programs offer additional specificity and strategies for meeting the conservation goal.

Comment 301: Some commenters expressed the opinion that the rules are too costly and will involve too much red tape.

Response: Saving a species is neither an easy task nor a cheap one. Nonetheless, NMFS is committed to finding the most efficient and cost-effective way of preserving salmon and steelhead on the West Coast. To assist us in this, we have prepared initial regulatory flexibility analyses of the effects the rules are likely to have on small businesses, non-profit organizations, local governments, and other small entities. The purpose of these analyses is to help the agency consider all reasonable regulatory alternatives that would minimize the rules' economic impacts on affected small entities. It is thus our intent to make full use of these analyses and keep economic impacts to a minimum.

In addition, because this is a new approach to promulgating 4(d) rules under the ESA, we are aware that the process may impose some unforseen burdens in terms of time investment and paperwork for all involved parties—including NMFS. To counter this, we will use the principles of adaptive management to streamline the process wherever and whenever possible.

Comment 302: A number of people stated that more time was needed for completing and commenting on the rules.

Response: NMFS has been working with individual programs, tribes, and local governments all over the Northwest for well over 2 years to complete the 4(d) rule proposals. Twenty-five public meetings were held in order to get input. The statutory time line for commenting on the rules was doubled so that every interested person in the region would have a reasonable amount of time in which to formulate and submit their comments.

It is important to note, however, that one of the main premises of promulgating these rules is to build a maximally adaptive process for managing salmon on the West Coast. Therefore, it is expected that these rules will continue to change in response to incoming monitoring data, further public input, other proposed limitations on the take prohibitions, and the developing recovery plans for the listed species.

Comment 303: One commenter requested that the reference to a public comment period of 30 days for various plans and programs be included in every section of the rule in order to provide consistency in process between limits.

Response: All programs that are accepted as ESA 4(d) limits will be published in the **Federal Register** and the usual comment period is 30 days. NMFS makes clear in the regulatory text of this final rule where and when the 30-day comment period applies.

Comment 304: Many commenters agreed with various portions of the rules, but stated that it is imperative that they be enforced and that monitoring and oversight need to be accounted for in every limit. Further, monitoring must be built into the system in a way that allows the limits to be altered when evolving science shows it necessary.

Response: Change in response to new data is the very heart of the adaptive management process. NMFS is committed to continually bringing the best and latest information to bear on the question of how to best preserve declining salmon stocks—monitoring is a critical path for developing that information. Most of the programs given limitations in the 4(d) rules feature monitoring as an integral part. The language in the final rules has been changed slightly to further stress the importance of monitoring and to make clear that it will be used to alter the programs where necessary.

Comment 305: Some commenters suggested that the results from monitoring data for programs implemented under different limits should be available for public comment. Another commenter urged that the process for reviewing the effectiveness of the fish protection measures include tribal managers, independent scientists, and the public.

Response: The results of monitoring data from programs within ESA 4(d) limits will be available for public review at the appropriate NMFS office. At this time, however, NMFS does not have a mechanism to seek formal public comment on the data. NMFS will continue to seek monitoring data, input, and other relevant information from co-managers and others as the programs are reviewed, evaluated, and adjusted.

Comment 306: Some commenters wanted to know why NMFS believes it is necessary to have such a detailed review and reporting process for the limits when FWS does not require anything like it for wildlife.

Response: As stated previously, this is a ground-breaking approach to managing threatened species. Its intent is to allow a maximum of local input while simultaneously offering the largest possible degree of protection for the species. It has never been tried before and, as a result, it is imperative that we keep a very close eye on its progress. Aside from the need for monitoring to allow the process to adapt, these rules will eventually become part of the larger recovery planning process. By closely examining the success of the proposed measures, we can get a much better idea of what it will take to fulfill the ultimate portion of our mandate: to recover the species.

Comment 307: One commenter recommended that NMFS work with FWS to make sure that Federal activities receive take prohibition limits under our ESA 4(d) rules similar to the ones being proposed for Bull trout. In addition, another commenter urged close coordination with FWS to prevent different interpretations of take and different limits being offered.

Response: NMFS always seeks to cooperate with FWS, and procedures have been established for joint consultation on ESA rulemaking and for reviewing Federal programs through section 7 of the ESA. NMFS anticipates that this cooperation will be strengthened as the 4(d) rule is implemented. NMFS will further work with FWS to ensure that the existing bull trout take prohibitions might be modified to reflect appropriate state or local efforts in parallel to this final rule.

Comment 308: Some tribal commenters were concerned that the 4(d) rules could serve as a ''back door'' to unfairly allocate the conservation burden on tribal governments. The

concern is that if the program is not scientifically rigorous enough, the Agency would be forced to turn to the tribes for additional conservation burden (i.e., limit fishing or development activities).

Response: NMFS intends to review all new proposed limitations rigorously for their contribution to the conservation of the species using existing criteria and additional site-specific tools. In addition, before any program is accepted, it will be published in the **Federal Register** for public review and comment. NMFS expects this process to be rigorous and open enough to permit the development of effective protective regulations and programs.

Comment 309: Some commenters stated that NMFS should delineate specific population parameters for several named populations (e.g., the Yuba River) so it can be determined if they may be excepted from having any take prohibitions placed on them. Some commenters wanted the rules to be eased when a viable population size is reached in order to give landowners an incentive to continue using protective measures.

Response: The limits on take prohibitions are given for specific activities, not for populations. If an activity helps conserve salmonids or if it adequately limits impacts on salmonids, it may receive a limitation on the take prohibitions. In the spirit of adaptive management, there may well come a point in the future where a population (and its ESU) has rebounded to the point where it is healthy enough, viable enough, that alternative management actions would be allowable. Of necessity, this would first take place in a highly controlled experimental environment that would allow researchers to determine the impacts of any new management scheme. Until that time, however, it is necessary to protect the salmonids while we get a better measure of population viability and place it firmly in the context of managing West Coast salmon. NMFS scientists are working diligently to accomplish that goal and will continue to use their results to adapt the agency's ongoing salmon management programs.

Comment 310: Some commenters stated that the overall regulatory scheme was too fragmented. They stated the need for a clear pathway for local and state governments to synthesize their programs with the ESA 4(d) approach. They also stated there should be a better recognition of the limitations local governments face in terms of staffing, funding, and ability to monitor.

Response: One of this final rule's purposes is to develop a process that is flexible, adaptable, and receptive to greater participation from local entities. In order to accomplish this, the regulatory scheme must remain somewhat open as well. Nonetheless, though NMFS desires to remain open to new approaches, we have also included a good deal of guidance as to what we believe any program should contain in terms of protective measures for salmon. Also, we will continue to do what we can to assist local entities, watershed councils, and others with instruction, technical assistance, and, whenever possible, funding.

Comment 311: Some commenters asserted that NMFS cannot anticipate how many states or local governments will be affected by the rule or how many entities or jurisdictions will apply for coverage under the new ESA 4(d) limits. Others commented that NMFS will be inundated and overwhelmed with requests for programs to come under a 4(d) limit and suggested simplified procedures streamlining the review and approval of future potential take limitations.

Response: NMFS is anticipating strong interest from state and local governments in the ESA 4(d) limits. We are encouraging jurisdictions to work together in developing plans that cover wide geographic scales and multiple activities—thus reducing the number of individual programs that need to be reviewed. Also, we anticipated that promulgating these rules would increase workloads and, as a result, we are evaluating our resource needs and are fully committed to meeting future program demands.

Comment 312: Several commenters suggested that NMFS provides no scientific basis to categorically apply the take prohibition to an entire category of activities such as agriculture, and that the agency provides no technical guidance on take avoidance.

Response: The take prohibitions do not apply to categories of activities, but to any activities that take listed species. The section on ''Take Guidance'' provides further information on those activities that have a high risk of take. NMFS stands ready to work with interested parties to provide further guidance, including guidance that could ultimately be included as a 4(d) limitation.

Comment 313: Several commenters were confused by multiple **Federal Register** documents and didn't realize that there were several separate ESA 4(d) rules.

Response: For the final rules, we have combined the chinook and the steelhead rules to help reduce some of the confusion. We hope this, along with several changes in the rule' language will make things a bit more clear.

Changes to the Proposed ESA 4(d) Rules

The proposed rules included a lengthy preamble where NMFS provided technical guidance, description of the scientific principles upon which the limits on the take prohibition were based, and a description of the background and content of the 13 limits. The proposed regulatory language was included in sections 223.203 and 223.208. Modifications to the proposed preamble sections based on written comments will be reflected in ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000), while the actual changes to the regulatory language are described as follows.

An important change to highlight is that the final 4(d) rules for the different ESUs have different effective dates. In the final steelhead and salmon 4(d) rule the effective date for the steelhead ESUs (§ 223.102(a)(5) through (a)(9) and (a)(14) and (a)(15)) is September 8, 2000. The effective date for the salmon ESUs (§ 223.102(a)(10), (a)(12), (a)(13) and (a)(16) through (a)(19)) is January 8, 2001. NMFS recognizes that the final 4(d) rules are complex and that even the proposed rules created a certain amount of confusion among those who commented on them. The court-ordered settlement date requires NMFS to adopt protective regulations for the steelhead ESUs by June 19, 2000. NMFS, however, is not under a similar court-mandated time line for the salmon ESUs. Therefore, because of the rule's length and complexity, the diverse range of human activities that will potentially be affected, and the continued need to educate all sectors of the public, the effective date for the salmon ESUs will be six months after publication of this **Federal Register** document. This 6-month period will allow NMFS to educate and work with all jurisdictions, entities, and individuals affected by the rule. It will also provide additional time for them to review their activities and programs and adjust them (if needed) to avoid taking threatened species.

The general format of the proposed regulations included the prohibitions of section 9(a)(1) of the ESA (16 U.S.C. 1538) relating to endangered species being applied to the 14 listed threatened salmonid ESUs, except as provided in the 13 limits on application of the section 9(a)(1)(B) and 9(a)(1)(C) take prohibitions that are included in the regulation. The proposed rules listed the following 13 limit categories: (1) Activities conducted in accord with

ESA incidental take authorization; (2) ongoing scientific research activities, for a period of 6 months from the publication of the final rule; (3) emergency actions related to injured, stranded, or dead salmonids; (4) fishery management activities; (5) hatchery and genetic management programs; (6) activities in compliance with joint tribal/state plans developed within *U.S.* v. *Washington* or *U.S.* v. *Oregon*; (7) scientific research activities permitted or conducted by the states; (8) state, local, and private habitat restoration activities; (9) properly screened water diversion devices; (10) routine road maintenance activities in Oregon; (11) certain park maintenance activities in the City of Portland, Oregon; (12) certain municipal, residential, commercial and industrial (MRCI) development and redevelopment activities; and (13) forest management activities within the state of Washington.

NMFS is modifying the final ESA 4(d) protective regulations for these 14 ESUs based on comments and new information received on the proposed rules. The following section summarizes how the regulatory language for each limit and technical issues did or did not change. The actual regulatory descriptions of each limit and technical information can be found in the regulatory text at the end of this **Federal Register** document.

Viable Salmonid Populations Paper

The proposed rules solicited public comments on the draft NMFS VSP paper. The VSP paper is not a separate limit, but provides a technical framework for the fishery management and hatchery management limits. Based on public comments regarding the draft VSP paper, changes were made in the regulatory language for the fishery and hatchery management limits to clarify how the VSP data requirements will be addressed. Additional compliance guidance is available in''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000).

Properly Functioning Conditions

For the reasons identified in the Comment and Responses section, language was added to the limits addressing habitat issues, i.e., habitat restoration, pest management and routine road maintenance, in order to define properly functioning condition and how NMFS will evaluate the limits with regard to meeting this biological standard.

Legal and Affirmative Defense

For the reasons identified in the Comment and Responses section, regulation language was modified to: (1) add new language to make explicit that it would be the defendant's obligation to plead and prove application of and compliance with a limit as an affirmative defense; (2) clarify the question about whether the rule should be non-severable, by making it explicit that NMFS intends the provisions of this rule to be severable.

Limit for Activities Conducted in Accord with ESA Incidental Take Authorization

No changes were made to the regulations pertaining to this limit. Additional compliance guidance is available from NMFS in ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000).

Limit for Ongoing Scientific Research Activities

No changes were made to the regulations pertaining to this limit. Additional compliance guidance is available from NMFS in ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000).

Limit for Rescue and Salvage Actions

No changes were made to the regulations pertaining to this limit. Additional compliance guidance is available from NMFS in ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000).

Limit for Fishery Management Activities

For the reasons identified in the comment and response section, this limit was modified to: (1) change the use of a MOA between states and NMFS to a letter of concurrence from NMFS; (2) clarify the use of viable and critical salmonid population thresholds consistent with the VSP paper; (3) clarify the timing of reports describing take of listed salmonids; and (4) explain that the prohibitions on take of threatened steelhead in recreational fisheries managed solely by the states of Oregon, Washington, Idaho and California will go into effect January 8, 2001.

Limit for HGMPs

For the reasons identified in the comment and response section, this limit was modified to change the use of a MOA between states and NMFS to a letter of concurrence from NMFS.

Limit for Joint Tribal and State Plans

No changes were made to the regulations pertaining to this limit. Additional compliance guidance is available from NMFS in ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000).

Limit for Scientific Research Activities Permitted or Conducted by the States

NMFS has revised the limit to reflect commenter concerns about the feasibility of adequate oversight by state fishery agencies. Additional compliance guidance is available from NMFS in ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000).

Limit for Habitat Restoration

For the reasons identified in the Comment and Responses section, this limit was modified to: (1) clarify that take prohibitions do not apply to habitat restoration activities provided the activity is part of a WCP that meets criteria listed in the regulation; (2) change the time frame to complete a watershed conservation plan from 2 years to an undetermined time, so that the limit is available whenever the criteria described in the regulation are met; (3) delete the list of six categories of habitat restoration activities that would not have the ESA section 9 take prohibitions applied to them for 2 years; (4) clarify and revise the criteria NMFS will use to evaluate a state's watershed conservation plan guidelines; and (5) clarify that NMFS will not approve individual WCPs; instead, NMFS will approve the WCP guidelines with each state and periodically review the state watershed planning programs for consistency with the guidelines. Additional compliance guidance is available from NMFS in ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000).

Limit for Water Diversion Screening

For the reasons identified in the comment and response section, this limit was modified to: (1) allow NMFS-authorized state agency engineers (''authorized officers'') to review and recommend certification of screen designs to NMFS rather than NMFS' engineers solely having this responsibility; and (2) allow NMFS, on a case by case basis, to grant this limit to water diversion projects where NMFS has approved a design construction plan and schedule, including interim operation measures to reduce the likelihood of take. NMFS may also require a commitment of compensatory mitigation if implementation of a plan and schedule is terminated prior to completion.

Limit for Routine Road Maintenance Activities

For the reasons identified in the comment and response section, this limit was modified to: (1) allow this limit to be available to any state, county, city, or port once they have demonstrated in writing that their routine road maintenance activities are equivalent to those in the ODOT Guide which adequately protect threatened salmonid species; or by employees or

agents of a state, county, city or port that complies with a routine road maintenance program that meets proper functioning habitat conditions; (2) add language referring to state, city, county, and ports; (3) change the time frame for ODOT or another jurisdiction to respond to new information in the shortest amount of time feasible, but not longer than one year; (4) clarify that prior to approving any state, city, county, or port program as within this limit, or approving any substantive change in a program within this limit, NMFS will publish notification in the **Federal Register**; (5) clarify that any jurisdiction should first commit in writing to apply the management practices in the ODOT Guide, rather than the proposed language, which first required the jurisdiction to enter into a memorandum of agreement with NMFS; and (6) add new language regarding properly functioning condition. Additional compliance guidance is available from NMFS in ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000).

Limit for Certain Integrated Pesticide Management Activities

For the reasons identified in the Comment and Responses section, this limit was modified to: (1) add new language regarding properly functioning conditions; and (2) clarify language regarding how NMFS will address future program changes and provide public notice that the limit is withdrawn. Additional compliance guidance is available from NMFS in ''A Citizen's Guide to the 4(d) Rule'' (NMFS, 2000).

Limit for Municipal, Residential, Commercial and Industrial (MRCI) Development and Redevelopment Activities

For the reasons identified in the Comment and Responses section, this limit was modified to: (1) clarify that this limit applies to MRCI development and redevelopment undertaken by cities, counties, and regional governmental entities; (2) expand and clarify the content of the 12 evaluation considerations NMFS will use to review MRCI development ordinances and plans; (3) add new language to emphasize the properly functioning habitat conditions NMFS considers adequate to conserve listed salmonids; (4) clarify that NMFS notes that not all 12 considerations described in the regulation will necessarily be relevant to all ordinances and plans submitted for review and approval; and (5) include language which clarifies the process NMFS will use to provide notice of availability of ordinances and plans for public review, and NMFS' process to amend or withdraw limits.

Limit for Forest Management Activities in the State of Washington

For the reasons identified in the Comment and Responses section, this limit was modified to add new language stating that actions taken under alternative plans are included in this limit provided that they meet the requirements stated in the regulation and are submitted and approved by the authorized Washington state agency.

Take Guidance

These threatened species 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 an act 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.

On July 1, 1994 (59 FR 34272), NMFS and 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 is resulting 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 that 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 below are as cited in NMFS' harm rule 64 FR 215 (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 streamflow 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 resulting in 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 species. Determination of whether take has actually occurred depends on the circumstances of a particular case.

Many activities that may kill or injure salmonids are regulated by state and/or Federal processes, such as fill and removal authorities, NPDES or other water quality permitting, pesticide use, and the like. For those types of activities, NMFS would not intend to 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 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 who conclude 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 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) constitute a violation of this rule.

State and local efforts like the Oregon Plan for Salmon and Watersheds, the State of Washington's Extinction is Not an Option Plan, Metro's Functional Plan, the Puget Sound Tri-County Initiative and Lower Columbia Fish Recovery Board in Washington state, the Eugene, Oregon-area Metro ESA Coordinating Team, and the Willamette Restoration Initiative (WRI) have stepped forward and assumed leadership roles in saving these species. NMFS reiterates its support for these efforts and encourages them to resolve critical uncertainties and further develop their programs so they can take the place of blanket ESA take prohibitions.

Impacts on listed salmonids resulting from actions in compliance with a permit issued by NMFS pursuant to section 10 of the ESA are not violations of this rule. 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 and any take authorized, will not constitute violations of this rule—provided the activities are conducted in accord with all reasonable and prudent measures, terms, and conditions stated in the consultation and incidental take permit.

References

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

Classification

Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) (5 U.S.C. 601–612) 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. NMFS prepared an initial regulatory flexibility analysis (IRFA) which was made available through the proposed rule. Several public comments were received related to the IRFA or to economic impacts generally. Those comments and NMFS responses to them are summarized in the Response to Comments section. NMFS has prepared a Regulatory Impact Review (RIR) and a Final Regulatory Flexibility Analysis (FRFA), taking into consideration the public comments received. A summary of the final FRFA follows. The FRFA is available upon request (see **ADDRESSES**), or may be accessed on NMFS web site at www.nwr.noaa.gov.

This ESA 4(d) rule has no specific requirements for regulatory compliance; it essentially sets an enforceable performance standard (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 will not impose the take prohibitions. Hence, the universe of entities reasonably expected to be directly or indirectly impacted by the prohibition is broad.

The geographic range of these regulations crosses four states and the number of entities potentially affected by imposition of take prohibitions is substantial. Activities potentially affecting salmonids are those associated with agriculture, forestry, fishing, mining, heavy construction, highway and street construction, logging, wood and paper mills, electric services, water transportation, tourism, real estate, 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 will also be impacted. The activities of some nonprofit organizations will also be affected by these regulations.

NMFS examined in as much detail as practical 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, proximity to waterways, the degree to which the operation is already protective of salmonids, and individual strategies for dealing with the take prohibitions.

There are no recordkeeping or reporting requirements associated with the take prohibition and, therefore, it is not possible to simplify or tailor recordkeeping or reporting to be less burdensome for small entities. Some limits, for which NMFS has found it not necessary to prohibit take, involve recordkeeping and/or reporting to support that continuing determination. NMFS has attempted to minimize any burden associated with programs for which the take prohibitions are not enacted. The final rule does not duplicate, overlap, or conflict with any other relevant Federal rules.

In formulating this rule, NMFS considered several alternative approaches, described in more detail in the FRFA. These included:

(1) Enacting a ''global'' protective regulation for threatened species, through which section 9 take prohibitions are applied automatically to all threatened species at the time of listing; (2) ESA 4(d) protective regulations with no limits, or only a few limits, on the application of the take prohibition for relatively uncontroversial activities such as fish rescue/salvage; (3) take prohibitions in combination with detailed prescriptive requirements applicable to one or more sectors of activity; (4) ESA 4(d) protective regulations similar to the existing interim 4(d) protective regulations for Southern Oregon/Northern California coast coho, which includes four limits on the take prohibition for harvest plans, hatchery plans, scientific research, and habitat restoration projects, when in conformance with specified criteria; (5) a protective regulation similar to the interim rule, but with recognition of more programs and circumstances in which application of take prohibitions is not necessary and advisable; (6) an option earlier advocated by the State of Oregon and others, in which ESA section 9 take prohibitions would not be applied to any activity addressed by the Oregon Plan for Salmon and Watersheds, fundamentally deferring protections to the state; and (7) enacting no protective regulations for threatened steelhead. The first four alternatives would place greater burdens on small entities. Alternative 6 would not provide sufficient protections (see response to comments), while alternative 7 would leave the ESUs without any protection other than provided by ESA section 7 consultations for actions with some Federal nexus. NMFS could not support that approach as being consistent with the obligation to enact such protective regulations as are ''necessary and advisable to provide for the conservation of'' the listed steelhead. Alterative 5 is the approach taken in this rule.

As a result of comments received related to the proposed rules and IRFAs, NMFS has modified the regulations to broaden the applicability of some limits, and to make them more flexible. For instance, the road maintenance limit is now generally available. The limit for development has been broadened to cover a greater range of types of plans or ordinances, and has been modified to allow for circumstances where a jurisdiction's ordinances may not address all of the evaluation criteria, but nonetheless are adequate for a limit for those aspects addressed. These types of adjustments provide additional options for jurisdictions that may wish to seek ESA compliance assurances.

NMFS concludes that at the present time there are no legally viable alternatives to the final rule, as modified from the proposals, that would have less impact on small entities and still fulfill the agency's obligations to protect listed salmonids. The first four alternatives may result in unnecessary impacts on economic activity of small entities, given NMFS' judgment that more limited protections would suffice to conserve the species.

Executive Order 12866

Under E.O. 12866 (58 FR 51735, October 4, 1993), NMFS has prepared a Regulatory Impact Review (RIR) which considers costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits 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. We cannot quantify the economic effect of this rule, given the geographic scope and the size and economic dimensions of the potentially affected economic sectors that operate within the ESUs, but have considered costs and benefits qualitatively in structuring the rule. Although only a share of the benefits from the recovery of threatened salmonids to a sustainable level would be attributable to this rule, it is clear that the potential costs associated with imposing take prohibitions to protect those salmonids are associated with substantial potential tangible and intangible returns.

The ESA limits NMFS to alternatives that lead to recovery, but in choosing among alternatives, we are obligated to consider taking the least cost path. NMFS has concluded that among the alternative regulatory approaches, the approach in this final rule (with changes made in response to public comment) will maximize net benefits (including potential economic, environmental, public health and safety, and other advantages, distributive impacts; and equity) and minimize costs, within the constraints of the ESA. Because this alternative exempts activities that fall within adequate state or local programs, NMFS' involvement will be more collaborative and less often require enforcement actions. This alternative 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 a state or region will aid citizens in reducing the risks of take in an efficient way. For these reasons, it is likely that this alternative will minimize the financial burden on the public of avoiding take over the long term.

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 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 final rule.

Nonetheless, NMFS took several steps to inform tribal governments and solicit their input during development of the proposed rule, and made numerous adjustments to the proposal as a result of those contacts. A number of Indian tribal governments, as well as both the Columbia River Intertribal and Northwest Indian Fisheries

Commissions, commented formally on the proposed rules. In addition, NMFS has continued both informal exchanges with tribal representatives and meetings with tribal officials. These exchanges have resulted in some refinements of the rule, as well as greater appreciation by NMFS of the challenges ahead as it implements the rule. NMFS has proposed an ongoing, regular meeting schedule to assure continued exchange of information with the numerous tribal governments on matters of interest, including matters associated with this 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 rule. In fact, this rule provides a route by which NMFS may defer to state and local government programs, where they provide necessary protections for threatened salmonids.

Although not required by E.O. 13132, in keeping with the intent of the Administration and Congress to provide continuing and meaningful dialogue on issues of mutual state and Federal interest, NMFS conferred with numerous state, local and other governmental entities while preparing the proposed rules, and has had continued informal and formal contacts with all affected states. We have held workshops explaining the rule to interested local or regional entities and exploring possible implementation strategies as well as options for future limits with those attending.

In addition to these efforts, NMFS staff have given numerous 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 NMFS staff have met with them as rapidly as our resources permit. Finally, NMFS' Sustainable Fisheries Division staff have continued close coordination with state fisheries agencies toward development of artificial propagation and harvest plans and programs that will be protective of listed salmonids and ultimately may be recognized within this rule. NMFS expects to continue to work with all of these entities in implementing this 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 PRA, unless that collection of information displays a currently valid OMB Control Number.

This rule contains collection-of-information requirements subject to the Paperwork Reduction Act (PRA) and which have been approved by OMB under control number 0648-0399. Public reporting burden per response for this collection of information is estimated to average 5 hours for a submission on diversion screenings 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. These estimates include the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding these burden estimates, or any other aspect of this data collection, including suggestions for reducing the burden, 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).

National Environmental Policy Act

NMFS prepared an Environmental Assessment (EA), as defined under the authority of the National Environmental Policy Act (NEPA) of 1969, in connection with this regulation. Based on review and evaluation of the information contained in the EA, we determined that the proposed action to promulgate protective regulations for 14 threatened salmonid ESUs, and to create limits 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 received a number of comments related to NEPA compliance, which are summarized together with responses elsewhere in this notice. NMFS believes the EA examined appropriate alternatives, and that preparation of an EIS is not required. Accordingly, we adhere to our prior Finding of No Significant Impact (FONSI) for this action. The EA and FONSI are available (see **ADDRESSES**).

List of Subjects in 50 CFR Part 223

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

Dated: June 19, 2000.

Andrew A. Rosenberg,

Deputy Assistant Administrator for Fisheries, National Marine Fisheries Service.

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

PART 223—THREATENED MARINE AND ANADROMOUS SPECIES

1. The authority citation for part 223 is revised 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. Section 223.203 is revised to read as follows:

§ 223.203 Anadromous fish.

(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)(19), 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 II 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)(19).

(2) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102 (a)(5) through (a)(10), and (a)(12) through (a)(19) 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 October 10, 2000. 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 March 7, 2001, whichever occurs earliest.

(3) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102 (a)(4) through (a)(10), and (a)(12) through (a)(19) do not apply to any employee or designee of NMFS, the United States Fish and Wildlife Service, any Federal land management agency, the Idaho Department of Fish and Game (IDFG), Washington Department of Fish

and Wildlife (WDFW), the Oregon Department of Fish and Wildlife (ODFW), 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.

(4) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102 (a)(5) through (a)(10), and (a)(12) through (a)(19) 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 the technical document entitled ''Viable Salmonid Populations (NMFS, 2000b).'' The VSP paper 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 NMFS Southwest or Northwest Regional Administrator, as appropriate. 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 it is not, 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 Northwest Region's website (www.nwr.noaa.gov).

(v) The prohibitions of paragraph (a) of this section relating to threatened species of steelhead listed in § 223.102 (a)(5) through (a)(9), (a)(14), and (a)(15) do not apply to fisheries managed solely by the states of Oregon, Washington, Idaho, and California until January 8, 2001.

(5) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102 (a)(5) through (a)(10), and (a)(12) through (a)(19) 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 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 the technical document entitled ''Viable Salmonid Populations'' (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) Taking into account health, abundances, and trends in the donor population, broodstock collection programs reflect appropriate priorities. The primary purpose of broodstock collection programs of listed species is to reestablish 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 such for secondary purposes, 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 programs whose purpose is to sustain fisheries, HGMPs must not compromise the ability of FMEPs or other management plans to conserve listed salmonids.

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

(H) Adequate monitoring and evaluation exist 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.

(K) The HGMP is consistent with plans and conditions set 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 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 congruity 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 a plan shall be a written approval by NMFS Southwest or Northwest Regional Administrator, as appropriate.

(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, the NMFS will identify to the jurisdiction 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 no less than 30 days, after which NMFS will make a final determination whether to withdraw the limit so that take prohibitions, likeall other activity not within a limit, would then apply to that program. A template for developing HGMPs is available from NMFS Northwest Region's website (www.nwr.noaa.gov).

(6) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102 (a)(7), (a)(8), (a)(10), and (a)(12) through (a)(19) do not apply to actions undertaken in compliance with a resource management plan developed jointly by the States of Washington, Oregon and/or Idaho and the Tribes (joint plan) within the continuing jurisdiction of *United States* v. *Washington* or *United States* v. *Oregon*, the on-going Federal court proceedings to enforce and implement reserved treaty fishing rights, provided that:

(i) The Secretary has determined pursuant to 50 CFR 223.209 and the government-to-government processes therein that implementing and enforcing the joint tribal/state plan will not appreciably reduce the likelihood of survival and recovery of affected threatened ESUs.

(ii) The joint plan will be implemented and enforced within the parameters set forth in *United States* v. *Washington* or *United States* v. *Oregon*.

(iii) In making that determination for a joint plan, the Secretary has taken comment on how any fishery management plan addresses the criteria in § 223.203(b)(4), or on how any hatchery and genetic management plan addresses the criteria in § 223.203(b)(5).

(iv) The Secretary shall publish notice in the **Federal Register** of any determination whether or not a joint plan, will appreciably reduce the likelihood of survival and recovery of affected threatened ESUs, together with a discussion of the biological analysis underlying that determination.

(v) On a regular basis, NMFS will evaluate the effectiveness of the joint plan in protecting and achieving a level of salmonid productivity commensurate with conservation of the listed salmonids. If the plan is not effective, then NMFS will identify to the jurisdiction ways in which the joint plan 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 joint plan. 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 withdraw the limit so that take prohibitions would then apply to that joint plan as to all other activity not within a limit.

(7) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102(a)(5) through (a)(10), and (a)(12) through (a)(19) do not apply to scientific research activities provided that:

(i) Scientific research activities involving purposeful take is conducted by employees or contractors of the ODFW, WDFW (Agencies), IDFG, or CDFG (Agencies), or as a part of a monitoring and research program overseen by or coordinated with that Agency.

(ii) The Agencies provide 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) The Agencies annually provide 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 agency personnel, or are in accord with a permit issued by the Agency.

(v) The Agencies provide 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 Northwest or Southwest Regional Administrator.

(8) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102(a)(5) through (a)(10), and (a)(12), through (a)(19) do not apply to habitat restoration activities, as defined in paragraph (b)(8)(iv) of this section, provided that the activity is part of a watershed conservation plan, and:

(i) The watershed conservation plan has been certified by the State of Washington, Oregon, Idaho, or California (State) 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 and populations.

(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 watershed conservation plan guidelines under paragraph (b)(8)(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 no less than 30 days.

(9) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102(a)(5) through (a)(10), and (a)(12) through (a)(19) 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 Juvenile Fish Screen Criteria, National Marine Fisheries Service, Northwest Region, Revised February 16, 1995, with Addendum of May 9, 1996, or in California 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 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 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 encompass any impacts of 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.

(10) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102 (a)(5) through (a)(10), and (a)(12) through (a)(19) do not apply to routine road maintenance activities provided that:

(i) The activity results from routine road maintenance activity conducted by ODOT employees or agents that complies with ODOT's Transportation Maintenance Management System Water Quality and Habitat Guide (July, 1999); or by employees or agents of a state, county, city or port that complies with a program substantially similar to that contained in the ODOT Guide that is determined to meet or exceed the protections provided by the ODOT Guide; or by employees or agents of a state, county, city or port that complies with a routine road maintenance program that meets proper functioning habitat conditions as described further in subparagraph (ii) following. 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 Northwest or Southwest Regional Administrator, whichever is appropriate. Any jurisdiction desiring its routine road maintenance activities to be 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 any state, city, county, or port to be consistent with the conservation of listed salmonids' habitat when it contributes, as does the ODOT Guide, 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 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 ESU. 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 as to all other activity not within a limit. 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 within this limit.

(iv) Prior to approving any state, city, county, or port program as within this limit, or approving any substantive change in a program 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.

(11) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102 (a)(5) through (a)(10), and (a)(12) through (a)(19) do not apply to activities within the City of Portland, Oregon Parks and Recreation Department's (PP&R) Pest Management Program (March 1997), including its Waterways Pest Management Policy updated December 1, 1999, provided that:

(i) Use of only the following chemicals is included within this limit on the take prohibitions: Round Up, Rodeo, Garlon 3A, Surfactant LI–700, Napropamide, Cutrine Plus, and Aquashade.

(ii) Any chemical use is initiated in accord with the priorities and decision processes of the Department's Pest Management Policy, including the Waterways Pest Management Policy, updated December 1, 1999.

(iii) Any chemical use within a 25 ft. (7.5 m) buffer complies with the buffer application constraints contained in PP&R's Waterways Pest Management Policy (update December 1, 1999).

(iv) Prior to implementing any changes to this limit, the PP&R provides NMFS with a copy of the proposed change for review and approval as within this limit.

(v) Prior to approving any substantive change in a program 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 no less than 30 days.

(vi) NMFS' approval of amendments shall be a written approval by NMFS Northwest Regional Administrator.

(vii) NMFS finds the PP&R Pest Management Program activities to be consistent with the conservation of listed salmonids' habitat by contributing to the attainment and maintenance of properly functioning condition (PFC). NMFS defines PFC as the sustained presence of a watershed's 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 the effectiveness of an approved program 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 ESU. 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 as to all other activity not within a limit. 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.

(12) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102 (a)(5) through (a)(10), and (a)(12) through (a)(19) 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 listed species; or within the jurisdiction of the Metro regional government in Oregon and pursuant to ordinances that Metro has found comply with its Urban Growth Management Functional Plan (Functional Plan) following a determination by NMFS that the Functional Plan is adequately protective. NMFS approval or determinations about any MRCI development ordinances or plans, including the Functional Plan, shall be a written approval by NMFS Northwest or Southwest Regional Administrator, whichever is appropriate. NMFS will apply the following 12 evaluation considerations when reviewing MRCI development ordinances or plans to assess whether they adequately conserve listed salmonids by maintaining and restoring properly functioning habitat conditions:

(A) 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) 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) 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 PFC due to MRCI development impacts to riparian management areas.

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

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

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

(G) MRCI development ordinance or plan adequately preserves the hydrologic capacity of permanent and intermittent streams to pass peak flows.

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

(J) 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) 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) 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 listed salmonids' habitat when it contributes to the attainment and maintenance of PFC. NMFS defines PFC 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. 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 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 ESU. 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 as to all other activity not within a limit. 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.

(iv) Prior to approving any city, county, or regional government ordinances or plans as within this limit, or approving any substantive change in an ordinance or plan 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.

(13) The prohibitions of paragraph (a) of this section relating to threatened

species of salmonids listed in § 223.102 (a)(12), (a)(13), (a)(16), (a)(17), and (a)(19) do not apply to non-Federal forest management activities conducted in the State of Washington provided that:

(i) The action is in compliance with forest practice regulations adopted and implemented by the Washington Forest Practices Board that NMFS has found are at least as protective of habitat functions as are the regulatory elements of the Forests and Fish Report dated April 29, 1999, and submitted to the Forest Practices Board by a consortium of landowners, tribes, and state and Federal agencies.

(ii) All non-regulatory elements of the Forests and Fish Report are being implemented.

(iii) Actions involving use of herbicides, pesticides, or fungicides are not included within this limit.

(iv) Actions taken under alternative plans are included in this limit provided that the Washington Department of Natural Resources (WDNR) finds that the alternate plans protect physical and biological processes at least as well as the state forest practices rules and provided that NMFS, or any resource agency or tribe NMFS designates, has the opportunity to review the plan at every stage of the development and implementation. A plan may be excluded from this limit if, after such review, WDNR determines that the plan is not likely to adequately protect listed salmon.

(v) Prior to determining that regulations adopted by the Forest Practice Board are at least as protective as the elements of the Forests and Fish Report, NMFS will publish notification in the **Federal Register** announcing the availability of the Report and regulations for public review and comment.

(vi) NMFS finds the activities to be consistent with the conservation of listed salmonids' habitat by contributing to the attainment and maintenance of PFC. NMFS defines PFC as the sustained presence of a watershed's 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. Programs must meet this biological standard in order for NMFS to find they qualify for a habitat-related limit. NMFS uses the best available science to make these determinations. NMFS may review and revise previous findings as new scientific information becomes available. NMFS will evaluate the effectiveness of the program in maintaining and achieving habitat function that provides for conservation of the listed salmonids. If the program is not adequate, 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 ESU. If Washington 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 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) take prohibitions.

(vii) NMFS approval of regulations shall be a written approval by NMFS Northwest Regional Administrator.

(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)(5) through (a)(10), and (a)(12) through (a)(19), 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 (a)(1)(G) of the ESA with respect to the alleged violation.

(d) *Severability*. The provisions of this section and the various applications thereof are distinct and severable from one another. If any provision or the application thereof to any person or circumstances is stayed or determined to be invalid, such stay or invalidity shall not affect other provisions, or the application of such provisions to other persons or circumstances, which can be given effect without the stayed or invalid provision or application.

[FR Doc. 00–16933 Filed 7–7–00; 8:45 am]

BILLING CODE 3510–22–F

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 223

[Docket No. 991207318–0159–02; I.D. No 092799G]

RIN 0648–AG15

Limitation on Section 9 Protections Applicable to Salmon and Steelhead Listed as Threatened under the Endangered Species Act (ESA), for Actions Under Tribal Resource Management Plans

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

ACTION: Final rule.

SUMMARY: The National Marine Fisheries Service (NMFS) is issuing a final rule to modify the ESA section 9 take prohibitions applied to threatened salmon and steelhead. The modification will create a section 4(d) limitation on those prohibitions for tribal resource management plans (Tribal Plans), where the Secretary of Commerce (Secretary) has determined that implementing that Tribal Plan will not appreciably reduce the likelihood of survival and recovery for the listed species. This rule intends to harmonize statutory conservation requirements with tribal rights and the Federal trust responsibility to tribes.

DATES: Effective September 8, 2000.

ADDRESSES: Branch Chief, NMFS, Northwest Region, Protected Resources Division, 525 NE. Oregon St., Suite 500, Portland, OR 97232–2737; Assistant Regional Administrator, Protected Resources Division, NMFS, Southwest Region, 501 West Ocean Blvd., Suite 4200, Long Beach, CA 90802-4213; Salmon Coordinator, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910.

FOR FURTHER INFORMATION CONTACT: Garth Griffin at 503-231-2005; Craig Wingert at 562–980–4021.

Electronic Access

Reference materials regarding this final rule can also be obtained from the internet at www.nwr.noaa.gov.

SUPPLEMENTARY INFORMATION:

Definitions

Indian Tribe—Any Indian tribe, band, nation, pueblo, community or other organized group within the United States which the Secretary of the Interior has identified on the most current list of tribes maintained by the

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

49 CFR Part 219

[FRA Docket No. 2001–11213, Notice 2]

RIN 2130–AA81

Alcohol and Drug Testing: Determination of Minimum Random Testing Rates for 2002; Corrections

AGENCY: Federal Railroad Administration (FRA), DOT.

ACTION: Notice of determination; corrections.

SUMMARY: FRA published a document in the **Federal Register** of January 2, 2002, setting the minimum random drug and alcohol testing rates for calendar year 2002. The testing rates are based on the rail industry's overall positive rate, which is determined using annual railroad drug and alcohol program data taken from FRA's Management Information System. Although the original notice correctly set the minimum random testing rates, the overall positive rates for drug testing and alcohol testing were inadvertently transposed. This document corrects the error.

DATES: This correction is effective January 2, 2002.

FOR FURTHER INFORMATION CONTACT: Lamar Allen, Alcohol and Drug Program Manager, Office of Safety Enforcement, Mail Stop 25, FRA, 1120 Vermont Avenue, NW, Washington, DC 20005 (Telephone: (202) 493–6313).

Corrections

In the **Federal Register** issue of January 2, 2002, in FR Doc. 01–32047, two sentences need correcting. On page 21, in the third column, correct the first sentence of the **SUMMARY** caption to read:

Using data from Management Information System annual reports, FRA has determined that the calendar year 2000 rail industry random testing positive rate was .79 percent for drugs and .20 percent for alcohol.

On page 22, correct the last sentence in the first column that runs over into the second column, in the **SUPPLEMENTARY INFORMATION** caption to read:

In this notice, FRA announces that the minimum random drug testing rate will remain at 25 percent of covered railroad employees for the period January 1, 2002 through December 31, 2002, since the industry random drug testing positive rate for 2001 was .79 percent.

Dated: January 3, 2002.

George A. Gavalla,

Associate Administrator for Safety.

[FR Doc. 02–559 Filed 1–8–02; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 223

[Docket No. 010521133-1307-02; I.D. No. 050101B]

RIN 0648-AP17

Endangered and Threatened Species; Final Rule Governing Take of Four Threatened Evolutionarily Significant Units (ESUs) of West Coast Salmonids

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

ACTION: Final rule.

SUMMARY: Under the Endangered Species Act (ESA), the Secretary of Commerce (Secretary) shall issue such regulations as he deems necessary and advisable for the conservation of species listed as threatened. NMFS now issues a final ESA 4(d) rule adopting regulations necessary and advisable to conserve four salmonid ESUs listed as threatened species. This final rule applies the take prohibitions enumerated in section 9(a)(1) of the ESA in most circumstances to three salmonid ESUs in California: California Central Valley Chinook, California Coastal Chinook, and Northern California steelhead. For these three ESUs, NMFS does not find it necessary and advisable to apply the take prohibitions described in the ESA to certain specified categories of activities that contribute to conserving these ESUs or are governed by a program that adequately limits impacts on these ESUs. Therefore, this final rule also includes 10 such limits on the application of the section 9(a)(1) take prohibitions for these three ESUs. This final rule also modifies an existing ESA 4(d) rule, which applies the take prohibitions to the threatened Central California Coast coho ESU, by incorporating the same 10 limits on the application of the take prohibitions as described for the chinook and steelhead ESUs.

DATES: Effective on March 11, 2002, except for §223.203 (b)(16)(v) and (b)(17)(vii) which are effective on July 8, 2002. Applications for a permit for scientific purposes or a permit to enhance the conservation or survival of Central Valley spring-run chinook, California Coastal chinook and Northern California steelhead must be received by the Assistant Administrator for Fisheries no later than April 9, 2002.

ADDRESSES: Assistant Regional Administrator, Protected Resources Division, NMFS, Southwest Region, 501 W. Ocean Blvd., Suite 4200, Long Beach, CA 90802–4213.

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.

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 the final listing notice for the CCC coho salmon ESU, NMFS published a final ESA 4(d) rule which put in place all of the prohibitions of section 9(a)(1) of the ESA for this ESU.

Section 4(d) of the ESA provides that whenever a species is listed as threatened, the 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 final 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, hydropower development, hatchery practices, 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 the ESUs covered by this rule, 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 in fisheries, and hatchery effects as significant factors for the decline of these ESUs. While the most influential factors for decline differ from species to species and among ESUs depending on their geographic location, the loss and degradation of habitat conditions and impacts from harvest among other impacts, are factors that have affected all of the species and ESUs. Accordingly, NMFS has determined that it is necessary and advisable to apply the section 9(a)(1) take prohibitions to the threatened ESUs covered in this final rule in order to reduce take and provide for their conservation.

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. 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.

For this reason, NMFS has incorporated a mechanism (termed take limitations) in this final ESA 4(d) rule where state, local and other non-Federal entities can be assured that certain activities (see Substantive Content of Final Regulation for the 10 categories of activities specified in this rule) they conduct or permit are consistent with ESA requirements when they avoid or minimize the risk of take of listed ESUs. When NMFS determines that such programs provides sufficient conservation for the threatened salmonid ESUs covered by this final rule, NMFS will find that it is not necessary and advisable to apply take prohibitions to activities governed by those programs. In these 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 ESUs. NMFS believes that not applying take prohibitions to programs that meet such conservation standards may result in even greater conservation benefits for these threatened ESUs 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 using this take limitation approach is that NMFS can focus its enforcement efforts on activities and programs that have not yet adequately addressed the conservation needs of the ESUs covered by this rule.

Substantive Content of Final Regulation

On August 17, 2001, NMFS proposed to apply the ESA section 9(a)(1) take prohibitions to the CCV spring-run chinook salmon, CC chinook salmon, and NC steelhead ESUs. NMFS has concluded that the section 9 take prohibitions that automatically apply to endangered species are necessary and advisable for the conservation of these three threatened ESUs. Accordingly, this final rule applies the prohibitions of ESA section 9(a)(1) to each of these three ESUs. NMFS applied the section 9(a)(1) take prohibitions to the CCC coho salmon ESU in a previous rulemaking (see 61 FR 56138), and the August 17, 2001, proposed rule (66 FR 43150) did not propose to change those protections.

In its August 17, 2001, proposal (66 FR 43150), NMFS proposed that the take of listed fish in these four ESUs (i.e., CCV spring-run chinook, CC chinook, NC steelhead, and CCC coho salmon) would not be prohibited when it resulted from 10 specific categories of activities that meet specified levels of protection and conservation. As described in the proposed rule, these activities must be conducted in a way that contributes to the conservation of these ESUs, or they must be governed by a program that limits impacts on the ESUs to an extent that makes added protection through Federal regulation not necessary and advisable for their conservation. In this final rule NMFS has concluded that it will not apply the ESA section 9(a) prohibitions to these four ESUs for the 10 categories of activities described in this final rule when they meet the necessary level of protection and conservation.

As an alternative to utilizing the 10 limitations on the take prohibitions described in this final rule, affected entities may choose to seek an ESA section 10 permit from NMFS, or may be required to satisfy ESA section 7 consultation if Federal funding, management, or approval is involved. This final rule does not impose restrictions beyond those applied in other sections of the ESA, but rather provides another option beyond the provisions of sections 7 and 10 for the authorization of incidental take and in some instances directed take.

As discussed above, NMFS has identified 10 categories of activities or programs for which it is not necessary and advisable to impose take prohibitions when they contribute to the conservation of these four ESUs or are governed by a program that adequately limits impacts on these ESUs. Under the criteria specified in the final rule, these activities include the following: (1) Activities conducted in accordance with an existing 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 limitations on the take prohibitions are described in more

detail in the proposed rule and the specific criteria and standards that must be met to qualify for the limitations are described in detail in the regulations contained in this final rule. In general, these take limitations and associated approval criteria are for future programs where NMFS will limit the application of the ESA section 9(a)(1) take prohibitions rather than for existing programs. NMFS anticipates that new take limits for additional activities may be added to these regulations in the future.

NMFS emphasizes that these 10 limitations on the section 9 take prohibitions are not prescriptive regulations. The fact that an activity is not conducted within the specified criteria for one of the 10 take limits does not necessarily mean that the activity violates the ESA or this regulation. Many activities do not affect the threatened ESUs covered by this final rule, and, therefore, do not need to be conducted within any of the 10 categories of take limits to avoid ESA 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. Jurisdictions, entities, and individuals are encouraged to evaluate their practices and activities to determine the likelihood of whether take is occurring. Entities can comply with the ESA through this and other 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) rule procedures.

This final rule does not require jurisdictions, entities, and individuals to seek coverage from NMFS under any of the 10 take limits. In order to reduce its liability, a jurisdiction, entity, or individual may informally comply with a limit by choosing to modify its programs to be consistent with the evaluation considerations described in the individual limits. Alternatively, a jurisdiction, entity, or individual may seek, at its discretion, to qualify its plans, activities, or ordinances for inclusion under one of the 10 take limits by obtaining an authorization from the NMFS' Southwest Region Administrator as detailed in the regulations contained in this final rule (see **ADDRESSES**).

NMFS will continue to work collaboratively with all affected governmental entities to recognize existing management programs that conserve and meet the biological requirements of these and other threatened salmonid ESUs, and to strengthen other programs so that they contribute to the conservation of listed salmonids. This final rule may be amended to add new limits on the take prohibitions, or to amend or delete adopted take limits as circumstances warrant.

The following section entitled ''Notice of Availability'' lists four documents referred to in the proposed rule and this final 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 to NMFS for coverage under one of the take limits in the final rule. The documents represent 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 hatchery management take limits, provides a framework for identifying populations and their status as a component of developing adequate harvest or hatchery management plans. The final rule indicates that Fishery Management and Evaluation Plans (FMEPs) and Hatchery and Genetic Management Plans (HGMPs) should utilize the concepts of 'viable' and 'critical' salmonid population thresholds, consistent with the concepts contained in NMFS's VSP report. 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 designee, to address site specific considerations and conditions. Finally, research involving electrofishing comes within the scientific research limit 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 seek coverage under the road maintenance limit in this final rule if they use the ODOT program or submit a program that utilizes other practices found by NMFS to meet or exceed the ODOT standards for the protection of threatened salmonids.

Where this rule cites a guidance 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 requesting that NMFS concur that a program meets the criteria of 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 use the mechanisms of this final rule to take comment on revisions of any of the referenced state programs. If any of these documents are revised in the future 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 final 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).

The limits on the take prohibitions in this final 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 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.

Applicability of Final Rule to Specific ESUs

In the regulatory language in this final rule, the limits on the 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 in 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 final 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

Summary of Comments in Response to the Proposed Rule

The public comment period for the proposed rule was open from August 17, 2001, through October 1, 2001. During the comment period, NMFS held three public hearings (Chico, CA on 9/13/01; Eureka, CA on 9/18/01; and Ukiah, CA on 9/19/01) to solicit public comments. A limited number of individuals provided oral testimony at the three public hearings. During the comment period, NMFS received 8 written comments on the proposed rule from various agencies, non-governmental organizations, and individuals. A summary of the comments and NMFS' responses to those comments are presented here by specific issue.

Comments and Responses

Tribal Coordination

Comment 1: The Bureau of Indian Affairs (BIA) reminded NMFS of its obligation to consult with potentially affected Indian tribes that might be affected by this ESA 4(d) rule pursuant to Executive Order 13175 (Consultation and coordination with Indian tribal governments). In addition, BIA provided NMFS with a list of recognized Indian tribes that occur within the range of the threatened ESUs covered by this final rule.

Response: In response to the BIA's guidance, NMFS notified all of the potentially affected Indian tribes of the proposed ESA 4(d) rule and the U.S. District Court Order to finalize the rule by December 31, 2001. NMFS offered to meet with any tribe to explain the rule, discuss its potential impact on the tribe, and to explain its relationship to the Tribal ESA 4(d) rule which NMFS published on July 10, 2000 (65 FR 42481). NMFS has consulted in the past with many of these tribes on previous ESA 4(d) rules, as well as the Tribal ESA 4(d) rule, and will consult with any and all tribes as they request us to do so.

Comment 2: BIA requested clarification as to whether or not the Tribal ESA 4(d) rule (65 FR 42481, July 10, 2000) applied to the four ESUs covered in this ESA 4(d) rule.

Response: The Tribal ESA 4(d) rule (65 FR 42481) NMFS published on July 10, 2000, is actually a broadly defined limitation on the ESA section 9(a)(1) take prohibitions for recognized Indian tribes that applies to all threatened salmon and steelhead ESUs including the four covered by this final ESA 4(d) rule and any threatened salmonid ESUs that may be listed in the future. Under this Tribal ESA 4(d) rule, a section 9(a)(1) take limitation was created for resource management plans (e.g., harvest, habitat restoration, research and monitoring, etc.) developed by Tribes where NMFS has determined that implementation of the plan will not appreciably reduce the likelihood of survival and recovery for the listed ESU(s) that are affected by the plan. This Tribal ESA 4(d) rule was intended to harmonize NMFS' statutory conservation efforts under the ESA with tribal rights and the Federal Trust responsibility to tribes.

Comment 3: BIA advised NMFS that Tribal governments may incur direct compliance costs if they choose to pursue coverage under the Tribal ESA 4(d) rule or this final rule.

Response: NMFS does not anticipate that Indian Tribes will pursue coverage under the take limits in this final ESA 4(d) rule. Although Tribes are certainly eligible to pursue coverage under the limitations in this final rule, the purpose of the Tribal ESA 4(d) rule was to provide recognized tribes with a broad take limitation that could cover any type of resource management plan including those that might be developed pursuant to this final ESA 4(d) rule (e.g., routine road maintenance, fish harvest, habitat restoration, etc.). For this reason, NMFS would strongly recommend to Tribes that they utilize the Tribal ESA 4(d) rule instead of this final rule to obtain coverage for their activities if they choose to do so. Not only is the Tribal ESA 4(d) rule sufficiently flexible that it can accommodate the full range of tribal resource management plans, but it provides for a broad and open government-to-government consultation process in developing and evaluating such plans. NMFS recognizes that Tribes may incur direct compliance costs in the development of tribal resource management plans. NMFS is prepared to work closely with interested tribes to develop resource management plans for consideration under the Tribal ESA 4(d) rule that will minimize costs and will also provide technical expertise and other support wherever it can pursuant to the 1997 Secretarial Order (June 5, 1997).

Take Guidance

Comment 4: One commenter stated the proposed ESA 4(d) rule does not adequately state why a take prohibition is necessary for these threatened ESUs, nor does it establish a basis for the conclusion that specified activities are likely to result in a take.

Response: NMFS believes that the listing determinations for each of the ESUs covered by this final rule, as well as all other west coast salmonid listing determinations, have documented the historic and current factors responsible for their decline to the point where ESA protection was necessary. Factors responsible for the decline of these ESUs include loss and degradation of freshwater habitat from a wide range of habitat modifying activities, harvest of fish in recreational and in some cases commercial fisheries, predation, and natural fluctuations in the environment (e.g., ocean conditions, rainfall, drought, etc.). NMFS believes that historic and ongoing take of fish in these ESUs as a result of these factors has contributed significantly to their decline. For this reason, NMFS has concluded that it is necessary and advisable to prohibit and closely regulate the allowable take of these species. Failure to prohibit and regulate take by this final rule would result in continued decline of listed salmonids.

It is NMFS' policy to increase public awareness of, and to identify which activities we believe are likely or not likely to, injure or kill a listed species. The take guidance in the proposed rule and in this final rule are intended to do that. It is only possible based on direct experience with managing populations in their natural environment and from scientific literature to describe the types of activities that may have adverse impacts (i.e., result in take) on fish and their habitat and describe their consequences (e.g., blocking fish from reaching spawning grounds, dewatering incubating redds, etc.). NMFS understands that there is considerable

interest by many entities in knowing as much as possible about what constitutes take of a listed species and the take guidance in this final rule attempts to provide that information. However, determining whether an individual local program or activity will or is likely to injure or kill a listed fish requires an accurate and credible assessment that takes into account local factors and conditions.

Comment 5: One commenter stated that NMFS' take guidance in the proposed rule identifies activities that ''are very likely'' or ''may'' injure or kill listed species, instead of stating only activities resulting in ''actual death or injury.''

Response: NMFS provided broad take ''guidance'' for the purpose of helping individuals understand what actions could possibly lead to take. By offering guidance on what type of activities may cause take, individuals can better avoid any illegal behavior that could result in an actual death or injury.

Comment 6: One commenter stated that the proposed ESA 4(d) rule is more restrictive than the ESA section 9 take prohibitions.

Response: NMFS disagrees. The proposed and final ESA 4(d) rule do impose the section 9(a)(1) take prohibitions in the ESA, but simultaneously it puts into place limitations on those take prohibitions for certain categories of activities under specified conditions. In effect, whenever NMFS finds that an activity falls within a take limit in the final rule, the section 9 take prohibitions do not apply to that activity. In this way, this rule is more flexible and potentially less restrictive than an alternative ESA 4(d) rule that would simply put into place the section 9 take prohibitions without limitation. In this latter case where only the take prohibitions are in effect, the only way to comply with the ESA is to either avoid taking entirely or to have take authorized through ESA sections 7 or 10.

Comment 7: One commenter requested clarification that the rule does not prohibit take associated with an activity when it is conducted pursuant to an approved Federal permit.

Response: If a Federal permit was subject to a previous section 7 consultation for which an incidental take permit was issued, then take associated with the project will have been previously authorized. However, if a Federal permit was issued without section 7 consultation or without an incidental take statement for the ESUs in this final rule, then the permitted activity would not have take authorization for these ESUs and might violate the ESA section 9 take prohibitions. Under this circumstance, ESA section 7 consultation should be initiated or reinitiated with NMFS so that incidental take can be properly authorized.

Comment 8: Several commenters suggested or requested that NMFS create take limitations for other programs such as the Natural Resources Conservation Service's Field Office Technical Guidance and some or all elements of the CALFED program in California's Central Valley.

Response: NMFS believes that the ESA 4(d) rule process provides another opportunity in addition to ESA sections 7 and 10, for state and other jurisdictions to assume leadership for threatened salmonid conservation at the state and local level in addition to the conventional tools that are available through sections 7 and 10 of the ESA. NMFS is prepared to collaborate with Federal, state, tribal, and local entities to develop and evaluate programs that will take advantage of the ESA 4(d) option for achieving salmonid conservation and compliance with section 9 take prohibitions of the ESA. NMFS is especially interested in state-level conservation programs because such programs can more efficiently and comprehensively provide for conservation of threatened salmonids. However, incorporation of any additional take limitations into this or future ESA 4(d) rules will need to go through the rulemaking process.

Federal programs, including many programs and activities being carried out as part of the CALFED implementation program, are subject to ESA section 7 consultation if they may affect listed species. This ESA 4(d) rule does not and cannot relieve Federal agencies of their ESA section 7 consultation obligations under the ESA and, therefore, authorization of incidental take for Federally permitted, conducted, or funded programs must occur through the section 7 process.

Legal Issues/Section 7/National Environmental Policy Act (NEPA)/ Regulatory Flexibility Analysis/ Regulatory Impact Review

Comment 9: The Department of the Interior commented that the ESA 4(d) rule may affect terrestrial and other species under the jurisdiction of the U.S. Fish and Wildlife Service (FWS) and that NMFS should, therefore, consult with FWS pursuant to section 7 of the ESA.

Response: NMFS recognizes that promulgation of this ESA 4(d) rule is a Federal action requiring consultation under section 7 of the ESA. NMFS must ensure through the ESA section 7 process that the 4(d) rule does not jeopardize the continued existence of listed species or result in the destruction or adverse modification of their critical habitat. NMFS has completed the required ESA section 7 consultation with itself concerning the effects of this 4(d) rule on listed species under NMFS' jurisdiction and concluded that the rule is not likely to adversely affect these listed species or adversely modify their critical habitat.

NMFS also consulted with FWS concerning the effects of promulgating this ESA 4(d) rule on listed species under FWS' jurisdiction (FWS' listed species) and their critical habitat. FWS concurred with NMFS that the imposition of ESA section 9(a)(1) take prohibitions for the ESUs addressed by this rule was not likely to adversely affect FWS' listed species or their critical habitat. However, both agencies recognized that plans, programs, or activities developed for future approval by NMFS pursuant to the take limits in this final rule have the potential to affect FWS' listed species or their critical habitat depending on their geographic location and the details of the plan, program or activity. Through the consultation process NMFS has committed to work closely with FWS during development of such plans, programs or activities to determine if and how they may affect FWS' listed species or their critical habitat. As part of this early coordination process, NMFS has committed to work with FWS and any applicant seeking a take limit approval under this final rule to ensure that any plan, program, or activity that is developed either avoids impacts to, or does not adversely affect any of FWS' listed species or their critical habitat. Finally, if a plan, program or activity cannot be developed that will not adversely affect or not avoid impacts to FWS' listed species or their critical habitat NMFS will continue to work with FWS to ensure appropriate compliance with the ESA for FWS' listed species or critical habitat. On the basis of these determinations and commitments, FWS concluded that promulgation of this rule is not likely to adversely affect species under FWS' jurisdiction.

Comment 10: Some commenters asked NMFS to clarify the extent which NEPA applies to the ESA 4(d) rule.

Response: NEPA applies to this and other ESA 4(d) rules, and as this final rule states, NMFS completed Environmental Assessments (EAs) for this regulatory action. Those documents were made available during the comment period and continue to be

available via NMFS' Southwest Region website (http://swr.nmfs.noaa.gov).

Comment 11: One commenter suggested that the EAs prepared by NMFS were inadequate and failed to examine a full range of alternatives, particularly with regard to some of the take limitations contained in the proposed rule.

Response: NMFS believes that the range of alternatives examined in the EAs is appropriate and that no additional alternatives need to be considered.

NMFS believes that the EAs that were prepared for this final rule are adequate to support the regulatory action of imposing the section 9(a)(1) take prohibitions on the CCV spring-run chinook, CCC chinook, and NC steelhead ESUs. However, NMFS has determined that additional NEPA analysis is necessary to support any future agency approvals under the 10 take limitations contained in the rule. NMFS intends to conduct additional, programmatic NEPA analysis that specifically addresses the environmental impacts of approving activities under each of the take limitations (e.g., water diversion screening, etc.) contained in this final rule. This is consistent with the approach NMFS is now taking for the ESA 4(d) rule it published in July 2000 which covered 14 threatened salmon and steelhead ESUs. Until programmatic NEPA analyses are completed for each of the take limitations in this final rule as described above, NMFS will prepare separate NEPA analysis for any plan or activity for which the agency is requested to make an approval under any of the rule's take limitations. For example, until a programmatic NEPA document is completed which specifically addresses recreational angling under the Fishery Management and Evaluation Plan (FMEP) take limitation in this final rule, NMFS will not approve any FMEPs until approval of that plan has been addressed in a plan specific NEPA document.

Comment 12: Two commenters argued that according to the holding in *Alsea Valley Alliance* v. *Evans*, 99-6265-HO (D. Oreg., September 12, 2001), the four threatened salmonid ESUs covered by this ESA 4(d) rule have been improperly listed under the ESA, and hence, NMFS has no statutory authority to issue an ESA 4(d) rule pertaining to them.

Response: NMFS disagrees. Unless a listing decision is invalidated by a court, or superceded by another formal rule making, an ESU remains listed and, thus, properly subject to ESA 4(d) rule protection. None of the four ESUs covered by this final rule were de-listed as a result of the *Alsea* case and, thus, NMFS has an obligation to promulgate ESA 4(d) rules that it believes are necessary and advisable for their conservation.

Comment 13: The National Association of Home Builders (NAHB) commented that it opposes the proposed ESA 4(d) rule on many of the same grounds that are currently being litigated by NAHB against NMFS in *Kittitas County* v. *Evans* with regard to the July 10, 2000 ESA 4(d) rule, particularly the MRCI limit.

Response: NMFS will not address arguments and objections that are raised generally by reference to a pending case, such as Kittitas County. Rather, NMFS will respond to specific comments made in this rulemaking.

Comment 14: NAHB commented that with this ESA 4(d) rule NMFS is interpreting the ESA in a way that alters the federal-state framework by permitting Federal encroachment upon a traditional state power such as the states' traditional and primary power over land and water use. NAHB also asserted that NMFS had failed to demonstrate what it is necessary and advisable to place the additional burden on local governments of creating and submitting to NMFS for approval, ordinances that actively conserve these threatened salmonid ESUs

Response: NMFS disagrees that the ESA 4(d) rule alters the federal-state framework by encroaching on land and water use regulation by state/local governments. NMFS also disagrees that the rule places any additional burdens on state and local governments. To the extent that state or local regulation or permitting of land use or water use may result in the take of these threatened salmonids, the Municipal Residential Commercial and Industrial (MRCI) and other take limitations contained in this rule provide a mechanism for the state/local entity to relieve itself of the take prohibitions. Also, development and submittal of a plan to NMFS for consideration under any of the take limitations in the ESA 4(d) rule is completely voluntary. Should individuals, local governments or the state instead wish to obtain a take exception for threatened species subject to the section 9 prohibitions, they may submit a Habitat Conservation Plan to NMFS under section 10 of the ESA.

Comment 15: NAHB commented that NMFS did not demonstrate why it is necessary and advisable to require that each ordinance be approved by NMFS and placed in the **Federal Register** and be subjected to 30 days of public notice and comment in order to obtain coverage for the MRCI take limitation.

Response: In order for NMFS to determine whether a particular ordinance or plan may be sufficiently protective of threatened species, it must be submitted to NMFS for review and consideration. Prior to making any such determination, NMFS believes that it is important to obtain public and/or agency comments on both the ordinance or plan and our pending determination. For this reason, this final rule calls for publishing a notification in the **Federal Register** announcing the availability of the ordinance or plan for review and comment.

Comment 16: NAHB commented that NMFS cannot hold local governments liable for take under the ESA.

Response: The take limitations in the rule are permissive and not mandatory. Any vicarious liability determination would arise from application of the take prohibitions to the local government, depend upon the specifics of the regulations and the regulated activity, and so would depend upon the circumstances of each case.

Comment 17: NAHB asserted that the proposed ESA 4(d) rule raises 10th Amendment concerns by creating a state duty to administer the Federal law of ''take'' against third parties.

Response: The take limitations in this final rule are permissive, not mandatory (i.e., they impose no requirements on state and local governments). The only prohibition in this final rule is against take of the threatened species covered by this final rule. This final rule does not impose any affirmative duty upon the state to administer the ESA.

Viable Salmon Population (VSP) Framework

Comment 18: One commenter said that references to ''historic abundance levels'' and ''habitat capacity of the population'' in the discussion in the proposed rule about how NMFS would assess population status as part of its VSP framework are ambiguous and unclear.

Response: Historic conditions are meant to serve as one possible reference point in evaluating population status because under historic conditions populations were assumed to have been viable. The time frame, therefore, refers to a period in time where the population or ESU was considered self sustaining and may represent different time frames for different species or populations. Although historical data, if it is available, may be a useful tool in this assessment, it does not mean that NMFS will require or assume that every population must be at a historic

abundance level in order to be viable. Where historic data are not available or are of uncertain accuracy, the assessment of viable population levels could be based upon an evaluation of the habitat capacity or carrying capacity of the habitat available to a population.

Take Limitations - General Comments

Comment 19: Several commenters stated that each of the take limitations should have provisions for monitoring and oversight where NMFS is approving plans or ordinances (e.g., FMEPs, routine road maintenance, water diversion screening, etc.).

Response: NMFS agrees that programs that are approved under the take limits in this rule are incomplete if there is no mechanism to track their effectiveness and implementation. NMFS believes that this final rule provides for a sufficient level of monitoring and oversight of activities that may qualify for coverage under the 10 take limitations. Several of the take limits (e.g., recreational fishing, hatchery and genetic management, routine road maintenance, MRCI) in this final rule specifically require that monitoring be incorporated into programs or plans in order to qualify for coverage under the limitation. In addition, the final rule indicates that NMFS will evaluate on a regular basis the effectiveness of all programs that are approved under the take limits to insure that they are achieving the level of protection that is consistent with the conservation of the threatened ESUs covered in the rule. If a program or plan does not meet the required objectives, NMFS will work with the relevant entity to make adjustments to the program accordingly. If the relevant entity chooses not to adjust the program to meet the necessary objectives for coverage under the take limit, then NMFS will publish notification in the **Federal Register** that the program is no longer exempt from the ESA section 9(a)(1) take prohibitions because it does not sufficiently conserve the threatened ESUs.

Comment 20: One commenter was concerned that activities falling under any one of the 10 take limitation categories in the proposed rule were automatically exempt from the take prohibitions and would not be monitored by NMFS.

Response: Virtually all of the take limitations in this final rule require that entities seeking a limitation submit a plan to NMFS which addresses a wide range of detailed criteria specified in the rule. These include habitat modifying activities such as routine road maintenance, MRCI development, and water diversion screening. Only after NMFS has reviewed these plans against the specified criteria in the rule and responded to public comments on the plans, will NMFS make a determination as to whether or not the plan qualifies for coverage under a limit. As discussed in the preceding response to comment, NMFS believes this final rule requires sufficient monitoring of activities covered under the take limits, and ample opportunity for NMFS to provide oversight of activities covered under the take limits.

MRCI Take Limitation

Comment 21: One commenter expressed concerns that the MRCI take limitation does not explicitly require entities seeking coverage to address cumulative impacts or mitigation and recommended the final rule include such a requirement.

Response: NMFS recognizes the importance of assessing cumulative impacts for MRCI development and other types of activities covered by the take limitations in this final rule. For some take limitations such as recreational angling (i.e. the FMEP take limit), NMFS has explicitly incorporated consideration of cumulative impacts into the rule where it is feasible. For habitat modifying activities, however, this is difficult. NMFS believes, however, that cumulative impacts are addressed at least in part for habitat modifying activities, such as MRCI development and routine road maintenance, since coverage of such an activity under the rule requires NMFS to find that it is contributing to the attainment of, or is contributing to the maintenance of, properly functioning habitat conditions for the threatened ESUs covered in the rule.

Comment 22: One commenter stated that the description of the evaluation criteria relating to riparian management areas in MRCI plans should indicate that such areas are often larger than one site-potential tree height and that it should also specify the types of riparian functions that should be protected in such plans.

Response: NMFS recognizes that riparian areas are important to threatened salmonids and, therefore, provided guidance in this final rule that MRCI plans should provide sufficient riparian management requirements or measures within a distance of one site-potential tree height from the stream channel. This general guidance was based on the best available scientific information which indicates that this stream side area is the one in which development activities most affect riparian zone habitat functions. Although this is a good rule of thumb, NMFS recognizes, as stated in the guidance for riparian zone management, that this distance can vary substantially from location to location and should be determined on a site-specific basis taking into account the conditions of the site or area and the type of habitat that may be affected by the MRCI development.

Comment 23: One commenter indicated that it was unclear whether a plan must be submitted to NMFS when an entity requests coverage under the MRCI take limit, and that it was also unclear who is responsible for approving such a plan if warranted.

Response: NMFS does expect interested jurisdictions to submit a plan to NMFS which describes the MRCI activities to be covered and which addresses the twelve evaluation criteria contained in the take limit. As indicated in this final rule, the Southwest Regional Administrator is responsible for determining whether a MRCI plan qualifies for coverage under this take limit.

Comment 24: The MRCI limit is subjective, violates the ESA, and is arbitrary and void for vagueness.

Response: The MRCI limitation was intended to be more broadly flexible than most of the other take limitations in order to address and provide coverage to the wide variety of circumstances that may arise under this category of activities. As noted elsewhere in this final rule, tailoring activities to comply with the take limitations and submittal of any plan to NMFS for consideration under any of the take limits, including the MRCI limit, is strictly voluntary. The MRCI limit has 12 specific land use considerations relevant to preserving fish habitat that NMFS will use to evaluate submitted land use regulations. NMFS' use of these considerations to make its consistent with conservation and attaining and maintaining properly functioning condition determinations gives adequate clarity and certainty to this part of this regulation.

Comment 25: One commenter felt that NMFS should provide performance standards that ordinances should meet and that the twelve evaluation criteria contained in the MRCI take limit were too vague.

Response: As discussed in this final rule, the fundamental performance standard against which ordinances or plans will be evaluated under this take limit is whether they contribute to maintaining and/or restoring properly functioning habitat conditions that will conserve the threatened ESUs. Under this limit, NMFS will evaluate

ordinances or plans to determine if and how they affect conditions on the landscape and the extent to which they are contributing to the maintenance of or restoration of essential habitat functions. If such plans would maintain or contribute to restoring these functions, then they may qualify under the take limitation.

The 12 considerations contained in this final rule identify the specific issues and/or factors NMFS will use as a framework for evaluating ordinances or plans. These considerations are based on current scientific understanding of salmonid biological requirements. By assessing these twelve considerations, NMFS believes it can evaluate the extent to which an ordinance or plan contributes to maintaining or restoring properly functioning habitat conditions that will conserve the threatened ESUs. Depending on the scope of the ordinance or plan, all twelve of these considerations may not be relevant. NMFS recognizes this fact and will base its evaluation on only those considerations that are relevant.

Recreational Fisheries Take Limitation

Comment 26: One commenter suggested that the final rule should provide a mechanism allowing FMEPs to be ''tiered'' off of Pacific Fishery Management Council (PFMC) approved Fishery Management Plans in order to avoid redundancy and duplication.

Response: The FMEP take limitation in this final rule is intended to provide a more efficient mechanism for insuring that freshwater recreational fisheries managed by the State of California adequately protect and contribute to the conservation of the threatened ESUs covered by the rule while still providing for angling opportunities. Coverage of State managed fisheries in this manner will provide assurance to the State and anglers that they are in compliance with the ESA. Such fisheries are under the jurisdiction of the State and are not managed by PFMC. Since the PFMC manages marine fisheries covered by Federal Fishery Management Plans it is unclear how the FMEP process in this final rule can be tiered off of the FMP process that is implemented by the PFMC. Because the two processes manage two separate fisheries, NMFS does not believe that there will be unnecessary duplication or redundancy in the development of FMEPs. To the extent feasible, however, NMFS will encourage the State to utilize information gathered as part of the FMP process in the development of FMEPs that are submitted for coverage under this rule.

Water Diversion Screening Take Limitation

Comment 27: One commenter argued that the water diversion screening take limitation is inappropriate and does not meet the requirements of the ESA.

Response: NMFS believes strongly that the water diversion screening take limit is appropriate, that it provides for the conservation of the threatened ESUs covered by the rule, and that it is consistent with the ESA. As the commenter pointed out, NMFS is well aware that the entrainment of juvenile salmonids in unscreened or poorly screened water diversions is a problem, both in the central valley and in coastal watersheds. The water diversion screening limit in this rule is intended to provide an incentive for screening unscreened or poorly screened diversions. This final rule and this take limit do not allow unregulated take of listed salmonids at water diversions in the central valley or in coastal watersheds. In fact, this final rule imposes the ESA section 9(a)(1) take prohibitions on these three threatened ESUs making it illegal to entrain these fish into water diversions, and only relieves diverters of the take prohibitions if they qualify by meeting the criteria in the water diversion screening take limit or by obtaining take authorization through the processes of ESA section 7 or 10. NMFS will only provide coverage to water diverters under the water screening diversion take limit if they meet the criteria specified in the rule. These criteria call for: (1) NMFS to certify that a diversion is screened, maintained, and operated in compliance with NMFS' fish screening criteria; and (2) the owner/operator of the facility to allow NMFS to inspect the facility to insure compliance with the criteria. NMFS believes these screening criteria are fully protective of juvenile salmonids and presently uses them as the basis for evaluating water screening diversion projects under ESA sections 7 and 10 of the ESA.

Comment 28: One commenter was concerned that this final rule and this take limitation in particular would exempt all take of these threatened ESUs at the Federal and state water pumping facilities that operate in the central valley, provided they are operated in compliance with whatever screening criteria are in place.

Response: As discussed elsewhere, this final rule will impose the ESA section 9(a)(1) take prohibitions on three threatened ESUs, including the CCV spring-run chinook ESU. The water diversion screening take limit is primarily built into the rule to provide an incentive to smaller, non-Federal water diverters to screen their diversions with appropriate screens. In contrast, the Federal and state pumps and the associated fish protection facilities are part of the Federal and state water projects which are operated in a coordinated fashion by the Bureau of Reclamation and the Department of Water Resources. The combined operation of the Federal and state water projects, including the Federal and state pumps and the associated fish protection facilities, constitute a Federal project activity which is subject to section 7 of the ESA. This final rule does not relieve Federal agencies such as the Bureau of Reclamation of their obligation to consult under the ESA, nor does it exempt the take of these threatened species by Federal agencies. For this reason, the incidental take of CCV spring-run chinook at the Federal and state pumps and the associated fish protection facilities are authorized through section 7 of the ESA, not this final ESA 4(d) rule. Future modifications of the fish protection facilities in the Delta will comport to the extent appropriate with NMFS' fish screening criteria and the mechanism for any required ESA compliance will be section 7 of ESA through the Bureau of Reclamation.

Comment 29: One commenter asserted that NMFS' screening criteria are not well supported or justified scientifically.

Response: NMFS disagrees. NMFS' fish screening criteria are extensively detailed and have undergone a high degree of scientific scrutiny. They are based on decades of operational experience that have yielded some of the best screen designs for salmonid protection in existence. Several States, including California, have adopted NMFS' screening criteria and use them extensively. Lastly, extensive biological evaluations have demonstrated little or no injury to fish when testing screen facilities constructed to NMFS' criteria.

Comment 30: One commenter suggested that this take limit should also ''grandfather'' in older fish screen and passage facilities provided they met the standards that were in existence at the time they were installed.

Response: The intent of this take limitation is to allow a water diversion to be made as safe as possible for the threatened ESUs covered by the rule. Therefore, we believe that the best available information regarding fish screen criteria that are protective of salmonids should be used as the basis for providing coverage to water diversions under this limit. In our view, the 1997 criteria constitute the best

available information. As new biological information becomes available, however, it may be necessary to update these criteria and all new facilities from that point forward would need to comply with any updated criteria. NMFS recognizes that it may not be necessary to retrofit all existing screen facilities with new features every time that new information becomes available and that some older facilities may still function in a manner that is protective of threatened salmonids. In such cases, NMFS may consider certification of screen designs that meet the criteria in place at the time of construction providing there is no evidence to show that the device is causing the take of listed salmonids.

Habitat Restoration Take Limitation

Comment 31: One commenter argued that NMFS should not insert itself in the process of approving watershed conservation plan guidelines. This commenter also contended that NMFS does not have the authority to require states or local governments to consult with the agency in the development of such plans.

Response: The goal of this take limitation is to provide a mechanism for exempting habitat restoration projects from the ESA section 9 take prohibitions when those projects have been identified as being necessary to restore watershed function as a result of watershed scale assessments. In order for NMFS to provide this type of blanket coverage for habitat restoration projects and to avoid having to review all watershed conservation plans and habitat restoration projects separately, we believe it is appropriate for NMFS to link this exemption to an approval of watershed conservation plan guidelines. Absent the process described by this take limitation, the only means available for NMFS to authorize take that may occur as a result of habitat restoration projects is to review and approve them individually through ESA section 7 or section 10 processes. The process described in this take limit, if implemented by the state, can serve to expedite implementation of habitat restoration projects while at the same time promote watershed assessments and the development of watershed conservation plans on the basis of standard guidance. As clearly stated in the proposed and final rule, state and local entities are not required to use any of the take limitations, including the limitation for habitat restoration. In other words, NMFS is not requiring the state and local entities to develop guidelines or watershed conservation plans. We have made this option available as part of a process for facilitating the implementation of habitat restoration projects through exemption from the section 9 take prohibitions. As an alternative to using this take limitation, state or local entities may choose to utilize the section 7 or section 10 processes to obtain take authorization for habitat restoration projects they plan to implement.

Take Guidance

The threatened salmonid ESUs addressed in this final rule are in danger of becoming extinct throughout all or a significant portion of their range in the foreseeable future. Abundance of these ESUs has been reduced by over-fishing, past and ongoing freshwater and estuarine habitat destruction, hydropower development, hatchery practices, and other causes. NMFS has concluded, therefore, that it is necessary and advisable to apply the ESA section 9(a)(1) prohibitions to these ESUS to aid in their conservation. ESA 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 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 listed species.

Based on the best available information, NMFS believes the categories of activities that follow are those activities which as a general rule may be most likely to result in injury or harm to listed salmonids. It is important to emphasize, however, that whether injury or harm results from a particular activity is entirely dependent upon the facts and circumstances of each individual case. The mere fact that an activity may fall within one of these categories does not mean that the specific activity is causing harm or injury. These categories of activity, however, are ones that may be most likely to cause harm and, thus, violate the ESA section 9(a)(1) take prohibitions in this final rule. The activities listed below in A thru J 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.

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) that 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 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 activities that may violate the ESA and to encourage efforts to protect and conserve the threatened ESUs covered in this final rule. A determination as to 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 the impacts of such pesticides 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 ESA 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) one of the limits (if available) on the take prohibitions provided in this final 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 final rule.

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 final rule. 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 final rule provided the activities are conducted in accord with all reasonable and prudent measures and terms and conditions contained in any biological opinion and incidental take statement issued by NMFS.

References

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

Classification

Regulatory Flexibility Act

In accordance with the requirements of the Regulatory Flexibility Act (RFA) (5 U.S.C. 601-612), therefore, NMFS prepared an IRFA which was made available through the proposed ESA 4(d) rule for public comment. Although no comments were received on the IRFA during the public comment period, NMFS has made some revisions to the Final Regulatory Flexibility Analysis (FRFA) by defining further geographic subareas to insure its consistency with the Final Regulatory Impact Review (RIR). The FRFA is available upon request (see **ADDRESSES**) and a summary follows.

This ESA 4(d) rule has no specific requirements for regulatory compliance. Instead, the rule sets an enforceable performance standard in the form of the section 9(a)(1) take prohibitions (i.e., do not ''take'' the threatened ESUs) that applies to all entities and individuals unless an activity is within a carefully circumscribed set of activities for which NMFS will not impose the take prohibitions. Hence, the universe of entities reasonably expected to be directly or indirectly impacted by the prohibition is potentially broad.

The entities potentially affected by imposition of the ESA section 9 take prohibitions occur over a large geographic area which includes the Sacramento River basin in California's central valley, as well as coastal watersheds ranging from 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 ESA 4(d) rule 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, most of the activities that would be subject to the take prohibitions in the rule are already subject to the take prohibitions

imposed by existing ESA 4(d) rules that protect other salmonid ESUs utilizing the same habitat. Thus, determining the incremental cost of this rule requires information concerning regulated entities' response to pre-existing ESA 4(d) rules, some of which have been in effect for only a little over a year.

In the absence of 4(d) rules, entities could comply with the ESA through section 10 research, enhancement, and incidental take permits with private entities, or through ESA 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 ESA 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 compliance 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 compliance via the section 10 or section 7 process; and (4) those entities that are taking salmon but are not seeking ESA compliance.

Examination of the geographical aspects of overlapping ESUs, and consideration of differences in the distribution of the different ESUs within river systems revealed five subareas composing the geographic extent of the four ESUs combined. Subarea 1 consists of that area where this rule's take prohibition for Central Valley spring chinook would be superimposed on existing take prohibitions for threatened Central Valley steelhead and endangered winter-run chinook salmon. In this region only a small variety of activities involving deliberate take of spring-run chinook is expected to be affected.

Subarea 2 consists of that area where Central California coast coho will be subject to limitations on the take prohibition not presently allowed by the existing ESA 4(d) rule for that threatened ESU and no new take prohibition is being added. The impact of this rule in this subarea is the increased flexibility allowed by the 10 take prohibition limits.

Subarea 3 consists of that area where this rule superimposes the take prohibitions for Northern California steelhead and California coastal chinook on the existing take prohibition for Central California coast coho. Deliberate take of the steelhead and chinook will be newly affected in this subarea and the take limits will be introduced for coho, making them congruent with the take limits for steelhead and chinook in that area.

Subarea 4 consists of the area where this rule superimposes the take prohibition for steelhead and chinook on the existing take prohibition for the Southern Oregon/Northern California coho ESU. Deliberate take of steelhead and chinook will be newly regulated in this area, but no change will be made for the take limits applicable to coho.

Subarea 5 consists of those portions of the Northern California steelhead and California coastal chinook ESUs not utilized by either coho ESU. Because steelhead (and chinook to a lesser extent) are much more widely distributed within the ESU boundaries than coho, there are substantial areas where steelhead and/or chinook will be protected which are not utilized by coho. Modifications to habitat which have no risk of taking coho may risk taking steelhead and chinook in such areas.

Although there may be some limited impact in all of these subareas the only substantial economic impacts on individual small entities from this rule, therefore, are expected to occur in the non-federal portions of subarea 5, which lie almost entirely in low population density areas of Humboldt, Mendocino, and Sonoma counties. These three counties had a combined 1998 population of about 640,000 with personal income of about $18 billion. However, most of the people and income are contributed by urban centers in Sonoma and Humboldt counties which are not contained in subarea 5. No population estimate is available for subarea 5, but it is believed to be less than 15,000. Small entities in this

subarea likely to be directly affected by this rule include private timber harvesters, cattle ranches, a small number of farms and vineyards, and possibly small businesses engaged in road and culvert construction. The number of such entities is not known, but is a small subset of the same classes of entities found in the three counties containing subarea 5.

This final rule applies the take prohibitions enumerated in ESA section 9(a)(1), and also limits application of the take prohibitions to certain specified categories of activities that contribute to conserving these ESUs or are governed by a program that adequately limits impacts on these ESUs. 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 take limitations in this final rule would involve recordkeeping and/or reporting to support that continuing determination. NMFS has attempted to minimize any burden associated with these programs.

The public reporting burden per response for this collection 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 MRCI ordinance development package; and 10 hours for an MRCI development annual report.

This rule also contains a collection-of-information requirement associated with habitat restoration activities conducted under watershed conservation plans that has received PRA approval from OMB under control number 0648-0230. The public reporting burden for the approval of watershed conservation 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.

In formulating this final 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 last approach would leave the threatened ESUs without any protection other than provided by ESA section 7 consultations for actions with some Federal nexus.

The approach taken in this final rule is alternative 5 which would impose the ESA 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 the proposed rule). This approach is fundamentally the same as that taken in NMFS's July 2000 ESA 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 this final 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 this final 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.

Executive Order (E.O.) 12866

Pursuant to E.O. 12866 (58 FR 51735, October 4, 1993), NMFS has prepared a Regulatory Impact Review (RIR) which considers costs and benefits of the regulatory alternatives that were considered in developing this ESA 4(d) rule, including the alternative of not promulgating a protective rule. Copies of the RIR are available upon request (see **ADDRESSES**).

Costs and benefits of this final 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 this rule, as well as each of the other alternatives NMFS considered that afford sufficient protection for the threatened ESUs, is its contribution to the recovery of the threatened ESUs. No monetized measure of the benefit of recovery is available.

The RIR finds that in Area 1, Area 3, and Area 4 the only activities likely to be affected by this final rule are those involving deliberate direct take of listed species, especially angling, hatchery operation, and research. The costs of these activities, either to the state or private parties, are estimated to increase over the baseline due to increased permitting, NEPA documentation, and monitoring requirements. Activities in Area 2, where coho already have a take prohibition in place, will become less costly due to reduced permitting and NEPA requirements. In Area 5, timber harvest, grazing, stream diversions, summer dams, road construction and maintenance, and construction of new or improved culverts will come under increased regulation. Incremental costs associated with summer dams, roads, and culverts are significant but could not be quantified at this time. Aggregate quantified incremental first-year costs for the proposed rule are estimated to be between $11.8 million and $17.7 million, while annual costs thereafter are estimated to be from $4.6 million to $9.1 million. The same costs estimated for a blanket take prohibition with no limits are estimated at $18.9 million to $21.6 million and $6.2 million to $10.7 million, respectively.

The RIR concludes that the proposed rule would substantially improve conditions favorable to recovery of the threatened ESUs compared to taking no action, that the only alternative which could achieve quicker results (detailed prescriptive requirements) is too costly and intrusive, and that the proposed rule is the least costly rule among the alternatives which are sufficiently protective of threatened salmon and steelhead ESUs.

Because this final rule will eliminate application of the section 9 take prohibition to those State or local programs or activities that fall within defined take limitation criteria protective of salmonids, those programs will encourage participation and contribute to the conservation of the threatened ESUs covered by the rule; 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 this final rule will minimize the cost to the public of avoiding or minimizing take over the long term in comparison with the other alternatives that were considered.

Executive Order 13175-Consultation and Coordination with Indian Tribal Governments

E.O. 13175 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 final 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. 13175 do not apply to this final rule.

Nonetheless, NMFS took steps to inform potentially affected tribal governments, to provide information to tribes on the content and scope of the rule and its relationship to the Tribal ESA 4(d) rule (65 FR 42481, July 10, 2000), and to solicit tribal input on the rule. NMFS did not receive any formal comments from Indian tribes, but remains prepared to meet with interested tribes to discuss the rule and its relationship to their activities. As a result of the July 2000 Tribal ESA 4(d) rule, NMFS has already established efforts to coordinate with many of the tribes that are located within the range of ESUs affected by this 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 final rule. In fact, this final 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 ESA 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 ESA 4(d) rule. Because the threatened ESUs addressed in this rule overlap substantially with the ESUs addressed in the July 2000 ESA 4(d) rule (65 FR 42422), working relationships have already been established with many agencies and organizations that may be affected by this 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 the state 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 ESA 4(d) rule or this final 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 final rule contains collection-of-information requirements subject to the PRA and which have been approved by OMB under control number 0648-0399.

The public reporting burden per response for this collection 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 MRCI ordinance development package; and 10 hours for an MRCI development annual report.

This final rule also contains a collection-of-information requirement associated with habitat restoration activities conducted under watershed conservation plans that has received PRA approval from OMB under control number 0648-0230. The public reporting burden for the approval of watershed conservation 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.

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).

National Environmental Policy Act

NMFS prepared EAs, as defined under the authority of NEPA of 1969, addressing each threatened ESU covered by this final rule. Based on a review and evaluation of the information contained in these NEPA documents, NMFS has determined that promulgation of protective regulations for these four threatened salmonid ESUs, including the creation of limitations on the applicability of the prohibitions on taking any of those salmonids, is not 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/Findings of No Significant Impact are available on request (see **ADDRESSES**).

List of Subjects in 50 CFR Part 223

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

Dated: December 31, 2001.

Rebecca Lent,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 223 is 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 April 9, 2002. 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 September 9, 2002, 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 July 8, 2002.

(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 July 8, 2002.

(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 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.

(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 not 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.
3. Fish Screening Criteria for Anadromous Salmonids, National Marine Fisheries Service, Southwest Region, 1997.

[FR Doc. 02–440 Filed 1–8–02; 8:45 am]

BILLING CODE 3510–22–S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 229

[Docket No. 001128334-1312-02; I.D. 091401B]

RIN 0648-AN88

Taking of Marine Mammals Incidental to Commercial Fishing Operations; Atlantic Large Whale Take Reduction Plan Regulations

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

ACTION: Final rule.

SUMMARY: NMFS issues this final rule to amend the regulations that implement the Atlantic Large Whale Take Reduction Plan (ALWTRP) to clarify its authority to temporarily restrict the use of lobster trap and gillnet fishing gear within defined areas to protect North Atlantic right whales, and to establish criteria and procedures for implementing a Dynamic Area Management (DAM) program in areas north of 40o N. latitude, in order to further reduce risk of entanglement of right whales by such gear.

DATES: This final rule is effective February 8, 2002.

ADDRESSES: Copies of the Environmental Assessment (EA), its Regulatory Impact Review (RIR), and the

Corrections

Federal Register

Vol. 67, No. 218

Tuesday, November 12, 2002

This section of the FEDERAL REGISTER contains editorial corrections of previously published Presidential, Rule, Proposed Rule, and Notice documents. These corrections are prepared by the Office of the Federal Register. Agency prepared corrections are issued as signed documents and appear in the appropriate document categories elsewhere in the issue.

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 223

[Docket No. 010521133–1307–02; I.D. No. 050101B]

Endangered and Threatened Species; Final Rule Governing Take of Four Threatened Evolutionarily Significant Units (ESUs) of West Coast Salmonids

Correction

In rule document 02–440 beginning on page 1116 in the issue of Wednesday, January 9, 2002 make the following correction:

Appendix A to §227.203 [Corrected]

On page 1133, in the third column, in appendix A, after the fourth paragraph, paragraph 3. was duplicated, the fifth paragraph should read ''4. Viable Salmonid Populations and the Recovery of Evolutionarily Significant Units. (June 2000).''.

[FR Doc. C2–440 Filed 11–8–02; 8:45 am]

BILLING CODE 1505–01–D

ENVIRONMENTAL PROTECTION AGENCY

[FRL–7403–8]

Preliminary Administrative Determination Document on the Question of Whether Ferric Ferrocyanide is One of the ''Cyanides'' Within the Meaning of the List of Toxic Pollutants Under the Clean Water Act

Correction

In notice document 02–28006 appearing on page 67183 in the issue of Monday, November 4, 2002 make the following correction:

On page 67183, in the third column, under the heading **DATES**, in the second line, ''December 4, 2002'' should read ''January 3, 2003''.

[FR Doc. C2–28006 Filed 11–8–02; 8:45 am]

BILLING CODE 1505–01–D

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99–CE–71–AD; Amendment 39–12925; AD 2002–22–01]

RIN 2120–AA64

Airworthiness Directives; MORAVAN a.s. Models Z–143L and Z–242L Airplanes

Correction

In rule document 02–27201 beginning on page 66540 in the issue of Friday, November 1, 2002 make the following correction:

§39.13 [Corrected]

On page 66541, in the third column, in §39.13, in the first line, ''2002–22 01'' should read ''2002–22–01''.

[FR Doc. C2–27201 Filed 11–8–02; 8:45 am]

BILLING CODE 1505–01–D

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Parts 223 and 224

[Docket No. 040525161–5155–02; I.D. 052104F]

RIN No. 0648–AR93

Endangered and Threatened Species: Final Listing Determinations for 16 ESUs of West Coast Salmon, and Final 4(d) Protective Regulations for Threatened Salmonid ESUs

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

ACTION: Final rule.

SUMMARY: We, NOAA's National Marine Fisheries Service (NMFS), are issuing final determinations to list 16 Evolutionarily Significant Units (ESUs) of West Coast salmon (chum, *Oncorhynchus keta*; coho, *O. kisutch*, sockeye, *O. nerka*; Chinook, *O. tshawytscha*; pink, *O. gorbuscha*) under the Endangered Species Act (ESA) of 1973, as amended. We have concluded that four ESUs are endangered, and twelve ESUs are threatened, in California, Oregon, Washington, and Idaho. Fifteen of these ESUs were previously listed as threatened or endangered under the ESA, and one ESU was previously designated as a candidate species. With respect to the Oregon Coast coho ESU and ten *O. mykiss* ESUs, we have found that substantial disagreement regarding the sufficiency or accuracy of the relevant data precludes making final listing determinations at this time, and accordingly we are extending the deadline for making our final determinations for these 11 ESUs for an additional 6 months. The findings regarding the extension of the final listing determination for the Oregon Coast coho ESU and for the ten *O. mykiss* ESUs appear in the Proposed Rules section in today's **Federal Register** issue. The ten *O. mykiss* ESUs were previously listed and remain listed pending final agency action.

Also in this notice, we are finalizing amendments to the ESA 4(d) protective regulations for threatened salmonid ESUs. As part of the proposed listing determinations in June 2004, we proposed changes to these protective regulations to provide the necessary flexibility to ensure that fisheries and artificial propagation programs are managed consistently with the conservation needs of ESA-listed ESUs, and to clarify the existing regulations so that they can be more efficiently and effectively interpreted and followed by all affected parties.

Finally, we are soliciting biological and economic information relevant to designating critical habitat for the Lower Columbia River coho salmon ESU.

DATES: This final rule is effective August 29, 2005.

ADDRESSES: Correspondence concerning this final rule may be addressed to Chief, Protected Resources Division, Northwest Region, NMFS, 1201 Lloyd Boulevard, Suite 1100, Portland, Oregon, 97232–1274; or Chief, Protected Resources Division, Southwest Region, NMFS, 501 West Ocean Blvd., Suite 4200, Long Beach, CA, 90802–4213.

Information relevant to designating critical habitat for the Lower Columbia River coho ESU may be submitted by: standard mail to Steve Stone, Protected Resources Division, Northwest Region, NMFS, 1201 Lloyd Boulevard, Suite 1100, Portland, Oregon, 97232–1274; e-mail to *LCRcoho_CH.nwr@noaa.gov*; or fax to (503) 230–5441. Please include the identifier ''Information RE: Critical Habitat for Lower Columbia River Coho'' with any information submitted.

FOR FURTHER INFORMATION CONTACT: For further information regarding the final listing determinations and the final amendments to the 4(d) protective regulations please contact Scott Rumsey, NMFS, Northwest Region, (503) 872–2791; Craig Wingert, NMFS, Southwest Region, (562) 980–4021; or Marta Nammack, NMFS, Office of Protected Resources, (301) 713–1401. For further information concerning the information request regarding critical habitat for Lower Columbia River coho salmon, please contact Steve Stone, NMFS, Northwest Region, (503) 231–2317.

SUPPLEMENTARY INFORMATION: The ESA listing determinations and the amended 4(d) protective regulations for threatened ESUs described in this document are effective August 29, 2005. The take prohibitions applicable to threatened species do not apply to activities specified in an application for a permit or a 4(d) approval 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 August 29, 2005. This ''grace period'' for pending research and enhancement applications will remain in effect until the issuance or denial of authorization, or December 28, 2005, whichever occurs earliest. Additionally, biological and economic information regarding critical habitat for the Lower Columbia River coho ESU must be received no later than 5 p.m. P.S.T. on August 29, 2005 (*see* **ADDRESSES** and Information Solicited).

Organization of This Final Rule

This **Federal Register** notice describes the final listing determinations for 16 ESUs of West Coast salmon under the ESA, as well as final amendments to the 4(d) protective regulations for threatened ESUs. The pages that follow summarize the comments and information received in response to the proposed listing determinations and proposed protective regulations (69 FR 33102; June 14, 2004), describe any changes from the proposed listing determinations and proposed protective regulations, and detail the final listing determinations for 16 ESUs and the final protective regulations for threatened ESUs. To assist the reader, the content of this notice is organized as follows:

I. Review of Necessary Background Information.
- *Statutory basis for Listing Species Under the Endangered Species Act.*
- *Life History of West Coast Salmon.*
- NMFS' *Past Pacific Salmonid ESA Listings and the Alsea Decision.*
- *Initiation of Coast-Wide ESA Status Reviews for 27 ESUs of Pacific Salmonids.*

II. *Summary of Comments and Information Received in Response to the Proposed Rule.*
- Comments on the Consideration of Artificial Propagation in Listing Determinations.
- Comments on the Consideration of Efforts Being Made to Protect the Species.
- Comments on the Proposed Take Prohibitions and Protective Regulations.
- Comments on ESU-Specific Issues.

III. Summary of Changes from the Proposed Listing Determinations and Proposed Protective Regulations.

IV. Treatment of the Four Listing Determination Steps for Each ESU Under Review.

(1) *Determination of ''Species'' under the ESA*

(2) *Viability Assessments of ESUs* and *Summary of Factors Affecting the Species*

(3) Evaluation of *Efforts Being Made to Protect West Coast Salmonids*

(4) *Final Listing Determinations* of ''threatened,'' ''endangered,'' or ''not warranted,'' based on the foregoing information

V. Take *Prohibitions and Protective Regulations*

VI. *Identification of Those Activities That Would Constitute a Violation of Section 9 of the ESA*

VII. *Effective Date of the Final Listing Determinations and Protective Regulations*

VIII. Summary of agency efforts in designating *Critical Habitat* for listed salmon and *O. mykiss* ESUs, and a summary of *Information Solicited* regarding critical

habitat for the Lower Columbia River coho ESU

IX. Description of the *Classification*, NMFS' compliance with various laws and executive orders with respect to this rulemaking (*e.g.*, National Environmental Policy Act, Regulatory Flexibility Act)

X. Description of amendments to the Code of Federal Regulations (*List of Subjects*). This section itemizes the specific changes to Federal law being made based on the foregoing information:

- Amendments to the list of threatened and endangered species
- Amendments to the protective regulations for threatened West Coast salmonids

Background

Listing Species Under the Endangered Species Act

NMFS is responsible for determining whether species, subspecies, or distinct population segments (DPSs) of Pacific salmon and steelhead are threatened or endangered under the Endangered Species Act (ESA) (16 U.S.C. 1531 *et seq*). To be considered for listing under the ESA, a group of organisms must constitute a ''species,'' which is defined in section 3 of the ESA to include ''any subspecies of fish or wildlife or plants, and any *distinct population segment* [emphasis added] of any species of vertebrate fish or wildlife which interbreeds when mature.'' In this notice, we are issuing final listing determinations for DPSs of Pacific salmon. To qualify as a DPS, a Pacific salmon population must be substantially reproductively isolated from other conspecific populations and represent an important component in the evolutionary legacy of the biological species. A population meeting these criteria is considered to be an ESU (56 FR 58612; November 20, 1991). In our previous listing determinations for Pacific salmonids under the ESA, we have treated an ESU as constituting a DPS, and hence a ''species,'' under the ESA.

Section 3 of the ESA defines an endangered species as ''any species which is in danger of extinction throughout all or a significant portion of its range'' and a threatened species as one ''which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.'' The statute lists factors that may cause a species to be threatened or endangered (ESA section 4(a)(1)): (a) The present or threatened destruction, modification, or curtailment of its habitat or range; (b) overutilization for commercial, recreational, scientific, or educational purposes; (c) disease or predation; (d) the inadequacy of existing regulatory mechanisms; or (e) other natural or manmade factors affecting its continued existence.

Section 4(b)(1)(A) of the ESA requires NMFS to make listing determinations based solely on the best scientific and commercial data available after conducting a review of the status of the species and after taking into account efforts being made to protect the species. We follow a four-step process in making listing determinations for Pacific salmon: (1) We first determine the ESU or species under listing consideration; (2) we determine the viability of the defined ESU and the factors that have led to its decline; (3) we assess efforts being made to protect the ESU, determining if these efforts adequately mitigate threats to the species; and (4) based on the foregoing steps and the statutory listing factors, we determine if the ESU is threatened or endangered, or does not warrant listing under the ESA.

Life History of West Coast Salmon

The specific life-history characteristics of the subject species are summarized in the proposed listing determinations notice (69 FR 33102; June 14, 2004). These species addressed in this notice each exhibit anadromy, meaning that adults migrate from the ocean to spawn in freshwater lakes and streams where their offspring hatch and rear prior to migrating to the ocean to forage until maturity. The migration and spawning times vary considerably among and within species and populations. At spawning, adults pair to lay and fertilize thousands of eggs in freshwater gravel nests or ''redds'' excavated by females. Depending on lake/stream temperatures, eggs incubate for several weeks to months before hatching as ''alevins'' (a larval life stage dependent on food stored in a yolk sac). Following yolk sac absorption, alevins emerge from the gravel as young juveniles called ''fry'' and begin actively feeding. Depending on the species and location, juveniles may spend from a few hours to several years in freshwater areas before migrating to the ocean. The physiological and behavioral changes required for the transition to salt water result in a distinct ''smolt'' stage in most species. En route to the ocean the juveniles may spend from a few days to several weeks in the estuary, depending on the species. The highly productive estuarine environment is an important feeding and acclimation area for juveniles preparing to enter marine waters.

Juveniles and subadults typically spend from 1 to 5 years foraging over thousands of miles in the North Pacific Ocean before returning to freshwater to spawn. Some species, such as coho and Chinook salmon, have precocious life-history types (primarily male fish) that mature and spawn after only several months in the ocean. Spawning migrations known as ''runs'' occur throughout the year, varying in time by species and location. Most adult fish return or ''home'' with great fidelity to spawn in their natal stream, although some do stray to non-natal streams. Salmon species die after spawning.

Past Pacific Salmonid ESA Listings and the Alsea Decision

Pacific salmon ESUs in California and the Pacific Northwest have suffered broad declines over the past hundred years. Since 1991, we have conducted ESA status reviews of six species of Pacific salmonids in California, Oregon, Washington, and Idaho, identifying 52 ESUs, with 25 ESUs currently listed as threatened or endangered (see the Proposed Rule, 69 FR 33102; June 14, 2004, for a detailed summary of previous listing actions for West Coast salmonid ESUs). In past status reviews, we based our extinction risk assessments on whether the naturally spawned fish in an ESU are self-sustaining in their natural ecosystem over the long term. We listed as ''endangered'' those ESUs whose naturally spawned populations were found to have a present high risk of extinction, and listed as ''threatened'' those ESUs whose naturally spawned populations were found likely to become endangered in the foreseeable future.

In past status reviews we did not explicitly consider the contribution of hatchery fish to the overall viability of an ESU, or whether the presence of hatchery fish within the ESU might have the potential for reducing the risk of extinction of the ESU or the likelihood that the ESU would become endangered in the foreseeable future. We generally considered artificial propagation as a threat to the long-term persistence of the naturally spawned populations within an ESU. Under a 1993 Interim Policy on the consideration of artificially propagated Pacific salmon and steelhead under the ESA (58 FR 17573; April 5, 1993), if it was determined that an ESU warranted listing, we then reviewed the associated hatchery stocks to determine if they were part of the ESU. We did not include hatchery stocks in an ESU if: (1) Information indicated that the hatchery stock was of a different genetic lineage than the listed natural populations; (2) information indicated that hatchery practices had produced appreciable

changes in the ecological and life-history characteristics of the hatchery stock and these traits were believed to have a genetic basis; or (3) there was substantial uncertainty regarding the relationship between hatchery fish and the existing natural population(s). The Interim Policy provided that hatchery salmon and steelhead found to be part of an ESU would not be listed under the ESA unless they were found to be essential for the ESU's recovery (*i.e.*, if we determined that the hatchery stock contained a substantial portion of the genetic diversity remaining in the ESU). The result of the Interim Policy was that a listing determination for an ESU depended solely upon the relative health of the natural populations in an ESU, and that most hatchery stocks determined to be part of an ESU were excluded from any listing of the ESU.

Subsequently, in *Alsea Valley Alliance* v. *Evans*, 161 F. Supp. 2d 1154 (D. Or. 2001)(*Alsea*), the U.S. District Court in Eugene, Oregon, set aside our 1998 ESA listing of Oregon Coast coho salmon (*O. kisutch*) because it impermissibly excluded hatchery fish within the ESU from listing. The court ruled that the ESA does not allow listing a subset of a DPS and that, since we had found an ESU constitutes a DPS, we had improperly excluded stocks from the listing that we had determined were part of the ESU. Although the *Alsea* ruling affected only one ESU, the interpretive issue raised by the ruling called into question the validity of the Interim Policy implemented in nearly all of our Pacific salmonid listing determinations.

Initiation of Coast-Wide ESA Status Reviews

Following the *Alsea* ruling, NMFS received a total of nine petitions seeking to delist, or to redefine and list, 17 listed salmonid ESUs (see the Proposed Rule for a summary of the petitions; 69 FR 33102; June 14, 2004). We determined that seven of the petitions presented substantial scientific and commercial information that the petitioned actions may be warranted for 16 of the subject ESUs (67 FR 6215, February 11, 2002; 67 FR 40679, June 13, 2002; 67 FR 48601, July 25, 2002). As part of our response to the ESA interpretive issues raised by the *Alsea* ruling, we announced that we would revise the 1993 Interim Policy, and we elected to initiate status reviews for 11 ESUs in addition to the 16 ESUs for which we had accepted delisting/listing petitions (67 FR 6215, February 11, 2002; 67 FR 79898, December 31, 2002).

NMFS' Pacific Salmonid Biological Review Team (BRT) (an expert panel of scientists from several Federal agencies including NMFS, FWS, and the U.S. Geological Survey) reviewed the viability and extinction risk of naturally spawning populations in the 27 ESUs, 16 of which are the subject of this proposed rule (NMFS, 2003b). The BRT evaluated the risk of extinction based on the performance of the naturally spawning populations in each of the ESUs under the assumption that present conditions will continue into the future. The BRT did not explicitly consider artificial propagation in its evaluations.

The BRT assessed ESU-level extinction risk (as indicated by the viability of the naturally spawning populations) at two levels: First, at the individual population level, then at the overall ESU level. The BRT used factors for ''Viable Salmonid Populations'' (VSP; McElhany *et al.*, 2000) to guide its risk assessments. The VSP factors were developed to provide a consistent and logical reference for making viability determinations and are based on a review and synthesis of the conservation biology and salmon literature. Individual populations were evaluated according to the four VSP factors: abundance, productivity, spatial structure (including connectivity), and diversity. These four parameters are universal indicators of species' viability, and individually and collectively function as reasonable predictors of extinction risk. After reviewing all relevant biological information for the populations in a particular ESU, the BRT ascribed an ESU-level risk score for each of the four VSP factors.

The BRT described and assessed ESU-level risk for each of the VSP factors and the ESU-level extinction risk based on the performance of the naturally spawning populations. The BRT's assessment of ESU-level extinction risk uses categories that correspond to the definitions of endangered species and threatened species, respectively, in the ESA: in danger of extinction throughout all or a significant portion of its range, likely to become endangered within the foreseeable future throughout all or a significant portion of its range, or neither. In general, these evaluations did not include consideration of the potential contribution of hatchery stocks to the viability of ESUs, or evaluate efforts being made to protect the species. Therefore, the BRT's findings are not recommendations regarding listing. The BRT's ESU-level extinction risk assessment reflects the BRT's professional scientific judgment, guided by the analysis of the VSP factors, as well as by expectations about the likely interactions among the individual VSP factors. For example, a single VSP factor with a ''High Risk'' score might be sufficient to result in an overall extinction risk assessment of ''in danger of extinction,'' but a combination of several VSP factors with more moderate risk scores could also lead to the same assessment, or a finding that the ESU is ''likely to become endangered.''

To assist in determining the ESU membership of individual hatchery stocks, a Salmon and Steelhead Hatchery Assessment Group (SSHAG), composed of NMFS scientists from the Northwest and Southwest Fisheries Science Centers, evaluated the best available information describing the relationships between hatchery stocks and natural ESA-listed salmon and anadromous *O. mykiss* populations in the Pacific Northwest and California. The SSHAG produced a report, entitled ''Hatchery Broodstock Summaries and Assessments for Chum, Coho, and Chinook Salmon and Steelhead Stocks within Evolutionarily Significant Units Listed under the Endangered Species Act'' (NMFS, 2003a), describing the relatedness of each hatchery stock to the natural component of an ESU on the basis of stock origin and the degree of known or inferred genetic divergence between the hatchery stock and the local natural population(s). We used the information presented in the SSHAG Report to determine the ESU membership of those hatchery stocks within the historical geographic range of a given ESU. Our assessment of individual hatchery stocks and our findings regarding their ESU membership are detailed in the Salmonid Hatchery Inventory and Effects Evaluation Report (NMFS, 2004b).

The assessment of the effects of ESU hatchery programs on ESU viability and extinction risk is also presented in the Salmonid Hatchery Inventory and Effects Evaluation Report (NMFS, 2004b). The Report evaluates the effects of hatchery programs on the likelihood of extinction of an ESU on the basis of the four VSP factors (*i.e.*, abundance, productivity, spatial structure, and diversity) and how artificial propagation efforts within the ESU affect those factors. In April 2004, we convened an Artificial Propagation Evaluation Workshop of Federal scientists and managers with expertise in salmonid artificial propagation. The Artificial Propagation Evaluation Workshop reviewed the BRT's findings (NMFS, 2003a), evaluated the Salmonid Hatchery Inventory and Effects Evaluation Report (NMFS, 2004b), and assessed the overall extinction risk of ESUs with associated hatchery stocks. The discussions and conclusions of the

Artificial Propagation Evaluation Workshop are detailed in a workshop report (NMFS, 2004c). In this document, the extinction risk of an ESU ''in-total'' refers to the assessed level of extinction risk after considering the contributions to viability by all components of the ESU (hatchery origin, natural origin, anadromous, and resident).

On June 3, 2004, we published in the **Federal Register** a proposed policy for the consideration of hatchery-origin fish in ESA listing determinations (Hatchery Listing Policy; 69 FR 31354). On June 14, 2004, we proposed listing determinations for the 27 ESUs under review, proposing that four ESUs be listed as threatened and 23 ESUs be listed as endangered (69 FR 33102). We proposed maintaining the existing ESA listing status for 22 ESUs: Two sockeye ESUs (the endangered Snake River and threatened Ozette Lake sockeye ESUs); eight Chinook ESUs (the endangered Upper Columbia River spring-run ESU, and the threatened Central Valley spring-run, California Coastal, Upper Willamette River, Lower Columbia River, Puget Sound, Snake River fall-run, and Snake River spring/summer-run Chinook ESUs); one coho ESU (the threatened Southern Oregon/Northern California Coast coho ESU); two chum ESUs (the threatened Columbia River and Hood Canal summer-run chum ESUs); and nine *O. mykiss* ESUs (the endangered Southern California *O. mykiss* ESU, and the threatened South-Central California Coast, Central California Coast, California Central Valley, Northern California, Upper Willamette River, Lower Columbia River, Middle Columbia River, and Snake River Basin *O. mykiss* ESUs). We proposed revising the status of three ESA-listed ESUs: The endangered Sacramento River winter-run Chinook and Upper Columbia River *O. mykiss* ESUs were proposed for threatened status; and the threatened Central California Coast coho ESU was proposed for endangered status. Finally, we proposed that two ESUs designated as candidate species be listed as threatened: the Oregon Coast coho and Lower Columbia River coho ESUs. Also as part of the proposed listing determinations, we proposed amending the section 4(d) protective regulations for threatened ESUs to: Exclude listed hatchery fish marked by a clipped adipose fin and resident fish from the ESA take prohibition; and simplify existing 4(d) protective regulations so that the same set of limits apply to all threatened ESUs.

Summary of Comments and Information Received in Response to the Proposed Rule

With the publication of the proposed listing determinations for 27 ESUs we announced a 90-day public comment period extending through September 13, 2004. In **Federal Register** notices published on August 31, 2004 (69 FR 53093), September 9, 2004 (69 FR 54637), and October 8, 2004 (69 FR 61347), we extended the public comment period for the proposed policy through November 12, 2004. The public comment period for the proposed listing determinations was open for 151 days. We held 14 public hearings (at eight locations in the Pacific Northwest, and six locations in California) to provide additional opportunities and formats to receive public input (69 FR 53039, August 31, 2004; 69 FR 54620, September 9, 2004; 69 FR 61347, October 8, 2004). Additionally, pursuant to the requirements of the National Environmental Policy Act (NEPA) of 1969, we conducted an Environmental Assessment (EA) analyzing the proposed amendments to the 4(d) protective regulations for threatened salmonids. As part of the proposed listing determinations and the proposed amendments to the 4(d) protective regulations, we announced that a draft of the EA was available from NMFS upon request (69 FR at 33172; June 14, 2004). Additionally, on November 15, 2004, we published a notice of availability in the **Federal Register** soliciting comment on the draft EA for an additional 30 days (69 FR 65582).

A joint NMFS/FWS policy requires us to solicit independent expert review from at least three qualified specialists, concurrent with the public comment period (59 FR 34270; July 1, 1994). We solicited technical review of the proposed listing determinations from over 50 independent experts selected from the academic and scientific community, Native American tribal groups, Federal and state agencies, and the private sector. In December 2004 the Office of Management and Budget (OMB) issued a Final Information Quality Bulletin for Peer Review establishing minimum peer review standards, a transparent process for public disclosure, and opportunities for public input. The OMB Peer Review Bulletin, implemented under the Information Quality Act (Pub. L. 106–554), is intended to provide public oversight on the quality of agency information, analyses, and regulatory activities, and applies to information disseminated on or after June 16, 2005. The independent expert review under the joint NMFS/FWS peer review policy, and the comments received from several academic societies and expert advisory panels, collectively satisfy the requirements of the OMB Peer Review Bulletin (NMFS, 2005a).

In response to the requests for information and comments on the proposed hatchery listing policy, the proposed listing determinations, and the proposed amendments to the 4(d) protective regulations, we received over 28,250 comments by fax, standard mail, and e-mail. The majority of the comments received were from interested individuals who submitted form letters or form e-mails. Comments were also submitted by state and tribal natural resource agencies, fishing groups, environmental organizations, home builder associations, academic and professional societies, expert advisory panels (including NMFS' Recovery Science Review Panel, the Independent Science Advisory Board, and the State of Oregon's Independent Multidisciplinary Science Team), farming groups, irrigation groups, and individuals with expertise in Pacific salmonids. The majority of respondents focused on the proposed Hatchery Listing Policy, although many respondents also included comments relevant to the proposed listing determinations and the proposed amendments to the 4(d) protective regulations. The public comments were generally critical of the proposed hatchery listing policy, for a variety of reasons, but were generally favorable of the proposed listing determinations and the manner in which the proposed hatchery listing policy was implemented. Those few comments that addressed the proposed amendments to the 4(d) protective regulations expressed concerns about the practical implications of the proposed changes on the management of hatchery programs as well as on tribal, recreational, and commercial salmon and steelhead fisheries.

We also received comments from four of the independent experts from whom we had requested technical review of the proposed listing determinations. The independent expert reviews were generally supportive of the scientific principles underlying the application of the proposed Hatchery Listing Policy in the proposed listing determinations. However, the reviewers noted several concerns with the proposed Hatchery Listing Policy including: Vague and imprecise policy language; an apparent de-emphasis of the importance of naturally spawned self-sustaining populations for the conservation and recovery of salmonid ESUs, and the goal

of the ESA to conserve the ecosystems upon which they depend; accumulating long-term adverse impacts of artificial propagation due to unavoidable artificial selection and domestication in the hatchery environment; and the lack of scientific evidence that artificial propagation can contribute to the productivity and conservation of viable natural populations over the long term. Two of the reviewers felt that hatchery fish are inherently different from wild fish and should not be included in ESUs, and were concerned that the inclusion of hatchery fish in ESUs would jeopardize the conservation and recovery of native salmonid populations in their natural ecosystems. The other two reviewers were supportive of the scientific basis for including hatchery fish in ESUs, but felt that the policy did not appropriately emphasize that the conservation and recovery of listed ESUs depends upon the viability of wild populations and natural ecosystems over the long term.

There was substantial overlap between the comments from the independent expert reviewers, the independent scientific panels and academic societies, and the substantive public comments. Some of the comments received were not directly pertinent to the proposed listing determinations or the proposed amendments to the 4(d) protective regulations. We will consider and address comments relating to other determinations (for example, the proposed Hatchery Listing Policy (69 FR 31354, June 3, 2004), the proposed critical habitat designations for 20 West Coast salmonid ESUs (69 FR 71880, December 10, 2004; 69 FR 74572, December 14, 2004), and the remanded biological opinion on the Federal Columbia River Power System (see *http://www.salmonrecovery.gov/R_biop_final.shtml*)) in the context of those determinations. With respect to comments received on the Hatchery Listing Policy, the summary of and response to comments below is confined to the implementation of the policy in delineating the ESUs for consideration, and determining their ESA listing status. The reader is referred to the final Hatchery Listing Policy elsewhere in this edition of the **Federal Register** for a summary of the comments received regarding the legal and policy interpretations articulated in the policy.

The summary of comments and our responses below are organized into four general categories: (1) General comments on the consideration of artificial propagation in the proposed listing determinations; (2) general comments on the consideration of efforts being made to protect the species; (3) comments on the proposed amendments to the protective regulations; and (4) comments on ESU-specific issues (for example, the ESU membership of specific hatchery stocks, level of extinction risk assessed for an ESU, and the consideration of specific conservation efforts being made to protect and conserve an ESU).

General Comments on the Consideration of Artificial Propagation

Issue 1: Several commenters felt that our implementation of the Hatchery Listing Policy's threshold for including hatchery stocks in a given ESU was inconsistent among hatchery programs both within and among ESUs. The commenters felt that in most circumstances quantitative information on the genetic differentiation of a specific hatchery stock relative to the local natural population(s) is not available. The commenters argued that, given the poor availability of genetic data, determinations of whether a given hatchery stock is part of an ESU are ambiguous, highly subjective, and arbitrary.

Response: We agree with the commenters that in many cases empirical genetic data are not available to quantitatively assess the level of genetic differentiation and reproductive isolation of a hatchery stock relative to the local natural population(s) in an ESU. The ESA requires that we review the status of the species based upon the ''best available'' scientific and commercial information, and in many instances the agency must rely on qualitative analyses of surrogate information when quantitative genetic data are not available to assist in determining the ''species'' under consideration. For this rulemaking, in lieu of empirical genetic data, we relied on a number of strong biological indicators to inform a qualitative assessment of the level of reproductive isolation and evolutionary divergence, such as stock isolation, selection of run timing, the magnitude and regularity of incorporating natural broodstock, the incorporation of out-of-basin or out-of-ESU eggs or fish, mating protocols, behavioral and life-history traits, *etc.*

Issue 2: One commenter disapproved of our approach of evaluating the ESU membership of hatchery fish in terms of individual hatchery programs. The commenter recommended that ESU membership be based on broodstock source, recognizing that a given broodstock may be propagated at several hatchery facilities. The commenter felt that our approach of evaluating hatchery programs confused three important issues: the broodstock source, history, and genetic management of the hatchery fish; the management practices of the hatchery program producing the hatchery fish (such as the timing and location of releasing hatchery fish); and the life-history characteristics of the local natural population where a hatchery stock is being released. The commenter was concerned that evaluating and listing hatchery fish by hatchery program could erroneously result in one group of hatchery fish from a given broodstock source being included in an ESU, and another group of hatchery fish from the same broodstock source not being included in the ESU.

Response: The commenter is correct that our approach could, and did, result in hatchery programs being excluded from an ESU despite having been derived from the same broodstock lineage as other hatchery programs included in the ESU. However, we feel it would be inappropriate to determine the ESU membership of hatchery fish solely on the basis of broodstock lineage to the exclusion of a case-by-case analysis of the past and present practices of hatchery programs producing fish within the geographic range of an ESU. The commenter correctly points out that individual hatchery programs may differ in their broodstock lineage, hatchery practices, and the specific ecological conditions into which the hatchery fish are released. The broodstock used represents the raw genetic resources brought into a hatchery program, and provides one useful predictor of ESU membership. How these raw genetic resources are managed and the specific environmental and ecological conditions into which the hatchery fish are released are also key determinants of whether a group of hatchery fish is part of an ESU. Critical considerations in evaluating the relationship of hatchery fish to an ESU include whether it reflects: (1) The level of reproductive isolation characteristic of the natural populations in the ESU; and (2) the ecological, life-history, and genetic diversity that compose the ESU's evolutionary legacy. Information regarding the origin, isolation, and broodstock source and mating protocols of a hatchery program help determine its level of reproductive isolation from the local natural population(s) in an ESU. Information regarding the behavioral and life-history traits of the hatchery fish produced by a program relative to the locally adapted natural populations help inform evaluations of whether the hatchery fish are

representative of the ESU's evolutionary legacy. We feel that it is appropriate to evaluate the ESU membership of hatchery fish with respect to the specific hatchery programs producing them.

Issue 3: Many commenters felt that hatchery-origin fish should not be included in ESUs. The commenters discussed scientific studies demonstrating that hatchery-origin fish differ from naturally-spawned fish in physical, physiological, behavioral, reproductive and genetic traits. Commenters argued that hatchery-origin and natural-origin fish should not be included in the same ESU because of these differences.

Response: We do not agree that hatchery-origin fish should be universally excluded from ESUs. As articulated in the final Hatchery Listing Policy in this edition of the **Federal Register**, important genetic resources for the conservation and recovery of an ESU can reside in fish spawned in a hatchery as well as in fish spawned in the wild. The established practice of incorporating local natural-origin fish into hatchery broodstock can result in hatchery stocks and natural populations that are not reproductively isolated and that share the same genetic and ecological evolutionary legacy. Under the final Hatchery Listing Policy we determine the ESU membership of hatchery fish by conducting a case-by-case evaluation of the relationship of individual hatchery stocks to the local natural population(s) on the basis of: Stock origin and the degree of known or inferred genetic divergence between the hatchery stock and the local natural population(s); and the similarity of hatchery stocks to natural populations in ecological and life-history traits. Although certain hatchery programs will be determined to be reproductively isolated and not representative of the evolutionary legacy of an ESU (and hence not part of the ESU), we do not believe that such a conclusion is universally warranted for all hatchery stocks. Many hatchery stocks are reproductively integrated with natural populations in an ESU and continue to exhibit the local adaptations composing the ESU's ecological and genetic diversity. We recognize that artificial selection in the hatchery environment may be unavoidable, that a well-managed hatchery stock could eventually diverge from the evolutionary lineage of an ESU, and that a poorly managed hatchery stock could quickly diverge from the evolutionary lineage of an ESU. However, the potential for divergence is not adequate justification for the universal exclusion of hatchery fish from an ESU. Consistent with the ESU policy, a hatchery program should be excluded from an ESU if the hatchery stock exhibits genetic, ecological or life-history traits indicating that it has diverged from the evolutionary legacy of the ESU.

Issue 4: Many commenters felt that hatchery-origin fish should be considered only as a threat to the persistence of Pacific salmon and *O. mykiss* ESUs. The commenters cited scientific studies indicating that artificial selection in hatcheries can result in diminished reproductive fitness in hatchery-origin fish in only one generation. Commenters also noted scientific studies describing negative ecological, reproductive, and genetic effects of hatchery stocks on natural populations. The commenters were concerned that including hatchery fish in assessments of extinction risk reduces the importance of conserving self-sustaining populations in the wild, and inappropriately equates naturally produced fish and fish produced with ease in a hatchery.

Response: We do not agree that all hatchery programs, and the hatchery fish they produce, can be universally regarded as threats to salmon and *O. mykiss* ESUs. There are so many different ways in which hatchery-origin fish interact with natural populations and the environment that there can be no uniform conclusion about the potential contribution of hatchery-origin fish to the survival of an ESU. As described in the final Hatchery Listing Policy elsewhere in this edition of the **Federal Register**, the consideration of hatchery-origin fish in evaluating the level of extinction risk of an ESU requires a case-by-case analysis of the risks, benefits, and uncertainties of specific hatchery stocks within the geographical area of an ESU. The risks and benefits of artificial propagation to the survival of an ESU over the long term are highly uncertain. The presence of well distributed self-sustaining natural populations that are ecologically and genetically diverse provides the most certain predictor that an ESU is not likely to become endangered in the foreseeable future. The presence of carefully designed and operated hatchery programs, under certain circumstances, may mitigate the risk of extirpation for severely depressed populations in the short term, and thereby reduce an ESU's immediate risk of extinction. Whether the contributions of a hatchery program or group of hatchery programs will warrant an ESU being listed as ''threatened'' rather than ''endangered'' will depend upon the specific demographic risks facing natural populations within the ESU, the availability and condition of the surrounding natural habitat, as well as the factors that led to the ESU's decline and current threats limiting the ESU's recovery.

Issue 5: A few commenters felt that extinction risk should be evaluated based on the total abundance of fish within the defined ESU without discriminating between fish of hatchery or natural origin. These commenters contended that the District Court in *Alsea* ruled that once an ESU is defined, risk determinations should not discriminate among its components. The commenters described the risk of extinction as the chance that there will be no living representatives of the species, and that such a consideration must not be biased toward a specific means of production (artificial or natural).

Response: The *Alsea* ruling does not require any particular approach to assessing extinction risk. The court ruled that if it is determined that a DPS warrants listing, all members of the defined species must be included in the listing. The court did not rule on how the agency should determine whether the species is in danger of extinction or likely to become so in the foreseeable future. The commenters assert that the viability of an ESU is determined by the total numbers of fish. The risk of extinction of an ESU depends not just on the abundance of fish, but also on the productivity, spatial distribution, and diversity of its component populations (Viable Salmonid Populations (VSP) factors; McElhany *et al.*, 2000; Ruckelshaus *et al.*, 2002). In addition to having sufficient abundance, viable ESUs and populations have sufficient productivity, diversity, and a spatial distribution to survive environmental variation and natural and human catastrophes. The commenters also assume that hatchery managers will continue to produce the same numbers of the same stock and quality of fish with the same success as in the past. In many cases, such assumptions are not warranted.

Issue 6: One commenter noted that the proposed ESU delineations included ''naturally spawned fish'' within a given geographical area, and was concerned that as defined the ESUs might be misinterpreted to include the naturally spawned progeny of hatchery fish not included in the ESU. The commenter was concerned that the naturally-spawned progeny of these out-of-ESU hatchery fish would inadvertently be afforded the protections of the ESA, potentially constraining conservation measures intended to reduce the

negative impacts of these fish on listed local natural populations.

Response: The final rule defines ESUs as naturally spawned fish originating from a defined geographic area, plus hatchery fish from certain enumerated hatchery programs. It is possible that within any geographic area there may be out-of-ESU hatchery strays spawning with other out-of-ESU hatchery strays to produce progeny that biologically would not be considered part of the ESU. As a practical matter, however, it is seldom possible to distinguish the progeny of these matings from the progeny of within-ESU natural spawners, without elaborate (and potentially inconclusive) tests. Accordingly, we have defined the ESUs to make the listings unambiguous and the ESA protections easily enforceable.

Of the 16 ESUs addressed in this final rule, four ESUs have associated out-of-ESU hatchery programs: the Lower Columbia River Chinook, Upper Columbia River spring-run Chinook, Puget Sound Chinook, and Snake River spring/summer-run Chinook ESUs. In some instances the progeny of out-of-ESU hatchery fish may be distinguished by distinct patterns of habitat use, spawning location, run timing, or other means. In such a case we may determine that protection of those fish is not necessary for conservation of the ESU and approve actions that result in take, through sections 4(d), 7(a)(2), 10(a)(1)(A) or 10(a)(1)(B) of the ESA, as appropriate. NMFS will also use these statutory authorities to minimize harmful impacts to the listed ESUs from out-of-ESU hatchery fish spawning in the wild.

General Comments on the Consideration of Protective Efforts

Issue 7: Several commenters criticized the evaluation of efforts being made to protect the species in the proposed listing determinations (see 69 FR at 33142 through 33157; June 14, 2004). The commenters argued that the joint NMFS/FWS ''Policy for Evaluation of Conservation Efforts When Making Listing Decisions'' (''PECE''; 68 FR 15100; March 28, 2003) does not apply to currently listed species. In addition to this criticism the commenters felt that our treatment of protective efforts in the proposed listing determinations failed to address the criteria required under PECE for evaluating the certainty of implementation and effectiveness of protective efforts. (The commenters also provided criticisms specific to the consideration of protective efforts for the Sacramento River winter-run Chinook ESU, see Issue 13 in the ''Comments on ESU-specific Issues'' section, below).

Response: Section 4(b)(1)(A) of the ESA requires the Secretary of Commerce to make listing determinations ''solely on the basis of the best scientific and commercial data available * * * after conducting a review of the status of the species *and after taking into account those efforts, if any, being made * * * to protect such species*'' (emphasis added). When making listing determinations, we therefore evaluate efforts being made to protect the species to determine if those measures reduce the threats facing an ESU and ameliorate its assessed level of extinction risk. In judging the efficacy of protective efforts, we rely on the guidance provided in PECE. PECE provides direction for the consideration of protective efforts identified in conservation agreements, conservation plans, management plans, or similar documents (developed by Federal agencies, state and local governments, tribal governments, businesses, organizations, and individuals) that have not yet been implemented, or have been implemented but have not yet demonstrated effectiveness. The policy articulates 15 criteria for evaluating the certainty of implementation and effectiveness of protective efforts to aid in determination of whether a species should be listed as threatened or endangered. Evaluations of the certainty an effort will be implemented include whether: The necessary resources (*e.g.*, funding and staffing) are available; the requisite agreements have been formalized such that the necessary authority and regulatory mechanisms are in place; there is a schedule for completion and evaluation of the stated objectives; and (for voluntary efforts) the necessary incentives are in place to ensure adequate participation. The evaluation of the certainty of an effort's effectiveness is made on the basis of whether the effort or plan: establishes specific conservation objectives; identifies the necessary steps to reduce threats or factors for decline; includes quantifiable performance measures for the monitoring of compliance and effectiveness; incorporates the principles of adaptive management; and is likely to improve the species' viability at the time of the listing determination.

The commenters are correct that PECE does not explicitly apply to changing a species' listing status from endangered to threatened, or to delisting actions. NMFS and FWS noted that recovery planning is the appropriate vehicle to provide case-by-case guidance on the actions necessary to delist or change a species' listing status. The agencies left open whether specific policy guidance would be developed to instruct the consideration of conservation efforts for the purposes of changing a species' listing status or delisting a species, and such guidance has not yet been developed. Recovery planning efforts for the listed ESUs under review have not progressed to the point that they can provide guidance on the specific actions that would inform a decision to delist or change an ESU's listing status. In lieu of further policy guidance, PECE provides a useful and appropriate general framework to guide consistent and predictable evaluations of protective efforts.

We agree with the commenters that the regional summary of protective efforts provided as part of the proposed listing determinations does not provide a detailed treatment of the fifteen criteria articulated in PECE. However, only one of the proposed listings for the 16 ESUs addressed in this notice relied on the determination that protective efforts ameliorated risks to an ESU's abundance, productivity, spatial structure, and diversity as a basis for proposing that a previously endangered species be listed as threatened (the Sacramento River winter-run Chinook ESU). (The final listing determination for the Sacramento River winter-run Chinook ESU does not rely on an evaluation of protective efforts.) Our review of protective efforts provided in the proposed listing determinations concluded that the efforts do not as yet individually or collectively provide sufficient certainty of implementation and effectiveness to alter the assessed level of extinction risk for the other ESUs under review. A detailed documentation of the fifteen criteria articulated in PECE is not necessary unless we rely on protective efforts to overcome our assessment of extinction risk and the five factors identified in ESA section 4(a)(1).

Comments on Protective Regulations

Issue 8: Several commenters believe the ESA does not allow us to apply different levels of protections to hatchery and natural-origin fish in an ESU by not applying the take prohibitions to threatened hatchery fish that have had their adipose fin removed prior to release into the wild. The commenters argue that the *Alsea* ruling found that all fish included in an ESU must be protected equally if it is found that the ESU in-total warrants listing.

Response 14: The *Alsea* ruling does not require us to implement protective regulations equally among components of threatened ESUs. The *Alsea* ruling found that the ESA does not allow us to

list a subset of a DPS or ESU, and that all components of an ESU (natural populations, hatchery stocks, and resident populations) must be included in a listing if it is determined that an ESU warrants listing as threatened or endangered.

The section 9(a) take prohibitions (16 U.S.C. 1538(a)(1)(B)) apply to species listed as endangered. In the case of threatened species, ESA Section 4(d) leaves it to the Secretary's discretion whether and to what extent to promulgate protective regulations. Section 4(d) of the ESA states that ''[w]henever a species is listed as a threatened species * * *, the Secretary shall issue such regulations *as he deems necessary and advisable* to provide for the conservation of such species' [emphasis added]. ''The Secretary may * * * prohibit with respect to any threatened species any act prohibited under section 9(a)(1) * * * with respect to endangered species.'' This gives the Secretary flexibility under section 4(d) to tailor protective regulations that appropriately reflect the biological condition of each threatened ESU and the intended role of listed hatchery fish.

We find that it is necessary and advisable for conservation of the ESUs to prohibit take only of natural-origin fish and hatchery fish with the adipose fin left intact. The majority of hatchery programs produce fish for harvest rather than for conservation. Protecting those fish intended for harvest is not necessary for the conservation of the ESU. To the contrary, if too many hatchery fish are allowed to spawn naturally, it may pose ecological and genetic risks to the natural populations in the ESU. Removal of some hatchery fish before they are allowed to spawn may thus be necessary for the conservation of some ESUs. This concern is discussed in more detail in the final Hatchery Listing Policy elsewhere in this edition of the **Federal Register**.

Hatchery production that is surplus to conservation needs may thus create population pressures that cannot be relieved except through harvest of the surplus. An alternative approach to conservation would be to simply produce fewer hatchery fish. While reducing hatchery production might be another option for addressing this threat, the hatchery production itself is in many cases important for redressing lost treaty harvest opportunities (as well as meeting other societal values). Allowing the continued production of hatchery fish for harvest, and not prohibiting the take of listed marked hatchery fish, balances the conservation needs of listed ESUs against other Federal obligations.

Issue 9: Several commenters were concerned that excluding threatened hatchery fish with a clipped adipose fin (hereafter, ''ad-clipped'') from 4(d) protections would be perceived by managers as strong pressure to expand the use of mark-selective fisheries. (A ''mark-selective'' fishery is one in which anglers can retain only ad-clipped hatchery fish, while any unmarked fish that are caught must be released. Mark-selective fisheries are intended to protect the weaker stock(s) in a mixed-stock fishery, while allowing for harvest opportunities on stronger stocks. Mass-marking by clipping the adipose fins of hatchery fish that are intended for harvest is used to provide an easily distinguished visual cue for anglers). Some of these commenters suggested an alternative would be to prohibit the take of ''naturally spawned fish,'' and fish from specified conservation hatcheries.

Commenters also noted that many ad-clipped hatchery fish are released from conservation programs for recovery purposes and thus merit take prohibitions. The commenters were concerned that the proposed 4(d) protective regulations would require conservation hatchery managers to release hatchery fish with their adipose fins intact so that the take prohibitions would apply. The commenters argued that this would force hatchery managers to use alternative marking methods that are more expensive, more difficult to implement, and less effective.

Response: The amended prohibitions do not mandate that listed hatchery fish be ad-clipped, nor do they mandate the use of mark-selective fisheries. State and tribal hatchery and fishery managers use an array of management tools depending on the needs of individual salmonid populations and resource use objectives. Among these tools are mass marking and mark-selective fisheries. Although the amended protective regulations do not require it, ad-clipping may be the best strategy to achieve their goals for some hatchery programs. These ad-clipped hatchery fish can be harvested in fisheries that have appropriate ESA authorization, including, but not limited to, mark-selective fisheries. However, the amended 4(d) protective regulations do not mandate any particular management strategy provided the strategy is consistent with the conservation and recovery objectives of listed ESUs. An alternative approach would have been to prohibit the take of naturally spawned fish and fish from specific conservation hatcheries. We have instead chosen to rely on the adipose-fin clip because it provides a readily identifiable and enforceable feature for distinguishing those fish protected by the ESA take prohibitions.

The commenters are correct that hatchery fish intended for conservation purposes will not be afforded ESA protection against take if they are released with a clipped adipose fin. Managers of conservation hatchery programs may choose to use alternative marking methods to assist research and monitoring efforts such that the take prohibitions apply to the fish they produce. We acknowledge that the prospect of listing more than 130 West Coast hatchery programs presents challenges to hatchery and fishery management in California, Oregon, Washington, and Idaho. We believe that exempting ad-clipped fish from the take prohibitions is the preferable regulatory option, as compared to the alternative of prohibiting take of all listed hatchery fish. Allowing for the take of listed ad-clipped hatchery fish provides a clearly enforceable distinction for when take prohibitions apply, and provides additional flexibility to more effectively manage fisheries, control the number and proportion of hatchery fish spawning in the wild, and minimize potentially adverse impacts of hatchery fish on natural populations. Although the proposed approach provides management flexibility, we recognize that it may present some challenges. We will continue to work with state and tribal managers to address any challenges in a way that minimizes adverse impacts on affected parties, while achieving conservation and resource use objectives for listed ESUs.

Issue 10: A few commenters felt that NMFS should extend the ''grace period'' for applications for coverage under the 4(d) limits to: Apply to applications for all limits rather than just for scientific research and enhancement activities; allow for more than 60 days to submit an application; and allow for more than 6 months to obtain approval under a 4(d) limit. The commenters felt sufficient time must be allowed for entities to prepare and process applications for 4(d) coverage. The commenters were concerned that NMFS does not have the necessary resources to process applications and issue authorizations within 6 months, given the likely high volume of new 4(d) applications and the significant administrative burden associated with processing and authorizing 4(d) applications. The commenters stressed that any delays in issuing authorizations under 4(d) would disrupt important fisheries and would also risk impeding progress on important recovery efforts.

Response: We are concerned about the potential for disruption of ongoing scientific research, monitoring, and conservation activities, especially during the coming summer/fall field seasons. Consistent with the previously promulgated 4(d) protective regulations, the amended regulations finalized in this notice include a ''temporary'' limit or 6-month grace period for ongoing scientific research and enhancement activities provided a permit application is received by NMFS within 60 days of this notice (see **DATES**, above). Applicants will be subject to the take prohibitions if their permit application is denied, rejected as insufficient, or the 6-month grace period expires, whichever occurs earliest.

We do not feel that a similar 6-month grace period is warranted for limits addressing other activities affecting threatened ESUs. In this notice we are amending existing 4(d) protective regulations for threatened ESUs that are already listed under the ESA (except for the Lower Columbia River coho ESU, which is a new threatened listing). Thus, activities affecting the subject ESUs already have ESA coverage through the existing 4(d) protective regulations, through section 10 permits, as a result of section 7 consultation, or are in the process of obtaining such authorization. The amended 4(d) protective regulations will become effective within 60 days of the publication of this notice (see **DATES**, above). We believe that the grace period allows sufficient time to amend existing ESA authorizations consistent with the revised 4(d) protective regulations. Some activities will not need ESA coverage immediately after the amended protective regulations go into effect because the actions do not affect listed species. We will work with regional co-managers to prioritize activities and programs on the basis of how urgently each needs ESA coverage.

We have anticipated that processing new 4(d) applications submitted in response to the amended 4(d) protective regulations will increase agency workload. As a result, we are evaluating our resource needs and are fully committed to meeting future program demands. We encourage entities to work together in developing plans for 4(d) approval that cover wide geographic scales and multiple activities, thus reducing the number of individual programs that need to be reviewed. While enforcement may be initiated against activities that take protected salmonids, our clear preference is to work with persons or entities to promptly shape their programs and activities to include credible and reliable conservation measures for listed salmon and *O. mykiss* ESUs.

Issue 11: Two Federal agencies (the Bureau of Land Management (BLM), and the U.S. Forest Service (FS)) requested that we amend the limits concerning land management activities on state, private, and tribal lands to include activities on Federal lands that implement regional Land Resource Management Plans (LRMPs) and aquatic conservation strategies. The BLM and FS recognized that including Federal lands in these limits on the take prohibitions would not eliminate their requirement to consult under section 7 of the ESA. However, BLM and FS felt that extending these limits to Federal lands would make the section 7 consultation process more efficient, and minimize or eliminate the need to develop and implement reasonable and prudent measures, as well as mandatory terms and conditions for actions covered under a section 7 Incidental Take Statement.

Response: It is not possible to extend existing 4(d) limits to cover Federal activities implemented under FS and BLM LRMPs because the existing limits address land management activities conducted under differing regulatory authorities and relationships. If we were to adopt a new 4(d) limit covering the LRMPs, it would require review and approval of specific activities, similar to the current 4(d) limits. The LRMPs address general classes of FS and BLM actions, and lack the specificity required for a 4(d) limit. For a 4(d) limit to cover future unidentified actions, without subsequent review and approval, the limit would have to specify narrowly defined activities to be conducted according to strict guidelines within stringent project management conditions. Adopting limits that require subsequent review and approval would not provide any relief to Federal agencies and would, to the contrary, increase regulatory review.

As the BLM and FS acknowledged, the 4(d) limits on the take prohibitions 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 listed species. The various 4(d) limits may be useful to Federal agencies as guidance in developing and implementing their conservation programs. To the extent that Federal actions subject to section 7 consultation are consistent with the terms of a 4(d) limit, the consultation process may be greatly simplified. However, granting BLM's and FS'' request to explicitly include certain Federal activities in several 4(d) limits would not diminish their section 7 obligations.

Comments on ESU-Specific Issues

Issue 12: We received many helpful ESU-specific comments of an editorial nature. These comments noted inadvertent errors in the proposed listing determinations and offered non-substantive but nonetheless clarifying changes to wording.

Response: We have incorporated these editorial-type comments in the ESU definitions, descriptions of ESU status, and the final listing determinations. As these comments do not result in substantive changes to this final rule, we have not detailed the changes made.

Sacramento River Winter-Run Chinook ESU

Issue 13: Several commenters contended that our proposal to reclassify the endangered Sacramento River winter-run Chinook ESU as threatened was not justified because the BRT concluded it was at a high risk of extinction and we overstated the benefits of protective efforts such as the Battle Creek restoration project. They argued that this program in particular was uncertain to be fully implemented, funded, or successful in establishing a second population of this ESU in Battle Creek. In addition, they argued that 2004 changes in the Central Valley Project operations criteria (CVP–OCAP) provided less protection for this ESU than did the previous water project operational criteria.

Response: We acknowledge the BRT concluded this ESU still continues to be at a high risk of extinction, primarily because of concerns about the spatial structure (the ESU is represented by a single population) and the loss of diversity. As indicated in the proposed rule, however, we believe that many important protective efforts have been implemented over the past 10 to 15 years that have contributed to the increased abundance and productivity of this ESU in recent years, as have favorable ocean conditions. These protective efforts include changes in the operation of the Central Valley and State Water Projects, implementation of many CALFED Bay-Delta Program (CALFED) and other habitat restoration projects (*e.g.*, screening of water diversions), changes in ocean and freshwater harvest management, and successful implementation of the hatchery supplementation program at Livingston Stone National Fish Hatchery (NFH). We agree with commenters, however, that the Battle Creek restoration project, which was cited in the proposed rule to support the proposed reclassification,

has not been fully implemented and that its funding and future success are uncertain at this time.

We disagree, however, that the 2004 CVP–OCAP provides less protection to this ESU than previous water project operations criteria. The new CVP–OCAP continues to provide adequate control of temperatures for spawning in the upper Sacramento River despite changes in the temperature control point and carryover storage requirements. We fully analyzed the new CVP–OCAP operations in a biological opinion issued in 2004 and concluded that these operational changes would not jeopardize the continued existence of this ESU.

In light of the concerns raised about the adequacy and benefits of protective efforts for this ESU, particularly the Battle Creek restoration project, we are withdrawing our proposal to reclassify this ESU as threatened. We conclude that the Sacramento River winter-run Chinook ESU continues to warrant listing as an endangered species. We will continue to monitor the status of this ESU and the implementation of protective efforts throughout the California Central Valley. We may reconsider reclassification of the ESU's listing status in the future as these protective efforts mature (the Battle Creek restoration project in particular) and are fully implemented, and their certainty of effectiveness can be more fully assessed.

Central Valley Spring-Run Chinook

Issue 14: Several commenters questioned whether naturally spawning spring-run Chinook in the Feather River should be included in the listed ESU given that they are genetically similar to the Feather River Hatchery stock which was not proposed as part of the Central Valley spring-run Chinook ESU.

Response: We agree with the commenters that naturally spawning spring-run Chinook in the Feather River are genetically similar to the Feather River Hatchery spring-run Chinook stock. Although the hatchery stock shows evidence of introgression with Central Valley fall-run Chinook and is divergent from other within-ESU naturally spawning populations in Deer, Mill and Butte Creeks, both the Feather River naturally spawning population and the Feather River Hatchery spring-run Chinook stock continue to exhibit a distinct early-returning spring-run phenotype. NMFS' SSHAG report (NMFS, 2003a) found that if it was determined that the naturally spawning spring-run Chinook population in the Feather River was part of the ESU, then the Feather River Hatchery spring-run Chinook stock might also be considered part of the ESU. NMFS' Central Valley Technical Recovery Team believes that this early run timing in the Feather River represents the evolutionary legacy of the spring-run Chinook populations that once spawned above Oroville Dam, and that the extant population in the Feather River may be the only remaining representative of this important ESU component (NMFS, 2004d). The Feather River Hatchery spring-run Chinook stock may play an important role in the recovery of spring-run Chinook in the Feather River Basin as efforts progress to restore natural spring-run populations in the Feather and Yuba Rivers. The California Department of Fish and Game (CDFG) has recently initiated marking of all early returning fish to the Feather River Hatchery, and is incorporating only those early-run fish into the Feather River Hatchery spring-run Chinook stock. The California Department of Water Resources also plans to construct a weir to create geographic isolation for spring-run Chinook in the Feather River. These efforts are intended to reduce introgression by Central Valley fall-run Chinook, thereby further isolating and preserving this important early-returning spring-run Chinook phenotype in the Feather River. Recent results indicate that a small percentage of these marked early-run hatchery fish (*i.e.*, those that do not return to the hatchery or are not harvested) are spawning naturally in the Feather River. Based on a consideration of this information, we have determined that: (1) The naturally spawning population of spring-run Chinook in the Feather River represents the level of reproductive isolation and the evolutionary legacy of the ESU, and thus warrants inclusion in the ESU; and (2) the Feather River Hatchery spring-run Chinook stock is no more divergent relative to this local natural population than would be expected between two closely related populations in the ESU, and thus it also warrants inclusion in the ESU. Accordingly, we have revised the ESU definition of the Central Valley spring-run Chinook ESU in this final rule to include the natural population of spring-run Chinook in the Feather River as well as the Feather River Hatchery spring-run Chinook stock (see the ''Determination of 'Species' under the ESA'' section, below).

Upper Willamette River Chinook ESU

Issue 15: The Oregon Department of Fish and Wildlife (ODFW) felt that the Clackamas Hatchery spring-run Chinook program (ODFW stock #19), which was proposed for inclusion in the Upper Willamette River Chinook ESU, should not be included as part of the ESU. ODFW contended that the Clackamas Hatchery should be excluded from the ESU because the program consists of a long-term domesticated broodstock founded from a mix of non-local (but within ESU) populations, and the program is managed for isolation between the hatchery stock and the local natural populations.

Response: The Clackamas spring Chinook broodstock (ODFW stock #19) was initiated in 1976 and is the most recently founded broodstock in the entire ESU. Since hatchery fish released from this program were not all externally marked until 1997, it is unknown how many natural-origin fish have been incorporated into the broodstock since the program was initiated. However, based on the number of natural-origin fish that have entered the hatchery over the last 3 years since all hatchery returns have been marked, it is likely some natural-origin fish have been incorporated regularly into the broodstock since it was established. When this hatchery program began, naturally-produced spring Chinook numbered in the hundreds. It is likely that the subsequent increases in the number of natural-origin Clackamas spring-run Chinook includes the progeny of naturally spawning hatchery-origin fish from the Clackamas Hatchery. Based on this information, the Clackamas Hatchery stock is likely no more divergent from the local natural population than are closely related natural populations in the ESU, and thus it is appropriate for this hatchery stock to be included as part of the Upper Willamette River Chinook ESU.

Lower Columbia River Chinook ESU

Issue 16: ODFW felt that the Big Creek tule (Big Creek, OR) fall-run Chinook hatchery program, which was proposed for inclusion in the Lower Columbia River Chinook ESU, should not be included in the ESU. ODFW contended that the Big Creek tule Chinook program is substantially diverged from the local natural populations in the ESU because it has incorporated non-local (but within ESU) fish in the hatchery broodstock, and the program is unable to actively collect and incorporate natural-origin fish into the broodstock because returning hatchery-origin fish are unmarked and indistinguishable from returning natural-origin fish.

Response: We respectfully disagree with ODFW's contention that the Big Creek Tule fall-run Chinook hatchery program should be excluded from the Lower Columbia River Chinook ESU. The Big Creek Hatchery program has

been releasing hatchery tule fall-run Chinook into Big Creek since 1941 and has incorporated non-local (but within-ESU) hatchery and naturally produced fall-run Chinook into the hatchery broodstock. The program is currently using only hatchery-origin and natural-origin fish returning to Big Creek Hatchery. The level of natural-origin tule fall-run Chinook that are used in the broodstock is unknown due to the low marking rate of hatchery fall-run Chinook released from the facility. However, natural production within this population has been swamped by a high proportion of naturally spawning hatchery-origin fish, and available spawning habitat is constrained by the weir at the hatchery. Consequently, the distinction between the natural-origin and hatchery-origin fall Chinook is minimal. Presently, Big Creek Hatchery fall Chinook are probably not distinguishable from the existing natural population, and thus it is appropriate for this hatchery stock to be included as part of the ESU.

Puget Sound Chinook ESU

Issue 17: Two commenters felt that the Issaquah Creek (Cedar River, Washington), George Adams and Rick's Pond (Skokomish River, Washington), and Hamma Hamma (Westside Hood Canal, Washington) hatchery fall-run Chinook programs, which were not proposed for inclusion in the Puget Sound Chinook ESU, should be included and listed as part of the ESU. The commenters contended that recent genetic analyses (Spidle and Currens, 2005; Marshall, 2000a, 2000b), the broodstock source for the hatchery programs, and their spawning migration timing supported their inclusion in the ESU.

Response: The commenters reach different conclusions regarding the ESU membership of the subject hatchery programs largely because they evaluated their level of divergence relative to different reference natural populations than we did in the proposed listing determination for the Puget Sound Chinook ESU. After reviewing the comments received, other recently available scientific information, and the guidance provided in the final Hatchery Listing Policy, we agree with the commenters that the Issaquah Creek, George Adams, Rick's Pond, and Hamma Hamma fall-run Chinook hatchery programs should be included and listed as part of the ESU. Accordingly we have revised the defined ESU (see the ''Determination of 'Species' under the ESA'' section below) in this final listing determination. In the following paragraphs we provide a brief summary of the information considered in making this change from the proposed listing determination.

Each of the four hatchery programs addressed by the commenters presents a unique challenge in determining what the appropriate ''local natural population'' is for evaluating the level of genetic divergence exhibited by a hatchery program and for determining its ESU membership. These four hatchery programs produce hatchery stocks that are non-indigenous to the local area, but were derived from hatchery stocks founded elsewhere in the Puget Sound Chinook ESU (principally from the Green River hatchery stock lineage). If any existed, the historically native natural populations in the areas where these hatchery programs release their production have been extirpated and replaced by the introduced hatchery stocks (Ruckelshaus *et al.*, in press). Available genetic and tagging information indicates that the existing natural populations are derived from the introduced hatchery stocks and do not represent the historically present local populations. In evaluating the level of divergence exhibited by such a hatchery stock one might compare it to: (1) What is believed to have been the historically native natural population; (2) the out-of-basin natural population from which the hatchery stock was derived; or (3) the existing natural population in the local area that is largely, if not completely, derived from naturally spawning introduced hatchery fish. The commenters argue that the existing local natural population is the appropriate benchmark against which to evaluate a hatchery program's level of divergence. In developing the proposed ESU delineations, however, we evaluated hatchery programs relative to the natural populations from which they were founded, and considered several factors in determining their level of divergence (such as the incorporation of natural-origin fish into the hatchery broodstock, rearing and release practices, whether hatchery fish exhibit locally adaptive life-history traits reflective of the natural population, etc.).

The final Hatchery Listing Policy states that ''hatchery stocks with a level of genetic divergence relative to the *local natural population(s)* that is no more than what would be expected between closely related natural populations within the ESU * * * are considered part of the ESU'' [emphasis added]. In the proposed ESU delineation for the Puget Sound Chinook ESU we concluded that the Issaquah Creek, George Adams, Rick's Pond, and Hamma Hamma fall-run Chinook hatchery programs should not be included due to their non-indigenous origin, and their likely substantial divergence from the founding natural population and hatchery lineage. These programs are intended to produce fish for harvest in an isolated setting, and have not been designed or managed with the intention of seeding the local watersheds with hatchery fish that ecologically and genetically represent natural Chinook (WDFW, 2003a). Despite the intent of these programs, the existing natural populations are likely the progeny of naturally spawning hatchery fish from these non-local programs. Available information indicates that these four hatchery programs are no more diverged from the (existing) local natural populations than what would be expected between closely related natural populations within the ESU, and thus we conclude that they are part of the ESU.

In the proposed ESU determination for the Puget Sound Chinook ESU, we proposed excluding the Hoodsport fall-Chinook hatchery program from the ESU. Our conclusion, similar to the four hatchery programs discussed above, was based on an evaluation of divergence of the Hoodsport hatchery program relative to the stock from which it was derived. Upon re-evaluation consistent with the revised findings for the Issaquah Creek, George Adams, Rick's Pond, and Hamma Hamma hatchery programs, we conclude that the Hoodsport Hatchery program is not part of the ESU. Finch Creek, where the Hoodsport Hatchery program is located, historically and currently lacks an extant local natural Chinook salmon population.

Southern Oregon/Northern California Coast Coho ESU

Issue 18: One commenter disagreed with the proposed determination that the Southern Oregon/Northern California Coast coho ESU is threatened. The commenter asserted that the available data are inadequate to rigorously assess the risk of extinction of the ESU. The commenter further argued that the available data show increasing abundance in the ESU, and do not indicate that Southern Oregon/Northern California Coast coho salmon are likely to become endangered in the foreseeable future throughout all or a significant potion of its range. In addition, the commenter felt that the State of California's coho salmon recovery plan provides sufficient protections to remove the threat that the ESU will become endangered.

Response: We respectfully disagree with the commenter's conclusion that

the Southern Oregon/Northern California Coast coho ESU does not warrant listing. The commenter is correct that there are few data available for naturally spawned populations in the ESU, particularly for the portion of the ESU in California. (The Rogue River population in Oregon is the notable exception, providing the only robust time series of natural-origin abundance in the ESU.) The BRT's status review update report and our proposed threatened determination for this ESU acknowledged this paucity of data for populations in California. However, the ESA requires that we make listing determinations ''solely on the basis of the best scientific and commercial data *available* * * *'' [emphasis added] (ESA section 4(b)(1)(A)). The BRT evaluated all available indices of spawner abundance, and historical and current distribution. The strong majority of the BRT concluded that the ESU is ''likely to become endangered in the foreseeable future.'' The recent increases in ESU abundance noted by the commenter were fully considered by the BRT and in the proposed listing determination. The BRT was encouraged by indications of strong returns in 2001 for several California populations and an apparent increase in the distribution of coho in historically occupied streams. However, the BRT cautioned that the recent increase in abundance and distribution, presumably due to a combination of favorable freshwater and marine conditions, must be evaluated in the context of more than a decade of poor ESU performance, remaining concerns regarding the high level of hatchery production in the ESU, and the loss of local populations in several river systems.

In developing the proposed threatened listing determination for the Southern Oregon/Northern California Coast coho ESU, we considered the potential contributions of many conservation measures, including California's 2003 State listing of coho, and its subsequent efforts in developing and implementing a comprehensive recovery plan for coho in the State (69 FR at 33148; June 14, 2004). We concluded that if ''successfully implemented the State recovery plan will provide substantial benefits to both the Central California Coast and Southern Oregon/Northern California Coast coho ESUs, however, the long-term prospects for plan funding and implementation are uncertain.'' Although a wide range of important protective efforts have been implemented in both Oregon and California, these protective efforts, as yet, do not sufficiently reduce threats to the ESU. Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the conclusion that the Southern Oregon/Northern California Coast coho ESU is threatened.

Lower Columbia River Coho ESU

Issue 19: The Washington Department of Fish and Wildlife (WDFW) argued that the Kalama River Type-N and Type-S hatchery coho programs, which were not proposed for inclusion in the Lower Columbia River coho ESU, should be considered part of the ESU. WDFW acknowledged that the number of local natural-origin fish incorporated in the broodstock for these hatcheries is unknown prior to 1998, and for the Kalama River Type-N hatchery program, non-local sources of broodstock have been used when there were insufficient returns of local fish to meet the program's broodstock needs. However, WDFW noted that adults returning to the Kalama Basin are given priority for incorporation into the hatchery broodstock, and for the Kalama River Type-S hatchery these fish have been sufficient to meet the broodstock needs of the program. In 2004 WDFW proposed integrating the maximum possible level of natural-origin fish into the respective broodstocks for these programs.

WDFW also noted that the Washougal Type-N hatchery coho program was evaluated in NMFS' Salmonid Hatchery Inventory and Effects Evaluation Report (NMFS, 2004b) and recommended for inclusion in the ESU, but apparently was inadvertently omitted from the proposed listing determination. WDFW recommended that the Washougal Type-N hatchery coho program be included as part of the Lower Columbia River coho ESU.

ODFW opposed the inclusion of Oregon hatchery coho programs in the Lower Columbia River coho ESU. ODFW argued that the Big Creek Hatchery (ODFW stock # 13), Sandy Hatchery (ODFW stock # 11), Bonneville/Cascade/Oxbow Complex (ODFW stock # 14), and Eagle Creek NFH (ODFW stock # 19) broodstocks propagated at the Oregon hatchery facilities should not be regarded as part of the ESU as all are long-term domesticated broodstocks, all have incorporated various levels of out-of-basin (but within ESU) stocks, and all are managed for isolation between the hatchery stocks and any local natural coho populations. For these reasons ODFW recommended excluding the following Oregon hatchery coho programs from the Lower Columbia River coho ESU: Big Creek Hatchery (Big Creek, Oregon), Astoria High School STEP (Youngs Bay, Oregon), Warrenton High School STEP (Youngs Bay, Oregon), CEDC Coho Salmon Program (Youngs Bay, Oregon), Sandy Hatchery (Sandy River, Oregon), and the Bonneville/Cascade/Oxbow Complex (Lower Columbia River Gorge, Oregon) hatchery coho programs. ODFW also noted that the Eagle Creek NFH (Clackamas River, Oregon) coho hatchery program was apparently inadvertently omitted from the proposed listing determination.

Response: The commenters are correct that the Washougal Type-N and Eagle Creek NFH hatchery coho programs were inadvertently omitted from the proposed listing determinations. We have fixed that oversight by including these two programs as part of the Lower Columbia River coho ESU in the final listing determination (see ''Determination of Species under the ESA'' section, below).

We concur with WDFW that the Kalama River Type-N and Type-S hatchery coho programs should be included within the ESU (see ''Determination of Species under the ESA'' section, below). Although it is unknown if these programs represent the populations that were historically present, they do represent the current populations within the basin. Both Type-N and Type-S coho were historically present in the Kalama River but not in great abundance, with habitat limited to the area below Kalama Falls. Both natural and hatchery-origin Type-N and Type-S coho salmon were used in the broodstocks prior to 1998. Subsequently all hatchery production has been marked, and broodstocks were limited to only hatchery-origin coho from 1998 to 2004. In 2004, WDFW proposed to begin incorporating natural-origin coho into the broodstocks. The incorporation of Type-N coho salmon released into the Kalama River from other basins has occurred in recent years, though the origin of the Type-N coho is representative of the Type-N coho within the ESU. With implementation of WDFW's proposal to incorporate natural-origin coho salmon into the broodstock, the hatchery stock will become even more similar to the extant natural populations. The Type-S program has been self-sustaining (*i.e.*, it has not had to incorporate fish from other basins) since 1992.

We disagree with ODFW that the Big Creek Hatchery, Astoria High School STEP, Warrenton High School STEP, Sandy Hatchery, and the Bonneville/Cascade/Oxbow Complex hatchery coho programs should be excluded from the

Lower Columbia River coho ESU. We acknowledge that these programs have incorporated within-ESU hatchery coho from outside the local historical population(s) and that the hatcheries have been managed as isolated programs. However, these programs originated from within-ESU natural coho stocks and incorporated local natural-origin coho into the broodstock until the late 1990s (when the practice of mass marking hatchery coho was implemented and only marked hatchery-origin fish were incorporated into the broodstock). The Sandy Hatchery program has been the exception, having been developed from only Sandy River natural coho salmon with limited introductions from non-local ESU populations (the last of which occurred in 1952). Within the populations where these hatchery coho programs release their production, returning hatchery-origin adults contribute substantially to natural spawning. As described in the Salmonid Hatchery Inventory and Effects Evaluation Report (NMFS, 2004b; 2005b) and by the BRT (NMFS, 2003b) all of these hatchery programs represent the existing local spawning populations, and they also represent a large proportion of the remaining genetic material for many of the smaller tributaries within the ESU.

Issue 20: Several commenters were opposed to the proposed listing of the Lower Columbia River coho ESU. WDFW and ODFW suggested that conservation measures for coho and other salmonids in the Lower Columbia region, if evaluated pursuant to PECE, might substantially mitigate risks to the Lower Columbia River coho ESU such that it would not warrant ESA listing. In particular, the commenters highlighted the beneficial contributions of: (1) The Lower Columbia Fish Recovery Board's (LCFRB) recovery plan for salmonids in the Lower Columbia region; (2) the 1999 listing of Lower Columbia River coho as an ''endangered'' species on the State of Oregon's Endangered Species List; and (3) the recovery plan for Lower Columbia River coho developed and adopted by the Oregon Fish and Wildlife Commission in 2001, which specifies State conservation measures with respect to harvest, hatchery operations, fish passage, and habitat restoration necessary to achieve recovery goals.

Response: We respectfully disagree with the suggestion that conservation measures under the LCFRB and Oregon recovery plans substantially reduce risks to the ESU to the point that Lower Columbia River coho are not in danger of extinction or likely to become endangered in the foreseeable future. Of an estimated 23 historical populations in the ESU, there are only two extant populations in the Sandy and Clackamas Rivers, and approximately 40 percent of historical habitat is currently inaccessible. Of the extant populations, the total recent mean abundance is less than 1,500 naturally spawning adults, posing significant risks due to depensatory and stochastic demographic processes. The BRT found extremely high levels of risk to the ESU's abundance, productivity, spatial structure, and diversity, and the majority concluded that the ESU is ''in danger of extinction.'' In proposing Lower Columbia River coho as threatened, we concluded that the genetic reserve represented by the 21 hatchery programs within this ESU mitigated the immediacy of extinction risk in the short term. However, we cautioned that long-term reliance on the continued operation of these hatchery programs is inherently risky.

The commenters suggest that the LCFRB recovery plan and Oregon's Lower Columbia River coho recovery plan satisfy the criteria under PECE for certainty of implementation and effectiveness. PECE requires that conservation efforts provide such certainty at the time of a listing determination, and although we are very supportive of these recovery planning efforts, we feel that these efforts lack this certainty. For example, while the LCFRB and Oregon coho recovery plans lay out actions that, if implemented, would address threats to Lower Columbia River coho, all the laws and regulations necessary to implement those actions are not yet in place, nor is there a high level of certainty that the actions will be funded. Similarly, while the plans identify the nature and extent of threats to Lower Columbia River coho, they do not as yet address the full suite of PECE criteria for certainty of effectiveness (such as establishing quantifiable performance measures for monitoring compliance and effectiveness, and employing adaptive management). While we expect that as the plans evolve these elements will be developed, our listing determination must be based on whether the plans are *currently* certain to improve the status of the species.

As noted in PECE, ''there are circumstances in which the threats to a species are so imminent and/or complex that it will be almost impossible to develop an agreement or plan that includes conservation efforts that will result in making the listing unnecessary'' (68 FR at 15101; March 28, 2003). We are concerned that the severity of the demographic risks facing the two extant natural populations in the ESU makes it extremely unlikely that any conservation program or suite of programs could sufficiently mitigate extinction risk such that the ESU would not warrant listing.

Issue 21: In their comments on the proposed threatened determination for the Lower Columbia River coho ESU, ODFW noted that it was unclear whether the defined ESU includes naturally produced coho in the Willamette River Basin upstream of Willamette Falls (Oregon City, Oregon). ODFW noted that an apparently robust and self-sustaining population of coho has been established above the falls as a result of introductions of Lower Columbia River hatchery coho. These hatchery releases have been stopped, and the coho returning above the falls are naturally produced. ODFW recommended against including the coho population above Willamette Falls in the Lower Columbia River coho ESU because they occur outside of the native range of coho, and may pose a potential threat to native Upper Willamette spring-run Chinook and winter steelhead listed as threatened.

Response: The historical upstream extent of coho in the Willamette River Basin was Willamette Falls. Coho salmon returning to spawn in fall during low-flow conditions were unable to pass above the falls (only species with early spring migration timing during higher flow conditions, spring-run Chinook and winter steelhead, were historically able to pass above Willamette Falls (Myers *et al.*, 2001)). However, as early as 1885, fish ladders were constructed at the falls to aid the passage of anadromous fish in low flow conditions. The ladders have subsequently been modified and rebuilt, as recently as 1971 and 1975 (Bennett, 1987; PGE, 1994).

Although the coho population in the Upper Willamette River Basin is outside of the historical geographic range of the Lower Columbia River coho ESU, the question remains whether this population satisfies the criteria for inclusion in the ESU: (1) It is not substantially reproductively isolated from the ESU; and (2) it reflects the ESU's evolutionary legacy. The technical paper describing the ESU concept (Waples, 1991) notes that an introduced population outside of the historic range of the species may be considered part of an ESU if it supports natural production in areas that are ecologically similar to and geographically near the source natural population(s). The Upper Willamette River Basin is ecologically complex and

arguably shares ecological features with extant and historical coho populations in the Lower Columbia River coho ESU. However, it is worth noting that all of the anadromous salmonid species that historically spawned in the Upper Willamette River (*O. mykiss,* cutthroat trout, spring-run Chinook) are delineated into separate ESUs from lower Columbia River populations of the same species. The delineation of separate Upper Willamette River ESUs is based in part on historic genetic differences reflecting reproductive isolation, but also because of distinct ecological features.

We are uncertain whether the Upper Willamette River coho population is representative of the genetic lineage of the Lower Columbia River coho ESU. Introductions of coho into the Upper Willamette River Basin began on a regular basis in 1952 (Williams, 1983). Coho salmon (at various life-history stages) were released in the Willamette River and 17 major tributaries above Willamette Falls from thirteen different hatchery programs. The predominant hatchery stock released was from the Bonneville/Cascade/Oxbow Complex (considered within the ESU); however, several out-of-ESU hatchery stocks from the northern Oregon Coast were also introduced at several locations through the early 1970s. There is insufficient information to determine if this introduced coho population reflects the level of reproductive isolation in the Lower Columbia River coho ESU given the mixture of within-ESU and out-of-ESU hatchery stocks used to found the population, and the lack of genetic data to evaluate its level of divergence relative to the extant populations in the Sandy and Clackamas Rivers. Given this uncertainty, we do not feel that there is sufficient information to support including the Upper Willamette River coho population as part of the Lower Columbia River coho ESU at this time. If information becomes available indicating that the Upper Willamette River coho population is not substantially reproductively isolated from the Lower Columbia River coho ESU, we may take such opportunity to review the ESU membership of the introduced population.

Issue 22: Several commenters felt that we lack sufficient site-specific information to justify including co-occurring resident and anadromous *O. mykiss* in the same ESU. The commenters acknowledged that there is general evidence indicating that where the two life-history forms co-occur they interbreed, are genetically and phenotypically indistinguishable, and can produce offspring of the alternate life-history form. However, the commenters felt that we lack the population-specific genetic and behavioral information to extrapolate these observations universally to all populations and ESUs where resident and anadromous *O. mykiss* have overlapping distributions.

The commenters further noted that in the proposed listing determinations resident populations included in *O. mykiss* ESUs were determined to have minor contributions to the viability of the ESUs. (In the proposed listing determinations we concluded that, despite the reduced risk to abundance for certain *O. mykiss* ESUs due to qualitatively abundant rainbow trout populations, the collective contribution of the resident life-history form to the viability of an ESU in-total is unknown and may not substantially reduce an ESU's risk of extinction (NMFS, 2004; 69 FR 33102, June 14, 2004)). The commenters questioned why resident *O. mykiss* populations should be included in an ESU given that they have little, if any, contribution to the viability of the ESU.

Response: We believe that the best available scientific information indicates that: (1) Where resident and anadromous *O. mykiss* co-occur they share a common gene pool, and collectively exhibit the adaptive life-history, ecological, and behavioral traits composing an important component in the evolutionary legacy of the species; and (2) some components of an *O. mykiss* ESU will (on average) have a larger contribution to its viability, while other components will have a comparatively weaker contribution to the ESU's viability, with a persistence that may be dependent upon their connectivity with other more productive components of the ESU. However, we agree that substantial disagreement exists regarding the sufficiency and accuracy of the data. Several efforts are underway that may resolve scientific disagreement regarding the sufficiency and accuracy of data relevant to these ESUs (*i.e.*, the relationship between resident rainbow trout and anadromous steelhead and the contribution of resident rainbow trout to the viability of *O. mykiss* ESUs). We will gather more data and engage further debate among scientific experts before making final determinations regarding these ESUs. A separate notice of 6-month extension of the deadline for making final listing determinations on the *O. mykiss* ESUs appears in today's issue of the **Federal Register**.

Issue 23: In March 2005 the State of Oregon released a draft Oregon Coastal Coho Assessment (draft assessment) of the viability of the Oregon Coast coho ESU, as well as of the contributions of the Oregon Plan for Salmon and Watersheds to conserving the Oregon Coast coho ESU. Oregon's draft assessment concluded that the Oregon Coast coho ESU is viable. We announced in a **Federal Register** notice that we would be considering the information presented by Oregon in determining the final listing status for the ESU, and we solicited public comment on Oregon's draft assessment during a 30-day public comment period (70 FR 6840; February 9, 2005). The comments received by NMFS and Oregon raised a number of concerns regarding the sufficiency and adequacy of the data and analyses used in the draft assessment. On May 6, 2005, Oregon released a final Oregon Coastal Coho Assessment (final assessment) that incorporates and responds to the comments received, and includes several substantive changes intended to address the concerns raised regarding the sufficiency and adequacy of the draft assessment.

Response: We will extend the deadline for the final listing determination for the Oregon Coast coho ESU for 6 months to analyze Oregon's final assessment in light of the comments received on the draft assessment. Additionally, we are soliciting additional information regarding the sufficiency and adequacy of the final assessment. This extension will enable us to make a final listing determination based upon the best available scientific information. A separate notice of 6-month extension of the deadline for making a final listing determination on the Oregon Coast coho ESU appears in this issue of the **Federal Register**.

Summary of Changes From the Proposed Listing Determinations and Proposed Protective Regulations

Based on the comments received, we have made several substantive changes to the proposed ESU definitions and listing determinations, as discussed in the response to comments (above), and detailed below. We do not detail minor changes of an editorial nature (see Response to Issue 12, above).

The listing determination for the Sacramento River winter-run Chinook ESU has been changed from ''threatened'' (as proposed), to ''endangered'' (see Issue 13, above). The ESU is currently listed as an endangered species.

For the Central Valley spring-run Chinook ESU we have included the natural population of spring-run Chinook in the Feather River, as well as

the Feather River Hatchery spring-run Chinook program, in the ESU. The Feather River Hatchery spring-run Chinook program and the associated natural population were not proposed as part of the ESU (see Issue 14, above).

For the Puget Sound Chinook ESU we have included the following hatchery programs as part of the ESU: the Issaquah Creek (Cedar River, Washington), George Adams and Rick's Pond (Skokomish River, Washington), and Hamma Hamma (Westside Hood Canal, Washington) hatchery fall-run Chinook programs. These hatchery programs were not proposed as part of the ESU (see Issue 17, above).

For the Lower Columbia River coho ESU we have included the following programs as part of the ESU: Kalama River Type-N (Washington), Kalama River Type-S (Washington), Washougal River Type-N (Washington), and Eagle Creek NFH (Clackamas River, Oregon) hatchery coho programs. The Eagle Creek NFH and Washougal River Type-N hatchery programs were inadvertently omitted from the proposed listing determination (see Issue 19, above). The Kalama River Type-N and Type-S hatchery coho programs were not proposed as part of the ESU (see Issue 19, above).

Treatment of the Four Listing Determination Steps for Each ESU Under Review

Determination of ''Species'' Under the ESA

To qualify for listing as a threatened or endangered species, a population (or group of populations) of West Coast salmonids must be considered a ''species'' as defined under the ESA. The ESA defines a species to include ''any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature'' (ESA section 3(16)). NMFS published a policy (56 FR 58612; November 20, 1991) describing the agency's application of the ESA definition of ''species'' to anadromous Pacific salmonid species. This policy provides that a Pacific salmonid population (or group of populations) will be considered a DPS, and hence a ''species'' under the ESA, if it represents an ESU of the biological species. An ESU must be reproductively isolated from other conspecific population units, and it must represent an important component in the evolutionary legacy of the biological species. The first criterion, reproductive isolation, need not be absolute, but must be strong enough to permit evolutionarily important differences to accrue in different population units. The second criterion is met if the population unit contributes substantially to the ecological and genetic diversity of the species. Guidance on the application of this policy is contained in 56 FR 58612 (November 20, 1991) and Waples (1991). As noted in the *''Past Pacific Salmonid ESA Listings and the Alsea Decision''* section above, all components included in an ESU (natural populations, hatchery stocks, resident populations, etc.) must be listed if it is determined that the ESU in-total is threatened or endangered under the ESA.

We have reviewed the ESU relationships of hatchery salmon stocks (NMFS, 2003a; 2004b; 2005b). Hatchery stocks are included in an ESU if it is determined that they are not reproductively isolated from populations in the ESU, and they are representative of the evolutionary legacy of the ESU (see the ''Consideration of Artificial Propagation in Listing Determinations'' section above). Hatchery stocks are considered representative of the evolutionary legacy of an ESU, and hence included in the ESU, if it is determined that they are genetically no more than moderately divergent from the natural population (see final Hatchery Listing Policy elsewhere in this edition of the **Federal Register**). If a hatchery stock is more divergent from the local natural population, this indicates that the hatchery stock is reproductively isolated from the ESU.

The hatchery components are detailed below for each ESU, as applicable. More detailed descriptions of the hatchery stocks included in the ESUs below can be found in the revised Salmonid Hatchery Inventory and Effects Evaluation Report (NMFS, 2005b). A given hatchery stock determined to be part of an ESU may be propagated at multiple sites. To more clearly convey the hatchery fish that are included in a given ESU, the ESU descriptions below list the artificial propagation programs that propagate hatchery stocks determined to be part of the 16 ESUs addressed in this final rule. A list of those specific artificial propagation programs by ESU is provided for reference in Table 1 at the end of this section.

Snake River Sockeye ESU—The Snake River sockeye ESU includes populations of anadromous sockeye salmon in the Snake River Basin, Idaho (extant populations occur only in the Stanley Basin) (56 FR 58619; November 20, 1991), residual sockeye salmon in Redfish Lake, Idaho, as well as one captive propagation hatchery program (Table 1). Artificially propagated sockeye salmon from the Redfish Lake Captive Propagation program are considered part of this ESU. We have determined that this artificially propagated stock is no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b).

Subsequent to the 1991 listing determination for the Snake River sockeye ESU, a ''residual'' form of Snake River sockeye (hereafter ''residuals'') was identified. The residuals often occur together with anadromous sockeye salmon and exhibit similar behavior in the timing and location of spawning. Residuals are thought to be the progeny of anadromous sockeye salmon, but are generally nonanadromous. In 1993 NMFS determined that the residual population of Snake River sockeye that exists in Redfish Lake is substantially reproductively isolated from kokanee (*i.e.*, nonanadromous populations of *O. nerka* that become resident in lake environments over long periods of time), represents an important component in the evolutionary legacy of the biological species, and thus merits inclusion in the Snake River sockeye ESU. Constituents and co-managers were subsequently advised that residual sockeye salmon in Redfish Lake are part of the ESU and are listed as an endangered species ''subject to all the protection, prohibitions, and requirements of the ESA that apply to Snake River sockeye salmon'' (letter from Acting NMFS Director Nancy Foster to Constituents, dated March 19, 1993).

Ozette Lake Sockeye ESU—The Ozette Lake sockeye ESU includes all naturally spawned populations of sockeye salmon in Ozette Lake and streams and tributaries flowing into Ozette Lake, Washington (64 FR 14528; March 25, 1999). Two artificial propagation programs are considered to be part of this ESU (Table 1): The Umbrella Creek and Big River sockeye hatchery programs. We have determined that these artificially propagated stocks are no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b).

Sacramento Winter-run Chinook ESU—The Sacramento winter-run Chinook ESU includes all naturally spawned populations of winter-run Chinook salmon in the Sacramento River and its tributaries in California (59 FR 440; January 1, 1994), as well as two

artificial propagation programs (Table 1): Winter-run Chinook from the Livingston Stone National Fish Hatchery (NFH), and winter run Chinook in a captive broodstock program maintained at Livingston Stone NFH and the University of California Bodega Marine Laboratory. We have determined that these artificially propagated stocks are no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b).

Central Valley Spring-run Chinook ESU—The Central Valley spring-run Chinook ESU includes all naturally spawned populations of spring-run Chinook salmon in the Sacramento River and its tributaries in California, including the Feather River (64 FR 50394; September 16, 1999). One artificial propagation program is considered part of the ESU (Table 1): The Feather River Hatchery spring run Chinook program (see response to Issue 14 in the ''Summary of Comments and Information Received'' section, above). We have determined that this artificially propagated stock is no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b).

California Coastal Chinook ESU—The California Coastal Chinook ESU includes all naturally spawned populations of Chinook salmon from rivers and streams south of the Klamath River to the Russian River, California (64 FR 50394; September 16, 1999). Seven artificial propagation programs are considered to be part of the ESU (Table 1): The Humboldt Fish Action Council (Freshwater Creek), Yager Creek, Redwood Creek, Hollow Tree, Van Arsdale Fish Station, Mattole Salmon Group, and Mad River Hatchery fall-run Chinook hatchery programs. We have determined that these artificially propagated stocks are no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b).

Upper Willamette River Chinook ESU—The Upper Willamette River Chinook ESU includes all naturally spawned populations of spring-run Chinook salmon in the Clackamas River and in the Willamette River, and its tributaries, above Willamette Falls, Oregon (64 FR 14208; March 24, 1999). Seven artificial propagation programs are considered to be part of the ESU (Table 1): The McKenzie River Hatchery (Oregon Department of Fish and Wildlife (ODFW) stock # 24), Marion Forks/North Fork Santiam River (ODFW stock # 21), South Santiam Hatchery (ODFW stock # 23) in the South Fork Santiam River, South Santiam Hatchery (ODFW stock # 23) in the Calapooia River, South Santiam Hatchery (ODFW stock # 23) in the Mollala River, Willamette Hatchery (ODFW stock # 22), and Clackamas hatchery (ODFW stock # 19) spring-run Chinook hatchery programs. We have determined that these artificially propagated stocks are no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b).

Lower Columbia River Chinook ESU—The Lower Columbia River Chinook ESU includes all naturally spawned populations of Chinook salmon from the Columbia River and its tributaries from its mouth at the Pacific Ocean upstream to a transitional point between Washington and Oregon east of the Hood River and the White Salmon River, and includes the Willamette River to Willamette Falls, Oregon, exclusive of spring-run Chinook salmon in the Clackamas River (64 FR 14208; March 24, 1999). Seventeen artificial propagation programs are considered to be part of the ESU (Table 1): The Sea Resources Tule Chinook Program, Big Creek Tule Chinook Program, Astoria High School (STEP) Tule Chinook Program, Warrenton High School (STEP) Tule Chinook Program, Elochoman River Tule Chinook Program, Cowlitz Tule Chinook Program, North Fork Toutle Tule Chinook Program, Kalama Tule Chinook Program, Washougal River Tule Chinook Program, Spring Creek NFH Tule Chinook Program, Cowlitz spring Chinook Program in the Upper Cowlitz River and the Cispus River, Friends of the Cowlitz spring Chinook Program, Kalama River spring Chinook Program, Lewis River spring Chinook Program, Fish First spring Chinook Program, and the Sandy River Hatchery (ODFW stock #11) Chinook hatchery programs. We have determined that these artificially propagated stocks are no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b).

Upper Columbia River Spring-run Chinook ESU—The Upper Columbia River spring-run Chinook ESU includes all naturally spawned populations of Chinook salmon in all river reaches accessible to Chinook salmon in Columbia River tributaries upstream of the Rock Island Dam and downstream of Chief Joseph Dam in Washington, excluding the Okanogan River (64 FR 14208; March 24, 1999). Six artificial propagation programs are considered to be part of the ESU (Table 1): The Twisp River, Chewuch River, Methow Composite, Winthrop NFH, Chiwawa River, and White River spring-run Chinook hatchery programs. We have determined that these artificially propagated stocks are no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b).

Puget Sound Chinook ESU—The Puget Sound Chinook ESU includes all naturally spawned populations of Chinook salmon from rivers and streams flowing into Puget Sound including the Straits of Juan De Fuca from the Elwha River, eastward, including rivers and streams flowing into Hood Canal, South Sound, North Sound and the Strait of Georgia in Washington (64 FR 14208; March 24, 1999). Twenty-six artificial propagation programs are considered to be part of the ESU (Table 1): The Kendal Creek Hatchery, Marblemount Hatchery (fall, spring yearlings, spring subyearlings, and summer run), Harvey Creek Hatchery, Whitehorse Springs Pond, Wallace River Hatchery (yearlings and subyearlings), Tulalip Bay, Issaquah Hatchery, Soos Creek Hatchery, Icy Creek Hatchery, Keta Creek Hatchery, White River Hatchery, White Acclimation Pond, Hupp Springs hatchery, Voights Creek Hatchery, Diru Creek, Clear Creek, Kalama Creek, George Adams Hatchery, Rick's Pond Hatchery, Hamma Hamma Hatchery, Dungeness/Hurd Creek Hatchery, and Elwha Channel Hatchery Chinook hatchery programs. We have determined that these artificially propagated stocks are no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b; and see Response to Issue 17, above).

Snake River Fall-run Chinook ESU—The Snake River fall-run Chinook ESU includes all naturally spawned populations of fall-run Chinook salmon in the mainstem Snake River below Hells Canyon Dam, and in the Tucannon River, Grande Ronde River, Imnaha River, Salmon River, and Clearwater River subbasins (57 FR 14653, April 22, 1992; 57 FR 23458, June 3, 1992). Four artificial propagation programs are considered to be part of the ESU (Table 1): The Lyons Ferry Hatchery, Fall Chinook Acclimation Ponds Program, Nez Perce Tribal Hatchery, and Oxbow Hatchery fall-run

Chinook hatchery programs. We have determined that these artificially propagated stocks are no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b).

Snake River Spring/Summer Chinook ESU—The Snake River spring/summer-run Chinook ESU includes all naturally spawned populations of spring/summer-run Chinook salmon in the mainstem Snake River and the Tucannon River, Grande Ronde River, Imnaha River, and Salmon River subbasins (57 FR 23458; June 3, 1992). Fifteen artificial propagation programs are considered to be part of the ESU (Table 1): The Tucannon River conventional Hatchery, Tucannon River Captive Broodstock Program, Lostine River, Catherine Creek, Lookingglass Hatchery Reintroduction Program (Catherine Creek stock), Upper Grande Ronde, Imnaha River, Big Sheep Creek, McCall Hatchery, Johnson Creek Artificial Propagation Enhancement, Lemhi River Captive Rearing Experiment, Pahsimeroi Hatchery, East Fork Captive Rearing Experiment, West Fork Yankee Fork Captive Rearing Experiment, and the Sawtooth Hatchery spring/summer-run Chinook hatchery programs. We have determined that these artificially propagated stocks are no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b).

Central California Coast Coho ESU—The Central California Coast coho ESU includes all naturally spawned populations of coho salmon from Punta Gorda in northern California south to and including the San Lorenzo River in central California, as well as populations in tributaries to San Francisco Bay, excluding the Sacramento-San Joaquin River system (61 FR 56138; October 31, 1996). Four artificial propagation programs are considered part of this ESU (Table 1): The Don Clausen Fish Hatchery Captive Broodstock Program, Scott Creek/King Fisher Flats Conservation Program, Scott Creek Captive Broodstock Program, and the Noyo River Fish Station egg-take Program coho hatchery programs. We have determined that these artificially propagated stocks are no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b).

Southern Oregon/Northern California Coast Coho ESU—The Southern Oregon/Northern California Coast coho ESU includes all naturally spawned populations of coho salmon in coastal streams between Cape Blanco, Oregon, and Punta Gorda, California (62 FR 24588; May 6, 1997). Three artificial propagation programs are considered to be part of the ESU (Table 1): The Cole Rivers Hatchery (ODFW stock # 52), Trinity River Hatchery, and Iron Gate Hatchery coho hatchery programs. We have determined that these artificially propagated stocks are no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b).

Lower Columbia River Coho ESU—The Lower Columbia River coho ESU includes all naturally spawned populations of coho salmon in the Columbia River and its tributaries from the mouth of the Columbia up to and including the Big White Salmon and Hood Rivers, and includes the Willamette River to Willamette Falls, Oregon. Twenty-five artificial propagation programs are considered to be part of the ESU (Table 1): The Grays River, Sea Resources Hatchery, Peterson Coho Project, Big Creek Hatchery, Astoria High School (STEP) Coho Program, Warrenton High School (STEP) Coho Program, Elochoman Type-S Coho Program, Elochoman Type-N Coho Program, Cathlamet High School FFA Type-N Coho Program, Cowlitz Type-N Coho Program in the Upper and Lower Cowlitz Rivers, Cowlitz Game and Anglers Coho Program, Friends of the Cowlitz Coho Program, North Fork Toutle River Hatchery, Kalama River Type-N Coho Program, Kalama River Type-S Coho Program, Lewis River Type-N Coho Program, Lewis River Type-S Coho Program, Fish First Wild Coho Program, Fish First Type-N Coho Program, Syverson Project Type-N Coho Program, Washougal River Type-N Coho Program, Eagle Creek NFH, Sandy Hatchery, and the Bonneville/Cascade/Oxbow complex coho hatchery programs. We have determined that these artificially propagated stocks are no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b; see Response to Issue 19, above).

Columbia River Chum ESU—The Columbia River chum ESU includes all naturally spawned populations of chum salmon in the Columbia River and its tributaries in Washington and Oregon (64 FR 14508; March 25, 1999). Three artificial propagation programs are considered to be part of the ESU (Table 1): The Chinook River (Sea Resources Hatchery), Grays River, and Washougal River/Duncan Creek chum hatchery programs. We have determined that these artificially propagated stocks are no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b).

Hood Canal Summer-run Chum ESU—The Hood Canal summer-run chum includes all naturally spawned populations of summer-run chum salmon in Hood Canal and its tributaries as well as populations in Olympic Peninsula rivers between Hood Canal and Dungeness Bay, Washington (64 FR 14508; March 25, 1999). Eight artificial propagation programs are considered to be part of the ESU (Table 1): The Quilcene NFH, Hamma Hamma Fish Hatchery, Lilliwaup Creek Fish Hatchery, Union River/Tahuya, Big Beef Creek Fish Hatchery, Salmon Creek Fish Hatchery, Chimacum Creek Fish Hatchery, and the Jimmycomelately Creek Fish Hatchery summer-run chum hatchery programs. We have determined that these artificially propagated stocks are no more divergent relative to the local natural population(s) than what would be expected between closely related natural populations within the ESU (NMFS, 2005b).

TABLE 1.—LIST OF ARTIFICAL PROPAGATION PROGRAMS INCLUDED IN EVOLUTIONARILY SIGNIFICANT UNITS (ESUS) OF WEST COAST SALMON

Evolutionary significant unit (ESU) and included artificial propagation program(s)	Run timing	Location (state)
Snake River sockeye ESU:		
Redfish Lake Captive Propagation Program	n/a	Stanley Basin (Idaho).
Ozette Lake sockeye ESU:		
Umbrella Creek Hatchery—Makah Tribe	n/a	Ozette Lake (Washington).
Big River Hatchery—Makah Tribe	n/a	Ozette Lake (Washington).

TABLE 1.—LIST OF ARTIFICAL PROPAGATION PROGRAMS INCLUDED IN EVOLUTIONARILY SIGNIFICANT UNITS (ESUS) OF WEST COAST SALMON—Continued

Evolutionary significant unit (ESU) and included artificial propagation program(s)	Run timing	Location (state)
Sacramento River winter-run Chinook ESU:		
Livingston Stone National Fish Hatchery (NFH) Conservation Program	Winter	Sacramento River (California).
Captive Broodstock Program	Winter	Livingston Stone NFH & Univ. of Calif. Bodega Marine Laboratory (California).
Central Valley spring-run Chinook ESU:		
Feather River Hatchery	Spring	Feather River (California).
California Coastal Chinook ESU:		
Freshwater Creek/Humboldt Fish Action Council	Fall	Freshwater Creek, Humboldt Bay (California).
Yager Creek Hatchery	Fall	Yager Creek, Van Duzen River (California).
Redwood Creek Hatchery	Fall	Redwood Creek, South Fork Eel River (California).
Hollow Tree Creek Hatchery	Fall	Eel River (California).
Mattole Salmon Group Hatchery	Fall	Squaw Creek, Mattole River (California).
Van Arsdale Fish Station	Fall	Eel River (California).
Mad River Hatchery	Fall	Mad River (California).
Upper Willamette River Chinook ESU:		
McKenzie River Hatchery (Oregon Department of Fish & Wildlife (ODFW) stock #24).	Spring	McKenzie River (Oregon).
Marion Forks Hatchery (ODFW stock #21)	Spring	North Fork Santiam River (Oregon).
South Santiam Hatchery (ODFW stock #23)	Spring	South Fork Santiam River (Oregon).
South Santiam Hatchery (ODFW stock #23)	Spring	Calapooia River (Oregon).
South Santiam Hatchery (ODFW stock #23)	Spring	Mollala River (Oregon).
Willamette Hatchery (ODFW stock #22)	Spring	Middle Fork Willamette River (Oregon).
Clackamas Hatchery (ODFW stock #19)	Spring	Clackamas River (Oregon).
Lower Columbia River Chinook ESU:		
Sea Resources Tule Chinook Program	Fall	Chinook River (Washington).
Big Creek Tule Chinook Program	Fall	Big Creek (Oregon).
Astoria High School (STEP) Tule Chinook Program	Fall	Big Creek (Oregon).
Warrenton High School (STEP) Tule Chinook Program	Fall	Big Creek (Oregon).
Elochoman River Tule Chinook Program	Fall	Elochoman River (Washington).
Cowlitz Tule Chinook Program	Fall	Lower Cowlitz River (Washington).
North Fork Toutle Tule Chinook Program	Fall	Cowlitz River (Washington).
Kalama Tule Chinook Program	Fall	Kalama River (Washington).
Washougal River Tule Chinook Program	Fall	Washougal River (Washington).
Spring Creek NFH Tule Chinook Program	Fall	Upper Columbia River Gorge (Washington).
Cowlitz spring Chinook Program	Fall	Upper Cowlitz River (Washington).
Cowlitz spring Chinook Program	Spring	Cispus River (Washington).
Friends of Cowlitz spring Chinook Program	Spring	Upper Cowlitz River (Washington).
Kalama River spring Chinook Program	Spring	Kalama River (Washington).
Lewis River spring Chinook Program	Spring	Lewis River (Washington).
Fish First spring Chinook Program	Spring	Lewis River (Washington).
Sandy River Hatchery (ODFW stock #11)	Spring	Sandy River (Oregon).
Upper Columbia River spring Chinook ESU:		
Twisp River	Spring	Methow River (Washington).
Chewuch River	Spring	Methow River (Washington).
Methow Composite	Spring	Methow River (Washington).
Winthrop NFH (Methow Composite stock)	Spring	Methow River (Washington).
Chiwawa River	Spring	Wenatchee River (Washington).
White River	Spring	Wenatchee River (Washington).
Puget Sound Chinook ESU:		
Kendall Creek Hatchery	Spring	North Fork Nooksack River (Washington).
Marblemount Hatchery	Fall	Lower Skagit River (Washington).
Marblemount Hatchery (yearlings)	Spring	Upper Skagit River (Washington).
Marblemount Hatchery (sub-yearlings)	Spring	Upper Skagit River (Washington).
Marblemount Hatchery	Summer	Upper Skagit River (Washington).
Harvey Creek Hatchery	Summer	North Fork Stillaguamish River (Washington).
Whitehorse Springs Pond	Summer	North Fork Stillaguamish River (Washington).
Wallace River Hatchery (yearlings)	Summer	Skykomish River (Washington).
Wallace River Hatchery (sub-yearlings)	Summer	Skykomish River (Washington).
Tulalip Bay (Bernie Kai-Kai Gobin Hatchery/Tulalip Hatchery)	Summer	Skykomish River/Tulalip Bay (Washington).
Issaquah Hatchery	Fall	Cedar River (Washington).
Soos Creek Hatchery	Fall	Green River (Washington).
Icy Creek Hatchery	Fall	Green River (Washington).
Keta Creek—Muckelshoot Tribe	Fall	Green River (Washington).
White River Hatchery	Spring	White River (Washington).
White Acclimation Pond	Spring	White River (Washington).
Hupp Springs Hatchery	Spring	White River (Washington).
Voights Creek Hatchery	Fall	Puyallup River (Washington).
Diru Creek	Fall	Puyallup River (Washington).
Clear Creek	Fall	Nisqually River (Washington).
Kalama Creek	Fall	Nisqually River (Washington).

TABLE 1.—LIST OF ARTIFICAL PROPAGATION PROGRAMS INCLUDED IN EVOLUTIONARILY SIGNIFICANT UNITS (ESUS) OF WEST COAST SALMON—Continued

Evolutionary significant unit (ESU) and included artificial propagation program(s)	Run timing	Location (state)
George Adams Hatchery	Fall	Skokomish River (Washington).
Rick's Pond Hatchery	Fall	Skokomish River (Washington).
Hamma Hamma Hatchery	Fall	Westside Hood Canal (Washington).
Dungeness/Hurd Creek Hatchery	Fall	Dungeness River (Washington).
Elwha Channel Hatchery	Fall	Elwha River (Washington).
Snake River fall-run Chinook ESU:		
Lyons Ferry Hatchery	Fall	Snake River (Washington).
Fall Chinook Acclimation Ponds Program—Pittsburg, Captain John, and Big Canyon ponds.	Fall	Snake River (Washington).
Nez Perce Tribal Hatchery—including North Lapwai Valley, Lakes Gulch, and Cedar Flat Satellite facilities.	Fall	Snake and Clearwater Rivers (Idaho).
Oxbow Hatchery	Fall	Snake River (Oregon, Idaho).
Snake River spring/summer-run Chinook ESU:		
Tucannon River Hatchery (conventional)	Spring	Tucannon River (Washington).
Tucannon River Captive Broodstock Program	Spring	Tucannon River (Washington).
Lostine River (captive/conventional)	Summer	Grande Ronde (Oregon).
Catherine Creek (captive/conventional)	Summer	Grande Ronde (Oregon).
Lookingglass Hatchery (reintroduction)	Summer	Grande Ronde (Oregon).
Upper Grande Ronde (captive/conventional)	Summer	Grande Ronde (Oregon).
Imnaha River	Spring/ Summer.	Imnaha River (Oregon).
Big Sheep Creek	Spring/ Summer.	Imnaha River (Oregon).
McCall Hatchery	Spring	South Fork Salmon River (Idaho).
Johnson Creek Artificial Propagation Enhancement	Spring	East Fork South Fork Salmon River (Idaho).
Lemhi River Captive Rearing Experiment	Spring	Lemhi River (Idaho).
Pahsimeroi Hatchery	Summer	Salmon River (Idaho).
East Fork Captive Rearing Experiment	Spring	East Fork Salmon River (Idaho).
West Fork Yankee Fork Captive Rearing Experiment	Spring	Salmon River (Idaho).
Sawtooth Hatchery	Spring	Upper Mainstem Salmon River (Idaho).
Central California Coast coho ESU:		
Don Clausen Fish Hatchery Captive Broodstock Program	n/a	Dry Creek, Russian River (California).
Scott Creek/Kingfisher Flat Hatchery Conservation Program (Monterey Bay Salmon and Trout Project).	n/a	Big Creek, Scott Creek (California).
Scott Creek Captive Broodstock Program	n/a	NOAA Southwest Fisheries Science Center, Santa Cruz (California).
Noyo River Fish Station egg-take program	n/a	Nonoyo River (California).
Southern Oregon/Northern California Coast coho ESU:		
Cole Rivers Hatchery (ODFW stock #52)	n/a	Rogue River (Oregon).
Trinity River Hatchery	n/a	Trinity River (California).
Iron Gate Hatchery	n/a	Klamath River (California).
Lower Columbia River coho ESU:		
Grays River	Type-S	Grays River (Washington).
Sea Resources Hatchery	Type-S	Grays River (Washington).
Peterson Coho Project	Type-S	Grays River (Washington).
Big Creek Hatchery (ODFW stock #13)	n/a	Big Creek (Oregon).
Astoria High School (STEP) Coho Program	n/a	Youngs Bay (Oregon).
Warrenton High School (STEP) Coho Program	n/a	Youngs Bay (Oregon).
Elochoman Type-S Coho Program	Type-S	Elochoman River (Washington).
Elochoman Type-N Coho Program	Type-N	Elochoman River (Washington).
Cathlamet High School FFA Type-N Coho Program	Type-N	Elochoman River (Washington).
Cowlitz Type-N Coho Program	Type-N	Upper Cowlitz River (Washington).
Cowlitz Type-N Coho Program	Type-N	Lower Cowlitz River (Washington).
Cowlitz Game and Anglers Coho Program	n/a	Lower Cowlitz River (Washington).
Friends of the Cowlitz Coho Program	n/a	Lower Cowlitz River (Washington).
North Fork Toutle River Hatchery	Type-S	Cowlitz River (Washington).
Kalama River Type-N Coho Program	Type-N	Kalama River (Washington).
Kalama River Type-N Coho Program	Type-S	Kalama River (Washington).
Lewis River Type-N Coho Program	Type-N	North Fork Lewis River (Washington).
Lewis River Type-S Coho Program	Type-S	North Fork Lewis River (Washington).
Fish First Wild Coho Program	n/a	North Fork Lewis River (Washington).
Fish First Type-N Coho Program	Type-N	North Fork Lewis River (Washington).
Syverson Project Type-N Coho Program	Type-N	Salmon River (Washington).
Washougal River Type-N Coho Program	Type-N	Washougal River (Washington).
Eagle Creek NFH	n/a	Clackamas River (Oregon).
Sandy Hatchery (ODFW stock #11)	Late	Sandy River (Oregon).
Bonneville/Cascade/Oxbow Complex (ODFW stock #14)	n/a	Lower Columbia River Gorge (Oregon).
Columbia River chum ESU:		
Chinook River/Sea Resources Hatchery	Fall	Chinook River (Washington).
Grays River	Fall	Grays River (Washington).

TABLE 1.—LIST OF ARTIFICAL PROPAGATION PROGRAMS INCLUDED IN EVOLUTIONARILY SIGNIFICANT UNITS (ESUS) OF WEST COAST SALMON—Continued

Evolutionary significant unit (ESU) and included artificial propagation program(s)	Run timing	Location (state)
Washougal Hatchery/Duncan Creek	Fall	Washougal River (Washington).
Hood Canal summer-run chum ESU:		
Quilcene/ Quilcene NFH	Summer	Big Quilcene River (Washington).
Hamma Hamma Fish Hatchery	Summer	Western Hood Canal (Washington).
Lilliwaup Creek Fish Hatchery	Summer	Southwestern Hood Canal (Washington).
Union River/Tahuya	Summer	Union River (Washington).
Big Beef Creek Fish Hatchery	Summer	North Hood Canal (Washington).
Salmon Creek Fish Hatchery	Summer	Discovery Bay (Washington).
Chimacum Creek Fish Hatchery	Summer	Port Townsend Bay (Washington).
Jimmycomelately Creek Fish Hatchery	Summer	Sequim Bay (Washington).

Viability Assessments of ESUs

The Pacific Salmonid BRT evaluated the risk of extinction faced by naturally spawning populations in each of the ESUs addressed in this proposed rule (NMFS, 2003b). As noted above, the BRT did not explicitly consider potential contributions of hatchery stocks or protective efforts in their evaluations. For each ESU the BRT evaluated overall extinction risk after assessing ESU-level risk for the four VSP factors: abundance, productivity, spatial structure, and diversity. We then assessed the effects of ESU hatchery programs on ESU viability and extinction risk relative to the BRT's assessment for the naturally spawning component of the ESU (NMFS, 2004b, 2005b). The effects of hatchery programs on the extinction risk of an ESU in-total were evaluated on the basis of the factors that the BRT determined are currently limiting the ESU (*e.g.*, abundance, productivity, spatial structure, and diversity), and how artificial propagation efforts within the ESU affect those factors. The Artificial Propagation Evaluation Workshop (NMFS, 2004c) reviewed the BRT's findings (NMFS, 2003a), evaluated the Salmonid Hatchery Inventory and Effects Evaluation Report (NMFS, 2004b), and assessed the overall extinction risk of ESUs with associated hatchery stocks. The BRT and the Artificial Propagation Evaluation Workshop assessed the extinction risk for the naturally spawning populations in an ESU, and for the ESU in-total, respectively. The level of extinction risk was categorized into three categories: ''in danger of extinction;'' ''likely to become endangered within the foreseeable future;'' or ''not in danger of extinction or likely to become endangered within the foreseeable future.'' Although these overall risk categories resemble the definitions of ''endangered'' and ''threatened'' as defined in the ESA, the BRT and the Workshop did not evaluate protective efforts in assessing ESU extinction risk (efforts being made to protect the species are evaluated in the ''Evaluation of Protective Efforts'' section, below). Thus, the extinction risk assessments described in this section are not necessarily indicative of whether an ESU warrants listing as a threatened or endangered species. The reader is referred to the BRT's report (NMFS, 2003b), the Salmonid Hatchery Inventory and Effects Evaluation Report (NMFS, 2004b, 2005b), and the Workshop Report (NMFS, 2004c) for more detailed descriptions of the viability of individual natural populations and hatchery stocks within these ESUs.

Snake River Sockeye ESU—The residual form of Redfish Lake sockeye, determined to be part of the ESU in 1993, is represented by a few hundred fish. Snake River sockeye historically were distributed in four lakes within the Stanley Basin, but the only remaining population resides in Redfish Lake. Only 16 naturally produced adults have returned to Redfish Lake since the Snake River sockeye ESU was listed as an endangered species in 1991. All 16 fish were taken into the Redfish Lake Captive Propagation Program, which was initiated as an emergency measure in 1991. The return of over 250 adults in 2000 was encouraging; however, subsequent returns from the captive program in 2001 and 2002 have been fewer than 30 fish.

The BRT found extremely high risks for each of the four VSP categories. Informed by this assessment, the BRT unanimously concluded that the Snake River sockeye ESU is ''in danger of extinction.''

There is a single artificial propagation program producing Snake River sockeye salmon in the Snake River basin. The Redfish Lake sockeye salmon stock was originally founded by collecting the entire anadromous adult return of 16 fish between 1990 and 1997, a small number of residual sockeye salmon, and a few hundred smolts migrating from Redfish Lake. These fish were put into a Captive Broodstock program as an emergency measure to prevent extinction of this ESU. Since 1997, nearly 400 hatchery-origin anadromous sockeye adults have returned to the Stanley Basin from juveniles released by the program. Redfish Lake sockeye salmon have also been reintroduced into Alturas and Pettit Lakes using progeny from the captive broodstock program. The captive broodstock program presently consists of several hundred fish of different year classes maintained at facilities in Eagle (Idaho) and Manchester (Washington).

Our assessment of the effects of artificial propagation on ESU extinction risk concluded that the Redfish Lake Captive Broodstock Program does not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). The Artificial Propagation Evaluation Workshop noted that the Captive Broodstock Program has prevented likely extinction of the ESU. This program has increased the total number of anadromous adults, attempted to increase the number of lakes in which sockeye salmon are present in the upper Salmon River (Stanley Basin), and preserved what genetic diversity remains in the ESU. Although the program has increased the number of anadromous adults in some years, it has yet to produce consistent returns. The majority of the ESU now resides in the captive program composed of only a few hundred fish. The long-term effects of captive rearing are unknown. The consideration of artificial propagation does not substantially mitigate the BRT's assessment of extreme risks to ESU abundance, productivity, spatial structure, and diversity. Informed by the BRT's findings (NMFS, 2003b) and our assessment of the effects of artificial propagation on the viability of the ESU

(NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that the Snake River sockeye ESU in-total is ''in danger of extinction'' (NMFS, 2004c).

Ozette Lake Sockeye ESU—Evaluating extinction risk for the Ozette Lake sockeye ESU is complicated by incomplete historical data with uncertain errors and biases. The Makah Tribe's fisheries program, however, is engaged in significant efforts to improve sampling techniques and to adjust for biases in historical data. The number of returning adults has increased in recent years, but is believed to be well below historical levels. Prior to 2002 an uncertain fraction of the returns was of hatchery origin, generating uncertainty in evaluating trends in the abundance and productivity of the naturally spawned component of the ESU. Accurately assessing trends in natural spawners is further complicated by the poor visibility in the lake. Habitat degradation, siltation, and alterations in the lake level regime have resulted in the loss of numerous beach spawning sites. The BRT expressed concern that the reduction in the number of spawning aggregations poses risks for ESU spatial structure and diversity.

The BRT expressed moderately high concern for each of the VSP risk categories. Informed by this risk assessment, the majority opinion of the BRT was that the naturally spawned component of the Ozette Lake sockeye ESU is ''likely to become endangered within the foreseeable future,'' with the minority being split between ''in danger of extinction'' and ''not in danger of extinction or likely to become endangered within the foreseeable future.''

There are two artificially propagated stocks considered to be part of the Ozette Lake sockeye salmon ESU (Table 1). The program, operated by the Makah Tribe, is derived from native broodstock and has the primary objective of establishing viable sockeye salmon spawning aggregations in two Ozette Lake tributaries where spawning has not been observed for many decades, if ever. The program includes research, monitoring, and evaluation activities designed to determine success in recovering the propagated populations to viable levels, and to determine the demographic, ecological, and genetic effects on target and non-target (*i.e.*, Ozette Lake beach) spawning aggregations. The Makah Program will be reevaluated for termination (or continuation) after 12 years of operation.

Our assessment of the effects of artificial propagation on ESU extinction risk concluded that the Makah supplementation program at Umbrella Creek and Big River does not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). The program has increased the abundance of natural spawners and natural-origin sockeye in the Ozette Lake tributaries. However, it is unknown whether these tributaries were historically spawning habitat. The program (by design) has not increased the abundance of natural spawners or natural origin beach spawners in Ozette Lake. Despite the relative increases in abundance due to the supplementation program, the total ESU abundance remains small for a single sockeye population. The contribution of artificial propagation to the ESU's productivity is uncertain. Only since 2000 have the hatchery returns been sufficient to meet the program's broodstock goals. The Makah program at present serves as an important genetic reserve with the continuing loss of beach spawning habitat. The reintroduction of spawners to Ozette Lake tributaries reduces risks to ESU spatial structure. Although there currently is no evidence of genetic divergence between the hatchery program and the founding population, the isolation of the hatchery program and adaptation to tributary habitats may in time cause the tributary spawning aggregations to diverge from founding beach spawning aggregations. Although the program has a beneficial effect on ESU abundance and spatial structure, it has neutral or uncertain effects on ESU productivity and diversity. Informed by the BRT's findings (NMFS, 2003b) and our assessment of the effects of artificial propagation programs on the viability of the ESU (NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that the Ozette Lake sockeye ESU in-total is ''likely to become endangered in the foreseeable future'' (NMFS, 2004c).

Sacramento River Winter-run Chinook ESU—The Sacramento River winter-run ESU is represented by a single extant naturally spawning population that has been completely displaced from its historical spawning habitat by the construction of Shasta and Keswick Dams. The remaining spawning habitat is artificially maintained by cold-water releases from the reservoir behind Shasta Dam. The naturally spawning component of the ESU has exhibited marked improvements in abundance and productivity in recent years. The recent increases in abundance are encouraging, relative to the years of critically low abundance of the 1980s and early 1990s; however, the recent 5-year geometric mean is only 3 percent of the peak post-1967 5-year geometric mean. The BRT was particularly concerned about risks to the ESU's diversity and spatial structure. Construction of Shasta Dam merged at least four independent winter-run Chinook populations into a single population, representing a substantial loss of genetic diversity, life-history variability, and local adaptation. Episodes of critically low abundance, particularly in the early 1990s, for the single remaining population imposed ''bottlenecks'' that further reduced genetic diversity. The BRT found extremely high risk for each of the four VSP risk categories. Informed by this risk assessment, the majority opinion of the BRT was that the naturally spawned component of the Sacramento winter-run ESU is ''in danger of extinction.'' The minority opinion of the BRT was that the ESU is ''likely to become endangered within the foreseeable future.''

Two artificial propagation programs are considered to be part of the Sacramento River winter-run Chinook ESU (Table 1; NMFS, 2005b). The artificial propagation of winter-run Chinook is carried out at the Livingston Stone National Fish Hatchery (NFH) on the mainstem Sacramento River above Keswick Dam. The captive broodstock program is maintained at two locations: the Livingston Stone NFH and at the University of California's Bodega Marine Laboratory. These programs have been operated for conservation purposes since the early 1990s and both were identified as high priority recovery actions in NMFS' 1997 Draft Recovery Plan for this ESU. The artificial propagation program was established to supplement the abundance of the naturally spawning winter-run Chinook population and thereby assist in its population growth and recovery. The captive broodstock program was established in the early 1990s when the naturally spawning population was at critically low levels (less than 200 spawners) in order to preserve the ESU's remaining genetic resources and to establish a reserve for potential use in the artificial propagation program. Because of increased natural escapement over the last several years, consideration is being given to terminating the captive broodstock program.

An assessment of the effects of these artificial propagation programs on the viability of the ESU in-total concluded that they decrease risk to some degree by contributing to increased ESU abundance and diversity, but have a neutral or uncertain effect on

productivity and spatial structure of the ESU (NMFS, 2005b). Spawning escapement of winter-run Chinook has increased since the inception of the program and may account for up to 10 percent of the total number of fish spawning naturally in a given year. Improvements in freshwater habitat conditions, harvest management, as well as improved ocean conditions, however, are thought to be the major factors responsible for the increased abundance of the ESU since the early 1990s. Effects on productivity are uncertain, but studies are underway to assess the effect of artificial propagation on fitness and productivity of artificially propagated fish. Although abundance of spawners has increased, in part due to artificial propagation, the spatial distribution of spawners has not expanded. The primary reason is that the naturally spawning population is artificially maintained by cool water releases from Shasta/Keswick dams, and the spatial distribution of spawners is largely governed by water year type and the ability of the Central Valley Project to manage water temperatures in the upper Sacramento River. A second naturally spawning population is considered critical to the long-term viability of this ESU, and plans are underway to eventually establish a second population in the upper Battle Creek watershed using the artificial propagation program as a source of fish. However, the program has yet to be implemented because of the need to complete habitat restoration efforts in that watershed. The artificial propagation program has contributed to maintaining diversity of the ESU through careful use of spawning protocols and other tools that maximize genetic diversity of propagated fish and minimize impacts on naturally spawning populations. In addition, the artificial propagation and captive broodstock programs collectively serve as a genetic repository which serves to preserve the genome of the ESU.

Informed by the BRT's findings (NMFS, 2003b) and our assessment of the effects of artificial propagation programs on the viability of the ESU (NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that this ESU in-total is ''in danger of extinction'' (NMFS, 2004c).

Central Valley Spring-run Chinook ESU—Extensive construction of dams throughout the Sacramento-San Joaquin Basin has reduced the California Central Valley spring Chinook ESU to only a small portion of its historical distribution, generating concerns about risks to the spatial structure and diversity of the ESU. The ESU has been reduced to only three naturally spawning independent populations that are free of hatchery influence from an estimated 17 historical populations. These three populations (Deer, Mill and Butte Creek which are tributaries to the Sacramento River) are in close geographic proximity, increasing the ESU's vulnerability to disease or catastrophic events. There are other natural populations (*i.e.*. Clear, Antelope, Big Chico, and Beegum Creeks) of spring Chinook, but the Central Valley Technical Recovery Team considers them to be dependent upon the populations in Deer, Mill, and Butte Creek. As discussed in the Summary of Comments and Information Received (see Issue 14), the naturally spawning spring Chinook of hatchery origin in the Feather and Yuba Rivers are also considered to be part of this ESU as is the spring-run Chinook hatchery stock at Feather River Hatchery. The BRT was concerned that the Feather River spring-run Chinook hatchery population represents a risk factor for the naturally spawning populations in Deer, Mill and Butte Creeks. The Feather River Hatchery produces spring-run Chinook that are genetically more similar to fall-run Chinook, probably due to hybridization at the hatchery, though these fish still exhibit an early returning ''spring'' behavior. The off-site release location for fish produced at the hatchery is believed to contribute to a high straying rate of hatchery fish which increases the likelihood the Feather River hatchery origin fish could interact negatively with the extant natural populations in the ESU. To address these concerns, CDFG initiated efforts in 2002 to restore and enhance the spring run genotype at the Feather River Hatchery. Although the recent 5-year mean abundance for the three naturally spawning populations in the ESU remains small (ranging from nearly 500 to over 4,500 spawners), short- and long-term productivity trends are positive, and population sizes have shown continued increases over the abundance levels of the 1980s (with 5-year mean population sizes of 67 to 243 spawners). The BRT noted moderately high risk for the abundance, spatial structure, and diversity VSP factors, and a lower risk for the productivity factor reflecting recent positive trends. Informed by this risk assessment, the strong majority opinion of the BRT was that the Central Valley spring-run Chinook ESU is ''likely to become endangered within the foreseeable future.'' The minority opinion of the BRT was that the ESU is ''in danger of extinction.'' There Feather River Hatchery spring-run Chinook stock included in this ESU does not mitigate the BRT's assessment that the ESU is ''likely to become endangered within the foreseeable future.''

California Coastal Chinook ESU—Evaluation of the viability of the naturally spawning component of the California Coastal Chinook ESU is hindered by the limited availability of data, particularly regarding the abundance and spatial distribution of natural populations within the ESU. Additionally, the data that are available are of varying type, quality and temporal coverage, and are generally not amenable to rigorous estimation of abundance or robust statistical analyses of trends. The little historical and current abundance information that is available indicates that (putative) natural ESU population abundance levels remain depressed relative to historical levels. Evidence suggests that populations have been extirpated or nearly extirpated in the southern part of the ESU, or are extremely low in abundance. This observation, in combination with the apparent loss of the spring-run Chinook life history in the Eel River Basin and elsewhere in the ESU, indicates risks to the diversity of the ESU. Recently available natural abundance estimates in the Russian River are in excess of 1,300 fish for 2000–2002. These data suggest either the presence of a naturally producing population in the Russian River, or represent straying from other basins or ESUs. No data are available to assess the genetic relationship of the Russian River fish to populations in this or other ESUs. The BRT found moderately high risks for all VSP risk categories, and underscored a strong concern due to the paucity of information and the resultant uncertainty generated in evaluating the ESU's viability. Informed by this risk assessment and the related uncertainty, the majority opinion of the BRT was that the naturally spawned component of the California Coastal Chinook ESU is ''likely to become endangered within the foreseeable future.'' The minority opinion of the BRT was that the naturally spawned component of the ESU is ''in danger of extinction.''

Seven artificial propagation programs that produce Chinook salmon are considered to be part of the California Coastal Chinook ESU (Table 1; NMFS, 2005b). Six of these programs (Freshwater Creek, Yager Creek, Redwood Creek, Hollow Tree Creek, Mattole River Salmon Group, and Mad River Hatchery) are relatively small programs with production goals of less than 80,000 fish that have been operated for restoration purposes for more than

20 years. Because of State funding limitations, it is likely that these programs will be terminated after 2004. These programs are small-scale supplementation facilities operated by local groups or companies in cooperation with the CDFG under its cooperative hatchery program. The Van Arsdale Fish Station has been operated for over 30 years by CDFG for supplementation purposes in the upper Eel River. Because of State funding limitations, the operations at the Station were terminated in 2003. The seven hatchery programs are primarily located in the northern portion of the ESU's range and most are in the Eel River.

An assessment of the effects of these small artificial propagation programs on the viability of the ESU in-total concluded that they collectively decrease risk to some degree by contributing to local increases in abundance, but have a neutral or uncertain effect on productivity, spatial structure or diversity of the ESU (NMFS, 2005b). There have been no demonstrable increases in natural abundance from the five cooperative hatchery programs, with the possible exception of increased abundance in the Freshwater Creek natural population and as a result of the rescue and rearing activities by the Mattole Salmon Group. In part, this is because there is limited natural population monitoring in the watersheds where the hatchery programs are located. No efforts have been undertaken to assess the productivity of hatchery produced fish or to assess the effects of hatchery produced fish on natural origin fish productivity. The seven hatchery populations in this ESU are primarily located in the northern portion of the ESU's range and overlap with natural origin fish populations. With the exception of Freshwater Creek where local distribution may have expanded in association with the natural population increase, there are no demonstrable beneficial effects on spatial structure. The six cooperative programs use only natural-origin fish as broodstock and mark all production with an adipose fin clip to ensure that hatchery-origin fish are not incorporated into the broodstock.

Informed by the BRT's findings (NMFS, 2003b) and our assessment of the effects of artificial propagation programs on the viability of the ESU (NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that this ESU in-total is ''likely to become endangered within the foreseeable future'' (NMFS, 2004c).

Upper Willamette River Chinook ESU—There are no direct estimates of natural-origin spawner abundance for the Upper Willamette River Chinook ESU. The abundance of adult spring Chinook salmon (hatchery and natural fish) passing Willamette Falls has remained relatively steady over the past 50 years (ranging from approximately 20,000 to 70,000 fish), but is only a fraction of peak abundance levels observed in the 1920s (approximately 300,000 adults). Interpretation of abundance levels is confounded by a high but uncertain fraction of hatchery produced fish. The McKenzie River population has shown substantial increases in total abundance (hatchery origin and natural origin fish) in the last 2 years, while trends in other natural populations in the ESU are generally mixed. With the relatively large incidence of naturally spawning hatchery fish in the ESU, it is difficult to determine trends in productivity for natural-origin fish. The BRT estimated that despite improving trends in total productivity (including hatchery origin and natural origin fish) since 1995, productivity would be below replacement in the absence of artificial propagation. The BRT was particularly concerned that approximately 30 to 40 percent of total historical habitat is now inaccessible behind dams. These inaccessible areas, however, represent a majority of the historical spawning habitat. The restriction of natural production to just a few areas increases the ESU's vulnerability to environmental variability and catastrophic events. Losses of local adaptation and genetic diversity through the mixing of hatchery stocks within the ESU, and the introgression of out-of-ESU hatchery fall-run Chinook, have represented threats to ESU diversity. However, the BRT was encouraged by the recent cessation of releases of the fall-run hatchery fish, as well as by improved marking rates of hatchery fish to assist in monitoring and in the management of a marked-fish selective fishery.

The BRT found moderately high risks for all VSP categories. Informed by this risk assessment, the strong majority opinion of the BRT was that the naturally spawned component of the Upper Willamette River Chinook ESU is ''likely to become endangered within the foreseeable future.'' The minority opinion was that this ESU is ''in danger of extinction.''

Seven artificial propagation programs in the Willamette River produce fish that are considered to be part of the Upper Willamette River Chinook ESU. All of these programs are funded to mitigate for lost or degraded habitat and produce fish for harvest purposes.

Our assessment of the effects of artificial propagation on ESU extinction risk concluded that these hatchery programs collectively do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). An increasing proportion of hatchery-origin returns has contributed to increases in total ESU abundance. However, it is unclear whether these returning hatchery and natural fish actually survive overwintering to spawn. Estimates of pre-spawning mortality indicate that a high proportion (>70 percent) of spring Chinook die before spawning in most ESU populations. In recent years, hatchery fish have been used to reintroduce spring Chinook back into historical habitats above impassible dams (*e.g.*, in the South Santiam, North Santiam, and McKenzie Rivers), slightly decreasing risks to ESU spatial structure. Within-ESU hatchery fish exhibit differing life-history characteristics from natural ESU fish. High proportions of hatchery-origin natural spawners in remaining natural production areas (*i.e.*, in the Clackamas and McKenzie Rivers) may thereby have negative impacts on within and among population genetic and life-history diversity. Collectively, artificial propagation programs in the ESU have a slight beneficial effect on ESU abundance and spatial structure, but neutral or uncertain effects on ESU productivity and diversity. Informed by the BRT's findings (NMFS, 2003b) and our assessment of the effects of artificial propagation programs on the viability of the ESU (NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that the Upper Willamette River Chinook ESU in-total is ''likely to become endangered in the foreseeable future'' (NMFS, 2004c).

Lower Columbia River Chinook ESU—Many populations within the Lower Columbia River Chinook ESU have exhibited pronounced increases in abundance and productivity in recent years, possibly due to improved ocean conditions. Abundance estimates of naturally spawned populations in this ESU, however, are uncertain due to a high (approximately 70 percent) fraction of naturally spawning hatchery fish and a low marking rate (only 1 to 2 percent) of hatchery produced fish. Abundance estimates of naturally produced spring Chinook have improved since 2001 due to the marking of all hatchery spring Chinook releases, allowing for the enumeration of hatchery spring Chinook at weirs, traps and on spawning grounds. Despite recent improvements, long-term trends in productivity are below replacement for the majority of

populations in the ESU. It is estimated that 8 to 10 of approximately 31 historical populations in the ESU have been extirpated or nearly extirpated. Although approximately 35 percent of historical habitat has been lost in this ESU due to the construction of dams and other impassable barriers, this ESU exhibits a broad spatial distribution in a variety of watersheds and habitat types. Natural production currently occurs in approximately 20 populations, although only one population has a mean spawner abundance exceeding 1,000 fish. The BRT expressed concern that the spring-run populations comprise most of the extirpated populations. The disproportionate loss of the spring-run life history represents a risk for ESU diversity. Additionally, of the four hatchery spring-run Chinook populations considered to be part of this ESU, two are propagated in rivers that are within the historical geographic range of the ESU but that likely did not support spring-run populations. High hatchery production in the Lower Columbia River poses genetic and ecological risks to the natural populations in the ESU, and complicates assessments of their performance. The BRT also expressed concern over the introgression of out-of-ESU hatchery stocks.

The BRT found moderately high risks for all VSP categories. Informed by this risk assessment, the majority opinion of the BRT was that the naturally spawned component of the Lower Columbia River Chinook ESU is ''likely to become endangered within the foreseeable future,'' with the minority being split between ''in danger of extinction'' and ''not in danger of extinction or likely to become endangered within the foreseeable future.''

There are 17 artificial propagation programs releasing hatchery Chinook salmon that are considered to be part of the Lower Columbia River Chinook ESU (Table 1). All of these programs are designed to produce fish for harvest, with three of these programs also being implemented to augment the naturally spawning populations in the basins where the fish are released. These three programs integrate naturally produced spring Chinook salmon into the broodstock in an attempt to minimize the genetic effects of returning hatchery adults that spawn naturally.

Our assessment of the effects of artificial propagation on ESU extinction risk concluded that these hatchery programs collectively do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Hatchery programs have increased total returns and numbers of fish spawning naturally, thus reducing risks to ESU abundance. Although these hatchery programs have been successful at producing substantial numbers of fish, their effect on the productivity of the ESU in-total is uncertain. Additionally, the high level of hatchery production in this ESU poses potential genetic and ecological risks to the ESU, and confounds the monitoring and evaluation of abundance trends and productivity. The Cowlitz River spring Chinook salmon program produces parr for release into the upper Cowlitz River Basin in an attempt to re-establish a naturally spawning population above Cowlitz Falls Dam. Such reintroduction efforts increase the ESU's spatial distribution into historical habitats, and slightly reduce risks to ESU spatial structure. The few programs that regularly integrate natural fish into the broodstock may help preserve genetic diversity within the ESU. However, the majority of hatchery programs in the ESU have not converted to the regular incorporation of natural broodstock, thus limiting this risk reducing feature at the ESU scale. Past and ongoing transfers of broodstock among hatchery programs in different basins represent a risk to within and among population diversity. Collectively, artificial propagation programs in the ESU provide slight benefits to ESU abundance, spatial structure, and diversity, but have neutral or uncertain effects on ESU productivity. Informed by the BRT's findings (NMFS, 2003b) and our assessment of the effects of artificial propagation programs on the viability of the ESU (NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that the Lower Columbia River Chinook ESU in-total is ''likely to become endangered in the foreseeable future'' (NMFS, 2004c).

Upper Columbia River Spring-run Chinook ESU—All populations in the Upper Columbia River spring-run Chinook ESU exhibited pronounced increases in abundance in 2001. These increases are particularly encouraging following the last decade of steep declines to record, critically low escapements. Despite strong returns in 2001, both recent 5-year and long term productivity trends remain below replacement. The five hatchery spring-run Chinook populations considered to be part of this ESU (Table 1) are programs aimed at supplementing natural production areas. These programs have contributed substantially to the abundance of fish spawning naturally in recent years. However, little information is available to assess the impact of these high levels of supplementation on the long-term productivity of natural populations. Spatial structure in this ESU was of little concern as there is passage and connectivity among almost all ESU populations, although it is estimated that approximately 58 percent of historical habitat has been lost. During years of critically low escapement (1996 and 1998) extreme management measures were taken in one of the three major spring Chinook producing basins by collecting all returning adults into hatchery supplementation programs. Such actions reflect the ongoing vulnerability of certain segments of this ESU. The BRT expressed concern that these actions, while appropriately guarding against the catastrophic loss of populations, may have compromised ESU population structure and diversity.

The BRT's assessment of risk for the four VSP categories reflects strong concerns regarding abundance and productivity, and comparatively less concern for ESU spatial structure and diversity. The BRT's assessment of overall extinction risk faced by the naturally spawned component of the Upper Columbia River spring-run Chinook ESU was divided between ''in danger of extinction'' and ''likely to become endangered within the foreseeable future,'' with a slight majority opinion that the ESU is ''in danger of extinction.''

Six artificial propagation programs in the Upper Columbia River Basin produce spring-run Chinook in the Methow and Wenatchee Rivers that are considered to be part of the Upper Columbia River spring-run Chinook ESU (Table 1). The Entiat NFH operating in the Entiat River is not included in the ESU, and is intended to remain isolated from the local natural population. The within ESU hatchery programs are conservation programs intended to contribute to the recovery of the ESU by increasing the abundance and spatial distribution of naturally spawned fish, while maintaining the genetic integrity of populations within the ESU. Three of the conservation programs incorporate local natural broodstock to minimize adverse genetic effects, and follow broodstock protocols guarding against the overcollection of the natural run. The remaining within-ESU hatchery programs are captive broodstock programs. These programs also adhere to strict protocols for the collection, rearing, maintenance, and mating of the captive brood populations. All of the six artificial propagation programs considered to be part of the ESU include extensive monitoring and evaluation efforts to continually evaluate the extent and implications of

any genetic and behavioral differences that might emerge between the hatchery and natural stocks.

Genetic evidence suggests that the within-ESU programs remain closely related to the naturally spawned populations and maintain local genetic distinctiveness of populations within the ESU. The captive broodstock programs may exhibit lower fecundity and younger average age-at-maturity compared to the natural populations from which they were derived. However, the extensive monitoring and evaluation efforts employed afford the adaptive management of any unintended adverse effects. Habitat Conservation Plans (HCPs) with the Chelan and Douglas Public Utility Districts and binding mitigation agreements ensure that these programs will have secure funding and will continue into the future. These hatchery programs have undergone ESA section 7 consultation to ensure that they do not jeopardize the continued existence of the ESU, and they have received ESA section 10 permits for production through 2007. Annual reports and other specific information reporting requirements ensure that the terms and conditions as specified by NMFS are followed. These programs, through adherence to best professional practices, have not experienced disease outbreaks or other catastrophic losses.

Our assessment of the effects of artificial propagation on ESU extinction risk concluded that these hatchery programs collectively do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Overall, the hatchery programs in the ESU have increased the total abundance of fish considered to be part of the ESU. Specifically, the two hatchery programs in the Wenatchee Basin have contributed to reducing abundance risk. However, it is uncertain whether the four programs in the Methow Basin have provided a net benefit to abundance. The contribution of ESU hatchery programs to the productivity of the ESU in-total is uncertain. The overall impact of the hatchery programs on ESU spatial structure is neutral. The Wenatchee Basin programs are managed to promote appropriate spatial structure, and they likely reduce spatial structure risk in that basin. The Methow Basin hatchery programs, however, concentrate spawners near the hatchery facilities, altering population spatial structure and increasing vulnerability to catastrophic events. Overall, within-ESU hatchery programs do not moderate risks to ESU diversity. The Wenatchee Basin programs do help preserve population diversity though the incorporation of natural-origin fish into broodstock. The Methow Basin programs, however, incorporate few natural fish with hatchery-origin fish predominating on the spawning grounds. Additionally, the presence of out-of-ESU Carson stock Chinook in the Methow Basin remains a concern, although the stock is in the process of being terminated. The out-of-ESU Entiat hatchery program is a source of significant concern to the ESU. The Entiat stock may have introgressed significantly with or replaced the native population. Although the artificial propagation programs in the ESU have a slight beneficial effect on ESU abundance, they do not mitigate other key risk factors identified by the BRT. Informed by the BRT's findings (NMFS, 2003b) and our assessment of the effects of artificial propagation programs on the viability of the ESU (NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that the Upper Columbia River spring-run Chinook ESU in-total is ''in danger of extinction'' (NMFS, 2004c).

Puget Sound Chinook ESU—Assessing extinction risk for the Puget Sound Chinook ESU is complicated by high levels of hatchery production and a limited availability of information on the fraction of natural spawners that are of hatchery-origin. Although populations in the ESU have not experienced the dramatic increases in abundance in the last 2 to 3 years that have been evident in many other ESUs, more populations have shown modest increases in escapement in recent years than have declined (13 populations versus nine). Most populations have a recent 5-year mean abundance of fewer than 1,500 natural spawners, with the Upper Skagit population being a notable exception (the recent 5-year mean abundance for the Upper Skagit population approaches 10,000 natural spawners). Currently observed abundances of natural spawners in the ESU are several orders of magnitude lower than estimated historical spawner capacity, and well below peak historical abundance (approximately 690,000 spawners in the early 1900s). Recent 5-year and long-term productivity trends remain below replacement for the majority of the 22 extant populations of Puget Sound Chinook. The BRT was concerned that the concentration of the majority of natural production in just a few subbasins represents a significant risk. Natural production areas, due to their concentrated spatial distribution, are vulnerable to extirpation due to catastrophic events. The BRT was concerned by the disproportionate loss of early run populations and its impact on the diversity of the Puget Sound Chinook ESU. The Puget Sound Technical Recovery Team has identified 31 historical populations (Ruckelshaus *et al.*, 2002), nine of which are believed to be extinct, most of which were ''early run'' or ''spring'' populations. Past hatchery practices that transplanted stocks among basins within the ESU and present programs using transplanted stocks that incorporate little local natural broodstock represent additional risk to ESU diversity. In particular, the BRT noted that the pervasive use of Green River stock, and stocks subsequently derived from the Green River stock, throughout the ESU may reduce the genetic diversity and fitness of naturally spawning populations.

The BRT found moderately high risks for all VSP categories. Informed by this risk assessment, the strong majority opinion of the BRT was that the naturally spawned component of the Puget Sound Chinook ESU is ''likely to become endangered within the foreseeable future.'' The minority opinion was in the ''not in danger of extinction or likely to become endangered within the foreseeable future'' category.

There are currently 26 programs artificially propagating Puget Sound Chinook salmon that are considered to be part of the ESU (Table 1). Eight of the programs are directed at conservation, and are specifically implemented to preserve and increase the abundance of native populations in their natal watersheds where habitat needed to sustain the populations naturally at viable levels has been lost or degraded. Each of these conservation hatchery programs includes research, monitoring, and evaluation activities designed to determine success in recovering the propagated populations to viable levels, and to determine the demographic, ecological, and genetic effects of each program on target and non-target salmonid populations. The remaining programs considered to be part of the ESU are operated primarily for fisheries harvest augmentation purposes (some of which also function as research programs) using transplanted within-ESU-origin Chinook salmon as broodstock.

Our assessment of the effects of artificial propagation on ESU extinction risk concluded that these hatchery programs collectively do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). The conservation and hatchery augmentation programs collectively have increased the total abundance of the ESU. The conservation programs

have increased the abundance of naturally spawning Chinook, and likely have reduced abundance risks for these populations. The large numbers of Chinook produced by the harvest augmentation programs, however, have resulted in considerable numbers of strays. Any potential benefits from these programs to abundance likely are offset by increased ecological and genetic risks. There is no evidence that any of the 26 ESU hatchery programs have contributed to increased abundances of natural-origin Chinook, despite decades of infusing natural spawning areas with hatchery fish. The contribution of ESU hatchery programs to the productivity of the ESU in-total is uncertain. Four programs are planting hatchery fish above impassible dams, providing some benefit to ESU spatial structure. However, the ongoing practice of transplanting stocks within the ESU and incorporating little natural local-origin broodstock continues to pose significant risks to ESU spatial structure and diversity. The conservation hatchery programs function to preserve remaining genetic diversity, and likely have prevented the loss of several populations. Among the harvest augmentation programs are yearling Chinook release programs. Yearling Chinook programs may be harmful to local natural-origin populations due to increased risks of predation and the reduction of within-population diversity. Collectively, artificial propagation programs in the ESU provide a slight beneficial effect to ESU abundance and spatial structure, but neutral or uncertain effects to ESU productivity and diversity. Informed by the BRT's findings (NMFS, 2003b) and our assessment of the effects of artificial propagation programs on the viability of the ESU (NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that the Puget Sound Chinook ESU in-total is ''likely to become endangered in the foreseeable future'' (NMFS, 2004c).

Snake River Fall-run Chinook ESU—The abundance of natural-origin spawners in the Snake River fall-run Chinook ESU for 2001 (2,652 adults) was in excess of 1,000 fish for the first time since counts began at the Lower Granite Dam in 1975. The recent 5-year mean abundance of 871 naturally produced spawners, however, generated concern that despite recent improvements, the abundance level is very low for an entire ESU. With the exception of the marked increase in 2001, the ESU has fluctuated between approximately 500 to 1,000 natural spawners since 1975, suggesting a higher degree of stability in growth rate at low population levels than is seen in other salmonid populations. Increasing returns reflect improved ocean conditions, improved management of the mainstem hydrosystem flow regime, decreased harvest, and an increasing contribution from the Lyons Ferry Hatchery supplementation program. However, due to the large fraction of naturally spawning hatchery fish, it is difficult to assess the productivity of the natural population. Depending upon the assumption made regarding the reproductive contribution of hatchery fish, long-term and short-term trends in productivity are at or above replacement. It is estimated that approximately 80 percent of historical spawning habitat was lost (including the most productive areas) with the construction of a series of Snake River mainstem dams. The loss of spawning habitats and the restriction of the ESU to a single extant naturally spawning population increase the ESU's vulnerability to environmental variability and catastrophic events. The diversity associated with populations that once resided above the Snake River dams has been lost, and the impact of straying out-of-ESU fish has the potential to further compromise ESU diversity. Recent improvements in the marking of out-of-ESU hatchery fish and their removal at Lower Granite Dam have reduced the impact of these strays. However, introgression below Lower Granite Dam remains a concern. The BRT voiced concern that the practice of collecting fish below Lower Granite Dam for broodstock incorporates non-ESU strays into the Lyons Ferry Hatchery program, and poses additional risks to ESU diversity. Straying of out-of-ESU hatchery fall Chinook salmon from outside the Snake River Basin was identified as a major risk factor in the late 1980s to mid 1990s. Out-of-ESU hatchery strays have been much reduced due to the removal of hatchery strays at downstream dams, and a reduction in the number of fish released into the Umatilla River (where the majority of out-of-ESU strays originated).

The BRT found moderately high risk for all VSP categories. Informed by this risk assessment, the majority opinion of the BRT was that the naturally spawned component of the Snake River fall-run Chinook ESU is ''likely to become endangered within the foreseeable future.'' The minority opinion assessed ESU extinction risk as ''in danger of extinction,'' although a slight minority fell in the ''not in danger of extinction or likely to become endangered within the foreseeable future'' category.

There are four artificial propagation programs producing Snake River fall Chinook salmon in the Snake River basin, all based on the Lyons Ferry Hatchery stock and considered to be part of the Snake River fall-run Chinook ESU (Table 1). When naturally spawning fall Chinook declined to fewer than 100 fish in 1991, most of the genetic legacy of this ESU was preserved in the Lyons Ferry Hatchery broodstock (NMFS, 1991c). These four hatchery programs are managed to enhance listed Snake River fall Chinook salmon and presently include the Lyons Ferry Hatchery, Fall Chinook Acclimation Ponds Program, Nez Perce Tribal Hatchery, and Oxbow Hatchery (an Idaho Power Company mitigation hatchery). These existing programs release fish into the mainstem Snake River and Clearwater River which represent the majority of the remaining habitat available to this ESU.

Our assessment of the effects of artificial propagation on ESU extinction risk concluded that these hatchery programs collectively do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). These hatchery programs have contributed to the recent substantial increases in total ESU abundance, including both natural-origin and hatchery-origin ESU components. Spawning escapement has increased to several thousand adults (from a few hundred in the early 1990s) due in large part to increased releases from these hatchery programs. These programs collectively have had a beneficial effect on ESU abundance in recent years. The BRT noted, however, that the large but uncertain fraction of naturally spawning hatchery fish complicates assessments of ESU productivity. The contribution of ESU hatchery programs to the productivity of the ESU in-total is uncertain. As ESU abundance has increased in recent years, ESU spatial distribution has increased. The Snake River fall-run Chinook hatchery programs contributed to this reduction in risk to ESU spatial distribution. The Lyons Ferry stock has preserved genetic diversity during critically low years of abundance. However, the ESU-wide use of a single hatchery broodstock may pose long-term genetic risks, and may limit adaptation to different habitat areas. Although the ESU presently consists of a single independent population, it was most likely composed of diverse production centers. Additionally, the broodstock collection practices employed pose risks to ESU spatial structure and diversity. Release

strategies practiced by the ESU hatchery programs (*e.g.*, extended captivity for about 15 percent of the fish before release) are in conflict with the Snake River fall-run Chinook life history, and may compromise ESU diversity. Collectively, artificial propagation programs in the ESU provide slight benefits to ESU abundance, spatial structure, and diversity, but have neutral or uncertain effects on ESU productivity. Informed by the BRT's findings (NMFS, 2003b) and our assessment of the effects of artificial propagation programs on the viability of the ESU (NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that the Snake River fall-run Chinook ESU in-total is ''likely to become endangered in the foreseeable future'' (NMFS, 2004c).

Snake River Spring/Summer Chinook ESU—The aggregate return (including hatchery and natural-origin fish) of Snake River spring/summer-run Chinook in 2001 exhibited a large increase over recent abundances. Many, but not all, of the 29 natural production areas within the ESU experienced large abundance increases in 2001 as well, with two populations nearing the abundance levels specified in NMFS' 1995 Proposed Snake River Recovery Plan (NMFS, 1995b). However, approximately 79 percent of the 2001 return of spring-run Chinook was of hatchery origin. Short-term productivity trends were at or above replacement for the majority of natural production areas in the ESU, although long-term productivity trends remain below replacement for all natural production areas, reflecting the severe declines since the 1960s. Although the number of spawning aggregations lost in this ESU due to the establishment of the Snake River mainstem dams is unknown, this ESU has a wide spatial distribution in a variety of locations and habitat types. The BRT considered it a positive sign that the out-of-ESU Rapid River broodstock has been phased out of the Grande Ronde system. There is no evidence of wide-scale straying by hatchery stocks, thereby alleviating diversity concerns somewhat. Nonetheless, the high level of hatchery production in this ESU complicates the assessments of trends in natural abundance and productivity.

The BRT found moderately high risk for the abundance and productivity VSP factors, and comparatively lower risk for spatial structure and diversity. Informed by this risk assessment, the majority opinion of the BRT was that the naturally spawned component of the Snake River spring/summer-run Chinook ESU is ''likely to become endangered within the foreseeable future.'' The minority opinion assessed ESU extinction risk as ''in danger of extinction,'' although a slight minority concluded that the ESU is in the ''not in danger of extinction or likely to become endangered within the foreseeable future'' category.

There are 15 artificial propagation programs producing spring/summer-run Chinook salmon that are considered to be part of the Snake River spring/summer-run Chinook ESU (Table 1). A portion of these programs are managed to enhance listed natural populations, including the use of captive broodstock hatcheries in the upper Salmon River, Lemhi River, East Fork Salmon River, and Yankee Fork populations. These enhancement programs all use broodstocks founded from the local native populations. Currently, the use of non-ESU broodstock sources is restricted to Little Salmon/Rapid River (lower Salmon River tributary), mainstem Snake River at Hells Canyon, and the Clearwater River.

Our assessment of the effects of artificial propagation on ESU extinction risk concluded that these hatchery programs collectively do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Overall, these hatchery programs have contributed to the increases in total ESU abundance and in the number of natural spawners observed in recent years. The contribution of ESU hatchery programs to the productivity of the ESU in-total is uncertain. Some reintroduction and outplanting of hatchery fish above barriers and into vacant habitat has occurred, providing a slight benefit to ESU spatial structure. All of the within-ESU hatchery stocks are derived from local natural populations and employ management practices designed to preserve genetic diversity. The Grande Ronde Captive Broodstock programs likely have prevented the extirpation of the local natural populations. Additionally, hatchery releases are managed to maintain wild fish reserves in the ESU in an effort to preserve natural local adaptation and genetic variability. Collectively, artificial propagation programs in the ESU provide benefits to ESU abundance, spatial structure, and diversity, but have neutral or uncertain effects on ESU productivity. Informed by the BRT's findings (NMFS, 2003b) and our assessment of the effects of artificial propagation programs on the viability of the ESU (NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that the Snake River spring/summer-run Chinook ESU in-total is ''likely to become endangered in the foreseeable future'' (NMFS, 2004c).

Central California Coast Coho ESU—Information on the abundance and productivity trends for the naturally spawning component of the Central California Coast coho ESU is extremely limited. There are no long-term time series of spawner abundance for individual river systems. Analyses of juvenile coho presence-absence information, juvenile density surveys, and irregular adult counts for the South Fork Noyo River indicate low abundance and long-term downward trends for the naturally spawning populations throughout the ESU. Improved ocean conditions coupled with favorable stream flows and harvest restrictions have contributed to increased returns in 2001 in streams in the northern portion of the ESU, as indicated by an increase in the observed presence of fish in historically occupied streams. Data are particularly lacking for many river basins in the southern two-thirds of the ESU where naturally spawning populations are considered to be at the greatest risk. The extirpation or near extirpation of natural coho salmon populations in several major river basins, and across most of the southern historical range of the ESU, represents a significant risk to ESU spatial structure and diversity. Artificial propagation of coho salmon within the Central California Coast ESU has declined since the ESU was listed in 1996 though it continues at the Noyo River and Scott Creek facilities, and two captive broodstock populations have recently been established. Genetic diversity risk associated with out-of-basin transfers appears to be minimal, but diversity risk from domestication selection and low effective population sizes in the remaining hatchery programs remains a concern. An out-of-ESU artificial propagation program for coho was operated at the Don Clausen hatchery on the Russian River through the mid 1990s, but was terminated in 1996. Termination of this program was considered by the BRT as a positive development for naturally produced coho in this ESU. For the naturally spawning component of the ESU, the BRT found very high risk for the abundance, productivity, and spatial structure VSP parameters and comparatively moderate risk with respect to the diversity VSP parameter. The lack of direct estimates of the performance of the naturally spawned populations in this ESU, and the associated uncertainty this generates, was of specific concern to the BRT. Informed by the VSP risk assessment

and the associated uncertainty, the strong majority opinion of the BRT was that the naturally spawned component of the Central California Coast coho ESU was ''in danger of extinction.'' The minority opinion was that this ESU is ''likely to become endangered within the foreseeable future.''

Four artificial propagation programs are considered to be part of the Central California Coast coho ESU (Table 1; NMFS, 2005b). The Noyo River program is an augmentation program located in the northern portion of the ESU which regularly incorporates local natural-origin fish into the broodstock and releases fish into the Noyo River watershed. The program has been in operation for over 50 years, but the program has recently been discontinued. The Monterey Bay Salmon and Trout Project is an artificial propagation program that is operated as a conservation program designed to supplement the local natural population, located in the southern portion of the ESU (south of San Francisco) where natural populations are at the highest risk of extinction. Relatively small numbers of fish are spawned and released from this program on Scott Creek, but natural-origin fish are routinely incorporated into the broodstock. Recently, captive broodstock programs have been established for the Russian River and Scott Creek populations in order to preserve the genetic resources of these two naturally spawning populations and for use in artificial programs. Artificially propagated fish from these two captive broodstock programs will be outplanted in the Russian River and Scott Creek watersheds to supplement local natural populations. The Russian River program is integrated with a habitat restoration program designed to improve habitat conditions and subsequent survival for outplanted coho juveniles.

An assessment of the effects of these four artificial propagation programs on the viability of the ESU in-total concluded that they decrease risk of extinction to some degree by contributing to increased ESU abundance and diversity, but have a neutral or uncertain effect on the productivity or spatial structure of the ESU (NMFS, 2005b). The three conservation programs are considered crucial to the recovery of this ESU, but it is unclear if they have had any beneficial effect on natural spawner abundance. The Noyo River program which had been operated for over 50 years is being terminated because it has not met CDFG's goal of increasing coho salmon abundance. Productivity of coho salmon in the Noyo River is thought to be reduced or unaffected by long term artificial propagation in that watershed. It is uncertain how effective the captive broodstock and rearing programs in the Russian River and Scott Creek will be in increasing productivity, but efforts in the Russian River are coupled with a major habitat restoration effort which may improve natural population productivity. The two captive broodstock programs will hopefully contribute to future abundance and improved spatial structure of the ESU, but out-planting has yet to be implemented so long term benefits are uncertain. The Monterey Bay Salmon and Trout Program is thought to be responsible for sustaining the presence of natural origin coho salmon in Scott Creek, which is at the southern extent of the ESU's range. Both of the captive broodstock programs, particularly the Scott Creek program, are genetic repositories which serve to preserve the genome of the ESU thereby reducing genetic diversity risks. Informed by the BRT's findings (NMFS, 2003b) and our assessment of the effects of artificial propagation programs on the viability of the ESU (NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that the Central California Coast coho ESU in-total is ''in danger of extinction'' (NMFS, 2004c).

Southern Oregon/Northern California Coast Coho ESU—The only reliable time series of adult abundance for the naturally spawning component of the Southern Oregon/Northern California Coast coho ESU is for the Rogue River population in southern Oregon. The California portion of the ESU is characterized by a paucity of data, with only a few available spawner indices and presence-absence surveys. The recent 5-year mean abundance for the Rogue River is approximately 5,000 natural spawners and is the highest such abundance for the Rogue River data series (since 1980). Both long- and short-term productivity trends for Rogue River natural spawners are above replacement. The BRT concluded, based on an analysis of pre-harvest abundance, however, that these positive trends for the Rogue River population reflect the effects of reduced harvest rather than improved freshwater conditions and population productivity. Less reliable indices of spawner abundance in several California populations suggest flat or declining trends. Relatively low levels of observed presence in historically occupied coho streams (32–56 percent from 1986 to 2000) indicate continued low abundance in the California portion of this ESU. Indications of stronger 2001 returns in several California populations, presumably due to favorable freshwater and ocean conditions, is encouraging but must be evaluated in the context of more than a decade of generally poor performance. Nonetheless, the high occupancy rate of historical streams in 2001 suggests that much habitat remains accessible to coho salmon. Although extant populations reside in all major river basins within the ESU, the BRT was concerned about the loss of local populations in the Trinity, Klamath, and Rogue river systems. The high hatchery production in these systems may mask trends in ESU population structure and pose risks to ESU diversity. The recent termination of several out-of-ESU hatcheries in California is expected to result in decreased risks to ESU diversity. The BRT found moderately high risks for abundance and productivity VSP categories, with comparatively lower risk for spatial structure and diversity. Informed by this risk assessment, the strong majority opinion of the BRT was that the naturally spawned component of the Southern Oregon/Northern California Coast coho ESU is ''likely to become endangered within the foreseeable future.'' The minority opinion assessed ESU extinction risk as ''in danger of extinction,'' although a slight minority concluded that the ESU is in the ''not in danger of extinction or likely to become endangered within the foreseeable future'' category.

There are three artificial propagation programs releasing hatchery coho salmon that are considered to be part of the Southern Oregon/Northern California Coast Coho ESU. The Rogue River hatchery in Oregon and the Trinity River and Iron Gate hatcheries (Klamath River) in California are all mitigation programs designed to produce fish for harvest, but they integrate naturally produced coho salmon into the broodstock in an attempt to minimize the genetic effects of returning hatchery adults that spawn naturally. All three programs have been in operation for several decades with smolt production goals ranging from 75,000 to 500,000 fish.

An assessment of the effects of these three artificial propagation programs on the viability of the ESU in-total concluded that they decrease risk of extinction by contributing to increased ESU abundance, but have a neutral or uncertain effect on the productivity, spatial structure and diversity of the ESU (NMFS, 2005b). Abundance of the ESU in-total has been increased as a result of these artificial propagation programs, particularly in the Rogue and Trinity Rivers. In the Rogue River,

hatchery origin fish have averaged approximately half of the returning spawners over the past 20 years. In the Trinity River, most naturally spawning fish are thought to be of hatchery origin based on weir counts at Willow Creek. The effects of these artificial propagation programs on ESU productivity and spatial structure are limited. Only three rivers have hatchery populations and natural populations are depressed throughout the range of the ESU. The effects of these hatchery programs on ESU diversity are likely limited. Natural origin fish have been incorporated into the broodstock but the magnitude of natural fish use is unknown. Informed by the BRT's findings (NMFS, 2003b) and our assessment of the effects of artificial propagation programs on the viability of the ESU (NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that the Southern Oregon/Northern California Coast coho ESU in-total is ''likely to become endangered in the foreseeable future'' (NMFS, 2004c).

Lower Columbia River Coho ESU—There are only two extant populations in the Lower Columbia River coho ESU with appreciable natural production (the Clackamas and Sandy River populations), from an estimated 23 historical populations in the ESU. Although adult returns in 2000 and 2001 for the Clackamas and Sandy River populations exhibited moderate increases, the recent 5-year mean of natural-origin spawners for both populations represents less than 1,500 adults. The Sandy River population has exhibited recruitment failure in 5 of the last 10 years, and has exhibited a poor response to reductions in harvest. During the 1980s and 1990s natural spawners were not observed in the lower tributaries in the ESU. Coincident with the 2000–2001 abundance increases in the Sandy and Clackamas populations, a small number of coho spawners of unknown origin have been surveyed in some lower tributaries. Short- and long-term trends in productivity are below replacement. Approximately 40 percent of historical habitat is currently inaccessible, which restricts the number of areas that might support natural production, and further increases the ESU's vulnerability to environmental variability and catastrophic events. The extreme loss of naturally spawning populations, the low abundance of extant populations, diminished diversity, and fragmentation and isolation of the remaining naturally produced fish confer considerable risks to the ESU. The paucity of naturally produced spawners in this ESU is contrasted by the very large number of hatchery produced adults. The abundance of hatchery coho returning to the Lower Columbia River in 2001 and 2002 exceeded one million and 600,000 fish, respectively. The BRT expressed concern that the magnitude of hatchery production continues to pose significant genetic and ecological threats to the extant natural populations in the ESU. However, these hatchery stocks at present collectively represent a significant portion of the ESU's remaining genetic resources. The 25 hatchery stocks considered to be part of the ESU (Table 1), if appropriately managed, may prove essential to the restoration of more widespread naturally spawning populations.

The BRT found extremely high risks for each of the VSP categories. Informed by this risk assessment, the strong majority opinion of the BRT was that the naturally spawned component of the Lower Columbia River coho ESU is ''in danger of extinction.'' The minority opinion was that the ESU is ''likely to become endangered within the foreseeable future.''

All of the 25 hatchery programs included in the Lower Columbia River coho ESU are designed to produce fish for harvest, with two small programs designed to also augment the natural spawning populations in the Lewis River Basin. Artificial propagation in this ESU continues to represent a threat to the genetic, ecological, and behavioral diversity of the ESU. Past artificial propagation efforts imported out-of-ESU fish for broodstock, generally did not mark hatchery fish, mixed broodstocks derived from different local populations, and transplanted stocks among basins throughout the ESU. The result is that the hatchery stocks considered to be part of the ESU represent a homogenization of populations. Several of these risks have recently begun to be addressed by improvements in hatchery practices. Out-of-ESU broodstock is no longer used, and near 100-percent marking of hatchery fish is employed to afford improved monitoring and evaluation of broodstock and (hatchery- and natural-origin) returns. However, many of the within-ESU hatchery programs do not adhere to best hatchery practices. Eggs are often transferred among basins in an effort to meet individual program goals, further compromising ESU spatial structure and diversity. Programs may use broodstock that does not reflect what was historically present in a given basin, limiting the potential for artificial propagation to establish locally adapted naturally spawning populations. Many programs lack Hatchery and Genetic Management Plans that establish escapement goals appropriate for the natural capacity of each basin, and that identify goals for the incorporation of natural-origin fish into the broodstock.

Our assessment of the effects of artificial propagation on ESU extinction risk concluded that hatchery programs collectively mitigate the immediacy of extinction risk for the Lower Columbia River coho ESU in-total in the short term, but that these programs do not substantially reduce the extinction risk of the ESU in the foreseeable future (NMFS, 2004c). At present, within ESU hatchery programs significantly increase the abundance of the ESU in-total. Without adequate long-term monitoring, the contribution of ESU hatchery programs to the productivity of the ESU in-total is uncertain. The hatchery programs are widely distributed throughout the Lower Columbia River, reducing the spatial distribution of risk to catastrophic events. Additionally, reintroduction programs in the Upper Cowlitz River may provide additional reduction of ESU spatial structure risks. As mentioned above, the majority of the ESU's genetic diversity exists in the hatchery programs. Although these programs have the potential of preserving historical local adaptation and behavioral and ecological diversity, the manner in which these potential genetic resources are presently being managed poses significant risks to the diversity of the ESU in-total. At present, the Lower Columbia River coho hatchery programs reduce risks to ESU abundance and spatial structure, provide uncertain benefits to ESU productivity, and pose risks to ESU diversity. Overall, artificial propagation mitigates the immediacy of ESU extinction risk in the short-term, but is of uncertain contribution in the long term.

Over the long term, reliance on the continued operation of these hatchery programs is risky (NMFS, 2005b). Several Lower Columbia River coho hatchery programs have been terminated, and there is the prospect of additional closures in the future. With each hatchery closure, any potential benefits to ESU abundance and spatial structure are reduced. Risks of operational failure, disease, and environmental catastrophes further complicate assessments of hatchery contributions over the long term. Additionally, the two extant naturally spawning populations in the ESU were described by the BRT as being ''in danger of extinction.'' Accordingly, it is likely that the Lower Columbia River coho ESU may exist in hatcheries only

within the foreseeable future. It is uncertain whether these isolated hatchery programs can persist without the incorporation of natural-origin fish into the broodstock. Although there are examples of salmonid hatchery programs having been in operation for relatively long periods of time, these programs have not existed in complete isolation. Long-lived hatchery programs historically required infusions of wild fish in order to meet broodstock goals. The long-term sustainability of such isolated hatchery programs is unknown. It is uncertain whether the Lower Columbia River coho isolated hatchery programs are capable of mitigating risks to ESU abundance and productivity into the foreseeable future. In isolation, these programs may also become more than moderately diverged from the evolutionary legacy of the ESU, and hence no longer merit inclusion in the ESU. Under either circumstance, the ability of artificial propagation to buffer the immediacy of extinction risk over the long-term is uncertain. Informed by the BRT's findings (NMFS, 2003b) and our assessment of the short- and long-term effects of artificial propagation programs on the viability of the ESU (NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that the Lower Columbia coho ESU in-total is ''likely to become endangered in the foreseeable future'' (NMFS, 2004c).

Columbia River Chum ESU—Approximately 90 percent of the historical populations in the Columbia River chum ESU are extirpated or nearly so. During the 1980s and 1990s, the combined abundance of natural spawners for the Lower and Upper Columbia River Gorge, Washougal, and Grays River populations was below 4,000 adults. In 2002, however, the abundance of natural spawners exhibited a substantial increase evident at several locations in the ESU. The preliminary estimate of natural spawners is approximately 20,000 adults. The cause of this dramatic increase in abundance is unknown. Improved ocean conditions, the initiation of a supplementation program in the Grays River, improved flow management at Bonneville Dam, favorable freshwater conditions, and increased survey sampling effort may all have contributed to the elevated 2002 abundance. However, long- and short-term productivity trends for ESU populations are at or below replacement. The loss of off-channel habitats and the extirpation of approximately 17 historical populations increase the ESU's vulnerability to environmental variability and catastrophic events. The populations that remain are low in abundance, and have limited distribution and poor connectivity.

The BRT found high risks for each of the VSP categories, particularly for ESU spatial structure and diversity. Informed by this risk assessment, the majority opinion of the BRT was that the naturally spawned component of the Columbia River chum ESU is ''likely to become endangered within the foreseeable future,'' with a minority opinion that it is ''in danger of extinction.''

There are three artificial propagation programs producing chum salmon considered to be part of the Columbia River chum ESU. These are conservation programs designed to support natural production. The Washougal Hatchery artificial propagation program provides artificially propagated chum salmon for re-introduction into recently restored habitat in Duncan Creek, Washington. This program also serves as a genetic reserve for the naturally spawning population in the mainstem Columbia River below Bonneville Dam, which can access only a portion of spawning habitat during low flow conditions. The other two programs are designed to augment natural production in the Grays River and the Chinook River in Washington. All these programs use naturally produced adults for broodstock. These programs were only recently established (1998–2002), with the first hatchery chum returning in 2002.

Our assessment of the effects of artificial propagation on ESU extinction risk concluded that these hatchery programs collectively do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). The Columbia River chum hatchery programs have only recently been initiated, and are beginning to provide benefits to ESU abundance. The contribution of ESU hatchery programs to the productivity of the ESU in-total is uncertain. The Sea Resources and Washougal Hatchery programs have begun to provide benefits to ESU spatial structure through reintroductions of chum salmon into restored habitats in the Chinook River and Duncan Creek, respectively. These three programs have a neutral effect on ESU diversity. Collectively, artificial propagation programs in the ESU provide a slight beneficial effect to ESU abundance and spatial structure, but have neutral or uncertain effects on ESU productivity and diversity. Informed by the BRT's findings (NMFS, 2003b) and our assessment of the effects of artificial propagation programs on the viability of the ESU (NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that the Columbia River chum ESU in-total is ''likely to become endangered in the foreseeable future'' (NMFS, 2004c).

Hood Canal Summer Chum ESU—Adult returns for some populations in the Hood Canal summer-run chum ESU showed modest improvements in 2000, with upward trends continuing in 2001 and 2002. The recent 5-year mean abundance is variable among populations in the ESU, ranging from one fish to nearly 4,500 fish. Hood Canal summer-run chum are the focus of an extensive rebuilding program developed and implemented since 1992 by the state and tribal co-managers. Two populations (the combined Quilcene and Union River populations) are above the conservation thresholds established by the rebuilding plan. However, most populations remain depressed. Estimates of the fraction of naturally spawning hatchery fish exceed 60 percent for some populations, indicating that reintroduction programs are supplementing the numbers of total fish spawning naturally in streams. Long-term trends in productivity are above replacement for only the Quilcene and Union River populations. Buoyed by recent increases, seven populations are exhibiting short-term productivity trends above replacement. Of an estimated 16 historical populations in the ESU, seven populations are believed to have been extirpated or nearly extirpated. Most of these extirpations have occurred in populations on the eastern side of Hood Canal, generating additional concern for ESU spatial structure. The widespread loss of estuary and lower floodplain habitat was noted by the BRT as a continuing threat to ESU spatial structure and connectivity. There is some concern that the Quilcene hatchery stock is exhibiting high rates of straying, and may represent a risk to historical population structure and diversity. However, with the extirpation of many local populations, much of this historical structure has been lost, and the use of Quilcene hatchery fish may represent one of a few remaining options for Hood Canal summer-run chum conservation.

The BRT found high risks for each of the VSP categories. Informed by this risk assessment, the majority opinion of the BRT was that the naturally spawned component of the Hood Canal summer-run chum ESU is ''likely to become endangered within the foreseeable

future,'' with a minority opinion that the ESU is ''in danger of extinction.''

There are currently eight programs releasing summer chum salmon that are considered to be part of the Hood Canal summer chum ESU (Table 1). Six of the programs are supplementation programs implemented to preserve and increase the abundance of native populations in their natal watersheds. These supplementation programs propagate and release fish into the Salmon Creek, Jimmycomelately Creek, Big Quilcene River, Hamma Hamma River, Lilliwaup Creek, and Union River watersheds. The remaining two programs use transplanted summer-run chum salmon from adjacent watersheds to reintroduce populations into Big Beef Creek and Chimacum Creek, where the native populations have been extirpated. Each of the hatchery programs includes research, monitoring, and evaluation activities designed to determine success in recovering the propagated populations to viable levels, and to determine the demographic, ecological, and genetic effects of each program on target and non-target salmonid populations. All the Hood Canal summer-run chum hatchery programs will be terminated after 12 years of operation.

Our assessment of the effects of artificial propagation on ESU extinction risk concluded that these hatchery programs collectively do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). The hatchery programs are reducing risks to ESU abundance by increasing total ESU abundance as well as the number of naturally spawning summer-run chum salmon. Several of the programs have likely prevented further population extirpations in the ESU. The contribution of ESU hatchery programs to the productivity of the ESU in-total is uncertain. The hatchery programs are benefiting ESU spatial structure by increasing the spawning area used in several watersheds and by increasing the geographic range of the ESU through reintroductions. These programs also provide benefits to ESU diversity. By bolstering total population sizes, the hatchery programs have likely stemmed adverse genetic effects for populations at critically low levels. Additionally, measures have been implemented to maintain current genetic diversity, including the use of native broodstock and the termination of the programs after 12 years of operation to guard against long-term domestication effects. Collectively, artificial propagation programs in the ESU presently provide a slight beneficial effect to ESU abundance, spatial structure, and diversity, but uncertain effects to ESU productivity. The long-term contribution of these programs after they are terminated is uncertain. Despite the current benefits provided by the comprehensive hatchery conservation efforts for Hood Canal summer-run chum, the ESU remains at low overall abundance with nearly half of historical populations extirpated. Informed by the BRT's findings (NMFS, 2003b) and our assessment of the effects of artificial propagation programs on the viability of the ESU (NMFS, 2005b), the Artificial Propagation Evaluation Workshop concluded that the Hood Canal summer-run chum ESU in-total is ''likely to become endangered in the foreseeable future'' (NMFS, 2004c).

Summary of Factors Affecting the Species

Section 4(a)(1) of the ESA and our implementing regulations (50 CFR part 424) set forth procedures for listing species. The Secretary of Commerce (Secretary) must determine, through the regulatory process, if a species is endangered or threatened because of any one or a combination of the following factors: (1) The present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms; or (5) other natural or human-made factors affecting its continued existence. We have previously detailed the impacts of various factors contributing to the decline of Pacific salmon and *O. mykiss* (*e.g.*, see summary of previous ESU listing determinations in the proposed rule, 69 FR 33102, June 14, 2004; NMFS 1998c, ''Factors Contributing to the Decline of Chinook Salmon—An Addendum to the 1996 West Coast Steelhead Factors for Decline Report;'' NMFS 1996a, ''Factors for Decline—A Supplement to the Notice of Determination for West Coast Steelhead Under the Endangered Species Act''). These **Federal Register** notices and technical reports conclude that all of the factors identified in section 4(a)(1) of the ESA have played a role in the decline of West Coast salmon and *O. mykiss* ESUs. The reader is referred the summary of factors affecting the species provided in the proposed rule (69 FR at 33141 through 33142; June 14, 2004), and references therein, for a more detailed treatment of the species' factors for decline.

Efforts Being Made to Protect West Coast Salmonids

Section 4(b)(1)(A) of the ESA requires the Secretary to make listing determinations solely on the basis of the best scientific and commercial data available after taking into account efforts being made to protect a species. Therefore, in making ESA listing determinations, we first assess an ESU's level of extinction risk and identify factors that have led to its decline. We then assess existing efforts being made to protect the species to determine if those measures ameliorate the risks faced by the ESU.

In judging the efficacy of existing protective efforts, we rely on the joint NMFS–FWS ''Policy for Evaluation of Conservation Efforts When Making Listing Decisions'' (''PECE;'' 68 FR 15100; March 28, 2003). PECE provides direction for the consideration of protective efforts identified in conservation agreements, conservation plans, management plans, or similar documents (developed by Federal agencies, state and local governments, Tribal governments, businesses, organizations, and individuals) that have not yet been implemented, or have been implemented but have not yet demonstrated effectiveness. The policy articulates several criteria for evaluating the certainty of implementation and effectiveness of protective efforts to aid in determination of whether a species warrants listing as threatened or endangered.

During our update of the status for the 16 ESUs addressed in this final rule, we reviewed protective efforts ranging in scope from regional conservation strategies to local watershed initiatives. The principal protective efforts affecting these West Coast salmonid ESUs were summarized in the June 14, 2004, proposed rule (69 FR 33102). Informed by the public comments received and based on our review, we conclude that collectively protective efforts do not provide sufficient certainty of implementation and effectiveness to substantially ameliorate the level of assessed extinction risk for all of the 16 ESUs addressed in this notice. While we acknowledge that many of the ongoing protective efforts are likely to promote the conservation of listed salmonids, most efforts are relatively recent, have yet to indicate their effectiveness, and few address conservation needs at scales sufficient to conserve entire ESUs. We conclude that existing protective efforts lack the certainty of implementation and effectiveness to preclude listing the 16 ESUs addressed in this final rule. Nonetheless, we will continue to

encourage these and other future protective efforts, and we will continue to collaborate with tribal, federal, state, and local entities to promote and improve efforts being made to protect the species.

Final Listing Determinations

The ESA defines an endangered species as any species in danger of extinction throughout all or a significant portion of its range, and a threatened species as any species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Section 4(b)(1) of the ESA requires that the listing determination be based solely on the best scientific and commercial data available, after conducting a review of the status of the species and taking into account those efforts, if any, being made to protect such species.

We conclude that for the 16 West Coast salmon and *O. mykiss* ESUs addressed in this final rule, four ESUs are endangered, and 12 ESUs are threatened. Collectively, these 16 ESUs include 132 artificial propagation programs. Informed by the *Alsea* ruling and consistent with the final Hatchery Listing Policy, which appears elsewhere in this edition of the **Federal Register**, any artificial propagation programs considered to be part of an ESU will be included in the listing if it is determined that the ESU in-total is threatened or endangered. Table 2 at the end of this section provides a summary of these final listing determinations.

Snake River Sockeye ESU

The BRT unanimously concluded that the Snake River sockeye ESU is ''in danger of extinction.'' Our assessment of the effects of artificial propagation on the ESU's extinction risk concluded that the Redfish Lake captive broodstock program does not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is ''in danger of extinction.'' We conclude that the ESU in-total is in danger of extinction throughout all or a significant portion of its range, and determine that the Snake River sockeye ESU continues to warrant listing under the ESA as an endangered species.

Ozette Lake Sockeye ESU

The BRT concluded that the naturally spawned component of the Ozette Lake sockeye ESU is ''likely to become endangered within the foreseeable future.'' Our assessment of the effects of artificial propagation on the ESU's extinction risk concluded that the within-ESU hatchery programs do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is ''likely to become endangered within the foreseeable future.'' We conclude that the ESU in-total is likely to become endangered within the foreseeable future throughout all or a significant portion of its range, and determine that the Ozette Lake sockeye ESU continues to warrant listing under the ESA as a threatened species.

Sacramento River Winter-Run Chinook ESU

The BRT concluded that the naturally spawned component of the Sacramento winter-run Chinook ESU is ''in danger of extinction.'' Informed by the BRT's findings (NMFS, 2003b) and the assessment of artificial propagation programs on the viability of the ESU (NMFS, 2004b), the Artificial Propagation Evaluation Workshop concluded that the Sacramento River winter-run Chinook ESU in-total is presently ''in danger of extinction'' (NMFS, 2004c). Major efforts have been undertaken by NMFS and others over the past decade to assess the viability of, and conduct research on, the winter-run Chinook population; implement freshwater and ocean harvest management conservation efforts; and implement a wide range of habitat conservation measures. The State of California has listed winter-run Chinook under the California Endangered Species Act, implemented freshwater harvest management conservation measures, and increased monitoring and evaluation efforts in support of conserving this ESU. Harvest and habitat conservation efforts have improved the ESU's abundance and productivity over the past decade. These efforts include: Changes in Central Valley Project and State Water Project operations and other actions undertaken pursuant to implementation of the Central Valley Project biological opinions that have increased freshwater survival; changes in salmon ocean harvest pursuant to the ocean harvest biological opinion that have increased ocean survival and adult escapement; and implementation of habitat restoration efforts (*e.g.* Ecosystem Restoration Program) throughout the Central Valley as a result of the CVPIA and CALFED programs and other central valley habitat restoration projects. A key concern of the BRT was the lack of diversity within this ESU and the fact that it is represented by a single extant population at present. Although significant efforts are underway through the CALFED ecosystem restoration program to restore habitat and anadromous fish access to Battle Creek which would provide an opportunity for this ESU to establish a second population, it is uncertain whether this program will be fully implemented, funded or successful in achieving the goal of establishing a second population. Although many important efforts have been and continue to be implemented, we do not believe that the protective efforts being implemented for this ESU, as evaluated pursuant to PECE, provide sufficient certainty of implementation and effectiveness to alter the BRT's and Artificial Propagation Workshop's assessments that the ESU is ''in danger of extinction.'' We find, therefore, that the Sacramento River winter-run Chinook ESU in-total is in danger of extinction throughout all or a significant portion of its range and conclude that the ESU continues to warrant listing as an endangered species under the ESA.

Central Valley Spring-Run Chinook ESU

The BRT concluded that the Central Valley spring-run Chinook ESU is ''likely to become endangered within the foreseeable future'' (NMFS, 2003b). Because the Feather River Hatchery spring Chinook stock was not considered to be part of the ESU at the time, the Artificial Propagation Evaluation Workshop did not address this ESU. Although consideration of the naturally spawning spring-run Chinook in the Feather River and the hatchery stock would likely reduce ESU risk in terms of abundance, it is unlikely to benefit any other VSP factors such as productivity, spatial structure, or diversity. If ongoing efforts to further isolate the spring-run phenotype in the Feather River are successful, the risks to the ESU's spatial structure and diversity would likely be reduced. Substantial protective efforts have been implemented to benefit this ESU, but as evaluated pursuant to PECE, they do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is ''likely to become endangered within the foreseeable future.'' We conclude that the ESU in-total is likely to become endangered within the foreseeable future throughout all or a significant portion of its range, and determine that the Central Valley spring-run Chinook ESU continues to warrant listing as threatened under the ESA.

California Coastal Chinook ESU

The BRT concluded that the naturally spawned component of the California Coastal Chinook ESU is ''likely to become endangered within the foreseeable future.'' Our assessment of artificial propagation programs on the viability of the ESU concluded that the California Coastal Chinook ESU in-total is ''likely to become endangered within the foreseeable future'' (NMFS, 2004c). Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is ''likely to become endangered within the foreseeable future.'' We conclude that the ESU in-total is likely to become endangered within the foreseeable future throughout all or a significant portion of its range, and determine that the California Coastal Chinook ESU continues to warrant listing as a threatened species under the ESA.

Upper Willamette River Chinook ESU

The BRT concluded that the naturally spawned component of the Upper Willamette River Chinook ESU is ''likely to become endangered within the foreseeable future.'' Our assessment of the effects of artificial propagation on the ESU's extinction risk concluded that the within-ESU hatchery programs do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is ''likely to become endangered within the foreseeable future.'' We conclude that the ESU in-total is likely to become endangered within the foreseeable future throughout all or a significant portion of its range, and determine that the Upper Willamette River Chinook ESU continues to warrant listing under the ESA as a threatened species.

Lower Columbia River Chinook ESU

The BRT concluded that the naturally spawned component of the Lower Columbia River Chinook ESU is ''likely to become endangered within the foreseeable future.'' Our assessment of the effects of artificial propagation on the ESU's extinction risk concluded that the within-ESU hatchery programs do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is ''likely to become endangered within the foreseeable future.'' We conclude that the ESU in-total is likely to become endangered within the foreseeable future throughout all or a significant portion of its range, and determine that the Lower Columbia River Chinook ESU continues to warrant listing under the ESA as a threatened species.

Upper Columbia River Spring-Run Chinook ESU

The BRT was divided on the extinction risk faced by the naturally spawned component of the Upper Columbia River spring-run Chinook ESU between ''in danger of extinction'' and ''likely to become endangered within the foreseeable future,'' with a slight majority finding that the ESU is ''in danger of extinction.'' Our assessment of the effects of artificial propagation on the ESU's extinction risk concluded that the within-ESU hatchery programs do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is in danger of extinction or likely to become so in the foreseeable future. We conclude that the ESU in-total is in danger of extinction throughout all or a significant portion of its range, and determine that the Upper Columbia River spring-run Chinook ESU continues to warrant listing under the ESA as an endangered species.

Puget Sound Chinook ESU

The BRT concluded that the naturally spawned component of the Puget Sound Chinook ESU is ''likely to become endangered within the foreseeable future.'' Our assessment of the effects of artificial propagation on the ESU's extinction risk concluded that the within-ESU hatchery programs do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is ''likely to become endangered within the foreseeable future.'' We conclude that the ESU in-total is likely to become endangered within the foreseeable future throughout all or a significant portion of its range, and determine that the Puget Sound Chinook ESU continues to warrant listing under the ESA as a threatened species.

Snake River Fall-Run Chinook ESU

The BRT concluded that the Snake River fall-run Chinook ESU is ''likely to become endangered within the foreseeable future.'' Our assessment of the effects of artificial propagation on the ESU's extinction risk concluded that the within-ESU hatchery programs do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is ''likely to become endangered within the foreseeable future.'' We conclude that the ESU in-total is likely to become endangered within the foreseeable future throughout all or a significant portion of its range, and determine that the Snake River fall-run Chinook ESU continues to warrant listing under the ESA as a threatened species.

Snake River Spring/Summer Chinook ESU

The BRT concluded that the Snake River spring/summer-run Chinook ESU is ''likely to become endangered within the foreseeable future.'' Our assessment of the effects of artificial propagation on the ESU's extinction risk concluded that the within-ESU hatchery programs do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is ''likely to become endangered within the foreseeable future.'' We conclude that the ESU in-total is likely to become endangered within the foreseeable future throughout all or a significant portion of its range, and determine that the Snake River spring/summer-run Chinook ESU continues to warrant listing under the ESA as a threatened species.

Central California Coast Coho ESU

The BRT concluded that the naturally spawned component of the Central California Coast coho ESU is ''in danger of extinction.'' Our assessment of the effects of artificial propagation on the ESU's extinction risk concluded that the within-ESU hatchery programs do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is ''in danger of extinction.'' We conclude that the ESU in-total is in danger of extinction throughout all or a

significant portion of its range. We determine that the Central California Coast coho ESU, presently listed as a threatened species, warrants listing as an endangered species under the ESA.

Southern Oregon/Northern California Coast Coho ESU

The BRT concluded that the naturally spawned component of the Southern Oregon/Northern California Coast coho ESU is ''likely to become endangered within the foreseeable future.'' Our assessment of the effects of artificial propagation on the ESU's extinction risk concluded that the within-ESU hatchery programs do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is ''likely to become endangered within the foreseeable future.'' We conclude that the ESU in-total is likely to become endangered within the foreseeable future throughout all or a significant portion of its range, and determine that the Southern Oregon/Northern California Coast coho ESU continues to warrant listing under the ESA as a threatened species.

Lower Columbia River Coho ESU

The BRT concluded that the naturally spawned component of the Lower Columbia River coho ESU is ''in danger of extinction.'' The BRT observed that although the scale of artificial propagation poses genetic and ecological threats to the two extant natural populations in the ESU, the within-ESU hatchery programs represent a substantial proportion of the genetic resources remaining in the ESU. However, the manner in which the majority of these hatchery fish are being produced does not adhere to best management practices, and may be compromising the integrity of these genetic resources. Our assessment of the effects of artificial propagation on the ESU's extinction risk concluded that hatchery programs collectively mitigate the immediacy of extinction risk for the Lower Columbia River coho ESU in-total in the short term, but that these programs do not substantially reduce the extinction risk of the ESU in the foreseeable future (NMFS, 2004c). Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is ''likely to become endangered within the foreseeable future.'' We conclude that the ESU in-total is likely to become endangered within the foreseeable future throughout all or a significant portion of its range, and determine that Lower Columbia River coho ESU warrants listing under the ESA as a threatened species.

Columbia River Chum ESU

The BRT concluded that the Columbia River chum ESU is ''likely to become endangered within the foreseeable future.'' Our assessment of the effects of artificial propagation on the ESU's extinction risk concluded that the within-ESU hatchery programs do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is ''likely to become endangered within the foreseeable future.'' We conclude that the ESU in-total is likely to become endangered within the foreseeable future throughout all or a significant portion of its range, and determine that the Columbia River chum ESU continues to warrant listing under the ESA as a threatened species.

Hood Canal Summer Chum ESU

The BRT concluded that the naturally spawned component of the Hood Canal summer-run chum ESU is ''likely to become endangered within the foreseeable future.'' Our assessment of the effects of artificial propagation on the ESU's extinction risk concluded that the within-ESU hatchery programs do not substantially reduce the extinction risk of the ESU in-total (NMFS, 2004c). Protective efforts, as evaluated pursuant to PECE, do not provide sufficient certainty of implementation and effectiveness to alter the assessment that the ESU is ''likely to become endangered within the foreseeable future. We conclude that the ESU in-total is likely to become endangered within the foreseeable future throughout all or a significant portion of its range, and determine that the Hood Canal summer chum ESU continues to warrant listing under the ESA as a threatened species.

TABLE 2.—SUMMARY OF THE PREVIOUS ENDANGERED SPECIES ACT (ESA) STATUS AND THE FINAL LISTING DETERMINATIONS FOR 16 EVOLUTIONARY SIGNIFICANT UNITS (ESUS) OF WEST COAST SALMON

Evolutionarily significant unit (ESU)	Previous ESA listing status	Final listing determination	Number of artificial propagation programs included in the ESU
Snake River sockeye ESU	Endangered	Endangered	1
Ozette Lake sockeye ESU	Threatened	Threatened	2
Sacramento River winter-run Chinook ESU	Endangered	Endangered	2
Central Valley spring-run Chinook ESU	Threatened	Threatened	1
California Coastal Chinook ESU	Threatened	Threatened	7
Upper Willamette River Chinook	Threatened	Threatened	7
Lower Columbia River Chinook ESU	Threatened	Threatened	17
Upper Columbia River spring-run Chinook ESU	Endangered	Endangered	6
Puget Sound Chinook ESU	Threatened	Threatened	26
Snake River fall-run Chinook ESU	Threatened	Threatened	4
Snake River spring/summer-run Chinook ESU	Threatened	Threatened	15
Central California Coast coho ESU	Threatened	Endangered	4
Southern Oregon/Northern California Coast coho ESU	Threatened	Threatened	3
Lower Columbia River coho ESU	Threatened	Threatened	25
Columbia River chum ESU	Threatened	Threatened	3
Hood Canal summer-run chum ESU	Threatened	Threatened	8

Prohibitions and Protective Regulations

ESA section 9(a) take prohibitions (16 U.S.C. 1538(a)(1)(B)) apply to all species listed as endangered. Hatchery stocks determined to be part of endangered ESUs are afforded the full protections of the ESA. In the case of threatened species, ESA section 4(d) leaves it to the Secretary's discretion to determine whether and to what extent conservation measures may be appropriate, and directs the agency to issue regulations it considers necessary and advisable for the conservation of the species. NMFS has flexibility under section 4(d) to tailor protective regulations based on the contributions of available conservation measures. The 4(d) protective regulations may prohibit, with respect to threatened species, some or all of the acts which section 9(a) of the ESA prohibits with respect to endangered species.

Previously Promulgated 4(d) Protective Regulations

NMFS has already adopted ESA 4(d) rules that exempt or ''limit'' a range of activities from the take prohibitions for certain threatened salmon and *O. mykiss* ESUs (62 FR 38479, July 18, 1997; 65 FR 42422, July 10, 2000; 65 FR 42485, July 10, 2000; 67 FR 1116, January 9, 2002). Currently there are a total of 29 ''limits'' to ESA Section 9(a) ''take'' prohibitions for threatened salmonid ESUs (see the proposed rule, and references therein, for a more detailed description of the specific 4(d) limits; 69 FR at 33166; June 14, 2004). The previously promulgated limits do not apply to all threatened ESUs, and several of the limits are redundant, outdated, or are located disjunctly in the Code of Federal Regulations (CFR).

The first six of these limits (50 CFR 223.204(b)(1) through (b)(6)) were published as an interim rule in 1997 for the Southern Oregon/Northern California Coast coho ESU (62 FR 38479, July 18, 1997). These six limits allow for the take of coho salmon in Oregon and California, under certain circumstances, if the take is: Part of approved fisheries management plans; part of an approved hatchery program; part of approved fisheries research and monitoring activities; or part of approved habitat restoration activities.

In 2000, NMFS promulgated 13 limits affecting, in total, 14 ESUs in California, Oregon, and Washington (65 FR 42422, July 10, 2000; 50 CFR 223.203(b)(1) through (b)(13)). These ''limits'' include: Paragraph (b)(1) activities conducted in accordance with ESA section 10 take authorization; paragraph (b)(2) scientific or artificial propagation activities with pending applications at the time of rulemaking; paragraph (b)(3) emergency actions related to injured, stranded, or dead salmonids; paragraph (b)(4) fishery management activities; paragraph (b)(5) hatchery and genetic management plans; paragraph (b)(6) activities in compliance with joint tribal/state plans developed within *United States (U.S.)* v. *Washington* or *U.S.* v. *Oregon;* paragraph (b)(7) scientific research activities permitted or conducted by the states; paragraph (b)(8) state, local, and private habitat restoration activities; paragraph (b)(9) properly screened water diversion devices; paragraph (b)(10) routine road maintenance activities; paragraph (b)(11) certain park pest management activities in Portland, Oregon; paragraph (b)(12) certain municipal, residential, commercial, and industrial development and redevelopment activities; and paragraph (b)(13) forest management activities on state and private lands within the State of Washington. The Southern Oregon/Northern California Coasts coho ESU was included under two of these 13 limits (limits 50 CFR 223.203(b)(1) and (b)(3)). The limits published in 2000 that addressed fishery and harvest management, scientific research, and habitat restoration activities did not supersede the six limits for the Southern Oregon/Northern California Coast coho ESU promulgated in the 1997 interim rule, despite addressing the same types of activities (although for different ESUs). Also in 2000, NMFS issued a limit for all threatened ESUs exempting activities undertaken consistent with an approved tribal resource management plan (65 FR 42485, July 10, 2000; 50 CFR 223.209).

In 2002, NMFS added an additional nine limits (67 FR 1116, January 9, 2002; 50 CFR 223.203(b)(14) through (b)(22)) addressing four salmonid ESUs in California: the Central Valley spring-run Chinook, California Coastal Chinook, Central California Coast coho, and Northern California *O. mykiss* ESUs. These limits are essentially identical to limits previously promulgated in 2000. These additional nine limits similarly address emergency actions, fishery management activities, artificial propagation programs, scientific research, habitat restoration activities, properly screened water diversions, routine road maintenance activities, and development and redevelopment activities. Rather than including the four California ESUs under the limits promulgated in 2000, these ESUs were treated under separate limits.

Final Amendments to the 4(d) Protective Regulations

As part of this final rulemaking we are amending the existing 4(d) protective regulations for threatened salmon and *O. mykiss* ESUs to: (1) Provide needed flexibility in fisheries and hatchery management, and (2) simplify and clarify the existing regulations so that they may be more efficiently and effectively accessed and interpreted by all affected parties. The specific changes being made to the application of the take prohibitions and limits under 4(d) are described in the following two subsections (''Changes in the Application of the Take Prohibitions,'' and ''Clarifying Amendments to the 4(d) Protective Regulations'').

Changes in the Application of the Take Prohibitions—We are finalizing an amendment to the existing 4(d) protective regulations to provide the necessary flexibility to ensure that fisheries and artificial propagation programs are managed consistently with the conservation needs of ESA-listed ESUs. For threatened salmon and *O. mykiss* ESUs, we will apply section 4(d) protections to natural and hatchery fish with an intact adipose fin, but not to listed hatchery fish that have had their adipose fin removed prior to release into the wild. (The removal (''clipping'') of the adipose fin from hatchery fish prior to their release into the natural environment is a commonly employed method for the marking of hatchery production.) Many hatcheries produce fish that are not part of a listed ESU, while others produce fish that are part of a listed ESU (and thus also listed in this final rule) but are surplus to conservation and recovery needs, for the purpose of contributing to sustainable fisheries. With their adipose fin removed, these non-listed and surplus listed hatchery fish can be visually distinguished from listed fish requiring protection for conservation and/or recovery purposes. Exempted from take prohibitions, these adipose-fin-clipped hatchery fish can be harvested in fisheries, including but not limited to mark selective fisheries, that have appropriate ESA authorization. In addition to adipose-fin-clipped hatchery fish, other listed hatchery fish (with intact adipose fins) that are surplus to the recovery needs of an ESU and that are otherwise distinguishable from naturally spawned fish in the ESU (*e.g.*, by run timing, location, or other marking methods) may be exempted from the section 4(d) protections under the available limits. NMFS believes this approach provides needed flexibility to appropriately manage artificial

propagation and direct take of threatened salmon and *O. mykiss* for the conservation and recovery of these ESUs.

Not all hatchery stocks considered to be part of listed ESUs are of equal value for use in conservation and recovery. Certain ESU hatchery stocks may comprise a substantial portion of the genetic diversity remaining in a threatened ESU, and thus are essential assets for ongoing and future recovery efforts. If released with adipose fins intact, hatchery fish in these populations would be afforded protections under the amended 4(d) protective regulations. NMFS, however, may need to approve the take of listed hatchery stocks to manage the number of naturally spawning hatchery fish to limit potential adverse effects on the local natural population(s). Other hatchery stocks, although considered to be part of a threatened ESU, may be of limited or uncertain conservation value at the present time. Artificial propagation programs producing within-ESU hatchery populations could release adipose-fin-clipped fish, such that protections under 4(d) would not apply, and these hatchery fish could fulfill other purposes (*e.g.*, fulfilling Federal trust and tribal treaty obligations) while preserving all future recovery options. If it is later determined through ongoing recovery planning efforts that these hatchery stocks are essential for recovery, the relevant hatchery program(s) could discontinue removal of the adipose fin from all or a sufficient portion of its production as necessary to meet recovery needs.

This amendment also does not apply the take prohibitions to resident or residualized fish in salmonid ESUs, principally affecting *O. nerka* and *O. mykiss* ESUs. The kokanee (resident *O. nerka*) population that co-occurs with threatened Ozette Lake sockeye is not considered part of the ESU, and residualized sockeye are believed to be a minor components of the ESU. We believe that extending the take prohibitions to resident or residualized *O. nerka* is not necessary for the conservation and recovery of the Ozette Lake sockeye ESU. Furthermore, extending the take prohibitions to resident *O. nerka* would result in considerable confusion given the presence of a co-occurring resident kokanee population that is not listed under the ESA. We do not have sufficient information to suggest that extending the ESA take prohibitions to resident *O. mykiss* populations would confer any additional conservation benefits to listed *O. mykiss* ESUs. Rainbow trout stocks are presently being managed conservatively under state regulations in support of conserving listed steelhead, and additional conservation benefits would not be accrued by extending Federal take prohibitions to these resident populations.

Clarifying Amendments to the 4(d) Protective Regulations—Although the existing ESA section 4(d) regulations for threatened salmonids have proven effective at appropriately protecting threatened salmonid ESUs and authorizing certain activities, several of the limits described therein are redundant, outdated, or are located disjunctly in the Code of Federal Regulations (CFR). The resulting complexity of the existing 4(d) regulations unnecessarily increases the administrative and regulatory burden of managing protective regulations for threatened ESUs, and does not effectively convey to the public the specific ESUs for which certain activities may be exempted from the take prohibitions under 4(d). As part of this final rulemaking, we are clarifying the existing section 4(d) regulations for threatened salmonids so that they can be more efficiently and effectively accessed and interpreted by all affected parties. These clarifying amendments are: (1) To amend the expired 4(d) limit (§ 223.203(b)(2)), which provided a temporary exemption for ongoing research and enhancement activities with pending applications during the 2000 4(d) rulemaking, to temporarily exempt ongoing research and enhancement activities affected by the current rulemaking process; (2) to move the description of the limit for Tribal Resource Management Plans (§ 223.209) so that the text would appear next to the 4(d) rule in the CFR, improving the clarity of the 4(d) regulations; (3) to apply the amended 4(d) take prohibitions and the 14 limits promulgated in 2000 (as modified by these amendments) to the Lower Columbia River coho ESU which is newly being listed as threatened; and (4) to apply the amended 4(d) take prohibitions and the 14 limits promulgated in 2000 (as modified by these amendments) to all threatened salmon and *O. mykiss* ESUs, thus bringing them under the same 4(d) protective regulations.

Other Protective Regulations

Section 7(a)(4) of the ESA requires that Federal agencies confer with NMFS on any actions likely to jeopardize the continued existence of a species proposed for listing and on actions likely to result in the destruction or adverse modification of proposed critical habitat. For listed species, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or conduct are not likely to jeopardize the continued existence of a listed species or to destroy or adversely modify its critical habitat. If a proposed Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with NMFS. Examples of Federal actions likely to affect salmon include authorized land management activities of the FS and the BLM, as well as operation of hydroelectric and storage projects of the BOR and the USACE. Such activities include timber sales and harvest, permitting livestock grazing, hydroelectric power generation, and flood control. Federal actions, including the USACE section 404 permitting activities under the Clean Water Act, USACE permitting activities under the River and Harbors Act, Federal Energy Regulatory Commission (FERC) licenses for non-Federal development and operation of hydropower, and Federal salmon hatcheries, may also require consultation.

Sections 10(a)(1)(A) and 10(a)(1)(B) of the ESA provide NMFS with authority to grant exceptions to the ESA's ''take'' prohibitions. Section 10(a)(1)(A) scientific research and enhancement permits may be issued to entities (Federal and non-Federal) conducting research that involves a directed take of listed species. A directed take refers to the intentional take of listed species. NMFS has issued section 10(a)(1)(A) research/enhancement permits for currently listed ESUs for a number of activities, including trapping and tagging, electroshocking to determine population presence and abundance, removal of fish from irrigation ditches, and collection of adult fish for artificial propagation programs. Section 10(a)(1)(B) incidental take permits may be issued to non-Federal entities performing activities which may incidentally take listed species. The types of activities potentially requiring a section 10(a)(1)(B) incidental take permit include the operation and release of artificially propagated fish by state or privately operated and funded hatcheries, state or academic research that may not incidentally take listed species and is receiving Federal authorization or funding, the implementation of state fishing regulations, logging, road building, grazing, and diverting water into private lands.

We are concerned about the potential for disruption of ongoing scientific

research, monitoring, and conservation activities, especially during the coming summer/fall field seasons. Consistent with the ''grace period for pending applications for 4(d) approval of research and enhancement activities,'' we are extending a similar grace period for pending permit applications under sections 10(a)(1)(a) and 10(a)(1)(B). The take prohibitions applicable to threatened species will 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 NOAA Assistant Administrator for Fisheries no later than 60 days from the date of publication of this notice. This grace period for pending scientific research and enhancement applications will remain in effect until the issuance or denial of authorization, or 6 months from the date of publication of this notice, whichever occurs earliest.

Identification of Those Activities That Would Constitute a Violation of Section 9 of the ESA

NMFS and the FWS published in the **Federal Register** on July 1, 1994 (59 FR 34272), a policy that NMFS shall identify, to the maximum extent practicable at the time a species is listed, those activities that would or would not constitute a violation of section 9 of the ESA. The intent of this policy is to increase public awareness of the effect of this listing on proposed and ongoing activities within the species' range. At the time of the final rule, NMFS must identify to the extent known, specific activities that will not be considered likely to result in violation of section 9, as well as activities that will be considered likely to result in violation. We believe that, based on the best available information, the following actions will not result in a violation of section 9:

1. Possession of fish from any ESU listed as threatened or endangered that are acquired lawfully by permit issued by NMFS pursuant to section 10 of the ESA, or by the terms of an incidental take statement issued pursuant to section 7 of the ESA; or

2. Federally funded or approved projects that involve activities such as silviculture, grazing, mining, road construction, dam construction and operation, discharge of fill material, stream channelization or diversion for which section 7 consultation has been completed, and when activities are conducted in accordance with any terms and conditions provided by NMFS in an incidental take statement accompanying a biological opinion.

There are many activities that we believe could potentially ''harm'' salmon, which is defined by our regulations as ''an act which actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including, breeding, spawning, rearing, migrating, feeding or sheltering'' (50 CFR 222.102 [harm]). Activities that may harm the listed ESUs, resulting in a violation of the section 9 take prohibition, include, but are not limited to:

1. Land-use activities that adversely affect habitats for any listed ESU (*e.g.*, logging, grazing, farming, urban development, road construction in riparian areas and areas susceptible to mass wasting and surface erosion);

2. Destruction/alteration of the habitats for any listed ESU, such as removal of large woody debris and ''sinker logs'' or riparian shade canopy, dredging, discharge of fill material, draining, ditching, diverting, blocking, or altering stream channels or surface or ground water flow;

3. Discharges or dumping of toxic chemicals or other pollutants (*e.g.*, sewage, oil, gasoline) into waters or riparian areas supporting listed ESUs;

4. Violation of discharge permits;

5. Application of pesticides affecting water quality or riparian areas for listed ESUs;

6. Interstate and foreign commerce of fish from any of the listed ESUs and import/export of fish from any listed ESU without a threatened or endangered species permit;

7. Collecting or handling of fish from any of the listed ESUs. Permits to conduct these activities are available for purposes of scientific research or to enhance the conservation or survival of the species; or

8. Introduction of non-native species likely to prey on fish from any listed ESU or displace them from their habitat.

These lists are not exhaustive. They are intended to provide some examples of the types of activities that might or might not be considered by NMFS as constituting a take of fish in any of the listed ESUs under the ESA and its regulations. Questions regarding whether specific activities will constitute a violation of the section 9 take prohibition, and general inquiries regarding prohibitions and permits, should be directed to NMFS (see **ADDRESSES**).

Effective Date of the Final Listing Determinations and Protective Regulations

Given the cultural, scientific, and recreational importance of West Coast salmon, and the broad geographic range of these ESUs, we recognize that numerous parties may be affected by these listing determinations and by the final amendments to the 4(d) protective regulations. Therefore, to permit an orderly implementation of the consultation requirements and take prohibitions associated with these actions, the final listings and protective regulations will take effect on August 29, 2005. The take prohibitions applicable to threatened species do not apply to activities specified in an application for a permit or 4(d) approval 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 August 29, 2005. This ''grace period'' for pending research and enhancement applications will remain in effect until the issuance or denial of authorization, or December 28, 2005, whichever occurs earliest.

Critical Habitat

Critical habitat is either designated or proposed for designation for all but one of the ESUs (the Lower Columbia River coho ESU) addressed in this **Federal Register** notice. Final critical habitat designations exist for: the Sacramento River winter-run Chinook ESU (58 FR 33212, June 16, 1993); the Snake River sockeye, spring/summer Chinook, and fall-run Chinook ESUs (58 FR 68543, December 28, 1993); and the Southern Oregon/Northern California Coasts and Central California Coast coho ESUs (64 FR 24049, May 5, 1999). Critical habitat was recently proposed for the following 20 ESUs (69 FR 71880, December 10, 2004; 69 FR 74572, December 14, 2004): Puget Sound Chinook; Lower Columbia River Chinook; Upper Willamette River Chinook ; Upper Columbia River spring-run Chinook; California Coastal Chinook; Central Valley spring-run Chinook; Oregon Coast coho; Hood Canal summer-run chum; Columbia River chum; Ozette Lake sockeye; Upper Columbia River *O. mykiss*; Snake River Basin *O. mykiss*; Middle Columbia River *O. mykiss*'; Lower Columbia River *O. mykiss*; Upper Willamette River *O. mykiss*; Northern California *O. mykiss*; Central California Coast *O. mykiss*; South-Central California Coast *O. mykiss*; Southern California *O. mykiss*; and Central Valley *O. mykiss*. In keeping with a Consent Decree and

Stipulated Order of Dismissal approved by the D.C. District Court (*Pacific Coast Federation of Fishermen's Associations, Institute for Fisheries Resources, Center for Biological Diversity, Oregon Natural Resources Council, Pacific Rivers Council and the Environmental Protection Information Center* v. *NMFS*, Civ. No. 031833), on or before August 15, 2005, we will submit to the **Federal Register** for publication the final rules designating critical habitat for those of the 20 ESUs identified above that are included on the lists of threatened and endangered species as of that date.

Section 4(a)(3)(A) of the ESA requires that, to the maximum extent prudent and determinable, critical habitat be designated concurrently with the listing of a species. Section 4(b)(6)(C)(ii) provides that, where critical habitat is not determinable at the time of final listing, we may extend the period for designating critical habitat by not more than one additional year. In keeping with agency regulations at 50 CFR 424.12, we conclude that critical habitat is not presently determinable for the Lower Columbia River coho ESU. Specifically, we lack biological and mapping information sufficient to perform required analyses of the impacts of critical habitat designation to determine which areas may qualify as critical habitat for this ESU. Therefore, we have decided to proceed with the final listing determination now and propose critical habitat in a separate rulemaking. In this notice we are soliciting information necessary to inform the designation of critical habitat for this ESU (see Information Solicited and **ADDRESSES**) and will consider such information in support of a future proposed designation.

Information Solicited

As noted previously, we are soliciting biological and economic information relevant to making critical habitat designations for the Lower Columbia River coho ESU. Data reviewed may include, but are not limited to, scientific or commercial publications, administrative reports, maps or other graphic materials, information received from experts, and comments from interested parties. Comments and data particularly are sought concerning:

(1) Maps and specific information describing the amount, distribution, and use type (*e.g.,* spawning, rearing, or migration) of coho salmon habitat in the lower Columbia River; as well as any additional information on occupied and unoccupied habitat areas;

(2) The reasons why any habitat should or should not be determined to be critical habitat as provided by sections 3(5)(A) and 4(b)(2) of the ESA;

(3) Information regarding the benefits of excluding lands covered by Habitat Conservation Plans (ESA section 10(a)(1)(B) permits), including the regulatory burden designation may impose on landowners and the likelihood that exclusion of areas covered by existing plans will serve as an incentive for other landowners to develop plans covering their lands;

(4) Information regarding the benefits of excluding Federal and other lands covered by habitat conservation strategies and plans (*e.g.* Northwest Forest Plan, Washington's Forest and Fish Plan, and the Oregon Plan), including the regulatory burden designation may impose on land managers and the likelihood that exclusion of areas covered by existing plans will serve as an incentive for land users to implement the conservation measures covering the lands subject to these plans;

(5) Information regarding the benefits of designating particular areas as critical habitat;

(6) Current or planned activities in the areas proposed for designation and their possible impacts on proposed critical habitat;

(7) Any foreseeable economic or other potential impacts resulting from the proposed designations, in particular, any impacts on small entities;

(8) Whether specific unoccupied areas (*e.g.*, areas behind dikes or dams) not presently proposed for designation may be essential for conservation of this ESU; and

(9) Potential peer reviewers for a proposed critical habitat designation, including persons with biological and economic expertise relevant to the designations.

NMFS seeks information regarding critical habitat for the Lower Columbia River coho ESU as soon as possible, but by no later than August 29, 2005 (see **ADDRESSES**, above).

Classification

National Environmental Policy Act

ESA listing decisions are exempt from the requirement to prepare an environmental assessment or environmental impact statement under the NEPA. See NOAA Administrative Order 216–6.03(e)(1) and *Pacific Legal Foundation* v. *Andrus*, 675 F. 2d 825 (6th Cir. 1981). Thus, we have determined that the final listing determinations for 16 ESUs of Pacific salmonids described in this notice are exempt from the requirements of the NEPA of 1969. We conducted an Environmental Assessment (EA) under the NEPA analyzing the proposed amendments to the 4(d) protective regulations for Pacific salmonids. We solicited comment on the EA as part of the proposed rule, as well as during a subsequent comment period following formal notice in the **Federal Register** of the availability of the draft EA for review. Informed by the comments received, we have finalized the EA, and issued a Finding of No Significant Impact for the amended 4(d) protective regulations.

Regulatory Flexibility Act

The Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration that the proposed rule issued under authority of ESA section 4, if adopted, would not have a significant economic impact on a substantial number of small entities. The factual basis for this certification was published with the proposed rule, and is not repeated here. No comments were received regarding that certification. As a result, no final regulatory flexibility analysis for the listing determinations or 4(d) protective regulations contained in this final rule has been prepared.

Paperwork Reduction Act (PRA)

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 PRA, unless that collection of information displays a currently valid Office of Management and Budget (OMB) Control Number.

This final rule does not contain a collection-of-information requirement for purposes of the PRA of 1980.

Executive Order (E.O.) 12866

The final listing determinations and amendments to the ESA 4(d) protective regulations addressed in this rule have been determined to be significant for the purposes of E.O. 12866. We prepared a Regulatory Impact Review which was provided to the OMB with the publication of the proposed rule.

E.O. 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 final 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, we intend to inform potentially affected tribal governments and to solicit their input and coordinate on future management actions.

E.O. 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 final rule. In fact, this notice provides mechanisms by which NMFS, in the form of 4(d) limits to take prohibitions, may defer to state and local governments where they provided necessary protections for threatened salmonids.

References

A complete list of all references cited herein is available upon request (see **ADDRESSES**), or can be obtained from the Internet at: *http://www.nwr.noaa.gov*.

List of Subjects

50 CFR Part 223

Enumeration of threatened marine and anadromous species, restrictions applicable to threatened marine and anadromous species.

50 CFR Part 224

Enumeration of endangered marine and anadromous species.

Authority: 16 U.S.C. 1531 *et seq.*

Dated: June 16, 2005.

John Oliver,

Deputy Assistant Administrator for Operations, National Marine Fisheries Service.

■ For the reasons set out in the preamble, 50 CFR parts 223 and 224 are 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 § 223.102, paragraph (a) is revised to read as follows:

§ 223.102 Enumeration of threatened marine and anadromous species.

* * * * *

(a) *Marine and anadromous fish.* The following table lists the common and scientific names of threatened species, the locations where they are listed, and the citations for the listings and critical habitat designations.

Species [1]		Where Listed	Citation(s) for listing determination(s)	Citation for critical habitat designation
Common name	Scientific name			
(1) Gulf sturgeon	*Acipenser oxyrinchus desotoi.*	Everywhere	56 FR 49653, Sep. 30, 1991.	68 FR 13370, Mar. 19, 2003.
(2) Ozette Lake sockeye	*Oncorhynchus nerka*	U.S.A., WA, including all naturally spawned populations of sockeye salmon in Ozette Lake and streams and tributaries flowing into Ozette Lake, Washington, as well as two artificial propagation programs: the Umbrella Creek and Big River sockeye hatchery programs.	64 FR 14528, Mar. 25, 1999. June 28, 2005.	NA [vacated 9/29/03, 68 FR 55900].
(3) Central Valley spring-run Chinook.	*Oncorhynchus tshawytscha.*	U.S.A., CA, including all naturally spawned populations of spring-run Chinook salmon in the Sacramento River and its tributaries in California, including the Feather River, as well as the Feather River Hatchery spring-run Chinook program.	64 FR 50394, Sep. 16, 1999. June 28, 2005.	NA [vacated 9/29/03, 68 FR 55900].
(4) California Coastal Chinook.	*Oncorhynchus tshawytscha.*	U.S.A., CA, including all naturally spawned populations of Chinook salmon from rivers and streams south of the Klamath River to the Russian River, California, as well as seven artificial propagation programs: the Humboldt Fish Action Council (Freshwater Creek), Yager Creek, Redwood Creek, Hollow Tree, Van Arsdale Fish Station, Mattole Salmon Group, and Mad River Hatchery fall-run Chinook hatchery programs.	64 FR 50394, Sep. 16, 1999. June 28, 2005.	NA [vacated 9/29/03, 68 FR 55900].

Species [1]		Where Listed	Citation(s) for listing determination(s)	Citation for critical habitat designation
Common name	Scientific name			
(5) Upper Willamette River Chinook.	*Oncorhynchus tshawytscha*.	U.S.A., OR, including all naturally spawned populations of spring-run Chinook salmon in the Clackamas River and in the Willamette River, and its tributaries, above Willamette Falls, Oregon, as well as seven artificial propagation programs: the McKenzie River Hatchery (Oregon Department of Fish and Wildlife (ODFW) stock #24), Marion Forks/North Fork Santiam River (ODFW stock #21), South Santiam Hatchery (ODFW stock #23) in the South Fork Santiam River, South Santiam Hatchery in the Calapooia River, South Santiam Hatchery in the Mollala River, Willamette Hatchery (ODFW stock #22), and Clackamas hatchery (ODFW stock #19) spring-run Chinook hatchery programs.	64 FR 14308, Mar. 24, 1999. June 28, 2005.	NA [vacated 9/29/03, 68 FR 55900].
(6) Lower Columbia River Chinook.	*Oncorhynchus tshawytscha*.	U.S.A., OR, WA, including all naturally spawned populations of Chinook salmon from the Columbia River and its tributaries from its mouth at the Pacific Ocean upstream to a transitional point between Washington and Oregon east of the Hood River and the White Salmon River, and includes the Willamette River to Willamette Falls, Oregon, exclusive of spring-run Chinook salmon in the Clackamas River, as well as seventeen artificial propagation programs: the Sea Resources Tule Chinook Program, Big Creek Tule Chinook Program, Astoria High School (STEP) Tule Chinook Program, Warrenton High School (STEP) Tule Chinook Program, Elochoman River Tule Chinook Program, Cowlitz Tule Chinook Program, North Fork Toutle Tule Chinook Program, Kalama Tule Chinook Program, Washougal River Tule Chinook Program, Spring Creek NFH Tule Chinook Program, Cowlitz spring Chinook Program in the Upper Cowlitz River and the Cispus River, Friends of the Cowlitz spring Chinook Program, Kalama River spring Chinook Program, Lewis River spring Chinook Program, Fish First spring Chinook Program, and the Sandy River Hatchery (ODFW stock #11) Chinook hatchery programs.	64 FR 14308, Mar. 24, 1999. June 28, 2005.	NA [vacated 9/29/03, 68 FR 55900].

Species [1]		Where Listed	Citation(s) for listing determination(s)	Citation for critical habitat designation
Common name	Scientific name			
(7) Puget Sound Chinook	*Oncorhynchus tshawytscha*.	U.S.A., WA, including all naturally spawned populations of Chinook salmon from rivers and streams flowing into Puget Sound including the Straits of Juan De Fuca from the Elwha River, eastward, including rivers and streams flowing into Hood Canal, South Sound, North Sound and the Strait of Georgia in Washington, as well as twenty-six artificial propagation programs: the Kendal Creek Hatchery, Marblemount Hatchery (fall, spring yearlings, spring subyearlings, and summer run), Harvey Creek Hatchery, Whitehorse Springs Pond, Wallace River Hatchery (yearlings and subyearlings), Tulalip Bay, Issaquah Hatchery, Soos Creek Hatchery, Icy Creek Hatchery, Keta Creek Hatchery, White River Hatchery, White Acclimation Pond, Hupp Springs Hatchery, Voights Creek Hatchery, Diru Creek, Clear Creek, Kalama Creek, George Adams Hatchery, Rick's Pond Hatchery, Hamma Hamma Hatchery, Dungeness/Hurd Creek Hatchery, Elwha Channel Hatchery Chinook hatchery programs.	64 FR 14308, Mar. 24, 1999. June 28, 2005.	NA [vacated 9/29/03, 68 FR 55900].
(8) Snake River fall-run Chinook.	*Oncorhynchus tshawytscha*.	U.S.A., OR, WA, ID, including all naturally spawned populations of fall-run Chinook salmon in the mainstem Snake River below Hells Canyon Dam, and in the Tucannon River, Grande Ronde River, Imnaha River, Salmon River, and Clearwater River, as well as four artificial propagation programs: the Lyons Ferry Hatchery, Fall Chinook Acclimation Ponds Program, Nez Perce Tribal Hatchery, and Oxbow Hatchery fall-run Chinook hatchery programs.	57 FR 14653, Apr. 22, 1992, 57 FR 23458, Jun. 3, 1992. June 28, 2005.	58 FR 68543, Dec. 28, 1993.
(9) Snake River spring/summer-run Chinook.	*Oncorhynchus tshawytscha*.	U.S.A., OR, WA, ID, including all naturally spawned populations of spring/summer-run Chinook salmon in the mainstem Snake River and the Tucannon River, Grande Ronde River, Imnaha River, and Salmon River subbasins, as well as fifteen artificial propagation programs: the Tucannon River conventional Hatchery, Tucannon River Captive Broodstock Program, Lostine River, Catherine Creek, Lookingglass Hatchery, Upper Grande Ronde, Imnaha River, Big Sheep Creek, McCall Hatchery, Johnson Creek Artificial Propagation Enhancement, Lemhi River Captive Rearing Experiment, Pahsimeroi Hatchery, East Fork Captive Rearing Experiment, West Fork Yankee Fork Captive Rearing Experiment, and the Sawtooth Hatchery spring/summer-run Chinook hatchery programs.	57 FR 14653, Apr. 22, 1992, 57 FR 23458, Jun. 3, 1992. June 28, 2005	58 FR 68543, Dec. 28, 1993. 64 FR 57399, Oct. 25, 1999.
(10) Southern Oregon/Northern California Coast coho.	*Oncorhynchus kisutch* ...	U.S.A., CA, OR, including all naturally spawned populations of coho salmon in coastal streams between Cape Blanco, Oregon, and Punta Gorda, California, as well three artificial propagation programs: the Cole Rivers Hatchery (ODFW stock #52), Trinity River Hatchery, and Iron Gate Hatchery coho hatchery programs.	62 FR 24588, May 6, 1997. June 28, 2005.	64 FR 24049, May 5, 1999.

Species [1]		Where Listed	Citation(s) for listing determination(s)	Citation for critical habitat designation
Common name	Scientific name			
(11) Lower Columbia River coho.	*Oncorhynchus kisutch* ...	U.S.A., OR, WA, including all naturally spawned populations of coho salmon in the Columbia River and its tributaries in Washington and Oregon, from the mouth of the Columbia up to and including the Big White Salmon and Hood Rivers, and includes the Willamette River to Willamette Falls, Oregon, as well as twenty-five artificial propagation programs: the Grays River, Sea Resources Hatchery, Peterson Coho Project, Big Creek Hatchery, Astoria High School (STEP) Coho Program, Warrenton High School (STEP) Coho Program, Elochoman Type-S Coho Program, Elochoman Type-N Coho Program, Cathlamet High School FFA Type-N Coho Program, Cowlitz Type-N Coho Program in the Upper and Lower Cowlitz Rivers, Cowlitz Game and Anglers Coho Program, Friends of the Cowlitz Coho Program, North Fork Toutle River Hatchery, Kalama River Type-N Coho Program, Kalama River Type-S Coho Program, Lewis River Type-N Coho Program, Lewis River Type-S Coho Program, Fish First Wild Coho Program, Fish First Type-N Coho Program, Syverson Project Type-N Coho Program, Eagle Creek National Fish Hatchery, Sandy Hatchery, and the Bonneville/Cascade/Oxbow complex coho hatchery programs.	June 28, 2005.	NA
(12) Columbia River chum.	*Oncorhynchus keta*	U.S.A., OR, WA, including all naturally spawned populations of chum salmon in the Columbia River and its tributaries in Washington and Oregon, as well as three artificial propagation programs: the Chinook River (Sea Resources Hatchery), Grays River, and Washougal River/Duncan Creek chum hatchery programs.	64 FR 14508, Mar. 25, 1999. June 28, 2005.	NA [vacated 9/29/03, 68 FR 55900].
(13) Hood Canal summer-run chum.	*Oncorhynchus keta*	U.S.A., WA, including all naturally spawned populations of summer-run chum salmon in Hood Canal and its tributaries as well as populations in Olympic Peninsula rivers between Hood Canal and Dungeness Bay, Washington, as well as eight artificial propagation programs: the Quilcene NFH, Hamma Hamma Fish Hatchery, Lilliwaup Creek Fish Hatchery, Union River/Tahuya, Big Beef Creek Fish Hatchery, Salmon Creek Fish Hatchery, Chimacum Creek Fish Hatchery, and the Jimmycomelately Creek Fish Hatchery summer-run chum hatchery programs.	64 FR 14508, Mar. 25, 1999. June 28, 2005.	NA [vacated 9/29/03, 68 FR 55900].
(14) South-Central California Coast Steelhead.	*Oncorhynchus mykiss*	U.S.A., CA, including all naturally spawned populations of steelhead (and their progeny) in streams from the Pajaro River (inclusive), located in Santa Cruz County, California, to (but not including) the Santa Maria River.	62 FR 49397, Aug. 18, 1997.	NA [vacated 9/29/03, 68 FR 55900].

Species [1]		Where Listed	Citation(s) for listing determination(s)	Citation for critical habitat designation
Common name	Scientific name			
(15) Central California Coast Steelhead.	*Oncorhynchus mykiss*	U.S.A., CA, including all naturally spawned populations of steelhead (and their progeny) in streams from the Russian River to Aptos Creek, Santa Cruz County, Californian (inclusive), and the drainages of San Francisco and San Pablo Bays eastward to the Napa River (inclusive), Napa County, California. Excludes the Sacramento- San Joaquin River Basin of the Central Valley of California.	62 FR 43937, Aug. 18, 1997.	NA [vacated 9/29/03, 68 FR 55900].
(16) California Central Valley Steelhead.	*Oncorhynchus mykiss*	U.S.A., CA, including all naturally spawned populations of steelhead (and their progeny) in the Sacramento and San Joaquin Rivers and their tributaries, excluding steelhead from San Francisco and San Pablo Bays and their tributaries.	63 FR 13347; Mar. 19, 1998.	NA [vacated 9/29/03, 68 FR 55900].
(17) Northern California Steelhead.	*Oncorhynchus mykiss*	U.S.A., CA, including all naturally spawned populations of steelhead (and their progeny) in California coastal river basins from Redwood Creek in Humboldt County, California, to the Gualala River, inclusive, in Mendocino County, California.	65 FR 36074, June 7, 2000.	NA
(18) Upper Willamette River Steelhead.	*Oncorhynchus mykiss*	U.S.A., OR, including all naturally spawned populations of winter-run steelhead in the Willamette River, Oregon, and its tributaries upstream from Willamette Falls to the Calapooia River, inclusive.	62 FR 43937, Aug. 18, 1997.	NA [vacated 9/29/03, 68 FR 55900].
(19) Lower Columbia River Steelhead.	*Oncorhynchus mykiss*	U.S.A., OR, WA, including all naturally spawned populations of steelhead (and their progeny) in streams and tributaries to the Columbia River between the Cowlitz and Wind Rivers, Washington, inclusive, and the Willamette and Hood Rivers, Oregon, inclusive. Excluded are steelhead in the upper Willamette River Basin above Willamette Falls, Oregon, and from the Little and Big White Salmon Rivers, Washington.	62 FR 13347, Mar. 19, 1998.	NA [vacated 9/29/03, 68 FR 55900].
(20) Middle Columbia River Steelhead.	*Oncorhynchus mykiss*	U.S.A., OR, WA, including all naturally spawned populations of steelhead in streams from above the Wind River, Washington, and the Hood River, Oregon (exclusive), upstream to, and including, the Yakima River, Washington. Excluded are steelhead from the Snake River Basin.	57 FR 14517, Mar. 25, 1999.	NA [vacated 9/29/03, 68 FR 55900].
(21) Snake River Basin Steelhead.	*Oncorhynchus mykiss*	U.S.A., OR, WA, ID, including all naturally spawned populations of steelhead (and their progeny) in streams in the Snake River Basin of southeast Washington, northeast Oregon, and Idaho.	62 FR 43937, Aug. 18, 1997.	NA [vacated 9/29/03, 68 FR 55900].

[1] Species includes taxonomic species, subspecies, distinct population segments (DPSs) (for a policy statement, see 61 FR 4722, February 7, 1996), and evolutionarily significant units (ESUs) (for a policy statement, see 56 FR 58612, November 20, 1991).

■ 3. In § 223.203, paragraphs (a), (b) introductory text, and (b)(2) are revised and paragraphs (b)(14) through (22) are removed.

The revisions read as follows:

§ 223.203 Anadromous fish.

(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 anadromous fish with an intact adipose fin that are part of the threatened species of salmonids listed in § 223.102(a)(2) through (a)(21).

* * * * *

(b) *Limits on the prohibitions.* The limits to the prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102(a) are described in the following paragraphs (b)(1) through (b)(13):

* * * * *

(2) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102(a)(2) through (a)(21) do not apply to activities specified in an application for 4(d) authorization 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 August 29, 2005. The prohibitions of this section apply to these activities upon the AA's rejection of the application as insufficient, upon issuance or denial of authorization, or December 28, 2005, whichever occurs earliest.

* * * * *

§ 223.203 [Amended]

■ 4. In § 223.203, paragraphs (b)(1) through (b)(13), and (c), the references in the sections listed in the first column below are revised according to the directions in the second and third columns.

Section	Remove	Add
§ 223.203(b)(1)	§ 223.102(a)(1) through (a)(10), and (a)(12) through (a)(22)	§ 223.102(a)(2) through (a)(21).
§ 223.203(b)(3)	§ 223.102(a)(4) through (a)(10), and (a)(12) through (a)(19)	§ 223.102(a)(2) through (a)(21).
§ 223.203(b)(4)	§ 223.102(a)(5) through (a)(10), and (a)(12) through (a)(19)	§ 223.102(a)(2) through (a)(21).
§ 223.203(b)(5)	§ 223.102(a)(5) through (a)(10), and (a)(12) through (a)(19)	§ 223.102(a)(2) through (a)(21).
§ 223.203(b)(6)	§ 223.102(a)(7), (a)(8), (a)(10), and (a)(12) through (a)(19)	§ 223.102(a)(2) through (a)(21).
§ 223.203(b)(7)	§ 223.102(a)(5) through (a)(10), and (a)(12) through (a)(19)	§ 223.102(a)(2) through (a)(21).
§ 223.203(b)(8)	§ 223.102(a)(5) through (a)(10), and (a)(12) through (a)(19)	§ 223.102(a)(2) through (a)(21).
§ 223.203(b)(9)	§ 223.102(a)(5) through (a)(10), and (a)(12) through (a)(19)	§ 223.102(a)(2) through (a)(21).
§ 223.203(b)(10)	§ 223.102(a)(5) through (a)(10), and (a)(12) through (a)(19)	§ 223.102(a)(2) through (a)(21).
§ 223.203(b)(11)	§ 223.102(a)(5) through (a)(10), and (a)(12) through (a)(19)	§ 223.102(a)(2) through (a)(21).
§ 223.203(b)(12)	§ 223.102(a)(5) through (a)(10), and (a)(12) through (a)(19)	§ 223.102(a)(2) through (a)(21).
§ 223.203(b)(13)	§ 223.102(a)(12), (a)(13), (a)(16), (a)(17), and (a)(19)	§ 223.102(a)(2) through (a)(22).
§ 223.203(c)	§ 223.102(a)(3), (a)(5) through (a)(10), and (a)(12) through (a)(22)	§ 223.102(a)(2) through (a)(21).
§ 223.203(c)	§ 223.209(a)	§ 223.204(a).

§ 223.204 [Removed]

■ 5. Remove § 223.204.

§ 223.209 [Redesignated as § 223.204]

■ 6. Redesignate § 223.209 as § 223.204, and add and reserve new § 223.209.

PART 224—ENDANGERED MARINE AND ANADROMOUS SPECIES

■ 7. The authority citation for part 224 continues to read as follows:

Authority: 16 U.S.C. 1531–1543 and 16 U.S.C. 1361 *et seq.*

■ 8. Revise § 224.101(a) to read as follows:

§ 224.101 Enumeration of endangered marine and anadromous species.

* * * * *

(a) *Marine and anadromous fish.* The following table lists the common and scientific names of endangered species, the locations where they are listed, and the citations for the listings and critical habitat designations.

Species [1]		Where listed	Citation(s) for listing determination(s)	Citation for critical habitat designation
Common name	Scientific name			
Shortnose sturgeon	*Acipenser brevirostrum*	Everywhere	32 FR 4001, Mar. 11, 1967.	NA.
Smalltooth sawfish	*Pristis pectinata*	U.S.A.	68 FR 15674, Apr. 1, 2003.	NA.
Totoaba	*Cynoscion macdonaldi*	Everywhere	44 FR 29480, May 21, 1979.	NA.
Atlantic salmon	*Salmon salar*	U.S.A., ME, Gulf of Maine population, which includes all naturally reproducing populations and those river-specific hatchery populations cultured from them.	65 FR 69459, Nov. 17, 2000.	NA.
Snake River sockeye	*Oncorhynchus nerka*	U.S.A., ID, including all anadromous and residual sockeye salmon from the Snake River Basin, Idaho, as well as artificially propagated sockeye salmon from the Redfish Lake captive propagation program.	56 FR 58619, Nov. 20, 1991. June 28, 2005.	58 FR 68543, Dec. 28, 1993.
Sacramento River winter-run Chinook.	*Oncorhynchus tshawytscha.*	U.S.A., CA, including all naturally spawned populations of winter-run Chinook salmon in the Sacramento River and its tributaries in California, as well as two artificial propagation programs: winter-run Chinook from the Livingston Stone National Fish Hatchery (NFH), and winter run Chinook in a captive broodstock program maintained at Livingston Stone NFH and the University of California Bodega Marine Laboratory.	52 FR 6041; Feb. 27, 1987, 55 FR 49623; Nov. 30, 1990. 59 FR 440; Jan. 1, 1994. June 28, 2005.	58 FR 33212, June 16, 1993.

Species [1]		Where listed	Citation(s) for listing determination(s)	Citation for critical habitat designation
Common name	Scientific name			
Upper Columbia spring-run Chinook.	*Oncorhynchus tshawytscha*.	U.S.A., WA, including all naturally spawned populations of Chinook salmon in all river reaches accessible to Chinook salmon in Columbia River tributaries upstream of the Rock Island Dam and downstream of Chief Joseph Dam in Washington (excluding the Okanogan River), the Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) upstream to Chief Joseph Dam in Washington, as well as six artificial propagation programs: the Twisp River, Chewuch River, Methow Composite, Winthrop NFH, Chiwawa River, and White River spring-run Chinook hatchery programs.	64 FR 14308, Mar. 24, 1999. June 28, 2005.	NA. [vacated 9/29/03; 68 FR 55900].
Central California Coast coho.	*Oncorhynchus kisutch* ...	U.S.A., CA, including all naturally spawned populations of coho salmon from Punta Gorda in northern California south to and including the San Lorenzo River in central California, as well as populations in tributaries to San Francisco Bay, excluding the Sacramento-San Joaquin River system, as well four artificial propagation programs: the Don Clausen Fish Hatchery Captive Broodstock Program, Scott Creek/King Fisher Flats Conservation Program, Scott Creek Captive Broodstock Program, and the Noyo River Fish Station egg-take Program coho hatchery programs.	61 FR 56138, Oct. 31, 1996. June 28, 2005.	64 FR 24049, May 5, 1999.
Southern California Steelhead.	*Oncorhynchus mykiss*	U.S.A., CA, including all naturally spawned populations of steelhead (and their progeny), in streams from the Santa Maria River, San Luis Obispo County, California, (inclusive) to the United States—Mexico Border.	62 FR 43937, Aug. 18, 1997. 67 FR 21586, May 1, 2002.	NA. [vacated 9/29/03; 68 FR 55900].
Upper Columbia River Steelhead.	*Oncorhynchus mykiss*	U.S.A., WA, including the Wells Hatchery stock all naturally spawned populations of steelhead (and their progeny) in streams in the Columbia River Basin upstream from the Yakima River, Washington, to the United States-Canada border.	62 FR 43937, Aug. 18, 1997.	NA. [vacated 9/29/03, 68 FR 55900].

[1] Species includes taxonomic species, subspecies, distinct population segments (DPSs) (for a policy statement, see 61 FR 4722, February 7, 1996), and evolutionarily significant units (ESUs) (for a policy statement, see 56 FR 58612, November 20, 1991).

* * * * *

[FR Doc. 05–12351 Filed 6–27–05; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Parts 223 and 224

[Docket No. 040511148–5151–02; I.D. 050304B]

Policy on the Consideration of Hatchery-Origin Fish in Endangered Species Act Listing Determinations for Pacific Salmon and Steelhead

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

ACTION: Final policy.

SUMMARY: We, the National Marine Fisheries Service (NMFS), announce a final policy addressing the role of artificially propagated (hatchery produced) Pacific salmon (*Oncorhynchus gorbuscha*, *O. keta*, *O. kisutch*, *O. nerka*, *O. tshawytscha*) and steelhead (*O. mykiss*) in listing determinations under the Endangered Species Act of 1973 (ESA), as amended. This final policy supersedes the Interim Policy on Artificial Propagation of Pacific Salmon under the Endangered

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 223

[Docket No. 060124013–6013–01; I.D. 052104F]

RIN 0648–AU18

Endangered and Threatened Species: Final Protective Regulations for Threatened Upper Columbia River Steelhead

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

ACTION: Final listing determination.

SUMMARY: We, NOAA's National Marine Fisheries Service (NMFS), are applying the protective regulations for threatened West Coast salmon and steelhead to Upper Columbia River steelhead. Upper Columbia River steelhead were previously listed as endangered in 1997 and were thereby afforded protections against ''take'' under the Endangered Species Act (ESA). On January 5, 2006, the listing status of Upper Columbia River steelhead was changed to threatened. We have determined that the existing protective regulations for threatened West Coast salmonids are necessary and advisable for the conservation of Upper Columbia River steelhead.

DATES: This final determination is effective March 3, 2006.

ADDRESSES: NMFS, Protected Resources Division, 1201 NE Lloyd Boulevard, Suite 1100, Portland, OR 97232.

FOR FURTHER INFORMATION CONTACT: Dr. Scott Rumsey, NMFS, Northwest Region, Protected Resources Division, at (503) 872–2791, and Marta Nammack, NMFS, Office of Protected Resources, at (301) 713–1401. Reference materials regarding the protective regulations for threatened salmonids are available upon request or on the Internet at *http://www.nwr.noaa.gov*.

SUPPLEMENTARY INFORMATION:

Background

ESA section 9(a)(1) (16 U.S.C. 1538(a)(1)) prohibits the import/export and ''take'' of, and commercial transactions involving all species listed as endangered. The term ''take'' is defined under the ESA as ''to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct'' (Section 3(19), 16 U.S.C. 1532 (19)). In the case of threatened species, section 4(d) of the ESA leaves it to the discretion of the Secretary of Commerce (Secretary) whether, and to what extent, to apply the statutory 9(a)(1) take and other prohibitions, and directs the agency to issue regulations it deems necessary and advisable for the conservation of the species. The 4(d) protective regulations may prohibit, with respect to threatened species, some or all of the acts which section 9(a)(1) of the ESA prohibits with respect to endangered species. These 9(a)(1) prohibitions and 4(d) regulations apply to all individuals, organizations, and agencies subject to U.S. jurisdiction.

Since 1997 we have promulgated a total of 29 ''limits'' to the ESA section 9(a) ''take'' prohibitions for 19 threatened salmon and steelhead Evolutionarily Significant Units (ESUs) (62 FR 38479, July 18, 1997; 65 FR 42422, July 10, 2000; 65 FR 42485, July 10, 2000; 67 FR 1116, January 9, 2002). On June 28, 2005, as part of the final listing determinations for 16 ESUs of West Coast salmon, we amended and streamlined the previously promulgated 4(d) protective regulations for threatened salmon and steelhead (70 FR 37160). We finalized an amendment to provide the necessary flexibility to ensure that fisheries and artificial propagation programs are managed consistently with the conservation needs of threatened salmon and steelhead. Under this change the section 4(d) protections apply to natural and hatchery fish with an intact adipose fin, but not to listed hatchery fish that have had their adipose fin removed prior to release into the wild. Additionally, we made several simplifying and clarifying changes to the 4(d) protective regulations including updating an expired limit (§ 223.203(b)(2)), providing a temporary exemption for ongoing research and enhancement activities, and applying the same set of 14 limits to all threatened salmon and steelhead. With respect to steelhead, the amended June 2005 4(d) rule applies to the steelhead ESUs previously listed as threatened: South-Central California, Central California Coast, California Central Valley, Northern California, Upper Willamette River, Lower Columbia River, Middle Columbia River, and Snake River Basin steelhead.

On August 18, 1997, Upper Columbia River steelhead were listed as an endangered species, and subject to the section 9(a)(1) take prohibitions (62 FR 43937). After conducting an updated status review of listed West Coast steelhead, we proposed in June 2004 to list Upper Columbia River steelhead as threatened (69 FR 33102; June 14, 2004). As part of the proposed listing determination we proposed applying the amended 4(d) protective regulations to Upper Columbia River steelhead. On January 5, 2006, we issued a final determination listing the Upper Columbia River steelhead Distinct Population Segment (DPS) as threatened, and we announced that we would finalize the protective regulations in a subsequent **Federal Register** notice (71 FR 834). In this final rule we are applying the 4(d) protective regulations, as amended in June 2005 (70 FR 37160; June 28, 2005), to Upper Columbia River steelhead.

Comments and Information Received in Response to the Proposed Rule

We solicited public comment on the proposed listing determinations for West Coast salmon and steelhead, and the proposed amendments to the 4(d) protective regulations for a total of 268 days (69 FR 33102, June 14, 2004; 69 FR 53031, August 31, 2004; 69 FR 61348, October 18, 2004; 70 FR 6840, February 9, 2005;70 FR 37219, June 28, 2005; 70 FR 67130, November 4, 2005). We held eight public hearings in the Pacific Northwest, and six public hearings in California, concerning the June 2004 West Coast salmon and steelhead proposed listing determinations and proposed amendments to the 4(d) protective regulations (69 FR 53031, August 31, 2004; 69 FR 54647, September 9, 2004; 69 FR 61348, October 18, 2004). Additionally, pursuant to the requirements of the National Environmental Policy Act (NEPA) of 1969, we conducted an Environmental Assessment (EA) analyzing the proposed amendments to the 4(d) protective regulations for threatened salmonids. As part of the proposed listing determinations and the proposed amendments to the 4(d) protective regulations, we announced that a draft of the EA was available from NMFS upon request (69 FR at 33172; June 14, 2004). Additionally, on November 15, 2004, we published notice of availability in the **Federal Register**, soliciting comment on the draft EA for an additional 30 days (69 FR 65582).

In response to the various requests for comments on the June 2004 proposed listing determinations and proposed 4(d) protective regulations, we received over 28,250 comments by fax, standard mail, and e-mail. The majority of the comments received were from interested individuals who submitted form letters or form e-mails and addressed general issues not specific to a particular ESU. Comments were also submitted by state and tribal natural resource agencies, fishing groups, environmental

organizations, home builder associations, academic and professional societies, expert advisory panels, farming groups, irrigation groups, and individuals with expertise in Pacific salmonids. The majority of respondents focused on the consideration of hatchery-origin fish in ESA listing determinations, with only a few comments specifically addressing the proposed amendments to the 4(d) protective regulations. We did not receive any comments specifically addressing the proposed application of the amended 4(d) protective regulations to Upper Columbia River steelhead. The reader is referred to the June 28, 2005, final rule for a summary of, and our response to, the public comments received regarding the proposed amendments to the 4(d) protective regulations (70 FR 37160 at 37166).

Description of Protective Regulations Being Afforded Upper Columbia River Steelhead

Consistent with the June 2005 amended 4(d) protective regulations, this final rule applies the ESA section 9(a)(1) take prohibitions (subject to the ''limits'' discussed below) to unmarked anadromous fish with an intact adipose fin that are part of the Upper Columbia River steelhead DPS. (The clipping of adipose fins in juvenile hatchery fish just prior to release into the natural environment is a commonly employed method for the marking of hatchery production). We believe this approach provides needed flexibility to appropriately manage the artificial propagation and directed take of threatened salmon and steelhead for the conservation and recovery of the listed species

The June 2005 amended ESA 4(d) protective regulations simplified the previously promulgated 4(d) rules by applying the same set of 14 ''limits'' to all threatened salmon and steelhead. These limits allow us to exempt certain activities from the take prohibitions, provided that the applicable programs and regulations meet specific conditions to adequately protect the listed species. In this final rule we are applying this same set of 14 limits to Upper Columbia River steelhead. Comprehensive descriptions of each 4(d) limit are contained in ''A Citizen's Guide to the 4(d) Rule'' (available on the Internet at *http://www.nwr.noaa.gov*), and in previously published **Federal Register** notices (65 FR 42422, July 10, 2000; 65 FR 42485, July 10, 2000; 69 FR 33102; June 14, 2004; 70 FR 37160, June 28, 2005). These ''limits'' include: activities conducted in accordance with ESA section 10 incidental take authorization (50 CFR 223.203(b)(1)); scientific or artificial propagation activities with pending permit applications at the time of rulemaking (§ 223.203(b)(2)); emergency actions related to injured, stranded, or dead salmonids (§ 223.203(b)(3)); fishery management activities (§ 223.203(b)(4)); hatchery and genetic management programs (§ 223.203(b)(5)); activities in compliance with joint tribal/state plans developed within *United States (U.S.)* v. *Washington* or *U.S.* v. *Oregon* (§ 223.203(b)(6)); scientific research activities permitted or conducted by the states (§ 223.203(b)(7)); state, local, and private habitat restoration activities (§ 223.203(b)(8)); properly screened water diversion devices (§ 223.203(b)(9)); routine road maintenance activities (§ 223.203(b)(10)); certain park pest management activities (§ 223.203(b)(11)); certain municipal, residential, commercial, and industrial development and redevelopment activities (§ 223.203(b)(12)); management activities on state and private lands within the State of Washington (§ 223.203(b)(13)); and activities undertaken consistent with an approved tribal resource management plan (§ 223.204).

Limit § 223.203((b)(2) exempts scientific or artificial propagation activities with pending applications for 4(d) approval. The limit was amended as part of the June 28, 2005, final rule to temporarily exempt such activities from the take prohibitions for 6 months, provided that a complete application for 4(d) approval was received within 60 days of the notice's publication (70 FR 37160). The deadlines associated with this exemption have expired. As we discussed in the proposed rule (69 FR 33102; June 14, 2004), we believe it is in the interest of the conservation and recovery of threatened salmon and steelhead to allow research and enhancement activities to continue uninterrupted while we process the necessary 4(d) approvals. Provided we receive a complete application by April 3, 2006, the take prohibitions will not apply to research and enhancement activities until the application is rejected as insufficient, 4(d) approval is issued, or until March 1, 2007, whichever occurs earliest. The length of this ''grace period'' is necessary because we process applications for 4(d) approval annually.

Classification

National Environmental Policy Act

We conducted an Environmental Assessment (EA) under the NEPA analyzing the proposed application of the amended 4(d) protective regulations to Upper Columbia River steelhead. We solicited comment on the EA as part of the proposed rule, as well as during a subsequent comment period following formal notice in the **Federal Register** of the availability of the draft EA for review. Informed by the comments received, we finalized the EA on June 14, 2005, and issued a Finding of No Significant Impact for the amended 4(d) protective regulations.

Regulatory Flexibility Act

The Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration that the proposed rule issued under authority of ESA section 4, if adopted, would not have a significant economic impact on a substantial number of small entities. The factual basis for this certification was published with the proposed rule, and is not repeated here. No comments were received regarding that certification. As a result, no final regulatory flexibility analysis for applying the 4(d) protective regulations to Upper Columbia River steelhead contained in this final rule has been prepared.

Executive Order (E.O.) 12866

The extension of the ESA 4(d) protective regulations to Upper Columbia River steelhead addressed in this rule has been determined to be significant for the purposes of E.O. 12866. We prepared a Regulatory Impact Review which was provided to the Office of Management and Budget (OMB) with the publication of the proposed rule.

E.O. 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 final 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 action. Nonetheless, we intend to inform potentially affected tribal governments and to solicit their input and coordinate on future management actions.

E.O. 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 final rule. In fact, this notice provides mechanisms by which NMFS, in the form of 4(d) limits to the statutory take prohibitions, may defer to state and local governments where they provide adequate protections for threatened salmonids, including Upper Columbia River steelhead.

References

A complete list of all references cited herein is available upon request (see **ADDRESSES**), or can be obtained from the Internet at: *http://www.nwr.noaa.gov*.

List of Subjects in 50 CFR Part 223

Endangered and threatened species, Exports, Imports.

Dated: January 26, 2006.

John Oliver,

Deputy Assistant Administrator for Operations, National Marine Fisheries Service.

■ For the reasons set out in the preamble, 50 CFR part 223 is 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) through (b)(13), and (c), the references in the sections listed in the first column below are revised according to the directions in the second and third columns:

Section	Remove	Add
§ 223.203(a)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)
§ 223.203(b)(1)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)
§ 223.203(b)(2)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)
§ 223.203(b)(3)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)
§ 223.203(b)(4)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)
§ 223.203(b)(5)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)
§ 223.203(b)(6)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)
§ 223.203(b)(7)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)
§ 223.203(b)(8)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)
§ 223.203(b)(9)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)
§ 223.203(b)(10)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)
§ 223.203(b)(11)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)
§ 223.203(b)(12)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)
§ 223.203(b)(13)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)
§ 223.203(c)	§ 223.102(a)(2) through (a)(21)	§ 223.102(a)

■ 3. In § 223.203, paragraph (b)(2) is revised to read as follows:

§ 223.203 Anadromous fish.

* * * * *

(b) * * *

(2) The prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102(a) do not apply to activities specified in an application for ESA 4(d) authorization 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 April 3, 2006. The prohibitions of this section apply to these activities upon the AA's rejection of the application as insufficient, upon issuance or denial of authorization, or March 1, 2007, whichever occurs earliest.

* * * * *

[FR Doc. 06–929 Filed 1–31–06; 8:45 am]

BILLING CODE 3510–22–S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 229

[Docket No. 030221039-6017-25; I.D. 012706A]

Taking of Marine Mammals Incidental to Commercial Fishing Operations; Atlantic Large Whale Take Reduction Plan (ALWTRP)

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

ACTION: Temporary rule.

SUMMARY: The Assistant Administrator for Fisheries (AA), NOAA, announces temporary restrictions consistent with the requirements of the ALWTRP's implementing regulations. These regulations apply to lobster trap/pot and anchored gillnet fishermen in an area totaling approximately 2,404 nm^2 (8,245 km^2), southeast of Portland, ME, for 15 days. The purpose of this action is to provide protection to an aggregation of northern right whales (right whales).

DATES: Effective beginning at 0001 hours February 3, 2006, through 2400 hours February 17, 2006.

ADDRESSES: Copies of the proposed and final Dynamic Area Management (DAM) rules, Environmental Assessments (EAs), Atlantic Large Whale Take Reduction Team (ALWTRT) meeting summaries, and progress reports on implementation of the ALWTRP may also be obtained by writing Diane Borggaard, NMFS/Northeast Region, One Blackburn Drive, Gloucester, MA 01930.

FOR FURTHER INFORMATION CONTACT: Diane Borggaard, NMFS/Northeast Region, 978–281–9300 x6503; or Kristy Long, NMFS, Office of Protected Resources, 301–713–1401.

SUPPLEMENTARY INFORMATION:

Electronic Access

Several of the background documents for the ALWTRP and the take reduction planning process can be downloaded from the ALWTRP web site at *http://www.nero.noaa.gov/whaletrp/*.

open seasons are prescribed'' in part 20. Because of this definition, many of the migratory birds that we had intended 50 CFR 21.21(b) to cover are not covered by the new regulations. We are therefore publishing this document to correct the final regulations by revising § 21.21(b) to remove the term ''migratory game birds'' and instead use the more generic term ''migratory birds.''

List of Subjects in 50 CFR Part 21

Exports, Hunting, Imports, Reporting and recordkeeping requirements, Transportation, Wildlife.

■ Accordingly, 50 CFR part 21 is corrected by making the following correcting amendments:

PART 21—MIGRATORY BIRD PERMITS

■ 1. The authority citation for part 21 continues to read as follows:

Authority: Migratory Bird Treaty Act, 40 Stat. 755 (16 U.S.C. 703); Public Law 95–616, 92 Stat. 3112 (16 U.S.C. 712(2)); Public Law 106–108, 113 Stat. 1491, Note following 16 U.S.C. 703.

§ 21.21 [Amended]

■ 2. In § 21.21, amend paragraph (b) introductory text by:

■ a. Removing the words ''Game bird'' from the heading; and

■ b. Removing the word ''game'' both times that it appears in the second and third sentences.

Dated: September 19, 2008.

Sara Prigan,

Federal Register Liaison.

[FR Doc. E8–22516 Filed 9–24–08; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 223

[Docket No. 070727426–81200–01]

RIN 0648–AV18

Endangered and Threatened Species: Final Protective Regulations for Threatened Puget Sound Steelhead

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

ACTION: Final rule.

SUMMARY: We, NMFS, apply the Endangered Species Act (ESA) protective regulations for threatened West Coast salmon and steelhead to the distinct population segment (DPS) of steelhead (*Oncorhynchus mykiss*) in Puget Sound, Washington.

DATES: The effective date of this rule is October 27, 2008.

ADDRESSES: NMFS, Protected Resources Division, 1201 NE Lloyd Boulevard, Suite 1100, Portland, OR 97232.

FOR FURTHER INFORMATION CONTACT: Steve Stone, NMFS, Northwest Region, at (503) 231–2317; or Marta Nammack, NMFS, Office of Protected Resources, at (301) 713 1401. Reference materials regarding protective regulations for this and other threatened salmonids are available upon request or on the Internet at *http://www.nwr.noaa.gov*.

SUPPLEMENTARY INFORMATION:

Background

ESA section 9(a)(1) (16 U.S.C. 1538(a)(1)) prohibits ''take'' and import/export of, and commercial transactions involving, all species listed as endangered. The term ''take'' is defined under the ESA as ''to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct'' (Section 3(19), 16 U.S.C. 1532 (19)). In the case of threatened species, section 4(d) of the ESA directs the Secretary of Commerce (Secretary) to issue regulations he or she deems necessary and advisable for the conservation of the species. The 4(d) protective regulations may prohibit, with respect to threatened species, some or all of the acts which section 9(a)(1) of the ESA prohibits with respect to endangered species. These 9(a)(1) prohibitions and 4(d) regulations apply to all individuals, organizations, and agencies subject to U.S. jurisdiction.

Since 1997 we have promulgated a total of 29 limits to the ESA section 9(a) take prohibitions for 21 threatened Pacific salmon and steelhead Evolutionarily Significant Units (ESUs) or Distinct Populations Segments (DPSs) (62 FR 38479, July 18, 1997; 65 FR 42422, July 10, 2000; 65 FR 42485, July 10, 2000; 67 FR 1116, January 9, 2002; 73 FR 7816, February 11, 2008). On June 28, 2005, as part of the final listing determinations for 16 ESUs of West Coast salmon, we amended and streamlined the previously promulgated 4(d) protective regulations for threatened salmon and steelhead (70 FR 37160). We took this action to provide appropriate flexibility to ensure that fisheries and artificial propagation programs are managed consistently with the conservation needs of threatened salmon and steelhead. Under this change, the section 4(d) protections apply to natural and hatchery fish with an intact adipose fin, but not to listed hatchery fish that have had their adipose fin removed prior to release into the wild. Additionally, we made several simplifying and clarifying changes to the 4(d) protective regulations including updating an expired limit (§ 223.203(b)(2)), providing a temporary exemption for ongoing research and enhancement activities, and applying the same set of 14 limits to all threatened Pacific salmon and steelhead ESUs or DPSs.

On March 29, 2006, we proposed to list the Puget Sound steelhead DPS as a threatened species (71 FR 15666). On February 7, 2007 (72 FR 5648), we proposed protective regulations for Puget Sound steelhead under section 4(d) of the ESA. On May 11, 2007, we issued a final determination listing the Puget Sound steelhead DPS as threatened, and we announced that we would finalize protective regulations in a subsequent **Federal Register** notice (72 FR 26722). In this final rule we apply the 4(d) protective regulations adopted for other Pacific salmonids, as amended in June 2005 (70 FR 37160; June 28, 2005), to Puget Sound steelhead.

Summary of Comments Received in Response to the Proposed Rule

We solicited public comment on the proposed protective regulations and draft Environmental Assessment (EA) (72 FR 5648; February 7, 2007) and received nine comments in response. Comments received consisted of e-mails and letters submitted by or for the following entities: Lummi Nation, Muckleshoot Indian Tribe, Native Fish Society, Port Gamble S'Klallam and Jamestown S'Klallam Tribes, Tulalip Tribes of Washington, U.S. Department of Interior, Washington Forest Protection Association, Western States Petroleum Association, and Wild Fish Conservancy. Copies of the full text of comments received are available upon request (see **ADDRESSES** and **FOR FURTHER INFORMATION CONTACT**). Below we address the comments received that pertain to proposed protective regulations for Puget Sound steelhead.

Comment 1: One commenter recommended that we re-open the comment period on the proposed 4(d) limits after making a final listing determination. This commenter also believed that we should explain each of the 4(d) limits in greater detail to prevent confusion regarding which 4(d) limits would be in effect for Puget Sound steelhead.

Response: We have described the same 4(d) limits presently being applied to Puget Sound steelhead in previously published **Federal Register** notices (65 FR 42422, July 10, 2000; 65 FR 42485, July 10, 2000; 69 FR 33102; June 14,

2004; 70 FR 37160, June 28, 2005). We do not believe that providing additional time for comment would result in substantive new information beyond that which we have already considered during this and previous rulemakings. To reduce confusion and enhance public understanding of the various 4(d) limits, we are in the process of updating a comprehensive ''Citizen's Guide to the 4(d) Rule'' available on the Internet at *http://www.nwr.noaa.gov*. At this website we also identify agency contacts who can assist interested parties in understanding the take prohibitions and which 4(d) limits are relevant to their anticipated activities.

Comment 2: One commenter suggested that it was not necessary to issue a 4(d) rule for Puget Sound steelhead because ESA protective regulations already exist for a number of other co-occurring species in Puget Sound. Another commenter was skeptical that the 4(d) limits would be effective at conserving steelhead, contending that many of the limits were based on vague criteria and would place responsibility on local agencies that have failed to meet their existing mandates to conserve steelhead. In contrast, another commenter asserted that the adoption of the proposed protective regulations was the most appropriate action for protecting Puget Sound steelhead.

Response: We acknowledge that existing ESA protective regulations for co-occurring species such as Puget Sound Chinook and Hood Canal summer-run chum salmon (both listed as threatened species under the ESA) provide some level of protection to Puget Sound steelhead. There are many activities that the existing regulations would not cover, however, such as the take of steelhead in fisheries or for hatchery broodstock. In addition, there are areas and times where Puget Sound steelhead are the only listed species that occur. Protective regulations prohibiting take of Puget Sound steelhead will specifically address the take of listed steelhead. Applying the existing limits on the take prohibition to Puget Sound steelhead will provide incentives and opportunities for interested parties to work with us to address a wide spectrum of human activities that will continue to pose a threat to steelhead unless they are managed in ways that adequately protect listed steelhead.

We also acknowledge that management efforts to date have not been sufficient to prevent Puget Sound steelhead from becoming a threatened species. However, we believe that state, tribal, and local governments remain in the best position to help develop and implement conservation strategies for listed species. During 8 years of implementing these 4(d) protections we have worked with state, tribal, and local governments throughout the Pacific Northwest to achieve significant conservation benefits for listed species. Such achievements include more efficient review and implementation of hundreds of scientific studies on threatened salmon and steelhead, and closer coordination to craft Fishery Management Evaluation Plans (FMEP), Hatchery Genetic Management Plans, and Tribal Resource Management Plans.

Comment 3: One commenter recommended that we describe the current status of the Forest Practices Habitat Conservation Plan (HCP) in Washington and clarify that ESA take prohibitions need not apply to lands covered by this and other HCPs.

Response: Section 10 of the ESA allows us to issue permits for the take of a listed species. The process requires that a non-federal permit applicant develop and submit an HCP to NMFS. We coordinate with applicants, provide technical assistance to ensure use of the best available science, and ensure that National Environmental Policy Act (NEPA) and ESA procedures are followed. Once an HCP is final and all parties agree to the plan, we issue an ESA Section 10 incidental take permit for the listed species. HCPs are often in effect for many decades to provide the greatest benefits of functioning habitats, while permitting land management under stable regulations. This ESA regulatory assurance is particularly attractive to landowners with long-term investments, such as timber growers or water suppliers. While applicants' future activities under an HCP may cause a low level of unintentional injury or death to listed salmon and steelhead, the habitat they manage will support long-term survival and recovery of those fish.

On June 5, 2006, NMFS issued an incidental take permit under section 10 of the ESA to the Washington Department of Natural Resources that covers activities and forestlands identified in the Washington State Forest Practices HCP. This HCP is a 50–year agreement for protection of Washington's streams and forests that provide habitat for more than 70 aquatic species, including threatened or endangered salmon and steelhead. The incidental take permit includes a provision that, ''for unlisted covered species, the permit will take effect upon the listing of a species as endangered, and for a species listed as threatened, on the effective date of a rule under Section 4(d) of the ESA prohibiting take of the species.''

One of the 4(d) limits that will be in effect for Puget Sound steelhead recognizes that entities holding a permit under section 10 of the ESA (or receiving other exemptions of the ESA) are free of take prohibitions so long as they act in accordance with the permit or applicable law (§ 223.203(b)(1)). Therefore, approved HCPs in the range of Puget Sound steelhead including the Washington State Forest Practices HCP would comply with this 4(d) limit.

Comment 4: Several commenters requested that we delay adoption of a 4(d) rule until we engaged in government-to-government consultations with affected Indian tribes. These commenters also asserted that requiring the release of all steelhead with an intact adipose fin would discriminate against tribal fishermen by disrupting net fisheries and precluding access to large quantities of harvestable salmon and steelhead in order to avoid taking a small number of unmarked steelhead.

Response: We recognize that the tribes have longstanding cultural ties to steelhead and steelhead fisheries, and that a number of tribes have treaty-based rights. We also understand that an ESA listing of Puget Sound steelhead may impact some tribal fisheries and resource management agencies, at least in the short term. Soon after listing Puget Sound steelhead as a threatened species, we met and consulted with several of the affected tribes to discuss implications for their steelhead management. All Puget Sound steelhead fisheries are regulated, either by the State of Washington or by tribal governments. These discussions have continued to date and are expected to result in a comprehensive new fisheries management plan for Puget Sound steelhead from tribal and state comanagers. This plan will address all manner of steelhead harvest, including tribal net fisheries. We will review this plan, including public input and revisions to it, and determine if it meets the criteria for coverage under one or more of the 4(d) limits. To accommodate development and review of the plan, this final 4(d) rule provides for a delay in the effective date for take prohibitions associated with tribal and recreational steelhead harvest until June 1, 2009, so long as that harvest is not directed at naturally spawning stocks and is authorized either by a federally recognized treaty tribe or the State of Washington. By the beginning of the 2010 winter fishing season, we expect such harvest to be addressed by two relevant 4(d) limits: § 223.203(b)(4) -

fishery harvest activities associated with an approved FMEP, and § 223.203(b)(6) - actions undertaken in compliance with a resource management plan developed jointly by the States of Washington, Oregon, and/or Idaho and the Tribes (joint plan) within the continuing jurisdiction of *United States* v. *Washington* or *United States* v. *Oregon*. Delaying the take prohibitions pertaining to steelhead harvest until June 2009 (one fishing season) is not expected to pose undue risk to listed steelhead. In the final listing determination (72 FR 26722; May 11, 2007), we observed that a primary threat to Puget Sound steelhead is the natural spawning of out-of-basin hatchery steelhead. Allowing the present level of hatchery-directed harvest to continue through June 2009 will assist in removing existing hatchery fish before they are able to spawn. We also concluded in the final listing determination that previous harvest management practices likely contributed to the historical decline of Puget Sound steelhead, but that the elimination of the directed harvest of wild steelhead in the mid 1990s has largely addressed this threat. Based on these factors we concluded that suspending the take prohibition for one fishing season would be consistent with conservation of the Puget Sound steelhead ESU.

Comment 5: One commenter requested that we explain how the EA has complied with applicable case law. This commenter also asserted that we should explain if and how we intend to conduct ESA section 7 consultation pertaining to the proposed issuance of a 4(d) rule.

Response: The EA developed in support of these 4(d) regulations was prepared in accordance with NOAA directives, policies, and guidelines for implementing the NEPA, Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA, and NOAA Administrative Order (NAO) 216–6. A NEPA Handbook, available on the Internet at *http://www.nepa.noaa.gov*, describes these and other relevant legal requirements and describes how we apply them.

We also have certain consultation responsibilities under section 7 of the ESA when making determinations regarding a specific 4(d) limit. That is, we must conduct a consultation to ensure that the proposed action (e.g., adopting an FMEP under § 223.203(b)(4)) will not jeopardize the continued existence of listed salmonids or destroy or adversely modify designated critical habitat. In addition, we must consider any adverse effects on designated essential fish habitat (EFH) by completing a consultation as required by the Magnuson-Stevens Act. Generally, ESA and EFH consultations are conducted concurrently. As detailed in an updated ''4(d) Rule Implementation Binder for Threatened Salmon and Steelhead on the West Coast'' (available on the Internet at *http://www.nwr.noaa.gov/ESA-Salmon-Regulations-Permits/4d-Rules/*), we expect that our 4(d) limit evaluations will provide a large part of the biological analysis required for the ESA section 7/EFH consultation.

Comment 6: One commenter noted that juvenile steelhead and rainbow trout are similar in appearance and requested that we explain how take prohibitions would apply to the former but not the latter life form. Another commenter believed that protective regulations should apply to both resident and anadromous life forms and that we should require applicants for take authorization to undertake efforts to research the relationship between the two forms and incorporate the findings into management actions.

Response: As described in the final listing determination for the Puget Sound steelhead DPS (72 FR 26722; May 11, 2007), resident *O. mykiss* occur within the range of the DPS but are not part of the DPS due to marked differences in physical, physiological, ecological, and behavioral characteristics. Only anadromous *O. mykiss* are listed in this DPS and subject to the ESA 4(d) take regulations. We recognize that it is difficult to distinguish between the two life forms, especially juvenile fish. Therefore we encourage the public to carefully consider the impacts of activities that might result in taking either life form and recommend that they consult with NMFS (see contacts at *http://www.nwr.noaa.gov/Regional-Office/Habitat-Conservation/Washington-State-Branch/*) or state or tribal biologists familiar with steelhead in the area of concern.

There is a critical need to improve our understanding of the interactions between the anadromous and resident life forms of O. mykiss, and, when appropriate, we will encourage applicants for take authorization to undertake efforts to research the relationship between the two forms and incorporate the findings into management actions and additional scientific research. Such research could elucidate the factors affecting reproductive exchange between the two life forms, as well as their respective contributions to the viability of *O. mykiss* as a whole. These considerations may prove to be important in the context of recovery planning and assessing risks faced by the *O. mykiss* species as a whole. At present, there is insufficient information to evaluate whether, under what circumstances, and to what extent the resident form may contribute to the viability of steelhead over the long term (Recovery Science Review Panel, 2004; Good *et al.*, 2005; Independent Scientific Advisory Board, 2005; NMFS, 2005).

Description of Protective Regulations Being Afforded Puget Sound Steelhead

Consistent with the June 28, 2005 amended 4(d) protective regulations (70 FR 37160), this final rule applies the ESA section 9(a)(1) take prohibitions (subject to the limits discussed below) to unmarked anadromous fish with an intact adipose fin that are part of the Puget Sound steelhead DPS. (The clipping of adipose fins in juvenile hatchery fish just prior to release into the natural environment is a commonly employed method for the marking of hatchery production). We believe this approach provides needed flexibility to appropriately manage the artificial propagation and directed take of threatened salmon and steelhead for the conservation and recovery of the listed species.

The June 2005 amended ESA 4(d) protective regulations simplified the previously promulgated 4(d) rules by adopting the same set of 14 limits for all threatened salmon and steelhead. These limits allow us to exempt certain activities from the take prohibitions, provided that the applicable programs and regulations meet specific conditions to adequately protect the listed species. In this final rule we adopt this same set of 14 limits for Puget Sound steelhead. Comprehensive descriptions of each 4(d) limit are contained in ''A Citizen's Guide to the 4(d) Rule'' (available on the Internet at *http://www.nwr.noaa.gov*), and in previously published **Federal Register** notices (65 FR 42422, July 10, 2000; 65 FR 42485, July 10, 2000; 69 FR 33102; June 14, 2004; 70 FR 37160, June 28, 2005). These limits include: activities conducted in accordance with ESA section 10 incidental take authorization (50 CFR 223.203(b)(1)); ongoing scientific and conservation activities for which a permit application has been timely submitted, and treaty and non-treaty fisheries for which a comanager's management plan has been timely submitted (§ 223.203(b)(2)); emergency actions related to injured, stranded, or dead salmonids (§ 223.203(b)(3)); fishery management activities (§ 223.203(b)(4)); hatchery and genetic management programs

(§ 223.203(b)(5)); activities in compliance with joint tribal/state plans developed within *United States (U.S.)* v. *Washington* or *U.S.* v. *Oregon* (§ 223.203(b)(6)); scientific research activities conducted or permitted by the states (§ 223.203(b)(7)); state, local, and private habitat restoration activities (§ 223.203(b)(8)); properly screened water diversion devices (§ 223.203(b)(9)); routine road maintenance activities (§ 223.203(b)(10)); certain park pest management activities (§ 223.203(b)(11)); certain municipal, residential, commercial, and industrial development and redevelopment activities (§ 223.203(b)(12)); forest management activities on state and private lands within the State of Washington (§ 223.203(b)(13)); and activities undertaken consistent with an approved tribal resource management plan (§ 223.204).

Limits § 223.203(b)(4) and § 223.203(b)(6) address fishery management plans. As noted in our response to comments above, steelhead comanagers and stakeholders in the State of Washington have been actively working to develop a comprehensive management plan for Puget Sound steelhead. We have participated in the development of this plan and will review it for compliance with the above 4(d) limits. We have reviewed existing state and tribal fisheries management regimes and concluded that implementation of these regimes for the balance of the current fishing season is adequate for conservation of Puget Sound steelhead, until a comprehensive regime is adopted (NMFS, 2008). Therefore, steelhead harvest is not prohibited until June 1, 2009, so long as the harvest is authorized by the State of Washington or a tribe with jurisdiction over steelhead. If NMFS does not receive a fishery management plan for Puget Sound steelhead by November 14, 2008, subsequent take by harvest will be subject to the take prohibitions.

Section 223.203(b)(2) exempts scientific or artificial propagation activities with pending applications for ESA approval. The limit was amended as part of the June 28, 2005, final listing determination for West Coast salmon and steelhead to temporarily exempt such activities from the take prohibitions for 6 months, provided that a complete application was received within 60 days of the notice's publication (70 FR 37160). The deadlines associated with this exemption were most recently extended to address research related to threatened Oregon Coast coho salmon (73 FR 7816; February 11, 2008), but one of these deadlines has now expired. As discussed in the proposed rule (69 FR 33102; June 14, 2004), it is in the interest of the conservation and recovery of Puget Sound steelhead to allow ongoing research and enhancement activities to continue uninterrupted while we process the necessary permits and approvals. For modified research requests received by November 14, 2008, the take prohibitions will not apply to research and enhancement activities until the application is rejected as insufficient, a permit or 4(d) approval is issued, or until June 1, 2009, whichever occurs earliest. The length of this ''grace period'' is necessary because we process applications for 4(d) approval annually.

Classification

National Environmental Policy Act (NEPA)

We conducted an EA under the NEPA analyzing the proposed application of the 4(d) protective regulations to Puget Sound steelhead. We solicited and received comments on the EA as part of the proposed rule. Informed by the comments received, we finalized the EA on August 25, 2008, and issued a finding of no significant impact for promulgation of the 4(d) protective regulations.

Regulatory Flexibility Act

The Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration that this rule would not have a significant economic impact on a substantial number of small entities. As a result, no regulatory flexibility analysis is required and none has been prepared. The factual basis for this certification follows:

Under section 4(d) of the ESA, NMFS is required to adopt such regulations as it deems necessary and advisable for the conservation of species listed as threatened, which may include prohibiting ''take'' of the threatened species. Steelhead are considered a game fish in Washington State, and in Puget Sound are primarily harvested in recreational fisheries. The entities that provide goods and services to steelhead fisheries range in size from multi-national corporations and chain stores to local family businesses. Except for the multi-national corporations and chain stores, most of these entities are small businesses that include bait and tackle suppliers, guides, and lodging and related service providers. These entities do not support steelhead fisheries exclusively, but instead provide goods and services related to a variety of other fisheries as well, e.g., for salmon and trout. The economic output associated with sport fisheries for Puget Sound steelhead is estimated to be approximately $29 million per year, most of which ($19.5 million) is associated with the winter steelhead fishery (Washington Department of Fish and Wildlife, 2006).

NMFS has previously adopted ESA 4(d) rules prohibiting (with some limits) take of all Pacific salmon and steelhead (salmonid) species listed as threatened under the ESA. NMFS now proposes to apply the Section 9(a)(1) take prohibitions (subject to the limits discussed above and applicable to other threatened Pacific salmon and steelhead) to unmarked steelhead with an intact adipose fin that are part of the Puget Sound steelhead DPS. Because these prohibitions and associated limits address other threatened Pacific salmonids whose range overlaps that of Puget Sound steelhead, this final rule would not add a significant impact to the existing regulatory scheme. In addition, non-tribal harvest regulations currently prohibit, and are expected to continue to prohibit, the retention of fish with an intact adipose fin, and so are consistent with the 4(d) rule. Fisheries in the foreseeable future will thus be largely unaffected. In the long term, fisheries may be affected by changes in hatchery production. Landowners will be affected only in those areas (primarily headwater streams) where the range of the Puget Sound steelhead DPS does not overlap with that of already-listed species whose take is already prohibited. Thus, this final rule will not have significant impacts on small entities.

Paperwork Reduction Act (PRA)

This final rule does not contain a collection-of-information requirement for purposes of the PRA.

Executive Order (E.O.) 12866 Regulatory Planning and Review

We prepared a regulatory impact review in 2000 when the ESA section 4(d) regulations were initially adopted and concluded that among the alternative regulatory approaches, the proposed 4(d) rule would maximize net benefits and minimize costs, within the constraints of the ESA. We have reviewed that analysis and new information available since the analysis was initially prepared, including OMB Circular A–4 (2003). We have determined that none of the new information would change the earlier analysis or conclusion.

E.O. 12988 Civil Justice Reform

We have determined that this rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of E.O. 12988. We issue protective regulations pursuant to provisions in the ESA using an existing approach that improves the clarity of the regulations and minimizes the regulatory burden of managing ESA listings while retaining necessary and advisable protections to provide for the conservation of threatened species.

E.O. 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 rulemaking. In fact, this rule includes mechanisms by which we, in the form of 4(d) limits to take prohibitions, may defer to state and local governments where they provide adequate protections for Puget Sound steelhead.

E.O. 13175 – Consultation and Coordination with Indian Tribal Governments

The longstanding and distinctive relationship between the Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and co-management agreements. These differentiate tribal governments from the other entities that deal with, or are affected by, the Federal Government. This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the United States toward Indian Tribes and the application of fiduciary standards of due care with respect to Indian lands, tribal trust resources, and the exercise of tribal rights. E.O. 13175 outlines the responsibilities of the Federal Government in matters affecting tribal interests. During our status review of Puget Sound steelhead we solicited information from the tribes, met with several tribal governments and associated tribal fisheries commissions, and provided the opportunity for all interested tribes to comment on the proposed listing of this DPS and discuss any concerns they may have. Several tribes submitted comments during the public comment period. We thoroughly considered and incorporated them, as appropriate, into our final determinations regarding listing and take prohibitions. We will continue to coordinate with the tribes on management and conservation actions related to this species.

E.O. 13211 – Energy Supply, Distribution, or Use

E.O. 13211 requires agencies to prepare a statement of energy effects when undertaking certain actions. According to E.O. 13211, ''significant energy action'' means any action by an agency that is expected to lead to the promulgation of a final rule or regulation that is a significant regulatory action under E.O. 12866 and is likely to have a significant adverse effect on the supply, distribution, or use of energy. We have determined that the energy effects of this final rule are unlikely to exceed the energy impact thresholds identified in E.O. 13211 and that this rulemaking is, therefore, not a significant energy action. No statement of energy effects is required.

References

A complete list of all references cited herein is available upon request (see **ADDRESSES**), or can be obtained from the Internet at: *http://www.nwr.noaa.gov*.

List of Subjects in 50 CFR Part 223

Endangered and threatened species, Exports, Imports, Transportation.

Dated: September 22, 2008.

John Oliver,

Deputy Assistant Administrator for Operations, National Marine Fisheries Service.

■ For the reasons set out in the preamble, 50 CFR part 223 is 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.

■ 2. In § 223.203, paragraphs (a), (b) introductory text, and (b)(2) are revised to read as follows:

§ 223.203 Anadromous fish.

* * * * *

(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 fish with an intact adipose fin that are part of the threatened species of salmonids listed in § 223.102(c)(3) through (c)(24).

(b) *Limits on the prohibitions.* The limits to the prohibitions of paragraph (a) of this section relating to threatened species of salmonids listed in § 223.102(c)(3) through (c)(24) are described in the following paragraphs (b)(1) through (b)(13):

* * * * *

(2) The prohibitions of paragraph (a) of this section relating to threatened Puget Sound steelhead listed in § 223.102(c)(23) do not apply to:

(i) 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 November 14, 2008. The prohibitions 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 June 1, 2009, whichever occurs earliest, or

(ii) Steelhead harvested in tribal or recreational fisheries prior to June 1, 2009, so long as the harvest is authorized by the State of Washington or a tribe with jurisdiction over steelhead harvest. If NMFS does not receive a fishery management plan for Puget Sound steelhead by November 14, 2008, subsequent take by harvest will be subject to the take prohibitions.

* * * * *

[FR Doc. E8–22556 Filed 9–24–08; 8:45 am]

BILLING CODE 3510–22–S

Pursuant to Court Remand to interested parties on January 16, 2009. Corus and ArcelorMittal USA. Inc. (ArcelorMittal), domestic interested party, submitted comments on January 23, 2009. Corus and domestic producer U.S. Steel Corporation (U.S. Steel) submitted rebuttal comments on January 28, 2009.

On February 20, 2009, the Department filed its final results of redetermination pursuant to *Corus Staal* with the CIT. *See* Final Results of Redetermination Pursuant to Court Remand, *Corus Staal BV* v. *United States Court* No. 07–00221, Slip Op. 08–144 (CIT December 29, 2008) (Final Redetermination). In the Final Redetermination, the Department amended the final results of the 2004–2005 administrative review to rescind our duty absorption finding with respect to Corus Staal BV (Corus), ''consistent with the Federal Circuit's interpretation of 19 U.S.C. 1675(a)(4) in *Agro Dutch Indus. Ltd.* v. *United States*, 508 F.3d 1024, 1028 (Fed. Cir. 2007) (*Agro Dutch*).'' *See Corus Staal* at 26. Specifically, we no longer found that Corus absorbed antidumping duties during the period of review since Corus was, itself, the importer of record. This redetermination did not affect either the weighted-average margin or assessment rate calculated for Corus for the relevant period of review.

On March 24, 2009, the Court sustained all aspects of the remand redetermination. The Court reaffirmed the Department's calculation of Corus Staal's dumping margin during the administrative review and affirmed the Department's reversal of its duty absorption finding. Further, the Court also affirmed the Department's authority to issue instructions to U.S. Customs and Border Protection (CBP) to levy antidumping duties on entries.

In *Timken*, 893 F.2d at 341, the Federal Circuit held that, pursuant to section 516A(e) of the Tariff Act of 1930, as amended (the Act), the Department must publish a notice of a court decision that is ''not in harmony'' with a Department determination, and must suspend liquidation of entries pending a ''conclusive'' court decision. The Court's decision in *Corus Staal Judgment* on March 24, 2009, constitutes a final decision of the court that is not in harmony with the Department's *Final Results* and *Amended Final Results*. This notice is published in fulfillment of the publication requirements of *Timken*. Accordingly, the Department will continue the suspension of liquidation of the subject merchandise pending the expiration of the period of appeal or, if appealed, pending a final and conclusive court decision. In the event the Court's ruling is not appealed or, if appealed, upheld by the Federal Circuit the Department will instruct CBP to assess antidumping duties on entries of the subject merchandise during the POR based on the *Amended Final Results*.

This notice is issued and published in accordance with section 516A(c)(1) of the Act.

Dated: March 27, 2009.

Ronald K. Lorentzen,

Acting Assistant Secretary for Import Administration.

[FR Doc. E9–7445 Filed 4–1–09; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Proposed Information Collection; Comment Request; Limits on Applications of Take Prohibitions

AGENCY: National Oceanic and Atmospheric Administration (NOAA).

ACTION: Notice.

SUMMARY: The Department of Commerce, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995.

DATES: Written comments must be submitted on or before June 1, 2009.

ADDRESSES: Direct all written comments to Diana Hynek, Departmental Paperwork Clearance Officer, Department of Commerce, Room 7845, 14th and Constitution Avenue, NW., Washington, DC 20230 (or via the Internet at *dHynek@doc.gov*).

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of the information collection instrument and instructions should be directed to Steve Stone at (503) 231–2317, or *steve.stone@noaa.gov*.

SUPPLEMENTARY INFORMATION:

I. Abstract

Section 4(d) of the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 *et seq.*) requires the National Marine Fisheries Service (NMFS) to adopt such regulations as it ''deems necessary and advisable to provide for the conservation of'' threatened species. Those regulations may include any or all of the prohibitions provided in section 9(a)(1) of the ESA, which specifically prohibits ''take'' of any endangered species (''take'' includes actions that harass, harm, pursue, kill, or capture). The first salmonid species listed by NMFS as threatened were protected by virtually blanket application of the section 9 take prohibitions. There are now 22 separate Distinct Population Segments (DPS) of west coast salmonids listed as threatened, covering a large percentage of the land base in California, Oregon, Washington and Idaho. NMFS is obligated to enact necessary and advisable protective regulations. NMFS makes section 9 prohibitions generally applicable to many of those threatened DPS, but also seeks to respond to requests from States and others to both provide more guidance on how to protect threatened salmonids and avoid take, and to limit the application of take prohibitions wherever warranted (See 70 FR 37160, June 28, 2005; 71 FR 834, January 5, 2006; and 73 FR 55451, September 25, 2008). The regulations describe programs or circumstances that contribute to the conservation of, or are being conducted in a way that limits impacts on, listed salmonids. Because we have determined that such programs/circumstances adequately protect listed salmonids, the regulations do not apply the ''take'' prohibitions to them. Some of these limits on the take prohibitions entail voluntary submission of a plan to NMFS and/or annual or occasional reports by entities wishing to take advantage of these limits, or continue within them.

II. Method of Collection

Submissions may be in paper or electronic format.

III. Data

OMB Control Number: 0648–0399.

Form Number: None.

Type of Review: Regular submission.

Affected Public: State, local, or tribal government; business or other for-profit organizations.

Estimated Number of Respondents: 301.

Estimated Time per Response: 20 hours for a road maintenance agreement; 5 hours for a diversion screening limit project; 30 hours for an urban development package; 10 hours for an urban development report; 20 hours for a tribal plan; and 5 hours for a report of aided, salvaged, or disposed of salmonids.

Estimated Total Annual Burden Hours: 1,705.

Estimated Total Annual Cost to Public: $1,000.

IV. Request for Comments

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden (including hours and cost) of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

Dated: March 30, 2009.

Gwellnar Banks,

Management Analyst, Office of the Chief Information Officer.

[FR Doc. E9–7389 Filed 4–1–09; 8:45 am]

BILLING CODE 3510–22–P

COMMODITY FUTURES TRADING COMMISSION

Sunshine Act Meetings

AGENCY HOLDING THE MEETING: Commodity Futures Trading Commission.

TIME AND DATE: 11 a.m., Friday April 17, 2009.

PLACE: 1155 21st St., NW., Washington, DC, 9th Floor Commission Conference Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance matters.

CONTACT PERSON FOR MORE INFORMATION: Sauntia S. Warfield, 202–418–5084.

Sauntia S. Warfield,

Staff Assistant.

[FR Doc. E9–7531 Filed 3–31–09; 4:15 pm]

BILLING CODE 6351–01–P

COMMODITY FUTURES TRADING COMMISSION

Sunshine Act Meetings

AGENCY HOLDING THE MEETING: Commodity Futures Trading Commission.

TIME AND DATE: 11 a.m., Friday April 10, 2009.

PLACE: 1155 21st St., NW., Washington, DC, 9th Floor Commission Conference Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance matters.

CONTACT PERSON FOR MORE INFORMATION: Sauntia S. Warfield, 202–418–5084.

Sauntia S. Warfield,

Staff Assistant.

[FR Doc. E9–7534 Filed 3–31–09; 4:15 pm]

BILLING CODE 6351–01–P

COMMODITY FUTURES TRADING COMMISSION

Sunshine Act Meetings

AGENCY HOLDING THE MEETING: Commodity Futures Trading Commission.

TIME AND DATE: 11 a.m., Friday April 3, 2009.

PLACE: 1155 21st St., NW., Washington, DC, 9th Floor Commission Conference Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance matters.

FOR FURTHER INFORMATION CONTACT: Sauntia S. Warfield, 202–418–5084.

Sauntia S. Warfield,

Staff Assistant.

[FR Doc. E9–7537 Filed 3–31–09; 4:15 pm]

BILLING CODE 6351–01–P

COMMODITY FUTURES TRADING COMMISSION

Sunshine Act Meetings

AGENCY HOLDING THE MEETING: Commodity Futures Trading Commission.

TIME AND DATE: 11 a.m., Friday, April 24, 2009.

PLACE: 1155 21st St., NW., Washington, DC, 9th Floor Commission Conference Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance matters.

CONTACT PERSON FOR MORE INFORMATION: Sauntia S. Warfield, 202–418–5084.

Sauntia S. Warfield,

Staff Assistant.

[FR Doc. E9–7540 Filed 3–31–09; 4:15 pm]

BILLING CODE 6351–01–P

COMMODITY FUTURES TRADING COMMISSION

Sunshine Act Meetings

AGENCY HOLDING THE MEETING: Commodity Futures Trading Commission.

TIME AND DATE: 2 p.m., Wednesday April 15, 2009.

PLACE: 1155 21st St., NW., Washington, DC, 9th Floor Commission Conference Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Enforcement matters.

CONTACT PERSON FOR MORE INFORMATION: Sauntia S. Warfield, 202–418–5084.

Sauntia S. Warfield,

Staff Assistant.

[FR Doc. E9–7541 Filed 3–31–09; 4:15 pm]

BILLING CODE 6351–01–P

DEPARTMENT OF DEFENSE

Office of the Secretary

[Docket No. DoD–2008–OS–0110]

Submission for OMB Review; Comment Request

ACTION: Notice.

The Department of Defense has submitted to OMB for clearance, the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).

DATES: Consideration will be given to all comments received by May 4, 2009.

Title and OMB Number: Request for approval for Procurement Technical Assistance Center Cooperative Agreement Performance Report; DLA Form 1806; OMB Control Number 0704–0320.

Type of Request: Extension.

Number of Respondents: 95.

Responses Per Respondent: 4.

Annual Responses: 380.

Average Burden per Response: 7 hours.

Annual Burden Hours: 2,660.

Needs and Uses: The Defense Logistics Agency uses the report as the principal instrument for measuring the performance of Cooperative Agreement awards made under 10 U.S.C. Chapter 142.

Affected Public: Not-for-profit institutions; state, local or tribal governments.

Frequency: Quarterly.

Respondent's Obligation: Required to obtain or retain benefits.