

APPENDIX A

BIOLOGICAL EVALUATION OF 2006 COUNCIL-ADOPTED

OCEAN SALMON FISHERY IMPACTS

ON FISH SPECIES LISTED UNDER THE ENDANGERED SPECIES ACT

Since 1989, NMFS has listed 16 ESUs of salmon under the ESA (Table A-1). As the listings have occurred, NMFS has initiated formal section 7 consultations and issued biological opinions (Table A-2) that consider the impacts resulting from implementation of the Salmon FMP, or from annual management measures, to listed salmonid species. NMFS has also reinitiated consultation on certain ESUs when new information has become available on the status of the stocks or on the impacts of the Salmon FMP on the stocks. Some opinions have concluded that implementation of the Salmon FMP is not likely to jeopardize the continued existence of certain listed ESUs. Other opinions have found the Salmon FMP is likely to jeopardize certain listed ESUs and have identified reasonable and prudent alternatives that would avoid the likelihood of jeopardizing the continued existence of the ESU under consideration. The consultation standards referred to in this document include (1) reasonable and prudent alternatives, (2) conservation objectives for which NMFS conducted section 7 consultations and arrived at a no-jeopardy conclusion, and (3) NMFS requirements under section 4(d) determinations.

Amendment 12 to the Salmon FMP added to the list of stocks in the salmon management unit the generic category “species listed under the ESA” and the respective escapement goal to “manage consistent with NMFS jeopardy standards or recovery plans to meet immediate conservation needs and long-term recovery of the species”. Amendment 14 specified those listed ESUs and clarified which stocks in the FMP management unit were representative of the ESUs.

TABLE A-1. Salmon ESUs listed under the ESA.

Species	ESU	Status	Federal Register Notice
Chinook Salmon (<i>O. tshawytscha</i>)	Sacramento River Winter	Endangered	70 FR 37160 6/28/05
	Snake River Fall	Threatened	70 FR 37160 6/28/05
	Snake River Spring/Summer	Threatened	70 FR 37160 6/28/05
	Puget Sound	Threatened	70 FR 37160 6/28/05
	Lower Columbia River	Threatened	70 FR 37160 6/28/05
	Upper Willamette River	Threatened	70 FR 37160 6/28/05
	Upper Columbia River Spring	Endangered	70 FR 37160 6/28/05
	Central Valley Spring	Threatened	70 FR 37160 6/28/05
	California Coastal	Threatened	70 FR 37160 6/28/05
Chum Salmon (<i>O. keta</i>)	Hood Canal Summer-Run	Threatened	70 FR 37160 6/28/05
	Columbia River	Threatened	70 FR 37160 6/28/05
Coho Salmon (<i>O. kisutch</i>)	Central California Coastal	Threatened	70 FR 37160 6/28/05
	S. Oregon/ N. California Coastal	Threatened	70 FR 37160 6/28/05
	Lower Columbia River	Threatened	70 FR 37160 6/28/05
Sockeye Salmon (<i>O. nerka</i>)	Snake River	Endangered	70 FR 37160 6/28/05
	Ozette Lake	Threatened	70 FR 37160 6/28/05

TABLE A-2. NMFS' Endangered Species Act consultations and Section 4(d) determinations on ocean fisheries implemented under the Salmon FMP and their duration.	
Date	Evolutionarily Significant Unit covered and effective period
March 8, 1996	Snake River Chinook and sockeye (until reinitiated)
April 28, 1999	Oregon coastal coho, Southern Oregon/ Northern California coastal coho, Central California coastal coho (until reinitiated) ^{1/}
April 28, 2000	Central Valley spring Chinook and California coastal Chinook (until reinitiated)
April 27, 2001	Hood Canal summer chum 4(d) limit (until reinitiated)
April 30, 2001	Upper Columbia River spring Chinook and Upper Willamette River Chinook (until reinitiated)
April 30, 2001	Lower Columbia River Chinook, Upper Willamette Chinook, Upper Columbia spring Chinook, Lake Ozette sockeye, ten steelhead ESUs and Columbia River chum (until reinitiated)
April 27, 2004	Sacramento River winter Chinook (April 30, 2010)
April 29, 2004	Puget Sound and Lower Columbia River Chinook (until reinitiated)
Expected Prior to May 1, 2006	Lower Columbia River natural coho

1/ Oregon coastal coho are no longer listed under the Endangered Species Act

NMFS, in a letter to the Council dated March 6, 2006, provided guidance on protective measures for listed species for the 2006 fishing season. The letter summarized the requirements of NMFS' biological opinions and 4(d) rules which are to be applied to the 2006 management season. The ESA consultation standards and the exploitation rate (or other criteria) projected for the 2006 management measures are presented in Table A-3. Some listed stocks are either rarely caught in Council fisheries (e.g., spring Chinook from the upper Columbia and Willamette rivers) or already receive sufficient protection from Salmon FMP and ESA consultation standards for other listed ESUs (e.g., Central Valley spring Chinook). NMFS has determined that management actions designed to limit catch from these ESUs beyond what will be provided by harvest constraints for other stocks are not necessary.

Additional listed salmonid ESUs found within the Council area, but which are not significantly impacted by Council-managed fisheries include:

Sockeye

- Snake River (endangered)
- Ozette Lake Sockeye (threatened)

Chum

- Columbia River (threatened)
- Hood Canal summer (threatened)

Steelhead

- Southern California (endangered)
- Central Valley, California (threatened)
- South-central California coast (threatened)
- Central California coast (threatened)
- Upper Columbia River (endangered)
- Upper Willamette River (threatened)
- Middle Columbia River (threatened)
- Lower Columbia River (threatened)
- Snake River Basin (threatened)
- Northern California (threatened)

TABLE A-3. Impacts of Council adopted 2006 management measures on ESA listed ESUs. (Page 1 of 2)

ESU	Stock Representation in Salmon FMP	ESA Consultation Standard	2006 Management Measures
Central Valley spring Chinook - threatened	· Sacramento River spring	No guidance in addition to the ESA consultation standard for Sacramento winter Chinook.	Consultation standard for Sacramento River spring Chinook is met.
Sacramento River winter Chinook - endangered	· Sacramento River winter	Open recreational fishery south of Point Arena no earlier than first Saturday in April and close no later than the first Sunday in October south of Pigeon Point, and no later than the second Sunday in November from Point Arena to Pigeon Point, with a minimum size limit no less than 20 inches. Open commercial fishery south of Point Arena no earlier than May 1 and close no later than Sept 30, except Point Reyes to Point San Pedro to close no later than Oct 15, with a minimum size limit no less than 26 inches.	The recreational fishery between Point Arena and Pigeon Point is open between April 1 and November 12. The recreational fishery between Pigeon Point and the U.S./Mexico border is open between April 1 and September 24. The commercial fishery south of Point Arena is open between July 26 and September 30, and between Point Reyes and Point San Pedro between October 2 and 13. Consultation standard for Sacramento River winter Chinook is met.
California Coastal Chinook - threatened	· Eel, Mattole, and Mad Rivers	≤16.0% age-four ocean harvest rate on Klamath River fall Chinook.	11.5% Age-4 ocean harvest rate.
Lower Columbia River Chinook - threatened	· Sandy, Cowlitz, Kalama, Lewis spring · Lower River Hatchery fall · North Fork Lewis River fall	· No consultation standard. · ≤ 49.0% brood year adult equivalent exploitation rate on Coweeman tule fall Chinook. · ≥5,700 MSY level adult spawning escapement.	Meet hatchery escapement goals. 47.2% total ocean and freshwater adult equivalent (AEQ) exploitation rate. 16,600 adults to the Columbia River mouth.
Upper Willamette Chinook - threatened	· Upper Willamette River spring	No specific requirements. Rare occurrence in Council fisheries.	North of Falcon troll fisheries do not begin prior to May 1
Upper Columbia River spring Chinook - endangered	· Upper Columbia River spring	No specific requirements. Rare occurrence in Council fisheries.	North of Falcon troll fisheries do not begin prior to May 1.
Snake River fall Chinook - threatened	· Snake River fall	≥30.0% reduction from the 1988-1993 average adult equivalent age-3/age-4 exploitation rate for all ocean fisheries.	35.7% reduction from 1988-1993 average age 3/4 AEQ ocean exploitation rate.
Snake River spring/summer Chinook - threatened	· Snake River spring/summer	No specific requirements. Rare occurrence in Council fisheries.	North of Falcon troll fisheries do not begin prior to May 1.

