

**HIGH SEAS SALMONID  
CODED-WIRE TAG RECOVERY DATA, 2002**

Katherine W. Myers  
School of Aquatic and Fishery Sciences  
University of Washington  
Box 355020  
Seattle, Washington 98195

Adrian G. Celewycz and Edward V. Farley, Jr.  
Auke Bay Laboratory  
Alaska Fisheries Science Center  
National Marine Fisheries Service  
National Oceanic and Atmospheric Administration  
11305 Glacier Highway  
Juneau, AK 99801-8626

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## **ABSTRACT**

Information on high seas recoveries of coded-wire tagged (CWT) salmonids has been reported annually to the International North Pacific Fisheries Commission (1981-1992) and to the North Pacific Anadromous Fish Commission (1993-present). Release and recovery data for 185 CWT salmonids are reported for the first time. Reported recoveries are from U.S. commercial groundfish (trawl) fishery operations (172 recoveries) in 1999-2002 and U.S. and Japanese high seas research vessel operations (13 recoveries) in 2001. The results were compared to previous CWT and high seas tag (HST) recoveries, and new information on ocean distribution of Pacific salmon is discussed. The most important new information is a recovery in March 2001 at 177°48'W, 51°37'N in the central Aleutian Islands that is a significant westward extension of the known ocean range of British Columbia chinook salmon (previous western range limit from a CWT recovery at 169°40'W, 56°01'N in the eastern Bering Sea).

## INTRODUCTION

The North Pacific Anadromous Fish Commission (NPAFC) coordinates the examination of high seas commercial and research catches for salmonids that might contain a coded-wire tag (CWT). Recoveries of coded-wire tagged salmonids in the North Pacific Ocean and Bering Sea have been reported annually to the International North Pacific Fisheries Commission (Dahlberg 1981-1982; Wertheimer and Dahlberg 1983-1984; Dahlberg and Fowler 1985; Dahlberg et al. 1986-1992; Margolis 1985; Margolis et al. 1989; McKinnell et al. 1991) and to the North Pacific Anadromous Fish Commission (Dahlberg et al. 1993-97, Myers et al. 1998-2001). The Regional Mark Processing Center, Pacific States Marine Fisheries Commission, incorporates the high seas CWT recovery data into their coastwide, on-line CWT recovery data set (Regional Mark Information System (RMIS), <http://www.rmis.org/index.html>). In this document, we list previously unreported data for CWT salmonids recovered aboard commercial groundfish vessels in the U.S. Exclusive Economic Zone (1999-2002) and U.S. and Japanese salmon research vessels in the North Pacific Ocean (2001). The results were compared to previous CWT and high seas tag (HST) recoveries, and significant new information on ocean distribution and migration patterns of salmon and steelhead (*Oncorhynchus* spp.) is presented.

## RESULTS AND DISCUSSION

Data for 172 CWT salmon recovered in incidental salmon catches by the U.S. commercial groundfish (trawl) fishery in the U.S. Exclusive Economic Zone in 1996-2000 are listed by recovery region (Bering Sea, Gulf of Alaska, U.S. West Coast), species (1 chum salmon and 171 chinook salmon), and release location (state, region, and basin) in Table 1. The latitude and longitude of recovery for 1 CWT southeastern Alaska chinook salmon recovered in September 2001 in the western Gulf of Alaska (statistical area 610, 158°W–170°W) could not be determined from the data recorded by the fishery observer. Data for 13 CWT salmonids recovered during U.S. and Japanese salmon research vessel operations in 2001 (6 chinook salmon, 4 coho salmon, and 3 steelhead) are listed in Table 2.

U.S. scientists periodically prepare reports and maps for NPAFC based on historical high-seas salmonid tag recoveries that describe the known ocean ranges of major regional stocks of Asian and North American salmonids (for example, Myers et al. 1996). The sections that follow are a review by species of significant new information pertaining to ocean distribution and migration patterns of salmonids.

### **Chinook salmon**

New and previously reported recoveries of CWT chinook salmon in commercial trawl fisheries in the Bering Sea/Aleutian Islands and Gulf of Alaska regions are shown by state or province in Figures 1-6. There were no new CWT recoveries from Idaho or California chinook salmon in these northern regions. One recovery in March 2001 at 177°48'W, 51°37'N in the central Aleutian Islands is a

significant westward extension of the known ocean range of British Columbia chinook salmon (Fig. 4; previous western range limit from a CWT recovery at 169°40'W, 56°01'N in the eastern Bering Sea). Two new recoveries were slight northern and western extensions of the known ranges of Washington chinook salmon in the eastern Bering Sea (Fig. 5). None of the recoveries of immature and maturing CWT chinook salmon in the US West Coast region or in research vessel operations in 2001 were range extensions (Tables 1 and 2). Two U.S. research trawl recoveries in the Gulf of Alaska provide additional information on summer migrations of juvenile spring chinook salmon from the lower Columbia River (Oregon) (Fig. 7, Table 2).

### **Chum salmon**

One hatchery fall-run chum salmon, released in 1999 in the lower Fraser River Basin, British Columbia, was recovered in early October 2001 in the southeastern Bering Sea (Table 1, Fig. 8). There have been only 13 other recoveries of CWT chum salmon by the U.S. Groundfish Observer Program since 1980, and all of these were Bering Sea recoveries of hatchery chum salmon released in British Columbia (9), southeast Alaska (3), and Washington (1).

### **Coho salmon**

There were four recoveries of CWT coho salmon during U.S. and Japanese high seas research vessel operations in 2001 (Table 2). A wild CWT coho salmon released in Moose Creek (Cook Inlet), Alaska, and recovered in the central Gulf of Alaska at 56°N, 145°W was well within the known summer range of maturing central Alaska coho salmon (Myers et al. 1996). Three U.S. research trawl recoveries in the Gulf of Alaska provide additional information on summer migrations of juvenile coho salmon from southeastern Alaska (2) and Washington (1) (Figs. 9 and 10, Table 2).

### **Steelhead**

Three Japanese research vessel recoveries of CWT steelhead were well within the known ocean ranges of these stocks (Table 2; Myers et al. 1996).

## **ACKNOWLEDGMENTS**

Fishermen, processors, observers, and scientists who participated in the 2002 high-seas CWT recovery program are gratefully acknowledged. The North Pacific Groundfish Observer Program, Alaska Fisheries Science Center (AFSC), National Marine Fisheries Service (NMFS), provided snout samples from salmonids lacking the adipose fin and recovery data collected by observers from the U.S. groundfish fishery. Eric Reiter, Auke Bay Laboratory (ABL), NMFS, dissected salmon snouts, read tags, and coded data. Jerry Berger, AFSC, provided data on catch locations, when observer data accompanying the samples were incomplete or erroneous. The Fisheries Agency of Japan and Hokkaido University provided salmonid head samples and accompanying biological and catch data from Japanese salmon research vessels. Robert Walker and Nancy Davis, School of Aquatic and Fishery Sciences, University of Washington, participated in Japanese salmon research vessel recoveries of CWT

salmonids. ABL provided funding for compilation and reporting of CWT release and recovery data (NOAA Contract No. 50ABNF-1-0002).

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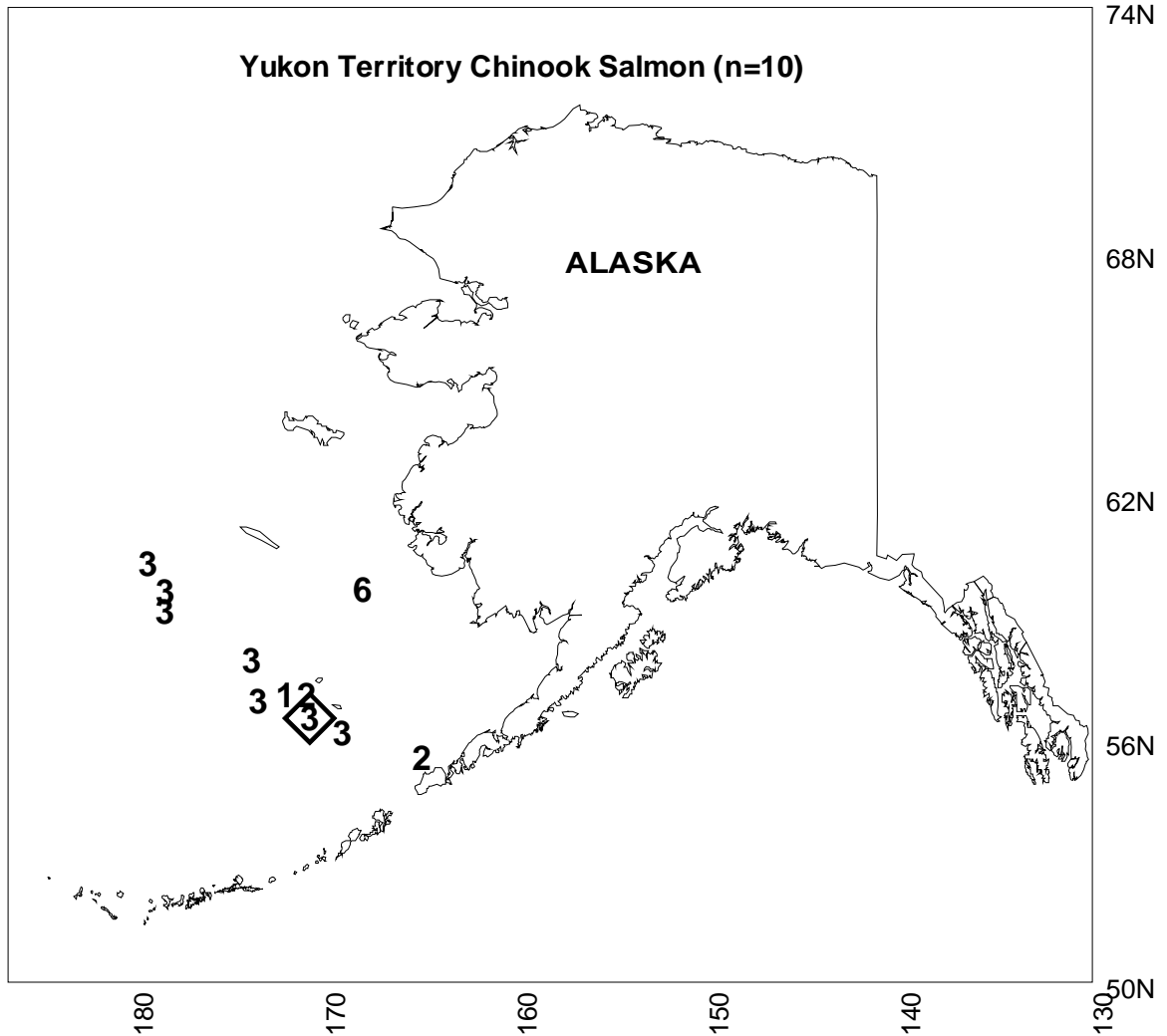


Fig. 1. Recovery locations of coded-wire tagged (CWT) Yukon River (Yukon Territory) hatchery chinook salmon in the bycatch of the U.S. commercial groundfish (trawl) fisheries in the eastern Bering Sea. The numbers at each location indicate the month of recovery. One new recovery reported in this document is indicated by an open diamond. These CWT recoveries provide the only direct information on the distribution of Yukon River chinook salmon in the eastern Bering Sea.



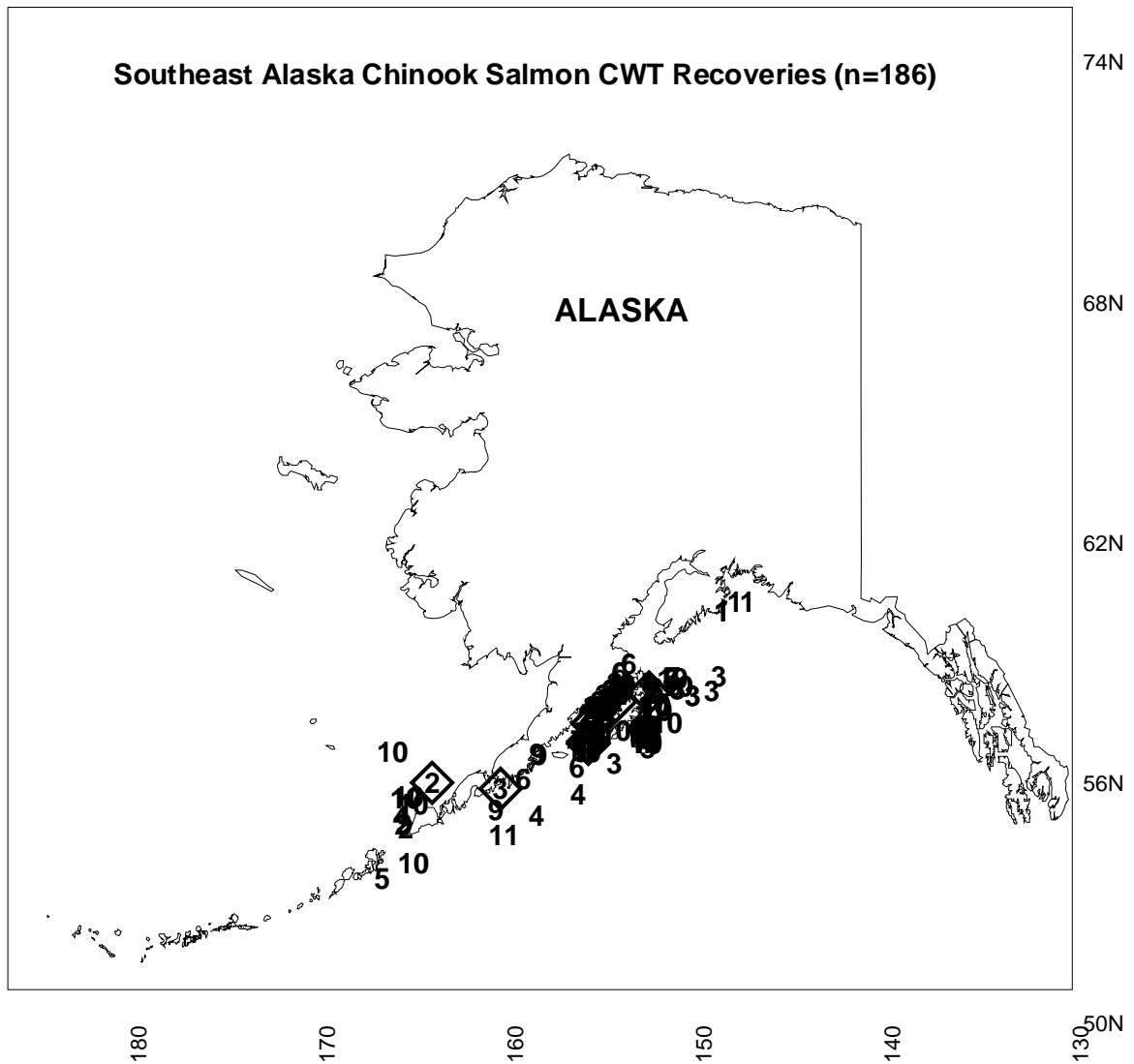


Fig. 3. Recovery locations of coded-wire tagged (CWT) southeastern Alaska chinook salmon in the bycatch of the U.S. commercial groundfish (trawl) fisheries in the eastern Bering Sea, Aleutian Islands, and Gulf of Alaska. The numbers at each location indicate the month of recovery. New recoveries reported in this document are indicated by an open diamond.

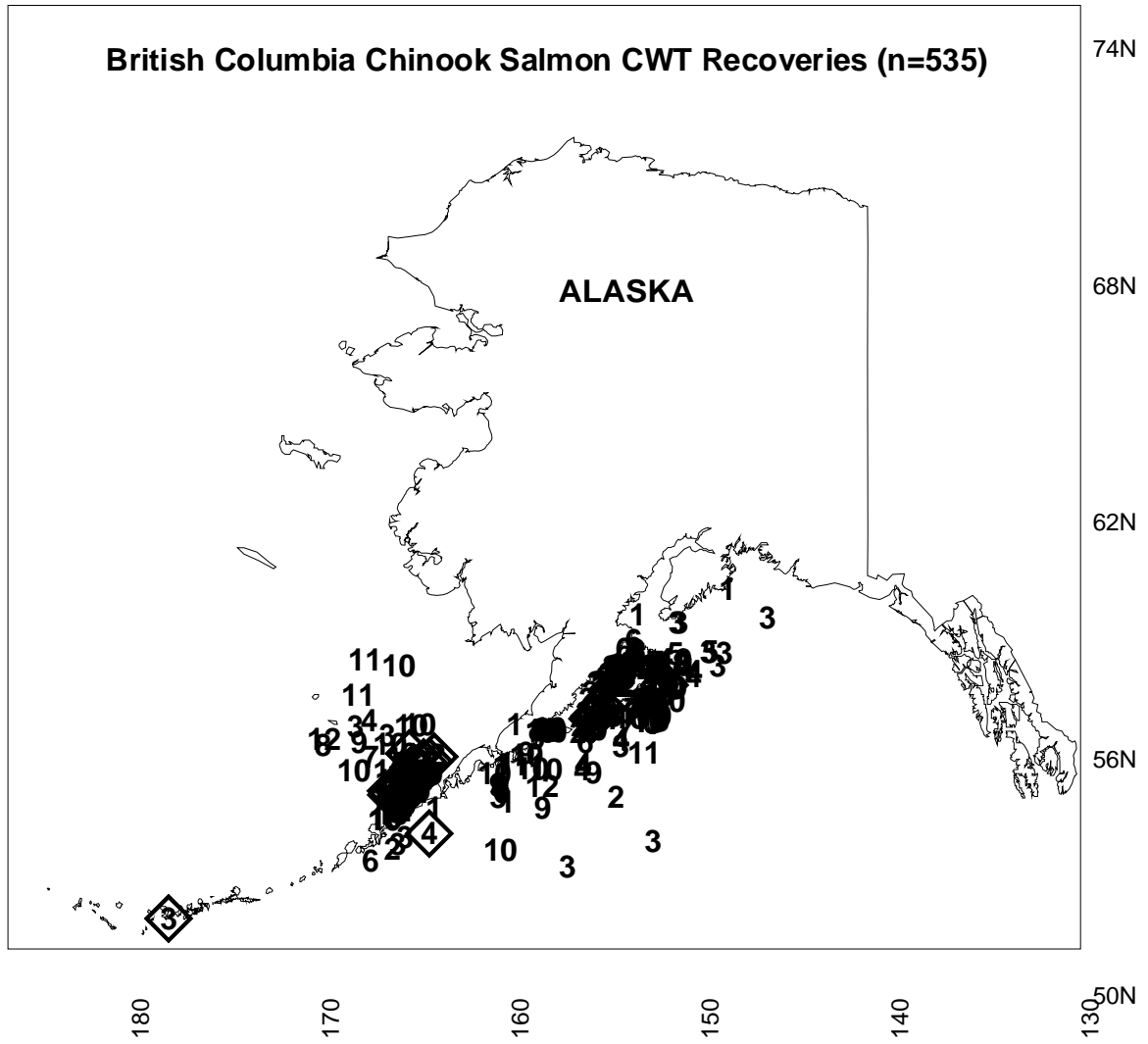


Fig. 4. Recovery locations of coded-wire tagged (CWT) British Columbia chinook salmon in the bycatch of U.S. commercial groundfish (trawl) fishery operations in the eastern Bering Sea, Aleutian Islands, and Gulf of Alaska. The numbers at each location indicate the month of recovery. New recoveries reported in this document are indicated by an open diamond.



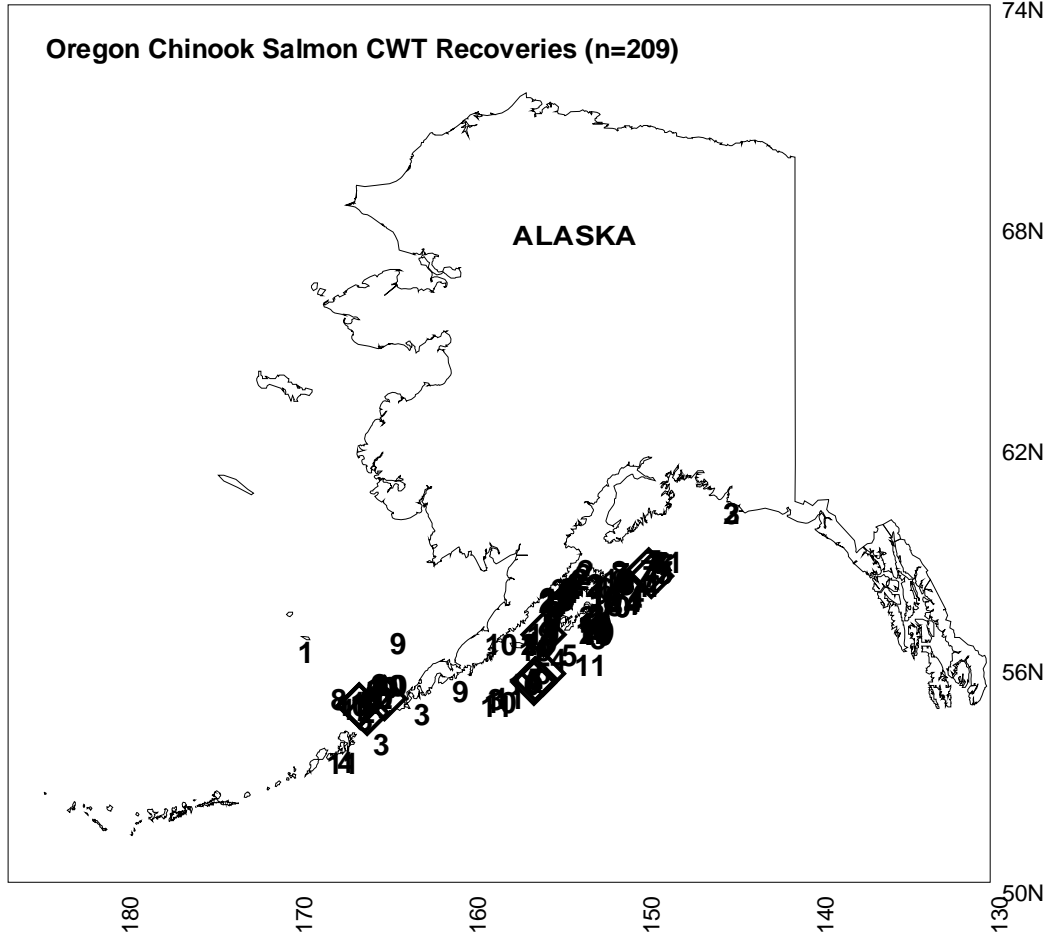


Fig. 6. Recovery locations of coded-wire tagged (CWT) Oregon chinook salmon in the bycatch of U.S. commercial groundfish (trawl) fishery operations in the eastern Bering Sea, Aleutian Islands, and Gulf of Alaska. The numbers at each location indicate the month of recovery. New recoveries reported in this document are indicated by an open diamond.

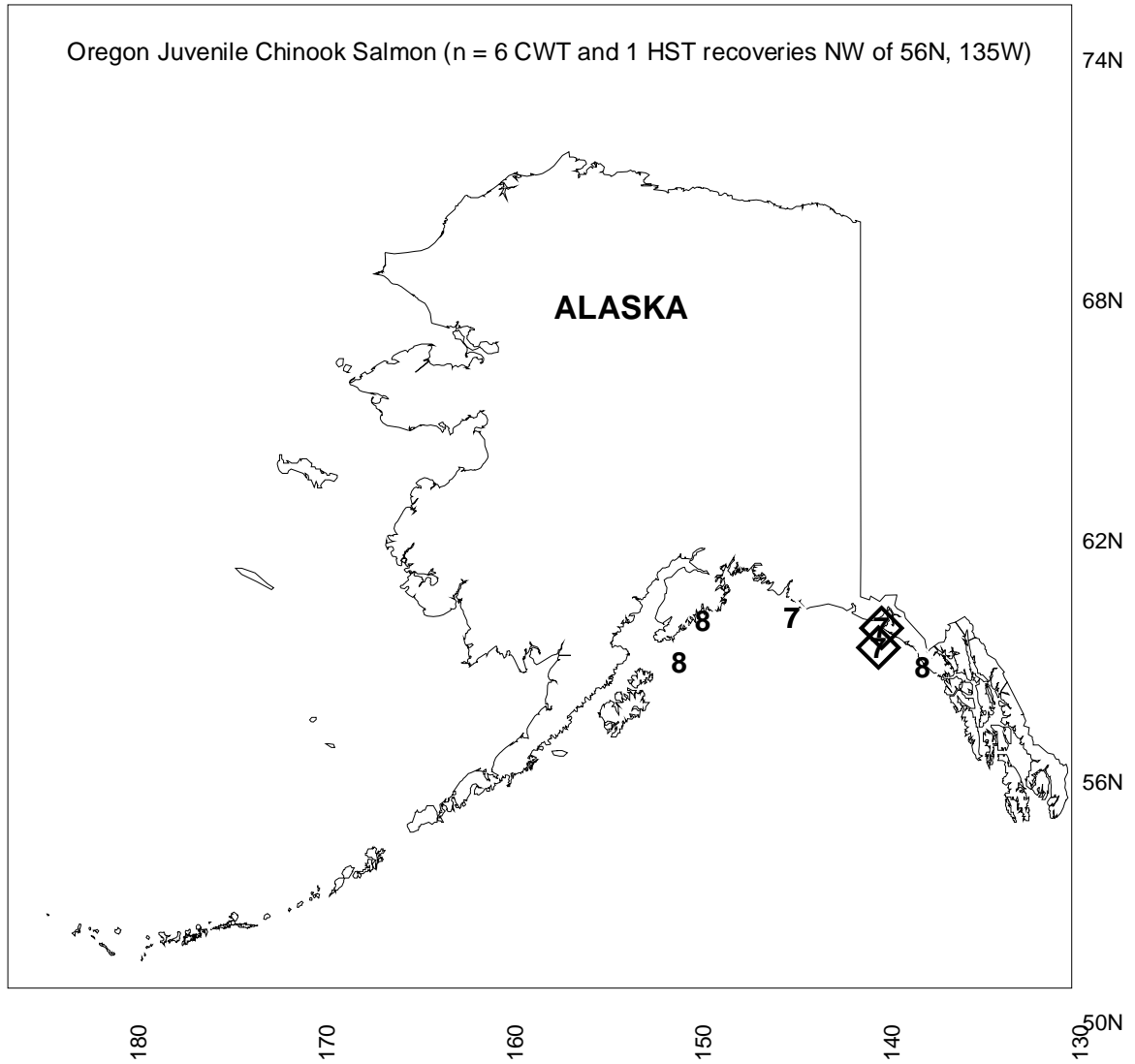


Fig. 7. Coded-wire tagged (CWT) recovery and high seas tag (HST) release locations of juvenile (ocean age-0) Oregon chinook salmon in U.S. research vessel operations in the Gulf of Alaska. The numbers at each location indicate the month of CWT recovery or HST release. New recoveries reported in this document are indicated by an open diamond.

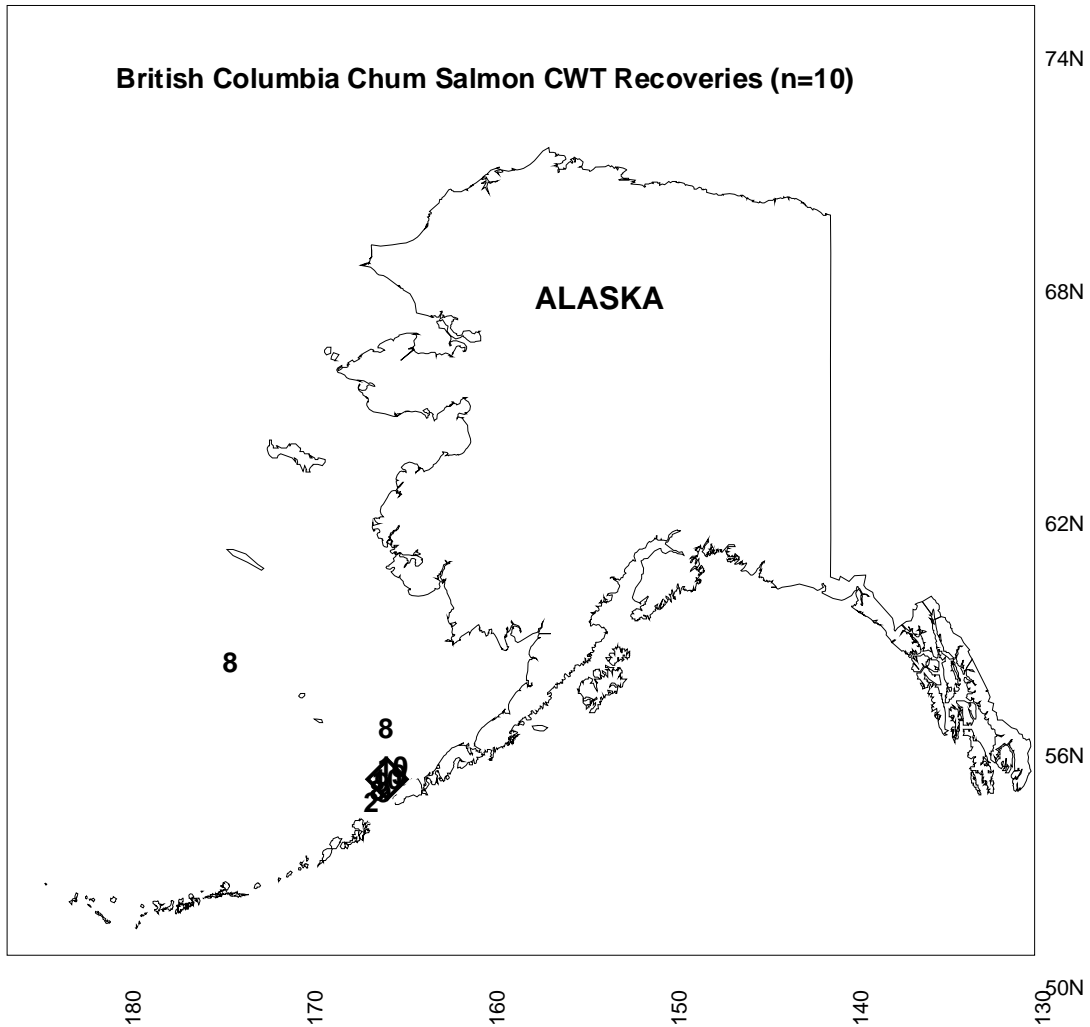


Fig. 8. Recovery locations of coded-wire tagged (CWT) British Columbia chum salmon in the bycatch of U.S. commercial groundfish (trawl) fishery operations in the eastern Bering Sea. The numbers at each location indicate the month of recovery. One new recovery reported in this document is indicated by an open diamond.

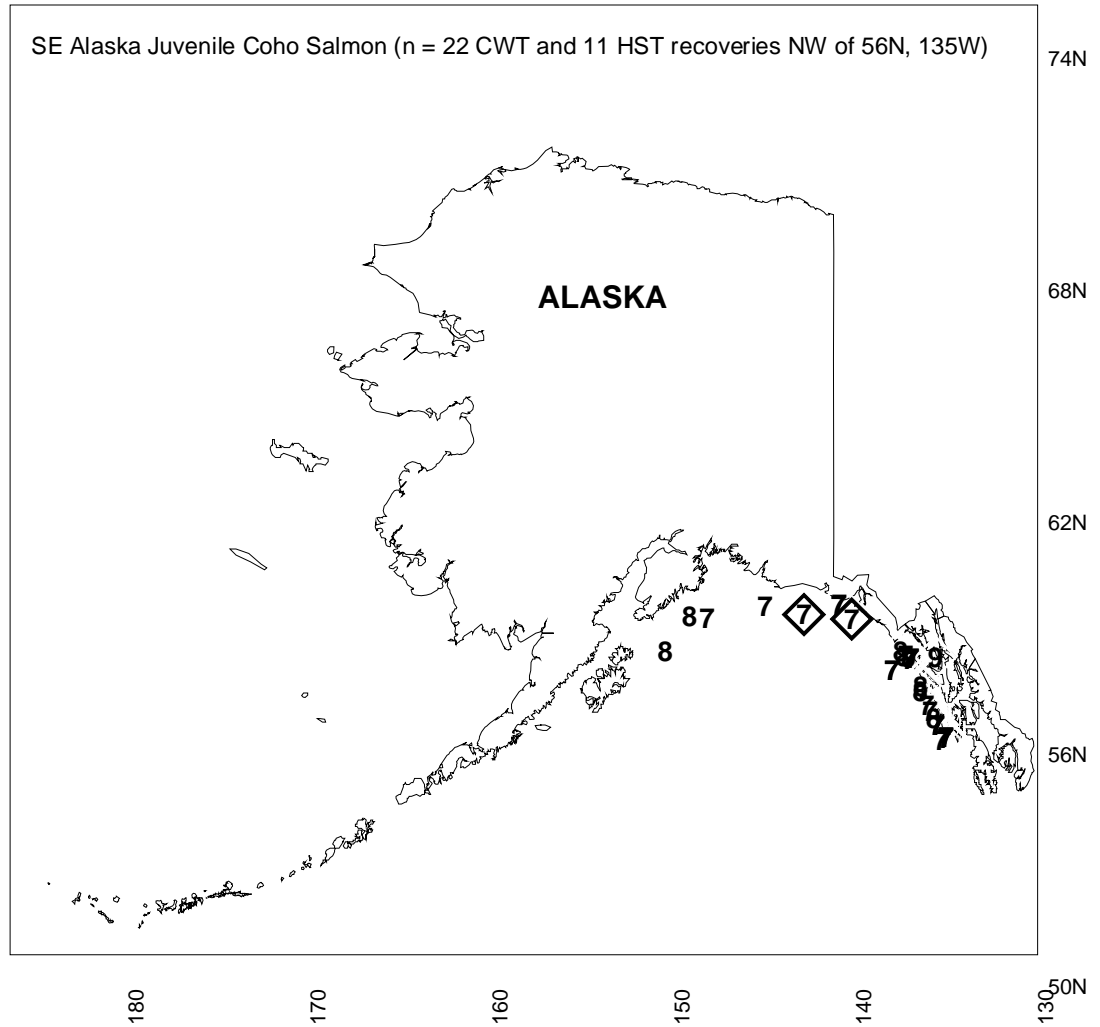


Fig. 9. Coded-wire tagged (CWT) recovery and high seas tag (HST) release locations of juvenile (ocean age-0) Southeast Alaska coho salmon in U.S. research vessel operations in the Gulf of Alaska. The numbers at each location indicate the month of CWT recovery or HST release. New recoveries reported in this document are indicated by an open diamond.

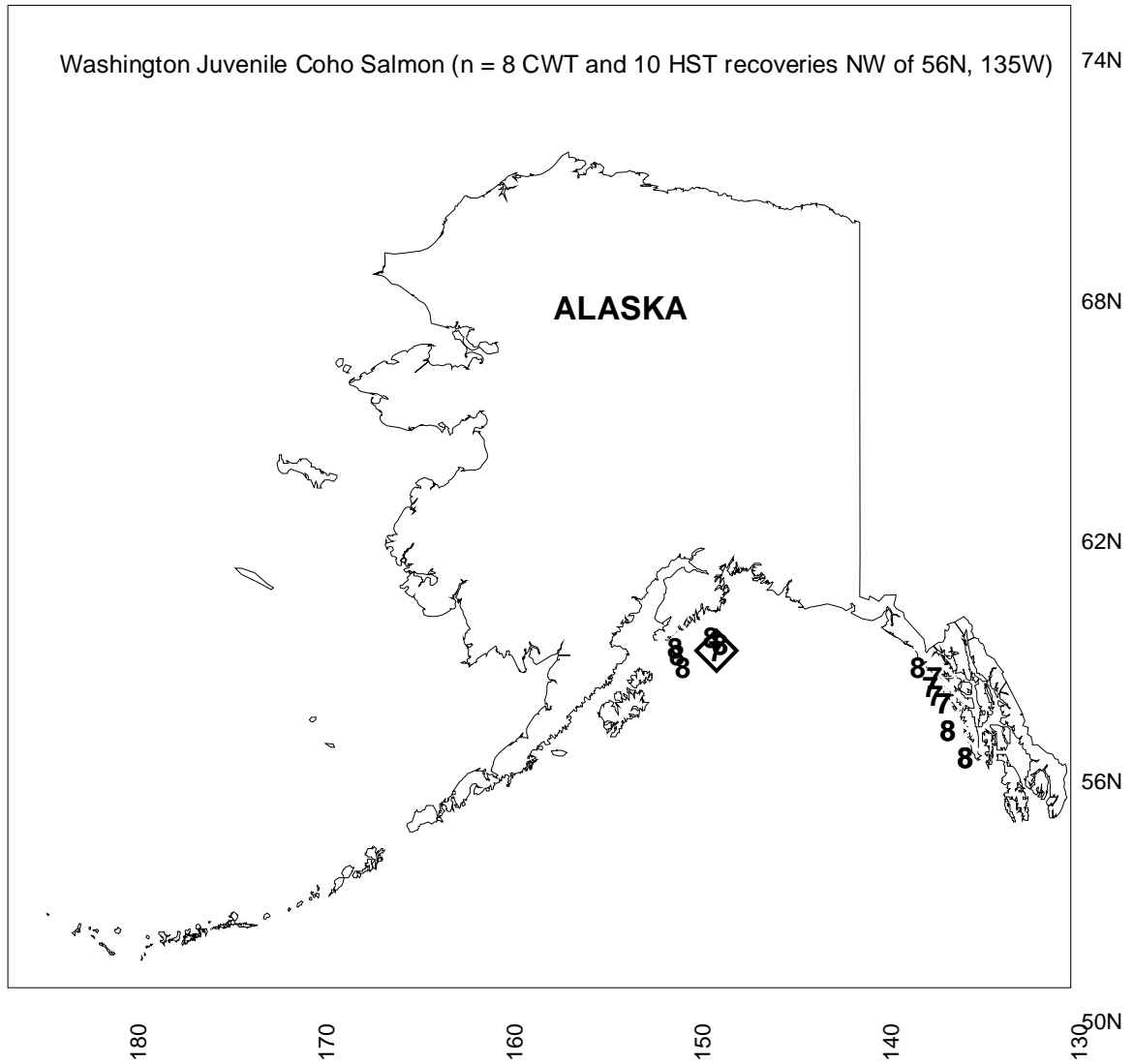


Fig. 10. Coded-wire tagged (CWT) recovery and high seas tag (HST) release locations of juvenile (ocean age-.0) Washington coho salmon in U.S. research vessel operations in the Gulf of Alaska. The numbers at each location indicate the month of CWT recovery or HST release. One new recovery reported in this document is indicated by an open diamond.

Table 1. Release and recovery information for coded-wire tagged salmon (*Oncorhynchus* spp.) caught in U.S. commercial groundfish trawl fisheries for walleye pollock *Theragra chalcogramma* in the Bering Sea, Aleutian Islands, and Gulf of Alaska and Pacific hake *Merluccius productus* along the US West Coast. All recoveries in the table are reported for the first time (1 September 2001-31 August 2002 reporting period). Species: CHUM=chum salmon *O. keta*, CHIN=chinook salmon *O. tshawytscha*. Run: SP=spring, SU=summer, F=fall, LF=late fall. Rearing type: H=hatchery, M=mixed hatchery and wild. State: AK=Alaska, BC=British Columbia, CA=California, ID=Idaho, OR=Oregon, WA=Washington, YT=Yukon Territory. TSFT=Tip of snout to fork of tail length. Wt=whole body weight. Sex: M=male, F=female.

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
<b>1. BERING SEA</b>																				
184045	CHUM	S-INCH CR	F	H	98	FRTH	LWFR	R-INCH CR	BC	CDFO	990521	011005	55	05	165	22	W	630	3200	
183159	CHIN	S-YUKON R	SP	H	97	YUKN	YUKN	R-JUDAS CR	YT	CDFO	980612	010328	56	18	170	33	W	550	1650	
312629	CHIN	HOMER (CROOKED CR)	SP	H	97	CNAK	COOK	CROOKED CR 244-30	AK	ADFG	980604	010226	55	22	164	39	W	610	2750	M
310134	CHIN	CROOKED CR 244-30	SP	H	99	CNAK	COOK	CROOKED CR 244-30	AK	ADFG	000605	011022	56	15	170	46	W	470	1300	F
310234	CHIN	DECEPTION CR 247-41	SP	H	99	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	000602	020128	54	45	166	5	W	560	2400	F

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
310235	CHIN	DECEPTION CR 247-41	SP	H	99	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	000602	020128	54	45	166	5	W	490	1500	F
310234	CHIN	DECEPTION CR 247-41	SP	H	99	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	000602	020128	54	45	166	5	W	460	1300	M
312621	CHIN	DECEPTION CR 247-41	SP	H	99	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	000614	011015	54	40	165	31	W	470	1600	
310144	CHIN	DECEPTION CR 247-41	SP	H	99	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	000614	011014	54	50	165	25	W	460	1400	
312617	CHIN	DECEPTION CR 247-41		H	98	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	990617	011007	54	46	165	48	W	640	3280	
312621	CHIN	DECEPTION CR 247-41	SP	H	99	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	000614	010827	56	15	165	01	W	460	1170	F
312619	CHIN	DECEPTION CR 247-41		H	98	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	990617	010926	57	28	173	06	W	620	3130	
310233	CHIN	DECEPTION CR 247-41	SP	H	99	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	000614	011005	54	28	165	39	W	560	1150	
310234	CHIN	DECEPTION CR 247-41	SP	H	99	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	000602	010908	54	58	165	58	W	440	1000	F

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
312619	CHIN	DECEPTION CR 247-41		H	98	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	990617	010825	54	44	165	40	W	680	3700	
310131	CHIN	DECEPTION CR 247-41		H	98	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	990617	011006	54	58	165	13	W	630	3130	
312620	CHIN	DECEPTION CR 247-41		H	98	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	990617	011022	56	10	170	32	W	520	3300	M
310248	CHIN	NINILCHIK R 244-20	SP	H	99	CNAK	COOK	NINILCHIK R 244-20	AK	ADFG	000602	011003	54	43	165	30	W	470	1300	
312631	CHIN	NINILCHIK R 244-20	SP	H	97	CNAK	COOK	SELDOVIA HBR 241-11	AK	ADFG	980609	011021	56	22	167	55	W	830	8420	F
040152	CHIN	KETCHIKAN CR	SP	H	97	SEAK	SEAK	KETCHIKAN CR 101-47	AK	KTHC	990510	020202	55	42	163	45	W	810	7330	F
184357	CHIN	S-ATNARKO R UP	SU	H	99	COBC	CCST	R-ATNARKO R UP	BC	CDFO	000606	020128	54	45	166	5	W	520	2000	F
182130	CHIN	S-SALMON R/TOMF	SP	H	98	FRTH	TOMF	R-SALMON R/TOMF	BC	CDFO	000412	011011	54	51	166	06	W	550	2420	

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
184507	CHIN	S-SHUSWAP R LOW	SU	H	00	FRTH	TOMF	R-SHUSWAP R LOW	BC	CDFO	010518	020122	55	5	164	57	W	490	1700	F
183356	CHIN	S-BABINE R	SU	H	96	NASK	SKNA	R-BABINE R	BC	CDFO	980504	010324	51	37	177	48	W	780	6300	
183245	CHIN	S-BULKLEY R UP	SP	H	98	NASK	SKNA	R-BULKLEY R UP	BC	CDFO	000501	011021	54	46	165	23	W	560	2450	
183162	CHIN	S-CONUMAR	F	H	98	WCVI	NWVI	R-FIDALGO PASS	BC	CDFO	990514	020202	55	35	164	23	W	640	3300	F
183162	CHIN	S-CONUMAR	F	H	98	WCVI	NWVI	R-FIDALGO PASS	BC	CDFO	990514	020124	55	27	164	54	W	700	4770	M
183162	CHIN	S-CONUMAR	F	H	98	WCVI	NWVI	R-FIDALGO PASS	BC	CDFO	990514	020204	55	43	163	49	W	700	4610	F
184517	CHIN	S-NITINAT R	F	H	99	WCVI	SWVI	R-NITINAT R	BC	CDFO	000607	020216	55	48	165	8	W	480	1450	F
183910	CHIN	S-TRAN- QUILLE CR	F	H	97	WCVI	SWVI	R-TRAN- QUILLE EST	BC	CDFO	980529	010227	55	36	164	5	W	650	3290	

Release Data												Recovery data									
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex	
213001	CHIN	QUEETS R 21.0016	F	H	98	NWC	QEQU	SALMON R 21.0139	WA	QDNR	990730	020311	56	15	165	13	W	670	3700	F	
210167	CHIN	SALMON R 21.0139	F	H	99	NWC	QEQU	SALMON R 21.0139	WA	QDNR	000731	020128	54	45	166	5	W	500	1700	M	
213001	CHIN	QUEETS R 21.0016	F	H	98	NWC	QEQU	SALMON R 21.0139	WA	QDNR	990730	011011	54	47	165	58	W	600	2860		
093037	CHIN	WASHING- TON BRIGHTS	F	H	99	CECR	UMAT	UMA- TILLA R	OR	ODFW	000523	020205	54	33	165	37	W	530	1810	F	
092519	CHIN	CLACK- AMAS EARLY R	SP	H	97	LOCR		SANDY R	OR	ODFW	990310	010201	54	57	164	37	W	650	3800		
093053	CHIN	BURNT HILL PUBLIC CR	F	H	99	NOOR	SIYA	SALMON R	OR	ODFW	000827	020128	54	45	166	5	W	510	1700	F	
093053	CHIN	BURNT HILL PUBLIC CR	F	H	99	NOOR	SIYA	SALMON R	OR	ODFW	000827	020128	54	45	166	5	W	520	1900	F	
<b>2. GULF OF ALASKA</b>																					
312629	CHIN	HOMER (CROOKED CR)	SP	H	97	CNAK	COOK	CROOKED CR 244-30	AK	ADFG	980604	991009	56	41	155	28	W	400	1200		

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
312629	CHIN	HOMER (CROOKED CR)	SP	H	97	CNAK	COOK	CROOKED CR 244-30	AK	ADFG	980604	991009	56	40	155	30	W	320	1000	
312532	CHIN	DECEP- TION CR 247-41	SP	H	97	CNAK	COOK	DECEP- TION CR 247-41	AK	ADFG	980626	991009	56	41	155	28	W	500	1800	F
312532	CHIN	DECEP- TION CR 247-41	SP	H	97	CNAK	COOK	DECEP- TION CR 247-41	AK	ADFG	980626	991015	57	38	154	35	W	320	1200	
310234	CHIN	DECEP- TION CR 247-41	SP	H	99	CNAK	COOK	DECEP- TION CR 247-41	AK	ADFG	000602	010902	53	45	164	40	W	450	1000	
312635	CHIN	NINILCHIK R 244-20	SP	H	97	CNAK	COOK	NINIL- CHIK R 244-20	AK	ADFG	980615	010824	57	6	152	26	W	820	7700	
312557	CHIN	NINILCHIK R 244-20	SP	H	96	CNAK	COOK	SELDO- VIA HBR 241-11	AK	ADFG	970606	991009	56	41	155	28	W	660	4400	F
044816	CHIN	MEDVEJIE		H	98	SEAK	SEAK	BEAR COVE 113- 41	AK	NSRA	000530	010905						590	2700	
044820	CHIN	HIDDEN FALLS	SP	H	96	SEAK	SEAK	BEAR COVE 113- 41	AK	NSRA	980526	010316	57	57	152	15	W	760	6000	F
044526	CHIN	CRYSTAL CR	SP	H	95	SEAK	SEAK	CRYSTAL CR 106-44	AK	ADFG	970529	991009	56	41	155	28	W	630	3400	F

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
044662	CHIN	CRYSTAL CR	SP	H	96	SEAK	SEAK	CRYSTAL CR 106-44	AK	ADFG	980526	010321	55	33	160	08	W	700	4700	
044244	CHIN	CRYSTAL CR	SP	H	94	SEAK	SEAK	EARL WEST COV 107-40	AK	ADFG	960526	991014	56	44	155	28	W	700	8600	
040419	CHIN	CRYSTAL CR		H	98	SEAK	SEAK	EARL WEST COV 107-40	AK	ADFG	000530	020310	57	57	152	15	W	480	1400	M
044818	CHIN	HIDDEN FALLS	SP	H	97	SEAK	SEAK	KASNYKU BAY 112-11	AK	NSRA	990601	010203	57	44	154	1	W			
032307	CHIN	UNUK R 101-75	SP	H	95	SEAK	SEAK	L PORT WALTER 109-10	AK	NMFS	970516	991009	56	41	155	28	W	800	5600	F
040117	CHIN	BURRO CR	SP	H	96	SEAK	SEAK	TAIYA INLET 115-34	AK	BURR	980614	010327	57	11	155	14	W	840	5800	F
471735	CHIN	TAMGAS CR	SP	H	96	SEAK	SEAK	TAMGAS CR	AK	MIC	980514	991009	56	41	155	28	W	570	2900	
182528	CHIN	S-ATNARKO R UP	SU	H	96	COBC	CCST	R-ATNARKO R UP	BC	CDFO	970613	991009	56	41	155	28	W	670	5100	

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
184216	CHIN	S-SHUSWAP R LOW	SU	H	97	FRTH	TOMF	R-SHUSWAP R LOW	BC	CDFO	980522	990926	56	59	155	01	W	480	1600	F
183356	CHIN	S-BABINE R	SU	H	96	NASK	SKNA	R-BABINE R	BC	CDFO	980504	991012	56	45	155	23	W	570	2900	M
183356	CHIN	S-BABINE R	SU	H	96	NASK	SKNA	R-BABINE R	BC	CDFO	980504	990914	57	32	151	42	W	560	2600	
183211	CHIN	S-BULKLEY R UP	SP	H	96	NASK	SKNA	R-BULKLEY R UP	BC	CDFO	980505	991009	56	41	155	28	W	560	2600	M
183228	CHIN	S-BULKLEY R UP	SP	H	97	NASK	SKNA	R-BULKLEY R UP	BC	CDFO	990429	010414	53	46	164	5	W	580	2290	
630606	CHIN	WELLS DAM (47)	SU	M	97	CRGN	CRGN G	COLUM- BIA R - GENERAL	WA	COOP	990421	010430	55	29	155	58	W	620	3000	
636327	CHIN	BONNE- VILLE POOL	F	H	96	CRGN	CRGN G	COLUM- BIA R - GENERAL	WA	WDF W	9707	991009	56	40	155	30	W	540	3700	
630610	CHIN	SIMILK- AMEEN R 490325	SU	H	97	UPCR	MEOK	SIMILK- AMEEN R 490325	WA	WDF W	990426	010203	57	44	154	1	W	640	3700	M

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
630610	CHIN	SIMILK- AMEEN R 490325	SU	H	97	UPCR	MEOK	SIMILK- AMEEN R 490325	WA	WDF W	990426	010328	57	45	153	1	W	590	2400	
630612	CHIN	WENAT- CHEE R 45.0030	SU	H	97	UPCR	WECH	WENAT- CHEE R 45.0030	WA	WDF W	990427	010720	58	33	149	20	W	750	5500	
092519	CHIN	CLACKA- MAS R EARLY	SP	H	97	LOCR		SANDY R	OR	ODFW	990310	010714	58	16	149	16	W	730	5440	F
092320	CHIN	N SANTIAM R	SP	H	96	LOCR	WILL	SANTIAM R & N FK- 1	OR	ODFW	980303	991009	56	41	155	28	W	580	2900	
092522	CHIN	M WILLAM- ETTE R	SP	H	97	LOCR	WILL	WILLAM- ETTE R, MID FK	OR	ODFW	990305	010721	58	26	149	25	W	740	4800	
091856	CHIN	SILETZ R (SILETZ HT)	F	H	97	NOOR		YAQUINA R	OR	ODFW	980814	010512	55	37	155	30	W	750	6200	
092449	CHIN	ELK R (ELK R HT)	F	H	97	SOOR		ELK RIVER	OR	ODFW	981013	010513	55	22	156	1	W	750	4100	
092449	CHIN	ELK R (ELK R HT)	F	H	97	SOOR		ELK RIVER	OR	ODFW	981013	010506	55	28	155	57	W	660	3500	

## 3. US WEST COAST

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
181724	CHIN	S-HARRISON R	F	H	98	FRTH	LWFR	R-CHEHALIS R	BC	CDFO	990501	010708	47	42	124	55	W	700	4520	F
184048	CHIN	S-CHILLI-WACK R	F	H	98	FRTH	LWFR	R-CHILLI-WACK R	BC	CDFO	990528	011020	48	12	125	13	W	680	3830	
184046	CHIN	S-CHILLI-WACK R	F	H	98	FRTH	LWFR	R-CHILLI-WACK R	BC	CDFO	990528	011018	48	14	125	13	W	690	4160	
184128	CHIN	S-CHILLI-WACK R	F	H	99	FRTH	LWFR	R-CHILLI-WACK R	BC	CDFO	000529	011010	48	21	125	13	W	520	1780	
184044	CHIN	S-STAVE R	F	H	98	FRTH	LWFR	R-STAVE R	BC	CDFO	990528	011017	48	20	125	15	W	660	3770	
183732	CHIN	S-COWI-CHAN R	F	H	98	GST	GSVI	R-COWI-CHAN R	BC	CDFO	990510	010926	48	8	125	18	W	670	3610	
631022	CHIN	KLICKI-TAT R 30.0002	SP	H	98	CECR	KLIC	KLICKI-TAT R 30.0002	WA	WDF W	000331	011017	48	16	125	16	W	540	1770	
630264	CHIN	KLICKI-TAT R 30.0002	SP	H	99	CECR	KLIC	KLICKI-TAT R 30.0002	WA	WDF W	010309	011020	48	19	125	13	W	350	470	
631045	CHIN	PRIEST RAPIDS (36)	F	H	98	CECR	KLIC	KLICKI-TAT R 30.0002	WA	WDF W	9906	011003	48	4	125	22	W	720	4810	

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
054405	CHIN	SPRING CR 29.0159	F	H	98	CECR	WIND	SPRING CR 29.0159	WA	FWS	990513	010707	47	43	125	1	W	760	5950	M
054419	CHIN	SPRING CR 29.0159	F	H	99	CECR	WIND	SPRING CR 29.0159	WA	FWS	000518	010708	47	42	124	54	W	400	750	F
054404	CHIN	SPRING CR 29.0159	F	H	98	CECR	WIND	SPRING CR 29.0159	WA	FWS	990513	011020	47	50	125	09	W	730	5340	
631032	CHIN	WELLS HATCHERY	SU	H	98	CRGN	CRGN G	COLUM- BIA R - GENERAL	WA	WDF W	000422	011017	48	16	125	16	W	560	1920	
630606	CHIN	WELLS DAM (47)	SU	M	97	CRGN	CRGN G	COLUM- BIA R - GENERAL	WA	COOP	990421	010707	47	45	125	2	W	770	6790	M
631032	CHIN	WELLS HATCHERY	SU	H	98	CRGN	CRGN G	COLUM- BIA R - GENERAL	WA	WDF W	000422	011009	48	04	125	18	W	580	2270	
630632	CHIN	GEO.ADAM S + FINCH CR	F	H	98	HOOD	SKDO	PURDY CR 16.0005	WA	WDF W	990512	011025	48	3	125	13	W	530	1880	

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
630315	CHIN	LEWIS R 27.0168	SP	H	98	LOCR	LEWI	LEWIS R - NF 27.0168	WA	WDF W	000321	011014	48	17	125	14	W	630	3050	
630171	CHIN	BIG SOOS CR 09.0072	F	H	99	MPS	DUW A	BIG SOOS CR 09.0072	WA	WDF W	000531	011020	48	19	125	14	W	380	680	
210153	CHIN	GROVERS CR 15.0299	F	H	99	MPS	EKPN	GROVERS CR HATCH- ERY	WA	SUQ	000524	011012	48	16	125	2	W	400	730	
213154	CHIN	GROVERS CR 15.0299	F	H	98	MPS	EKPN	GROVERS CR HATCH- ERY	WA	SUQ	990513	010927	48	06	125	18	W	580	2210	
631028	CHIN	NOOK- SACK R 01.0120	SP	H	98	NOOK	NOOK	KENDALL CR 01.0406	WA	WDF W	9906	011002	48	24	125	10	W	630	3140	
630164	CHIN	SKAGIT R 03.0176	SP	H	99	SKAG	SKAG	CASCADE R 03.1411	WA	WDF W	000603	011020	48	19	125	13	W	450	1070	
631213	CHIN	SNAKE R- LOWR 33.0002	F	H	98	SNAK	LOSN	SNAKE R- LOWR 33.0002	WA	WDF W	000414	011025	48	9	125	11	W	570	1960	
631213	CHIN	SNAKE R- LOWR 33.0002	F	H	98	SNAK	LOSN	SNAKE R- LOWR 33.0002	WA	WDF W	000414	010708	47	42	124	55	W	460	1190	F

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
631213	CHIN	SNAKE R- LOWR 33.0002	F	H	98	SNAK	LOS	SNAKE R- LOWR 33.0002	WA	WDF W	000414	010516	47	29	125	0	W	500	1100	
631213	CHIN	SNAKE R- LOWR 33.0002	F	H	98	SNAK	LOS	SNAKE R- LOWR 33.0002	WA	WDF W	000414	010619	44	06	124	34	W	520	1800	F
631213	CHIN	SNAKE R- LOWR 33.0002	F	H	98	SNAK	LOS	SNAKE R- LOWR 33.0002	WA	WDF W	000414	010620	44	07	124	34	W	480	1400	F
630167	CHIN	SNAKE R- LOWR 33.0002	F	H	99	SNAK	LOS	SNAKE R- LOWR 33.0002	WA	WDF W	000426	011002	48	21	125	1	W	420	850	
631213	CHIN	SNAKE R- LOWR 33.0002	F	H	98	SNAK	LOS	SNAKE R- LOWR 33.0002	WA	WDF W	000414	011005	48	8	125	18	W	520	1590	
631212	CHIN	LYONS FERRY HATCHERY	F	H	98	SNAK	SNAK G	SNAKE R @PITTS- BURG L	WA	WDF W	991028	010627	43	32	124	33	W	550	1860	M
210135	CHIN	KALAMA CR 11.0017	F	H	98	SPS	NISQ	KALAMA CR 11.0017	WA	NISQ	990607	011017	48	16	125	16	W	610	2730	
210135	CHIN	KALAMA CR 11.0017	F	H	98	SPS	NISQ	KALAMA CR 11.0017	WA	NISQ	990607	011020	48	19	125	14	W	530	1880	

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
212952	CHIN	WALLACE R 07.0940	SU	H	98	STIL	SNOH	TULALIP CR 07.0001	WA	TULA	990524	010927	48	6	125	18	W	660	3600	
631033	CHIN	WELLS HATCHERY	SU	H	98	UPCR	MEOK	METHOW R 48.0002	WA	WDF W	000502	010517	47	31	124	51	W	440	980	
631148	CHIN	WELLS HATCHERY	SP	H	98	UPCR	MEOK	SIMILK- AMEEN R 490325	WA	WDF W	000426	011019	48	4	125	18	W	640	3260	
631148	CHIN	WELLS HATCHERY	SP	H	98	UPCR	MEOK	SIMILK- AMEEN R 490325	WA	WDF W	000426	010708	47	47	124	56	W	470	1130	
630470	CHIN	WELLS HATCHERY	SU	H	00	UPCR	WACO	COL.R. @ TURTLE ROCK	WA	WDF W	010527	011012	48	16	125	2	W	330	370	
631061	CHIN	WELLS HATCHERY	SU	H	98	UPCR	WECH	COLUM- BIA NEAR WELLS	WA	WDF W	000512	011019	48	4	125	18	W	590	2470	
630124	CHIN	WELLS HATCHERY	SU	H	96	UPCR	WECH	COLUM- BIA NEAR WELLS	WA	WDF W	980505	010706	47	22	124	43	W	830	8600	
631061	CHIN	WELLS HATCHERY	SU	H	98	UPCR	WECH	COLUM- BIA NEAR WELLS	WA	WDF W	000512	010618	43	32	124	28	W	480	1330	M

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
631061	CHIN	WELLS HATCHERY	SU	H	98	UPCR	WECH	COLUMBIA NEAR WELLS	WA	WDF W	000512	011002	48	04	125	16	W	640	3460	M
631061	CHIN	WELLS HATCHERY	SU	H	98	UPCR	WECH	COLUMBIA NEAR WELLS	WA	WDF W	000512	010620	44	06	124	31	W	540	1670	M
630611	CHIN	WELLS DAM (47)	SU	H	97	UPCR	WECH	COLUMBIA NEAR WELLS	WA	WDF W	990531	011005	48	7	125	18	W	660	3680	
630612	CHIN	WENATCHEE R 45.0030	SU	H	97	UPCR	WECH	WENATCHEE R 45.0030	WA	WDF W	990427	011019	48	4	125	18	W	670	3940	
631151	CHIN	WENATCHEE R 45.0030	SU	H	98	UPCR	WECH	WENATCHEE R 45.0030	WA	WDF W	000501	011018	48	8	125	8	W	550	2040	
631151	CHIN	WENATCHEE R 45.0030	SU	H	98	UPCR	WECH	WENATCHEE R 45.0030	WA	WDF W	000501	011019	48	4	125	18	W	570	2080	
631151	CHIN	WENATCHEE R 45.0030	SU	H	98	UPCR	WECH	WENATCHEE R 45.0030	WA	WDF W	000501	010607	42	48	124	53	W	430	840	F
631151	CHIN	WENATCHEE R 45.0030	SU	H	98	UPCR	WECH	WENATCHEE R 45.0030	WA	WDF W	000501	011002	48	29	125	10	W	460	1120	
631151	CHIN	WENATCHEE R 45.0030	SU	H	98	UPCR	WECH	WENATCHEE R 45.0030	WA	WDF W	000501	011025	48	3	125	13	W	560	1930	

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
631151	CHIN	WENAT-CHEE R 45.0030	SU	H	98	UPCR	WECH	WENAT-CHEE R 45.0030	WA	WDFW	000501	011006	48	6	125	18	W	560	2040	
092760	CHIN	COLE RIVERS	F	H	98	LOCR		KLASKANINE R, NFK	OR	ODFW	990928	010521	43	27	124	36	W	530	1960	
092760	CHIN	COLE RIVERS	F	H	98	LOCR		KLASKANINE R, NFK	OR	ODFW	990928	010603	45	10	124	21	W	600	2840	M
092760	CHIN	COLE RIVERS	F	H	98	LOCR		KLASKANINE R, NFK	OR	ODFW	990928	010713	47	41	124	52	W	600	3000	M
092631	CHIN	CLACK-AMAS EARLY R	SP	H	97	LOCR	WILL	CLACK-AMAS R	OR	ODFW	990317	010707	47	45	125	2	W	780	6850	F
092758	CHIN	COLE RIVERS		H	98	LOCR	YOCL	YOUNGS R & BAY	OR	ODFW	990712	010629	43	37	124	32	W	600	2890	
093042	CHIN	COLE RIVERS	F	H	99	LOCR	YOCL	YOUNGS R & BAY	OR	ODFW	000705	010619	44	06	124	34	W	400	900	M
093043	CHIN	COLE RIVERS	F	H	99	LOCR	YOCL	YOUNGS R & BAY	OR	ODFW	000705	010620	44	06	124	33	W	440	1000	
093042	CHIN	COLE RIVERS	F	H	99	LOCR	YOCL	YOUNGS R & BAY	OR	ODFW	000705	010620	44	06	124	31	W	450	1120	M

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
093040	CHIN	COLE RIVERS	F	H	99	LOCR	YOCL	YOUNGS R & BAY	OR	ODFW	000705	010619	44	06	124	30	W	420	950	
092810	CHIN	ELK R (ELK R HT)	F	H	98	SOOR		ELK RIVER	OR	ODFW	991027	010606	43	26	124	40	W	590	2680	
092449	CHIN	ELK R (ELK R HT)	F	H	97	SOOR		ELK RIVER	OR	ODFW	981013	010527	43	27	124	37	W	670	3440	
092810	CHIN	ELK R (ELK R HT)	F	H	98	SOOR		ELK RIVER	OR	ODFW	991027	010518	43	41	124	30	W	590	2530	
092449	CHIN	ELK R (ELK R HT)	F	H	97	SOOR		ELK RIVER	OR	ODFW	981013	010523	43	06	124	43	W	740	5700	F
092810	CHIN	ELK R (ELK R HT)	F	H	98	SOOR		ELK RIVER	OR	ODFW	991027	010618	43	28	124	37	W	510	1800	M
092449	CHIN	ELK R (ELK R HT)	F	H	97	SOOR		ELK RIVER	OR	ODFW	981013	011009	48	3	125	24	W	710	5700	
091857	CHIN	ELK R (ELK R HT)	F	H	97	SOOR		ELK RIVER	OR	ODFW	981013	010930	48	7	125	16	W	900	11690	M

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
091927	CHIN	UMPQUAR(ROCK CR HT)	SP	H	98	SOOR		ROCK CR (N UMPQUAR)	OR	ODFW	991003	011019	48	9	125	12	W	680	4080	
091927	CHIN	UMPQUAR(ROCK CR HT)	SP	H	98	SOOR		ROCK CR (N UMPQUAR)	OR	ODFW	991003	010708	47	42	124	54	W	570	2620	F
091860	CHIN	UMPQUAR(ROCK CR HT)	SP	H	97	SOOR		ROCK CR (N UMPQUAR)	OR	ODFW	990212	011012	44	13	124	59	W	740	5480	F
092808	CHIN	COLE RIVERS	SP	H	98	SOOR	ROGU	ROGUE R-4	OR	ODFW	990915	011008	44	21	124	51	W	700	5320	F
091928	CHIN	UMPQUAR(ROCK CR HT)	SP	H	98	SOOR	UMPQ	ROCK CR (N UMPQUAR)	OR	ODFW	000209	010526	42	55	124	56	W	550	2130	
091928	CHIN	UMPQUAR(ROCK CR HT)	SP	H	98	SOOR	UMPQ	ROCK CR (N UMPQUAR)	OR	ODFW	000209	010629	43	37	124	32	W	490	1500	
091928	CHIN	UMPQUAR(ROCK CR HT)	SP	H	98	SOOR	UMPQ	ROCK CR (N UMPQUAR)	OR	ODFW	000209	010522	43	07	124	45	W	610	3100	

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
091928	CHIN	UMPQUA R(ROCK CR HT)	SP	H	98	SOOR	UMPQ	ROCK CR (N UMPQUA R)	OR	ODFW	000209	010521	43	24	124	37	W	500	1400	M
091928	CHIN	UMPQUA R(ROCK CR HT)	SP	H	98	SOOR	UMPQ	ROCK CR (N UMPQUA R)	OR	ODFW	000209	010629	43	37	124	32	W	560	2190	F
065128	CHIN	EEL RIVER	F	H	97	CECA	MAEL	VAN ARSDALE	CA	CDFG	981120	010522	43	15	124	41	W	770	5580	
062939	CHIN	AMERICAN RIVER	F	H	98	CECA	SFBA	TIBURON NET PENS	CA	TYEE	990828	010518	43	51	124	34	W	600	2490	F
062641	CHIN	TRINITY RIVER	F	H	98	KLAM	TRIN	TRINITY R HATCH-ERY	CA	HVT	991013	010530	43	5	124	47	W	510	1580	
065241	CHIN	TRINITY RIVER	F	H	97	KLAM	TRIN	TRINITY R HATCH-ERY	CA	HVT	981007	010526	43	17	124	44	W	670	3160	
062641	CHIN	TRINITY RIVER	F	H	98	KLAM	TRIN	TRINITY R HATCH-ERY	CA	HVT	991013	010529	43	19	124	41	W	630	3080	

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
062641	CHIN	TRINITY RIVER	F	H	98	KLAM	TRIN	TRINITY R HATCH-ERY	CA	HVT	991013	010604	43	35	124	31	W	570	2420	
062631	CHIN	FEATHER RIVER	F	H	98	SACR	GRSU	CROCK-ETT	CA	CDWR	990611	010522	43	9	124	43	W	700	4560	
062638	CHIN	FEATHER RIVER	F	H	98	SACR	GRSU	CROCK-ETT	CA	CDWR	990611	010522	43	10	124	42	W	740	5420	
060215	CHIN	MOKE-LUMNE RIVER	F	H	98	SACR	GRSU	CROCK-ETT	CA	EBMD	990702	010526	42	55	124	56	W	670	3810	
062637	CHIN	FEATHER RIVER	F	H	98	SACR	GRSU	CROCK-ETT	CA	CDWR	990611	010527	43	16	124	41	W	610	2650	
064918	CHIN	MOKE-LUMNE RIVER	F	H	98	SACR	MOKE	NEW HOPE LANDING	CA	EBMD	990513	010519	43	39	124	30	W	630	3480	
055208	CHIN	COLEMAN NFH	LF	H	99	SACR	SACR	COLE-MAN NFH	CA	FWS	000104	010620	44	4	124	24	W	460	1150	F
0501021403	CHIN	COLEMAN NFH	F	H	99	SACR	SACR	COLE-MAN NFH	CA	FWS	000414	010518	43	54	124	34	W	450	1200	

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
052310	CHIN	COLEMAN NFH	LF	H	98	SACR	SACR	COLE- MAN NFH	CA	FWS	990104	010520	43	42	124	31	W	660	3520	
055208	CHIN	COLEMAN NFH	LF	H	99	SACR	SACR	COLE- MAN NFH	CA	FWS	000104	010519	43	45	124	39	W	490	1540	
05010214 10	CHIN	COLEMAN NFH	F	H	99	SACR	SACR	COLE- MAN NFH	CA	FWS	000414	010619	44	06	124	34	W	420	880	M
055208	CHIN	COLEMAN NFH	LF	H	99	SACR	SACR	COLE- MAN NFH	CA	FWS	000104	010618	43	28	124	37	W	550	2070	M
05010214 06	CHIN	COLEMAN NFH	F	H	99	SACR	SACR	COLE- MAN NFH	CA	FWS	000414	010629	43	37	124	32	W	480	1240	M
054129	CHIN	COLEMAN NFH	LF	H	98	SACR	SACR	COLE- MAN NFH	CA	FWS	990104	010617	43	34	124	31	W	580	2440	F
055208	CHIN	COLEMAN NFH	LF	H	99	SACR	SACR	COLE- MAN NFH	CA	FWS	000104	011026	46	38	124	42	W	650	3460	
060254	CHIN	MOKE- LUMNE RIVER	F	H	99	SACR	SJOA	SHERMAN ISL OP JERSY	CA	EBMD	000501	010620	44	6	124	33	W	450	1140	
064922	CHIN	MOKE- LUMNE RIVER	F	H	98	SACR	SJOA	SHERMAN ISL OP JERSY	CA	EBMD	990521	010522	43	07	124	45	W	550	2340	

Release Data												Recovery data								
Tagcode	Species	Stock	Run	Rearing type	Brood year	Region <sup>1</sup>	Basin <sup>2</sup>	Release site	State	Agency <sup>3</sup>	Date (yyymmdd)	Date (yyymmdd)	Lat (deg)	Lat (min)	Long (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
060247	CHIN	MOKE-LUMNE RIVER	F	H	98	SACR	SJOA	SHERMAN ISL OP JERSY	CA	EBMD	990521	010618	43	28	124	37	W	560	2410	M
064922	CHIN	MOKE-LUMNE RIVER	F	H	98	SACR	SJOA	SHERMAN ISL OP JERSY	CA	EBMD	990521	010620	44	04	124	34	W	560	2060	F
060248	CHIN	MOKE-LUMNE RIVER	F	H	98	SACR	SJOA	SHERMAN ISL OP JERSY	CA	EBMD	990521	011029	46	32	124	30	W	680	4160	
062662	CHIN	MOKE-LUMNE RIVER	F	H	99	SJOA	MOKE	MOKE-LUMNE R, MOUTH	CA	SJRG	000421	010618	43	28	124	32	W	450	1140	M

<sup>1</sup>Region: CEC =Central Coastal California, CECR=Central Columbia R, CNAK=central Alaska, COBC=Coastal British Columbia, CRGN=Columbia R general, FRTH=Fraser R - Thompson R, GRAY=Grays Harbor, GST=Georgia Strait, HOOD=Hood Canal, JNST=Johnstone Strait, JUAN=Strait of Juan de Fuca, KLAM=Klamath R - Trinity R, LOCR=Lower Columbia R, MPS=Mid Puget Sound, NASK=Nass R - Skeena R, NOOK=Nooksack R - Samish R, NOOR=North Coastal Oregon, NWC=North Washington Coast, SACR=Sacramento R, SEAK=Southeast Alaska, SJOA=San Joaquin R, SKAG=Skagit R, SNAK=Snake R, SPS=South Puget Sound, SOOR=South Coastal Oregon, STIL=Stillaguamish R - Snohomish R, UPCR=Upper Columbia R, WCVI=Western Vancouver Island, YUKN=Yukon Territory (Yukon R in Yukon Territory only).

<sup>2</sup>Basin (if different than region): CCST=Central Coastal BC, COOK=Cook Inlet, COWL=Cowlitz R, CRNG=Columbia R general, DUWA=Duwamish R - Green R, EKPN=East Kitsap Peninsula North, EKPS=East Kitsap Peninsula South, ELDU=Elwha R - Dungeness R, GRAY=Grays Harbor - Lower Chehalis R, GRSU=Grizzly - Susin Bays, GSMN=Georgia Strait Mainland North, GREL=Grays R - Elokomin R, GRIA=Grand Ronde R - Imnaha R - Asotin Cr, GSVI=Georgia Strait - Vancouver Island, JNSTG=Johnstone Strait general, KLAM=Klamath R, KIIC=Klickitat R, LEWI=Lewis R, LOSN=Lower Snake R, LWFR=Lower Fraser R, MAEL=Mad R - Eel R, MEOK=Methow R - Okanogan R, MERC=Merced R, Moke=Mokelumne R, NISQ=Nisqually R, NWVI =NW Vancouver I, PUYA=Puyallup R, QEU=Queets R - Quinault R, QUHO=Quillayute R - Hoh R, ROGU=Rogue R, SAWA=Salmon R - Washougal R, SFBA=San Francisco Bay, SIYA=Siletz R - Yaquina R, SKDO=Skokomish R - Dosewallips R, SKNA=Skeena R, SNAK=Snake R, SNAKG=Snake R general, SNOH=Snohomish R, SWVI=SW Vancouver I, TOMF=Thompson R North and South Forks, TOMM=Thompson R Mainstem, TRIN=Trinity R, TUST=Tuolumne R - Stanislaus R, UMAT=Umatilla R, UPCR=Upper Columbia R general, UPFR=Upper Fraser R, UPSN=Upper Snake R,

WACO=Wanapum R - Coulee Res, WECH=Wenatchee R - Entiat R - Lk Chelan, WILL=Willamette R, WIND=Wind R - White Salmon R, YOCL=Youngs Bay-Clatskanie R.

<sup>3</sup>Agency: ADFG=Alaska Department of Fish & Game, BURR=Burro Creek Hatchery, CDFO=Canadian Department of Fisheries and Oceans, CDFG=California Department of Fish & Game, CDWR=California Department of Water Resources, COOP=Washington Department of Fish & Wildlife - Cooperative, DIPAC=Douglas Island Pink & Chum, Inc., EBMD=East Bay Municipal Utilities District, FWS=US Fish & Wildlife Service, HVT=Hoopa Valley Tribe, KRUK=Karuk Tribe, KTHC=Ketchikan Tribal Hatchery Corporation, MIC=Metlakatla Indian Community, MUCK=Muckleshoot Tribe, NEZP=Nez Pierce Tribe, NISQ=Nisqually Tribe, NMFS=National Marine Fisheries Service, NSRA=Northern Southeast Regional Aquaculture Association, ODFW=Oregon Department of Fish & Wildlife, QDNR=Quinalt Department of Natural Resources, SUQ=Suquamish Tribe, SSRA=Southern Southeast Regional Aquaculture Association, TULA=Tulalip Tribes, TYEE=TYEE Foundation, WDFW=Washington Department of Fish & Wildlife.

Table 2. Release and recovery information for coded-wire tagged salmonids (*Oncorhynchus* spp.) caught in Japanese and U.S. research gillnets and trawls in the North Pacific Ocean. All recoveries in the table are reported for the first time (1 September 2001 - 31 August 2002 reporting period). Run: F=fall, SP=spring, SU=summer, W=winter. Rearing type: H= Hatchery, W=wild. State: AK = Alaska, BC = British Columbia, WA = Washington, OR = Oregon. TSFT = Tip of snout to fork of tail length. Wt. = whole body weight. Gear: G=research gillnet, T=research trawl. Sex: M = male, F = female. Oceanic region: GOA=Gulf of Alaska, CNP=Central North Pacific.

Release Data											Recovery Data										
Tagcode	Stock	Run	Rearing type	Brood year	Region1	Basin2	Release site	State	Agency3	Release date (yyymmdd)	Recovery date (yyymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Longitude (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex	Gear	Oceanic Region
1. Chinook Salmon <i>O. tshawytscha</i>																					
470109	TAMGAS CR	SP	H	98	SEAK	SEAK	TAMGAS CR	AK	MIC	000515	010723	59	47	144	40	W	457	1427	M	T	GOA
630194	ELOCH-OMAN R 25.0236	F	H	99	LOCR	SAWA	WASH- OUGAL R 28.0159	WA	WDFW	000719	010724	59	23	147	23	W	381	745	F	T	GOA
630610	SIMILK- AMEEN R 490325	SU	H	97	UPCR	MEOK	SIMILK- AMEEN R 490325	WA	WDFW	990426	010719	59	21	139	55	W	755	6000	M	T	GOA
093142	MCKEN- ZIE R	SP	H	99	LOCR	WILL	CLACK- AMAS R	OR	ODFW	010307	010719	59	2	140	3	W	272	256		T	GOA
093022	CLACK- AMAS R EARLY	SP	H	99	LOCR	WILL	CLACK- AMAS R	OR	ODFW	010314	010719	59	31	139	53	W	250	188		T	GOA
092739	MCKEN- ZIE R	SP	H	98	LOCR	WILL	MCKENZIE R-1	OR	ODFW	000209	010722	60	2	142	32	W	594	3014	M	T	GOA

Release Data											Recovery Data										
Tagcode	Stock	Run	Rearing type	Brood year	Region1	Basin2	Release site	State	Agency3	Release date (yyymmdd)	Recovery date (yyymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Longitude (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex	Gear	Oceanic Region
<b>2. Coho Salmon <i>O. kisutch</i></b>																					
310224	KENAIR		W	97	CNAK	COOK	MOOSE R 244-30	AK	ADFG	000602	010630	56	12	145	3	W	580	2500	F	G	GOA
044853	HIDDEN FALLS		H	99	SEAK	SEAK	KASNYKU BAY 112-11	AK	NSRA	010530	010722	59	19	142	38	W	225	140		T	GOA
044919	HIDDEN FALLS		H	99	SEAK	SEAK	KASNYKU BAY 112-11	AK	NSRA	010529	010719	59	12	140	0	W	208	96		T	GOA
631104	LEWIS R 27.0168	F	H	99	LOCR	LEWI	LEWIS R 27.0168	WA	WDFW	010410	010726	58	57	148	37	W	310	382		T	GOA
<b>3. Steelhead <i>O. mykiss</i></b>																					
105408	DWOR B	SP	H	99	SNAK	CLEA	SFK CLWTR@ RED HOUSE	ID	IDFG	000421	010718	43	0	180	0	W	614	2450	M	G	CNP
631207	LEWIS R 27.0168	SU	H	99	LOCR	LEWI	LEWIS R 27.0168	WA	WDFW	000507	010704	51	59	144	59	W	608	2740	M	G	GOA
210301	QUIN- AULT R 21.0398	W	H	99	NWC	QEQU	SALMON R 21.0139	WA	QDNR	000414	010704	51	59	144	59	W	604	2800	F	G	GOA

<sup>1</sup>Region: CNAK=central Alaska, LOCR=Lower Columbia R, NWC=North Washington Coast, SEAK=Southeast Alaska, SNAK=Snake R, UPCR=Upper Columbia R.

<sup>2</sup>Basin (if different than region): CLEA=Clearwater R, COOK=Cook Inlet, LEWI=Lewis R, MEOK=Methow R - Okanogan R, QEU=Queets R - Quinault R, SAWA=Salmon R - Washougal R, WILL=Willamette R.

<sup>3</sup>Agency: ADFG=Alaska Department of Fish & Game, IDFG=Idaho Department of Fish and Game, MIC=Metlakatla Indian Community, NSRA=Northern Southeast Regional Aquaculture Association, ODFW=Oregon Department of Fish & Wildlife, QDNR=Quinault Department of Natural Resources, WDFW=Washington Department of Fish & Wildlife.