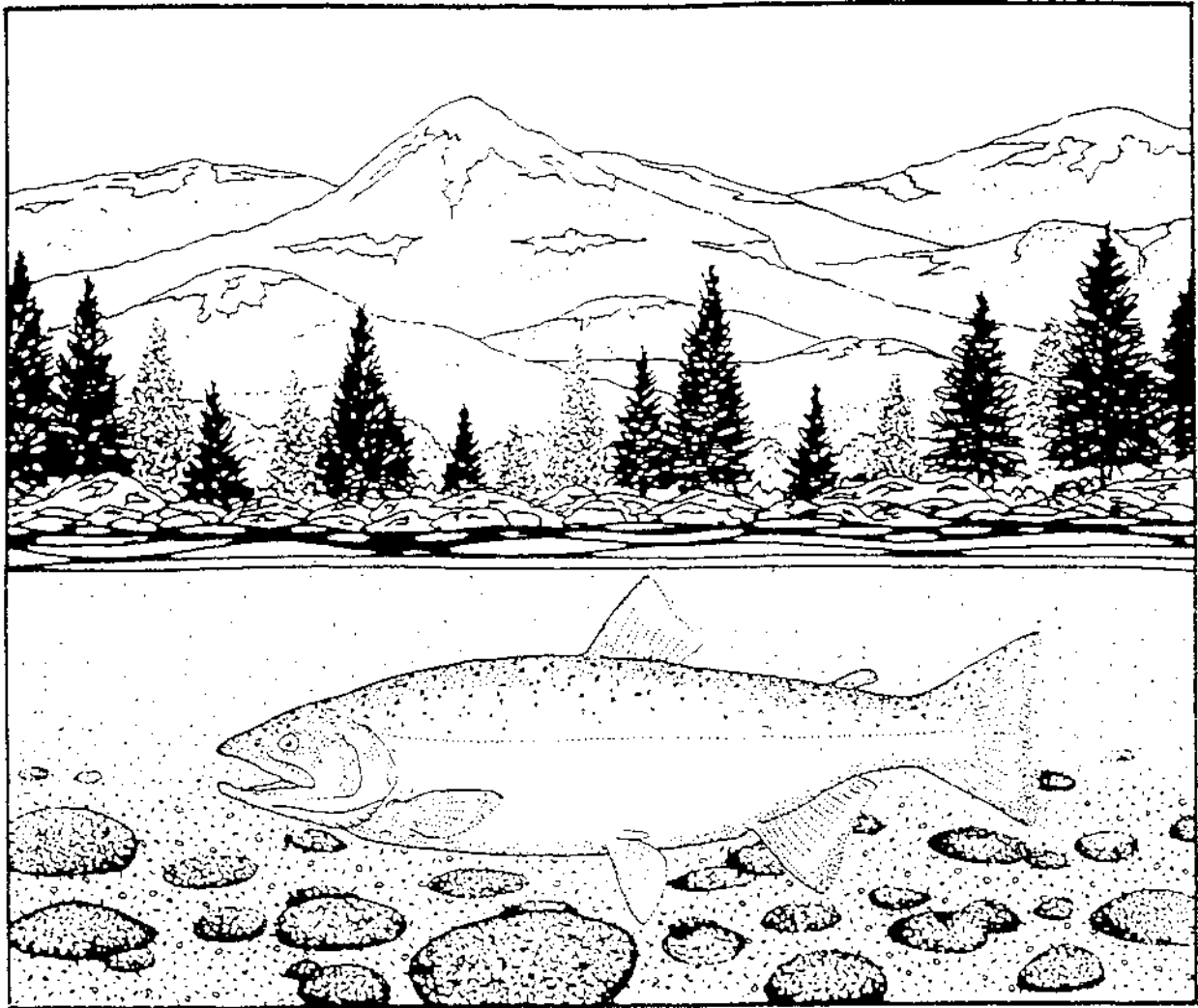


DISTRIBUTION OF COHO SALMON IN CALIFORNIA



U.S. Fish and Wildlife Service
California Cooperative Fishery Research Unit
Humboldt State University

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by

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Final Report Submitted
to
California Department of Fish and Game

Contract No. FG7292



February 1991

¹ This study was supported by Federal Aid in Sport Fish Restoration Act funds
(California Project F-51-R, Subproject IX, study 6)

INTRODUCTION

Coho salmon Oncorhynchus kisutch are anadromous along the Pacific coast from Chamalu Bay, Mexico (Miller and Lea 1972), to Point Hope, Alaska, through the Aleutians, and from the Anadyr River, USSR, south to Hokkaido, Japan (Scott and Crossman 1973). Coho are most abundant between Oregon and southeast Alaska (Hart 1973). In California, coho salmon historically used most of the accessible coastal streams in Monterey County north to the Oregon, border. However, coho no longer occur in many of those streams and their numbers are greatly reduced in others. For example, coho salmon run sizes have decreased by 80% to 90% of the 1940's levels (Clark 1988). Currently, coho enter small coastal streams and rivers from the Smith River in Del Norte County to the Big Sur River in Monterey County (Figure 1). Coho salmon were rare in the Sacramento River system until the California Department of Fish and Game stocked large numbers of fry into the system in 1956-58 (Hallock and Fry 1967). Coho salmon returned to spawn but did not develop a sustained run of naturally reproducing fish; the fish have again become scarce and any that enter the Sacramento River should be regarded as strays.

Coho salmon usually spend one growing season in freshwater and two growing seasons in the ocean before they return to freshwater to spawn. Coho begin returning to coastal streams in September (Snyder 1931) but usually enter from October to March, peaking in December and January (Shapovalov and Taft 1954). Generally, fish return earlier in the more northerly portions of their range and on the larger river system. Upstream migration coincides with large increases in streamflow, especially in streams in which the flow is low in summer. Spawning usually peaks from November to January. Coho spawn in

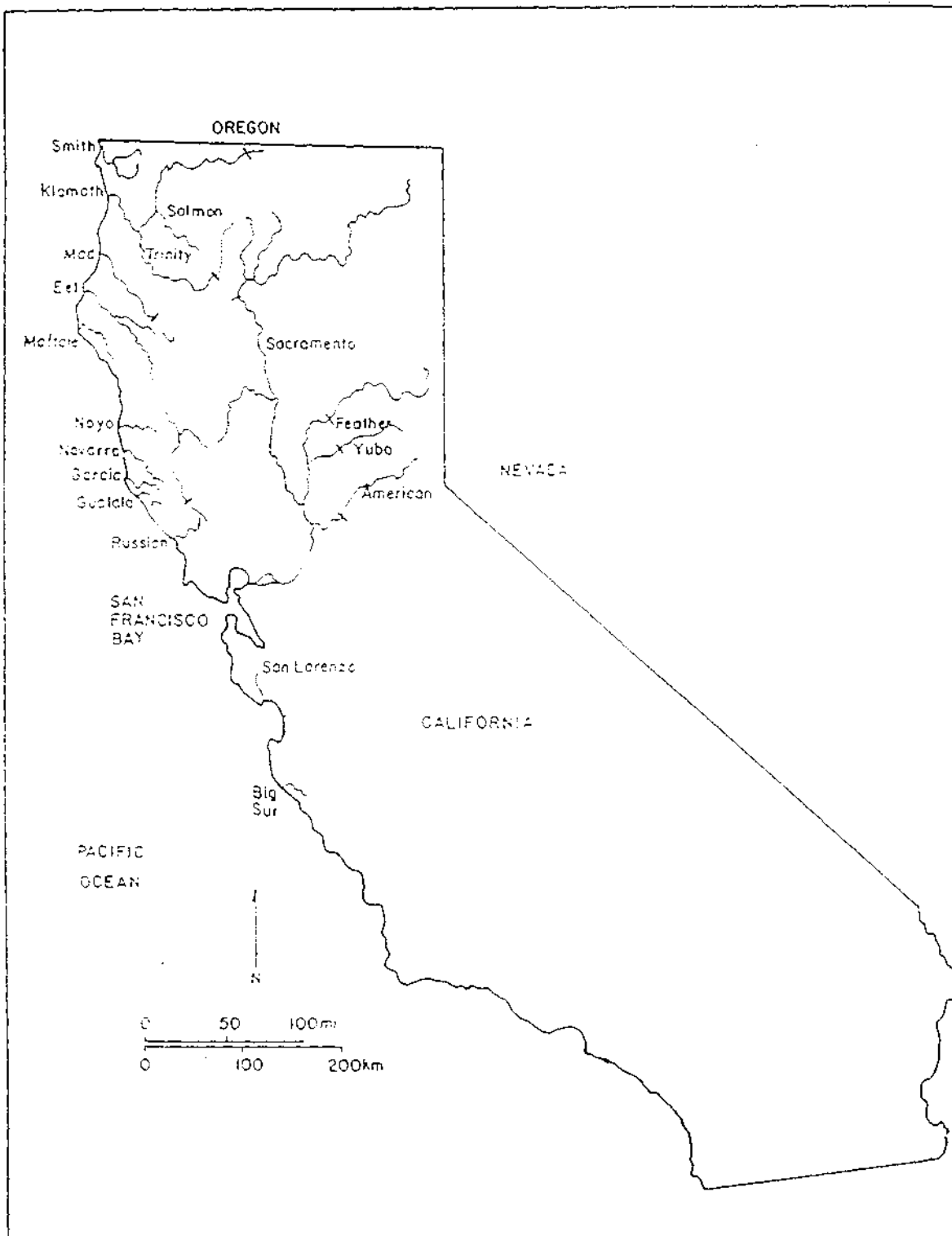


Figure 1. Major spawning rivers of coho salmon in the Pacific Southwest; the species is found in all marine waters of the region (Berger 1982). Short lines perpendicular to rivers represent impassable barriers.

riffles at water temperatures of 4 C to 12° C (Briggs 1953; Shapovalov and Taft 1954; Regnart 1991) and in depths of 0.03-0.54 m at velocities of 0.01-0.90 m/s (Briggs 1953; Buck and Barnhart 1986, Regnart 1991).

An extensive commercial and sport fishery for coho salmon exists along the California coast. During the 1980's, about 12% of the coho salmon caught by commercial trollers along the Pacific coast (California, Oregon, and Washington) and 7% of the fish caught by sport fishers were caught along the California coast. The commercial catch averaged 51,600 fish, range 91,900-11,000 fish. The sport catch averaged 26,600 fish, range 47,300-9,200 fish (Pacific Fishery Management Council 1990).

The mean annual coho salmon populations in California -- the number of adults caught both at sea and in rivers, plus the number that escape to spawn in streams -- has declined to only 100,000 fish (Clark 1988). State and federal agencies and private conservation groups are developing and using a number of restoration and enhancement programs to increase coho stocks. Most of the coho salmon that are produced in California are from hatcheries, which produce about 1 million fish annually (Greenley 1985; Baker and Reynolds 1936).

The distribution of coho salmon in California were determined from personal communications, office records and reports, publications, and field surveys. The data are arranged by county, river, and tributary from Del Norte County to Monterey County (Table 1). Coho are still widely distributed along the coast with principal populations in the Klamath, Trinity, Mad, Eel, and Noyo rivers, with other populations in many small coastal streams north of San Francisco Bay. Coho no longer occupy many coastal streams south of the Bay and their numbers are greatly reduced in others both north and south of the Bay. Coho of hatchery origin now occur in many of the streams in the state.

Table 1. Distribution of coho salmon in California by watershed.

Reference	River	Tributary
<u>DEL NORTE COUNTY</u>		
1,45	South Fork Winchuck River	
	Illinois River	
1		Broken Kettle Creek (trib. to West: Fork IR)
1		Elk Creek (trib. to West Fork IR)
1		<u>East Fork IR</u>
1		Dunn Creek
	Smith River	
2,3,4,5	SR and tributaries	
1,6,7,8		Mill Creek, East and West forks
6		Bummer Lake Creek (trib. to EF)
8		Morrison Creek
7		Rowdy Creek and tributaries
1		Dominie Creek
1		Copper Creek
1		Savoy Creek
1		<u>North Fork SR and tributaries</u>
1		Diamond Creek
1		Peridotite Creek
1		Still Creek
1		<u>Middle Fork SR and tributaries</u>
1		Patrick Creek and tributaries
1		West Fork
1		Shelly Creek
1		Eleven Mile Creek
1		Ten Mile Creek
1		Twelve Mile Creek
1		Griffin Creek
1		Hardscrabble Creek
1		Eighteen Mile Creek
1		Knopki Creek
1		Monkey Creek
1		Myrtle Creek
1		Packsaddle Creek
1		Siskiyou Fork
1		<u>South Fork SR and tributaries</u>
1		Buck Creek
1		Coon Creek
1		Craigs Creek
1		Hurdy Gurdy Creek

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference

River
Tributary

DEL NORTE COUNTY (continued)

	Smith River and tributaries (continued)
1	<u>South Fork SR and tributaries (continued)</u>
1	Eight Mile Creek
1	Williams Creek
1	Jones Creek
1	Muzzle Loader Creek
1	Prescott Fork
1	Quartz Creek
1, 7	Elk Creek (trib. to Pacific Ocean, Crescent City)
	Lake Earl (Crescent City)
7	LE and tributaries
1, 45	Jordan Creek
8	Yonker Creek during 1950's
1,7	Wilson Creek (trib. to Pacific Ocean)

DEL NORTE, SISKIYOU, AND HUMBOLDT COUNTIES

	Klamath River
1,2,3,9,10	KR and tributaries, to Shasta River (2)
4	20,000 average annual population estimate (1960)
1, 9, 11	Blue Creek and tributaries
1, 9	West Fork
1, 9	Potatoe Patch Creek
1, 9, 11	Nickowitz Creek
11	Crescent City Fork
7, 11	Salt Creek
11	Richardson Creek
1, 7, 48	High Prairie Creek
1	Hoppaw Creek
1, 9, 11	Hunter Creek
7	Minot Creek
1, 7, 11	McGarvey Creek
1	Mynot Creek
1, 11	Omagar Creek
1, 11	Saugep Creek
1	Tarup Creek
1, 11	Turwur Creek
1, 11	Waukell Creek
11	Bear Creek

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference	River	Tributary
DEL NORTE, SISKIYOU, AND HUMBOLDT COUNTIES (continued)		
	Klamath River and tributaries (continued)	
9, 11	Ah Pah Creek	
9, 11	Tectah Creek	
9, 11	Pecwan Creek	
11	Roach Creek	
9	Mettah Creek	
11	Pine Creek	
9	Little Pine Creek	
11	Miner's Creek	
9, 41	Bluff Creek	
9, 11	Slate Creek	
9, 11, 41	Red Cap Creek	
9, 11	Boise Creek	
9, 11, 41, 51	Camp Creek	
10	Dillon Creek	
10	Ukonom Creek	
2, 10, 11	Clear Creek	
42	China Creek	
10, 38, 42	Elk Creek	
42	Cougar Creek	
42	Bear Creek	
42	East Fork EC	
10, 11, 38, 42	Indian Creek and tributaries	
42	Mill Creek	
10, 11	South Fork	
11, 42	East Fork	
10, 42	Thompson Creek	
10, 11	Grider Creek	
10	West Grider Creek	
10, 11	Seiad Creek	
10, 11	Horse Creek and tributaries	
10, 11	Buckhorn Creek	
10	Middle Creek	
10	Salt Gulch	
10	Bark House Creek	
10, 11, 38	Beaver Creek	
11, 11	Humbug Creek	
10, 11	Cottonwood Creek	
10, 11	Willow Creek	
10, 44	Bogus Creek	
42	Swillop Creek	
42	Independence Creek	
42	Irving Creek	

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference	River	Tributary
<u>DEL NORTE, SISKIYOU, AND HUMBOLDT COUNTIES (continued)</u>		
	Klamath River and tributaries (continued)	
10,11	<u>Shasta River</u>	
10		Big Springs Creek
2,10	<u>Salmon River and tributaries</u>	
2,10,11		Wooley Creek
10,11		Nordheimer Creek
10,11		North Fork SR and tributaries
10		North Russian Creek
10,11		South Russian Creek
10,11		South Fork SR and tributaries
10,11		Knownothing Creek
10,11		Methodist Creek
10,11		East Fork of South Fork SR
10,11		Taylor Creek
2,10,11	<u>Scott River and tributaries</u>	
10,11		Tompkins Creek
10		Kelsey Creek
10		Canyon Creek
10,11		Shackleford Creek
10,11		Mill Creek
10,11		Kidder Creek
10		Patterson Creek
10,11		Etna Creek
10,11		French Creek
10		Miners Creek
10,11		Sugar Creek
10		East Fork
10		Big Mill Creek
10		South Fork
<u>HUMBOLDT AND TRINITY COUNTIES</u>		
9,12,11	Trinity River and tributaries	
9,11		Scottish Creek
9		Mill Creek
9,11		Hostler Creek
9,11		Tish Tang A Tang Creek
9,11,13,48	Horse Linto Creek	
9,43		Willow Creek
3,49		T.R. to Lewiston
51		Weaver Creek
14		Rush and Deadwood creeks (possible hatchery strays)
11,51		Rush Creek

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference	River	Tributary
<u>HUMBOLDT AND TRINITY COUNTIES (continued)</u>		
Trinity River and tributaries (continued)		
39	Deadwood Creek	
2, 11, 39	Browns Creek	
11, 12, 39	<u>New River</u>	
39	Big Creek	
39	East Fork NR	
11, 12	Manzanita Creek	
12	Indian Creek	
11, 52	Canyon Creek	
11	<u>North Fork Trinity River</u>	
11	Supply Creek	
11	Campbell Creek	
2, 3, 9, 11, 12, 15	<u>South Fork T.R. and tributaries</u>	
12	Ectapom Creek	
12	Pelletreu Creek	
11, 12	Hayfork Creek	
12	Olsen Creek	
12	Butter Creek	
11, 12	Rattlesnake Creek	
<u>HUMBOLDT COUNTY</u>		
	Redwood Creek (trib. to Pacific Ocean)	
3, 9, 16	RC and tributaries	
4	2,000 average annual population estimate	
2, 9	Lackes Creek	
2, 9, 16, 17, 45, 48, 51	Prairie Creek and tributaries	
9	Little Lost Man Creek	
9, 51	Lost Man Creek	
9	Mae Creek	
9	Godwood Creek	
8	Browns Creek	
8	Streelow Creek	
9, 16	Tom McDonald Creek	
9, 16	Bridge Creek	
9, 16	Panther Creek	
16	Coyote Creek	
	McDonald Creek (trib. to Stone Lagoon)	
9	Fresh Creek	

Table I. Distribution of coho salmon in California by watershed (continued).

Reference	River	Tributary
<u>HUMBOLDT COUNTY (continued)</u>		
45	Maple Creek	(trib. to Big Lagoon)
46	Little River and tributaries	(Crannell)
9		<u>South Fork</u>
9		Lower South Fork
9		Upper South Fork
	Mad River	
2, 3, 4, 9, 46	MR and tributaries	
4		Warren Creek
9		Lindsay Creek and tributaries
9		Grassy Creek
9		Squaw Creek
9		Mather Creek
9		Hall Creek and tributaries
9		Noisy Creek
9		Mill Creek
9		<u>North Fork MR and tributaries</u>
9		Sullivan Creek
9		Long Prairie Creek
9		Leggit Creek
9		Quarry Creek
9		Dry Creek
9, 40		Canon Creek
9		Maple Creek
9		Boulder Creek
9		Palmer Creek
8		Black Creek
8		Powers Creek
8		Kelley Creek
9	Strawberry Creek	(trib. to Pacific Ocean, Arcata)
	Humboldt Bay	
8		Arcata oxidation ponds since 1972
9		Cochran Creek (trib. to Fay Slough)
9, 16, 18, 46	Elk River and tributaries	
9, 16		<u>North Fork</u>
9		<u>South Fork</u>
9		Little South Fork

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference	River	Tributary
HUMBOLDT COUNTY (continued)		
	Humboldt Bay (continued)	
9,16,18,46	Freshwater Creek and tributaries	
9	Graham Gulch	
9	Cloney Gulch	
8	McCready Gulch	
8	Falls Gulch	
8	South Fork FC	
8	Little Freshwater Creek	
9,18,46	Jacoby Creek	
9,47	Jolly Giant Creek	
9	Martin Slough (trib. to Swain Slough)	
9	Ryan Creek (trib. to Ryan Slough)	
9,18	Salmon Creek	
8	College of Redwoods Creek	
8	Rocky Gulch Creek	
HUMBOLDT AND MENDOCINO COUNTIES		
	Eel River	
9,12,19,20	ER and tributaries	
4	15,000 average annual population estimate	
8	Shaw Creek (trib. of Eel River Estuary)	
9	Salt River and tributaries	
9	Russ Creek	
9	Reas Creek	
9	Howe Creek	
9	Atwell Creek	
8	Jordan Creek	
9	Chadd Creek	
9,46	Larabee Creek	
8	Kekawaka Creek	
5,20,54	Outlet Creek	
20,54	Broaddus Creek	
21	Price Creek	
21	Larabee Creek	
19	Rocktree Creek (trib. to Tomki Creek)	
19	String Creek	
9	Newman Creek	
9	Jewett Creek	
2,3,9,14,19,20,21	<u>South Fork ER and tributaries</u>	

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference	River	Tributary
HUMBOLDT AND MENDOCINO COUNTIES (continued)		
	South Fork Eel River and tributaries (continued)	
19, 22, 54		Hollow Tree Creek and tributaries
19, 22		Huckleberry Creek
19		Mule Creek
19, 22, 54		Redwood Creek
19, 54		Waldron Creek
19		Walters Creek
19, 54		Butler Creek
22, 54		Bonds Creek
22		Michaels Creek
9, 21		Bull Creek and tributaries
9		Squaw Creek
9		Albee Creek
9		Mill Creek
46		Salmon Creek
21		2 unnamed creeks between Salmon Cr. & Indian Cr. - the downstream of these two creeks has occurrence up 4 mi. & the upstream creek has occurrence in all areas.
21		Indian Creek up 4 miles
19, 21		Ten Mile Creek and tributaries
19		Mud Springs Creek
19		Big Rock Creek
19		Cahto Creek
19		Mill Creek
19		Streeter Creek
21		3 unnamed tributaries across from Elder Creek
21		Rock Creek
19		Mill Creek
19		Grist Creek
19		Haun Creek
19, 20		Indian Creek
19, 20		Jack of Hearts Creek
19		Kenny Creek
19		Little Charlie Creek
19		Low Gap Creek
19		McCoy Creek
19, 21		Rattlesnake Creek
19		Cummings Creek
16, 19		Redwood Creek and tributaries
9		Seely Creek
9		China Creek
19		Rock Creek

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference	River	Tributary
<u>HUMBOLDT AND MENDOCINO COUNTIES (continued)</u>		
	South Fork Eel River and tributaries (continued)	
19		Standley Creek
19		Taylor Creek
16, 19, 20, 54		Wildcat Creek
19		unnamed trib. to WC
19		Barnwell Creek
19		Bear Creek
19		Bear Pen Creek
19		Cub Creek
19		Cedar Creek
19		Deer Creek
19		Dutch Charlie Creek
9		Fish Creek
9, 46		Redwood Creek
9		Bear Canyon Creek
9, 40, 46		Sprowl Creek and tributaries
9		Warden Creek
9		Little Sprowl Creek
9		West Fork Sprowl Creek
9		East Branch of South Fork
9		Durphy Creek
9		Milk Ranch Creek
20		Piercy Creek
8		Dean Creek
8		Schofield Creek
2, 3, 14, 20	<u>Middle Fork ER</u>	
	Van Duzen River	
2, 3, 9		VDR and tributaries
9, 11, 46		Yager Creek and tributaries (YC to Lawrence Creek and the two tribs. to the Van Duzen just above Yager Creek)
9		Wilson Creek
9		Copper Mill Creek
9		Lawrence Creek
9		Fielder Creek
9		Root Creek
9, 46		Grizzly Creek
9		Stevens Creek
9		Hoagland Creek
9, 46		Little Larabee Creek

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference	River	Tributary
HUMBOLDT AND MENDOCINO COUNTIES (continued)		
	Bear River (trib. to Pacific Ocean, Cape Mendocino)	
9	BR and tributaries	
9		Bonanza Gulch
9		South Fork
9		Hollister Creek
9	Guthrie Creek (trib. to Pacific Ocean, Ferndale)	
9	McNutt Gulch (trib. to Pacific Ocean, Petrolia)	
HUMBOLDT COUNTY		
54	Mattole River	
9	MR and tributaries	
4	2,000 average annual population estimate	
9	Bear Creek	
9	tansberry Creek	
9	North Fork	
9	Mill Creek (Petrolia)	
8, 46	Thompson Creek	
8	Westland Creek	
9	Clear Creek	
9	Conklin Creek	
9	McGinnis Creek	
9	Indian Creek	
9, 46	Squaw Creek	
9	Pritchard Creek	
9	Granny Creek	
9	Saunders Creek	
9	Woods Creek	
9	Upper North Fork	
9	Oil Creek	
9		Devils Creek
9	Rattlesnake Creek	
9, 46	Honeydew Creek	
8	Baker Creek	
9	Bear Trap Creek	
9	Dry Creek	
9	Middle Creek	
9	Westlund Creek	
9	Gilhara Creek	
9	Fourmile Creek	

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference	River	Tributary
<u>HUMBOLDT COUNTY (continued)</u>		
Mattole River and tributaries (continued)		
9	Sholes Creek	
9	Harrow Creek	
9	Grindstone Creek	
9	Mattole Canyon	
9	Blue Slide Creek	
9, 46	Bear Creek	
9	Big Finley Creek	
9	Eubank Creek	
9, 46	Bridge Creek	
54	McNasty Creek	
54	Thompsons Creek	
54	South Branch TC	
9	McKee Creek	
9	Vanankin Creek	
9	Mill Creek (Garberville)	
<u>MENDOCINO COUNTY</u>		
16, 19	Usal Creek (trib. to Pacific Ocean, Hales Grove)	
19	Juan Creek (trib. to Pacific Ocean, Westport)	
19	Little Juan Creek	
19	Ten Mile River and tributaries	
2, 19	<u>North Fork TMR and tributaries</u>	
19	Mill Creek	
19, 54	Little North Fork	
2, 19	<u>South Fork TMR and tributaries</u>	
19	Gulch Eleven, flows from Sherwood Ridge into SF	
19	Smith Creek	
19	Unnamed tributary to SC	
19	Campbell Creek	
19	Churchman's Gulch	
	<u>Middle Fork TMR and tributaries</u>	
19	Little Bear Haven Creek	
3, 16	Cottoneva Creek (trib. to Pacific Ocean, Westport)	
19, 20	South Fork	
23	Slaughterhouse Gulch	
20	North Fork	

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference	River	Tributary
<u>MENDOCINO COUNTY (continued)</u>		
19	Hardy Creek (trib. to Pacific Ocean, Westport)	
19, 50, 54	Dehaven Creek (trib. to Pacific Ocean, Westport)	
2, 19, 54	Pudding Creek (trib. to Pacific Ocean, Comptche)	
19	Little Valley Creek and 2 unnamed tributaries	
54	Wages Creek (trib. to Pacific Ocean, Westport)	
54	Hare Creek (trib. to Pacific Ocean, Fort Bragg)	
19	South Fork HC	
19, 54	Bunker Gulch Creek	
54	Covington Gulch Creek	
54	Walton Gulch Creek	
19	Jug Handle Creek (trib. to Pacific Ocean, Fort Bragg)	
	Noyo River	
2, 3, 20	NR and tributaries	
19	Olds Creek	
19	Hayshed Gulch	
19	2 unnamed tributaries	
19, 23	Redwood Creek	
19	Duffy Gulch	
19	<u>North Fork NR and tributaries</u>	
19	Haysworth Creek	
19	Marble Gulch Creek	
19, 23, 54	Little North Fork	
19	Middle Fork of North Fork	
19, 54	<u>South Fork NR and tributaries</u>	
19, 54	North Fork of South Fork	
19, 54	Kass Creek	
19	Parlin Creek	
19	Bear Gulch	
19, 20, 24, 54	Casper Creek (trib. to Pacific Ocean, Mendocino)	
48	North Fork CC	
48	South Fork CC	

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference	River	Tributary
<u>MENDOCINO COUNTY (continued)</u>		
	Big River	
2, 3, 19, 20	BR and tributaries	
23, 54		Two Log Creek
23		Tramway Gulch
19		<u>North Fork BR and tributaries</u>
19		Little North Fork and tributaries
19, 23, 54		East Branch
54		Berry Gulch Creek
23		North Fork Berry Gulch
19, 54		Chamberlain Creek
19		Arvola Gulch
19, 23	James Creek	
19		North Fork JC
19		<u>South Fork BR and tributaries</u>
19		Dougherty Creek
23		Johnson Creek
19, 20, 54	Big Salmon Creek (trib. to Pacific Ocean, Albion)	
19		Hazel Gulch
19		Hazel Gulch, West Branch
19		Little Salmon Creek and unnamed tributary
54	Albion River	
19	AR and tributaries	
19		Marsh Creek
19		Railroad Gulch
19		North Fork
19		South Fork
19	Buckhorn Creek (trib. to Pacific Ocean, Mendocino)	
		Unnamed tributary to Buckhorn Creek
19, 54	Doyle Creek (trib. to Pacific Ocean, Mendocino)	
54	Ryan Creek (trib. to Pacific Ocean, Mendocino)	
19, 20, 54	Little River (trib. to Pacific Ocean, Mendocino)	
	Navarro River	
2, 3, 20	NR and tributaries	
19		Rancheria Creek and tributaries
19		Ham Canyon Creek

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference

River
Tributary

MENDOCINO COUNTY (continued)

	NR and tributaries (continued)
19	Horse Creek
19	Minnie Creek
19	Camp Creek
19	German Creek
19	Indian Creek and tributaries
19	Gut Creek
19	Dick Creek
19	North Fork 1C
19	Mill Creek
19	<u>North Fork NR and tributaries</u>
54	Flynn Creek
15	Little North Fork
19	North Branch of North Fork
19	South Branch of North Fork
19	Bridge Creek
19, 54	John Smith Creek
19	Robinson Creek (trib. to Anderson Creek)
20	North Fork Flynn Creek
19	Greenwood Creek (trib. to Pacific Ocean, Elk)
19	Elk Creek (trib. to Pacific Ocean, Navarro)
19	Three Springs Creek
19	Soda Fork
19	Sulpher Fork
19	Brush Creek (trib. to Pacific Ocean, Point Arena)
2,3,19,20	Garcia River
54	<u>South Fork GR</u>
54	Fleming Creek
19	Mallo Pass Creek (trib. to Pacific Ocean, Mallo Pass)
19	Schooner Gulch (trib. to Pacific Ocean, Saunder's Reef)
6	North Fork SG
19	Seaside Creek (trib. to Pacific Ocean, Inglenook)
19	Frazer Creek
19	Whale Gulch (trib. to Pacific Ocean, Bear Harbor)
19	Fish Rock Gulch (trib. to Pacific Ocean, Gualala)

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference	River	Tributary
<u>MENDOCINO AND SONOMA COUNTIES</u>		
	Gualala River	
2,17,19,20,25	GR and tributaries	
54	<u>Little North Fork GR</u>	
19	Doty Creek	
17, 25, 54	<u>South Fork GR and tributaries</u>	
25	Franchini Creek (trib. to Buckeye Creek to SF)	
17	Sproule Creek	
25	Marshall Creek	
25	<u>Wheatfork GR and tributaries</u>	
17,25	Haupt Creek	
25	House Creek	
17,25	Fuller Creek	
17,25	North Fork FC	
17,25	South Fork FC	
17,25	Fort Ross Creek (trib. to Pacific Ocean, Fort Ross)	
17,19,20,50,54	Russian Gulch (trib. to Pacific Ocean, Arched Rock)	
19	Middle Branch	
19	East Branch	
17,25	Scotty Creek (trib. to Pacific Ocean, Duncan Mills)	
	Russian River	
2,3,17,19,25	RR and tributaries	
19,25	Dry Creek	
17,25	Dutch Bill Creek	
17,25	Freezeout Creek	
17,25	Austin Creek and tributaries	
17,25	East Austin Creek	
25	Gilliam Creek	
17,25	Kidd Creek	
25	Kohute Gulch	
25	Red Slide Creek	
17,25	Mark Slide Creek	
25	Mission Creek (trib. to Hulbert Creek)	
17,25	Sheephouse Creek	
25	Unnamed tributary to SC	
17,25	Willow Creek	

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference	River	Tributary
<u>MENDOCINO AND SONOMA COUNTIES (continued)</u>		
RR and tributaries (continued)		
19	East Fork	
19	West Fork	
17	Green Valley Creek	
19	<u>West Fork RR and tributaries</u>	
19	Mariposa Creek	
19	Rocky Creek	
19	Salt Hollow Creek	
19	York Creek	
19	Corral Creek	
19	Fisher Creek	
	Salmon Creek (trib. to Pacific Ocean, Valley Ford)	
2,17,25	SC and tributaries	
17,25	Coleman Valley Creek	
17,25	Fay Creek	
17,25	Finley Creek	
17	Tannery Creek	
2	Valley Ford Creek (trib. to Pacific Ocean, Valley Ford)	
<u>MARIN COUNTY</u>		
	Bolinas Lagoon	
17,26	Pine Gulch Creek	
17,26	Redwood Creek (trib. to Pacific Ocean, Pt. Bolinas)	
	Walker Creek (trib. to Tomales Bay)	
17,26	WC and tributaries	
26	Salmon Creek	
26	Arroyo Sausal Creek	
	Lagunitas Creek (trib. to Tomales Bay)	
2,3,17,26	LC and tributaries	
17,26	Devils Gulch Creek	
26	Haggerty Gulch Creek	
26	Nicasio Creek	
17,26	San Geronimo Creek	
17	Olema Creek	

Table 1. Distribution of coho salmon in California by watershed (continued).

Reference	River Tributary
<u>SAN MATEO COUNTY</u>	
27,28,29,53	Pescadero Creek (trib. to Pacific Ocean, San Gregorio)
27	Gazos Creek (trib. to Pacific Ocean, Franklin Point)
29	Butano Creek (trib. to Pacific Ocean)
28	San Vicente Creek (trib. to Pacific Ocean)
29	San Gregorio Creek (trib. to Pacific Ocean)
<u>SANTA CRUZ COUNTY</u>	
53	Waddell Creek (trib. to Pacific Ocean)
2,28,29,30	East Branch
2,28,29	Scott Creek (trib. to Pacific Ocean)
2,28,29,30	San Lorenzo River Hare Creek (trib. to Boulder Creek to SLR)
14,29	Monterey Bay Soquel Creek
14	Aptos Creek
<u>MONTEREY COUNTY</u>	
3	Carmel River
3	Big Sur River
<u>INLAND CALIFORNIA</u>	
3,31	Sacramento River

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