
APPENDIX A

BIOLOGICAL EVALUATION OF 2004 COUNCIL-ADOPTED OCEAN SALMON FISHERY IMPACTS ON FISH SPECIES LISTED UNDER THE ENDANGERED SPECIES ACT

INTRODUCTION

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 that NMFS conducted section 7 consultation s 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	54 FR 32085 8/1/89
	Snake River Fall	Threatened	57 FR 14653 4/22/92
	Snake River Spring/Summer	Threatened	57 FR 14653 4/22/92
	Puget Sound	Threatened	64 FR 14308 3/24/99
	Lower Columbia River	Threatened	64 FR 14308 3/24/99
	Upper Willamette River	Threatened	64 FR 14308 3/24/99
	Upper Columbia River Spring	Endangered	64 FR 14308 3/24/99
	Central Valley Spring	Threatened	64 FR 50394 9/16/99
	California Coastal	Threatened	64 FR 50394 9/16/99
Chum Salmon (<i>O. keta</i>)	Hood Canal Summer-Run	Threatened	64 FR 14508 3/25/99
	Columbia River	Threatened	64 FR 14508 3/25/99
Coho Salmon (<i>O. kisutch</i>)	Central California Coastal	Threatened	61 FR 56138 10/31/96
	S. Oregon/ N. California Coastal	Threatened	62 FR 24588 5/6/97
	Oregon Coastal	Threatened ^{a/}	63 FR 42587 8/10/98
Sockeye Salmon (<i>O. nerka</i>)	Snake River	Endangered	56 FR 58619 11/20/91
	Ozette Lake	Threatened	64 FR 14528 3/25/99

a/ On February 24, 2004, the Ninth Circuit Court of Appeals dismissed the appeals in the *A/sea Valley Alliance* case and sent the case back to Judge Hogan. The practical effect of the decision is there is no Federal protection under the ESA for Oregon Coastal coho at this time.

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) ^{a/}
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)
Pending	Sacramento River winter chinook
Pending	Puget Sound and Lower Columbia River chinook

a/ On Feb 4, 2004, the ninth Circuit Court of Appeals dismissed appeals in the *Alesea Valley Alliance* case. Consequently, there are currently no ESA protections in place for OCN coho.

NMFS, in a March 5, 2004 letter to the Council, provided guidance on protective measures for listed species for the 2004 fishing season. The letter summarized the requirements of NMFS' biological opinions and 4(d) rules which are to be applied to the 2004 management season. The ESA consultation standards and the exploitation rate (or other criteria) projected for the 2004 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 2004 management measures on ESA listed ESUs. (Page 1 of 2)

ESU	Stock Representation in Salmon FMP	ESA Consultation Standard	2004 Management Measures
Central Valley spring chinook - threatened	Sacramento River spring	No guidance in addition to the ESA consultation standard for Sacramento winter chinook.	<p>The recreational fishery between Point Arena and Pigeon Point is open between April 17 and November 14.</p> <p>The recreational fishery between Pigeon Point and the U.S./Mexico border is open between April 3 and October 3.</p> <p>The commercial fishery south of Point Arena is open between May 1 and September 30, and between Point Reyes and Point San Pedro between October 1 and 15.</p>
Sacramento River winter chinook - endangered	Sacramento River winter	<p>The recreational season between Point Arena and Pigeon Point shall open no earlier than the first Saturday in April and close no later than the second Sunday in November; the recreational season between Pigeon Point and the U.S./Mexico Border shall open no earlier than the first Saturday in April and close no later than the first Sunday in October. The minimum size limit shall be at least 20 inches total length.</p> <p>Commercial seasons between Point Arena and the U.S./Mexico border shall open no earlier than May 1 and close no later than September 30, with the exception of an October season conducted Monday through Friday between Point Reyes and Point San Pedro, which shall end no later than October 15. The minimum size limit shall be at least 26 inches total length.</p>	Consultation standard for Sacramento River winter chinook is met.
California Coastal chinook - threatened	Eel, Mattole, and Mad Rivers	≤16% age-4 ocean harvest rate on Klamath River fall chinook.	15.0 % age-4 ocean harvest rate.
Lower Columbia River chinook - threatened	<ul style="list-style-type: none"> • Cowlitz, Kalama, Lewis spring • Lower River Hatchery fall • North Fork Lewis River fall 	<ul style="list-style-type: none"> • No specific requirements. • Brood year adult equivalent exploitation rate on Coweeman tule fall chinook ≤49%. • 5,700 MSY level adult spawning escapement. 	<p>Meet hatchery escapement goals.</p> <p>46% total ocean and freshwater adult equivalent (AEQ) exploitation rate.</p> <p>24,100 adults to the Columbia River mouth.</p>
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% reduction from the 1988-1993 average adult equivalent age-3/age-4 exploitation rate for all ocean fisheries.	30% 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.

TABLE A-3. Impacts of Council adopted 2004 management measures on ESA listed ESUs. (Page 2 of 2)

ESU	Stock Representation in Salmon FMP	ESA Consultation Standard	2004 Management Measures	
			Exploitation Rate	Spawner Escapement
Puget Sound chinook - threatened ^{a/}	<ul style="list-style-type: none"> • Elwha summer/fall • Dungeness spring • Mid-Hood Canal summer/fall • Skokomish summer/fall • Nooksack spring • Skagit summer/fall • Skagit spring • Stillaguamish summer/fall • Snohomish summer/fall • Lake Washington summer/fall • Green River summer/fall • White River spring • Puyallup summer/fall • Nisqually River summer/fall 	Exploitation Rate/Spawner Escapement <ul style="list-style-type: none"> • ≤22% Total or ≤5% southern U.S. • ≤22% Total or ≤5% southern U.S. • ≤ 29% Total or ≤13% southern U.S. • ≥1,200 spawners • ≤20% Total or ≤7% southern U.S. • ≤50% Total • ≤38% Total • ≤24% Total • ≤18% Total • ≤31% Total • ≥5,500 spawners • ≤20% Total • ≤50% Total • ≥1,100 spawners 	24%	2,310
			4%	461
			24%	298
			5%	1,262
			31%	570
			12%	19,929
			52%	1,183
			27%	1,891
			6%	9,341
			38%	414
			33%	5,898
			23%	1,705
			29%	2,149
			43%	2,079
			62%	
19%				
50%				
76%				
Central California Coast coho - threatened	Not yet represented	No retention of coho in commercial and recreational fisheries off California.	No retention of coho in California fisheries.	
Southern Oregon/Northern California Coastal coho - threatened	<ul style="list-style-type: none"> • South Oregon coast natural • Northern California 	≤13% marine exploitation rate on Rogue/Klamath hatchery coho.	8.6% marine exploitation rate.	
Oregon Coast coho - threatened	<ul style="list-style-type: none"> • South Central Oregon coast • North Central Oregon coast • North Oregon coast natural 	No ESA consultation standard in effect. Salmon FMP limit of 13%-35% (15% in 2004) combined marine/freshwater exploitation rate, depending on parental escapement and marine survival index.	14.7% Marine and freshwater exploitation rate.	

a/ NMFS has determined the overall impact to the ESU is consistent with their preliminary 4(d) determination. Ultimately, fisheries will have to be managed consistent with their final 4(d) determination.