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2014 Exploitation Rate Analysis and Model Calibration
Volume Two: Appendix Supplement

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LIST OF APPENDICES

Note: Product names used in this publication are included for completeness but do not constitute product endorsement.

APPENDIX A: RELATIONSHIP BETWEEN EXPLOITATION RATE INDICATOR STOCKS, ESCAPEMENT INDICATOR STOCKS, MODEL STOCKS, AND ADDITIONAL MANAGEMENT ACTION STOCKS IDENTIFIED IN THE PACIFIC SALMON TREATY ANNEX

LIST OF APPENDIX A TABLES

Appendix A1. Indicator stocks for Southeast Alaska and Transboundary Rivers.

Area	Annex Stock Group[1]	Annex Indicator Stocks	Run Type	Escapement Indicator Stock	Escapement Objective[2]	Model Stock	Escapement Goal in Model[3]	Exploitation Rate Indicator Stock	CWT Acronym
SEAK/TBR			Spring	Taku	19,000–36,000 [4]			Taku	TAK
				Stikine	14,000–28,000[4]			Stikine	STI
				Alsek	3,500–5,300			NA	
Yakutat				Situk	500–1,000[2]			NA	
SEAK Northern Inside				Chilkat	1,750-3,500[4]			Chilkat	CHK
SEAK Southern Inside				Unuk	1,800–3,800[4]	Alaska South SE	9,110	Alaska Spring (Little Port Walter, Neets Bay Hatchery, Whitman Lake Hatchery, Deer Mountain Hatchery, Crystal Lake Hatchery)	UNU
				Chickamin	450–900[5]				AKS

Note: NA = not available.

[1] SEAK fisheries will be managed to achieve escapement objectives for Southeast Alaska and Transboundary River Chinook salmon stocks.

[2] CTC escapement objective.

[3] Agency objective.

[4] Based on large spawners (age-.3 and older).

[5] Based on index count of large spawners (age-.3 and older).

Appendix A2. Indicator stocks for Canada.

Area	Annex Stock Group	Annex Indicator Stocks	Run Type	Escapement Indicator Stock	Escapement Objective[1]	Model Stock	Escapement Goal in Model[2]	Exploitation Rate Indicator Stock	CWT Acronym
NBC-Area 1	North/Central British Columbia	Yakoun	Summer	Yakoun	Escapement goal range by stock	North/Central BC	117,500	Kitsumkalum	KLM
NBC-Area 3		Nass	Summer	Nass					
NBC-Area 4		Skeena		Skeena					
CBC-Area 8			Spring/Fall	Rivers Inlet					
CBC-Area 9			Spring	Dean				Atnarko	ATN
WCVI	West Coast Vancouver Island Falls	Artlish, Burman, Gold, Kauok, Tahsis, Tashish, Marble	Fall	WCVI Aggregate (Artlish, Burman, Kauok, Tahsis, Tashish, Marble)	Escapement goal range for aggregate	WCVI Natural	42,734	Robertson Creek	RBT
						WCVI Hatchery	6,472		
Upper Strait of Georgia	Upper Strait of Georgia	Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish	Summer/Fall	Upper Strait of Georgia (Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish)	Escapement goal range for aggregate	Upper Strait of Georgia	23,300	Quinsam	QUI
Lower Strait of Georgia	Lower Strait of Georgia		Summer/Fall			Lower Strait of Georgia Hatchery	5,318	Puntledge	PPS
								Big Qualicum	BQR
		Cowichan, Nanaimo	Fall	Lower Strait of Georgia (Cowichan/ Nanaimo)	Escapement goal range for aggregate	Lower Strait of Georgia Natural	21,935	Cowichan	COW
								Nanaimo	NAN
Fraser River	Fraser Early	Upper Fraser Mid Fraser Thompson	Spring	Fraser Spring run age 1.2	Escapement goal range by stock	Fraser Early	93,700	Nicola	NIC
				Fraser Spring run age 1.3				Dome	DOM
			Summer	Fraser Summer run age 1.3				NA	NA
				Fraser Summer run age 0.3				Lower Shuswap	SHU
								Middle Shuswap	MSH
	Fraser Late	Harrison River	Fall	Harrison River	75,100–98,500	Fraser Late	75,100	Chilliwack	CHI
								Harrison	HAR

[1] CTC escapement objective.
[2] Agency objective.

Appendix A3. Indicator stocks for Puget Sound.

Area	Annex Stock Group	Annex Indicator Stocks	Run Type	Escapement Indicator Stock	Escapement Objective[1]	Model Stock	Escapement Goal in Model[2]	Exploitation Rate Indicator Stock	CWT Acronym
North/ Central Puget Sound	North Puget Sound Natural Springs	Nooksack	Spring	Nooksack	Escapement goal range by stock	Nooksack Spring	4,000	Nooksack Spring Fingerling Nooksack Spring Yearling	NSF NKS
		Skagit		Skagit Spring				Skagit Spring Fingerling Skagit Spring Yearling	SKF SKS
	Not an Annex stock		Fall			Nooksack Fall	11,923	Samish Fall Fingerling	SAM
	Puget Sound Natural Summer/Falls	Snohomish	Summer/ Fall	Snohomish		Snohomish Wild	5,250	Skykomish	SKY
		Skagit group		Skagit Summmer/Fall		Skagit Wild	9,778	Skagit Summer Fingerling	SSF
		Lake Washington		Lake Washington Falls		Puget Sound Natural Fingerling	16,966	NA	
		Green River		Green River				Green River Fingerling	GRN
		Stillaguamish		Stillaguamish		Stillaguamish Wild	2,000	Stillaguamish Fall Fingerling	STL
								Nisqually Fall Fingerling	NIS
Hood Canal	Not an Annex stock		Fall			Puget Sound Hatchery Fingerling		George Adams Fall Fingerling	GAD
South Puget Sound	Not an annex stock		Fall			Puget Sound Hatchery Fingerling	24,769	South Puget Sound Fall Fingerling	SPS
						Puget Sound Hatchery Yearling	9,136	South Puget Sound Fall Yearling	SPY
								Squaxin Pens Fall Yearling[3]	SQP
								Univ. of Washington Accelerated Fall[3]	UWA
			Spring					White River Spring Yearling	WRY

Note: NA = not available.
[1] CTC escapement objective.
[2] Agency objective.
[3] Production and tagging discontinued.

Appendix A4. Indicator stocks for the Washington Coast.

Area	Annex Stock Group	Annex Indicator Stocks	Run Type	Escapement Indicator Stock	Escapement Objective[1]	Model Stock	Escapement Goal in Model[2]	Exploitation Rate Indicator Stock	CWT Acronym
North/ Central Puget Sound	North Puget Sound Natural Springs	Nooksack	Spring	Nooksack	Escapement goal range by stock	Nooksack Spring	4,000	Nooksack Spring Fingerling Nooksack Spring Yearling	NSF NKS
		Skagit		Skagit spring				Skagit Spring Fingerling Skagit Spring Yearling	SKF SKS
	Not an Annex stock		Fall			Nooksack Fall	11,923	Samish Fall Fingerling	SAM
	Puget Sound Natural Summer/Falls	Snohomish	Summer/ Fall	Snohomish		Snohomish Wild	5,250	Skykomish	SKY
		Skagit group		Skagit Summmer/Fall		Skagit Wild	9,778	Skagit Summer Fingerling	SSF
		Lake Washington		Lake Washington Falls		Puget Sound Natural Fingerling	16,966	NA	
		Green River		Green River				Green River Fingerling	GRN[3]
		Stillaguamish		Stillaguamish		Stillaguamish Wild	2,000	Stillaguamish Fall Fingerling	STL
								Nisqually Fall Fingerling	NIS
Hood Canal	Not an Annex stock		Fall			Puget Sound Hatchery Fingerling		George Adams Fall Fingerling	GAD
South Puget Sound	Not an annex stock		Fall			Puget Sound Hatchery Fingerling	24,769	South Puget Sound Fall Fingerling	SPS
						Puget Sound Hatchery Yearling	9,136	South Puget Sound Fall Yearling	SPY
								Squaxin Pens Fall Yearling[4]	SQP
								Univ. of Washington Accelerated Fall[3]	UWA
			Spring					White River Spring Yearling	WRY

Note: NA = not available.
[1] CTC escapement objective.
[2] Agency objective.
[3] GRN is a subset of SPS CWT aggregate
[4] Production and tagging discontinued.

Appendix A5. Indicator stocks for Columbia River and Oregon Coast.

Area	Annex Stock Group	Annex Indicator Stocks	Run Type	Escapement Indicator Stock	Escapement Objective[1]	Model Stock	Escapement Goal in Model[2]	Exploitation Rate Indicator Stock	CWT Acronym
Columbia River	Not an Annex stock		Spring			Cowlitz Spring Hatchery	2,500	NA	CWS
						Willamette River Hatchery	13,500	Willamette Spring	WSH
	Columbia River Summers	Mid-Columbia Summers	Summer	Mid-Columbia Summer	17,857[3]	Columbia River Summer	17,857	Columbia Summers	SUM
	Columbia River Falls		Fall			Fall Cowlitz Hatchery	8,800	Cowlitz Tule	CWF
						Spring Creek Hatchery	7,000	Spring Creek Tule	SPR
						Lower Bonneville Hatchery	26,200	Columbia Lower River Hatchery	LRH
		Upriver Brights		Columbia Upriver Bright	45,000	Columbia Upriver Brights	40,000	Columbia Upriver Bright	URB
								Hanford Wild	HAN
		Deschutes		Deschutes River Fall	4,532	Subset of Columbia Upriver Brights	4,000	NA	
						Lyons Ferry	3,430	Lyons Ferry	LYF
						Mid-Columbia River Brights	12,500	NA	
		Lewis River		Lewis	5,700	Lewis River Wild	5,700	Lewis River Wild	LRW
North Oregon Coast	Far North Migrating Oregon Coastal Falls	Nehalem	Fall	Nehalem	6,989	Oregon Coast	62,382	Salmon River	SRH
		Siuslaw		Siuslaw	12,925				
		Siletz		Siletz	2,944				
Mid-Oregon Coast	Not an Annex stock		Fall	Umpqua				Elk River	ELK
				Mid-South Oregon Coastal Falls					

Note: NA = not available.
[1] CTC escapement objective.
[2] Agency objective.
[3] Measured at Bonneville Dam.

APPENDIX B: ISBM INDICES

LIST OF APPENDIX B TABLES

Appendix B1. ISBM Indices for all British Columbia ISBM fisheries based on CWT-based exploitation rate analysis (1999-2012). The stock groups correspond to Annex 4, Chapter 3, Attachment IV of the 2009 PST Agreement.

Stock Group	Escapement Indicator Stocks	CWT Indices[1]													
		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Lower Strait of Georgia	Cowichan	0.517	0.196	0.260	0.247	0.363[2]	0.284	0.132	0.191	0.043	0.242	0.400	0.261	0.147	0.262
	Nanaimo[3]	0.163	0.154	0.260	0.247	NA[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fraser Late	Harrison River[5]	0.112	0.073	0.090	0.105	0.055[6]	0.032	0.058	0.032	0.035	0.031	0.058	0.134	0.092	0.141
North Puget Sound Natural Springs	Nooksack	0.183	1.176	0.040	0.023	0.046	NA	NA	NA	NA	NA	0.106	0.014	0.144[7]	0.137
	Skagit	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Upper Strait of Georgia	Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish	0.021	0.123	0.040	0.063	0.006	0.018	0.028	0.079	0.268	0.073	0.247	0.182	0.032	0.175
Fraser Early (Spring and Summers)	Upper Fraser, Mid Fraser, Thompson	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
West Coast Vancouver Island Falls	WCVI (Artlish, Burman, Kauok, Tahsis, Tashish, Marble)	0.431	0.083	0.060	0.248	0.496[8]	0.488	0.267	0.267	0.906	0.652	0.464	0.178	0.65	1.017
Puget Sound Natural Summer/Falls	Skagit	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Stillaguamish	0.194	0.111	0.145	NA	NA	0.027	0.057	0.074	0.192	NA	0.252	0.083	0.246	0.158
	Snohomish	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lake Washington	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Green River	0.171	0.154	0.350	0.323	0.328	0.162	0.085	0.109	0.076	0.106	0.208	0.151	0.3	0.346
North/Central BC	Yakoun, Nass, Skeena, Area 8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Note: NA means not available because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc.).

[1] The CWT-based estimates, not the model estimates, are to be used in postseason assessments.

[2] An inconsistency was discovered between the approaches used to calculate the model-based and CWT-based indices. The former included harvest rates for terminal sport while the latter did not. Terminal sport harvest rates are now included in the calculation of both indices starting 2003. Further review is yet required to determine whether the base period terminal sport harvest rates obtained from analyses of Big Qualicum CWT recoveries adequately represent impacts that would have occurred on Cowichan Chinook salmon.

[3] Indices for the Nanaimo stock are calculated from CWT recoveries for Cowichan; differences between Nanaimo and Cowichan stock indices are due to differences in terminal harvest.

[4] Several problems have been identified in the approach previously used to calculate the CWT-based indices for Nanaimo Chinook salmon; indices for this stock will not be reported starting 2003 as their utility is questionable.

[5] Stock or stock group with an agreed CTC escapement goal.

[6] The terminal sport harvest rates for Chilliwack Hatchery Chinook salmon, the indicator stock, were removed from the calculation for the Harrison River naturals starting 2003 because sport harvest has been essentially zero on the natural population.

[7] An error was detected in the Nooksack ISBM index estimate for 2011 as reported in TCChinook (14)-01; the corrected value appears here.

[8] A review of the approach used to calculate both the CWT-based and model data-based indices for the WCVI naturals was carried out in 2008. A similar approach was adopted for both indices but due to modifications to the formerly used procedures, the historical time series of values was updated starting 2003.

Appendix B2. ISBM Indices for all southern US fisheries based on CWT-based exploitation rate analysis (1999-2012). The stock groups correspond to Annex 4, Chapter 3, and Attachment V of the 2009 PST Agreement.

Stock Group	Escapement Indicator Stocks	CWT Indices[1]													
		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Washington Coastal Fall Naturals	Hoko	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Grays Harbor	0.430	1.630	0.860	0.540	0.150	0.530	0.560	0.520	0.790	0.390	0.700	0.690	0.923	0.591
	Queets	1.000	0.850	1.440	0.840	0.850	0.840	2.050	0.600	1.050	0.610	0.450	0.670	NA	0.951
	Hoh	1.540	2.750	1.660	0.950	1.340	1.220	1.030	1.290	2.230	0.950	1.220	1.000	2.003	1.593
	Quillayute	1.300	2.470	1.480	1.420	0.990	1.150	1.030	1.180	1.470	1.160	1.970	0.670	NA	2.14
Columbia River Falls	Upriver Brights	1.370	2.530	1.350	1.320	1.430	1.740	1.780	3.080	3.100	1.830	2.790	1.750	2.862	3.133
	Deschutes	0.510	0.710	0.520	0.590	0.049	0.510	0.670	0.580	0.510	1.860	2.360	0.790	0.798	1.045
	Lewis[2]	0.000	0.360	0.580	0.560	1.030	0.170	0.980	1.330	0.790	0.630	0.140	0.430	0.432	0.895
Puget Sound Natural Summer/Falls	Skagit	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Stillaguamish	0.120	0.040	0.890	NA	NA	0.010	0.220	0.080	0.120	NA [2]	0.200	0.380	0.195	0.213
	Snohomish	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lake Washington	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Green River	0.500	0.700	1.180	1.070	1.030	1.010	0.170	0.370	0.380	0.280	0.290	0.340	0.439	0.544
Fraser Late	Harrison River[2]	0.470	0.130	0.310	0.410	0.640	0.320	NA	NA	NA	NA	NA	NA	NA	0.405
Columbia River Summers	Mid-Columbia Summers[2]	1.640	4.820	5.320	7.250	10.040	2.690	6.080	0.480	1.840	6.800	1.310	9.810	5.376	5.192
Far North Migrating OR Coastal Falls	Nehalem[2]	1.960	1.970	1.940	2.170	3.110	1.800	2.000	3.480	2.010	0.920	0.590	1.210	1.210	2.267
	Siletz[2]	0.820	1.160	1.190	1.310	1.590	2.290	1.190	2.340	1.600	0.670	0.730	0.500	1.068	0.997
	Siuslaw[2]	1.220	2.450	2.180	2.560	3.820	1.030	1.630	2.230	1.000	0.640	1.070	0.770	1.108	1.603
North Puget Sound Natural Springs	Nooksack	0.440	0.000	0.040	NA	NA	NA	NA	NA	NA	0.210	0.520	0.700	0.795 [3]	2.758
	Skagit	NA	NA	NA	1.120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Note: NA means not available because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc.).

[1] The CWT-based estimates, not the model estimates, are to be used in postseason assessments.

[2] Stock or stock group with an agreed CTC escapement goal.

[3] An error was detected in the Nooksack ISBM index estimate for 2011 as reported in TCChinook (14)-01; the corrected value appears here.

Appendix B3. ISBM Indices for all British Columbia fisheries, from the Chinook model (1999-2014) used to establish the AI for each year. The stock groups correspond to Annex 4, Chapter 3, Attachment IV of the 2009 PST Agreement.

Stock Group	Escapement Indicator Stocks	Model Indices															
		1999 CLB 0107	2000 CLB 0107	2001 CLB 0107	2002 CLB 0206	2003 CLB 0308	2004 CLB 0404	2005 CLB 0506	2006 CLB 0604	2007 CLB 0705	2008 CLB 0807	2009 CLB 0907	2010 CLB 1007	2011 CLB 1106	2012 CLB 1209	2013 CLB 1308	2014 CLB 1402
Lower Strait of Georgia	Cowichan	0.304	0.232	0.325	0.541	0.490	0.593	0.381 [2]	0.590	0.240	0.315	0.494	0.203	0.367	0.443	0.362	0.307
	Nanaimo [1]	0.209	0.113	0.246	0.190	0.498	0.695										
Fraser Late	Harrison River [3]	0.309	0.198	0.336	0.302	0.352	0.719	0.332	0.294	0.211	0.208	0.245	0.138	0.193	0.256	0.286	0.252
North Puget Sound Natural Springs	Nooksack, Skagit	0.233	0.156	0.241	0.195	0.251	0.273	0.314	0.993	0.563	0.470	0.988	0.568	0.732	0.339	0.273	0.197
		NA	NA	NA	NA	0.251	0.273	0.314	0.993	0.563	0.470	0.988	0.568	0.731	0.340	0.273	0.197
Upper Strait of Georgia	Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish	0.174	0.118	0.314	0.272	0.649	0.971	0.649	0.584	0.146	0.622	0.128	0.122	0.578	0.596	0.649	0.598
Fraser Early (Spring and Summers)	Upper Fraser, Mid Fraser, Thompson	0.125	0.124	0.210	0.145	0.661	0.718	0.654	0.610	0.159	0.128	0.094	0.121	0.222	0.226	0.238	0.213
West Coast Vancouver Island Falls	WCVI (Artlish, Burman, Kauok, Tahsis, Tashish, Marble)	0.365	0.327	0.244	0.342	0.744	0.927	0.728	1.082	0.133	1.490	0.137	0.122	0.491	0.636	0.227	0.639
Puget Sound Natural Summer/Falls	Skagit	0.197	0.119	0.217	0.172	0.436	0.438	0.465	1.092	0.718	0.724	1.097	0.709	0.745	1.421	0.429	0.368
	Stillaguamish	0.355	0.234	0.469	0.375	0. 513	0.567	0.587	1.166	0.821	0.796	1.123	0.791	0.793	1.329	0.561	0.462
	Snohomish	0.185	0.116	0.222	0.176	0.435	0.445	0.457	1.101	0.736	0.721	1.098	0.718	0.744	1.359	0.423	0.367
	Lake Washington	0.332	0.202	0.355	0.275	0.508	0.446	0.497 [4]	0.898	0.735	0.722	0.918	0.690	0.752	0.991	0.419 [4]	0.337
	Green River	0.333	0.202	0.356	0.275	0.508	0.466	0.497 [4]	0.914	0.752	0.721	0.919	0.670	0.756	1.000	0.419 [4]	0.337
North/Central BC	Yakoun, Nass, Skeena, Area 8	0.237	0.254	0.613	0.584	0.689	0.804	0.680	0.626	0.202	0.593	0.224	0.177	0.598	0.536	0.496	0.502

Note: NA means not available because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc.).

[1] Indices for the Nanaimo stock are calculated from CWT recoveries for Cowichan; differences between Nanaimo and Cowichan stock indices are due to differences in terminal harvest.

[2] Although model-based indices were previously calculated separately for Cowichan and Nanaimo Chinook salmon; these did not adequately represent impacts on either LGS stock. This is because the model-based data represent an aggregate of the 2 stocks and methods do not currently exist to correctly disaggregate these data for calculation of the ISBM values. Until such methods are developed, a single index value only will be reported representing the aggregate starting 2007.

[3] Stock or stock group with an agreed CTC escapement goal.

[4] For the Canadian ISBM fisheries, both Lake Washington and Green are assumed to have the same distribution and thus the same index value.

Appendix B4. ISBM Indices for all southern US fisheries, from the Chinook model (1999-2014) used to establish the AI for each year. The stock groups correspond to Annex 4, Chapter 3, Attachment V of the 2009 PST Agreement.

Stock Group	Escapement Indicator Stocks	Model Indices															
		1999 CLB 0107	2000 CLB 0107	2001 CLB 0107	2002 CLB 0206	2003 CLB 0308	2004 CLB 0404	2005 CLB 0506	2006 CLB 0604	2007 CLB 0705	2008 CLB 0807	2009 CLB 0907	2010 CLB 1007	2011 CLB 1106	2012 CLB 1209	2013 CLB 1308	2014 CLB 1402
Washington Coastal Fall Naturals	Hoko	0.39	0.34	0.56	0.48	0.682	0.966	0.444	0.442	0.401	0.305	0.284	0.130	0.419	0.378	0.608	0.395
	Grays Harbor	0.440	0.430	0.450	0.840	0.494	0.573	0.222	0.544	0.504	0.45	0.404	0.382	0.549	0.604	0.547	0.477
	Queets	0.880	0.420	0.440	1.050	1.063	0.932	1.023	1.022	1.014	1.007	0.508	0.285	0.327	0.179	0.532	0.227
	Hoh	1.390	0.730	0.760	1.260	1.208	1.214	1.499	1.493	1.111	1.457	0.981	0.987	0.760	0.443	0.802	1.251
	Quillayute	1.140	0.720	0.750	1.310	1.292	1.139	1.133	0.673	0.883	0.851	0.881	0.963	1.058	1.151	1.442	1.149
Columbia River Falls	Upriver Brights	1.020	1.090	0.990	0.910	1.022	0.906	0.734	0.814	0.726	0.701	0.798	0.801	0.841	0.894	0.971	0.914
	Deschutes	1.020	0.880	0.740	0.550	0.561	0.475	0.483	0.437	0.493	0.428	0.461	1.004	1.044	0.684	0.718	0.696
	Lewis[1]	0.110	0.160	1.700	0.930	0.851	1.008	1.058	1.861	1.466	0.436	0.470	0.505	0.426	0.442	0.538	0.527
Puget Sound Natural Summer/Falls	Skagit	0.170	0.210	0.780	0.270	0.406	0.157	0.195	0.258	0.325	0.321	0.292	0.261	0.789	0.327	1.015	0.718
	Stillaguamish	0.140	0.140	0.400	0.200	0.184	0.224	0.185	0.493	0.152	0.137	0.446	0.117	0.169	1.054	0.213	0.131
	Snohomish	0.040	0.050	0.600	0.150	0.072	0.110	0.891	0.199	0.138	0.165	0.202	0.125	0.211	0.332	0.231	0.192
	Lake Washington	0.500	0.480	0.590	1.250	0.768	0.411	0.373	0.613	0.391	0.392	0.768	0.517	0.387	0.590	0.404	0.466
	Green River	0.500	0.480	0.600	0.350	0.263	0.260	0.202	0.361	0.278	0.380	0.555	0.520	0.236	0.631	0.331	0.251
Fraser Late	Harrison River[1]	0.660	0.390	0.620	0.720	0.981	1.058	0.670	0.787	0.563	0.378	0.410	0.209	0.497	0.448	0.887	0.528
Columbia River Summers	Mid-Columbia Summers[1]	0.110	0.090	0.140	0.820	0.794	0.715	0.545	0.696	0.943	1.254	1.236	1.142	1.398	1.369	1.571	1.463
Far North Migrating OR Coastal Falls	Nehalem[1]	2.670	2.660	2.750	2.610	2.346	2.230	2.090	1.912	2.183	1.968	2.003	0.916	2.146	1.696	1.475	1.436
	Siletz[1]	1.810	1.790	1.870	1.330	1.302	1.288	1.233	1.237	1.399	1.592	1.217	0.698	0.643	0.814	0.679	0.717
	Siuslaw[1]	0.940	0.930	0.950	3.340	2.856	2.816	2.643	1.095	1.241	0.971	1.632	2.028	1.427	1.646	1.443	1.393
North Puget Sound Natural Springs	Nooksack	0.150	0.200	0.010	0.000	0.121	0.974	0.222	0.121	NA	NA	0.107	0.181	0.484	0.171	0.330	0.274
	Skagit	NA	NA	0.070	0.060	0.119	0.663	0.213	0.161	NA	NA	0.143	0.245	0.271	0.147	0.337	0.357

Note: NA means not available because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc.).

[1] Stock or stock group with an agreed CTC escapement goal.

APPENDIX C: PERCENT DISTRIBUTION OF LANDED CATCH AND TOTAL MORTALITY AMONG FISHERIES AND ESCAPEMENT FOR EXPLOITATION RATE INDICATOR STOCKS BY CALENDAR YEAR WITH ANALOGOUS MODEL STOCKS LISTED IN PARENTHESES

Landed catch distribution tables are available from the PSC office upon request.

These data result from cohort analysis of CWT recoveries for the indicator stocks; data within a row for each calendar year sum to 100%. Total mortality includes landed catch and incidental (i.e., release mortality) which occurs in both retention and nonretention fisheries due to fatal contact with gear. Landed catch is from direct observation programs and incidental mortalities are estimated based on sampling data and/or internal algorithms (i.e., size-at-age vulnerability algorithms and gear-specific mortality rates). Data are not reported for a particular calendar year if there are less than 3 age classes present in the calendar year or if there are less than 10 estimated CWTs in the reported catch and escapement. Where relevant, the escapement portion of the distribution includes mortalities resulting from interdam loss. Escapement data is footnoted when it's missing or partially enumerated. Note there are substantive differences in this year's distribution tables as compared those previously reported; differences are due to changes in the 1) CWT database, 2) inclusion of a terminal troll fishery, 3) inclusion of a terminal stray category, 4) inclusion of additional CWT indicator stocks, 5) elimination of incorrectly assigned tag codes, and 6) fishery mappings. Changes to fishery mappings entails grouping stock-specific terminal fishery impacts in marine areas with the nonstock-specific preterminal fishery (e.g., time- and location-based Georgia Strait sport fishery impacts on maturing Big Qualicum River Fall Chinook are reported along with impacts on immature fish in one total under Georgia Strait Sport rather separated under Georgia Strait Sport and Terminal Sport).

LIST OF APPENDIX C TABLES

Appendix C1. Percent distribution of Alaska Spring (Alaska South SE) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	264	3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	2086	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	1128	3,4,5	44.8%	3.3%	10.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.0%	0.0%	0.7%	0.0%	31.1%
1982	3060	3,4,5,6	27.0%	5.2%	5.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	0.0%	0.5%	0.2%	56.7%
1983	6569	3,4,5,6	33.8%	1.2%	8.3%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	0.0%	0.0%	0.3%	51.1%
1984	12158	3,4,5,6	27.3%	2.5%	16.3%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.3%	0.1%	50.5%
1985	19157	3,4,5,6	28.3%	9.9%	13.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.8%	0.4%	45.2%
1986	19753	3,4,5,6	26.5%	11.9%	12.4%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	0.0%	0.0%	0.2%	44.6%
1987	18839	3,4,5,6	33.9%	5.0%	7.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%	0.0%	0.0%	0.3%	45.8%
1988	17231	3,4,5,6	31.5%	4.8%	10.1%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%	0.4%	0.3%	44.7%
1989	14340	3,4,5,6	23.3%	15.1%	9.5%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.2%	4.3%	0.0%	0.8%	41.0%
1990	17331	3,4,5,6	36.7%	6.3%	9.3%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	0.8%	0.5%	34.3%
1991	15957	3,4,5,6	37.2%	6.3%	10.1%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.1%	0.0%	0.0%	0.6%	33.6%
1992	10248	3,4,5,6	18.9%	32.0%	8.8%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%	0.1%	0.0%	1.4%	29.9%
1993	6801	3,4,5,6	21.5%	7.3%	12.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.2%	2.2%	0.0%	2.0%	45.9%
1994	8338	3,4,5,6	14.6%	34.6%	10.3%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	2.7%	0.0%	1.1%	33.1%
1995	6960	3,4,5,6	28.4%	7.8%	12.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.9%	8.9%	0.1%	2.0%	33.0%
1996	6853	3,4,5,6	24.4%	6.0%	15.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.6%	5.0%	0.0%	1.6%	32.3%
1997	6080	3,4,5,6	24.8%	5.5%	14.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.5%	3.8%	0.0%	0.5%	32.8%
1998	4287	3,4,5,6	25.6%	10.3%	14.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.0%	3.5%	1.4%	1.1%	29.8%
1999	6662	3,4,5,6	20.9%	3.2%	17.1%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.1%	3.1%	2.6%	0.9%	40.3%
2000	7208	3,4,5,6	23.6%	4.0%	13.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.2%	2.7%	3.6%	0.4%	43.5%
2001	7294	3,4,5,6	17.5%	2.6%	5.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.5%	1.9%	5.4%	0.2%	58.0%
2002	6391	3,4,5,6	13.1%	2.4%	5.4%	1.1%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%	2.4%	5.9%	0.2%	62.2%
2003	6280	3,4,5,6	17.7%	2.1%	5.7%	0.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.9%	0.0%	4.5%	0.4%	58.6%
2004	9081	3,4,5,6	18.2%	7.0%	4.2%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.5%	0.5%	3.3%	0.5%	56.6%
2005	9186	3,4,5,6	26.5%	7.2%	8.9%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.4%	0.1%	3.6%	0.1%	33.1%
2006	11510	3,4,5,6	35.1%	4.7%	5.1%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.3%	2.2%	2.0%	0.6%	40.1%
2007	11455	3,4,5,6	31.2%	7.1%	5.6%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.5%	1.3%	1.2%	0.8%	42.8%
2008	10494	3,4,5,6	21.2%	4.7%	2.6%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.1%	1.2%	1.7%	0.2%	53.8%
2009	8193	3,4,5,6	17.3%	4.7%	2.5%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.1%	6.1%	1.8%	1.1%	57.7%
2010	6173	3,4,5,6	18.3%	5.6%	7.2%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.8%	1.6%	1.5%	1.0%	55.6%
2011	6413	3,4,5,6	13.2%	9.1%	3.7%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.5%	3.1%	1.6%	0.7%	56.0%
2012	4425	3,4,5,6	25.3%	11.7%	3.8%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.9%	15.1%	0.9%	1.9%	25.3%
2013	6408	3,4,5,6	15.4%	14.9%	2.2%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.5%	13.0%	0.8%	2.9%	38.6%
1979-2013	9463		24.9%	8.1%	8.9%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.8%	2.6%	1.4%	0.8%	43.6%
1979-1984	5729		33.2%	3.0%	10.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.4%	0.0%	0.4%	0.2%	47.4%
1985-1995	14087		27.3%	12.8%	10.4%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.5%	1.7%	0.2%	0.9%	39.2%
1996-1998	5740		24.9%	7.3%	14.8%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.0%	4.1%	0.5%	1.1%	31.6%
1999-2013	7812		21.0%	6.1%	6.2%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.5%	3.6%	2.7%	0.8%	48.1%

Appendix C2. Percent distribution of Atnarko River (North/Central BC) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	5	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	36	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	145	2,3,4	20.7%	3.4%	0.0%	2.1%	0.7%	0.7%	0.0%	0.0%	0.0%	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.2%	0.0%	0.0%	50.3%
1991	772	2,3,4,5	7.5%	0.1%	0.0%	1.7%	1.3%	0.5%	0.0%	0.0%	0.0%	1.0%	0.3%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	23.1%	3.5%	0.0%	60.4%
1992	984	2,3,4,5,6	8.9%	0.0%	0.0%	1.8%	1.8%	0.3%	0.0%	0.0%	0.0%	5.3%	0.0%	1.3%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	21.8%	2.2%	0.0%	56.2%
1993	1357	2,3,4,5,6	10.4%	0.4%	0.6%	4.5%	2.1%	0.4%	0.0%	0.0%	0.0%	1.2%	0.1%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.1%	2.6%	0.3%	61.2%
1994	1701	2,3,4,5,6	7.8%	0.2%	0.2%	1.5%	1.8%	0.0%	0.0%	0.0%	0.0%	2.5%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	0.8%	0.0%	64.5%
1995	2340	2,3,4,5,6	4.6%	0.1%	1.2%	1.1%	2.7%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.1%	3.5%	0.0%	65.4%
1996	2057	2,3,4,5,6	2.6%	0.0%	0.5%	0.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.8%	5.8%	0.0%	72.3%
1997	1170	2,3,4,5,6	4.5%	0.0%	1.5%	0.2%	3.1%	0.0%	0.0%	0.0%	0.0%	0.4%	0.9%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.8%	4.4%	0.0%	67.5%
1998	1061	2,3,4,5,6	7.4%	0.0%	0.4%	0.0%	4.9%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	23.4%	3.4%	0.0%	59.2%
1999	1444	2,3,4,5,6	5.7%	0.0%	2.6%	0.0%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.2%	3.8%	0.0%	72.4%
2000	1045	2,3,4,5,6	6.4%	0.1%	0.0%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.0%	4.1%	0.0%	70.8%
2001	679	2,3,4,5,6	6.8%	0.0%	1.6%	0.0%	2.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	21.8%	4.1%	0.0%	62.2%
2002	743	2,3,4,5,6	5.0%	0.1%	0.5%	9.0%	4.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	23.0%	3.9%	0.0%	53.3%
2003	636	2,3,4,5,6	4.9%	0.2%	0.0%	2.8%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	2.4%	1.4%	41.7%
2004	684	2,3,4,5,6	10.4%	0.0%	0.0%	3.5%	5.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29.1%	5.0%	0.0%	44.7%
2005	933	3,4,5,6	13.1%	0.1%	0.8%	4.5%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.8%	4.1%	0.1%	40.9%
2006	1423	4,5,6	8.6%	0.0%	1.1%	2.2%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.2%	2.5%	0.0%	64.9%
2007	407	2,5,6	11.8%	0.0%	2.2%	1.2%	3.7%	0.5%	0.0%	0.0%	0.2%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.6%	5.4%	0.0%	50.4%
2008	153	2,3,6	7.2%	0.0%	0.7%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.7%	0.0%	0.0%	74.5%
2009	684	2,3,4	9.5%	0.0%	0.0%	3.2%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32.2%	4.4%	0.0%	45.6%
2010	822	2,3,4,5	10.9%	0.1%	0.6%	3.0%	1.7%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	24.2%	1.9%	0.0%	50.7%
2011	574	2,3,4,5,6	13.2%	0.0%	0.5%	8.0%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.7%	3.5%	0.0%	36.2%
2012	835	2,3,4,5,6	10.8%	0.5%	0.4%	1.9%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.7%	0.0%	0.4%	51.5%
2013	2937	3,4,5,6	2.6%	0.2%	0.2%	1.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.5%	5.4%	0.1%	69.5%
1979-2013	1066		8.4%	0.2%	0.6%	2.3%	2.8%	0.1%	0.0%	0.0%	0.0%	0.7%	0.1%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	21.3%	3.2%	0.1%	57.8%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	1216		10.0%	0.7%	0.3%	2.1%	1.7%	0.3%	0.0%	0.0%	0.0%	2.5%	0.1%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.6%	2.1%	0.0%	59.7%
1996-1998	1429		4.9%	0.0%	0.8%	0.1%	2.9%	0.0%	0.0%	0.0%	0.1%	0.1%	0.3%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.0%	4.5%	0.0%	66.3%
1999-2013	933		8.5%	0.1%	0.7%	2.8%	3.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.5%	3.4%	0.1%	55.3%

Appendix C3. Percent distribution of Big Qualicum River Fall (Lower Strait of Georgia Hatchery and Natural) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	5090	2,3,4,5	4.4%	0.7%	0.4%	1.9%	0.0%	2.5%	0.1%	20.9%	18.2%	10.5%	11.9%	0.1%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	27.9%
1980	2925	2,3,4,5	1.6%	1.8%	0.4%	4.6%	0.0%	4.6%	0.0%	15.2%	24.9%	7.1%	12.8%	0.3%	0.1%	0.0%	0.0%	0.0%	0.3%	0.2%	0.0%	0.1%	0.0%	0.0%	25.9%
1981	1539	2,3,4,5	2.3%	0.1%	0.5%	1.4%	0.0%	1.6%	0.3%	17.5%	37.9%	12.3%	14.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.6%	0.0%	0.0%	0.0%	0.0%	11.2%
1982	791	2,3,4,5	5.6%	0.8%	1.3%	4.7%	0.0%	4.6%	0.0%	12.5%	13.1%	6.1%	20.4%	0.3%	0.0%	0.0%	0.0%	0.0%	1.1%	0.8%	0.0%	0.0%	0.0%	0.1%	28.8%
1983	696	2,3,4,5	5.5%	0.3%	0.9%	5.0%	0.0%	1.1%	0.0%	14.5%	24.1%	7.2%	18.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	21.4%
1984	556	2,3,4,5	2.2%	0.4%	0.0%	1.4%	0.0%	1.6%	0.0%	9.0%	48.9%	7.0%	9.9%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.5%
1985	821	2,3,4,5	6.7%	1.3%	0.0%	2.1%	0.0%	1.6%	0.0%	2.3%	34.5%	4.3%	18.0%	0.6%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.6%	0.0%	0.2%	24.7%
1986	1346	2,3,4,5	3.0%	0.4%	0.0%	0.7%	0.0%	1.4%	0.0%	10.0%	36.7%	13.6%	14.7%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	18.0%
1987	797	2,3,4,5	10.0%	0.0%	0.9%	4.3%	0.0%	4.6%	0.0%	2.1%	32.4%	2.8%	7.5%	0.0%	0.8%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	33.9%
1988	551	2,3,4,5	2.4%	1.8%	0.0%	2.2%	0.0%	2.7%	1.6%	1.6%	44.8%	1.1%	12.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.4%	27.9%
1989	631	2,3,4,5	3.6%	4.9%	0.8%	3.5%	0.0%	4.9%	0.0%	1.9%	42.3%	0.5%	7.8%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	1.6%	26.8%
1990	781	2,3,4,5	4.5%	4.4%	0.0%	6.5%	1.7%	2.9%	0.0%	3.6%	24.8%	1.5%	15.9%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.4%	0.0%	0.5%	30.6%
1991	799	2,3,4,5	2.8%	3.4%	0.0%	2.3%	0.0%	1.9%	0.0%	5.9%	44.8%	1.3%	7.1%	0.6%	0.5%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	1.4%	27.7%
1992	770	2,3,4,5	3.1%	5.2%	2.3%	5.3%	0.0%	3.1%	0.0%	9.6%	40.4%	5.5%	4.3%	1.2%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	1.0%	18.6%
1993	523	2,3,4,5	1.3%	2.3%	0.0%	1.7%	0.0%	1.7%	0.0%	4.2%	50.5%	4.2%	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.2%	24.7%
1994	279	2,3,4,5	5.0%	0.0%	0.0%	1.4%	1.8%	2.9%	0.0%	5.0%	32.6%	1.4%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	1.1%	0.0%	0.4%	40.9%
1995	248	2,3,4,5	6.9%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	31.0%	0.0%	10.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	49.2%
1996	375	2,3,4,5	3.2%	0.0%	0.0%	0.5%	0.0%	0.3%	0.0%	0.0%	57.1%	0.0%	1.1%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.3%	35.7%
1997	234	2,3,4,5	4.3%	0.0%	0.0%	3.4%	0.0%	0.0%	4.3%	0.9%	32.5%	3.4%	4.7%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	44.4%
1998	209	2,3,4,5	7.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.7%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	59.3%
1999	298	2,3,4,5	6.0%	2.0%	0.0%	3.7%	2.3%	0.0%	3.7%	0.0%	17.1%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	1.7%	58.7%
2000	249	2,3,4,5	16.5%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	0.0%	60.6%
2001	534	2,3,4,5	5.2%	10.5%	0.0%	0.0%	9.2%	0.6%	0.0%	0.0%	12.5%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	1.7%	57.5%
2002	342	2,3,4,5	10.5%	0.0%	3.2%	3.5%	0.0%	1.8%	3.2%	0.0%	12.9%	0.0%	5.0%	3.2%	0.0%	0.9%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	2.3%	51.5%
2003	262	2,3,4,5	8.4%	0.4%	1.9%	0.0%	0.0%	3.4%	0.0%	0.0%	18.3%	0.0%	0.0%	9.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	55.3%
2004	395	2,3,4,5	8.9%	0.0%	0.3%	5.6%	0.0%	1.5%	0.0%	0.0%	12.4%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	2.0%	67.3%
2005	609	2,3,4,5	9.5%	0.3%	0.0%	2.0%	0.0%	5.3%	2.8%	0.0%	22.3%	0.0%	1.0%	2.6%	0.5%	0.7%	0.0%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	1.1%	48.4%
2006	624	2,3,4,5	5.3%	3.8%	1.0%	1.6%	0.0%	0.6%	0.0%	0.0%	9.6%	0.0%	0.0%	2.9%	0.0%	0.5%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.5%	74.0%
2007	624	2,3,4,5	12.3%	0.6%	0.3%	5.3%	3.2%	0.6%	2.2%	0.0%	15.9%	0.0%	1.0%	1.3%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.5%	55.3%
2008	439	2,3,4,5	5.2%	0.9%	0.2%	1.8%	0.0%	0.9%	7.1%	0.0%	15.3%	0.0%	0.5%	4.1%	0.0%	0.0%	0.0%	0.0%	2.1%	4.8%	0.0%	0.0%	0.0%	0.2%	56.9%
2009	558	2,3,4,5	4.7%	5.6%	0.0%	2.0%	0.0%	1.4%	4.8%	0.0%	13.8%	0.0%	0.0%	1.6%	0.5%	0.0%	0.0%	0.0%	1.1%	0.7%	0.0%	0.0%	0.0%	1.6%	62.2%
2010	477	2,3,4,5	6.3%	0.2%	1.5%	1.7%	0.0%	1.0%	3.8%	0.0%	20.3%	0.0%	0.0%	1.5%	1.9%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.8%	59.1%
2011	528	2,3,4,5	8.0%	1.7%	1.3%	0.0%	1.3%	1.1%	1.3%	0.0%	12.3%	0.0%	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	2.5%	65.0%
2012	554	2,3,4,5	7.6%	1.8%	0.0%	3.2%	1.4%	2.9%	0.0%	0.0%	27.3%	0.0%	0.0%	4.2%	0.5%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.7%	49.1%
2013	950	2,3,4,5	1.8%	1.6%	0.0%	1.3%	0.5%	0.4%	1.9%	0.0%	28.2%	0.0%	0.0%	1.8%	0.2%	0.0%	0.0%	0.0%	1.5%	2.8%	0.0%	0.0%	0.0%	0.2%	57.8%
1979-2013	783		5.8%	1.7%	0.5%	2.5%	0.6%	1.9%	1.1%	3.9%	27.3%	2.7%	6.1%	1.4%	0.2%	0.1%	0.0%	0.0%	1.0%	0.5%	0.0%	0.1%	0.0%	0.8%	42.1%
1979-1984	1933		3.6%	0.7%	0.6%	3.2%	0.0%	2.7%	0.1%	14.9%	27.9%	8.4%	14.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.4%	0.0%	0.0%	0.0%	0.0%	22.3%
1985-1995	686		4.5%	2.2%	0.4%	2.9%	0.3%	2.5%	0.1%	4.2%	37.7%	3.3%	10.1%	0.3%	0.2%	0.0%	0.0%	0.0%	0.8%	0.4%	0.0%	0.2%	0.0%	0.6%	29.4%
1996-1998	273		4.9%	0.2%	0.0%	1.3%	0.0%	0.1%	1.4%	0.3%	39.4%	1.1%	1.9%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	1.0%	46.5%
1999-2013	496		7.7%	2.1%	0.6%	2.1%	1.2%	1.4%	2.1%	0.0%	17.0%	0.2%	0.5%	2.5%	0.3%	0.1%	0.0%	0.0%	1.6%	0.6%	0.0%	0.0%	0.0%	1.2%	58.6%

Appendix C4. Percent distribution of Chilliwack River Fall (Fraser Late) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3148	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	4649	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	2376	2,3,4	1.0%	0.1%	0.0%	0.3%	0.0%	32.4%	0.0%	6.0%	21.3%	2.1%	4.3%	0.0%	3.6%	0.4%	0.1%	0.0%	3.7%	4.2%	0.0%	2.5%	1.0%	4.7%	12.3%
1986	2177	2,3,4,5	0.0%	0.0%	0.0%	0.8%	0.0%	20.0%	0.0%	9.3%	18.2%	2.6%	6.2%	0.2%	2.7%	0.2%	0.0%	0.0%	3.4%	7.6%	0.0%	7.9%	1.2%	1.1%	18.5%
1987	2707	2,3,4,5	0.0%	0.0%	0.0%	0.8%	0.0%	18.7%	0.5%	15.7%	18.7%	0.4%	1.2%	0.0%	3.8%	0.1%	0.2%	0.0%	3.2%	2.7%	0.0%	1.5%	1.2%	1.9%	29.3%
1988	2444	2,3,4,5	0.4%	0.1%	0.0%	0.2%	0.0%	17.7%	0.0%	6.3%	12.9%	0.0%	0.7%	0.0%	4.1%	0.1%	0.1%	0.0%	3.9%	2.7%	0.0%	1.5%	2.5%	2.3%	44.6%
1989	1313	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	22.9%	0.0%	1.7%	20.5%	0.0%	2.4%	0.0%	4.3%	0.2%	1.3%	0.0%	3.4%	1.3%	0.0%	1.1%	0.6%	2.1%	38.1%
1990	1857	2,3,4,5	0.9%	0.0%	0.0%	0.0%	0.0%	10.1%	1.9%	3.3%	16.3%	0.1%	3.0%	0.0%	5.9%	0.5%	0.0%	0.0%	14.9%	7.2%	0.0%	1.8%	1.0%	3.9%	29.2%
1991	3164	2,3,4,5	0.2%	0.1%	0.0%	0.4%	0.0%	19.0%	0.6%	8.9%	15.8%	0.2%	2.6%	0.0%	12.7%	0.2%	0.4%	0.0%	5.7%	5.1%	0.0%	2.5%	1.5%	0.9%	23.1%
1992	4231	2,3,4,5	0.3%	0.0%	0.0%	0.1%	0.0%	19.7%	0.1%	6.5%	10.8%	0.7%	1.1%	0.0%	8.6%	0.1%	0.0%	0.0%	0.9%	3.5%	0.0%	0.5%	1.1%	1.5%	44.5%
1993	2028	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	13.1%	0.3%	8.0%	7.2%	0.0%	0.1%	0.0%	7.1%	0.0%	0.2%	0.0%	0.0%	1.1%	0.0%	1.3%	1.7%	2.3%	57.3%
1994	739	2,3,4,5	0.4%	0.3%	0.0%	0.8%	0.0%	8.3%	2.6%	3.2%	7.7%	0.4%	5.7%	0.0%	1.5%	0.0%	0.0%	0.0%	5.1%	6.0%	0.0%	1.6%	5.8%	0.0%	50.6%
1995	2223	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	12.7%	0.4%	0.0%	8.1%	0.0%	1.2%	0.0%	1.1%	0.0%	0.0%	0.0%	1.4%	2.5%	0.0%	1.9%	0.9%	0.2%	69.7%
1996	1792	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	2.0%	0.4%	0.0%	22.7%	0.0%	1.3%	0.0%	2.8%	0.0%	1.1%	0.0%	1.1%	4.4%	0.0%	0.9%	2.5%	0.1%	60.5%
1997	2413	2,3,4,5	0.6%	0.0%	0.0%	0.1%	0.0%	12.7%	1.9%	0.0%	15.2%	0.3%	1.2%	0.0%	3.3%	0.1%	1.2%	0.1%	2.5%	3.9%	0.0%	2.7%	2.5%	0.0%	51.6%
1998	3196	2,3,4,5	0.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.3%	0.0%	4.0%	0.0%	0.0%	0.3%	2.1%	0.0%	1.1%	0.0%	0.3%	0.9%	0.0%	0.2%	1.3%	0.5%	88.4%
1999	3392	2,3,4,5	0.1%	0.0%	0.0%	0.2%	0.0%	0.3%	1.9%	0.0%	11.1%	0.0%	0.0%	0.0%	12.9%	0.5%	0.5%	0.0%	0.7%	0.5%	0.0%	0.4%	1.6%	0.3%	68.8%
2000	2717	2,3,4,5	0.1%	0.0%	0.0%	0.0%	0.0%	5.9%	2.7%	0.0%	5.2%	0.0%	0.0%	0.4%	4.4%	0.1%	0.0%	0.0%	0.8%	1.0%	0.0%	0.0%	2.5%	0.0%	77.0%
2001	4265	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	1.6%	0.0%	9.2%	0.0%	0.0%	0.2%	5.6%	0.4%	0.6%	0.0%	1.1%	4.8%	0.0%	0.2%	12.9%	0.0%	59.8%
2002	5147	2,3,4,5	0.3%	0.0%	0.0%	0.1%	0.0%	8.2%	4.9%	0.0%	4.3%	0.0%	0.1%	0.2%	7.4%	1.2%	0.6%	0.0%	0.3%	2.0%	0.0%	0.6%	5.3%	0.0%	64.5%
2003	4956	2,3,4,5	0.1%	0.0%	0.0%	0.0%	0.0%	5.3%	2.6%	0.0%	3.1%	0.0%	0.0%	0.2%	7.6%	0.4%	0.5%	0.0%	0.3%	1.2%	0.0%	0.3%	6.1%	5.6%	66.6%
2004	6792	2,3,4,5	0.1%	0.0%	0.0%	0.2%	0.0%	5.3%	2.4%	0.0%	0.8%	0.0%	0.0%	0.0%	6.7%	0.2%	0.1%	0.0%	0.1%	1.1%	0.0%	0.7%	4.8%	0.4%	77.2%
2005	4057	2,3,4,5	0.0%	0.0%	0.0%	0.1%	0.0%	7.5%	4.2%	0.0%	3.7%	0.0%	0.1%	0.2%	3.7%	0.9%	0.0%	0.0%	0.9%	1.0%	0.0%	3.5%	6.0%	0.0%	68.2%
2006	3037	2,3,4,5	0.0%	0.0%	0.0%	0.5%	0.0%	7.3%	2.1%	0.0%	2.3%	0.0%	0.0%	0.0%	2.7%	0.3%	0.1%	0.0%	0.3%	1.7%	0.0%	0.6%	4.4%	0.9%	76.8%
2007	1826	2,3,4,5	0.0%	0.0%	0.0%	0.3%	0.0%	8.3%	3.2%	0.0%	2.3%	0.0%	0.0%	0.0%	2.7%	0.2%	0.0%	0.0%	0.7%	1.8%	0.0%	3.2%	6.7%	0.2%	70.4%
2008	2867	2,3,4,5	0.3%	0.0%	0.0%	0.0%	0.0%	10.9%	4.8%	0.0%	2.1%	0.0%	0.1%	0.0%	4.7%	1.6%	0.0%	0.1%	0.9%	2.0%	0.0%	1.0%	9.7%	0.6%	61.2%
2009	3048	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	3.2%	0.0%	4.6%	0.0%	0.0%	0.0%	0.6%	0.3%	0.0%	0.0%	1.2%	3.0%	0.0%	3.7%	14.3%	1.2%	66.0%
2010	5386	2,3,4,5	0.3%	0.0%	0.0%	0.1%	0.0%	3.1%	3.1%	0.0%	7.6%	0.0%	0.0%	0.0%	3.7%	1.1%	0.4%	0.0%	1.1%	1.7%	0.0%	1.9%	7.0%	0.7%	68.2%
2011	5001	2,3,4,5	0.0%	0.0%	0.0%	0.1%	0.0%	4.4%	3.5%	0.0%	4.2%	0.0%	0.0%	0.2%	1.5%	0.7%	0.0%	0.0%	1.4%	3.3%	0.0%	2.0%	3.6%	0.0%	75.3%
2012	5600	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	1.6%	0.0%	12.6%	0.0%	0.0%	0.0%	5.1%	0.7%	0.1%	0.1%	0.7%	7.8%	0.0%	0.5%	6.5%	0.0%	63.3%
2013	13451	2,3,4,5	0.0%	0.0%	0.0%	0.1%	0.0%	2.3%	2.2%	0.0%	8.6%	0.0%	0.0%	0.1%	8.8%	1.0%	0.1%	0.0%	0.8%	2.9%	0.0%	2.9%	5.7%	0.3%	64.3%
1979-2013	3593		0.2%	0.0%	0.0%	0.2%	0.0%	9.8%	1.8%	2.4%	9.7%	0.2%	1.1%	0.1%	4.9%	0.4%	0.3%	0.0%	2.1%	3.1%	0.0%	1.7%	4.2%	1.1%	56.7%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	2296		0.3%	0.1%	0.0%	0.3%	0.0%	17.7%	0.6%	6.3%	14.3%	0.6%	2.6%	0.0%	5.0%	0.2%	0.2%	0.0%	4.2%	4.0%	0.0%	2.2%	1.7%	1.9%	37.9%
1996-1998	2467		0.4%	0.0%	0.0%	0.0%	0.0%	5.0%	0.9%	0.0%	14.0%	0.1%	0.8%	0.1%	2.8%	0.0%	1.1%	0.0%	1.3%	3.1%	0.0%	1.2%	2.1%	0.2%	66.8%
1999-2013	4769		0.1%	0.0%	0.0%	0.1%	0.0%	5.0%	2.9%	0.0%	5.5%	0.0%	0.0%	0.1%	5.2%	0.6%	0.2%	0.0%	0.7%	2.4%	0.0%	1.4%	6.5%	0.7%	68.5%

Appendix C5. Percent distribution of Chilkat River total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1999	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2000	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2001	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	63	3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	309	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2004	520	3,4,5	5.8%	8.8%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	78.8%
2005	561	3,4,5,6	5.2%	4.8%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	86.1%
2006	317	3,4,5,6	3.5%	1.3%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	91.2%
2007	296	3,4,5,6	6.4%	9.8%	9.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	74.3%
2008	435	3,4,5,6	3.7%	6.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	89.4%
2009	593	3,4,5,6	3.5%	1.9%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	90.7%
2010	303	3,4,5,6	4.6%	10.6%	8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	75.9%
2011	356	3,4,5,6	7.3%	7.0%	6.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	79.2%
2012	231	3,4,5,6	7.8%	10.0%	8.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	72.3%
2013	262	3,4,5,6	1.9%	16.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	81.3%
1979-2013	387		5.0%	7.7%	5.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	81.9%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1996-1998	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1999-2013	387		5.0%	7.7%	5.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	81.9%

Appendix C6. Percent distribution of Cowichan River Fall (Lower Strait of Georgia Natural) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM														
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal			
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	126	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	311	3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	628	2,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	2085	2,3,5	0.0%	0.0%	0.0%	0.1%	0.0%	2.2%	0.0%	12.9%	56.6%	1.1%	9.8%	0.0%	0.6%	0.2%	0.0%	0.0%	3.5%	1.9%	0.0%	0.7%	0.0%	0.3%	9.9%
1991	4254	2,3,4	0.1%	0.0%	0.0%	0.2%	0.0%	3.8%	0.7%	9.0%	61.5%	0.4%	4.1%	0.2%	0.7%	0.0%	0.0%	0.0%	3.2%	0.9%	0.0%	0.4%	0.0%	0.4%	14.5%
1992	4616	2,3,4,5	0.0%	0.1%	0.0%	0.4%	0.0%	8.6%	1.1%	17.7%	52.9%	1.0%	4.0%	0.1%	0.2%	0.0%	0.0%	0.0%	1.3%	1.3%	0.0%	0.9%	0.0%	0.4%	10.1%
1993	4145	2,3,4,5	0.3%	0.0%	0.0%	0.1%	0.0%	7.8%	1.4%	11.9%	54.5%	0.5%	3.3%	0.0%	0.6%	0.0%	0.0%	0.0%	0.9%	0.5%	0.0%	1.0%	0.0%	0.2%	17.1%
1994	1346	2,3,4,5	0.5%	0.0%	0.0%	0.4%	0.0%	3.9%	0.7%	4.8%	43.0%	0.1%	7.5%	0.0%	0.3%	0.0%	0.0%	0.0%	4.1%	0.7%	0.0%	4.1%	0.2%	0.6%	29.0%
1995	1702	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	5.3%	0.6%	0.0%	41.0%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	1.0%	0.0%	2.1%	0.0%	1.4%	43.1%
1996	1369	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	0.3%	0.9%	0.0%	52.2%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	4.7%	0.0%	4.5%	0.0%	1.3%	34.0%
1997	940	2,3,4,5	1.0%	0.0%	0.0%	0.0%	0.0%	3.2%	0.9%	0.0%	28.6%	0.0%	1.4%	0.4%	0.0%	0.0%	0.0%	0.0%	3.5%	3.4%	0.0%	0.3%	0.0%	0.7%	56.6%
1998	493	2,3,4,5	3.9%	0.0%	0.0%	0.0%	0.0%	0.4%	1.6%	0.0%	34.3%	0.0%	0.4%	0.8%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	0.0%	8.3%	0.0%	3.7%	43.2%
1999	595	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	51.3%	0.0%	0.0%	0.5%	0.8%	0.5%	0.0%	0.0%	7.4%	0.0%	0.0%	1.2%	0.0%	4.2%	30.8%
2000	806	2,3,4,5	0.9%	0.4%	0.0%	0.0%	0.0%	1.2%	4.7%	0.0%	25.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	2.2%	0.0%	0.5%	0.0%	1.2%	58.1%
2001	801	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	9.2%	0.0%	0.0%	33.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	12.5%	2.7%	0.0%	6.2%	0.0%	4.4%	31.6%
2002	721	2,3,4,5	1.5%	0.0%	0.0%	0.0%	0.0%	3.5%	3.2%	0.0%	36.2%	0.0%	0.0%	1.0%	0.3%	0.0%	0.3%	0.0%	4.4%	6.2%	0.0%	7.8%	2.4%	2.8%	30.5%
2003	399	2,3,4,5	2.0%	0.3%	0.0%	2.5%	0.0%	9.0%	3.0%	0.0%	39.3%	0.3%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	7.8%	3.8%	0.0%	4.5%	1.5%	2.3%	23.3%
2004	394	2,3,4,5	0.0%	0.3%	0.0%	0.8%	0.0%	15.2%	11.4%	0.0%	27.7%	0.0%	0.0%	2.0%	2.5%	0.0%	0.0%	0.0%	6.9%	2.0%	0.0%	1.5%	0.0%	8.6%	21.1%
2005	385	2,3,4,5	0.0%	0.3%	0.0%	1.3%	4.7%	22.1%	2.1%	0.0%	9.1%	0.0%	1.3%	0.0%	0.3%	0.8%	0.0%	0.0%	17.1%	1.6%	0.0%	6.8%	0.0%	9.6%	23.1%
2006	291	3,4,5	1.0%	0.0%	0.0%	0.7%	0.0%	20.6%	11.0%	0.0%	15.1%	0.0%	0.0%	0.0%	2.7%	0.7%	0.0%	0.0%	4.8%	5.2%	0.0%	6.2%	0.0%	4.8%	27.1%
2007	261	2,4,5	0.0%	0.0%	0.8%	0.0%	0.0%	8.4%	2.3%	0.0%	17.6%	0.0%	1.5%	0.0%	0.4%	0.8%	0.0%	0.0%	9.6%	0.0%	0.0%	5.7%	0.0%	2.3%	50.6%
2008	292	2,3,5	0.0%	0.0%	0.3%	0.0%	0.0%	11.3%	11.6%	0.0%	33.9%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	5.1%	0.7%	0.0%	5.5%	0.0%	4.1%	26.4%
2009	679	2,3,4	0.0%	0.0%	0.4%	0.0%	0.0%	5.2%	7.2%	0.0%	44.5%	0.0%	0.0%	0.1%	0.6%	0.0%	0.0%	0.0%	6.3%	5.0%	0.0%	4.9%	0.0%	10.0%	15.8%
2010	1310	2,3,4,5	0.2%	0.1%	0.0%	0.0%	0.0%	7.9%	2.4%	0.0%	41.5%	0.0%	0.0%	0.3%	1.1%	0.0%	0.0%	0.0%	7.3%	3.8%	0.0%	1.4%	0.0%	2.4%	31.6%
2011	1962	2,3,4,5	0.7%	0.2%	0.0%	0.2%	0.2%	5.2%	5.3%	0.0%	20.5%	0.0%	0.0%	1.2%	1.3%	0.3%	0.0%	0.0%	4.0%	5.7%	0.0%	2.8%	0.0%	3.1%	49.3%
2012	3498	2,3,4,5	0.6%	0.1%	0.1%	0.5%	0.0%	3.2%	3.1%	0.0%	23.5%	0.0%	0.1%	0.3%	2.4%	0.3%	0.0%	0.0%	3.9%	8.5%	0.0%	16.0%	0.0%	1.8%	35.5%
2013	3209	2,3,4,5	0.3%	0.2%	0.0%	0.0%	0.1%	2.4%	3.9%	0.0%	31.8%	0.0%	0.0%	0.5%	4.0%	0.3%	0.0%	0.0%	2.5%	2.5%	0.0%	2.3%	0.0%	4.0%	45.2%
1979-2013	1523		0.6%	0.1%	0.1%	0.3%	0.2%	6.7%	3.4%	2.3%	36.5%	0.1%	1.5%	0.3%	0.9%	0.2%	0.0%	0.0%	5.3%	2.7%	0.0%	4.0%	0.2%	3.1%	31.6%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	3025		0.2%	0.0%	0.0%	0.2%	0.0%	5.3%	0.8%	9.4%	51.6%	0.5%	5.3%	0.0%	0.4%	0.0%	0.0%	0.0%	2.6%	1.0%	0.0%	1.5%	0.0%	0.5%	20.6%
1996-1998	934		1.7%	0.0%	0.0%	0.0%	0.0%	1.3%	1.1%	0.0%	38.4%	0.0%	0.9%	0.4%	0.0%	0.0%	0.0%	0.0%	2.6%	2.7%	0.0%	4.4%	0.0%	1.9%	44.6%
1999-2013	1040		0.5%	0.1%	0.1%	0.4%	0.3%	8.3%	5.0%	0.0%	30.1%	0.0%	0.2%	0.4%	1.2%	0.2%	0.0%	0.0%	7.0%	3.3%	0.0%	4.9%	0.3%	4.4%	33.3%

Appendix C7. Percent distribution of Cowlitz Fall Tule (Fall Cowlitz Hatchery) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	26	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	280	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	414	2,3,4	5.8%	0.0%	0.0%	2.2%	0.0%	17.1%	0.0%	0.0%	6.3%	0.0%	3.4%	0.0%	8.7%	13.0%	4.1%	0.0%	0.2%	0.0%	0.0%	14.0%	0.0%	4.3%	20.8%
1982	498	2,3,4,5	4.2%	0.0%	0.4%	1.4%	0.0%	16.3%	1.0%	0.0%	0.0%	0.4%	3.4%	0.0%	15.7%	10.8%	4.6%	0.0%	2.8%	0.0%	0.0%	7.6%	1.6%	2.2%	27.5%
1983	615	2,3,4,5	4.1%	0.0%	0.0%	7.2%	0.0%	18.9%	0.0%	0.0%	0.3%	3.9%	1.0%	0.0%	7.3%	17.6%	0.5%	0.3%	0.5%	0.0%	0.0%	4.4%	1.0%	5.0%	28.1%
1984	788	2,3,4,5	5.1%	0.0%	0.0%	7.5%	0.0%	25.3%	0.0%	0.0%	0.1%	2.3%	1.9%	0.6%	1.6%	0.1%	3.2%	0.0%	0.1%	0.0%	0.0%	14.8%	3.3%	0.6%	33.4%
1985	743	2,3,4,5	3.9%	0.8%	0.0%	4.4%	0.0%	12.7%	0.0%	0.0%	0.7%	0.0%	5.5%	0.0%	3.4%	4.7%	1.7%	0.9%	0.5%	0.7%	0.0%	6.9%	7.7%	0.8%	44.7%
1986	1550	2,3,4,5	0.5%	0.1%	0.0%	0.2%	0.0%	13.9%	0.0%	0.0%	0.3%	0.7%	1.8%	0.0%	6.5%	4.9%	7.8%	0.5%	0.0%	0.5%	0.0%	31.2%	6.3%	2.6%	21.9%
1987	1476	2,3,4,5	5.6%	0.6%	0.0%	4.6%	0.0%	11.3%	0.9%	0.0%	0.0%	1.4%	0.7%	0.0%	4.7%	6.6%	7.4%	0.5%	0.1%	0.5%	0.0%	21.5%	7.7%	0.7%	25.1%
1988	1557	2,3,4,5	1.8%	0.6%	0.0%	2.1%	0.0%	17.9%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	9.2%	1.6%	6.6%	0.4%	0.0%	0.0%	0.0%	23.1%	10.2%	1.1%	24.7%
1989	607	2,3,4,5	3.8%	0.0%	0.7%	4.8%	0.0%	7.2%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	8.7%	3.1%	10.0%	0.0%	0.0%	0.3%	0.0%	7.1%	7.1%	1.8%	44.0%
1990	293	2,3,4,5	4.4%	0.0%	0.0%	2.4%	0.0%	15.7%	0.0%	0.0%	0.0%	3.1%	3.4%	0.0%	7.5%	7.8%	2.0%	0.0%	0.0%	4.1%	0.0%	0.0%	1.0%	6.8%	41.6%
1991	149	2,3,4,5	10.7%	8.1%	0.0%	4.0%	0.0%	6.0%	3.4%	0.0%	0.0%	1.3%	0.0%	0.0%	2.7%	3.4%	8.1%	0.0%	0.0%	0.0%	0.0%	10.1%	4.7%	0.7%	36.9%
1992	202	2,3,4,5	2.5%	0.0%	0.0%	0.0%	0.0%	20.3%	0.0%	0.0%	2.0%	2.5%	0.0%	0.0%	7.9%	5.4%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	4.5%	50.0%
1993	362	2,3,4,5	3.9%	0.0%	0.0%	3.0%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	14.4%	7.5%	4.7%	0.3%	0.0%	0.0%	0.0%	3.3%	15.2%	2.8%	36.5%
1994	215	2,3,4,5	5.1%	0.0%	0.0%	1.9%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.4%	80.5%
1995	174	2,3,4,5	1.1%	0.0%	0.0%	2.9%	0.0%	2.9%	2.3%	0.0%	0.0%	0.0%	1.1%	0.0%	2.9%	0.0%	1.7%	0.0%	1.1%	0.0%	0.0%	0.0%	1.7%	1.7%	80.5%
1996	277	2,3,4,5	4.7%	0.0%	0.0%	0.4%	0.0%	0.7%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	0.7%	0.0%	5.4%	0.0%	0.0%	0.0%	0.0%	1.1%	3.6%	0.0%	80.9%
1997	171	2,3,4,5	5.8%	0.0%	10.5%	2.3%	0.0%	5.8%	0.0%	0.0%	3.5%	0.0%	0.0%	0.0%	1.2%	0.0%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	65.5%
1998	78	2,3,4,5	3.8%	0.0%	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	2.6%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.7%	71.8%
1999	150	2,3,4,5	6.7%	0.0%	4.0%	0.0%	6.7%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	2.7%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	14.7%	0.7%	51.3%
2000	108	2,3,4,5	3.7%	0.0%	0.0%	0.0%	0.0%	8.3%	13.9%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	1.9%	13.9%	0.0%	0.0%	0.0%	0.0%	5.6%	4.6%	0.0%	46.3%
2001	478	2,3,4,5	0.8%	0.0%	0.0%	0.0%	0.0%	1.3%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	9.6%	8.6%	0.4%	0.0%	0.0%	0.0%	1.7%	2.5%	2.3%	65.5%
2002	573	2,3,4,5	7.2%	0.0%	0.0%	1.0%	0.0%	6.6%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	19.0%	20.1%	8.7%	1.6%	0.0%	0.0%	0.0%	3.3%	3.7%	1.9%	23.7%
2003	543	2,3,4,5	5.3%	0.0%	0.0%	1.3%	0.0%	9.6%	2.2%	0.0%	1.7%	0.0%	0.0%	0.0%	9.6%	6.8%	9.2%	0.0%	0.0%	0.0%	0.0%	8.7%	5.0%	3.7%	37.0%
2004	215	2,3,4,5	4.7%	0.0%	0.0%	0.9%	0.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.2%	9.8%	9.3%	0.0%	0.0%	1.9%	0.0%	8.8%	2.3%	6.5%	39.5%
2005	235	2,3,4,5	2.6%	8.1%	0.0%	2.6%	0.0%	4.3%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	5.1%	3.4%	0.0%	0.0%	0.0%	0.0%	3.4%	3.8%	1.3%	57.4%
2006	142	2,3,4,5	5.6%	0.0%	0.0%	2.8%	0.0%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	2.1%	1.4%	0.0%	0.0%	0.0%	0.0%	2.1%	12.0%	0.0%	62.7%
2007	146	2,3,4,5	3.4%	2.7%	0.0%	5.5%	0.0%	11.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	14.4%	2.7%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	55.5%
2008	203	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	5.9%	0.0%	0.0%	0.0%	2.5%	0.0%	3.0%	11.3%	1.5%	63.5%
2009	473	2,3,4,5	2.5%	0.0%	2.1%	0.0%	1.1%	1.5%	1.7%	0.0%	4.7%	0.0%	0.0%	0.0%	6.1%	3.8%	0.0%	0.0%	0.0%	2.5%	0.0%	1.5%	7.6%	3.8%	61.1%
2010	633	2,3,4,5	3.5%	0.5%	0.0%	1.1%	0.3%	3.2%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	10.3%	1.7%	0.5%	0.0%	0.0%	0.0%	1.7%	1.3%	3.0%	61.6%
2011	1376	2,3,4,5	1.2%	0.1%	0.1%	0.3%	0.4%	1.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.3%	1.5%	2.4%	0.2%	0.2%	0.0%	0.0%	0.0%	0.4%	0.7%	0.4%	90.2%
2012	592	2,3,4,5	0.0%	0.0%	0.0%	1.4%	0.3%	2.5%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	3.9%	6.1%	1.0%	0.5%	0.0%	0.0%	0.0%	2.4%	6.4%	0.2%	74.7%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	501		3.9%	0.7%	0.6%	2.2%	0.3%	8.6%	1.3%	0.0%	0.7%	0.5%	0.8%	0.0%	6.4%	5.6%	4.5%	0.2%	0.2%	0.4%	0.0%	6.0%	4.6%	2.4%	50.1%
1979-1984	579		4.8%	0.0%	0.1%	4.6%	0.0%	19.4%	0.3%	0.0%	1.7%	1.6%	2.4%	0.2%	8.3%	10.4%	3.1%	0.1%	0.9%	0.0%	0.0%	10.2%	1.5%	3.1%	27.4%
1985-1995	666		3.9%	0.9%	0.1%	2.8%	0.0%	10.7%	0.6%	0.0%	0.3%	0.8%	1.4%	0.0%	6.3%	4.1%	4.7%	0.2%	0.2%	0.6%	0.0%	9.8%	5.6%	2.8%	44.2%
1996-1998	175		4.8%	0.0%	3.5%	2.2%	0.0%	2.2%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	1.5%	0.9%	5.7%	0.0%	0.0%	0.0%	0.0%	0.4%	1.6%	2.6%	72.7%
1999-2013	419		3.4%	0.8%	0.4%	1.2%	0.6%	5.3%	2.4%	0.0%	0.5%	0.0%	0.0%	0.0%	7.0%	6.4%	4.5%	0.3%	0.0%	0.5%	0.0%	3.0%	5.4%	1.8%	56.4%

Appendix C8. Percent distribution of Dome Creek Spring (Fraser Early) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	41	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	158	3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.6%	10.8%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	13.9%	0.0%	5.1%	3.2%	0.0%	64.6%
1992	162	3,4,5,6	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	0.0%	3.1%	9.3%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.6%	0.0%	5.6%	0.0%	45.1%	0.0%	0.0%	30.9%
1993	355	3,4,5,6	0.0%	0.0%	0.0%	0.0%	1.4%	1.7%	0.0%	0.0%	6.5%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	49.6%	5.6%	0.0%	33.5%
1994	302	3,4,5,6	0.7%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27.2%	2.3%	0.0%	66.2%
1995	530	3,4,5,6	0.0%	0.0%	0.0%	0.9%	0.0%	1.5%	0.0%	0.0%	6.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	20.9%	3.0%	0.0%	65.7%
1996	366	3,4,5,6	0.0%	0.0%	0.0%	0.5%	0.0%	0.3%	0.0%	0.0%	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	37.4%	4.4%	0.0%	48.1%
1997	326	3,4,5,6	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.3%	0.0%	7.7%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	39.0%	0.0%	0.0%	50.0%
1998	247	3,4,5,6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	44.1%	5.3%	1.6%	41.3%
1999	56	3,4,5,6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32.1%	10.7%	0.0%	41.1%
2000	111	3,4,5,6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	44.1%	0.0%	0.0%	35.1%
2001	316	3,4,5,6	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	15.5%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	58.9%	2.8%	0.0%	20.6%
2002	139	4,5,6	0.0%	0.0%	0.0%	12.2%	0.0%	10.8%	0.0%	0.0%	12.9%	0.0%	0.0%	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.1%	0.0%	0.0%	40.3%
2003	154	3,5,6	0.0%	0.0%	0.0%	5.2%	0.0%	0.0%	7.1%	0.0%	13.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	59.1%	0.0%	0.0%	14.9%
2004	8	3,4,6	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2005	228	3,4,5	0.0%	0.0%	0.0%	3.9%	0.0%	0.4%	0.0%	0.0%	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	58.8%	7.0%	0.0%	24.6%
2006	111	4,5,6	0.0%	0.0%	0.0%	0.0%	0.0%	7.2%	0.0%	0.0%	6.3%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	43.2%	0.0%	0.0%	42.3%
2007	20	5,6	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2009	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2010	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	237		0.0%	0.0%	0.0%	1.5%	0.1%	2.1%	0.5%	0.2%	9.6%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.1%	1.6%	0.0%	39.0%	3.0%	0.1%	41.3%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	301		0.1%	0.0%	0.0%	0.2%	0.3%	2.0%	0.0%	0.7%	6.8%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.1%	0.0%	4.2%	0.0%	29.6%	2.8%	0.0%	52.2%
1996-1998	313		0.0%	0.0%	0.0%	0.2%	0.0%	0.3%	0.1%	0.0%	7.5%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.4%	0.7%	0.0%	40.2%	3.2%	0.5%	46.5%
1999-2013	159		0.0%	0.0%	0.0%	3.1%	0.0%	2.9%	1.0%	0.0%	12.4%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	45.2%	2.9%	0.0%	31.3%

Appendix C9. Percent distribution of Elk River (Oregon Coast) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	26	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	154	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	462	2,3,4	4.3%	0.0%	0.2%	5.8%	0.0%	6.5%	0.0%	0.0%	0.0%	1.1%	1.9%	0.0%	2.4%	0.9%	13.2%	0.0%	0.2%	0.0%	3.5%	0.0%	38.5%	0.0%	21.4%
1982	2135	2,3,4,5	1.2%	0.4%	0.2%	2.0%	0.0%	5.4%	0.0%	0.0%	0.0%	0.3%	0.6%	0.0%	1.3%	0.6%	15.7%	0.3%	0.3%	0.0%	3.1%	0.1%	41.2%	0.0%	27.3%
1983	2931	2,3,4,5	3.2%	0.1%	0.0%	5.7%	0.0%	6.9%	0.1%	0.0%	0.0%	1.2%	0.0%	0.0%	2.3%	0.1%	3.8%	0.2%	0.0%	0.2%	5.4%	0.0%	28.9%	0.0%	41.7%
1984	2349	2,3,4,5	2.9%	0.0%	0.0%	4.1%	0.1%	5.2%	0.0%	0.0%	0.0%	0.5%	0.2%	0.0%	0.4%	0.0%	1.8%	0.0%	0.0%	0.0%	6.0%	0.0%	20.9%	0.0%	57.9%
1985	2024	2,3,4,5	1.6%	0.0%	0.0%	2.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%	1.1%	0.7%	0.0%	0.0%	3.8%	0.0%	34.6%	0.8%	53.8%
1986	957	2,3,4,5	1.6%	0.0%	0.0%	2.6%	0.0%	10.6%	0.3%	0.0%	0.3%	1.8%	0.0%	0.0%	0.5%	0.2%	21.9%	0.7%	0.0%	0.0%	9.1%	0.0%	15.9%	0.1%	34.4%
1987	2073	2,3,4,5	0.8%	0.0%	0.0%	3.4%	0.0%	5.6%	0.4%	0.0%	0.0%	0.7%	0.0%	0.0%	1.1%	0.1%	15.8%	0.8%	0.0%	0.0%	6.0%	0.0%	25.9%	0.0%	39.5%
1988	2152	2,3,4,5	0.4%	0.0%	0.0%	2.6%	0.0%	3.6%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.5%	0.0%	16.0%	0.5%	0.0%	0.2%	0.2%	0.0%	36.9%	0.0%	38.8%
1989	1364	2,3,4,5	0.7%	0.0%	0.3%	1.2%	0.4%	1.8%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.3%	0.0%	14.9%	0.4%	0.0%	0.0%	11.7%	0.0%	32.7%	0.4%	34.9%
1990	553	2,3,4,5	0.9%	0.0%	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	3.6%	0.0%	7.2%	0.0%	0.0%	0.0%	4.9%	0.0%	39.2%	0.4%	40.7%
1991	463	2,3,4,5	0.0%	0.6%	0.0%	2.2%	0.0%	5.2%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.4%	0.0%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	28.9%	0.2%	57.5%
1992	658	2,3,4,5	2.7%	3.0%	0.0%	0.0%	0.0%	6.5%	0.6%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	6.4%	0.3%	0.9%	0.0%	4.3%	0.0%	36.6%	0.2%	38.3%
1993	914	2,3,4,5	2.5%	0.0%	0.0%	2.2%	0.0%	5.4%	0.8%	0.0%	0.3%	0.0%	0.0%	0.0%	1.6%	0.2%	6.9%	0.0%	0.0%	0.0%	12.4%	0.0%	22.0%	0.2%	45.5%
1994	1643	2,3,4,5	3.2%	0.4%	0.0%	1.6%	0.4%	2.5%	0.0%	0.0%	0.0%	0.1%	0.4%	0.0%	0.4%	0.0%	6.8%	0.0%	0.0%	0.0%	9.5%	0.0%	36.0%	0.2%	38.5%
1995	3377	2,3,4,5	2.1%	0.2%	0.5%	1.1%	0.2%	1.9%	0.2%	0.0%	0.0%	0.0%	1.1%	0.0%	0.1%	0.0%	4.9%	0.1%	0.1%	0.0%	7.6%	0.0%	33.4%	0.1%	46.3%
1996	4957	2,3,4,5	2.0%	0.0%	0.0%	1.3%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.1%	0.0%	12.3%	0.1%	0.0%	0.1%	15.6%	0.0%	12.4%	0.3%	55.1%
1997	4070	2,3,4,5	14.1%	0.0%	0.1%	1.8%	0.2%	1.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.6%	0.0%	6.4%	0.0%	0.0%	0.0%	11.8%	0.0%	19.3%	0.2%	44.0%
1998	6033	2,3,4,5	7.9%	0.0%	0.0%	3.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.0%	4.7%	0.1%	0.0%	0.0%	7.7%	0.0%	10.0%	0.0%	66.0%
1999	5125	2,3,4,5	8.5%	0.0%	0.4%	2.8%	0.3%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.7%	0.1%	1.9%	0.0%	0.0%	0.0%	16.4%	0.0%	20.2%	0.1%	48.3%
2000	3727	2,3,4,5	9.6%	0.1%	0.2%	2.0%	0.7%	0.9%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.8%	0.6%	8.6%	0.2%	0.1%	0.0%	24.4%	0.0%	22.6%	0.2%	29.1%
2001	9512	2,3,4,5	5.3%	0.0%	0.4%	2.4%	0.0%	1.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.9%	8.4%	0.3%	0.0%	0.0%	8.5%	0.0%	14.2%	0.1%	55.7%
2002	6787	2,3,4,5	9.2%	0.0%	0.9%	6.4%	1.0%	1.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%	3.2%	1.0%	5.1%	0.6%	0.0%	0.0%	10.8%	0.0%	10.8%	0.0%	49.0%
2003	4295	2,3,4,5	8.7%	0.0%	0.4%	5.2%	0.3%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	3.9%	0.1%	6.7%	0.2%	0.0%	0.0%	16.4%	0.0%	18.5%	0.0%	37.8%
2004	5779	2,3,4,5	8.0%	0.0%	0.4%	3.9%	0.7%	3.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.1%	3.6%	0.1%	0.0%	0.0%	18.1%	0.0%	7.5%	0.2%	51.3%
2005	2281	2,3,4,5	12.6%	0.0%	0.3%	6.8%	2.1%	5.3%	1.3%	0.0%	0.0%	0.0%	0.0%	0.3%	2.8%	0.4%	2.7%	0.2%	0.0%	0.0%	15.9%	0.0%	11.3%	0.0%	38.0%
2006	2431	2,3,4,5	7.4%	0.0%	0.0%	5.6%	1.4%	5.7%	2.0%	0.0%	0.0%	0.0%	0.0%	0.7%	4.4%	0.3%	1.7%	0.2%	0.0%	0.0%	18.9%	0.0%	12.7%	0.0%	39.1%
2007	2229	2,3,4,5	9.6%	0.1%	0.4%	4.8%	1.0%	1.4%	0.4%	0.0%	0.3%	0.0%	0.0%	0.0%	4.0%	0.8%	5.4%	0.4%	0.0%	0.0%	18.2%	0.0%	18.8%	0.3%	34.0%
2008	4115	2,3,4,5	4.5%	0.0%	0.0%	3.7%	1.8%	1.5%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	0.2%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	20.4%	0.0%	62.3%
2009	3291	2,3,4,5	6.7%	0.0%	0.1%	4.4%	0.6%	1.6%	1.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.9%	0.2%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	16.4%	0.0%	66.7%
2010	4260	2,3,4,5	5.3%	0.0%	0.4%	4.2%	0.2%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	0.6%	0.7%	0.3%	0.0%	0.0%	5.4%	0.0%	10.8%	0.0%	68.1%
2011	1904	2,3,4,5	7.0%	0.0%	0.5%	4.6%	0.4%	2.2%	1.1%	0.0%	0.2%	0.0%	0.0%	0.0%	5.4%	0.5%	1.8%	0.0%	0.0%	0.0%	16.9%	0.0%	20.1%	0.1%	39.4%
2012	2797	2,3,4,5	2.3%	0.3%	0.0%	2.2%	0.1%	3.0%	3.2%	0.0%	0.0%	0.0%	0.0%	0.1%	6.3%	0.6%	3.6%	0.6%	0.0%	0.4%	12.2%	0.0%	16.6%	0.0%	48.5%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	3052		4.9%	0.2%	0.2%	3.2%	0.4%	3.2%	0.4%	0.0%	0.0%	0.2%	0.2%	0.1%	1.9%	0.3%	6.7%	0.2%	0.1%	0.0%	9.6%	0.0%	22.9%	0.1%	45.3%
1979-1984	1969		2.9%	0.1%	0.1%	4.4%	0.0%	6.0%	0.0%	0.0%	0.0%	0.8%	0.7%	0.0%	1.6%	0.4%	8.6%	0.1%	0.1%	0.1%	4.5%	0.0%	32.4%	0.0%	37.1%
1985-1995	1471		1.5%	0.4%	0.1%	1.7%	0.1%	4.2%	0.2%	0.0%	0.1%	0.3%	0.2%	0.0%	0.8%	0.1%	9.7%	0.3%	0.1%	0.0%	6.3%	0.0%	31.1%	0.2%	42.6%
1996-1998	5020		8.0%	0.0%	0.0%	2.1%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.3%	0.0%	7.8%	0.1%	0.0%	0.0%	11.7%	0.0%	13.9%	0.2%	55.0%
1999-2013	4181		7.5%	0.0%	0.3%	4.2%	0.8%	2.1%	0.8%	0.0%	0.0%	0.0%	0.0%	0.1%	3.1%	0.5%	3.6%	0.2%	0.0%	0.0%	13.2%	0.0%	15.8%	0.1%	47.7%

Appendix C10. Percent distribution of Elwha River total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	72	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	273	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	730	2,3,4	23.8%	3.0%	0.0%	2.6%	0.0%	17.7%	1.1%	0.8%	7.4%	1.1%	5.8%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	14.7%	0.0%	11.0%	0.0%	0.0%	10.0%
1987	476	2,3,4,5	16.2%	0.0%	0.0%	5.0%	0.0%	15.8%	2.3%	0.8%	10.5%	2.5%	5.3%	0.0%	2.5%	0.0%	0.4%	0.0%	0.0%	19.7%	0.0%	5.5%	0.0%	0.2%	13.2%
1988	460	2,3,4,5	5.2%	0.9%	0.7%	3.9%	0.0%	15.4%	6.1%	0.4%	2.4%	1.5%	1.3%	0.0%	4.6%	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%	11.1%	0.0%	0.0%	37.4%
1989	300	3,4,5	6.3%	5.7%	0.0%	4.3%	2.0%	6.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	2.7%	0.3%	0.0%	0.0%	0.0%	14.0%	0.0%	10.7%	0.0%	0.0%	45.0%
1990	40	2,4,5	0.0%	0.0%	0.0%	12.5%	0.0%	15.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%	10.0%	0.0%	0.0%	50.0%
1991	24	2,3,5	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	4.2%	0.0%	4.2%	0.0%	8.3%	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%	54.2%	0.0%	0.0%	0.0%
1992	74	2,3,4	0.0%	0.0%	0.0%	1.4%	0.0%	35.1%	4.1%	1.4%	4.1%	0.0%	8.1%	0.0%	12.2%	0.0%	0.0%	0.0%	0.0%	31.1%	0.0%	0.0%	0.0%	0.0%	2.7%
1993	151	2,3,4,5	6.6%	0.0%	0.0%	0.0%	0.0%	15.9%	10.6%	2.6%	11.3%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	28.5%	0.0%	2.6%	0.0%	4.0%	15.2%
1994	88	2,3,4,5	8.0%	0.0%	0.0%	9.1%	0.0%	18.2%	0.0%	4.5%	4.5%	0.0%	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	47.7%
1995	151	2,3,4,5	0.0%	0.0%	0.0%	0.0%	2.6%	32.5%	2.0%	0.0%	0.0%	4.0%	6.6%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	13.9%	0.0%	0.7%	0.0%	0.0%	36.4%
1996	316	2,3,4,5	4.1%	0.0%	0.0%	1.6%	0.0%	1.6%	3.2%	0.0%	3.8%	0.0%	2.8%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	7.3%	0.0%	0.0%	0.6%	0.0%	74.4%
1997	194	3,4,5	14.4%	0.0%	0.5%	1.0%	0.0%	4.1%	0.0%	0.0%	7.2%	0.0%	4.1%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	13.9%	0.0%	0.0%	0.0%	0.5%	53.1%
1998	173	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1999	27	5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2000	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2001	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2004	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2005	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2006	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2007	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2009	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2010	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	250		7.1%	0.8%	0.1%	3.5%	0.4%	16.2%	2.4%	0.9%	4.6%	1.0%	3.8%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	14.8%	0.0%	8.8%	0.1%	0.4%	32.1%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	249		6.6%	1.0%	0.1%	3.9%	0.5%	18.8%	2.6%	1.1%	4.4%	1.2%	3.9%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	15.6%	0.0%	10.6%	0.0%	0.4%	25.8%
1996-1998	255		9.3%	0.0%	0.3%	1.3%	0.0%	2.9%	1.6%	0.0%	5.5%	0.0%	3.5%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	10.6%	0.0%	0.0%	0.3%	0.3%	63.7%
1999-2013	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Appendix C11. Percent distribution of George Adams Fall Fingerling total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM														
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal			
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	70	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	411	2,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	714	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	860	2,3,4	0.0%	0.0%	0.0%	0.0%	0.0%	20.7%	0.0%	0.2%	4.7%	0.6%	0.7%	0.0%	2.9%	0.5%	0.0%	0.0%	0.0%	12.6%	0.0%	37.0%	0.0%	19.7%	0.6%
1983	943	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	12.0%	0.3%	0.0%	3.8%	1.3%	4.0%	0.0%	0.1%	0.5%	0.0%	0.0%	0.0%	40.9%	0.0%	26.4%	0.0%	8.7%	1.9%
1984	1069	3,4,5	0.0%	0.1%	0.0%	0.6%	0.0%	18.0%	0.0%	1.2%	5.0%	3.2%	1.8%	0.0%	2.2%	0.4%	0.2%	0.0%	0.0%	22.5%	0.0%	30.5%	0.0%	10.0%	4.6%
1985	364	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	18	5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	248	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	941	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	2007	2,3,4	0.0%	0.5%	0.0%	0.0%	0.0%	10.0%	1.7%	0.0%	4.3%	0.0%	4.2%	0.0%	12.5%	0.5%	0.2%	0.2%	0.0%	17.4%	0.0%	36.7%	1.4%	0.3%	9.8%
1990	1550	2,3,4,5	0.7%	0.0%	0.0%	0.4%	0.0%	21.1%	4.6%	0.0%	5.0%	0.3%	1.5%	0.0%	15.4%	0.4%	0.0%	0.0%	0.0%	18.1%	0.0%	26.3%	0.3%	0.1%	5.7%
1991	1050	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	19.3%	4.5%	0.0%	2.4%	0.0%	0.3%	0.0%	8.2%	0.0%	0.4%	0.0%	0.0%	18.5%	0.0%	31.9%	0.9%	0.4%	13.1%
1992	186	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	17.2%	0.0%	0.0%	1.6%	0.0%	5.9%	0.0%	19.9%	0.0%	0.0%	0.0%	0.0%	38.2%	0.0%	9.7%	0.0%	0.0%	7.5%
1993	126	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	8.7%	1.6%	4.0%	0.0%	0.0%	0.0%	8.7%	0.0%	0.0%	0.0%	0.0%	24.6%	0.0%	4.8%	0.0%	0.8%	15.9%
1994	50	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.0%	0.0%	16.0%	0.0%	0.0%	62.0%
1995	266	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%	3.8%	0.0%	5.6%	0.0%	3.4%	0.0%	0.8%	0.0%	0.0%	0.0%	0.4%	28.2%	0.0%	3.4%	0.0%	1.1%	44.0%
1996	370	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	4.6%	0.0%	14.3%	0.0%	2.4%	0.0%	5.4%	0.5%	0.0%	0.0%	0.0%	15.4%	0.0%	0.0%	0.3%	0.5%	55.1%
1997	398	2,3,4,5	2.0%	0.0%	0.0%	0.0%	0.0%	4.8%	1.3%	0.0%	3.3%	0.0%	0.5%	0.0%	2.3%	0.0%	0.5%	0.0%	0.0%	24.4%	0.0%	0.8%	0.0%	1.0%	59.3%
1998	593	2,3,4,5	0.7%	0.2%	0.0%	0.0%	0.0%	0.2%	1.2%	0.0%	1.9%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.2%	27.5%	0.0%	1.7%	0.0%	0.3%	64.8%
1999	892	2,3,4,5	0.4%	0.0%	0.0%	0.0%	0.0%	0.8%	9.2%	0.0%	3.0%	0.0%	0.0%	0.0%	4.1%	1.3%	1.5%	0.0%	0.0%	12.9%	0.0%	2.8%	0.0%	0.1%	63.8%
2000	964	2,3,4,5	0.3%	0.0%	0.0%	0.3%	0.0%	20.2%	8.7%	0.0%	3.6%	0.0%	0.2%	0.0%	3.0%	0.0%	0.5%	0.0%	0.0%	11.4%	0.0%	0.3%	12.2%	0.3%	38.8%
2001	906	2,3,4,5	0.9%	0.0%	0.0%	0.0%	0.0%	12.3%	2.2%	0.0%	2.6%	0.0%	0.0%	0.0%	5.0%	1.0%	1.9%	0.0%	0.0%	15.6%	0.0%	10.6%	0.6%	0.6%	46.9%
2002	1050	2,3,4,5	1.5%	0.0%	0.0%	1.1%	0.0%	10.2%	11.0%	0.0%	2.1%	0.0%	0.0%	0.0%	3.9%	0.8%	0.5%	0.2%	0.0%	7.2%	0.0%	10.8%	10.2%	0.5%	40.0%
2003	1052	2,3,4,5	0.7%	0.4%	0.0%	0.0%	0.0%	11.1%	2.3%	0.0%	3.4%	0.0%	0.0%	0.0%	6.0%	0.2%	0.8%	0.0%	0.0%	9.0%	0.0%	10.3%	12.6%	0.1%	43.2%
2004	1464	2,3,4,5	0.4%	0.3%	0.0%	0.0%	0.0%	14.5%	3.3%	0.1%	3.0%	0.0%	0.5%	0.0%	5.7%	0.5%	0.9%	0.0%	0.0%	8.5%	0.0%	12.4%	1.4%	0.4%	47.9%
2005	1752	2,3,4,5	0.3%	0.1%	0.0%	0.1%	0.0%	11.4%	8.8%	0.0%	8.3%	0.0%	0.0%	0.0%	6.8%	1.3%	0.5%	0.0%	0.0%	10.2%	0.0%	5.1%	6.5%	0.5%	40.2%
2006	1203	2,3,4,5	0.4%	0.2%	0.0%	0.8%	0.0%	11.8%	2.0%	0.0%	5.2%	0.0%	0.0%	0.0%	5.3%	0.4%	0.3%	0.0%	0.0%	11.2%	0.0%	14.4%	1.5%	0.2%	46.1%
2007	2018	2,3,4,5	0.2%	0.7%	0.0%	0.0%	0.0%	9.2%	1.6%	0.0%	3.0%	0.0%	0.0%	0.0%	3.3%	0.1%	0.2%	0.0%	0.0%	18.8%	0.0%	12.9%	12.9%	0.1%	36.7%
2008	1246	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	4.1%	4.6%	0.0%	3.3%	0.0%	0.0%	0.0%	1.5%	0.7%	0.0%	0.0%	0.0%	12.8%	0.0%	16.8%	0.0%	0.3%	55.9%
2009	1666	2,3,4,5	0.0%	0.0%	0.0%	0.2%	0.0%	5.3%	6.1%	0.0%	8.8%	0.0%	0.0%	0.0%	2.3%	0.4%	0.0%	0.0%	0.0%	17.0%	0.0%	6.9%	0.0%	0.1%	52.9%
2010	1997	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	9.3%	5.3%	0.0%	1.8%	0.0%	0.0%	0.0%	4.6%	0.4%	0.2%	0.0%	0.0%	11.9%	0.0%	19.4%	6.3%	0.1%	40.7%
2011	3004	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	2.2%	0.0%	2.6%	0.0%	0.0%	0.0%	1.9%	0.3%	0.2%	0.0%	0.0%	16.1%	0.0%	17.7%	7.8%	0.0%	48.4%
2012	3205	2,3,4,5	0.2%	0.0%	0.0%	0.1%	0.0%	2.4%	3.9%	0.0%	1.8%	0.0%	0.3%	0.0%	5.1%	1.3%	0.2%	0.0%	0.0%	13.9%	0.0%	24.1%	7.8%	0.3%	38.4%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	1181		0.3%	0.1%	0.0%	0.1%	0.0%	10.8%	3.8%	0.5%	4.0%	0.2%	1.0%	0.0%	5.1%	0.4%	0.3%	0.0%	0.0%	17.7%	0.0%	14.4%	3.1%	1.7%	36.5%
1979-1984	957		0.0%	0.0%	0.0%	0.2%	0.0%	16.9%	0.1%	0.5%	4.5%	1.7%	2.2%	0.0%	1.7%	0.5%	0.1%	0.0%	0.0%	25.3%	0.0%	31.3%	0.0%	12.8%	2.4%
1985-1995	748		0.1%	0.1%	0.0%	0.1%	0.0%	15.4%	3.3%	1.7%	3.3%	0.1%	2.2%	0.0%	9.3%	0.1%	0.1%	0.0%	0.1%	22.4%	0.0%	18.4%	0.4%	0.4%	22.6%
1996-1998	454		0.9%	0.1%	0.0%	0.0%	0.0%	2.1%	2.3%	0.0%	6.5%	0.0%	1.0%	0.0%	3.1%	0.2%	0.2%	0.0%	0.1%	22.4%	0.0%	0.8%	0.1%	0.6%	59.7%
1999-2013	1601		0.4%	0.1%	0.0%	0.2%	0.0%	9.0%	5.1%	0.0%	3.8%	0.0%	0.1%	0.0%	4.2%	0.6%	0.5%	0.0%	0.0%	12.6%	0.0%	11.8%	5.7%	0.3%	45.7%

Appendix C12. Percent distribution of Hanford Wild Brights total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	112	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	118	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	476	2,3,4	9.2%	0.8%	0.2%	5.0%	0.0%	8.8%	3.6%	0.0%	0.0%	0.4%	0.6%	0.0%	0.6%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	23.3%	6.3%	0.0%	40.1%
1991	615	2,3,4,5	10.7%	0.0%	1.5%	10.6%	0.5%	5.2%	0.0%	0.0%	1.0%	0.2%	0.0%	0.0%	0.5%	0.0%	0.5%	0.5%	0.0%	0.0%	0.0%	22.6%	3.7%	0.0%	42.6%
1992	367	2,3,4,5	16.1%	15.3%	1.4%	6.0%	0.0%	15.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.8%	0.0%	0.0%	0.0%	0.0%	15.0%	1.4%	0.0%	27.8%
1993	418	2,3,4,5	18.9%	0.0%	2.2%	3.1%	1.2%	6.0%	1.9%	0.0%	0.0%	0.0%	2.2%	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	15.1%	7.2%	1.2%	36.6%
1994	772	2,3,4,5	17.1%	3.1%	0.0%	5.4%	0.0%	4.7%	0.0%	0.0%	0.0%	0.3%	1.3%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.4%	12.2%	0.0%	49.9%
1995	690	2,3,4,5	13.3%	0.0%	4.2%	5.5%	0.0%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%	7.0%	0.0%	57.7%
1996	628	2,3,4,5	13.1%	0.0%	0.0%	0.8%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27.4%	7.8%	0.0%	49.7%
1997	649	2,3,4,5	16.8%	1.1%	1.1%	3.1%	3.1%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	13.9%	7.1%	0.0%	52.2%
1998	335	2,3,4,5	13.7%	0.0%	0.0%	11.3%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.3%	6.9%	0.0%	50.1%
1999	279	2,3,4,5	13.6%	0.4%	2.2%	12.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.8%	5.7%	0.0%	53.4%
2000	232	2,3,4,5	20.7%	0.4%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.4%	5.2%	0.0%	43.1%
2001	361	2,3,4,5	5.8%	0.6%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	21.3%	15.0%	0.0%	54.8%
2002	897	2,3,4,5	17.9%	0.0%	1.4%	0.8%	0.6%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.7%	0.2%	0.0%	0.0%	0.0%	9.7%	10.8%	2.0%	52.3%
2003	1547	2,3,4,5	13.6%	0.0%	0.9%	4.1%	1.1%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	13.9%	9.2%	0.0%	55.9%
2004	1901	2,3,4,5	18.7%	2.1%	3.0%	6.5%	3.3%	2.8%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.2%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	13.2%	4.0%	0.0%	45.4%
2005	464	2,3,4,5	13.1%	0.0%	0.0%	8.8%	3.0%	4.1%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	1.1%	0.4%	0.0%	0.0%	0.0%	0.0%	12.1%	15.5%	0.0%	38.8%
2006	566	2,3,4,5	19.1%	0.0%	0.9%	5.1%	0.0%	2.7%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	14.7%	19.4%	0.0%	35.0%
2007	314	2,3,4,5	23.2%	0.0%	1.0%	7.0%	7.3%	2.5%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.6%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	6.7%	16.9%	0.0%	32.8%
2008	222	2,3,4,5	33.8%	0.0%	5.4%	1.4%	1.8%	3.2%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.6%	7.2%	0.9%	27.0%
2009	231	2,3,4,5	21.6%	0.0%	0.9%	3.9%	2.2%	1.3%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	48.9%	4.3%	0.0%	11.3%
2010	504	2,3,4,5	16.3%	0.0%	4.6%	8.3%	3.6%	0.8%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.6%	0.4%	0.0%	0.0%	0.0%	0.0%	11.1%	4.6%	4.4%	42.7%
2011	566	2,3,4,5	20.7%	0.7%	0.0%	1.8%	5.3%	2.3%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.7%	0.9%	0.0%	0.0%	0.0%	22.1%	8.3%	0.0%	35.9%
2012	600	3,4,5	14.0%	0.8%	1.2%	4.7%	2.0%	5.8%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	0.3%	0.5%	0.8%	0.0%	0.5%	0.0%	17.5%	18.3%	0.0%	23.5%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	593		16.6%	1.1%	1.5%	5.0%	1.5%	3.2%	1.0%	0.0%	0.1%	0.0%	0.3%	0.0%	0.7%	0.2%	0.3%	0.1%	0.0%	0.1%	0.0%	17.3%	8.9%	0.4%	41.7%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	556		14.2%	3.2%	1.6%	5.9%	0.3%	7.2%	0.9%	0.0%	0.2%	0.1%	0.7%	0.0%	0.9%	0.3%	0.2%	0.1%	0.0%	0.2%	0.0%	15.1%	6.3%	0.2%	42.4%
1996-1998	537		14.5%	0.4%	0.4%	5.1%	1.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	19.5%	7.3%	0.0%	50.7%
1999-2013	620		18.0%	0.4%	1.8%	4.7%	2.1%	2.0%	1.3%	0.0%	0.1%	0.0%	0.1%	0.0%	0.8%	0.2%	0.3%	0.1%	0.0%	0.0%	0.0%	17.8%	10.3%	0.5%	39.4%

Appendix C13. Percent distribution of Harrison River (Fraser Late) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	873	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2395	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	1623	2,3,4	0.2%	0.0%	0.0%	1.1%	0.0%	24.6%	0.7%	8.3%	26.1%	1.8%	4.0%	0.0%	1.0%	0.2%	0.2%	0.0%	3.3%	3.5%	0.0%	1.5%	0.4%	0.0%	23.0%
1986	928	2,3,4,5	1.6%	0.0%	0.0%	0.4%	0.0%	18.2%	0.4%	19.5%	24.2%	2.8%	5.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.6%	4.2%	0.0%	6.4%	0.0%	0.0%	15.8%
1987	543	2,3,4,5	0.9%	0.0%	0.0%	0.0%	0.0%	10.1%	0.0%	9.6%	28.2%	0.6%	2.4%	0.0%	3.5%	0.4%	0.0%	0.0%	10.5%	2.4%	0.0%	3.1%	0.9%	0.0%	27.4%
1988	1392	2,3,4,5	0.5%	0.0%	0.7%	0.0%	0.0%	4.1%	3.4%	11.7%	37.1%	1.2%	4.3%	0.0%	4.0%	0.0%	0.9%	0.0%	14.1%	6.4%	0.0%	2.0%	0.4%	0.0%	9.1%
1989	2374	2,3,4,5	0.2%	0.0%	0.0%	0.3%	0.0%	24.9%	1.0%	5.5%	23.7%	0.7%	3.4%	0.0%	5.6%	0.2%	0.9%	0.0%	5.1%	4.8%	0.0%	2.2%	0.0%	0.0%	21.4%
1990	2912	2,3,4,5	0.5%	0.0%	0.0%	0.8%	0.0%	20.0%	1.2%	4.4%	11.8%	0.7%	1.5%	0.0%	6.0%	0.1%	0.0%	0.0%	4.3%	5.9%	0.0%	1.3%	0.3%	0.0%	41.1%
1991	1594	2,3,4,5	0.0%	0.1%	0.0%	0.0%	0.0%	29.5%	0.0%	8.9%	13.6%	0.3%	4.3%	0.0%	11.1%	0.0%	1.0%	0.0%	2.9%	4.8%	0.0%	1.3%	0.4%	0.0%	21.9%
1992	1676	2,3,4,5	0.0%	0.0%	0.0%	0.4%	0.0%	18.7%	0.0%	13.4%	12.5%	0.1%	1.3%	0.0%	11.3%	0.0%	0.3%	0.0%	1.2%	7.2%	0.0%	0.7%	0.0%	0.2%	32.6%
1993	1138	2,3,4,5	1.1%	0.0%	0.0%	0.3%	0.0%	19.2%	0.0%	6.6%	7.3%	0.4%	0.9%	0.0%	9.1%	0.0%	1.0%	0.0%	0.5%	2.1%	0.0%	2.0%	0.0%	0.0%	49.6%
1994	451	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	18.8%	2.0%	8.9%	6.7%	0.0%	3.3%	0.0%	2.2%	0.0%	0.9%	0.0%	3.5%	2.2%	0.0%	1.8%	0.0%	0.9%	48.8%
1995	359	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	21.4%	1.4%	0.0%	20.6%	0.0%	3.1%	0.0%	7.8%	0.6%	1.1%	0.0%	6.1%	4.5%	0.0%	2.5%	0.8%	5.6%	24.5%
1996	1104	2,3,4,5	0.0%	0.2%	0.0%	0.0%	0.0%	1.6%	0.2%	0.0%	23.2%	0.0%	0.5%	0.0%	3.7%	0.0%	0.6%	0.0%	0.0%	7.9%	0.0%	0.4%	0.4%	0.1%	61.2%
1997	863	2,3,4,5	1.5%	0.0%	0.0%	0.0%	0.0%	12.9%	3.6%	0.1%	19.2%	0.0%	1.4%	0.0%	6.8%	0.0%	2.8%	0.0%	3.4%	6.4%	0.0%	2.2%	0.0%	0.0%	39.7%
1998	1153	2,3,4,5	0.9%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	3.7%	0.0%	0.0%	0.0%	4.2%	0.0%	1.0%	0.0%	0.3%	0.3%	0.0%	0.3%	0.0%	0.9%	87.9%
1999	1305	2,3,4,5	0.2%	0.5%	0.0%	0.5%	0.0%	0.6%	1.8%	0.0%	9.3%	0.2%	0.0%	0.0%	12.9%	0.4%	0.8%	0.0%	0.8%	0.6%	0.0%	0.6%	0.2%	0.8%	69.7%
2000	665	2,3,4,5	1.5%	0.0%	0.0%	0.5%	0.0%	11.9%	3.8%	0.0%	9.9%	0.0%	0.0%	0.0%	11.4%	0.0%	1.8%	0.0%	0.8%	0.8%	0.0%	0.0%	0.0%	0.0%	57.7%
2001	838	2,3,4,5	0.4%	0.0%	0.0%	0.0%	0.0%	6.7%	2.4%	0.0%	6.9%	0.0%	0.0%	0.0%	6.1%	1.8%	1.6%	0.0%	0.1%	3.1%	0.0%	1.7%	0.0%	0.6%	68.7%
2002	383	2,3,4,5	0.5%	0.0%	0.0%	0.0%	0.0%	12.0%	2.9%	0.0%	10.7%	0.0%	7.0%	0.0%	13.6%	1.6%	0.5%	0.0%	3.4%	2.6%	0.0%	1.0%	0.0%	0.3%	43.9%
2003	574	2,3,4,5	1.2%	0.0%	0.0%	0.0%	0.0%	7.8%	3.8%	0.0%	4.7%	0.0%	0.0%	0.0%	7.0%	1.2%	0.0%	0.0%	0.3%	1.4%	0.0%	1.6%	0.0%	0.3%	70.6%
2004	560	2,3,4,5	1.3%	0.0%	0.0%	0.9%	0.0%	18.2%	6.4%	0.0%	0.9%	0.0%	0.0%	0.0%	16.4%	0.5%	0.0%	0.0%	0.2%	3.2%	0.0%	2.5%	0.0%	0.0%	49.5%
2005	729	2,3,4,5	0.0%	0.0%	0.0%	0.3%	0.0%	14.3%	3.8%	0.0%	7.3%	0.0%	0.0%	0.0%	6.2%	2.6%	0.3%	0.0%	0.5%	0.5%	0.0%	5.2%	0.0%	1.2%	57.8%
2006	412	3,4,5	1.2%	0.0%	0.0%	0.5%	0.0%	20.1%	6.3%	0.0%	2.9%	0.0%	0.0%	0.0%	13.6%	1.0%	1.2%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	52.7%
2007	853	2,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	10.7%	1.9%	0.0%	3.0%	0.0%	0.0%	0.0%	1.3%	0.1%	0.0%	0.0%	0.5%	1.2%	0.0%	0.1%	0.0%	0.0%	81.2%
2008	808	2,3,5	0.4%	0.2%	0.0%	0.0%	0.0%	27.1%	12.0%	0.0%	6.4%	0.0%	0.1%	0.0%	5.2%	1.2%	0.0%	0.0%	2.1%	1.6%	0.0%	0.5%	0.0%	0.0%	43.1%
2009	2207	2,3,4	0.0%	0.0%	0.0%	0.2%	0.0%	1.4%	3.7%	0.0%	4.7%	0.0%	0.0%	0.0%	1.2%	0.2%	0.0%	0.0%	0.4%	1.8%	0.0%	1.6%	1.0%	0.0%	83.6%
2010	2025	2,3,4,5	0.6%	0.0%	0.0%	0.1%	0.0%	3.9%	4.2%	0.0%	5.6%	0.0%	0.0%	0.2%	4.0%	1.1%	0.0%	0.0%	0.7%	2.0%	0.0%	1.1%	0.3%	0.0%	76.0%
2011	2738	2,3,4,5	0.3%	0.0%	0.0%	0.1%	0.4%	3.3%	6.3%	0.0%	4.1%	0.0%	0.0%	0.1%	3.1%	0.6%	0.0%	0.0%	0.5%	2.1%	0.0%	2.5%	0.0%	0.0%	76.4%
2012	2129	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	1.2%	1.0%	0.0%	10.8%	0.0%	0.0%	0.0%	3.1%	0.4%	0.2%	0.0%	0.3%	5.3%	0.0%	0.5%	0.9%	0.0%	76.0%
2013	3551	2,3,4,5	0.0%	0.1%	0.1%	0.0%	0.1%	1.8%	2.0%	0.0%	8.5%	0.0%	0.0%	0.1%	7.3%	0.8%	0.3%	0.0%	0.5%	3.0%	0.0%	1.1%	0.5%	1.2%	72.7%
1979-2013	1306		0.5%	0.0%	0.0%	0.2%	0.0%	12.6%	2.6%	3.3%	12.2%	0.3%	1.5%	0.0%	6.5%	0.5%	0.6%	0.0%	2.3%	3.2%	0.0%	1.6%	0.2%	0.4%	51.2%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	1363		0.5%	0.0%	0.1%	0.3%	0.0%	19.1%	0.9%	8.8%	19.3%	0.8%	3.1%	0.0%	5.6%	0.1%	0.6%	0.0%	4.7%	4.4%	0.0%	2.3%	0.3%	0.6%	28.7%
1996-1998	1040		0.8%	0.1%	0.0%	0.0%	0.0%	5.0%	1.3%	0.0%	15.4%	0.0%	0.6%	0.0%	4.9%	0.0%	1.5%	0.0%	1.2%	4.9%	0.0%	0.9%	0.1%	0.3%	62.9%
1999-2013	1318		0.5%	0.1%	0.0%	0.2%	0.0%	9.4%	4.2%	0.0%	6.4%	0.0%	0.5%	0.0%	7.5%	0.9%	0.4%	0.0%	0.7%	2.0%	0.0%	1.3%	0.2%	0.3%	65.3%

Appendix C14. Percent distribution of Hoko Fall Fingerling total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	10	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	138	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	354	2,3,4	11.6%	2.5%	0.3%	8.5%	0.0%	13.6%	0.0%	0.0%	1.7%	1.1%	15.8%	0.0%	0.6%	0.6%	0.0%	0.0%	1.4%	21.5%	0.0%	0.0%	0.0%	0.3%	20.6%
1990	677	3,4,5	18.2%	3.8%	0.6%	8.6%	0.0%	17.1%	0.0%	0.4%	0.3%	0.9%	3.7%	0.0%	0.6%	0.0%	0.0%	0.0%	0.6%	14.5%	0.0%	0.0%	0.0%	0.3%	30.4%
1991	1328	2,4,5,6	18.1%	0.0%	0.1%	5.2%	0.4%	7.1%	0.5%	0.0%	0.4%	1.1%	0.9%	0.2%	0.2%	0.1%	0.0%	0.0%	0.9%	8.8%	0.0%	0.0%	0.0%	0.2%	55.9%
1992	669	2,3,5,6	8.1%	10.2%	1.5%	5.4%	0.6%	9.7%	1.9%	0.0%	0.6%	1.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	0.3%	56.8%
1993	346	2,3,4,6	11.3%	1.2%	2.3%	7.5%	0.0%	15.0%	0.0%	0.0%	0.9%	0.0%	4.6%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	4.3%	0.0%	0.0%	0.0%	0.3%	52.0%
1994	402	2,3,4,5	19.4%	7.7%	2.5%	12.9%	0.0%	10.2%	1.7%	0.0%	1.7%	0.5%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	38.6%
1995	827	2,3,4,5,6	15.8%	0.0%	4.7%	7.9%	0.6%	3.9%	0.0%	0.0%	0.8%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.5%	64.4%
1996	685	2,3,4,5,6	14.0%	0.0%	4.4%	0.6%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	78.4%
1997	916	2,3,4,5,6	16.4%	0.0%	0.0%	1.5%	0.0%	1.1%	0.5%	0.0%	0.0%	0.2%	0.1%	0.4%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	74.6%
1998	1154	2,3,4,5,6	9.5%	0.0%	0.3%	7.2%	0.0%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	82.1%
1999	770	2,3,4,5,6	7.8%	0.0%	0.6%	7.8%	1.3%	0.0%	1.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.3%	80.5%
2000	521	2,3,4,5,6	6.0%	0.2%	2.9%	0.0%	0.0%	0.2%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	88.5%
2001	541	2,3,4,5,6	8.5%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	85.2%
2002	705	2,3,4,5,6	19.9%	0.0%	0.9%	4.8%	3.1%	1.4%	0.0%	0.0%	2.1%	0.3%	0.0%	0.3%	0.0%	0.7%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	65.2%
2003	979	2,3,4,5,6	14.8%	0.1%	2.9%	3.3%	0.0%	0.0%	0.6%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	76.1%
2004	1087	2,3,4,5,6	12.6%	0.0%	1.2%	9.6%	2.1%	0.6%	0.9%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.4%	69.2%
2005	638	2,3,4,5,6	13.6%	0.2%	1.3%	11.9%	1.9%	0.0%	1.3%	0.0%	8.5%	0.0%	0.0%	1.4%	0.8%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.3%	58.5%
2006	796	2,3,4,5,6	10.7%	1.4%	2.4%	6.4%	2.5%	0.0%	1.4%	0.0%	0.8%	0.0%	0.0%	1.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	72.1%
2007	302	2,3,4,5,6	16.6%	0.3%	4.3%	7.3%	6.0%	0.7%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	61.3%
2008	94	2,3,4,5,6	20.2%	0.0%	6.4%	7.4%	17.0%	0.0%	0.0%	0.0%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	44.7%
2009	349	2,3,4,5,6	12.3%	0.0%	0.0%	8.3%	1.1%	0.0%	1.4%	0.0%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	69.9%
2010	714	2,3,4,5,6	2.4%	0.0%	2.4%	4.9%	0.7%	0.7%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	86.3%
2011	1113	2,3,4,5,6	10.3%	0.9%	0.9%	2.3%	1.1%	1.1%	0.8%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	17.1%	63.7%
2012	573	2,3,4,5,6	8.2%	2.1%	2.1%	10.3%	3.1%	0.7%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.3%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.3%	65.4%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	689		12.8%	1.3%	2.0%	6.2%	1.7%	3.5%	0.7%	0.0%	1.5%	0.2%	1.2%	0.1%	0.2%	0.2%	0.0%	0.0%	0.1%	2.6%	0.0%	0.0%	0.0%	1.3%	64.2%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	658		14.6%	3.6%	1.7%	8.0%	0.2%	10.9%	0.6%	0.1%	0.9%	0.7%	4.3%	0.0%	0.2%	0.2%	0.0%	0.0%	0.4%	7.5%	0.0%	0.0%	0.0%	0.5%	45.5%
1996-1998	918		13.3%	0.0%	1.6%	3.1%	0.0%	0.8%	0.3%	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	78.4%
1999-2013	656		11.7%	0.4%	2.2%	6.0%	2.9%	0.4%	0.8%	0.0%	2.1%	0.0%	0.0%	0.2%	0.3%	0.2%	0.1%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	1.5%	70.5%

Appendix C15. Percent distribution of Kitsumkalum River Summer (North/Central BC) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	9	3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	28	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984[1]	80	3,4,5	56.3%	0.0%	0.0%	18.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%
1985	195	4,5,6	29.2%	0.0%	1.5%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.8%	0.0%	0.0%	48.7%
1986	216	3,5,6	10.2%	0.0%	0.0%	13.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.9%	2.3%	0.0%	64.8%
1987	264	3,4,6	13.3%	0.0%	2.7%	9.8%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.2%	4.2%	0.0%	62.5%
1988	202	3,4,5	24.3%	1.5%	5.0%	7.4%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.3%	5.9%	0.0%	37.1%
1989	851	3,4,5,6	14.2%	0.7%	6.9%	5.2%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.6%	5.2%	0.0%	55.6%
1990	636	3,4,5,6	11.8%	0.0%	3.1%	7.9%	0.8%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.8%	7.5%	0.0%	61.8%
1991	336	3,4,5,6	19.9%	0.0%	4.2%	10.7%	3.9%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.6%	9.2%	0.0%	36.6%
1992	691	3,4,5,6	15.2%	0.0%	1.9%	8.0%	3.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	3.0%	0.0%	58.8%
1993	241	3,4,5,6	11.6%	2.1%	2.1%	11.2%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.8%	1.2%	0.0%	51.0%
1994	131	3,4,5,6	13.7%	0.0%	0.0%	6.1%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.3%	2.3%	0.0%	55.7%
1995	202	3,4,5,6	13.4%	0.0%	3.5%	10.4%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.7%	5.0%	0.0%	38.6%
1996	539	3,4,5,6	10.8%	0.2%	6.9%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.4%	4.5%	0.0%	59.7%
1997	648	3,4,5,6	12.2%	0.0%	9.1%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.7%	7.1%	0.0%	60.3%
1998	506	3,4,5,6	10.7%	0.0%	3.4%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	5.3%	0.0%	79.1%
1999	729	3,4,5,6	12.8%	0.0%	10.2%	0.0%	11.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	2.1%	0.0%	61.6%
2000	354	3,4,5,6	9.0%	0.0%	10.2%	0.0%	8.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%	3.4%	0.0%	62.1%
2001	563	3,4,5,6	12.3%	0.0%	10.3%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.1%	7.6%	0.0%	59.0%
2002	1041	3,4,5,6	14.4%	0.4%	6.1%	1.5%	6.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	4.7%	0.0%	61.0%
2003	636	3,4,5,6	16.0%	0.0%	1.9%	5.8%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	6.6%	0.0%	66.4%
2004	947	3,4,5,6	8.0%	3.4%	5.3%	0.8%	10.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	1.1%	0.4%	69.2%
2005	308	3,4,5,6	18.8%	0.0%	3.2%	3.2%	8.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.8%	0.0%	59.4%
2006	309	3,4,5,6	14.2%	3.9%	1.9%	2.9%	6.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.1%	5.2%	0.0%	59.2%
2007	543	3,4,5,6	13.8%	0.9%	3.1%	1.7%	6.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	3.7%	0.0%	68.1%
2008	533	3,4,5,6	7.1%	0.2%	2.1%	2.6%	6.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.8%	21.0%	0.0%	48.2%
2009	706	3,4,5,6	13.0%	2.7%	5.4%	1.3%	4.2%	0.4%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	3.5%	0.0%	68.4%
2010	1011	3,4,5,6	5.3%	0.4%	4.1%	2.4%	5.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	9.5%	0.0%	70.7%
2011	540	3,4,5,6	12.2%	0.0%	0.9%	1.9%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	12.2%	0.0%	61.9%
2012	294	3,4,5,6	14.6%	1.0%	2.0%	1.0%	4.4%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	5.8%	0.0%	68.4%
2013	230	4,5,6	10.4%	0.0%	3.5%	5.7%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	10.0%	0.0%	68.7%
1979-2013	483		15.0%	0.6%	4.0%	5.0%	3.7%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.5%	5.5%	0.0%	57.4%
1979-1984	80		56.3%	0.0%	0.0%	18.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%
1985-1995	360		16.1%	0.4%	2.8%	8.9%	1.8%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.6%	4.2%	0.0%	51.9%
1996-1998	564		11.2%	0.1%	6.4%	0.1%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.8%	5.6%	0.0%	66.4%
1999-2013	583		12.1%	0.9%	4.7%	2.1%	5.8%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	6.9%	0.0%	63.5%

[1] Estimates for this year can only be used for distribution of fishing mortalities because the escapement data are insufficient.

Appendix C16. Percent distribution of Lower River Hatchery Tule (Lower Bonneville Hatchery) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	168	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	676	2,3,4	0.4%	0.0%	0.0%	0.1%	0.0%	28.8%	1.0%	0.0%	2.8%	0.7%	5.3%	0.0%	20.3%	8.4%	3.3%	0.4%	2.8%	9.3%	0.0%	4.7%	0.0%	0.0%	11.4%
1981	3215	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	31.9%	0.3%	0.0%	1.8%	0.5%	2.3%	0.0%	21.3%	7.9%	3.3%	0.1%	0.5%	3.8%	0.0%	1.4%	0.2%	0.1%	24.6%
1982	3559	2,3,4,5	0.0%	0.0%	0.0%	0.3%	0.0%	27.3%	0.5%	0.0%	0.9%	1.9%	0.3%	0.0%	17.4%	7.4%	3.2%	0.3%	1.3%	1.5%	0.0%	14.2%	0.1%	0.0%	23.7%
1983	2042	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	36.3%	0.4%	0.0%	1.9%	2.4%	0.8%	0.0%	12.1%	4.3%	0.2%	0.0%	0.4%	5.3%	0.0%	6.2%	0.0%	0.5%	29.0%
1984	1633	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	51.5%	0.2%	0.5%	0.9%	3.4%	1.5%	0.0%	3.9%	1.1%	2.4%	0.2%	0.4%	1.3%	0.0%	11.0%	1.5%	0.4%	19.8%
1985	1107	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	30.1%	0.7%	0.0%	1.1%	0.8%	1.5%	0.0%	13.1%	3.2%	4.7%	0.7%	0.0%	1.5%	0.0%	4.2%	0.5%	0.1%	37.8%
1986	2183	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	7.7%	2.2%	0.0%	13.1%	0.0%	5.9%	0.0%	3.1%	1.3%	2.3%	0.3%	0.0%	19.4%	0.0%	11.5%	3.8%	0.2%	29.1%
1987	9059	2,3,4,5	0.0%	0.0%	0.0%	0.2%	0.0%	33.0%	2.2%	0.0%	0.4%	1.9%	0.2%	0.0%	10.9%	2.9%	6.4%	0.7%	0.4%	1.5%	0.0%	18.2%	3.4%	0.3%	17.3%
1988	2690	2,3,4,5	0.3%	0.0%	0.0%	0.3%	0.0%	31.8%	2.4%	0.0%	1.0%	0.6%	0.0%	0.0%	8.7%	0.8%	3.1%	0.1%	0.3%	0.5%	0.0%	22.9%	1.8%	1.5%	24.0%
1989	275	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	17.1%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	14.5%	1.5%	10.2%	0.7%	0.0%	2.5%	0.0%	5.5%	0.7%	0.0%	45.5%
1990	322	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	23.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	14.6%	6.2%	3.7%	0.9%	0.0%	1.9%	0.0%	0.3%	2.5%	0.3%	44.7%
1991	510	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	11.8%	2.4%	0.0%	2.0%	0.2%	2.4%	0.0%	8.2%	2.9%	2.5%	1.6%	0.4%	2.5%	0.0%	2.5%	10.4%	0.0%	50.2%
1992	1324	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	19.7%	1.8%	0.0%	0.0%	0.6%	0.8%	0.0%	24.9%	3.8%	5.3%	1.4%	0.0%	2.1%	0.0%	0.8%	3.3%	0.4%	35.0%
1993	529	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	21.0%	4.3%	0.0%	0.0%	0.8%	0.0%	0.0%	15.1%	2.3%	5.7%	0.2%	0.0%	4.5%	0.0%	1.9%	4.2%	0.8%	39.3%
1994	31	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	29.0%	0.0%	0.0%	12.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.5%	51.6%
1995	30	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	10.0%	0.0%	86.7%
1996	67	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.0%	0.0%	0.0%	0.0%	0.0%	6.0%	1.5%	6.0%	73.1%
1997	225	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	21.8%	3.6%	0.0%	3.1%	0.0%	0.0%	0.0%	3.1%	3.1%	5.3%	0.0%	0.0%	0.0%	0.0%	0.9%	7.6%	9.3%	42.2%
1998	114	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	10.5%	0.0%	0.0%	0.0%	0.0%	4.4%	0.9%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	21.9%	0.9%	57.0%
1999	335	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	9.3%	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	1.5%	3.3%	1.8%	0.0%	0.0%	0.0%	3.6%	6.6%	10.1%	57.3%
2000	282	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	16.3%	12.4%	0.0%	4.3%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	3.5%	0.0%	2.5%	3.2%	9.2%	46.5%
2001	1233	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%	2.4%	0.0%	0.3%	0.0%	0.0%	0.0%	7.8%	2.8%	13.0%	0.8%	0.1%	1.1%	0.0%	1.4%	4.7%	9.0%	48.4%
2002	2033	2,3,4,5	0.4%	0.0%	0.0%	0.0%	0.0%	9.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.4%	5.7%	3.6%	1.6%	0.1%	0.0%	0.0%	7.5%	2.7%	6.5%	42.6%
2003	2129	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	13.2%	5.7%	0.0%	0.4%	0.0%	0.0%	0.0%	10.9%	5.9%	3.8%	0.2%	0.0%	0.8%	0.0%	6.1%	2.0%	5.1%	46.0%
2004	1624	2,3,4,5	0.5%	0.0%	0.0%	0.3%	0.0%	21.2%	8.8%	0.0%	0.7%	0.0%	0.0%	0.0%	4.5%	3.4%	4.0%	0.1%	0.0%	0.1%	0.0%	15.5%	1.2%	10.2%	29.4%
2005	618	2,3,4,5	0.0%	0.0%	0.0%	0.3%	0.0%	29.3%	7.4%	0.0%	0.0%	0.0%	0.0%	0.0%	5.2%	2.1%	1.6%	0.0%	0.0%	0.0%	0.0%	15.4%	0.2%	9.4%	29.1%
2006	88	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	15.9%	15.9%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	1.1%	2.3%	53.4%
2007	164	2,3,4,5	0.0%	0.6%	0.0%	0.0%	0.0%	11.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	4.9%	3.0%	0.0%	71.3%
2008	400	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	11.0%	9.8%	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%	6.8%	0.0%	0.0%	0.0%	0.0%	0.0%	24.3%	3.3%	4.3%	36.0%
2009	623	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	9.1%	0.0%	4.5%	0.0%	0.0%	0.0%	3.9%	4.7%	0.0%	0.0%	0.0%	7.2%	0.0%	28.9%	2.7%	4.7%	30.3%
2010	1643	2,3,4,5	0.1%	0.0%	0.0%	0.2%	0.0%	6.5%	6.3%	0.0%	2.9%	0.0%	0.0%	0.0%	14.5%	5.2%	3.7%	0.0%	0.0%	0.4%	0.0%	28.6%	3.3%	2.9%	25.4%
2011	860	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	9.2%	6.3%	0.0%	0.7%	0.0%	0.0%	0.9%	4.7%	7.3%	2.2%	0.3%	0.0%	2.9%	0.0%	21.5%	3.1%	8.3%	32.6%
2012	868	2,3,4,5	0.0%	0.0%	0.0%	0.5%	0.0%	3.0%	8.5%	0.0%	0.6%	0.0%	0.0%	0.0%	9.2%	12.8%	6.7%	1.5%	0.0%	2.9%	0.0%	16.5%	2.6%	3.6%	31.7%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	1288		0.1%	0.0%	0.0%	0.1%	0.0%	17.8%	4.2%	0.0%	1.7%	0.4%	0.7%	0.2%	8.8%	3.6%	3.4%	0.4%	0.2%	2.3%	0.0%	9.2%	3.4%	3.4%	40.1%
1979-1984	2225		0.1%	0.0%	0.0%	0.1%	0.0%	35.2%	0.5%	0.1%	1.7%	1.8%	2.0%	0.0%	15.0%	5.8%	2.5%	0.2%	1.1%	4.2%	0.0%	7.5%	0.4%	0.2%	21.7%
1985-1995	1642		0.0%	0.0%	0.0%	0.0%	0.0%	20.4%	1.5%	0.0%	2.8%	0.4%	1.3%	0.0%	10.3%	2.3%	4.0%	0.6%	0.1%	3.3%	0.0%	6.5%	3.7%	0.9%	41.9%
1996-1998	135		0.0%	0.0%	0.0%	0.0%	0.0%	9.0%	4.7%	0.0%	1.0%	0.0%	0.0%	1.5%	1.3%	1.6%	4.8%	0.0%	0.0%	0.0%	0.0%	2.9%	10.3%	5.4%	57.5%
1999-2013	921		0.1%	0.0%	0.0%	0.1%	0.0%	11.4%	7.5%	0.0%	1.0%	0.0%	0.0%	0.1%	7.0%	4.3%	3.0%	0.5%	0.0%	1.3%	0.0%	13.3%	2.8%	6.1%	41.4%

Appendix C17. Percent distribution of Lewis River Wild (Lewis River Wild) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	196	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	299	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	1201	2,3,4	7.5%	0.0%	0.0%	3.7%	0.0%	6.9%	0.0%	0.0%	2.2%	1.6%	0.9%	0.0%	1.9%	2.9%	0.6%	0.1%	0.2%	0.2%	0.0%	4.8%	12.7%	2.7%	51.0%
1982	972	3,4,5	7.7%	0.8%	0.1%	3.3%	0.0%	11.1%	0.0%	0.4%	0.0%	1.5%	1.4%	0.0%	3.4%	7.6%	1.0%	0.0%	0.6%	0.8%	0.0%	5.5%	15.0%	1.2%	38.4%
1983	1080	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	376	2,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	380	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	690	2,3,4	6.1%	0.0%	0.0%	2.5%	0.0%	8.1%	2.5%	0.0%	0.0%	2.3%	0.9%	0.0%	1.6%	0.6%	2.0%	0.0%	0.0%	0.0%	0.0%	26.8%	11.0%	0.9%	34.8%
1987	1208	2,3,4,5	5.5%	0.0%	0.0%	5.3%	0.0%	9.4%	1.0%	0.0%	0.0%	1.4%	0.0%	0.0%	1.1%	0.8%	1.7%	0.0%	0.0%	0.2%	0.0%	26.9%	4.8%	2.2%	39.7%
1988	1038	2,3,4,5	5.0%	0.0%	0.0%	3.4%	0.0%	10.4%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	3.9%	0.6%	1.1%	0.5%	0.0%	1.4%	0.0%	24.1%	14.5%	1.8%	32.9%
1989	1360	2,3,4,5	2.4%	0.7%	0.2%	5.1%	0.4%	5.9%	0.5%	0.0%	0.0%	0.2%	1.5%	0.0%	3.0%	0.7%	2.4%	0.0%	0.0%	0.0%	0.0%	9.8%	6.8%	4.4%	56.0%
1990	1207	2,3,4,5	7.4%	0.0%	0.0%	2.0%	0.0%	13.3%	0.8%	0.0%	0.0%	0.4%	0.6%	0.6%	2.7%	1.8%	1.5%	0.0%	0.0%	1.3%	0.0%	3.3%	2.2%	1.7%	60.5%
1991	916	2,3,4,5	7.0%	0.2%	0.0%	4.1%	1.2%	6.4%	0.0%	0.0%	0.0%	0.4%	0.7%	0.0%	1.3%	0.5%	1.1%	0.5%	0.0%	0.0%	0.0%	15.6%	6.3%	1.3%	53.2%
1992	583	2,3,4,5	1.9%	0.0%	0.0%	4.1%	0.0%	6.7%	0.0%	0.0%	0.9%	1.9%	0.0%	0.0%	1.4%	0.3%	1.9%	0.3%	0.0%	1.0%	0.0%	4.8%	22.6%	2.2%	49.9%
1993	407	2,3,4,5	4.2%	0.0%	1.0%	5.9%	0.0%	8.6%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	1.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	6.9%	8.8%	5.7%	55.3%
1994	265	2,3,4,5	9.1%	0.0%	0.0%	4.9%	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	3.8%	74.7%
1995	556	2,3,4,5	7.6%	0.0%	2.2%	4.0%	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	24.8%	2.3%	52.3%
1996	330	2,3,4,5	9.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.9%	4.5%	0.3%	82.1%
1997	234	3,4,5	15.4%	0.0%	0.0%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	76.9%
1998	101	2,4,5	7.9%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	2.0%	8.9%	74.3%
1999	62	2,3,5	17.7%	0.0%	1.6%	8.1%	0.0%	1.6%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	66.1%
2000	73	2,3,4	8.2%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.1%	2.7%	6.8%	64.4%
2001	238	2,3,4,5	5.9%	0.0%	1.7%	0.0%	0.0%	8.8%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	2.1%	1.3%	0.8%	0.0%	0.0%	0.0%	2.5%	2.9%	2.9%	62.2%
2002	391	2,3,4,5	14.6%	0.0%	1.8%	0.0%	0.0%	5.6%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	2.3%	4.1%	0.0%	0.0%	0.0%	0.0%	4.6%	2.3%	3.8%	52.4%
2003	477	2,3,4,5	10.7%	0.0%	0.0%	1.7%	1.3%	4.8%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	6.1%	1.0%	4.2%	0.0%	0.0%	0.0%	0.0%	6.5%	5.9%	1.3%	55.3%
2004	2170	2,3,4,5	6.6%	0.0%	0.5%	3.3%	0.5%	2.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.6%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	2.5%	1.9%	0.5%	81.2%
2005	391	2,3,4,5	4.1%	0.0%	0.0%	13.0%	7.2%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	11.8%	8.7%	0.3%	48.1%
2006	591	2,3,4,5	14.6%	0.0%	0.5%	6.6%	1.7%	8.3%	1.0%	0.0%	1.9%	0.0%	0.0%	0.0%	1.2%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	5.6%	19.3%	1.4%	37.2%
2007	206	2,3,4,5	37.4%	0.0%	1.0%	6.3%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	2.9%	5.8%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	1.5%	39.3%
2008	142	2,3,4,5	8.5%	0.0%	0.0%	0.0%	1.4%	12.7%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	5.6%	0.7%	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	4.9%	0.0%	57.7%
2009	176	2,3,4,5	19.9%	0.0%	0.0%	3.4%	2.3%	6.3%	19.3%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	3.4%	0.0%	42.6%
2010	200	2,3,4,5	6.5%	0.0%	0.0%	5.0%	2.5%	1.5%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	8.0%	0.0%	64.0%
2011	225	2,3,4,5	12.4%	0.0%	1.3%	12.0%	1.3%	4.4%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	6.2%	2.2%	0.0%	0.0%	0.0%	0.0%	1.8%	20.9%	1.8%	30.7%
2012	211	3,4,5	13.3%	2.4%	0.5%	3.8%	3.8%	7.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	6.6%	6.2%	1.4%	48.3%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	573		9.8%	0.1%	0.5%	4.2%	0.8%	5.8%	1.5%	0.0%	0.2%	0.3%	0.4%	0.1%	2.0%	1.4%	1.2%	0.1%	0.0%	0.4%	0.0%	6.7%	7.8%	2.2%	54.5%
1979-1984	1086		7.6%	0.4%	0.1%	3.5%	0.0%	9.0%	0.0%	0.2%	1.1%	1.6%	1.2%	0.0%	2.7%	5.3%	0.8%	0.0%	0.4%	0.5%	0.0%	5.1%	13.9%	2.0%	44.7%
1985-1995	823		5.6%	0.1%	0.3%	4.1%	0.2%	7.9%	0.5%	0.0%	0.1%	0.7%	0.8%	0.1%	1.7%	0.6%	1.2%	0.1%	0.0%	0.4%	0.0%	12.0%	10.2%	2.6%	50.9%
1996-1998	222		10.9%	0.0%	0.0%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	1.0%	3.2%	3.1%	77.8%
1999-2013	397		12.9%	0.2%	0.7%	4.5%	1.6%	5.0%	2.8%	0.0%	0.2%	0.0%	0.0%	0.2%	2.6%	1.8%	1.3%	0.1%	0.0%	0.4%	0.0%	4.5%	6.2%	1.7%	53.5%

Appendix C18. Percent distribution of Lyons Ferry (Lyons Ferry Hatchery) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	332	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	769	3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	761	2,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	400	2,3,5	1.5%	0.0%	0.0%	6.0%	0.0%	17.5%	1.8%	0.0%	0.0%	0.0%	3.0%	0.0%	8.0%	1.3%	7.0%	4.0%	0.0%	0.0%	0.0%	19.8%	1.5%	0.0%	28.8%
1990	542	2,3,4	3.0%	0.0%	0.0%	2.6%	0.0%	18.1%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	8.1%	3.7%	5.2%	0.6%	0.0%	0.0%	0.0%	24.7%	1.1%	0.0%	32.5%
1991	307	2,3,4,5	2.6%	0.0%	2.3%	4.6%	0.0%	13.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.7%	0.7%	2.9%	1.6%	0.0%	0.0%	0.0%	12.7%	1.0%	0.3%	56.4%
1992	267	3,4,5	1.9%	0.0%	0.0%	7.1%	1.5%	11.6%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	5.2%	0.0%	0.0%	1.5%	0.0%	6.4%	6.0%	0.0%	52.4%
1993	229	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	106	5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	39	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	42	3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	159	4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1999	123	5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2000	785	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2001	1667	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	1856	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	575	2,4,5	7.1%	0.0%	0.0%	1.6%	0.2%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.7%	2.1%	3.8%	0.0%	0.0%	0.2%	0.0%	10.8%	0.9%	0.2%	64.2%
2004	691	2,3,5	3.3%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	1.3%	1.4%	0.3%	0.0%	0.3%	0.0%	5.1%	0.9%	0.3%	86.3%
2005	433	2,3,4	3.5%	0.2%	0.0%	2.8%	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	2.1%	2.5%	2.5%	0.0%	0.0%	2.3%	0.0%	12.7%	0.9%	0.0%	64.9%
2006	389	2,3,4,5	4.1%	0.0%	0.0%	0.5%	2.1%	0.8%	1.5%	0.0%	0.0%	0.0%	0.0%	1.3%	6.9%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	9.3%	1.0%	0.0%	71.0%
2007	1577	2,3,4,5	0.2%	0.1%	0.0%	0.2%	0.0%	1.6%	0.4%	0.0%	1.8%	0.0%	0.0%	0.0%	0.3%	0.1%	0.1%	0.1%	0.0%	2.2%	0.0%	4.5%	2.3%	0.0%	85.9%
2008	2552	2,3,4,5	0.2%	0.0%	0.0%	0.2%	0.2%	6.1%	1.5%	0.0%	0.5%	0.0%	0.0%	0.2%	4.1%	2.3%	0.0%	0.0%	0.0%	0.2%	0.0%	8.5%	2.5%	0.0%	73.6%
2009	5310	2,3,4,5	0.6%	0.0%	0.1%	0.6%	0.0%	1.2%	1.3%	0.0%	0.3%	0.0%	0.0%	0.0%	1.1%	0.9%	0.0%	0.0%	0.0%	0.2%	0.0%	9.5%	2.8%	0.2%	81.1%
2010	3380	2,3,4,5	1.0%	0.1%	0.0%	1.3%	0.1%	4.5%	4.3%	0.0%	0.0%	0.0%	0.0%	0.1%	8.5%	7.2%	1.6%	0.3%	0.0%	0.4%	0.0%	17.5%	3.7%	0.0%	49.5%
2011	2796	2,3,4,5	1.8%	0.0%	0.1%	1.0%	0.3%	4.4%	3.1%	0.0%	0.2%	0.0%	0.0%	0.0%	4.0%	2.0%	1.4%	0.8%	0.0%	1.2%	0.0%	22.7%	6.5%	0.0%	50.6%
2012	1877	3,4,5	1.6%	0.4%	0.1%	0.3%	0.0%	4.5%	4.1%	0.0%	0.3%	0.0%	0.0%	0.6%	6.9%	4.4%	2.7%	0.8%	0.0%	0.6%	0.0%	13.1%	14.3%	5.7%	39.6%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	1507		2.3%	0.1%	0.2%	2.1%	0.3%	6.5%	1.6%	0.0%	0.2%	0.0%	0.3%	0.3%	4.2%	2.1%	2.4%	0.6%	0.0%	0.6%	0.0%	12.7%	3.2%	0.5%	59.8%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	379		2.2%	0.0%	0.6%	5.1%	0.4%	15.1%	1.5%	0.0%	0.0%	0.0%	1.2%	0.0%	4.8%	1.4%	5.1%	1.5%	0.0%	0.4%	0.0%	15.9%	2.4%	0.1%	42.5%
1996-1998	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1999-2013	1958		2.3%	0.1%	0.0%	0.9%	0.3%	3.0%	1.6%	0.0%	0.3%	0.0%	0.0%	0.4%	4.0%	2.4%	1.4%	0.2%	0.0%	0.8%	0.0%	11.4%	3.6%	0.6%	66.7%

Appendix C19. Percent distribution of Lyons Ferry Yearling total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	185	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	460	3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	1737	2,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	1817	2,3,5	0.3%	0.6%	0.0%	1.6%	0.0%	8.8%	6.5%	0.1%	0.1%	0.5%	3.4%	0.0%	8.1%	1.5%	5.6%	1.3%	0.6%	2.1%	0.0%	16.1%	2.6%	0.0%	40.4%
1990	3602	2,3,4,6	0.6%	0.0%	0.0%	0.6%	0.0%	17.9%	3.4%	0.0%	0.1%	0.7%	1.2%	0.0%	9.6%	4.9%	11.4%	0.5%	0.4%	2.9%	0.0%	14.2%	1.4%	0.7%	29.5%
1991	2871	3,4,5	0.2%	0.0%	0.0%	0.7%	0.0%	12.2%	2.0%	0.2%	0.5%	0.1%	1.8%	0.0%	7.3%	1.1%	5.3%	1.1%	0.4%	0.8%	0.0%	16.0%	0.9%	0.2%	49.2%
1992	2183	4,5,6	0.9%	0.0%	0.0%	2.6%	0.0%	22.0%	3.3%	0.0%	0.1%	0.0%	0.9%	0.2%	17.2%	1.6%	4.6%	0.5%	0.0%	2.1%	0.0%	9.0%	1.8%	0.0%	33.1%
1993	716	2,5,6	4.9%	0.0%	0.0%	1.7%	0.0%	26.4%	1.4%	0.4%	0.3%	0.0%	0.0%	0.0%	9.2%	1.4%	4.6%	0.0%	0.0%	0.0%	0.0%	15.9%	0.0%	2.0%	31.8%
1994	369	2,3,6	0.5%	0.0%	0.0%	0.3%	0.0%	1.9%	0.5%	0.0%	0.0%	0.0%	0.3%	0.0%	0.3%	0.0%	1.6%	0.0%	0.8%	0.0%	0.0%	15.2%	1.6%	1.4%	75.6%
1995	3910	2,3,4	0.3%	0.0%	0.0%	0.7%	0.1%	0.9%	0.5%	0.0%	0.0%	0.1%	0.7%	0.1%	0.5%	0.1%	0.3%	0.1%	0.3%	0.0%	0.0%	5.9%	4.1%	0.5%	84.7%
1996	3392	2,3,4,5	0.8%	0.1%	0.1%	0.8%	0.0%	1.0%	0.6%	0.0%	0.1%	0.0%	1.2%	0.1%	0.9%	0.1%	5.2%	0.0%	0.0%	0.0%	0.0%	16.1%	3.3%	0.9%	68.8%
1997	3394	2,3,4,5,6	1.8%	0.0%	0.0%	1.0%	0.0%	4.6%	1.1%	0.0%	0.0%	0.4%	0.6%	0.2%	1.3%	0.5%	6.3%	0.4%	0.0%	0.1%	0.0%	13.1%	4.8%	1.6%	62.3%
1998	5604	2,3,4,5,6	1.7%	0.1%	0.2%	2.5%	0.9%	0.1%	0.0%	0.0%	0.1%	0.0%	0.1%	0.4%	1.3%	0.2%	1.7%	0.1%	0.0%	0.1%	0.0%	10.7%	6.2%	0.4%	73.1%
1999	7428	2,3,4,5,6	1.4%	0.1%	0.3%	0.9%	0.1%	1.2%	1.3%	0.0%	0.5%	0.1%	0.1%	0.0%	7.2%	2.0%	6.0%	0.5%	0.0%	0.0%	0.0%	8.1%	4.1%	1.2%	65.0%
2000	6544	2,3,4,5,6	1.6%	0.0%	0.1%	0.0%	0.0%	6.3%	3.9%	0.0%	0.0%	0.0%	0.0%	0.1%	2.6%	3.7%	3.7%	0.6%	0.0%	0.0%	0.0%	11.7%	4.3%	0.9%	60.4%
2001	10049	2,3,4,5,6	0.7%	0.0%	0.1%	0.0%	0.0%	7.5%	1.8%	0.0%	0.0%	0.0%	0.0%	0.4%	5.2%	3.9%	15.4%	1.2%	0.0%	0.6%	0.0%	13.8%	3.8%	0.4%	45.1%
2002	7038	2,3,4,5,6	1.3%	0.2%	0.0%	0.8%	0.1%	7.0%	1.6%	0.0%	0.0%	0.0%	0.4%	0.5%	11.8%	9.1%	6.5%	1.9%	0.2%	0.2%	0.0%	11.5%	4.3%	0.5%	42.1%
2003	10545	2,3,4,5,6	0.6%	0.0%	0.0%	0.2%	0.1%	6.4%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	2.3%	3.5%	1.0%	0.0%	0.3%	0.0%	8.9%	2.4%	0.3%	68.1%
2004	14727	2,3,4,5,6	0.4%	0.0%	0.0%	0.3%	0.0%	3.7%	0.8%	0.0%	0.1%	0.0%	0.0%	0.1%	4.3%	2.0%	4.6%	1.2%	0.0%	0.6%	0.0%	5.4%	2.2%	0.6%	73.7%
2005	8612	2,3,4,5,6	0.4%	0.0%	0.0%	0.5%	0.2%	8.6%	2.4%	0.0%	0.0%	0.0%	0.0%	0.3%	6.8%	5.8%	4.8%	0.5%	0.0%	0.3%	0.0%	10.7%	1.9%	0.5%	56.3%
2006	5936	2,3,4,5,6	0.4%	0.0%	0.1%	1.3%	0.5%	4.4%	1.8%	0.0%	0.3%	0.0%	0.0%	0.2%	5.2%	2.3%	1.3%	0.2%	0.1%	0.5%	0.0%	10.7%	1.8%	1.0%	67.9%
2007	7638	2,3,4,5,6	0.9%	0.3%	0.1%	0.5%	0.0%	5.4%	1.7%	0.0%	0.3%	0.0%	0.1%	0.0%	4.3%	2.6%	1.6%	0.7%	0.0%	0.6%	0.0%	7.9%	2.1%	0.7%	70.3%
2008	6177	2,3,4,5,6	0.3%	0.0%	0.0%	0.1%	0.4%	3.6%	1.9%	0.0%	0.3%	0.0%	0.0%	0.0%	3.7%	1.4%	0.0%	0.0%	0.2%	0.3%	0.0%	11.8%	2.6%	0.1%	73.4%
2009	11322	2,3,4,5,6	0.1%	0.1%	0.0%	0.2%	0.1%	1.5%	4.0%	0.0%	0.6%	0.0%	0.0%	0.1%	3.1%	4.9%	0.0%	0.1%	0.1%	2.5%	0.0%	10.2%	3.4%	0.0%	69.1%
2010	6715	2,3,4,5,6	0.8%	0.1%	0.0%	1.1%	0.2%	6.3%	3.6%	0.0%	0.3%	0.0%	0.0%	0.3%	9.5%	9.6%	3.2%	0.2%	0.0%	0.4%	0.0%	27.7%	3.3%	0.4%	33.0%
2011	4813	3,4,5,6	0.6%	0.0%	0.0%	0.5%	0.1%	4.6%	3.6%	0.0%	0.1%	0.0%	0.0%	0.1%	6.4%	8.1%	1.7%	1.0%	0.0%	0.8%	0.0%	26.3%	9.7%	0.5%	35.9%
2012	3983	2,4,5,6	0.8%	0.0%	0.0%	0.5%	0.0%	2.2%	1.9%	0.0%	0.2%	0.0%	0.0%	0.4%	9.0%	5.4%	5.9%	1.3%	0.0%	0.2%	0.0%	15.5%	7.4%	7.0%	42.4%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	5808		0.9%	0.1%	0.0%	0.8%	0.1%	6.8%	2.1%	0.0%	0.2%	0.1%	0.4%	0.1%	5.8%	3.1%	4.4%	0.6%	0.1%	0.6%	0.0%	13.0%	3.3%	0.9%	56.3%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	2210		1.1%	0.1%	0.0%	1.2%	0.0%	12.9%	2.5%	0.1%	0.2%	0.2%	1.2%	0.0%	7.5%	1.5%	4.8%	0.5%	0.4%	1.1%	0.0%	13.2%	1.8%	0.7%	49.2%
1996-1998	4130		1.4%	0.1%	0.1%	1.5%	0.3%	1.9%	0.5%	0.0%	0.1%	0.1%	0.6%	0.3%	1.2%	0.3%	4.4%	0.2%	0.0%	0.1%	0.0%	13.3%	4.8%	1.0%	68.1%
1999-2013	7966		0.7%	0.1%	0.1%	0.5%	0.1%	4.9%	2.3%	0.0%	0.2%	0.0%	0.0%	0.2%	6.0%	4.5%	4.2%	0.7%	0.0%	0.5%	0.0%	12.9%	3.8%	1.0%	57.3%

Appendix C20. Percent distribution of Middle Shuswap River Summer (Fraser Early) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1999	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2000	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2001	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2004	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2005	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2006	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2007	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2009	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2010	3	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	56	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	243	2,3,4	2.9%	0.0%	1.2%	6.2%	5.3%	1.2%	0.0%	0.0%	17.7%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.4%	3.3%	1.6%	44.0%
2013	1594	3,4,5	1.1%	0.0%	0.3%	2.5%	1.1%	0.1%	0.2%	0.0%	16.0%	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	9.5%	2.2%	2.3%	64.4%
1979-2013	918		2.0%	0.0%	0.8%	4.3%	3.2%	0.6%	0.1%	0.0%	16.8%	0.0%	0.0%	0.1%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.9%	2.7%	2.0%	54.2%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1996-1998	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1999-2013	918		2.0%	0.0%	0.8%	4.3%	3.2%	0.6%	0.1%	0.0%	16.8%	0.0%	0.0%	0.1%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.9%	2.7%	2.0%	54.2%

Appendix C21. Percent distribution of Nanaimo River Fall (Lower Strait of Georgia Natural) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	286	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	1556	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	1872	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	542	2,4,5	4.2%	0.0%	0.0%	1.8%	0.0%	1.7%	0.7%	1.1%	45.8%	12.5%	19.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	1.1%	0.0%	0.4%	0.0%	0.0%	11.1%
1985	57	3,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	27	4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	25	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	421	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	1201	2,3,4	0.2%	0.4%	0.0%	0.7%	0.1%	1.7%	0.7%	6.8%	56.6%	1.1%	8.2%	0.1%	0.7%	0.0%	0.0%	0.0%	2.7%	0.9%	0.0%	0.0%	0.0%	0.4%	18.7%
1992	2327	2,3,4,5	0.1%	0.0%	0.0%	0.6%	0.0%	5.1%	0.2%	8.2%	48.5%	1.2%	5.5%	0.2%	0.4%	0.1%	0.0%	0.0%	0.7%	0.8%	0.0%	0.0%	0.0%	0.3%	28.1%
1993	1646	2,3,4,5	0.1%	0.4%	0.0%	1.7%	0.2%	2.7%	0.5%	6.1%	57.3%	1.3%	4.4%	0.0%	0.5%	0.0%	0.0%	0.0%	0.2%	1.0%	0.0%	0.0%	0.0%	0.4%	23.1%
1994	511	2,3,4,5	0.6%	0.0%	0.0%	0.8%	0.0%	3.7%	1.2%	0.8%	40.1%	0.0%	6.7%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.8%	0.0%	0.4%	42.5%
1995	1635	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.7%	0.0%	38.1%	0.0%	3.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.2%	0.0%	0.4%	54.0%
1996	950	2,3,4,5	0.0%	1.4%	0.0%	0.0%	0.0%	0.3%	0.4%	0.0%	68.3%	0.0%	2.3%	0.0%	0.2%	0.0%	0.0%	0.0%	0.5%	3.2%	0.0%	3.6%	0.0%	2.2%	17.6%
1997	288	2,3,4,5	6.3%	0.0%	0.0%	4.2%	0.0%	0.7%	0.3%	0.0%	41.0%	2.8%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	3.8%	0.0%	1.0%	0.0%	0.7%	32.3%
1998	266	2,3,4,5	1.1%	4.5%	0.0%	6.0%	0.0%	0.4%	0.0%	0.0%	44.0%	0.0%	1.9%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	36.8%
1999	306	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	38.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	2.9%	0.0%	1.0%	0.0%	2.3%	49.7%
2000	171	3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	6.4%	0.0%	49.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	2.3%	33.9%
2001	547	2,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.4%	9.3%	0.0%	2.4%	0.0%	0.4%	42.6%
2002	928	2,3,5	0.3%	0.1%	0.0%	0.0%	0.2%	1.0%	0.1%	0.0%	43.1%	0.0%	2.6%	0.4%	0.0%	0.0%	0.0%	0.0%	2.6%	4.0%	0.0%	4.1%	0.0%	1.0%	40.5%
2003	874	2,3,4	0.1%	0.7%	0.1%	0.1%	0.0%	3.8%	0.8%	0.0%	24.9%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	1.9%	3.2%	0.0%	1.3%	0.0%	2.7%	57.9%
2004	803	2,3,4,5	1.1%	0.0%	0.0%	0.7%	2.4%	5.4%	2.2%	0.0%	16.3%	0.0%	0.0%	2.6%	0.7%	0.0%	0.0%	0.0%	1.6%	3.0%	0.0%	1.4%	0.0%	4.6%	57.9%
2005	418	3,4,5	0.7%	0.0%	0.7%	1.9%	0.0%	7.7%	2.2%	0.0%	13.9%	0.0%	0.0%	7.9%	0.0%	0.0%	0.0%	0.0%	3.1%	1.2%	0.0%	23.9%	0.0%	0.7%	36.1%
2006	1568	2,4,5	0.3%	0.0%	0.0%	0.1%	0.0%	0.4%	0.5%	0.0%	15.7%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.6%	1.7%	0.0%	4.5%	0.0%	1.5%	74.4%
2007	1089	3,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	261	4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2009	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2010	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	881		0.9%	0.4%	0.0%	1.1%	0.2%	2.3%	1.1%	1.4%	40.1%	1.1%	3.3%	1.0%	0.2%	0.0%	0.0%	0.0%	1.5%	2.3%	0.0%	2.9%	0.0%	1.4%	38.7%
1979-1984	542		4.2%	0.0%	0.0%	1.8%	0.0%	1.7%	0.7%	1.1%	45.8%	12.5%	19.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	1.1%	0.0%	0.4%	0.0%	0.0%	11.1%
1985-1995	1464		0.2%	0.2%	0.0%	0.8%	0.1%	3.0%	0.7%	4.4%	48.1%	0.7%	5.6%	0.3%	0.3%	0.0%	0.0%	0.0%	0.7%	1.2%	0.0%	0.2%	0.0%	0.4%	33.3%
1996-1998	501		2.5%	2.0%	0.0%	3.4%	0.0%	0.5%	0.3%	0.0%	51.1%	0.9%	2.3%	0.6%	0.1%	0.0%	0.0%	0.0%	1.6%	2.3%	0.0%	1.5%	0.0%	2.1%	28.9%
1999-2013	702		0.3%	0.1%	0.1%	0.4%	0.3%	2.8%	1.8%	0.0%	30.2%	0.0%	0.3%	1.7%	0.1%	0.0%	0.0%	0.0%	2.2%	3.2%	0.0%	5.5%	0.0%	1.9%	49.1%

Appendix C22. Percent distribution of Nicola River Spring (Fraser Early) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	20	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	200	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	1396	2,3,4	0.0%	0.0%	0.0%	0.3%	1.1%	1.1%	0.0%	0.0%	11.2%	0.0%	0.4%	0.0%	0.9%	0.0%	0.0%	0.0%	1.0%	1.9%	0.0%	20.0%	2.3%	0.3%	59.5%
1990	271	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	3.3%	0.0%	14.8%	16.2%	1.8%	57.6%
1991	1320	2,3,4,5	0.2%	0.5%	0.0%	0.0%	0.2%	4.1%	0.0%	0.2%	5.7%	0.2%	0.7%	0.0%	0.8%	0.0%	0.0%	0.2%	0.2%	1.5%	0.0%	13.5%	8.4%	0.9%	62.8%
1992	545	2,3,4,5	0.0%	0.0%	0.0%	5.3%	0.0%	5.1%	0.0%	0.0%	8.3%	2.6%	0.9%	0.0%	5.0%	0.0%	0.6%	0.0%	0.0%	6.1%	0.0%	6.4%	9.4%	0.4%	50.1%
1993	1177	2,3,4,5	0.0%	0.0%	0.0%	3.2%	0.0%	5.8%	1.2%	0.0%	6.2%	0.0%	1.4%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	10.0%	5.7%	0.0%	62.2%
1994	2050	2,3,4,5	0.0%	0.0%	0.0%	0.2%	0.0%	3.6%	0.4%	0.0%	3.6%	0.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	8.1%	0.2%	82.1%
1995	1869	2,3,4,5	0.0%	0.0%	0.0%	0.2%	0.6%	1.3%	0.5%	0.0%	3.0%	0.0%	1.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	3.4%	3.6%	0.0%	85.4%
1996	73	2,3,4,5	0.0%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.8%	0.0%	0.0%	76.7%
1997	261	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.4%	0.0%	12.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.8%	0.0%	1.5%	5.4%	0.0%	61.7%
1998	423	2,3,4,5	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	0.0%	0.0%	2.6%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.6%	16.8%	0.0%	63.4%
1999	2423	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.9%	2.2%	0.0%	89.4%
2000	1794	2,3,4,5	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	5.2%	0.0%	79.2%
2001	2265	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	4.4%	0.0%	83.8%
2002	2309	2,3,4,5	0.0%	0.0%	0.0%	1.2%	0.3%	0.6%	0.0%	0.0%	1.1%	0.0%	0.2%	0.0%	0.6%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	4.0%	2.5%	0.0%	89.2%
2003	1797	2,3,4,5	0.1%	0.0%	0.0%	2.4%	0.0%	0.9%	0.6%	0.0%	2.6%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	6.8%	0.0%	85.6%
2004	440	2,3,4,5	0.0%	0.0%	0.0%	2.3%	0.0%	1.8%	0.0%	0.0%	3.9%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	23.6%	0.0%	0.0%	67.5%
2005	400	2,3,4,5	0.0%	0.0%	0.0%	1.0%	0.0%	3.8%	0.0%	0.0%	6.8%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.8%	15.3%	0.0%	60.0%
2006	421	2,3,4,5	0.0%	0.0%	0.0%	1.7%	0.0%	1.9%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	11.2%	9.7%	0.0%	71.3%
2007	146	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	26.7%	23.3%	0.0%	42.5%
2008	610	2,3,4,5	0.0%	0.0%	0.0%	1.1%	0.8%	0.0%	0.0%	0.0%	3.4%	0.0%	0.0%	0.0%	2.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	10.8%	3.6%	0.0%	77.7%
2009	277	2,3,4,5	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	9.0%	0.0%	0.0%	0.0%	3.2%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	17.0%	21.3%	0.0%	48.0%
2010	2309	2,3,4,5	0.3%	0.0%	0.0%	1.3%	0.2%	0.0%	0.1%	0.0%	1.7%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	4.5%	0.0%	0.0%	90.9%
2011	686	2,3,4,5	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.4%	0.0%	4.2%	0.0%	0.0%	0.0%	1.9%	0.3%	0.0%	0.0%	0.0%	1.3%	0.0%	5.2%	2.5%	0.0%	83.4%
2012	718	2,3,4,5	0.0%	0.0%	0.0%	0.6%	0.7%	0.0%	0.0%	0.0%	4.0%	0.0%	0.0%	0.0%	7.7%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	18.1%	0.8%	0.0%	67.7%
2013	1506	3,4,5	0.0%	0.0%	0.0%	0.9%	0.0%	0.2%	0.0%	0.0%	4.5%	0.0%	0.0%	0.2%	4.6%	0.3%	0.0%	0.0%	0.0%	0.3%	0.0%	4.4%	0.0%	0.0%	84.7%
1979-2013	1099		0.0%	0.0%	0.0%	1.0%	0.4%	1.5%	0.1%	0.0%	4.1%	0.1%	0.9%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	10.5%	6.9%	0.1%	71.3%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	1233		0.0%	0.1%	0.0%	1.3%	0.3%	3.3%	0.3%	0.0%	5.8%	0.4%	0.7%	0.0%	1.5%	0.0%	0.1%	0.0%	0.2%	2.2%	0.0%	9.9%	7.7%	0.5%	65.7%
1996-1998	252		0.0%	0.0%	0.0%	0.9%	1.3%	0.0%	0.0%	0.0%	2.7%	0.0%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.6%	0.0%	10.3%	7.4%	0.0%	67.3%
1999-2013	1207		0.0%	0.0%	0.0%	0.9%	0.3%	1.0%	0.1%	0.0%	3.6%	0.0%	0.0%	0.0%	1.7%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	10.8%	6.5%	0.0%	74.7%

Appendix C23. Percent distribution of Nisqually Fall Fingerling total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	26	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	99	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983[1]	303	2,3,4	0.0%	0.0%	0.0%	1.7%	0.0%	12.9%	0.0%	1.7%	7.6%	0.0%	4.6%	0.0%	3.0%	0.0%	0.3%	0.0%	0.0%	56.1%	0.0%	11.2%	0.0%	0.0%	1.0%
1984[1]	251	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	30.3%	0.0%	0.0%	1.6%	0.0%	2.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	23.9%	0.0%	36.3%	0.0%	0.4%	4.4%
1985[1]	81	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	27.2%	3.7%	0.0%	0.0%	0.0%	3.7%	0.0%	0.0%	0.0%	7.4%	0.0%	0.0%	19.8%	0.0%	34.6%	0.0%	0.0%	3.7%
1986	131	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	16.0%	0.0%	0.0%	14.5%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.1%	0.0%	32.1%	0.0%	0.0%	16.8%
1987	197	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	12.2%	0.0%	1.0%	14.2%	2.0%	1.5%	0.0%	3.0%	0.0%	2.0%	0.0%	0.0%	18.3%	0.0%	33.5%	2.5%	0.0%	9.6%
1988	492	2,3,4,5	0.0%	0.0%	0.0%	0.8%	0.0%	4.5%	0.0%	2.8%	32.7%	1.6%	3.5%	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%	15.7%	0.0%	15.2%	0.0%	0.0%	16.9%
1989	1155	2,3,4,5	0.0%	0.0%	0.0%	0.4%	0.0%	5.3%	6.0%	0.0%	2.9%	0.0%	3.8%	0.0%	14.6%	0.2%	0.0%	0.3%	0.0%	18.6%	0.0%	40.3%	0.4%	0.0%	7.2%
1990	1390	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	23.4%	5.9%	0.0%	3.2%	0.2%	0.1%	0.0%	10.5%	0.1%	0.0%	0.0%	0.0%	13.0%	0.0%	35.9%	0.0%	0.0%	7.6%
1991	282	2,3,4,5	0.0%	0.0%	0.0%	2.1%	0.0%	8.5%	1.8%	0.0%	3.2%	0.0%	2.1%	0.0%	16.7%	0.7%	0.0%	0.0%	0.0%	25.2%	0.0%	21.6%	2.5%	0.0%	15.6%
1992	544	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	6.6%	3.5%	0.0%	6.4%	0.0%	2.2%	0.0%	5.9%	0.0%	0.4%	0.0%	0.0%	27.4%	0.0%	19.9%	0.0%	0.0%	27.8%
1993	712	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	13.9%	1.8%	0.3%	3.9%	0.0%	2.7%	0.0%	2.9%	0.7%	0.0%	0.0%	0.0%	20.4%	0.0%	24.7%	0.0%	0.7%	27.9%
1994	1542	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	0.4%	0.0%	4.2%	0.0%	2.4%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	36.5%	0.0%	21.5%	0.5%	0.0%	30.4%
1995	2032	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.4%	7.9%	2.9%	0.0%	2.0%	0.0%	0.6%	0.0%	2.0%	0.0%	0.3%	0.0%	0.0%	27.7%	0.0%	30.9%	0.0%	0.0%	25.2%
1996	1091	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	0.6%	1.3%	0.0%	3.8%	0.0%	1.0%	0.0%	1.0%	0.0%	0.5%	0.0%	0.0%	26.0%	0.0%	39.3%	0.2%	0.0%	25.9%
1997	755	2,3,4,5	0.0%	0.4%	0.0%	0.0%	0.0%	3.2%	4.2%	0.0%	1.2%	0.0%	0.5%	0.0%	0.4%	0.8%	0.3%	0.0%	0.0%	29.1%	0.0%	20.0%	1.3%	0.0%	38.5%
1998	1546	2,3,4,5	0.1%	0.0%	0.0%	0.0%	0.0%	0.3%	0.6%	0.0%	2.3%	0.0%	0.0%	0.3%	0.4%	0.0%	0.0%	0.0%	0.0%	23.9%	0.0%	37.3%	0.8%	0.0%	34.0%
1999	1683	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	2.6%	0.0%	3.4%	0.0%	0.0%	0.0%	2.9%	0.3%	0.2%	0.0%	0.0%	23.6%	0.0%	42.3%	0.0%	0.0%	24.4%
2000	738	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	13.3%	3.0%	0.0%	3.8%	0.0%	0.0%	0.0%	1.1%	1.5%	0.4%	0.0%	0.0%	28.2%	0.0%	37.8%	0.0%	0.1%	10.8%
2001	1200	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	3.1%	2.8%	0.0%	1.6%	0.0%	0.0%	0.0%	3.3%	0.4%	1.0%	0.0%	0.0%	26.1%	0.0%	27.3%	0.0%	0.0%	34.3%
2002	1555	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	6.4%	3.4%	0.0%	1.0%	0.0%	0.0%	0.0%	2.8%	0.5%	0.7%	0.0%	0.0%	12.4%	0.0%	41.3%	3.3%	0.0%	28.1%
2003	1770	2,3,4,5	0.1%	0.0%	0.0%	0.0%	0.0%	5.1%	1.9%	0.0%	1.3%	0.0%	0.0%	0.6%	3.8%	0.0%	0.8%	0.0%	0.0%	15.0%	0.0%	42.8%	1.9%	0.0%	26.8%
2004	1897	2,3,4,5	0.0%	0.1%	0.0%	0.0%	0.0%	5.5%	1.2%	0.0%	1.5%	0.0%	0.0%	0.0%	6.1%	0.6%	0.9%	0.0%	0.0%	12.5%	0.0%	33.3%	0.0%	0.1%	38.2%
2005	1363	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	5.4%	2.1%	0.0%	5.0%	0.0%	0.3%	0.0%	3.5%	1.9%	0.5%	0.0%	0.0%	13.5%	0.0%	11.5%	0.0%	0.0%	56.3%
2006	3221	2,3,4,5	0.1%	0.0%	0.0%	0.0%	0.0%	6.0%	1.7%	0.0%	2.1%	0.0%	0.0%	0.0%	5.4%	0.3%	0.2%	0.0%	0.0%	8.5%	0.0%	41.6%	0.0%	0.0%	34.1%
2007	3342	2,3,4,5	0.0%	0.0%	0.0%	0.1%	0.0%	9.8%	1.5%	0.0%	0.9%	0.0%	0.0%	0.0%	4.8%	0.3%	0.1%	0.0%	0.0%	14.1%	0.0%	36.4%	0.0%	0.0%	32.1%
2008	1166	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	3.3%	0.0%	4.8%	0.0%	0.0%	0.0%	1.6%	0.4%	0.0%	0.0%	0.0%	15.4%	0.0%	47.6%	0.0%	0.0%	21.9%
2009	1853	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	3.6%	0.0%	1.2%	0.0%	0.0%	0.0%	2.1%	0.3%	0.0%	0.0%	0.0%	14.2%	0.0%	42.0%	0.0%	0.0%	34.8%
2010	1810	2,3,4,5	0.0%	0.1%	0.0%	0.0%	0.0%	4.4%	3.7%	0.0%	1.3%	0.0%	0.0%	0.0%	4.4%	0.7%	0.1%	0.0%	0.0%	9.1%	0.0%	35.8%	3.6%	0.0%	36.7%
2011	1514	2,3,4,5	0.0%	0.0%	0.0%	0.3%	0.0%	2.8%	3.0%	0.0%	1.0%	0.0%	0.0%	0.0%	3.1%	0.6%	0.5%	0.0%	0.0%	12.9%	0.0%	21.9%	4.4%	0.0%	49.5%
2012	1569	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	2.4%	0.0%	1.7%	0.0%	0.0%	0.0%	5.5%	1.1%	0.3%	0.0%	0.0%	13.0%	0.0%	17.6%	15.0%	0.0%	41.7%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	1240		0.0%	0.0%	0.0%	0.2%	0.0%	8.2%	2.3%	0.2%	4.5%	0.1%	1.1%	0.0%	3.9%	0.4%	0.6%	0.0%	0.0%	20.6%	0.0%	31.1%	1.2%	0.0%	25.4%
1979-1984	277		0.0%	0.0%	0.0%	0.8%	0.0%	21.6%	0.0%	0.8%	4.6%	0.0%	3.3%	0.0%	1.5%	0.0%	0.8%	0.0%	0.0%	40.0%	0.0%	23.7%	0.0%	0.2%	2.7%
1985-1995	778		0.0%	0.0%	0.0%	0.3%	0.0%	11.7%	2.4%	0.4%	7.9%	0.4%	2.2%	0.0%	5.7%	0.2%	0.9%	0.0%	0.0%	22.0%	0.0%	28.2%	0.5%	0.1%	17.2%
1996-1998	1131		0.1%	0.1%	0.0%	0.0%	0.0%	1.4%	2.0%	0.0%	2.4%	0.0%	0.5%	0.1%	0.6%	0.3%	0.3%	0.0%	0.0%	26.4%	0.0%	32.2%	0.8%	0.0%	32.8%
1999-2013	1763		0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	2.6%	0.0%	2.2%	0.0%	0.0%	0.0%	3.6%	0.6%	0.4%	0.0%	0.0%	15.6%	0.0%	34.2%	2.0%	0.0%	33.5%

[1] Estimates for this year can only be used for distribution of fishing mortalities because the escapement data are insufficient.

Appendix C24. Percent distribution of Nooksack Spring Yearling (Nooksack Spring Yearling) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	46	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	229	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	196	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	260	2,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.8%	2.3%	18.5%	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	3.5%	0.0%	10.4%	0.0%	0.0%	61.9%
1987	558	3,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	561	2,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	122	2,3,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.8%	0.0%	13.9%	0.0%	0.0%	66.4%
1990	85	2,3,4	0.0%	0.0%	0.0%	0.0%	0.0%	8.2%	1.2%	0.0%	40.0%	1.2%	8.2%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	23.5%	0.0%	2.4%	0.0%	0.0%	14.1%
1991	378	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	6.1%	0.0%	43.4%	0.0%	4.5%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	6.3%	0.0%	8.2%	0.0%	0.0%	27.2%
1992	1021	2,3,4,5	1.7%	2.0%	0.0%	0.0%	0.0%	19.2%	2.4%	1.7%	14.9%	1.0%	1.5%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	9.7%	0.0%	0.7%	0.0%	0.0%	44.5%
1993	643	3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%	7.9%	3.3%	16.0%	0.0%	5.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	12.9%	0.0%	6.2%	0.0%	0.0%	43.1%
1994	539	2,4,5	0.6%	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	5.9%	30.6%	0.0%	0.6%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	3.9%	0.0%	6.7%	0.0%	0.0%	46.6%
1995	181	2,3,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29.3%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.2%	0.0%	2.8%	0.0%	0.0%	55.2%
1996	202	2,3,4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	16.3%	0.0%	0.0%	1.0%	0.5%	0.0%	0.0%	0.0%	0.0%	5.4%	0.0%	0.5%	0.0%	0.0%	73.3%
1997	131	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	16.8%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	21.4%	0.0%	5.3%	0.0%	0.0%	50.4%
1998	115	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	0.0%	27.0%	0.0%	4.3%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	11.3%	0.0%	7.8%	0.0%	0.0%	38.3%
1999	179	3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	1.7%	0.0%	30.7%	0.0%	0.0%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	5.0%	0.0%	0.0%	54.2%
2000	147	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2001	31	5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2004	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2005	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2006	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2007	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2009	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2010	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	321		0.2%	0.2%	0.0%	0.0%	0.0%	3.7%	2.9%	1.1%	24.4%	0.2%	2.1%	0.4%	0.8%	0.0%	0.0%	0.0%	0.0%	10.2%	0.0%	5.8%	0.0%	0.0%	47.9%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	404		0.3%	0.2%	0.0%	0.0%	0.0%	5.2%	2.3%	1.6%	25.3%	0.3%	2.5%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	10.2%	0.0%	6.4%	0.0%	0.0%	44.9%
1996-1998	149		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	0.0%	20.0%	0.0%	1.7%	1.8%	0.2%	0.0%	0.0%	0.0%	0.0%	12.7%	0.0%	4.6%	0.0%	0.0%	54.0%
1999-2013	179		0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	1.7%	0.0%	30.7%	0.0%	0.0%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	5.0%	0.0%	0.0%	54.2%

Appendix C25. Percent distribution of Nooksack Spring Fingerling (Nooksack Spring Yearling) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	11	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	197	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	508	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	299	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	62	2,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	503	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	1117	2,3,4	3.3%	0.0%	0.2%	0.0%	0.0%	1.1%	3.9%	0.0%	19.9%	0.0%	5.8%	0.8%	0.7%	0.0%	0.0%	0.0%	0.0%	9.5%	0.0%	0.3%	0.0%	0.4%	54.2%
1997	2070	2,3,4,5	4.3%	0.4%	0.8%	0.2%	0.0%	2.2%	2.9%	0.0%	11.2%	0.8%	1.3%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	6.6%	0.0%	1.3%	0.0%	0.3%	67.3%
1998	1528	2,3,4,5	8.6%	0.2%	0.0%	0.0%	0.0%	1.8%	3.5%	0.0%	4.1%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.1%	0.0%	0.2%	79.9%
1999	1652	2,3,4,5	2.0%	0.2%	0.0%	0.0%	0.0%	2.4%	5.8%	0.0%	4.7%	0.0%	0.0%	0.7%	1.5%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	81.6%
2000	940	2,3,4,5	5.1%	0.2%	0.0%	0.0%	0.0%	20.5%	5.0%	0.0%	14.9%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.2%	0.0%	0.6%	52.6%
2001	1408	2,3,4,5	1.8%	0.0%	0.0%	0.0%	0.0%	10.9%	4.8%	0.0%	5.3%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.8%	0.0%	0.0%	73.6%
2002	1268	2,3,4,5	6.2%	0.0%	0.5%	0.9%	0.0%	17.0%	2.4%	0.0%	1.5%	0.0%	0.0%	1.3%	0.2%	0.5%	0.0%	0.0%	0.0%	0.7%	0.0%	0.2%	0.0%	0.3%	68.4%
2003	782	2,3,4,5	3.6%	0.0%	0.0%	0.0%	0.0%	13.6%	2.9%	0.0%	8.1%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	0.0%	1.3%	0.0%	0.1%	66.5%
2004	690	2,3,4,5	1.4%	0.0%	0.0%	0.3%	0.0%	31.7%	5.4%	0.0%	10.6%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.4%	0.0%	0.3%	45.1%
2005	859	2,3,4,5	3.7%	0.1%	0.0%	0.2%	0.0%	32.6%	4.2%	0.0%	9.0%	0.0%	0.5%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	1.0%	0.0%	0.8%	0.0%	0.1%	47.0%
2006	559	2,3,4,5	2.3%	0.0%	0.5%	1.1%	0.0%	32.2%	6.6%	0.0%	9.5%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	2.3%	0.5%	0.5%	39.9%
2007	605	2,3,4,5	5.8%	0.2%	0.5%	0.3%	0.0%	24.1%	9.4%	0.0%	10.9%	0.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	6.0%	0.0%	0.7%	0.3%	0.2%	41.2%
2008	1058	2,3,4,5	1.6%	0.2%	0.0%	0.4%	0.0%	19.9%	13.5%	0.0%	15.1%	0.0%	0.0%	0.0%	1.3%	0.5%	0.0%	0.0%	0.0%	7.0%	0.0%	2.2%	0.2%	0.2%	37.9%
2009	826	2,3,4,5	2.9%	0.6%	0.0%	0.0%	0.0%	7.5%	11.1%	0.0%	16.6%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	3.5%	0.0%	1.3%	0.0%	1.0%	54.6%
2010	850	2,3,4,5	3.4%	0.4%	0.0%	0.8%	0.0%	22.0%	11.1%	0.0%	3.3%	0.0%	0.0%	0.4%	2.5%	0.5%	0.0%	0.0%	0.0%	3.4%	0.0%	0.7%	0.0%	0.0%	51.6%
2011	391	2,3,4,5	4.1%	0.0%	0.0%	0.0%	0.0%	20.5%	7.4%	0.0%	21.7%	0.0%	0.5%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	5.4%	0.0%	3.1%	0.0%	0.3%	35.8%
2012	398	2,3,4,5	5.8%	1.0%	0.8%	0.0%	0.0%	17.8%	13.8%	0.0%	12.6%	0.0%	2.0%	0.0%	4.8%	0.0%	0.0%	0.0%	0.0%	15.1%	0.0%	5.0%	0.0%	0.5%	20.9%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	1000		3.9%	0.2%	0.2%	0.2%	0.0%	16.4%	6.7%	0.0%	10.5%	0.0%	0.6%	0.2%	1.2%	0.1%	0.0%	0.0%	0.0%	4.2%	0.0%	1.2%	0.1%	0.3%	54.0%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1996-1998	1572		5.4%	0.2%	0.3%	0.1%	0.0%	1.7%	3.4%	0.0%	11.7%	0.3%	2.4%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	5.7%	0.0%	0.6%	0.0%	0.3%	67.1%
1999-2013	878		3.5%	0.2%	0.2%	0.3%	0.0%	19.5%	7.4%	0.0%	10.3%	0.0%	0.2%	0.2%	1.3%	0.1%	0.0%	0.0%	0.0%	3.9%	0.0%	1.4%	0.1%	0.3%	51.2%

Appendix C26. Percent distribution of Puntledge River Summer (Lower Strait of Georgia Hatchery) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM														
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal			
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	1581	2,3,4	1.8%	0.3%	0.3%	2.7%	0.0%	1.1%	0.0%	19.4%	19.2%	8.4%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	34.4%
1980	920	2,3,4,5	2.4%	0.0%	0.4%	2.0%	0.0%	4.8%	0.0%	14.7%	23.9%	5.8%	9.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	36.4%
1981	589	2,3,4,5	0.8%	0.0%	0.0%	4.9%	0.0%	0.0%	0.0%	20.9%	44.1%	7.6%	8.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.9%
1982	551	2,3,4,5	1.1%	0.5%	0.0%	4.2%	0.0%	2.2%	0.0%	6.0%	20.1%	16.5%	24.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.4%
1983	537	2,3,4,5	2.0%	0.2%	0.0%	8.4%	0.0%	2.8%	0.0%	12.5%	16.6%	17.1%	7.8%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32.0%
1984	319	2,3,4,5	0.0%	0.9%	0.0%	2.2%	0.0%	2.2%	0.0%	6.0%	19.7%	5.6%	6.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	56.4%
1985	159	2,3,4,5	13.2%	0.6%	3.8%	6.3%	0.0%	0.0%	0.0%	0.0%	37.1%	1.3%	12.6%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.0%
1986	205	2,3,4,5	5.9%	0.0%	5.4%	2.4%	0.0%	2.4%	0.0%	12.7%	32.2%	4.4%	11.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.9%
1987	167	2,3,4,5	3.0%	1.2%	0.0%	15.0%	3.0%	0.0%	4.2%	0.0%	25.7%	2.4%	6.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	38.9%
1988	104	2,3,4,5	11.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	36.5%	0.0%	5.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	45.2%
1989	77	2,3,4,5	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	53.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.2%	39.0%
1990	101	2,3,4,5	7.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.9%	3.0%	15.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	58.4%
1991	128	2,3,4,5	5.5%	7.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	43.8%	0.0%	10.2%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.5%
1992	101	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	45.5%	0.0%	18.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32.7%
1993	82	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	59.8%	0.0%	7.3%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.0%
1994	32	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	65.6%	0.0%	9.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%
1995	46	2,3,4,5	4.3%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	41.3%	0.0%	15.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	37.0%
1996	52	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	44.2%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	53.8%
1997	27	3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.8%	0.0%	7.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	77.8%
1998	9	2,4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1999	51	2,3,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.6%	0.0%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	78.4%
2000	64	2,3,4	1.6%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	84.4%
2001	213	2,3,4,5	2.8%	0.5%	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	90.1%
2002	121	2,3,4,5	5.8%	0.0%	0.0%	0.0%	0.0%	0.0%	11.6%	0.0%	5.0%	0.0%	0.0%	9.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	67.8%
2003	123	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.9%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.5%	74.8%
2004	105	2,3,4,5	16.2%	1.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	11.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	68.6%
2005	332	2,3,4,5	1.5%	0.0%	0.0%	1.2%	0.0%	0.6%	0.0%	0.0%	27.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	69.6%
2006	303	2,3,4,5	7.9%	2.3%	0.0%	0.7%	0.0%	0.0%	2.0%	0.0%	6.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	80.2%
2007	435	2,3,4,5	11.5%	8.5%	1.6%	0.7%	0.0%	0.0%	0.0%	0.0%	6.2%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	70.8%
2008	270	2,3,4,5	1.5%	1.1%	0.0%	0.0%	0.0%	0.0%	5.2%	0.0%	12.6%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	76.7%
2009	610	2,3,4,5	5.2%	1.8%	0.2%	1.1%	0.3%	0.0%	0.0%	0.0%	14.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	76.7%
2010	483	2,3,4,5	6.8%	0.8%	0.0%	0.0%	1.0%	1.7%	1.0%	0.0%	14.5%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	71.0%
2011	332	2,3,4,5	6.6%	3.6%	0.3%	1.2%	1.5%	0.0%	0.0%	0.0%	11.4%	0.0%	0.0%	8.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	66.9%
2012	118	2,3,4,5	21.2%	0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	0.0%	54.2%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.3%
2013	246	2,3,4,5	0.0%	2.0%	0.0%	1.6%	1.6%	0.0%	1.6%	0.0%	28.5%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	64.2%
1979-2013	282		4.4%	1.1%	0.4%	1.6%	0.2%	0.7%	0.9%	2.8%	26.6%	2.1%	5.8%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	51.9%
1979-1984	750		1.4%	0.3%	0.1%	4.0%	0.0%	2.2%	0.0%	13.2%	23.9%	10.2%	11.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	32.9%
1985-1995	109		4.9%	1.1%	0.8%	2.2%	0.3%	0.2%	0.4%	1.4%	41.4%	1.0%	10.3%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	34.5%
1996-1998	40		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29.5%	0.0%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	65.8%
1999-2013	254		5.9%	1.5%	0.1%	0.4%	0.3%	0.5%	1.8%	0.0%	16.3%	0.0%	0.3%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	70.4%

Appendix C27. Percent distribution of Queets Fall Fingerling (Washington Coastal Wild) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	2	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	12	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	111	2,3,4	11.7%	0.0%	0.0%	17.1%	0.0%	12.6%	0.0%	0.0%	0.0%	1.8%	2.7%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	3.6%	0.0%	27.9%	0.0%	0.0%	20.7%
1982	246	2,3,4,5	15.4%	1.6%	0.0%	19.1%	0.0%	12.6%	0.0%	0.0%	0.0%	0.0%	0.8%	1.2%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	26.0%	0.0%	0.0%	22.8%
1983	199	2,3,4,5,6	47.2%	0.0%	0.0%	13.1%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.5%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	16.1%	0.0%	0.0%	15.1%
1984	154	2,3,4,5,6	16.2%	0.6%	0.0%	22.1%	2.6%	7.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	26.6%	0.0%	0.0%	21.4%
1985	293	2,3,4,5,6	19.8%	0.0%	0.0%	33.4%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	12.3%	0.0%	0.7%	28.3%
1986	331	3,4,5,6	25.7%	0.0%	1.2%	11.2%	0.0%	6.9%	0.0%	0.0%	0.0%	1.5%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%	0.3%	43.2%
1987	616	2,4,5,6	27.9%	1.8%	0.0%	11.7%	1.0%	1.5%	0.0%	0.0%	0.0%	0.8%	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	20.0%	0.0%	0.0%	33.8%
1988	825	2,3,5,6	17.8%	1.7%	1.5%	9.3%	0.2%	5.6%	1.0%	0.0%	0.0%	2.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	15.0%	0.0%	0.0%	41.7%
1989	659	2,3,4,6	16.7%	0.2%	0.2%	10.6%	1.1%	8.8%	0.0%	0.0%	0.0%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	24.4%	0.0%	0.0%	35.5%
1990	1363	2,3,4,5	15.0%	0.6%	0.1%	6.3%	2.4%	7.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.2%	0.0%	0.0%	54.7%
1991	1199	2,3,4,5,6	24.4%	0.3%	1.1%	10.1%	1.3%	5.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	14.6%	0.0%	0.0%	42.5%
1992	770	2,3,4,5,6	13.6%	5.7%	2.2%	8.6%	1.7%	17.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	16.0%	0.0%	0.0%	34.2%
1993	709	2,3,4,5,6	19.0%	2.3%	0.6%	15.0%	1.8%	13.1%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.4%	1.8%	0.0%	0.0%	0.0%	0.8%	0.0%	14.1%	0.0%	0.0%	30.7%
1994	1218	2,3,4,5,6	23.3%	1.2%	0.4%	21.3%	1.5%	4.0%	1.0%	0.0%	0.2%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.6%	0.0%	0.0%	27.9%
1995	831	2,3,4,5,6	22.0%	0.0%	1.7%	7.5%	3.7%	0.7%	0.4%	0.0%	0.2%	0.0%	0.2%	0.0%	0.7%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	30.0%	0.0%	0.0%	32.5%
1996	796	2,3,4,5,6	18.2%	0.0%	1.4%	0.8%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.0%	0.5%	0.0%	62.9%
1997	943	2,3,4,5,6	37.3%	0.5%	0.0%	5.4%	0.0%	0.3%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.1%	0.0%	0.0%	35.7%
1998	671	2,3,4,5,6	25.3%	0.0%	3.1%	19.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	11.6%	4.3%	0.0%	35.2%
1999	821	2,3,4,5,6	12.9%	0.0%	1.7%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%	0.0%	0.0%	70.2%
2000	497	2,3,4,5,6	26.4%	0.0%	12.1%	13.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	0.0%	44.7%
2001	501	2,3,4,5,6	28.5%	0.0%	6.8%	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	38.1%	0.0%	0.0%	20.0%
2002	1783	2,3,4,5,6	29.3%	0.0%	3.6%	5.2%	2.8%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	23.1%	0.0%	14.8%	20.8%
2003	1577	2,3,4,5,6	23.0%	0.1%	3.9%	11.7%	5.8%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	19.9%	0.0%	0.4%	34.2%
2004	3419	2,3,4,5,6	13.9%	0.8%	2.6%	5.8%	6.8%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	9.0%	0.0%	0.1%	59.4%
2005	2884	2,3,4,5,6	14.4%	0.0%	3.2%	6.5%	2.8%	3.2%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	17.6%	0.0%	0.1%	51.3%
2006	1553	2,3,4,5,6	19.4%	0.1%	2.1%	10.1%	2.1%	3.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.7%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	12.1%	0.0%	0.8%	48.5%
2007	753	2,3,4,5,6	31.1%	0.0%	4.1%	10.6%	14.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	13.7%	0.0%	0.0%	23.2%
2008	1090	2,3,4,5,6	17.4%	0.0%	1.3%	8.0%	4.8%	0.7%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.1%	0.0%	0.0%	46.7%
2009	1471	2,3,4,5,6	30.7%	1.9%	3.6%	10.8%	3.7%	0.1%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.9%	0.0%	0.3%	27.5%
2010	2619	2,3,4,5,6	20.5%	0.0%	4.4%	4.4%	4.6%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	14.9%	0.0%	0.0%	50.3%
2011	2714	2,3,4,5,6	23.6%	0.1%	3.6%	6.2%	4.8%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	20.9%	0.0%	0.0%	40.0%
2012	2356	3,4,5,6	39.7%	0.2%	2.8%	9.1%	7.7%	0.9%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	16.0%	0.0%	0.9%	20.8%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	1124		22.7%	0.6%	2.2%	11.1%	2.4%	3.8%	0.2%	0.0%	0.0%	0.3%	0.3%	0.1%	0.3%	0.2%	0.1%	0.0%	0.1%	0.4%	0.0%	17.8%	0.2%	0.6%	36.8%
1979-1984	178		22.7%	0.6%	0.0%	17.8%	0.6%	9.5%	0.0%	0.0%	0.0%	0.5%	1.4%	0.3%	0.8%	0.0%	0.5%	0.0%	0.4%	0.9%	0.0%	24.2%	0.0%	0.0%	20.0%
1985-1995	801		20.5%	1.3%	0.8%	13.2%	1.3%	6.6%	0.2%	0.0%	0.0%	0.6%	0.4%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.8%	0.0%	17.0%	0.0%	0.1%	36.8%
1996-1998	803		27.0%	0.2%	1.5%	8.6%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	15.9%	1.6%	0.0%	44.6%
1999-2013	1717		23.6%	0.2%	4.0%	8.1%	4.3%	0.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	16.9%	0.0%	1.2%	39.8%

Appendix C28. Percent distribution of Quinsam River Fall (Upper Strait of Georgia) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	1690	2,3,4,5	6.4%	4.5%	1.1%	6.1%	0.0%	0.1%	0.0%	2.4%	5.3%	10.7%	22.7%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	38.2%
1980	1715	2,3,4,5,6	15.0%	4.8%	3.1%	10.5%	0.0%	0.0%	0.0%	1.5%	7.3%	16.6%	21.2%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.0%
1981	1718	2,3,4,5,6	11.6%	4.4%	1.5%	13.1%	0.0%	0.5%	0.0%	2.1%	11.6%	12.3%	16.5%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	21.8%
1982	1266	2,3,4,5,6	19.6%	6.3%	4.7%	8.4%	0.0%	0.3%	0.0%	0.0%	4.6%	6.5%	25.9%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	21.5%
1983	1330	2,3,4,5,6	25.1%	1.2%	0.3%	14.4%	0.0%	0.7%	0.0%	0.2%	5.7%	11.5%	24.3%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.0%
1984	1289	2,3,4,5,6	17.0%	4.6%	5.6%	6.5%	0.0%	0.8%	0.0%	0.9%	9.8%	5.0%	20.3%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27.7%
1985	1796	2,3,4,5,6	28.3%	8.3%	4.1%	4.9%	0.0%	0.1%	0.0%	0.0%	5.0%	3.5%	18.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	27.1%
1986	1908	2,3,4,5,6	15.5%	9.7%	3.1%	6.7%	0.0%	0.0%	0.0%	0.2%	7.1%	7.3%	24.4%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	24.5%
1987	1640	2,3,4,5,6	15.1%	8.4%	2.9%	7.0%	0.0%	0.4%	0.3%	0.2%	6.9%	6.8%	20.7%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	28.0%
1988	1707	2,3,4,5,6	19.4%	4.9%	1.1%	6.9%	0.0%	0.8%	0.9%	0.2%	5.5%	2.6%	9.1%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.3%	46.9%
1989	1911	2,3,4,5,6	14.0%	8.6%	2.6%	4.0%	0.4%	0.3%	0.0%	0.0%	7.9%	2.0%	16.4%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%	41.1%
1990	1307	2,3,4,5,6	17.1%	5.1%	0.5%	6.7%	0.3%	1.4%	0.0%	1.5%	7.5%	5.0%	13.7%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	37.3%
1991	846	2,3,4,5,6	11.0%	5.4%	1.5%	6.4%	0.0%	0.5%	0.7%	0.7%	9.1%	10.3%	13.2%	6.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	34.5%
1992	684	2,3,4,5,6	15.2%	2.6%	1.9%	11.1%	0.0%	0.3%	0.0%	0.4%	5.4%	10.1%	9.9%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	38.5%
1993	394	2,3,4,5,6	8.4%	6.3%	1.3%	6.3%	0.0%	1.3%	0.0%	0.8%	13.5%	6.6%	21.1%	6.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.4%
1994	574	2,3,4,5,6	3.1%	48.3%	2.4%	6.1%	0.0%	0.0%	0.0%	0.0%	4.0%	0.7%	9.8%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	23.9%
1995	291	2,3,4,5,6	8.2%	7.9%	0.0%	11.3%	2.4%	0.0%	0.0%	0.0%	8.9%	0.0%	19.2%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	39.9%
1996	294	2,3,4,5,6	6.8%	1.0%	0.0%	1.4%	0.3%	0.0%	0.0%	0.0%	9.9%	0.0%	19.4%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	58.5%
1997	469	2,3,4,5,6	11.1%	4.5%	3.2%	3.6%	1.1%	0.4%	5.3%	0.0%	13.4%	2.6%	4.3%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	48.0%
1998	599	2,3,4,5,6	15.5%	2.8%	2.5%	0.0%	1.2%	0.0%	0.0%	0.0%	9.7%	0.0%	0.3%	4.3%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.8%	62.3%
1999	1000	2,3,4,5,6	9.5%	2.0%	4.9%	2.2%	2.7%	0.0%	0.0%	0.0%	13.0%	0.3%	1.2%	7.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	55.9%
2000	840	2,3,4,5,6	14.4%	3.0%	4.6%	0.4%	0.0%	0.0%	0.0%	0.0%	5.1%	0.0%	1.7%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	66.2%
2001	1265	2,3,4,5,6	11.0%	2.1%	1.7%	0.1%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.6%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	77.7%
2002	928	2,3,4,5,6	16.1%	3.4%	0.9%	0.5%	0.0%	0.0%	0.0%	0.0%	6.8%	0.1%	0.0%	7.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	64.0%
2003	535	2,3,4,5,6	20.9%	2.2%	0.9%	0.0%	1.5%	0.0%	0.0%	0.0%	4.7%	0.0%	0.0%	16.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	53.5%
2004	807	2,3,4,5,6	7.8%	20.2%	1.7%	0.2%	0.0%	0.0%	0.0%	0.0%	4.1%	0.0%	2.4%	11.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	52.2%
2005	907	2,3,4,5,6	18.2%	2.2%	3.0%	0.4%	0.9%	0.0%	0.0%	0.0%	8.9%	0.0%	1.3%	7.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	57.0%
2006	832	2,3,4,5,6	17.5%	5.2%	1.3%	0.7%	4.3%	0.0%	0.7%	0.0%	5.8%	0.0%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	61.5%
2007	628	2,3,4,5,6	21.7%	5.6%	1.1%	3.2%	0.8%	0.0%	0.0%	0.0%	8.4%	0.0%	1.0%	9.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	48.6%
2008	411	2,3,4,5,6	13.4%	2.2%	0.2%	0.7%	0.0%	0.0%	0.0%	0.0%	4.9%	0.0%	0.0%	7.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	71.3%
2009	462	2,3,4,5,6	11.7%	4.3%	2.2%	0.9%	5.2%	0.0%	1.5%	0.0%	10.4%	0.0%	1.5%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	58.0%
2010	474	2,3,4,5,6	8.4%	6.5%	1.1%	0.0%	1.3%	0.0%	0.0%	0.0%	25.1%	0.0%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.4%	50.8%
2011	760	2,3,4,5,6	10.9%	8.8%	0.7%	0.0%	2.1%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	12.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	59.9%
2012	810	2,3,4,5,6	18.1%	6.4%	2.6%	0.9%	0.7%	0.0%	0.0%	0.0%	7.2%	0.0%	0.0%	9.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	54.8%
2013	738	2,3,4,5,6	10.8%	6.6%	1.1%	0.4%	0.7%	0.0%	0.0%	0.0%	3.9%	0.0%	0.0%	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	67.9%
1979-2013	995		14.1%	6.6%	2.0%	4.3%	0.7%	0.2%	0.3%	0.3%	7.8%	3.4%	9.7%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	45.1%
1979-1984	1501		15.8%	4.3%	2.7%	9.8%	0.0%	0.4%	0.0%	1.2%	7.4%	10.4%	21.8%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	23.4%
1985-1995	1187		14.1%	10.5%	1.9%	7.0%	0.3%	0.5%	0.2%	0.4%	7.3%	5.0%	16.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	33.6%
1996-1998	454		11.1%	2.8%	1.9%	1.7%	0.9%	0.1%	1.8%	0.0%	11.0%	0.9%	8.0%	3.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.4%	56.2%
1999-2013	760		14.0%	5.4%	1.9%	0.7%	1.3%	0.0%	0.1%	0.0%	7.7%	0.0%	0.6%	7.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.3%	60.0%

Appendix C29. Percent distribution of Robertson Creek Fall (WCVI Hatchery and Natural) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	5482	2,3,4,5	21.5%	0.6%	0.7%	11.9%	0.0%	8.3%	0.1%	0.5%	1.3%	11.2%	9.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	5.0%	0.0%	29.2%
1980	5090	2,3,4,5	28.0%	6.3%	1.1%	8.5%	0.0%	7.3%	0.5%	0.0%	0.2%	8.7%	5.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	9.5%	3.0%	0.0%	20.9%
1981	3129	2,3,4,5	31.7%	1.8%	1.0%	13.7%	0.0%	5.8%	0.5%	0.4%	1.1%	8.2%	5.8%	0.3%	0.0%	0.0%	0.0%	0.0%	1.3%	0.1%	0.0%	10.2%	4.4%	0.3%	13.5%
1982	4748	2,3,4,5	29.3%	3.7%	1.6%	14.6%	0.0%	6.0%	0.4%	0.1%	0.7%	7.0%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.1%	0.0%	12.4%	5.8%	0.0%	11.6%
1983	4090	2,3,4,5	41.2%	2.8%	0.4%	11.1%	0.0%	5.7%	0.0%	0.0%	0.4%	7.9%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	15.0%	4.5%	0.2%	7.8%
1984	3310	2,3,4,5	29.8%	4.3%	0.1%	13.7%	0.0%	6.7%	0.0%	0.0%	1.1%	3.9%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.0%	14.6%	0.1%	7.2%
1985	1690	2,3,4,5	19.9%	13.3%	0.0%	16.0%	0.0%	1.4%	0.0%	0.0%	0.6%	0.9%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.2%	0.0%	1.1%	14.9%	0.5%	24.3%
1986	925	2,3,4,5	15.8%	8.1%	0.5%	8.0%	0.8%	6.1%	0.6%	0.0%	1.4%	0.9%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	1.4%	0.0%	0.3%	27.7%	0.0%	24.2%
1987	1624	2,3,4,5	10.4%	3.2%	1.0%	7.4%	0.0%	2.6%	0.2%	0.0%	1.1%	3.4%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.1%	0.0%	0.0%	19.5%	0.1%	47.5%
1988	3135	2,3,4,5	11.4%	4.4%	1.3%	7.7%	1.0%	4.9%	4.6%	0.0%	1.0%	1.4%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.3%	0.0%	6.5%	12.0%	0.8%	40.2%
1989	6639	2,3,4,5	10.1%	7.5%	0.4%	9.5%	0.5%	2.5%	1.8%	0.0%	1.2%	1.6%	2.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	16.3%	16.3%	0.3%	29.8%
1990	11184	2,3,4,5	19.1%	2.4%	2.0%	9.1%	0.8%	6.2%	1.4%	0.0%	0.4%	2.3%	2.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.4%	7.8%	0.3%	38.5%
1991	13867	2,3,4,5	19.4%	2.4%	3.2%	9.7%	0.5%	4.9%	1.4%	0.0%	0.5%	2.6%	1.9%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	13.4%	12.5%	0.3%	26.8%
1992	11372	2,3,4,5	15.3%	15.8%	1.6%	6.8%	0.9%	17.1%	1.9%	0.0%	0.2%	2.8%	1.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%	4.9%	0.1%	30.8%
1993	6723	2,3,4,5	16.1%	2.1%	2.4%	7.7%	0.8%	14.6%	2.4%	0.0%	0.8%	2.1%	1.1%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	6.8%	12.1%	0.3%	30.2%
1994	3794	2,3,4,5	17.8%	6.4%	3.9%	9.2%	0.4%	4.9%	3.8%	0.0%	0.6%	1.2%	1.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	11.1%	15.6%	0.3%	23.4%
1995	1529	2,3,4,5	14.8%	0.0%	4.2%	3.0%	1.8%	1.5%	2.7%	0.0%	1.7%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	5.7%	8.9%	0.3%	54.2%
1996	856	2,3,4,5	8.6%	0.1%	4.1%	2.6%	0.5%	0.7%	0.0%	0.0%	4.1%	0.5%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	75.0%
1997	2258	2,3,4,5	15.0%	3.7%	4.7%	4.8%	1.5%	0.1%	1.8%	0.0%	1.2%	1.8%	0.6%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.8%	17.1%	0.1%	40.5%
1998	3208	2,3,4,5	17.2%	1.7%	5.2%	5.5%	3.0%	0.0%	4.8%	0.0%	0.7%	0.0%	0.0%	0.4%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	4.1%	17.0%	0.1%	40.3%
1999	1260	2,3,4,5	12.4%	1.1%	7.5%	5.3%	6.7%	0.0%	3.3%	0.0%	1.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%	18.2%	0.0%	37.7%
2000	254	2,3,4,5	6.3%	0.0%	0.0%	0.0%	4.7%	0.0%	0.0%	0.0%	13.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	76.0%
2001	954	2,3,4,5	4.2%	0.0%	2.9%	0.0%	0.0%	0.0%	2.5%	0.0%	3.5%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	84.7%
2002	2111	2,3,4,5	12.9%	0.6%	1.8%	3.8%	2.1%	0.3%	3.0%	0.0%	0.7%	0.1%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.9%	14.9%	0.0%	50.7%
2003	3015	2,3,4,5	14.5%	2.2%	3.5%	0.8%	1.6%	0.0%	2.0%	0.0%	0.7%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.2%	15.2%	0.0%	48.6%
2004	5035	2,3,4,5	13.4%	8.4%	2.9%	2.7%	1.5%	0.1%	1.4%	0.0%	2.3%	0.0%	0.0%	2.8%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	11.3%	13.0%	0.7%	39.4%
2005	3231	2,3,4,5	15.2%	1.9%	4.2%	3.1%	4.4%	0.0%	1.9%	0.0%	2.8%	0.0%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.1%	8.0%	0.4%	22.8%
2006	2854	2,3,4,5	11.7%	2.6%	2.7%	2.6%	3.0%	0.0%	3.8%	0.0%	2.6%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	24.7%	10.9%	0.2%	33.3%
2007	2284	2,3,4,5	16.5%	3.4%	3.6%	5.2%	5.4%	0.1%	4.2%	0.0%	2.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.4%	12.5%	0.0%	20.2%
2008	1621	2,3,4,5	10.1%	0.5%	1.5%	2.6%	2.5%	0.0%	1.2%	0.0%	2.2%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	13.1%	0.1%	43.1%
2009	1456	2,3,4,5	13.1%	7.0%	2.7%	2.1%	6.1%	0.0%	4.3%	0.0%	3.5%	0.0%	0.0%	5.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	12.0%	0.9%	36.9%
2010	1377	2,3,4,5	7.8%	0.1%	3.8%	3.1%	4.6%	0.7%	2.5%	0.0%	4.4%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	4.4%	3.0%	0.4%	62.2%
2011	2394	2,3,4,5	13.8%	2.0%	1.5%	3.5%	3.5%	0.2%	5.2%	0.0%	3.0%	0.0%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	16.8%	16.3%	0.1%	29.9%
2012	1924	2,3,4,5	14.0%	3.7%	1.2%	3.0%	2.7%	0.2%	4.4%	0.0%	4.3%	0.0%	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.1%	16.0%	0.1%	31.7%
2013	1427	2,3,4,5	11.1%	4.2%	1.5%	1.1%	2.0%	0.0%	2.5%	0.0%	8.3%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	64.2%
1979-2013	3596		16.3%	3.7%	2.3%	6.3%	1.8%	3.1%	2.0%	0.0%	2.1%	2.0%	1.7%	1.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	9.0%	10.9%	0.2%	37.1%
1979-1984	4308		30.3%	3.3%	0.8%	12.2%	0.0%	6.6%	0.2%	0.2%	0.8%	7.8%	5.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	10.4%	6.2%	0.1%	15.0%
1985-1995	5680		15.5%	6.0%	1.9%	8.6%	0.7%	6.1%	1.9%	0.0%	0.9%	1.8%	2.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.3%	0.2%	0.0%	6.3%	13.8%	0.3%	33.6%
1996-1998	2107		13.6%	1.8%	4.7%	4.3%	1.6%	0.3%	2.2%	0.0%	2.0%	0.8%	0.2%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	12.0%	0.1%	51.9%
1999-2013	2080		11.8%	2.5%	2.8%	2.6%	3.4%	0.1%	2.8%	0.0%	3.6%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	11.7%	10.5%	0.2%	45.4%

Appendix C30. Percent distribution of Samish Fall Fingerling (Nooksack Fall Fingerling) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	1964	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	83	5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	1605	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	5422	3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	6375	4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	377	5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	76	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	1019	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	2061	2,3,4	0.0%	0.0%	0.0%	0.2%	0.0%	9.0%	1.8%	1.3%	18.1%	0.2%	3.3%	0.2%	7.9%	0.0%	0.0%	0.0%	0.0%	11.0%	0.0%	32.8%	0.0%	0.0%	14.2%
1990	2504	2,3,4,5	0.2%	0.0%	0.0%	0.6%	0.0%	20.6%	2.1%	3.6%	10.9%	0.1%	1.4%	0.0%	9.3%	0.1%	0.2%	0.0%	0.0%	8.2%	0.0%	28.1%	0.0%	0.0%	14.6%
1991	1042	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	14.3%	3.4%	1.9%	11.0%	0.1%	2.8%	0.0%	8.8%	0.7%	0.4%	0.0%	0.0%	9.9%	0.0%	21.5%	0.5%	0.8%	24.0%
1992	772	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	10.9%	0.8%	2.3%	18.7%	0.0%	1.8%	0.0%	8.8%	0.5%	0.4%	0.0%	0.1%	21.5%	0.0%	13.2%	0.0%	0.5%	20.5%
1993	1241	2,3,4,5	0.0%	0.0%	0.0%	0.2%	0.0%	13.6%	7.9%	3.6%	19.9%	0.2%	2.5%	0.0%	3.7%	0.1%	0.2%	0.0%	0.2%	13.2%	0.0%	14.8%	0.0%	0.1%	19.7%
1994	1045	2,3,4,5	0.5%	0.0%	0.0%	0.4%	0.0%	13.0%	5.5%	1.2%	14.5%	0.0%	2.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	4.1%	0.0%	37.1%	0.0%	0.6%	18.9%
1995	831	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	7.1%	3.2%	0.0%	6.6%	0.0%	1.6%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	20.3%	0.0%	23.9%	0.0%	1.9%	32.0%
1996	1363	2,3,4,5	0.0%	0.1%	0.0%	0.0%	0.0%	1.0%	0.7%	0.0%	14.6%	0.0%	0.4%	0.0%	1.5%	0.0%	0.0%	0.0%	0.1%	14.3%	0.0%	32.4%	0.2%	11.8%	22.9%
1997	1402	2,3,4,5	0.7%	0.1%	0.0%	0.2%	0.0%	2.6%	1.7%	0.0%	9.4%	0.6%	1.1%	0.1%	0.9%	0.1%	0.0%	0.0%	0.0%	11.5%	0.0%	33.7%	0.0%	0.3%	36.8%
1998	738	2,3,4,5	3.5%	0.0%	0.0%	0.0%	0.0%	1.6%	3.3%	0.0%	11.9%	0.0%	0.0%	0.0%	0.5%	0.0%	0.1%	0.0%	0.0%	4.7%	0.0%	42.5%	0.0%	0.8%	30.9%
1999	280	2,3,4,5	3.9%	0.0%	0.0%	1.8%	0.0%	1.4%	10.0%	0.0%	14.6%	0.0%	0.0%	3.2%	1.4%	0.0%	0.0%	0.0%	0.0%	5.7%	0.0%	35.7%	0.0%	0.0%	22.1%
2000	378	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	10.1%	9.3%	0.0%	15.9%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	6.1%	0.0%	35.4%	0.0%	0.0%	23.0%
2001	1749	2,3,4,5	0.0%	0.2%	0.0%	0.0%	0.0%	4.9%	5.3%	0.0%	9.3%	0.0%	0.5%	0.0%	2.3%	0.1%	0.2%	0.0%	0.0%	7.9%	0.0%	37.6%	0.0%	0.8%	30.9%
2002	1623	2,3,4,5	0.9%	0.0%	0.0%	0.7%	0.0%	8.3%	7.2%	0.0%	7.8%	0.0%	0.0%	0.0%	2.6%	0.6%	0.3%	0.0%	0.0%	6.1%	0.0%	35.7%	0.0%	0.1%	29.7%
2003	767	2,3,4,5	0.8%	0.0%	0.0%	0.0%	0.0%	13.2%	3.1%	0.0%	6.3%	0.0%	0.3%	0.0%	6.8%	0.5%	0.0%	0.0%	0.0%	3.1%	0.0%	37.7%	0.0%	0.0%	28.3%
2004	565	2,3,4,5	0.4%	0.0%	0.0%	0.0%	0.0%	7.6%	6.5%	0.0%	6.2%	0.0%	0.0%	0.0%	11.0%	0.4%	0.5%	0.0%	0.0%	8.7%	0.0%	29.7%	0.0%	0.7%	28.3%
2005	774	2,3,4,5	0.3%	0.1%	0.0%	0.3%	0.0%	10.5%	7.6%	0.0%	18.3%	0.0%	0.0%	0.0%	7.1%	0.6%	0.3%	0.0%	0.0%	6.6%	0.0%	30.7%	0.0%	0.0%	17.6%
2006	1612	2,3,4,5	0.4%	0.1%	0.0%	0.1%	0.0%	7.9%	5.5%	0.0%	6.5%	0.0%	0.0%	0.0%	6.7%	1.2%	0.1%	0.0%	0.0%	7.4%	0.0%	50.4%	0.0%	0.3%	13.4%
2007	2132	2,3,4,5	0.5%	0.0%	0.0%	0.0%	0.0%	9.1%	4.6%	0.0%	8.1%	0.0%	0.0%	0.0%	2.8%	0.2%	0.0%	0.1%	0.0%	6.5%	0.0%	31.0%	0.2%	17.5%	19.4%
2008	1795	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	6.0%	5.0%	0.0%	6.6%	0.0%	0.0%	0.0%	4.4%	0.3%	0.0%	0.0%	0.0%	11.2%	0.0%	42.1%	0.0%	0.1%	24.1%
2009	1747	2,3,4,5	0.0%	0.1%	0.0%	0.0%	0.0%	3.1%	5.4%	0.0%	5.3%	0.0%	0.0%	0.0%	3.3%	0.3%	0.0%	0.0%	0.0%	13.5%	0.0%	32.9%	0.0%	0.0%	36.1%
2010	1835	2,3,4,5	0.0%	0.0%	0.1%	0.0%	0.0%	7.0%	6.6%	0.0%	6.2%	0.0%	0.0%	0.0%	10.1%	0.7%	0.3%	0.0%	0.0%	9.3%	0.0%	31.5%	0.0%	0.5%	27.7%
2011	1433	2,3,4,5	0.1%	0.0%	0.0%	0.0%	0.0%	4.6%	4.8%	0.0%	12.4%	0.0%	0.0%	0.0%	2.9%	0.3%	0.0%	0.0%	0.0%	8.2%	0.0%	37.3%	0.0%	0.3%	29.2%
2012	1929	2,3,4,5	0.0%	0.2%	0.1%	0.5%	0.0%	2.0%	4.8%	0.0%	6.6%	0.0%	0.4%	0.2%	6.3%	0.9%	0.3%	0.0%	0.0%	6.2%	0.0%	53.9%	0.0%	0.2%	17.6%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	1317		0.5%	0.0%	0.0%	0.2%	0.0%	7.9%	4.8%	0.6%	11.1%	0.0%	0.8%	0.2%	4.8%	0.3%	0.1%	0.0%	0.0%	9.4%	0.0%	33.4%	0.0%	1.6%	24.2%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	1357		0.1%	0.0%	0.0%	0.2%	0.0%	12.6%	3.5%	2.0%	14.3%	0.1%	2.2%	0.0%	6.2%	0.2%	0.2%	0.0%	0.0%	12.6%	0.0%	24.5%	0.1%	0.6%	20.6%
1996-1998	1168		1.4%	0.1%	0.0%	0.1%	0.0%	1.7%	1.9%	0.0%	12.0%	0.2%	0.5%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	10.2%	0.0%	36.2%	0.1%	4.3%	30.2%
1999-2013	1330		0.5%	0.0%	0.0%	0.2%	0.0%	6.8%	6.1%	0.0%	9.3%	0.0%	0.1%	0.2%	4.9%	0.4%	0.1%	0.0%	0.0%	7.6%	0.0%	37.3%	0.0%	1.5%	24.8%

Appendix C31. Percent distribution of Lower Shuswap River Summer (Fraser Early) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	121	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	638	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	2063	2,3,4	7.8%	0.2%	0.1%	9.7%	0.3%	5.1%	0.0%	0.0%	3.0%	1.6%	3.1%	0.0%	0.0%	0.1%	0.0%	0.0%	1.5%	0.2%	0.0%	4.8%	1.5%	0.2%	60.8%
1989	1664	2,3,4,5	5.2%	4.0%	0.0%	7.3%	0.0%	1.1%	0.0%	0.0%	0.4%	0.5%	7.9%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.1%	0.0%	4.7%	0.4%	0.0%	66.7%
1990	1248	2,3,4,5	27.8%	0.0%	0.8%	19.5%	0.3%	3.8%	3.0%	0.0%	1.8%	1.8%	3.2%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	7.2%	1.5%	1.1%	26.8%
1991	629	2,3,4,5	33.9%	0.0%	0.6%	22.1%	0.5%	3.0%	0.0%	0.0%	1.4%	1.3%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	0.0%	0.0%	4.8%	0.0%	0.8%	21.3%
1992	285	2,3,4,5	12.6%	0.0%	0.0%	17.2%	0.0%	3.9%	0.0%	0.0%	5.6%	6.0%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	4.6%	4.6%	0.0%	36.5%
1993	457	2,3,4,5	6.3%	2.0%	0.0%	12.5%	0.0%	9.6%	0.0%	0.0%	1.5%	1.1%	8.5%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.1%	3.7%	3.7%	42.5%
1994	1053	2,3,4,5	9.3%	0.0%	1.0%	17.3%	1.7%	8.1%	0.0%	0.9%	1.9%	10.0%	5.1%	0.0%	0.0%	0.0%	0.0%	0.0%	4.1%	0.0%	0.0%	9.2%	0.0%	0.5%	31.0%
1995	533	2,3,4,5	15.9%	0.0%	3.8%	11.3%	4.1%	3.4%	0.0%	0.0%	2.8%	0.8%	3.6%	1.5%	0.0%	0.0%	0.0%	0.0%	3.9%	0.0%	0.0%	7.3%	0.4%	0.6%	40.7%
1996	744	2,3,4,5	16.4%	0.0%	0.0%	0.5%	0.7%	0.4%	0.9%	0.0%	4.4%	0.0%	0.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.8%	1.3%	0.0%	65.5%
1997	612	2,3,4,5	13.2%	0.0%	0.0%	8.7%	2.1%	0.5%	0.0%	0.0%	6.0%	0.2%	3.8%	0.7%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	15.2%	0.0%	0.5%	46.2%
1998	760	2,3,4,5	21.6%	0.4%	9.2%	7.0%	13.9%	0.0%	0.7%	0.0%	7.1%	0.0%	0.4%	1.1%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	5.7%	0.7%	1.2%	30.3%
1999	832	2,3,4,5	15.6%	0.0%	6.5%	0.7%	4.6%	0.0%	0.0%	0.0%	4.7%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	0.4%	0.0%	62.6%
2000	728	2,3,4,5	10.9%	0.0%	9.9%	0.0%	4.7%	0.0%	0.0%	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.1%	0.0%	0.0%	7.3%	1.4%	1.0%	60.6%
2001	1159	2,3,4,5	8.3%	1.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%	9.4%	0.3%	0.7%	1.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	1.3%	1.6%	0.3%	75.2%
2002	1536	2,3,4,5	18.6%	0.0%	3.5%	13.0%	4.2%	1.3%	0.0%	0.0%	3.8%	0.1%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.5%	0.5%	0.0%	44.8%
2003	1881	2,3,4,5	9.8%	0.9%	2.0%	7.8%	2.4%	0.0%	0.3%	0.0%	7.3%	1.3%	0.0%	0.4%	0.2%	0.0%	0.1%	0.0%	0.5%	0.0%	0.0%	4.0%	2.3%	0.0%	60.6%
2004	1161	2,3,4,5	18.3%	0.0%	1.9%	9.3%	4.0%	0.8%	0.0%	0.0%	5.5%	0.0%	0.0%	4.6%	0.3%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	11.8%	2.8%	0.0%	39.5%
2005	823	2,3,4,5	15.3%	0.0%	0.9%	12.4%	5.3%	0.4%	3.2%	0.0%	14.3%	0.0%	0.0%	1.3%	0.2%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	7.2%	3.5%	0.1%	35.5%
2006	1315	2,3,4,5	12.1%	0.0%	2.1%	13.3%	8.2%	0.3%	0.9%	0.0%	10.1%	0.0%	0.0%	1.7%	0.2%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	6.9%	3.0%	0.9%	39.4%
2007	494	2,3,4,5	7.9%	0.2%	8.1%	3.4%	10.3%	0.0%	1.0%	0.0%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	5.5%	0.0%	55.3%
2008	1762	2,3,4,5	9.1%	0.0%	0.5%	8.0%	7.7%	0.0%	1.6%	0.0%	7.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	3.1%	0.0%	60.4%
2009	1707	2,3,4,5	9.3%	0.0%	1.3%	6.4%	3.3%	0.8%	2.3%	0.0%	9.3%	0.0%	0.0%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	10.2%	4.4%	1.9%	49.9%
2010	2038	2,3,4,5	10.0%	0.0%	1.5%	10.4%	3.1%	0.0%	0.5%	0.0%	9.9%	0.0%	0.0%	0.3%	0.2%	0.1%	0.1%	0.0%	1.7%	0.0%	0.0%	9.0%	1.6%	1.5%	50.1%
2011	1904	2,3,4,5	8.2%	0.1%	1.8%	7.4%	4.5%	1.3%	0.8%	0.0%	8.2%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.4%	0.5%	0.0%	12.0%	2.8%	0.1%	51.6%
2012	2037	2,3,4,5	6.5%	0.0%	3.2%	7.1%	4.5%	1.0%	1.7%	0.0%	10.7%	0.0%	0.0%	0.7%	0.2%	0.3%	0.2%	0.0%	0.2%	3.0%	0.0%	5.4%	4.8%	0.0%	50.3%
2013	8441	2,3,4,5	7.2%	0.2%	0.4%	7.2%	1.8%	0.2%	0.9%	0.0%	10.0%	0.0%	0.0%	0.3%	0.9%	0.0%	0.0%	0.0%	0.4%	0.3%	0.0%	8.1%	1.7%	1.1%	59.0%
1979-2013	1456		13.0%	0.4%	2.3%	9.2%	3.6%	1.7%	0.7%	0.0%	6.0%	1.0%	1.9%	0.7%	0.1%	0.0%	0.0%	0.0%	1.0%	0.3%	0.0%	7.0%	2.0%	0.6%	48.6%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	992		14.9%	0.8%	0.8%	14.6%	0.9%	4.7%	0.4%	0.1%	2.3%	2.9%	5.5%	0.3%	0.1%	0.0%	0.0%	0.0%	1.8%	0.5%	0.0%	6.3%	1.5%	0.9%	40.8%
1996-1998	705		17.1%	0.1%	3.1%	5.4%	5.6%	0.3%	0.5%	0.0%	5.9%	0.1%	1.6%	1.1%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	9.5%	0.7%	0.6%	47.3%
1999-2013	1855		11.1%	0.2%	2.9%	7.1%	4.6%	0.4%	0.9%	0.0%	7.9%	0.1%	0.0%	0.9%	0.2%	0.1%	0.0%	0.0%	0.4%	0.3%	0.0%	6.9%	2.6%	0.5%	53.0%

Appendix C32. Percent distribution of Skagit Spring Fingerling total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	33	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	69	3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	38	4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	4	5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	80	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	548	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	928	2,3,4	1.5%	0.0%	0.0%	0.2%	0.0%	2.2%	4.5%	0.0%	11.4%	0.3%	2.8%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	9.7%	0.0%	1.4%	0.0%	0.2%	65.3%
1998	679	2,3,4,5	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	5.7%	0.0%	19.3%	0.0%	0.9%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	6.8%	0.0%	1.8%	0.0%	0.3%	62.2%
1999	1805	2,3,4,5	0.9%	0.2%	0.0%	0.3%	0.3%	2.3%	6.5%	0.0%	6.9%	0.0%	0.1%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	1.5%	0.0%	0.1%	77.7%
2000	1223	2,3,4,5	2.0%	0.0%	0.6%	0.0%	0.0%	6.5%	7.4%	0.0%	13.0%	0.0%	0.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	0.0%	0.2%	0.0%	0.1%	64.5%
2001	1918	2,3,4,5	1.8%	0.1%	0.4%	0.3%	0.0%	5.9%	4.2%	0.0%	7.1%	0.0%	0.0%	0.6%	0.2%	0.0%	0.0%	0.0%	0.1%	10.1%	0.0%	0.6%	0.0%	0.1%	68.8%
2002	1799	2,3,4,5	2.8%	0.0%	0.6%	0.6%	0.0%	5.5%	5.1%	0.0%	8.4%	0.0%	0.1%	0.6%	0.3%	0.1%	0.0%	0.0%	0.0%	3.7%	0.0%	0.6%	0.0%	0.2%	71.5%
2003	693	2,3,4,5	2.6%	0.0%	1.0%	1.3%	0.0%	18.8%	0.9%	0.0%	7.5%	0.0%	0.3%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.9%	0.0%	0.9%	62.8%
2004	1136	2,3,4,5	0.0%	0.0%	0.0%	0.5%	0.0%	12.4%	3.1%	0.0%	10.2%	0.0%	0.0%	0.0%	2.5%	0.0%	0.3%	0.0%	0.0%	3.0%	0.0%	1.3%	0.0%	0.4%	66.4%
2005	1168	2,3,4,5	1.8%	0.2%	0.0%	0.0%	0.0%	12.8%	6.8%	0.0%	8.5%	0.0%	0.3%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.3%	4.6%	0.2%	61.8%
2006	1662	2,3,4,5	0.4%	0.1%	0.0%	0.2%	0.0%	7.2%	3.5%	0.0%	9.4%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	4.1%	0.0%	1.6%	23.6%	0.6%	49.1%
2007	2429	2,3,4,5	0.4%	0.2%	0.0%	0.0%	0.0%	9.7%	7.3%	0.0%	8.3%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	4.1%	0.0%	1.7%	23.3%	0.3%	43.7%
2008	1449	2,3,4,5	0.3%	0.0%	0.0%	0.0%	0.0%	3.9%	7.0%	0.0%	6.1%	0.0%	0.3%	0.3%	0.8%	0.0%	0.0%	0.0%	0.0%	8.8%	0.0%	14.4%	17.3%	0.1%	40.8%
2009	949	2,3,4,5	0.5%	0.0%	0.0%	0.0%	0.0%	2.8%	5.9%	0.0%	5.7%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	7.8%	0.0%	17.8%	14.1%	0.4%	43.7%
2010	1505	2,3,4,5	0.1%	0.0%	0.0%	0.0%	0.0%	2.3%	4.3%	0.0%	6.9%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	20.3%	8.4%	0.2%	54.6%
2011	1328	2,3,4,5	0.4%	0.1%	0.0%	0.0%	0.0%	1.4%	5.0%	0.0%	4.4%	0.0%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	5.0%	0.0%	19.4%	9.3%	0.5%	54.1%
2012	1581	3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	4.6%	0.0%	10.0%	0.0%	0.0%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	7.5%	0.0%	18.8%	8.9%	0.3%	46.0%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	1391		1.1%	0.0%	0.2%	0.2%	0.0%	6.1%	5.1%	0.0%	9.0%	0.0%	0.3%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	5.2%	0.0%	6.4%	6.8%	0.3%	58.3%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1996-1998	804		1.9%	0.0%	0.0%	0.1%	0.0%	1.1%	5.1%	0.0%	15.4%	0.2%	1.8%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	8.2%	0.0%	1.6%	0.0%	0.3%	63.7%
1999-2013	1475		1.0%	0.1%	0.2%	0.2%	0.0%	6.8%	5.1%	0.0%	8.0%	0.0%	0.1%	0.3%	0.6%	0.0%	0.0%	0.0%	0.0%	4.8%	0.0%	7.1%	7.8%	0.3%	57.5%

Appendix C33. Percent distribution of Skagit Spring Yearling total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	8	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	76	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	132	2,3,4	0.0%	0.0%	0.0%	0.0%	0.0%	6.8%	0.0%	0.0%	29.5%	0.0%	25.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.2%	0.0%	9.1%	0.0%	0.0%	10.6%
1986	230	2,3,4,5	1.7%	0.0%	0.0%	0.0%	0.0%	6.5%	5.2%	6.1%	36.1%	3.9%	9.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.6%	0.0%	3.0%	0.0%	0.0%	18.7%
1987	165	2,3,4,5	0.0%	0.0%	0.0%	4.8%	0.0%	3.0%	0.0%	0.0%	9.1%	0.0%	4.8%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	40.6%	0.0%	21.2%	0.0%	0.0%	15.2%
1988	586	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	9.2%	0.5%	17.9%	0.0%	12.5%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	16.0%	0.0%	19.3%	0.0%	0.0%	20.1%
1989	868	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	3.9%	1.8%	0.0%	21.2%	0.8%	3.3%	0.0%	4.6%	0.0%	0.0%	0.0%	0.0%	10.1%	0.0%	28.0%	0.0%	0.1%	26.0%
1990	740	3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	8.5%	3.2%	12.7%	0.4%	4.1%	0.5%	3.6%	0.0%	0.0%	0.0%	0.0%	24.3%	0.0%	16.2%	0.0%	0.0%	21.4%
1991	502	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	103	2,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	417	3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	755	4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	182	2,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	186	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	645	2,3,4	0.2%	0.0%	0.0%	0.0%	0.0%	3.1%	8.8%	0.0%	22.6%	0.0%	3.9%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	29.9%	0.0%	1.4%	0.0%	0.0%	29.5%
1998	1233	2,3,4,5	0.6%	0.2%	0.0%	0.0%	0.0%	1.1%	9.9%	0.0%	10.9%	0.0%	0.3%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	20.9%	0.0%	3.0%	0.0%	0.2%	51.0%
1999	2538	2,3,4,5	0.6%	0.0%	0.0%	0.0%	0.0%	5.6%	4.4%	0.0%	8.2%	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	12.0%	0.0%	1.2%	0.0%	0.2%	67.6%
2000	574	2,3,4,5	0.7%	0.0%	0.0%	0.0%	0.0%	6.4%	3.1%	0.0%	16.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	0.0%	1.4%	0.0%	0.0%	51.4%
2001	354	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	2.3%	0.0%	19.8%	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	24.6%	0.0%	1.4%	0.0%	0.0%	46.9%
2002	312	2,3,4,5	1.0%	0.0%	0.0%	0.0%	0.0%	0.6%	14.7%	0.0%	17.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	13.1%	0.0%	1.0%	0.0%	0.0%	51.3%
2003	963	2,3,4,5	0.0%	0.0%	0.0%	0.9%	0.0%	19.3%	4.6%	0.0%	11.2%	0.0%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	10.4%	0.0%	0.7%	0.0%	0.0%	52.4%
2004	1656	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	13.0%	4.1%	0.0%	7.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	5.6%	0.0%	1.0%	0.1%	0.1%	68.1%
2005	1258	2,3,4,5	1.0%	0.0%	0.0%	0.2%	0.0%	8.1%	5.6%	0.0%	11.8%	0.0%	0.3%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	8.7%	0.0%	1.0%	7.0%	0.2%	55.8%
2006	820	2,3,4,5	0.4%	0.0%	0.0%	0.0%	0.0%	8.2%	6.2%	0.0%	13.3%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.4%	0.0%	4.8%	0.0%	1.5%	33.8%	0.0%	31.3%
2007	843	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	8.2%	0.0%	4.7%	0.0%	0.0%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	17.6%	0.0%	1.3%	24.6%	1.1%	39.5%
2008	770	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	3.8%	0.0%	6.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%	11.9%	21.7%	0.1%	41.9%
2009	402	2,3,4,5	1.0%	0.0%	0.0%	0.0%	0.0%	1.5%	13.2%	0.0%	4.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	9.5%	0.0%	14.4%	16.2%	0.2%	38.6%
2010	432	2,3,4,5	0.2%	0.0%	0.0%	0.0%	1.2%	0.0%	3.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.9%	0.0%	17.8%	20.4%	0.5%	44.7%
2011	614	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	4.2%	0.0%	8.1%	0.0%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	13.4%	0.0%	11.4%	21.0%	0.2%	38.9%
2012	851	3,4,5	0.7%	0.0%	0.0%	0.0%	0.0%	1.1%	5.2%	0.0%	6.0%	0.0%	1.3%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	13.6%	0.0%	14.8%	16.2%	0.0%	40.3%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	772		0.4%	0.0%	0.0%	0.3%	0.1%	4.7%	5.7%	0.4%	13.5%	0.2%	3.0%	0.2%	0.8%	0.0%	0.0%	0.0%	0.0%	15.7%	0.0%	8.3%	7.3%	0.1%	39.1%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	454		0.3%	0.0%	0.0%	0.8%	0.0%	4.6%	4.1%	1.6%	21.1%	0.9%	9.9%	0.1%	1.9%	0.0%	0.0%	0.0%	0.0%	19.8%	0.0%	16.1%	0.0%	0.0%	18.7%
1996-1998	939		0.4%	0.1%	0.0%	0.0%	0.0%	2.1%	9.4%	0.0%	16.8%	0.0%	2.1%	1.1%	0.0%	0.0%	0.0%	0.0%	0.2%	25.4%	0.0%	2.2%	0.0%	0.1%	40.2%
1999-2013	885		0.4%	0.0%	0.0%	0.1%	0.1%	5.2%	5.9%	0.0%	9.8%	0.0%	0.1%	0.1%	0.5%	0.1%	0.0%	0.0%	0.0%	12.6%	0.0%	5.8%	11.5%	0.2%	47.8%

Appendix C34. Percent distribution of Skykomish Fall Fingerling (Snohomish Wild) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1999	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2000	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2001	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	21	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	131	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2004	610	2,3,4	0.5%	0.0%	0.0%	0.0%	0.0%	16.4%	3.8%	0.0%	8.7%	0.0%	0.0%	1.5%	0.5%	0.0%	0.0%	0.0%	0.0%	8.0%	0.0%	0.5%	0.0%	0.0%	60.2%
2005	547	2,3,4,5	0.7%	0.0%	0.0%	0.4%	0.0%	18.5%	8.8%	0.0%	6.4%	0.0%	0.7%	0.0%	3.1%	0.5%	0.0%	0.0%	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	57.2%
2006	652	2,3,4,5	1.1%	0.0%	0.0%	0.3%	0.0%	14.1%	4.1%	0.0%	9.0%	0.0%	0.2%	0.0%	5.1%	0.0%	0.0%	0.0%	0.0%	8.6%	0.0%	0.9%	0.0%	0.3%	56.3%
2007	1150	2,3,4,5	0.4%	0.0%	0.0%	0.2%	0.0%	15.0%	6.6%	0.0%	5.9%	0.0%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	7.5%	0.0%	1.6%	0.0%	0.0%	59.7%
2008	787	2,3,4,5	0.3%	0.0%	0.0%	0.0%	0.0%	8.5%	2.9%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.0%	0.0%	1.3%	0.0%	3.8%	72.2%
2009	353	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	4.8%	0.0%	4.5%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	16.4%	0.0%	0.0%	0.0%	0.0%	70.8%
2010	420	2,3,4,5	0.0%	0.2%	0.0%	0.0%	0.0%	2.6%	2.4%	0.0%	3.6%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	9.3%	0.0%	1.7%	3.6%	0.0%	76.0%
2011	508	2,3,4,5	0.2%	0.6%	0.0%	0.0%	0.0%	1.8%	3.5%	0.0%	7.3%	0.0%	0.0%	0.0%	1.6%	0.6%	0.0%	0.0%	0.0%	19.1%	0.0%	0.8%	9.8%	0.2%	54.5%
2012	1036	2,3,4,5	0.3%	0.0%	0.0%	0.0%	0.2%	4.0%	3.5%	0.0%	15.7%	0.0%	0.0%	0.1%	2.9%	0.0%	0.0%	0.0%	0.0%	10.9%	0.0%	1.1%	1.4%	0.6%	59.4%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	674		0.4%	0.1%	0.0%	0.1%	0.0%	9.2%	4.5%	0.0%	7.1%	0.0%	0.1%	0.2%	2.0%	0.1%	0.0%	0.0%	0.0%	10.2%	0.0%	0.9%	1.7%	0.5%	62.9%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1996-1998	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1999-2013	674		0.4%	0.1%	0.0%	0.1%	0.0%	9.2%	4.5%	0.0%	7.1%	0.0%	0.1%	0.2%	2.0%	0.1%	0.0%	0.0%	0.0%	10.2%	0.0%	0.9%	1.7%	0.5%	62.9%

Appendix C35. Percent distribution of Sooes (now Tsoo-Yess) Fall Fingerling (Washington Coastal Wild) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	18	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	33	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	225	2,3,4	8.0%	19.1%	0.4%	2.7%	0.0%	4.0%	6.2%	0.0%	0.4%	0.0%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	52.9%
1990	170	3,4,5	11.8%	5.3%	4.1%	16.5%	0.0%	17.6%	0.0%	0.0%	7.1%	1.8%	2.4%	0.0%	1.8%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.8%
1991	377	2,4,5,6	14.1%	0.0%	0.3%	10.6%	0.0%	7.2%	0.0%	0.0%	0.3%	0.3%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	58.9%
1992	326	2,3,5,6	10.4%	0.3%	0.3%	10.7%	0.0%	20.6%	1.5%	0.0%	1.2%	2.1%	3.1%	0.0%	0.3%	0.0%	0.0%	0.6%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	46.9%
1993	251	2,3,4,6	6.4%	0.4%	0.0%	8.0%	2.0%	17.1%	0.0%	0.0%	0.0%	2.0%	2.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	60.6%
1994	240	2,3,4,5	17.9%	13.8%	3.3%	9.2%	0.8%	7.1%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	46.3%
1995	177	2,3,4,5,6	13.6%	0.0%	0.0%	6.2%	0.0%	13.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	63.8%
1996	224	2,3,4,5,6	15.2%	0.0%	0.0%	0.4%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	83.0%
1997	305	2,3,4,5,6	11.8%	0.0%	6.2%	5.2%	0.0%	0.0%	2.6%	0.0%	1.6%	0.7%	0.7%	0.0%	0.0%	0.0%	1.0%	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	19.7%	46.9%
1998	282	2,3,4,5,6	9.6%	0.0%	1.4%	20.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	68.4%
1999	220	2,3,4,5,6	14.1%	0.0%	13.6%	7.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	63.6%
2000	88	2,3,4,5,6	0.0%	0.0%	5.7%	0.0%	0.0%	0.0%	11.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	83.0%
2001	313	2,3,4,5,6	9.3%	0.0%	2.9%	0.0%	0.0%	0.0%	2.6%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	83.4%
2002	563	2,3,4,5,6	13.0%	0.2%	1.8%	3.4%	2.1%	0.7%	0.0%	0.0%	1.1%	0.0%	0.0%	1.2%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	75.8%
2003	786	2,3,4,5,6	14.0%	0.1%	0.0%	5.5%	2.7%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	24.2%	50.8%
2004	921	2,3,4,5,6	18.7%	0.8%	2.2%	15.9%	0.0%	0.8%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.9%	58.3%
2005	499	2,3,4,5,6	25.1%	0.0%	2.4%	25.3%	8.4%	1.0%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	0.8%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%
2006	240	2,3,4,5,6	23.8%	4.2%	2.5%	25.0%	2.1%	1.7%	2.9%	0.0%	5.0%	0.0%	0.0%	0.0%	0.4%	1.3%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	29.2%
2007	90	2,3,4,5,6	10.0%	0.0%	0.0%	15.6%	14.4%	0.0%	0.0%	0.0%	15.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	44.4%
2008	115	2,3,4,5,6	8.7%	0.0%	0.0%	14.8%	11.3%	0.0%	9.6%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	53.0%
2009	563	2,3,4,5,6	11.5%	1.2%	1.1%	8.0%	2.3%	0.0%	4.6%	0.0%	2.8%	0.0%	0.0%	1.4%	2.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	63.8%
2010	442	2,3,4,5,6	4.3%	0.0%	2.3%	5.7%	1.4%	0.9%	1.1%	0.0%	4.3%	0.0%	0.0%	0.0%	0.2%	3.2%	0.0%	0.0%	0.0%	1.8%	0.0%	0.2%	0.0%	0.0%	74.7%
2011	1117	2,3,4,5,6	9.8%	0.4%	0.9%	4.4%	1.3%	1.7%	2.0%	0.0%	2.1%	0.0%	0.0%	1.2%	0.4%	1.8%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	73.4%
2012	529	3,4,5,6	13.0%	0.0%	1.3%	10.2%	4.5%	1.1%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	0.8%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	64.3%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	378		12.2%	1.9%	2.2%	9.6%	2.2%	4.0%	2.0%	0.0%	1.9%	0.3%	0.7%	0.2%	0.5%	0.6%	0.1%	0.0%	0.2%	0.6%	0.0%	0.0%	0.0%	2.0%	58.6%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	252		11.7%	5.6%	1.2%	9.1%	0.4%	12.4%	1.1%	0.0%	1.3%	1.0%	2.4%	0.0%	0.4%	0.4%	0.0%	0.1%	0.1%	1.3%	0.0%	0.0%	0.0%	0.3%	51.2%
1996-1998	270		12.2%	0.0%	2.5%	8.8%	0.0%	0.1%	0.9%	0.0%	0.5%	0.2%	0.4%	0.0%	0.0%	0.0%	0.3%	0.1%	1.2%	0.0%	0.0%	0.0%	0.0%	6.6%	66.1%
1999-2013	463		12.5%	0.5%	2.6%	10.1%	3.6%	0.6%	2.6%	0.0%	2.6%	0.0%	0.0%	0.3%	0.7%	0.8%	0.0%	0.0%	0.1%	0.4%	0.0%	0.0%	0.0%	1.9%	60.8%

Appendix C36. Percent distribution of Spring Creek Tule (Spring Creek Hatchery) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	5297	2,3,4,5	0.0%	0.0%	0.0%	0.1%	0.0%	24.9%	0.1%	0.2%	1.2%	0.7%	2.5%	0.0%	16.5%	7.0%	1.3%	0.2%	1.6%	6.0%	0.0%	22.1%	0.0%	0.0%	15.7%
1980	6867	2,3,4,5	0.1%	0.0%	0.0%	0.1%	0.0%	26.6%	0.1%	0.1%	2.8%	0.6%	1.0%	0.0%	23.3%	5.0%	1.8%	0.1%	0.5%	5.8%	0.0%	21.7%	0.0%	0.1%	10.3%
1981	7383	2,3,4,5	0.0%	0.0%	0.0%	0.1%	0.0%	21.5%	0.1%	0.1%	1.4%	0.2%	1.9%	0.0%	21.6%	10.7%	2.9%	0.2%	0.4%	2.2%	0.0%	21.1%	0.0%	0.3%	15.4%
1982	4814	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	22.6%	0.0%	0.0%	1.1%	0.5%	0.2%	0.0%	19.8%	6.4%	2.3%	0.7%	0.5%	1.0%	0.0%	33.4%	0.0%	0.2%	11.2%
1983	897	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	30.8%	0.4%	0.0%	1.2%	0.3%	0.0%	0.0%	9.1%	3.9%	0.0%	0.2%	0.3%	7.9%	0.0%	19.7%	0.0%	0.2%	25.8%
1984	1175	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	26.3%	0.3%	0.0%	0.0%	2.3%	1.1%	0.0%	3.1%	0.3%	2.6%	0.6%	0.8%	8.9%	0.0%	26.3%	2.6%	0.1%	24.6%
1985	1260	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	14.6%	0.6%	0.0%	0.0%	0.2%	0.2%	0.0%	11.8%	2.4%	4.4%	0.1%	0.0%	1.3%	0.0%	27.5%	0.2%	0.1%	36.6%
1986	350	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	24.0%	2.3%	0.0%	2.3%	2.9%	1.7%	0.0%	0.9%	2.3%	1.4%	0.0%	0.0%	4.6%	0.0%	35.1%	1.1%	7.4%	14.0%
1987	158	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	9.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.3%	7.0%	1.9%	1.3%	15.8%	5.1%	0.0%	25.9%	6.3%	2.5%	11.4%
1988	891	2,3,4,5	0.0%	0.0%	0.0%	0.4%	0.0%	24.2%	2.0%	0.0%	2.0%	0.3%	1.7%	0.0%	11.3%	1.6%	4.7%	1.2%	1.8%	4.8%	0.0%	29.2%	3.9%	2.8%	7.9%
1989	2428	2,3,4,5	0.0%	0.0%	0.0%	0.2%	0.0%	16.1%	3.1%	0.0%	0.5%	0.0%	0.4%	0.0%	18.5%	2.1%	7.7%	1.0%	0.2%	1.9%	0.0%	32.9%	3.2%	0.0%	12.2%
1990	2533	2,3,4,5	0.0%	0.0%	0.0%	0.2%	0.0%	19.3%	4.4%	0.3%	0.6%	0.4%	0.9%	0.0%	11.4%	6.9%	3.6%	0.0%	0.4%	5.4%	0.0%	23.3%	2.1%	0.0%	20.9%
1991	3018	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	14.9%	1.4%	0.0%	0.3%	0.3%	0.5%	0.0%	12.4%	3.0%	5.9%	1.6%	0.6%	3.2%	0.0%	32.3%	3.3%	0.4%	19.8%
1992	3197	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	14.1%	2.4%	0.2%	0.5%	0.3%	0.4%	0.0%	22.5%	4.3%	6.3%	0.8%	0.0%	3.4%	0.0%	14.1%	3.5%	0.2%	27.0%
1993	1263	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	19.6%	4.1%	0.0%	0.0%	0.0%	0.3%	0.0%	17.7%	2.3%	1.4%	0.6%	0.0%	5.6%	0.0%	20.3%	3.0%	0.2%	24.9%
1994	990	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	21.2%	3.8%	0.0%	0.0%	0.0%	0.9%	0.0%	2.1%	0.0%	1.2%	0.0%	0.0%	1.0%	0.0%	31.6%	0.0%	0.0%	38.1%
1995	963	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	10.2%	2.8%	0.0%	0.0%	0.0%	0.4%	0.0%	1.3%	0.0%	0.4%	0.0%	0.5%	0.0%	0.0%	39.9%	0.0%	1.7%	42.8%
1996	933	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	4.8%	1.1%	0.0%	1.0%	0.0%	57.1%	1.8%	0.6%	28.4%
1997	641	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	13.6%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	1.2%	4.4%	0.0%	0.0%	3.9%	0.0%	24.3%	6.6%	0.2%	42.3%
1998	861	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	1.6%	2.2%	0.2%	0.0%	1.3%	0.0%	21.8%	14.1%	1.4%	55.1%
1999	1652	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	3.9%	0.0%	0.3%	0.0%	0.0%	0.0%	8.2%	1.7%	11.2%	1.0%	0.0%	0.4%	0.0%	36.4%	6.5%	1.3%	28.8%
2000	1016	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	5.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	1.8%	3.9%	0.1%	0.0%	1.8%	0.0%	26.0%	7.7%	0.0%	48.0%
2001	6766	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	0.9%	0.0%	0.3%	0.0%	0.0%	0.0%	4.5%	2.2%	11.8%	0.8%	0.0%	1.2%	0.0%	24.0%	2.2%	0.1%	48.3%
2002	4700	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	10.4%	1.4%	0.0%	0.4%	0.0%	0.0%	0.0%	14.3%	6.9%	4.4%	1.3%	0.1%	0.5%	0.0%	25.4%	2.5%	0.0%	32.5%
2003	6404	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.4%	3.4%	3.8%	0.4%	0.0%	0.2%	0.0%	23.3%	2.3%	0.5%	44.4%
2004	6401	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	12.1%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	7.3%	2.4%	3.1%	0.9%	0.0%	0.4%	0.0%	19.0%	1.8%	0.1%	49.8%
2005	2471	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	24.6%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	0.9%	1.1%	0.1%	0.0%	0.0%	0.0%	27.8%	0.9%	0.2%	35.2%
2006	755	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	1.3%	1.5%	0.5%	0.0%	1.2%	0.0%	37.9%	1.1%	0.0%	30.5%
2007	1318	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	5.4%	3.0%	0.0%	1.1%	0.0%	0.0%	0.0%	1.7%	3.6%	0.8%	0.0%	0.0%	4.7%	0.0%	46.1%	1.6%	0.0%	31.9%
2008	2318	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	6.7%	0.0%	0.4%	0.0%	0.0%	0.0%	7.5%	2.9%	0.0%	0.0%	0.0%	1.8%	0.0%	41.9%	2.6%	0.0%	31.1%
2009	3066	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	2.3%	0.0%	0.5%	0.0%	0.0%	0.3%	1.4%	3.6%	0.0%	0.0%	0.0%	6.4%	0.0%	43.3%	2.5%	0.2%	38.5%
2010	4362	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	3.1%	0.0%	0.8%	0.0%	0.0%	0.0%	11.5%	5.0%	4.0%	0.3%	0.0%	0.9%	0.0%	37.3%	1.4%	0.2%	31.1%
2011	2443	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	5.4%	5.9%	0.0%	0.2%	0.0%	0.0%	0.0%	5.5%	6.0%	2.0%	0.2%	0.0%	0.6%	0.0%	46.3%	1.3%	0.3%	26.3%
2012	2627	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	3.6%	0.0%	2.6%	0.0%	0.0%	0.0%	9.2%	8.6%	4.7%	0.5%	0.0%	2.8%	0.0%	36.2%	2.5%	0.3%	25.7%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	2712		0.0%	0.0%	0.0%	0.0%	0.0%	13.6%	2.5%	0.0%	0.6%	0.3%	0.4%	0.0%	9.1%	3.5%	3.3%	0.5%	0.7%	2.9%	0.0%	30.3%	2.6%	0.6%	29.0%
1979-1984	4406		0.0%	0.0%	0.0%	0.0%	0.0%	25.5%	0.2%	0.1%	1.3%	0.8%	1.1%	0.0%	15.6%	5.6%	1.8%	0.3%	0.7%	5.3%	0.0%	24.0%	0.4%	0.1%	17.2%
1985-1995	1550		0.0%	0.0%	0.0%	0.1%	0.0%	17.1%	2.4%	0.0%	0.6%	0.4%	0.7%	0.0%	11.2%	2.9%	3.5%	0.6%	1.8%	3.3%	0.0%	28.4%	2.4%	1.4%	23.2%
1996-1998	812		0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	1.0%	3.8%	0.4%	0.0%	2.0%	0.0%	34.4%	7.5%	0.7%	41.9%
1999-2013	3307		0.0%	0.0%	0.0%	0.0%	0.0%	7.6%	3.6%	0.0%	0.5%	0.0%	0.0%	0.0%	6.5%	3.6%	3.8%	0.4%	0.0%	1.6%	0.0%	33.6%	2.6%	0.2%	35.9%

Appendix C37. Percent distribution of South Puget Sound Fall Fingerling (Puget Sound Hatchery Fingerling) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	1026	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	632	2,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	1288	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3257	2,3,4	0.2%	0.1%	0.0%	0.2%	0.0%	22.3%	0.1%	2.1%	11.5%	0.9%	1.8%	0.0%	2.6%	0.1%	0.0%	0.0%	0.0%	24.4%	0.0%	24.2%	0.0%	0.2%	9.2%
1983	5054	2,3,4,5	0.1%	0.0%	0.0%	0.7%	0.0%	17.2%	0.2%	0.2%	4.2%	1.7%	2.7%	0.0%	1.5%	0.0%	0.1%	0.0%	0.0%	34.6%	0.0%	25.7%	0.2%	0.1%	10.7%
1984	4000	2,3,4,5	0.1%	0.2%	0.0%	0.7%	0.0%	21.0%	0.3%	1.3%	7.2%	1.5%	0.9%	0.1%	1.4%	0.1%	0.1%	0.0%	0.0%	24.5%	0.0%	23.8%	0.3%	0.4%	16.4%
1985	1523	2,3,4,5	0.8%	0.0%	0.0%	0.0%	0.0%	18.3%	0.8%	0.3%	6.4%	0.3%	2.0%	0.0%	1.7%	0.0%	0.1%	0.0%	0.0%	20.6%	0.0%	28.6%	0.0%	0.3%	19.8%
1986	558	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	18.6%	0.0%	0.0%	8.2%	0.0%	2.9%	0.0%	3.9%	1.1%	0.0%	0.0%	0.0%	26.5%	0.0%	9.7%	0.0%	0.0%	29.0%
1987	594	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	20.7%	0.0%	0.0%	12.8%	0.0%	2.5%	0.0%	8.8%	0.2%	0.0%	0.0%	0.0%	15.2%	0.0%	11.6%	0.0%	1.2%	27.1%
1988	2817	2,3,4,5	0.3%	0.0%	0.0%	0.2%	0.0%	9.2%	3.1%	0.1%	17.5%	0.9%	3.2%	0.0%	6.8%	0.4%	0.2%	0.1%	0.0%	20.4%	0.0%	20.2%	0.0%	0.2%	17.2%
1989	5616	2,3,4,5	0.1%	0.0%	0.0%	0.3%	0.0%	8.8%	2.5%	0.2%	5.0%	0.4%	3.5%	0.0%	11.2%	0.3%	1.0%	0.1%	0.0%	17.2%	0.0%	20.6%	0.0%	0.2%	28.7%
1990	5952	2,3,4,5	0.0%	0.1%	0.1%	0.3%	0.0%	23.8%	4.3%	0.3%	3.7%	0.3%	1.2%	0.0%	9.1%	0.4%	0.1%	0.0%	0.0%	13.0%	0.0%	22.4%	0.5%	0.2%	20.3%
1991	1904	2,3,4,5	0.4%	0.0%	0.0%	0.0%	0.0%	16.5%	2.7%	0.2%	1.7%	0.1%	0.9%	0.0%	11.3%	0.3%	0.9%	0.0%	0.0%	13.9%	0.0%	25.4%	0.3%	0.2%	25.2%
1992	1623	2,3,4,5	0.6%	0.4%	0.0%	0.0%	0.0%	17.2%	2.0%	0.3%	4.3%	0.9%	2.8%	0.0%	8.4%	0.6%	0.6%	0.1%	0.0%	23.2%	0.0%	21.2%	0.0%	0.1%	17.6%
1993	1616	2,3,4,5	0.2%	0.1%	0.0%	0.0%	0.0%	17.9%	4.5%	1.0%	3.6%	0.1%	2.5%	0.0%	5.8%	0.2%	0.0%	0.0%	0.0%	22.8%	0.0%	14.8%	0.0%	0.1%	26.3%
1994	1909	2,3,4,5	0.0%	0.0%	0.0%	0.5%	0.0%	9.3%	1.2%	0.0%	4.9%	0.0%	5.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	16.4%	0.0%	15.8%	0.3%	0.2%	45.7%
1995	4012	2,3,4,5	0.2%	0.0%	0.0%	0.1%	0.0%	5.4%	1.1%	0.0%	2.5%	0.0%	1.7%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	17.5%	0.0%	5.8%	0.0%	0.3%	64.1%
1996	5219	2,3,4,5	0.1%	0.0%	0.0%	0.0%	0.0%	0.9%	1.7%	0.0%	4.9%	0.0%	0.5%	0.0%	2.6%	0.0%	0.2%	0.0%	0.0%	18.0%	0.0%	6.3%	0.3%	0.2%	64.1%
1997	2736	2,3,4,5	0.5%	0.0%	0.0%	0.5%	0.0%	6.5%	1.5%	0.0%	2.0%	0.0%	1.0%	0.0%	1.2%	0.1%	0.3%	0.0%	0.0%	16.1%	0.0%	2.8%	0.2%	0.1%	67.1%
1998	1910	2,3,4,5	1.4%	0.0%	0.0%	0.6%	0.0%	0.5%	1.5%	0.0%	2.4%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	11.5%	0.0%	8.1%	0.5%	0.2%	72.4%
1999	2291	2,3,4,5	0.6%	0.0%	0.0%	0.3%	0.0%	0.7%	4.2%	0.0%	3.3%	0.0%	0.0%	0.0%	3.1%	0.3%	0.4%	0.0%	0.0%	7.6%	0.0%	9.3%	0.0%	0.2%	70.1%
2000	2551	2,3,4,5	0.4%	0.1%	0.0%	0.0%	0.0%	9.8%	4.6%	0.0%	2.7%	0.0%	0.0%	0.0%	0.3%	0.2%	0.0%	0.0%	0.0%	13.6%	0.0%	12.2%	0.0%	0.4%	55.8%
2001	4163	2,3,4,5	0.1%	0.0%	0.0%	0.0%	0.0%	8.2%	3.3%	0.0%	3.7%	0.0%	0.0%	0.0%	3.3%	0.3%	1.3%	0.1%	0.0%	14.0%	0.0%	11.0%	0.0%	0.3%	54.3%
2002	3654	2,3,4,5	0.8%	0.0%	0.0%	0.8%	0.0%	11.1%	3.4%	0.0%	5.3%	0.0%	0.3%	0.0%	3.5%	0.5%	0.8%	0.0%	0.0%	9.3%	0.0%	17.7%	0.0%	0.2%	46.3%
2003	2287	2,3,4,5	0.7%	0.0%	0.0%	0.8%	0.0%	13.5%	4.3%	0.0%	4.3%	0.0%	0.0%	0.0%	4.2%	0.4%	1.1%	0.0%	0.0%	12.0%	0.0%	14.1%	0.0%	0.1%	44.5%
2004	1866	2,3,4,5	0.4%	0.1%	0.0%	0.6%	0.0%	18.9%	5.1%	0.0%	3.8%	0.0%	0.0%	0.0%	8.4%	1.0%	0.4%	0.0%	0.0%	13.5%	0.0%	15.8%	0.0%	0.4%	31.6%
2005	1760	2,3,4,5	0.0%	0.0%	0.0%	0.1%	0.0%	11.1%	4.3%	0.0%	6.2%	0.0%	0.0%	0.0%	6.3%	1.3%	0.5%	0.0%	0.0%	10.9%	0.0%	5.9%	0.0%	0.5%	53.0%
2006	3551	2,3,4,5	0.2%	0.0%	0.1%	0.5%	0.0%	11.9%	2.6%	0.0%	3.0%	0.0%	0.0%	0.4%	6.6%	0.5%	0.5%	0.0%	0.0%	9.8%	0.0%	14.3%	0.0%	0.1%	49.6%
2007	3720	2,3,4,5	0.2%	0.0%	0.0%	0.2%	0.0%	11.5%	4.5%	0.0%	2.0%	0.0%	0.0%	0.0%	5.3%	0.2%	0.3%	0.0%	0.0%	16.0%	0.0%	15.2%	0.2%	0.0%	44.3%
2008	2630	2,3,4,5	0.0%	0.0%	0.0%	0.3%	0.0%	7.1%	3.8%	0.0%	2.8%	0.0%	0.0%	0.0%	3.2%	0.4%	0.0%	0.0%	0.0%	14.5%	0.0%	17.1%	0.3%	0.1%	50.4%
2009	3001	2,3,4,5	0.1%	0.0%	0.0%	0.2%	0.0%	5.0%	9.0%	0.0%	5.0%	0.0%	0.0%	0.0%	2.8%	0.3%	0.0%	0.0%	0.0%	12.9%	0.0%	14.9%	0.3%	0.3%	49.3%
2010	2940	2,3,4,5	0.1%	0.0%	0.0%	0.1%	0.1%	5.5%	5.7%	0.0%	2.4%	0.0%	0.0%	0.5%	2.9%	1.4%	0.1%	0.0%	0.0%	11.3%	0.0%	2.2%	0.0%	0.0%	67.6%
2011	2850	2,3,4,5	0.3%	0.1%	0.0%	0.0%	0.0%	3.5%	5.6%	0.0%	3.9%	0.0%	0.0%	0.0%	3.2%	0.4%	0.1%	0.0%	0.0%	14.9%	0.0%	8.3%	0.0%	0.0%	59.7%
2012	2746	2,3,4,5	0.0%	0.0%	0.0%	0.1%	0.0%	4.3%	5.2%	0.0%	4.9%	0.0%	0.0%	0.0%	5.5%	0.7%	0.7%	0.0%	0.0%	18.9%	0.0%	3.0%	0.0%	0.1%	56.7%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	2913		0.3%	0.0%	0.0%	0.3%	0.0%	11.5%	3.0%	0.2%	5.0%	0.2%	1.1%	0.0%	4.4%	0.4%	0.3%	0.0%	0.0%	16.6%	0.0%	14.4%	0.1%	0.2%	41.7%
1979-1984	4104		0.2%	0.1%	0.0%	0.5%	0.0%	20.2%	0.2%	1.2%	7.7%	1.4%	1.8%	0.0%	1.8%	0.1%	0.1%	0.0%	0.0%	27.8%	0.0%	24.6%	0.2%	0.2%	12.1%
1985-1995	2557		0.2%	0.0%	0.0%	0.1%	0.0%	15.1%	2.0%	0.2%	6.4%	0.3%	2.6%	0.0%	6.3%	0.3%	0.3%	0.0%	0.0%	18.8%	0.0%	17.8%	0.1%	0.3%	29.2%
1996-1998	3288		0.7%	0.0%	0.0%	0.4%	0.0%	2.7%	1.6%	0.0%	3.1%	0.0%	0.5%	0.0%	1.6%	0.0%	0.2%	0.0%	0.0%	15.2%	0.0%	5.7%	0.3%	0.2%	67.9%
1999-2013	2858		0.3%	0.0%	0.0%	0.3%	0.0%	8.7%	4.7%	0.0%	3.8%	0.0%	0.0%	0.1%	4.2%	0.6%	0.4%	0.0%	0.0%	12.8%	0.0%	11.5%	0.1%	0.2%	52.4%

Appendix C38. Percent distribution of South Puget Sound Fall Yearling (Puget Sound Hatchery Yearling) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	19	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	163	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	337	2,3,4	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	0.0%	0.0%	2.4%	2.4%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	67.7%	0.0%	14.5%	1.5%	0.0%	7.1%
1983	463	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	5.8%	0.0%	0.0%	0.4%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	78.2%	0.0%	8.9%	0.0%	0.0%	5.0%
1984	265	3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	6.8%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	46.0%	0.0%	32.1%	0.0%	0.0%	13.2%
1985	71	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	146	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	744	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	1431	2,3,4	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.1%	0.1%	0.5%	0.0%	1.5%	0.1%	0.0%	0.0%	0.0%	55.0%	0.0%	31.5%	0.6%	0.1%	9.7%
1991	1235	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	2.8%	0.0%	0.6%	0.0%	0.0%	62.2%	0.0%	11.5%	0.4%	0.2%	16.3%
1992	592	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	1.0%	0.0%	0.8%	0.0%	0.0%	0.0%	4.6%	0.7%	0.0%	0.0%	0.0%	51.2%	0.0%	26.9%	0.0%	0.2%	10.0%
1993	474	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	69.6%	0.0%	7.4%	2.1%	0.2%	16.2%
1994	807	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.6%	0.0%	0.9%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	62.7%	0.0%	16.5%	0.0%	0.0%	16.1%
1995	732	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	1.5%	0.0%	2.6%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	72.4%	0.0%	8.9%	1.5%	0.1%	7.4%
1996	792	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	1.1%	0.0%	1.8%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	90.4%	0.0%	2.9%	0.6%	0.0%	2.9%
1997	584	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.3%	0.0%	1.0%	0.0%	0.0%	0.0%	0.5%	2.1%	0.7%	0.0%	0.0%	69.9%	0.0%	3.4%	0.0%	0.0%	20.5%
1998	113	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	85.8%	0.0%	4.4%	0.0%	0.0%	8.0%
1999	105	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.3%	0.0%	0.0%	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	80.0%	0.0%	1.0%	0.0%	0.0%	1.9%
2000	95	3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	0.0%	74.7%	0.0%	9.5%	0.0%	0.0%	5.3%
2001	82	2,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	79.3%	0.0%	0.0%	0.0%	0.0%	14.6%
2002	10	2,3,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	7	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2004	263	2,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	38.4%	0.0%	13.3%	0.0%	1.1%	45.6%
2005	317	2,3,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	1.3%	0.0%	0.0%	0.0%	60.6%	0.0%	16.7%	0.0%	0.0%	19.2%
2006	422	2,3,4	0.0%	0.0%	0.0%	0.0%	0.0%	5.5%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	52.4%	0.0%	18.0%	0.0%	0.2%	19.2%
2007	343	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.6%	0.0%	0.9%	0.0%	52.8%	0.0%	19.5%	0.0%	0.0%	21.3%
2008	137	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	47.4%	0.0%	20.4%	0.0%	0.7%	25.5%
2009	217	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	55.8%	0.0%	5.5%	6.9%	0.0%	15.2%
2010	181	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	3.9%	0.0%	0.0%	0.0%	0.6%	1.7%	0.0%	0.0%	0.0%	32.6%	0.0%	7.7%	0.0%	2.8%	49.2%
2011	220	3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.5%	0.9%	0.0%	0.0%	62.3%	0.0%	30.9%	0.0%	0.0%	1.4%
2012	209	2,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	5.7%	0.0%	2.9%	0.0%	0.0%	0.0%	3.8%	3.8%	1.4%	0.0%	0.0%	44.0%	0.0%	32.5%	0.0%	0.0%	4.3%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	434		0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	1.6%	0.0%	1.4%	0.2%	0.1%	0.0%	1.5%	0.4%	0.4%	0.0%	0.0%	62.1%	0.0%	14.3%	0.6%	0.2%	14.8%
1979-1984	355		0.0%	0.0%	0.0%	0.0%	0.0%	5.4%	0.0%	0.0%	1.6%	1.4%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	64.0%	0.0%	18.5%	0.5%	0.0%	8.4%
1985-1995	878		0.0%	0.0%	0.0%	0.0%	0.0%	3.1%	0.5%	0.0%	1.2%	0.0%	0.5%	0.0%	1.7%	0.1%	0.1%	0.0%	0.0%	62.2%	0.0%	17.1%	0.8%	0.1%	12.6%
1996-1998	496		0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.5%	0.0%	0.9%	0.0%	0.0%	0.0%	0.8%	0.7%	0.2%	0.0%	0.0%	82.0%	0.0%	3.6%	0.2%	0.0%	10.5%
1999-2013	216		0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	2.8%	0.0%	1.7%	0.0%	0.0%	0.0%	1.8%	0.6%	0.6%	0.1%	0.0%	56.7%	0.0%	14.6%	0.6%	0.4%	18.6%

Appendix C39. Percent distribution of Squaxin Pens Fall Yearling (Puget Sound Hatchery Yearling) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	193	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	1023	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	1733	2,3,4	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	0.5%	0.0%	0.9%	0.0%	1.1%	0.0%	4.1%	0.4%	0.0%	0.0%	0.0%	54.5%	0.0%	32.6%	0.0%	0.6%	1.9%
1991	927	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	0.0%	0.4%	1.3%	0.0%	0.4%	0.0%	8.8%	0.3%	0.0%	0.0%	0.0%	48.1%	0.0%	32.8%	0.0%	1.3%	1.9%
1992	817	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.4%	0.4%	2.6%	0.0%	1.5%	0.0%	4.3%	0.2%	0.0%	0.0%	0.0%	58.4%	0.0%	26.6%	0.0%	0.9%	3.5%
1993	335	3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	9.6%	2.4%	0.0%	6.9%	0.0%	2.4%	0.0%	11.0%	0.6%	0.0%	0.0%	0.0%	46.3%	0.0%	4.2%	0.0%	4.8%	11.9%
1994	175	2,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	26.3%	5.1%	0.0%	6.3%	0.0%	4.6%	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%	6.9%	0.0%	22.3%	0.0%	3.4%	18.9%
1995	219	2,3,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	69.4%	0.0%	23.3%	0.0%	1.8%	4.1%
1996	419	2,3,4	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	89.5%	0.0%	5.5%	0.2%	0.7%	1.4%
1997	226	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	88.1%	0.0%	6.6%	0.0%	0.0%	0.4%
1998	130	3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	93.1%	0.0%	2.3%	0.0%	0.8%	1.5%
1999	182	2,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.5%	0.0%	0.5%	0.0%	0.0%	92.9%	0.0%	0.5%	0.0%	1.1%	1.1%
2000	366	3,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2001	226	4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2004	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2005	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2006	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2007	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2009	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2010	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	516		0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	0.8%	0.1%	2.2%	0.0%	1.0%	0.0%	3.5%	0.2%	0.5%	0.0%	0.0%	64.7%	0.0%	15.7%	0.0%	1.5%	4.7%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	701		0.0%	0.0%	0.0%	0.0%	0.0%	7.6%	1.4%	0.1%	3.1%	0.0%	1.7%	0.0%	5.8%	0.3%	0.0%	0.0%	0.0%	47.3%	0.0%	23.6%	0.0%	2.1%	7.1%
1996-1998	258		0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.1%	0.0%	1.6%	0.0%	0.0%	90.2%	0.0%	4.8%	0.1%	0.5%	1.1%
1999-2013	182		0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.5%	0.0%	0.5%	0.0%	0.0%	92.9%	0.0%	0.5%	0.0%	1.1%	1.1%

Appendix C40. Percent distribution of Salmon River (Oregon Coast) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM														
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal			
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	479	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	852	2,3,4	29.8%	0.0%	0.8%	10.3%	0.0%	7.9%	0.0%	0.0%	0.0%	1.2%	1.3%	0.0%	0.0%	0.0%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	16.3%	0.0%	31.3%
1981	784	2,3,4,5	22.7%	0.0%	0.5%	24.0%	0.0%	3.4%	0.6%	0.0%	0.0%	0.5%	2.2%	0.0%	0.3%	0.0%	0.4%	0.6%	0.0%	0.0%	0.0%	0.0%	16.6%	0.0%	28.2%
1982	745	2,3,4,5,6	10.1%	1.3%	0.5%	11.9%	0.0%	6.2%	0.0%	0.0%	0.0%	0.8%	0.3%	0.0%	0.0%	0.7%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	25.1%	0.0%	42.1%
1983	663	3,4,5,6	19.3%	0.5%	0.0%	13.4%	0.0%	6.5%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	21.9%	0.0%	37.4%
1984	789	2,4,5,6	12.0%	0.0%	0.0%	17.0%	0.0%	3.3%	0.0%	0.0%	0.0%	3.0%	1.1%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.3%	21.9%	0.0%	40.8%
1985	387	2,3,5,6	26.1%	1.8%	0.0%	23.3%	0.0%	2.3%	0.0%	0.0%	0.0%	1.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.7%	0.0%	32.0%
1986	545	2,3,4,6	19.6%	0.0%	0.0%	14.5%	0.0%	2.8%	0.0%	0.0%	0.0%	3.1%	0.4%	0.0%	0.0%	0.0%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	36.9%	0.0%	22.2%
1987	833	2,3,4,5	15.2%	0.0%	0.0%	14.6%	0.0%	2.5%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.2%	2.2%	0.6%	0.0%	0.0%	0.0%	0.0%	22.4%	0.0%	41.7%
1988	1343	2,3,4,5,6	12.7%	1.0%	0.0%	7.2%	0.0%	4.3%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.4%	0.0%	0.4%	1.4%	0.0%	0.0%	0.0%	0.0%	14.1%	0.1%	57.4%
1989	1348	2,3,4,5,6	15.2%	0.0%	0.0%	14.5%	0.0%	3.9%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	2.7%	0.2%	0.0%	0.1%	0.0%	0.0%	22.8%	0.2%	39.5%
1990	1662	2,3,4,5,6	16.4%	1.9%	0.0%	11.8%	1.4%	7.1%	0.0%	0.0%	0.0%	0.2%	0.7%	0.0%	1.4%	0.2%	1.3%	1.0%	0.0%	0.0%	0.0%	0.0%	22.7%	0.0%	33.8%
1991	2710	2,3,4,5,6	22.2%	0.0%	0.5%	15.6%	0.8%	5.6%	0.0%	0.0%	0.0%	0.1%	0.7%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.2%	0.0%	0.0%	21.7%	2.2%	30.1%
1992	3091	2,3,4,5,6	4.0%	2.8%	0.0%	7.5%	1.8%	15.2%	0.0%	0.0%	0.1%	0.8%	0.3%	0.0%	0.1%	0.2%	1.7%	0.3%	0.0%	0.2%	0.0%	0.0%	15.3%	0.1%	49.6%
1993	2611	2,3,4,5,6	9.5%	0.5%	0.2%	15.7%	0.9%	17.0%	0.0%	0.0%	0.0%	0.2%	0.3%	0.0%	0.4%	0.1%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	21.3%	0.0%	31.5%
1994	4450	2,3,4,5,6	13.7%	0.4%	0.8%	14.6%	1.8%	4.7%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	1.2%	0.4%	0.0%	0.0%	0.0%	0.0%	15.8%	1.1%	44.9%
1995	4153	2,3,4,5,6	9.0%	0.1%	0.4%	6.0%	1.1%	1.1%	0.2%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	25.9%	4.6%	51.1%
1996	2281	2,3,4,5,6	17.9%	0.0%	0.0%	2.3%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	3.2%	0.8%	0.0%	0.0%	0.0%	0.0%	47.9%	0.3%	26.7%
1997	4602	2,3,4,5,6	28.7%	0.0%	1.5%	3.1%	0.4%	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	1.2%	0.1%	0.0%	0.0%	0.0%	0.0%	18.1%	0.2%	46.6%
1998	3596	2,3,4,5,6	9.2%	0.6%	0.4%	9.5%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.8%	0.0%	0.0%	0.0%	0.0%	27.7%	0.4%	49.6%
1999	2348	2,3,4,5,6	16.0%	0.1%	0.0%	5.2%	4.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.3%	1.0%	0.0%	0.0%	0.0%	0.0%	32.9%	0.5%	39.2%
2000	2848	2,3,4,5,6	15.5%	0.0%	0.6%	3.1%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.3%	1.2%	0.0%	0.0%	0.0%	0.0%	20.3%	0.3%	57.0%
2001	3887	2,3,4,5,6	15.0%	0.0%	0.9%	3.4%	1.6%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	2.3%	1.3%	0.0%	0.0%	0.0%	0.0%	25.8%	0.4%	48.6%
2002	5206	2,3,4,5,6	20.0%	0.0%	1.0%	7.2%	2.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	1.2%	1.5%	0.0%	0.0%	0.0%	0.0%	32.5%	0.5%	33.1%
2003	5027	2,3,4,5,6	14.1%	1.4%	0.6%	6.2%	1.8%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	1.3%	2.3%	0.0%	0.0%	0.0%	0.0%	33.0%	0.3%	38.6%
2004	5390	2,3,4,5,6	18.8%	1.4%	0.8%	7.3%	4.3%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.1%	0.9%	0.0%	0.0%	0.0%	0.0%	22.9%	0.1%	41.0%
2005	5032	2,3,4,5,6	19.3%	0.0%	1.2%	8.1%	5.0%	2.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.3%	0.7%	0.8%	0.0%	0.0%	0.0%	0.1%	34.1%	0.2%	27.1%
2006	2052	2,3,4,5,6	24.9%	0.0%	1.8%	12.0%	5.9%	1.9%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.9%	2.7%	0.0%	0.0%	0.0%	0.0%	27.7%	0.6%	19.1%
2007	1006	2,3,4,5,6	21.1%	0.0%	1.4%	9.8%	6.8%	0.2%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	19.3%	0.3%	38.9%
2008	1935	2,3,4,5,6	15.7%	0.0%	1.4%	6.8%	4.8%	0.6%	1.1%	0.0%	0.1%	0.0%	0.3%	0.0%	0.7%	0.1%	0.2%	0.6%	0.1%	0.0%	0.0%	0.0%	15.7%	0.1%	51.7%
2009	2584	2,3,4,5,6	18.5%	1.0%	1.7%	13.1%	3.6%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.3%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	25.3%	0.5%	34.6%
2010	4127	2,3,4,5,6	12.5%	0.0%	1.5%	6.8%	1.5%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%	0.3%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	43.6%	0.1%	32.6%
2011	5374	2,3,4,5,6	11.1%	0.0%	0.7%	5.8%	2.3%	2.1%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.6%	0.3%	0.7%	0.0%	0.0%	0.0%	0.0%	32.2%	0.2%	41.1%
2012	4254	2,3,4,5,6	16.2%	0.3%	0.5%	8.7%	2.2%	1.8%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	0.5%	0.1%	2.3%	0.0%	0.1%	0.0%	0.0%	25.3%	0.4%	35.4%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	2682		16.7%	0.5%	0.6%	10.3%	1.8%	3.2%	0.3%	0.0%	0.0%	0.4%	0.3%	0.0%	0.3%	0.2%	0.8%	0.7%	0.0%	0.0%	0.0%	0.0%	24.8%	0.4%	38.6%
1979-1984	767		18.8%	0.4%	0.4%	15.3%	0.0%	5.5%	0.1%	0.0%	0.0%	1.2%	1.0%	0.0%	0.1%	0.3%	0.5%	0.2%	0.0%	0.0%	0.0%	0.1%	20.4%	0.0%	36.0%
1985-1995	2103		14.9%	0.8%	0.2%	13.2%	0.7%	6.1%	0.0%	0.0%	0.0%	0.7%	0.3%	0.0%	0.2%	0.1%	1.1%	0.4%	0.0%	0.0%	0.0%	0.0%	21.1%	0.8%	39.4%
1996-1998	3493		18.6%	0.2%	0.6%	4.9%	0.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	1.5%	0.6%	0.0%	0.0%	0.0%	0.0%	31.2%	0.3%	41.0%
1999-2013	3648		17.0%	0.3%	1.0%	7.4%	3.5%	0.8%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.2%	0.6%	1.2%	0.0%	0.0%	0.0%	0.0%	27.9%	0.3%	38.4%

Appendix C41. Percent distribution of Skagit Summer Fingerling (Skagit Wild) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	5	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	12	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	182	2,3,4	3.8%	0.0%	0.0%	0.0%	0.0%	1.6%	6.6%	0.0%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	83.0%
1999	189	2,3,4,5	10.6%	0.5%	0.0%	0.0%	0.0%	0.0%	21.2%	0.0%	11.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	55.0%
2000	279	2,3,4,5	10.4%	0.7%	0.0%	0.0%	0.0%	3.2%	7.5%	0.0%	10.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.8%	0.0%	1.8%	0.0%	0.4%	53.4%
2001	856	2,3,4,5	9.6%	2.7%	1.1%	0.0%	0.0%	8.6%	6.5%	0.0%	10.2%	0.0%	0.0%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.7%	0.0%	1.6%	55.7%
2002	2250	2,3,4,5	13.3%	0.0%	0.9%	1.6%	0.5%	5.9%	1.8%	0.0%	4.8%	0.0%	2.4%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	3.6%	63.8%
2003	876	2,3,4,5	7.3%	0.1%	0.0%	4.1%	1.4%	10.3%	4.5%	0.0%	8.9%	0.0%	0.2%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.6%	0.0%	0.7%	0.0%	0.0%	61.3%
2004	826	2,3,4,5	5.7%	0.0%	0.0%	2.8%	0.0%	11.6%	1.3%	0.0%	1.6%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	1.0%	0.0%	10.2%	64.4%
2005	966	2,3,4,5	8.7%	0.3%	0.0%	1.7%	2.3%	7.2%	4.5%	0.0%	5.7%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	3.6%	0.2%	0.5%	63.9%
2006	1398	2,3,4,5	3.6%	1.2%	0.2%	0.6%	0.9%	4.2%	3.5%	0.0%	4.9%	0.0%	0.2%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	3.3%	0.0%	0.5%	75.7%
2007	1466	2,3,4,5	6.2%	0.8%	0.2%	1.0%	0.6%	8.8%	3.8%	0.0%	0.7%	0.0%	0.1%	0.3%	1.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	3.0%	0.0%	0.8%	72.2%
2008	1123	2,3,4,5	5.6%	0.0%	0.0%	1.4%	1.0%	5.3%	5.9%	0.0%	2.3%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	18.3%	0.0%	1.6%	56.7%
2009	860	2,3,4,5	7.7%	0.9%	0.8%	1.6%	0.0%	3.6%	8.8%	0.0%	4.3%	0.0%	0.0%	1.2%	0.2%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	35.1%	0.0%	1.2%	31.6%
2010	570	2,3,4,5	8.4%	0.5%	0.2%	1.6%	0.0%	4.6%	4.2%	0.0%	3.5%	0.0%	0.5%	3.5%	0.7%	0.0%	0.0%	0.0%	0.0%	3.3%	0.0%	8.1%	1.1%	3.7%	56.1%
2011	526	2,3,4,5	5.5%	0.0%	0.6%	0.0%	0.0%	7.0%	6.8%	0.0%	6.1%	0.0%	0.0%	0.8%	1.1%	0.0%	0.0%	0.0%	0.0%	6.8%	0.0%	20.9%	0.0%	2.3%	42.0%
2012	541	2,3,4,5	8.9%	1.5%	0.0%	1.7%	0.4%	2.8%	2.4%	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	1.1%	0.0%	2.8%	0.0%	3.1%	71.3%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	861		7.7%	0.6%	0.3%	1.2%	0.5%	5.7%	6.0%	0.0%	5.5%	0.0%	0.3%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	6.7%	0.1%	2.0%	60.4%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1996-1998	182		3.8%	0.0%	0.0%	0.0%	0.0%	1.6%	6.6%	0.0%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	83.0%
1999-2013	909		8.0%	0.7%	0.3%	1.3%	0.5%	5.9%	5.9%	0.0%	5.6%	0.0%	0.3%	0.5%	0.3%	0.1%	0.0%	0.0%	0.0%	2.4%	0.0%	7.2%	0.1%	2.1%	58.8%

Appendix C42. Percent distribution of Stikine River total fishing mortalities among fisheries and escapement.

Catch Year	Estimated # of CWTs	Ages Present	AABM							ISBM																Esc.
			SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal					
			Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1999	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2000	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2001	7	3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	23	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	166	3,4,5	8.4%	0.6%	3.6%	10.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	75.9%
2004	205	3,4,5,6	13.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	2.4%	0.5%	81.0%
2005	344	3,4,5,6	18.0%	2.6%	7.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	1.5%	0.0%	45.9%
2006	339	3,4,5,6	15.3%	4.1%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	36.6%	0.9%	0.0%	41.3%
2007	243	3,4,5,6	18.5%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.2%	2.1%	0.0%	55.1%
2008	296	3,4,5,6	10.1%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	23.3%	1.0%	0.0%	63.9%
2009	201	3,4,5,6	13.4%	18.9%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	1.5%	63.7%
2010	212	3,4,5,6	17.9%	5.7%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.5%	73.1%
2011	267	3,4,5,6	7.5%	10.1%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%	0.0%	0.0%	69.3%
2012	514	3,4,5,6	11.3%	3.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	0.2%	0.2%	80.9%
2013	444	3,4,5,6	5.2%	5.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.5%	85.1%
1979-2013	294		12.7%	4.6%	2.2%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.5%	0.9%	0.3%	66.8%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1996-1998	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1999-2013	294		12.7%	4.6%	2.2%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.5%	0.9%	0.3%	66.8%

Appendix C43. Percent distribution of Stillaguamish Fall Fingerling (Stillaguamish Wild) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	16	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	57	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984[1]	108	2,3,4	0.9%	0.0%	0.0%	3.7%	0.0%	10.2%	0.0%	0.0%	16.7%	16.7%	21.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	26.9%	0.0%	3.7%	0.0%	0.0%	0.0%
1985[1]	113	2,3,4,5	8.0%	0.0%	0.0%	3.5%	0.0%	30.1%	8.8%	0.0%	8.0%	0.0%	14.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.7%	0.0%	8.8%	0.0%	0.9%	0.0%
1986[1]	96	3,4,5	5.2%	0.0%	0.0%	0.0%	0.0%	32.3%	0.0%	0.0%	20.8%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	21.9%	0.0%	15.6%	0.0%	0.0%	0.0%
1987	42	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	113	2,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	324	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	416	2,3,4	0.7%	0.0%	0.0%	1.0%	0.0%	21.2%	6.0%	0.7%	10.3%	7.7%	9.4%	0.2%	6.5%	0.0%	0.0%	0.0%	0.0%	16.3%	0.0%	9.1%	0.0%	0.0%	10.8%
1991	974	2,3,4,5	0.2%	0.0%	0.0%	0.0%	0.0%	5.4%	2.4%	0.0%	4.6%	0.0%	0.9%	0.5%	4.8%	0.0%	0.0%	0.0%	0.0%	8.3%	0.0%	5.5%	0.0%	0.5%	66.7%
1992	927	2,3,4,5	0.0%	0.0%	0.0%	0.4%	0.0%	17.4%	3.6%	0.0%	7.0%	0.0%	4.1%	0.0%	5.4%	0.0%	0.0%	0.0%	0.0%	38.5%	0.0%	10.9%	0.0%	0.0%	12.7%
1993	932	2,3,4,5	0.0%	0.0%	0.0%	0.8%	0.0%	13.4%	9.2%	0.3%	9.9%	0.5%	2.1%	0.6%	5.9%	0.3%	0.0%	0.0%	0.1%	21.6%	0.0%	1.3%	0.0%	3.3%	30.6%
1994	481	2,3,4,5	2.9%	0.0%	0.0%	0.6%	0.0%	7.3%	5.6%	0.0%	9.4%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	7.1%	0.0%	2.1%	0.0%	0.0%	62.6%
1995	514	2,3,4,5	2.3%	0.0%	0.0%	0.0%	0.0%	3.7%	8.8%	0.0%	6.6%	0.0%	12.1%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	24.7%	0.0%	2.1%	0.0%	0.2%	38.7%
1996	849	2,3,4,5	1.1%	0.0%	0.0%	0.0%	0.0%	1.1%	6.7%	0.0%	9.4%	0.0%	8.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.8%	0.0%	0.2%	0.1%	2.6%	44.4%
1997	849	2,3,4,5	9.9%	0.6%	0.0%	0.2%	0.0%	7.1%	4.8%	0.0%	5.3%	0.0%	1.8%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	18.8%	0.0%	1.8%	0.0%	1.4%	47.3%
1998	1094	2,3,4,5	10.4%	0.4%	0.3%	1.7%	0.0%	0.9%	2.6%	0.0%	2.2%	0.0%	0.5%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	1.7%	0.0%	13.3%	62.8%
1999	489	2,3,4,5	1.0%	1.0%	0.0%	0.0%	0.0%	4.5%	10.6%	0.0%	9.2%	0.0%	0.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	0.6%	0.0%	5.3%	61.3%
2000	816	2,3,4,5	5.1%	0.0%	0.0%	0.0%	0.0%	7.4%	1.6%	0.0%	2.2%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.1%	0.0%	0.6%	79.8%
2001	304	3,4,5	2.0%	0.0%	0.0%	0.0%	0.0%	5.3%	4.6%	0.0%	5.3%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	15.5%	0.0%	1.3%	0.0%	1.0%	64.8%
2002	246	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	13	5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2004	139	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2005	541	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2006	854	2,3,4	2.3%	0.1%	0.0%	0.0%	0.0%	14.2%	1.4%	0.0%	4.3%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	2.3%	0.0%	13.5%	57.0%
2007	808	2,3,4,5	1.0%	1.1%	0.0%	0.0%	0.0%	14.9%	5.8%	0.0%	14.7%	0.0%	1.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.1%	9.5%	0.0%	4.5%	0.0%	5.4%	40.1%
2008	1203	2,3,4,5	2.5%	0.0%	0.0%	0.0%	0.0%	4.7%	5.6%	0.0%	5.7%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	12.0%	0.0%	3.8%	0.0%	3.9%	61.8%
2009	1001	2,3,4,5	1.2%	0.1%	0.3%	0.3%	0.6%	2.1%	4.3%	0.0%	10.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	12.0%	0.0%	5.0%	0.0%	5.0%	58.9%
2010	867	2,3,4,5	1.0%	0.0%	0.0%	0.0%	0.0%	8.2%	8.3%	0.0%	9.2%	0.0%	0.0%	0.7%	2.3%	0.5%	0.0%	0.0%	0.0%	9.7%	0.0%	5.9%	0.0%	1.3%	52.9%
2011	1343	2,3,4,5	1.5%	0.2%	0.0%	0.0%	0.0%	4.8%	7.7%	0.0%	8.6%	0.0%	0.0%	3.1%	0.7%	0.2%	0.0%	0.0%	0.0%	5.7%	0.0%	2.5%	0.1%	2.8%	61.9%
2012	1091	2,3,4,5	1.6%	0.3%	0.0%	0.3%	0.0%	3.9%	3.4%	0.0%	6.7%	0.0%	0.0%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	4.9%	0.0%	1.4%	0.0%	8.0%	68.8%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	733		2.8%	0.2%	0.0%	0.6%	0.0%	10.0%	5.1%	0.0%	8.5%	1.1%	3.8%	0.3%	1.4%	0.0%	0.0%	0.0%	0.0%	14.2%	0.0%	4.1%	0.0%	3.1%	44.7%
1979-1984	108		0.9%	0.0%	0.0%	3.7%	0.0%	10.2%	0.0%	0.0%	16.7%	16.7%	21.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	26.9%	0.0%	3.7%	0.0%	0.0%	0.0%
1985-1995	557		2.4%	0.0%	0.0%	0.8%	0.0%	16.3%	5.5%	0.1%	9.6%	1.0%	6.2%	0.2%	2.9%	0.0%	0.0%	0.0%	0.0%	19.5%	0.0%	6.9%	0.0%	0.6%	27.8%
1996-1998	931		7.1%	0.3%	0.1%	0.7%	0.0%	3.0%	4.7%	0.0%	5.6%	0.0%	3.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	15.8%	0.0%	1.2%	0.0%	5.8%	51.5%
1999-2013	878		1.9%	0.3%	0.0%	0.1%	0.1%	7.0%	5.3%	0.0%	7.6%	0.0%	0.2%	0.5%	0.7%	0.1%	0.0%	0.0%	0.0%	8.1%	0.0%	2.7%	0.0%	4.7%	60.7%

[1] Estimates for this year can only be used for distribution of fishing mortalities because the escapement data are insufficient.

Appendix C44. Percent distribution of Columbia River Summers (Columbia River Summer) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	196	2,3,4	15.3%	0.0%	1.0%	8.2%	0.0%	17.9%	0.0%	2.6%	4.6%	3.6%	10.2%	1.5%	0.0%	2.6%	0.0%	1.5%	0.0%	0.0%	0.0%	4.1%	0.0%	3.6%	23.5%
1980	333	3,4,5	33.6%	0.0%	0.9%	9.0%	0.0%	17.7%	0.0%	0.0%	0.0%	4.2%	1.2%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	1.8%	29.1%
1981	296	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	23	5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	6	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	33	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	116	2,3,4	13.8%	0.9%	0.0%	5.2%	0.0%	11.2%	0.0%	0.0%	3.4%	2.6%	5.2%	0.0%	13.8%	0.9%	8.6%	0.0%	0.0%	0.0%	0.0%	6.9%	0.0%	3.4%	24.1%
1988	313	2,3,4,5	1.6%	3.5%	0.0%	9.3%	1.9%	20.4%	4.2%	0.0%	0.0%	0.0%	8.6%	0.0%	3.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	13.4%	2.6%	0.0%	31.0%
1989	702	2,3,4,5	7.7%	2.8%	0.6%	5.6%	0.0%	16.5%	2.3%	0.0%	1.6%	0.6%	2.3%	0.6%	10.0%	2.6%	5.0%	0.0%	0.0%	0.0%	0.0%	7.7%	0.0%	0.0%	34.3%
1990	861	2,3,4,5	10.8%	0.0%	0.0%	7.8%	0.0%	21.1%	0.0%	0.0%	0.6%	1.2%	1.6%	0.0%	3.6%	1.4%	2.4%	0.9%	0.0%	0.0%	0.0%	10.7%	0.2%	0.5%	37.2%
1991	599	2,3,4,5	5.3%	0.0%	0.0%	2.8%	0.0%	7.7%	0.8%	0.0%	0.0%	0.7%	3.3%	0.0%	3.0%	1.7%	1.3%	0.5%	0.0%	0.0%	0.0%	4.8%	0.5%	0.8%	66.6%
1992	305	2,3,4,5	18.0%	0.0%	0.0%	3.3%	0.0%	16.4%	0.0%	0.0%	0.7%	2.0%	1.0%	0.0%	3.9%	0.0%	2.6%	0.0%	0.0%	1.6%	0.0%	1.3%	0.0%	0.7%	48.5%
1993	210	2,3,4,5	7.6%	0.0%	0.0%	1.4%	0.0%	16.7%	1.9%	0.0%	0.0%	0.0%	2.4%	0.0%	3.3%	1.4%	1.9%	0.0%	0.0%	0.0%	0.0%	3.3%	0.0%	0.5%	59.5%
1994	37	2,3,4,5	16.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.8%	0.0%	0.0%	56.8%
1995	158	2,3,4,5	3.2%	0.0%	0.0%	0.0%	0.0%	7.6%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	1.9%	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	83.5%
1996	373	2,3,4,5	10.7%	1.1%	0.0%	2.1%	0.3%	2.9%	0.0%	0.0%	2.4%	0.0%	3.8%	0.0%	0.5%	0.0%	2.4%	0.8%	0.0%	1.3%	0.0%	0.0%	2.4%	1.3%	67.8%
1997	1275	2,3,4,5	9.3%	0.0%	3.8%	0.2%	1.3%	1.9%	0.0%	0.0%	0.2%	0.0%	0.4%	0.0%	0.0%	0.0%	3.2%	0.0%	0.0%	0.2%	0.0%	0.2%	0.5%	0.2%	78.8%
1998	1566	2,3,4,5	9.9%	0.2%	1.1%	0.1%	2.1%	0.0%	0.6%	0.0%	0.0%	0.0%	0.1%	0.2%	0.6%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	1.1%	0.9%	0.3%	81.7%
1999	947	2,3,4,5	14.3%	0.7%	3.1%	0.6%	1.1%	0.6%	5.2%	0.0%	0.6%	0.0%	0.5%	1.2%	5.4%	0.4%	3.8%	0.0%	0.0%	0.0%	0.0%	1.1%	2.6%	0.0%	58.8%
2000	2789	2,3,4,5	24.6%	1.6%	3.3%	0.6%	2.2%	4.4%	5.3%	0.0%	0.9%	0.0%	0.0%	0.5%	1.0%	1.4%	2.2%	0.0%	0.1%	0.0%	0.0%	1.4%	2.0%	0.4%	48.2%
2001	7369	2,3,4,5	15.6%	2.5%	1.3%	0.5%	0.9%	13.0%	2.6%	0.0%	0.2%	0.0%	0.0%	0.6%	7.0%	2.3%	9.9%	1.3%	0.0%	1.1%	0.0%	0.7%	1.5%	0.5%	38.3%
2002	11123	2,3,4,5	23.2%	0.0%	1.5%	12.8%	1.7%	14.2%	1.3%	0.0%	0.1%	0.0%	0.0%	0.3%	5.4%	3.0%	3.5%	0.6%	0.0%	0.0%	0.0%	1.0%	2.2%	0.3%	29.0%
2003	7841	2,3,4,5	27.9%	0.7%	1.1%	12.0%	1.3%	11.3%	0.3%	0.0%	0.1%	0.0%	0.0%	0.9%	2.9%	0.4%	3.8%	0.6%	0.0%	0.1%	0.0%	2.7%	5.6%	0.3%	28.0%
2004	4861	2,3,4,5	14.4%	0.4%	1.2%	5.4%	1.5%	12.5%	1.4%	0.0%	0.2%	0.0%	0.0%	0.2%	4.9%	0.6%	5.8%	0.9%	0.0%	0.3%	0.0%	7.4%	14.4%	0.1%	28.4%
2005	10031	2,3,4,5	9.1%	0.0%	0.6%	6.0%	2.5%	10.4%	0.9%	0.0%	0.0%	0.0%	0.0%	0.1%	2.6%	0.3%	3.7%	0.2%	0.0%	0.0%	0.0%	6.8%	7.6%	0.0%	49.1%
2006	3844	2,3,4,5	12.0%	0.1%	0.5%	3.7%	0.5%	11.3%	1.3%	0.0%	0.2%	0.0%	0.1%	0.5%	2.8%	0.1%	0.4%	0.3%	0.2%	0.1%	0.0%	12.9%	10.2%	0.0%	42.7%
2007	5573	2,3,4,5	9.8%	1.9%	1.2%	1.2%	1.7%	5.3%	1.2%	0.0%	0.3%	0.0%	0.8%	0.3%	2.5%	0.1%	1.4%	0.4%	0.0%	0.5%	0.0%	8.7%	15.8%	0.4%	46.4%
2008	4742	2,3,4,5	8.8%	0.1%	0.3%	1.0%	0.6%	6.4%	3.2%	0.0%	0.0%	0.0%	0.1%	0.6%	3.0%	0.6%	0.0%	0.0%	0.0%	0.2%	0.0%	19.3%	10.5%	0.2%	45.2%
2009	3797	2,3,4,5	8.7%	0.1%	0.4%	1.4%	0.7%	6.2%	4.1%	0.0%	0.0%	0.0%	0.0%	0.1%	1.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	17.5%	6.5%	0.0%	52.5%
2010	2123	2,3,4,5	9.0%	0.1%	0.5%	1.7%	2.0%	3.3%	0.7%	0.0%	1.2%	0.0%	0.0%	1.1%	2.4%	0.6%	2.2%	0.4%	0.0%	0.0%	0.0%	20.3%	9.1%	1.5%	43.8%
2011	1846	2,3,4,5	12.1%	0.2%	0.9%	2.3%	0.7%	4.2%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.9%	2.7%	0.3%	0.0%	0.0%	0.0%	23.1%	11.3%	3.4%	33.3%
2012	1615	2,3,4,5	9.3%	1.4%	0.0%	2.0%	0.5%	8.0%	5.4%	0.0%	0.1%	0.0%	0.0%	0.4%	6.8%	2.4%	3.7%	0.9%	0.0%	1.0%	0.0%	14.7%	15.0%	4.3%	24.0%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	2698		12.9%	0.7%	0.8%	3.8%	0.8%	9.6%	1.6%	0.1%	0.6%	0.5%	1.5%	0.9%	3.4%	0.9%	2.6%	0.3%	0.1%	0.2%	0.0%	7.2%	4.3%	0.9%	46.1%
1979-1984	264		24.5%	0.0%	1.0%	8.6%	0.0%	17.8%	0.0%	1.3%	2.3%	3.9%	5.7%	0.8%	0.9%	1.3%	0.0%	0.8%	0.0%	0.0%	0.0%	2.3%	0.0%	2.7%	26.3%
1985-1995	367		9.4%	0.8%	0.1%	3.9%	0.2%	13.1%	1.0%	0.0%	0.7%	0.8%	2.9%	1.9%	4.7%	0.9%	2.5%	0.2%	0.3%	0.2%	0.0%	6.6%	0.4%	0.7%	49.1%
1996-1998	1071		10.0%	0.4%	1.6%	0.8%	1.2%	1.6%	0.2%	0.0%	0.9%	0.0%	1.4%	0.1%	0.4%	0.0%	2.3%	0.3%	0.0%	0.5%	0.0%	0.4%	1.3%	0.6%	76.1%
1999-2013	4893		14.2%	0.7%	1.1%	3.7%	1.3%	7.9%	2.6%	0.0%	0.3%	0.0%	0.1%	0.5%	3.6%	1.0%	3.1%	0.4%	0.0%	0.2%	0.0%	9.8%	8.2%	0.8%	40.6%

Appendix C45. Percent distribution of Taku River total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	217	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	300	3,4,5	3.7%	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	89.7%
1981	448	3,4,5,6	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	94.4%
1982	267	3,4,5,6	7.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	89.9%
1983	166	3,4,5,6	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.6%	96.4%
1984	358	3,4,5,6	10.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	88.0%
1985	342	4,5,6	2.9%	0.0%	8.5%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	87.7%
1986	166	5,6	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	50	6	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	69	3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	178	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	379	3,4,5	1.6%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	94.5%
1997	641	3,4,5,6	0.3%	0.0%	10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	87.8%
1998	390	3,4,5,6	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	99.0%
1999	625	3,4,5,6	1.9%	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	0.0%	0.2%	89.6%
2000	1109	3,4,5,6	2.0%	0.5%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	94.8%
2001	993	3,4,5,6	3.6%	0.1%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	0.0%	0.2%	90.1%
2002	923	3,4,5,6	3.5%	0.0%	7.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	87.8%
2003	910	3,4,5,6	2.3%	0.1%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.1%	94.1%
2004	2183	3,4,5,6	3.2%	0.3%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.9%	0.0%	0.0%	88.4%
2005	1253	3,4,5,6	3.4%	0.2%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	0.0%	0.0%	61.9%
2006	893	3,4,5,6	3.5%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	0.0%	0.1%	76.3%
2007	391	3,4,5,6	6.9%	4.1%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	0.0%	0.0%	82.6%
2008	631	3,4,5,6	4.8%	2.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.2%	91.0%
2009	341	3,4,5,6	8.8%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.6%	0.0%	0.0%	76.2%
2010	227	3,4,5,6	4.4%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	92.1%
2011	377	3,4,5,6	6.6%	0.8%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.8%	86.2%
2012	499	3,4,5,6	5.6%	0.4%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	92.8%
2013	694	4,5,6	1.6%	0.3%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	96.5%
1979-2013	639		4.0%	0.4%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.1%	0.0%	0.1%	88.7%
1979-1984	308		5.7%	0.3%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.1%	91.7%
1985-1995	342		2.9%	0.0%	8.5%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	87.7%
1996-1998	470		1.0%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	93.8%
1999-2013	803		4.1%	0.6%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.9%	0.0%	0.1%	86.7%

Appendix C46. Percent distribution of Unuk River total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	29	3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	578	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	409	3,4,5	10.5%	0.2%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	84.4%
1988	413	3,4,5,6	6.8%	1.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	90.3%
1989	167	3,4,5,6	15.6%	3.6%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	77.8%
1990	181	4,5,6	28.2%	0.6%	11.6%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	56.9%
1991	138	5,6	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	144	6	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	1	3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	32	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	160	3,4,5	11.9%	6.9%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	76.3%
1998	479	3,4,5,6	9.6%	2.1%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	83.7%
1999	767	3,4,5,6	7.8%	0.7%	12.9%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	75.7%
2000	1097	3,4,5,6	9.8%	2.5%	9.1%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	75.2%
2001	1422	3,4,5,6	8.3%	0.6%	4.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	83.7%
2002	969	3,4,5,6	8.8%	0.6%	4.9%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	82.9%
2003	706	3,4,5,6	11.0%	0.1%	5.4%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	79.0%
2004	733	3,4,5,6	7.2%	15.7%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	72.3%
2005	753	3,4,5,6	21.8%	2.4%	7.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	62.8%
2006	822	3,4,5,6	11.9%	7.5%	3.6%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	73.5%
2007	680	3,4,5,6	16.3%	6.9%	3.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	71.9%
2008	363	3,4,5,6	15.7%	4.1%	0.8%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	74.7%
2009	401	3,4,5,6	14.7%	1.5%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	77.6%
2010	428	3,4,5,6	18.2%	0.9%	6.3%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.4%	69.4%
2011	285	3,4,5,6	20.7%	4.2%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	71.6%
2012	209	3,4,5,6	35.9%	8.6%	6.7%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	42.1%
2013	182	4,5,6	17.0%	15.4%	2.2%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%	61.0%
1979-2013	554		14.7%	4.1%	4.8%	0.5%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	73.5%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	292		15.3%	1.3%	4.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	77.4%
1996-1998	320		10.7%	4.5%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	80.0%
1999-2013	654		15.0%	4.8%	5.1%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	71.6%

Appendix C47. Percent distribution of Columbia River Upriver Bright (Columbia River Upriver Brights) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	5546	2,3,4	18.4%	0.3%	0.6%	7.7%	0.0%	12.8%	0.0%	0.4%	0.1%	4.0%	4.4%	0.1%	1.2%	1.1%	0.1%	0.1%	0.1%	0.3%	0.0%	22.4%	0.5%	0.0%	25.4%
1980	3697	2,3,4,5	20.8%	0.8%	0.6%	6.7%	0.0%	7.6%	0.0%	0.5%	0.6%	1.6%	1.9%	0.1%	1.0%	0.7%	0.1%	0.1%	0.0%	0.4%	0.0%	6.4%	0.7%	0.0%	49.6%
1981	2331	2,3,4,5	17.1%	0.2%	0.3%	5.8%	0.0%	4.0%	0.2%	0.2%	0.2%	1.1%	1.8%	0.0%	0.4%	0.9%	0.2%	0.0%	0.0%	0.2%	0.0%	3.6%	0.0%	0.0%	63.8%
1982	1428	2,3,4,5	8.9%	0.4%	0.3%	4.0%	0.0%	5.2%	0.0%	0.0%	0.1%	0.3%	1.7%	0.0%	0.7%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.2%	75.1%
1983	960	2,3,4,5	22.1%	0.2%	0.0%	11.3%	0.0%	3.9%	0.0%	0.0%	0.2%	2.0%	3.4%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.7%	0.0%	1.1%	47.4%
1984	1817	2,3,4,5	20.1%	0.9%	0.2%	10.4%	0.2%	8.4%	0.2%	0.0%	0.2%	2.3%	1.7%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.8%	0.0%	17.2%	0.9%	1.2%	35.1%
1985	2721	2,3,4,5	14.3%	2.3%	0.1%	7.3%	0.0%	6.8%	0.2%	0.0%	0.1%	0.1%	2.9%	0.0%	0.1%	0.4%	0.4%	0.1%	0.0%	0.4%	0.0%	30.2%	2.5%	1.0%	30.7%
1986	3142	2,3,4,5	8.7%	1.2%	0.1%	6.5%	0.0%	10.6%	0.2%	0.0%	0.3%	1.4%	1.7%	0.0%	0.9%	0.2%	0.7%	0.1%	0.0%	0.7%	0.0%	32.2%	2.5%	0.2%	31.7%
1987	3740	2,3,4,5	17.4%	1.6%	0.4%	11.7%	0.0%	7.9%	0.5%	0.0%	0.1%	1.8%	0.6%	0.0%	0.3%	0.4%	1.0%	0.1%	0.0%	0.2%	0.0%	34.1%	2.9%	0.0%	19.0%
1988	3049	2,3,4,5	10.9%	1.6%	0.4%	8.7%	0.0%	11.7%	0.0%	0.0%	0.0%	0.5%	0.6%	0.0%	0.9%	0.3%	1.1%	0.2%	0.1%	0.1%	0.0%	43.1%	2.2%	0.2%	17.4%
1989	1325	2,3,4,5	14.6%	0.0%	0.2%	15.2%	0.5%	8.1%	0.0%	0.0%	0.0%	0.2%	1.4%	0.0%	0.8%	0.2%	0.5%	0.2%	0.0%	0.0%	0.0%	40.8%	1.5%	0.2%	15.7%
1990	711	2,3,4,5	14.2%	0.0%	1.0%	10.8%	0.0%	8.7%	0.0%	0.0%	0.0%	0.7%	0.7%	0.0%	1.3%	0.4%	0.0%	0.0%	0.0%	0.8%	0.0%	33.1%	1.1%	0.0%	27.1%
1991	299	2,3,4,5	7.4%	2.0%	3.3%	6.7%	0.0%	10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.4%	4.0%	0.0%	45.2%
1992	332	2,3,4,5	3.6%	1.5%	0.0%	3.6%	0.0%	12.0%	1.2%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	18.1%	6.3%	0.0%	50.0%
1993	600	2,3,4,5	15.3%	0.0%	0.0%	7.8%	0.5%	19.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.5%	1.2%	1.2%	0.0%	0.0%	0.7%	0.0%	14.3%	4.0%	0.0%	34.8%
1994	982	2,3,4,5	10.8%	2.5%	0.0%	8.1%	1.2%	7.1%	0.6%	0.0%	0.0%	0.2%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.6%	8.8%	0.0%	46.0%
1995	746	2,3,4,5	10.1%	0.0%	2.4%	2.7%	0.0%	7.1%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.7%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	3.8%	0.1%	61.7%
1996	805	2,3,4,5	4.5%	0.0%	0.0%	1.5%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.1%	0.0%	0.6%	0.0%	0.0%	0.4%	0.0%	22.6%	5.6%	0.0%	63.5%
1997	1050	2,3,4,5	13.2%	0.7%	3.1%	5.0%	0.0%	0.5%	0.1%	0.0%	0.4%	0.6%	0.0%	0.5%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	20.3%	9.9%	0.0%	44.9%
1998	743	2,3,4,5	10.9%	4.3%	2.8%	2.4%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.2%	8.9%	0.1%	54.9%
1999	1422	2,3,4,5	14.1%	0.0%	2.7%	7.7%	0.8%	0.0%	0.4%	0.0%	0.5%	0.0%	0.0%	0.0%	0.2%	0.0%	0.4%	0.1%	0.0%	0.0%	0.0%	13.6%	8.0%	0.2%	51.3%
2000	963	2,3,4,5	25.5%	0.1%	3.0%	0.0%	0.0%	1.5%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.7%	0.0%	0.0%	0.0%	0.0%	19.4%	4.5%	0.3%	42.0%
2001	1335	2,3,4,5	6.4%	0.0%	1.3%	0.0%	0.0%	1.1%	0.7%	0.0%	0.0%	0.0%	0.0%	0.6%	1.8%	0.2%	0.4%	0.1%	0.0%	0.0%	0.0%	16.6%	8.5%	1.0%	61.2%
2002	1787	2,3,4,5	16.6%	0.0%	2.7%	1.8%	0.9%	1.7%	0.7%	0.0%	0.6%	0.0%	1.5%	0.0%	1.6%	0.9%	0.3%	0.1%	0.0%	0.0%	0.0%	17.4%	8.6%	1.0%	43.7%
2003	2358	2,3,4,5	14.3%	1.3%	0.5%	5.5%	1.0%	0.8%	0.7%	0.0%	0.0%	0.0%	0.0%	0.2%	0.5%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	15.1%	6.8%	0.4%	52.4%
2004	2507	2,3,4,5	11.0%	2.0%	0.5%	3.8%	1.2%	2.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.3%	1.0%	1.2%	0.0%	0.2%	0.0%	0.2%	0.0%	16.0%	6.3%	0.0%	53.9%
2005	2625	2,3,4,5	14.9%	1.4%	1.0%	9.5%	2.2%	3.5%	2.3%	0.0%	1.6%	0.0%	0.0%	1.2%	0.5%	1.3%	0.3%	0.0%	0.0%	0.0%	0.0%	13.6%	7.0%	0.0%	39.5%
2006	1706	2,3,4,5	14.0%	1.7%	1.3%	6.9%	1.9%	1.5%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.4%	0.4%	0.0%	0.0%	0.3%	0.0%	13.1%	15.4%	0.2%	39.9%
2007	637	2,3,4,5	10.7%	0.2%	1.1%	5.2%	5.5%	1.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	13.3%	20.7%	0.0%	39.9%
2008	889	2,3,4,5	13.3%	0.6%	0.0%	2.9%	1.8%	1.8%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	19.2%	8.2%	0.3%	46.0%
2009	1410	2,3,4,5	21.0%	1.6%	1.7%	8.8%	1.3%	0.6%	1.6%	0.0%	0.3%	0.0%	0.0%	0.0%	0.6%	1.1%	0.0%	0.0%	0.0%	1.1%	0.0%	23.0%	6.0%	0.3%	31.1%
2010	1781	2,3,4,5	5.1%	0.4%	2.5%	1.7%	1.2%	0.8%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	2.2%	0.0%	0.1%	0.0%	0.0%	0.0%	20.0%	4.6%	0.7%	56.8%
2011	3236	2,3,4,5	10.1%	0.2%	0.8%	2.8%	2.2%	1.5%	2.5%	0.0%	0.1%	0.0%	0.0%	0.8%	1.2%	0.9%	0.2%	0.1%	0.0%	0.0%	0.0%	27.1%	10.4%	0.0%	39.1%
2012	5305	2,3,4,5	6.6%	0.8%	0.5%	2.6%	0.6%	0.9%	1.6%	0.0%	0.2%	0.0%	0.0%	0.4%	1.9%	0.8%	0.2%	0.1%	0.0%	0.0%	0.0%	16.9%	19.4%	0.2%	46.4%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	1882		13.1%	0.9%	1.0%	6.0%	0.7%	5.0%	0.7%	0.0%	0.2%	0.5%	0.9%	0.1%	0.7%	0.6%	0.3%	0.1%	0.0%	0.2%	0.0%	19.2%	5.9%	0.3%	43.6%
1979-1984	2630		17.9%	0.5%	0.3%	7.6%	0.0%	7.0%	0.1%	0.2%	0.2%	1.9%	2.5%	0.1%	0.6%	0.6%	0.1%	0.0%	0.0%	0.3%	0.0%	10.0%	0.3%	0.4%	49.4%
1985-1995	1604		11.6%	1.2%	0.7%	8.1%	0.2%	10.0%	0.2%	0.0%	0.0%	0.5%	1.1%	0.0%	0.6%	0.4%	0.4%	0.1%	0.0%	0.3%	0.0%	26.4%	3.6%	0.2%	34.5%
1996-1998	866		9.5%	1.7%	2.0%	3.0%	0.1%	0.5%	0.0%	0.0%	0.1%	0.2%	0.1%	0.2%	0.0%	0.0%	0.5%	0.0%	0.0%	0.1%	0.0%	19.4%	8.1%	0.0%	54.4%
1999-2013	1997		13.1%	0.7%	1.4%	4.2%	1.5%	1.4%	1.5%	0.0%	0.3%	0.0%	0.1%	0.3%	1.0%	0.8%	0.2%	0.1%	0.0%	0.1%	0.0%	17.4%	9.6%	0.3%	45.9%

Appendix C48. Percent distribution of University Of Washington Accelerated total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	4296	2,3,4	0.0%	0.0%	0.0%	0.0%	0.0%	14.7%	0.1%	1.6%	4.2%	0.3%	3.8%	0.0%	1.8%	0.5%	0.0%	0.0%	0.0%	42.1%	0.0%	7.1%	0.0%	0.0%	24.0%
1980	5890	2,3,4,5	0.0%	0.0%	0.0%	0.1%	0.0%	7.6%	0.1%	0.3%	4.2%	0.2%	1.2%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	55.1%	0.0%	13.1%	0.2%	0.0%	16.3%
1981	4296	2,3,4,5	0.0%	0.0%	0.0%	0.6%	0.0%	10.0%	0.1%	0.5%	4.4%	0.0%	3.5%	0.0%	2.3%	0.3%	0.0%	0.0%	0.0%	51.1%	0.0%	11.2%	0.0%	0.0%	16.0%
1982	3804	2,3,4,5	0.0%	0.1%	0.0%	0.0%	0.0%	16.9%	0.2%	0.3%	3.7%	0.3%	0.9%	0.0%	2.5%	0.4%	0.1%	0.0%	0.0%	32.2%	0.0%	14.5%	0.0%	0.0%	27.9%
1983	3986	2,3,4,5	0.0%	0.0%	0.0%	0.1%	0.0%	9.4%	0.1%	0.6%	3.1%	0.9%	1.3%	0.0%	1.2%	0.2%	0.0%	0.0%	0.0%	38.6%	0.0%	25.0%	0.0%	0.2%	19.5%
1984	2063	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	17.9%	0.2%	0.4%	4.0%	0.5%	0.9%	0.0%	1.6%	0.0%	0.1%	0.0%	0.0%	30.5%	0.0%	23.1%	0.2%	0.0%	20.6%
1985	888	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	14.0%	1.2%	0.0%	5.0%	0.0%	4.7%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	29.6%	0.0%	15.9%	0.0%	0.1%	27.5%
1986	960	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	18.4%	0.9%	0.0%	4.1%	0.0%	7.3%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	23.8%	0.0%	26.5%	0.0%	0.1%	17.4%
1987	1036	3,4,5	0.5%	0.0%	0.0%	0.1%	0.0%	11.5%	1.4%	1.4%	4.6%	0.4%	0.0%	0.0%	4.1%	0.2%	0.3%	0.0%	0.0%	15.0%	0.0%	47.2%	0.0%	0.1%	13.4%
1988	618	4,5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	44	5	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1999	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2000	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2001	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2004	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2005	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2006	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2007	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2009	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2010	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	3024		0.1%	0.0%	0.0%	0.1%	0.0%	13.4%	0.5%	0.6%	4.1%	0.3%	2.6%	0.0%	2.1%	0.2%	0.1%	0.0%	0.0%	35.3%	0.0%	20.4%	0.0%	0.1%	20.3%
1979-1984	4056		0.0%	0.0%	0.0%	0.1%	0.0%	12.8%	0.1%	0.6%	3.9%	0.4%	1.9%	0.0%	1.8%	0.2%	0.0%	0.0%	0.0%	41.6%	0.0%	15.7%	0.1%	0.0%	20.7%
1985-1995	961		0.2%	0.0%	0.0%	0.0%	0.0%	14.6%	1.2%	0.5%	4.6%	0.1%	4.0%	0.0%	2.5%	0.1%	0.1%	0.0%	0.0%	22.8%	0.0%	29.8%	0.0%	0.1%	19.4%
1996-1998	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1999-2013	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Appendix C49. Percent distribution of White River Spring Yearling total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1999	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2000	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2001	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2004	173	2	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2005	1039	2,3	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2006	1043	2,3,4	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	0.1%	0.0%	0.0%	0.0%	17.5%	0.0%	0.2%	0.0%	1.7%	75.7%
2007	773	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.5%	0.0%	0.0%	0.0%	22.5%	0.0%	0.0%	0.0%	2.6%	72.8%
2008	197	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.6%	0.0%	0.5%	0.0%	6.6%	84.8%
2009	209	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.9%	0.0%	0.0%	0.0%	3.3%	82.8%
2010	212	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	7.5%	88.2%
2011	216	2,3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	94.0%
2012	200	3,4,5	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	6.0%	0.0%	0.0%	0.0%	16.0%	74.0%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	407		0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.1%	0.0%	0.0%	0.0%	9.7%	0.0%	0.1%	0.0%	6.3%	81.8%
1979-1984	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1996-1998	0		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1999-2013	407		0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.1%	0.0%	0.0%	0.0%	9.7%	0.0%	0.1%	0.0%	6.3%	81.8%

Appendix C50. Percent distribution of Willamette Spring (Willamette River Hatchery) total fishing mortalities among fisheries and escapement.

	Estimated		AABM							ISBM															
Catch	# of	Ages	SEAK			NBC		WCVI		Geo St		Cent.	Canada	NBC	N Falcon		S Falcon		Pgt Snd		Terminal				
Year	CWTs	Present	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Sport	Troll	Sport	Net	Sport	Troll	Net	Sport	Strays	Esc.
1979	2086	3,4	Failed	Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	5864	3,4,5	4.4%	0.5%	0.2%	5.9%	0.0%	2.8%	0.0%	0.0%	0.0%	0.2%	0.4%	0.1%	0.5%	0.5%	0.1%	0.0%	0.0%	0.1%	0.0%	0.4%	8.1%	0.0%	76.0%
1981	8171	3,4,5,6	5.3%	0.3%	0.1%	6.1%	0.0%	1.4%	0.0%	0.0%	0.0%	0.4%	0.1%	0.0%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	10.8%	0.0%	73.3%
1982	3729	3,4,5,6	5.3%	0.7%	0.1%	5.6%	0.0%	3.8%	0.0%	0.0%	0.0%	0.1%	0.2%	0.1%	1.0%	1.4%	0.1%	0.0%	0.1%	0.2%	0.0%	7.3%	25.4%	0.0%	48.5%
1983	2610	3,4,5,6	16.4%	0.1%	0.0%	10.5%	0.0%	1.6%	0.0%	0.3%	0.4%	0.2%	0.0%	0.0%	1.3%	0.3%	0.6%	0.0%	0.0%	0.5%	0.0%	6.4%	22.0%	0.0%	39.4%
1984	4007	3,4,5,6	4.5%	0.2%	0.3%	2.1%	0.1%	1.8%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	6.7%	25.0%	0.0%	57.6%
1985	2563	3,4,5,6	7.1%	0.2%	0.0%	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.4%	19.7%	0.0%	53.2%
1986	632	3,4,5,6	3.3%	0.3%	0.0%	6.2%	0.0%	4.4%	0.5%	0.0%	0.0%	0.5%	1.9%	0.0%	0.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	10.3%	17.7%	0.0%	54.4%
1987	689	3,4,5,6	15.8%	0.0%	0.6%	11.9%	0.0%	1.3%	0.9%	0.0%	0.0%	1.0%	0.7%	0.0%	1.7%	0.0%	1.2%	0.0%	0.0%	0.6%	0.0%	5.1%	26.1%	0.0%	33.1%
1988	2065	3,4,5,6	10.6%	0.3%	0.5%	6.5%	0.0%	3.4%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	1.7%	0.0%	0.4%	0.1%	0.0%	0.0%	0.0%	7.2%	29.2%	0.1%	39.2%
1989	2722	3,4,5,6	5.1%	0.0%	0.2%	1.8%	0.0%	1.5%	0.4%	0.0%	0.6%	0.0%	0.2%	0.0%	1.6%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	12.7%	20.9%	0.0%	54.8%
1990	2712	3,4,5,6	8.4%	0.6%	0.2%	1.6%	0.0%	2.3%	0.6%	0.0%	0.0%	0.2%	0.4%	0.3%	1.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	16.6%	27.9%	0.0%	39.5%
1991	2949	3,4,5,6	3.7%	1.5%	0.6%	1.7%	0.0%	0.3%	0.1%	0.0%	0.2%	0.0%	0.1%	0.0%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	6.1%	43.8%	0.0%	41.1%
1992	2703	3,4,5,6	6.2%	4.6%	0.2%	1.4%	0.0%	2.3%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	2.3%	0.2%	0.0%	0.1%	0.0%	0.5%	0.0%	5.7%	30.2%	0.0%	46.0%
1993	5203	3,4,5,6	11.0%	0.0%	0.0%	1.3%	0.1%	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	43.4%	0.0%	40.1%
1994	4953	3,4,5,6	5.4%	0.7%	0.7%	0.7%	0.1%	0.8%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%	5.0%	39.4%	0.5%	46.0%
1995	4371	3,4,5,6	4.5%	0.1%	0.3%	1.2%	0.0%	0.5%	0.1%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.3%	44.4%	0.1%	47.9%
1996	3679	3,4,5,6	2.1%	0.0%	0.0%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.8%	34.8%	0.4%	61.3%
1997	2222	3,4,5,6	4.4%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.8%	16.0%	0.1%	78.0%
1998	1575	3,4,5,6	5.1%	0.0%	0.3%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.4%	17.3%	0.1%	76.3%
1999	1802	3,4,5,6	7.4%	0.0%	0.7%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.8%	15.0%	0.2%	75.0%
2000	6810	3,4,5,6	11.5%	0.1%	0.8%	0.1%	0.4%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	2.4%	30.2%	0.0%	53.4%
2001	35531	3,4,5,6	1.5%	0.0%	0.1%	0.1%	0.1%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%	0.0%	0.0%	0.2%	0.0%	3.7%	25.8%	0.0%	67.7%
2002	20239	3,4,5,6	2.1%	0.1%	0.1%	1.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	15.4%	22.5%	0.0%	57.1%
2003	7244	3,4,5,6	5.2%	0.0%	0.1%	0.4%	0.1%	2.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	1.4%	20.4%	0.1%	69.5%
2004	7328	3,4,5,6	3.5%	0.4%	0.1%	0.7%	0.0%	5.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	6.1%	24.5%	0.0%	57.7%
2005	3222	3,4,5,6	2.8%	0.0%	0.1%	0.2%	0.2%	5.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.1%	0.3%	0.0%	0.0%	0.1%	0.0%	4.9%	21.2%	0.0%	64.0%
2006	2027	3,4,5,6	3.7%	0.0%	0.0%	0.4%	0.6%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	7.8%	27.1%	0.0%	54.5%
2007	1596	3,4,5,6	4.8%	0.1%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	19.2%	0.3%	68.7%
2008	2246	3,4,5,6	1.8%	0.1%	0.0%	0.5%	0.0%	0.9%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.5%	13.0%	0.3%	62.4%
2009	4111	3,4,5,6	3.3%	0.0%	0.0%	0.2%	0.1%	0.7%	2.1%	0.0%	0.8%	0.0%	0.0%	0.1%	0.3%	0.1%	0.0%	0.0%	0.0%	0.3%	0.0%	9.1%	23.0%	0.0%	59.7%
2010	11845	3,4,5,6	2.9%	0.0%	0.1%	0.5%	0.2%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	1.8%	0.2%	0.1%	0.0%	0.0%	0.1%	0.0%	3.9%	34.6%	0.1%	54.9%
2011	7992	3,4,5,6	4.0%	0.0%	0.2%	0.7%	0.2%	1.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.1%	0.9%	0.2%	0.2%	0.0%	0.0%	0.2%	0.0%	5.3%	42.7%	0.2%	43.9%
2012	6007	3,4,5,6	6.4%	0.0%	0.2%	0.3%	0.1%	3.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.7%	0.4%	0.0%	0.0%	0.4%	0.0%	5.2%	37.7%	0.6%	43.3%
2013	No Data		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-2013	5498		5.7%	0.3%	0.2%	2.1%	0.1%	1.7%	0.2%	0.0%	0.1%	0.1%	0.2%	0.0%	0.7%	0.2%	0.2%	0.0%	0.0%	0.1%	0.0%	6.2%	26.0%	0.1%	55.7%
1979-1984	4876		7.2%	0.4%	0.2%	6.0%	0.0%	2.3%	0.0%	0.1%	0.1%	0.2%	0.2%	0.0%	0.8%	0.5%	0.2%	0.0%	0.0%	0.2%	0.0%	4.5%	18.3%	0.0%	59.0%
1985-1995	2869		7.4%	0.8%	0.3%	3.2%	0.0%	1.7%	0.3%	0.0%	0.1%	0.3%	0.4%	0.0%	1.0%	0.1%	0.2%	0.1%	0.0%	0.1%	0.0%	8.0%	31.2%	0.1%	45.0%
1996-1998	2492		3.9%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.2%	0.0%	0.7%	22.7%	0.2%	71.9%
1999-2013	8429		4.3%	0.1%	0.2%	0.4%	0.1%	1.9%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.6%	0.1%	0.2%	0.0%	0.0%	0.1%	0.0%	6.6%	25.5%	0.1%	59.4%

APPENDIX D: MODEL ESTIMATES OF THE STOCK COMPOSITION OF THE AABM AND 3 ISBM OCEAN FISHERIES FOR 2013 AND THE AVERAGE, 1985–2012

This appendix shows the model estimates of the stock composition of the catch for the 3 AABM fisheries (Appendices D1, D2 and D4), and 3 ISBM ocean fisheries (Appendices D3, D5 and D6). These estimates are based on the summation of the contribution of the 30 model stocks for each fishery, expressed as a percentage of the total catch.

The estimated stock composition may not reflect the true stock composition in a given year for several reasons:

1. The yearly catch estimates by stock are influenced by the base period stock composition in a fishery which may not reflect the current stock composition in the fishery, amongst the 30 model stocks.
2. The distribution of certain stocks may have changed over time.
3. The 30 model stocks do not represent all production present in a fishery.

For example, in the SEAK fishery a substantial component (over 20%) of the catch is comprised of Alaska hatchery fish, most of which do not count as treaty catch and are not included in Appendix D1. Also, in the sport fishery portion of the present NBC AABM fishery, the base period data used is from fisheries which were located near shore and do not represent the current stock composition of the sport fishery which is located offshore.

Hence, these tables do not necessarily portray the true stock composition of the total catch of the fisheries in Appendices D1 to D6. There are genetic estimates for most of these fisheries in selected years which can provide more accurate accounting of contributions by stocks or stock groups.

LIST OF APPENDIX D TABLES

Appendix D1. Southeast Alaska all gear.

FISHERY	SOUTHEAST ALASKA ALL GEAR				
	2013	Average (1985–2012)			
Model Stock	% of Fishery Catch	% of Fishery Catch	% of Stock Catch	% of Stock Total Return	Associated Escapement Indicator Stocks[1]
North/Central BC	10.69%	17.80%	21.51%	10.56%	Yakoun Nass Skeena Area 6 Index Area 8 Index Rivers Inlet Smith Inlet
Columbia Upriver Bright	30.37%	15.58%	24.02%	11.84%	Columbia Upriver Bright
WCVI Hatchery	11.68%	16.42%	51.16%	17.59%	NA
Oregon Coastal North Migrating	7.87%	12.49%	30.71%	13.22%	Oregon Coastal
Fraser Early	4.07%	4.54%	26.04%	5.47%	Upper Fraser Middle Fraser Thompson
Mid-Columbia Brights	14.07%	5.57%	32.47%	12.55%	Not Represented
Upper Georgia Strait	5.73%	5.43%	36.46%	21.79%	Upper Georgia Strait
Alaska South SE	1.20%	4.32%	96.91%	37.17%	King Salmon Andrew Creek Blossom Keta Unuk Chickamin
Washington Coastal Wild	2.19%	3.04%	18.12%	9.59%	Grays Harbor Fall Quillayute Fall Hoh Fall Queets Fall
WCVI Wild	1.22%	3.25%	52.28%	17.75%	WCVI
Columbia Upriver Summer	4.79%	3.14%	32.48%	13.60%	Columbia Upriver Summer
WA Coastal Hatchery	2.00%	2.52%	17.05%	8.96%	NA
Willamette River Hatchery	1.44%	2.19%	11.48%	4.82%	NA
Fall Cowlitz Hatchery	0.25%	1.23%	6.51%	2.54%	NA
Lewis River Wild	0.91%	0.85%	18.18%	7.84%	Lewis River
Lower GS Hatchery	0.11%	0.36%	3.74%	1.85%	NA
PS Hatchery Fingerling	0.25%	0.25%	0.59%	0.32%	NA
Lower Georgia Strait	0.12%	0.21%	4.05%	2.11%	Lower Georgia Strait
Snake River Fall	0.64%	0.16%	8.25%	4.90%	Not Represented
Fraser Late	0.05%	0.16%	0.31%	0.11%	Harrison
Spring Cowlitz Hatchery	0.06%	0.11%	2.27%	1.17%	NA
Skagit Summer/Fall	0.03%	0.11%	4.49%	1.24%	Skagit Summer/Fall
Stillaguamish Summer/Fall	0.08%	0.07%	18.88%	7.04%	Stillaguamish
PS Yearling	0.08%	0.06%	0.61%	0.39%	NA
Nooksack Fall	0.04%	0.05%	0.22%	0.16%	NA
Puget Sound Natural	0.02%	0.05%	0.71%	0.32%	Green
Snohomish Summer/Fall	0.03%	0.05%	3.28%	1.24%	Snohomish
Spring Creek Hatchery	0.00%	0.00%	0.00%	0.00%	NA
Lower Bonneville Hatchery	0.00%	0.00%	0.00%	0.00%	NA
Nooksack Spring	0.00%	0.00%	0.00%	0.00%	Not Represented

[1] NA = a hatchery stock; Not represented = a wild stock without an escapement indicator.

Appendix D2. North BC troll.

FISHERY	NORTH TROLL				
	2013	Average (1985–2012)			
Model Stock	% of Fishery Catch	% of Fishery Catch	% of Stock Catch	% of Stock Tot. Ret.	Associated Escapement Indicator Stocks
North/Central BC	4.89%	11.05%	7.09%	3.48%	Yakoun Nass Skeena Area 6 Index Area 8 Index Rivers Inlet Smith Inlet
Oregon Coastal North Migrating	17.50%	25.86%	30.37%	13.92%	Oregon Coastal
Columbia Upriver Bright	44.40%	15.62%	11.89%	6.17%	Columbia Upriver Bright
WCVI Hatchery	2.96%	7.79%	10.65%	4.21%	NA
Upper Georgia Strait	3.56%	3.92%	12.43%	7.75%	Upper Georgia Strait
Fraser Early	4.22%	6.57%	16.64%	4.05%	Upper Fraser Middle Fraser Thompson
Willamette River Hatchery	2.64%	5.69%	13.34%	6.27%	NA
Washington Coastal Wild	2.46%	4.80%	13.37%	7.62%	Grays Harbor Fall Quillayute Fall Hoh Fall Queets Fall
Columbia Upriver Summer	2.70%	2.40%	11.40%	5.07%	Columbia Upriver Summer
WA Coastal Hatchery	2.21%	4.00%	12.76%	7.15%	NA
Mid-Columbia Brights	8.87%	3.93%	10.87%	4.50%	Not Represented
WCVI Wild	0.33%	1.78%	10.70%	4.21%	WCVI
Lower GS Hatchery	0.13%	0.81%	3.20%	1.70%	NA
Fall Cowlitz Hatchery	0.58%	1.01%	2.16%	0.94%	NA
Fraser Late	0.24%	0.65%	0.45%	0.20%	Harrison
Lower Georgia Strait	0.19%	0.45%	2.87%	1.64%	Lower Georgia Strait
Nooksack Fall	0.07%	0.26%	0.27%	0.20%	NA
Skagit Summer/Fall	0.24%	0.41%	5.62%	1.76%	Skagit Summer/Fall
PS Hatchery Fingerling	0.24%	0.40%	0.32%	0.19%	NA
Lewis River Wild	0.49%	0.55%	4.04%	2.01%	Lewis River
Spring Cowlitz Hatchery	0.10%	0.35%	2.17%	1.24%	NA
PS Yearling	0.17%	0.27%	0.71%	0.48%	NA
Snohomish Summer/Fall	0.05%	0.25%	4.03%	1.76%	Snohomish
Alaska South SE	0.03%	0.28%	1.97%	0.74%	King Salmon Andrew Creek Blossom Keta Unuk Chickamin
Snake River Fall	0.69%	0.34%	5.40%	3.43%	Not Represented
Puget Sound Natural	0.02%	0.17%	0.35%	0.18%	Green
Stillaguamish Summer/Fall	0.01%	0.13%	2.16%	0.90%	Stillaguamish
Spring Creek Hatchery	0.02%	0.14%	0.05%	0.04%	NA
Nooksack Spring	0.01%	0.12%	1.59%	0.49%	Not Represented
Lower Bonneville Hatchery	0.00%	0.00%	0.00%	0.00%	NA

[1] NA = a hatchery stock; Not represented = a wild stock without an escapement indicator.

Appendix D3. Central BC troll.

FISHERY	CENTRAL TROLL				
	2013	Average (1985–2012)			
Model Stock	% of Fishery Catch	% of Fishery Catch	% of Stock Catch	% of Stock Tot. Ret.	Associated Escapement Indicator Stocks
Fraser Late	0.00%	15.44%	1.52%	0.83%	Harrison
WCVI Hatchery	0.00%	13.15%	2.56%	1.08%	NA
Columbia Upriver Bright	0.00%	6.20%	0.65%	0.38%	Columbia Upriver Bright
North/Central BC	0.00%	5.30%	0.71%	0.30%	Yakoun Nass Skeena Area 6 Index Area 8 Index Rivers Inlet Smith Inlet
Upper Georgia Strait	0.00%	4.55%	2.40%	1.54%	Upper Georgia Strait
WCVI Wild	0.00%	2.94%	2.52%	1.07%	WCVI
Columbia Upriver Summer	0.00%	2.70%	2.60%	1.21%	Columbia Upriver Summer
Washington Coastal Wild	0.00%	2.52%	0.83%	0.54%	Grays Harbor Fall Quillayute Fall Hoh Fall Queets Fall
Fraser Early	0.00%	2.49%	0.75%	0.25%	Upper Fraser Middle Fraser Thompson
Lower GS Hatchery	0.00%	2.19%	1.01%	0.69%	NA
WA Coastal Hatchery	0.00%	2.01%	0.78%	0.50%	NA
Mid-Columbia Brights	0.00%	1.99%	0.78%	0.39%	Not Represented
Oregon Coastal North Migrating	0.00%	1.86%	0.27%	0.14%	Oregon Coastal
Lower Bonneville Hatchery	0.00%	1.68%	0.69%	0.34%	NA
Lower Georgia Strait	0.00%	1.33%	0.96%	0.68%	Lower Georgia Strait
PS Hatchery Fingerling	0.00%	1.33%	0.19%	0.12%	NA
Nooksack Fall	0.00%	1.28%	0.26%	0.21%	NA
Skagit Summer/Fall	0.00%	0.90%	1.56%	0.65%	Skagit Summer/Fall
Lewis River Wild	0.00%	0.66%	0.44%	0.24%	Lewis River
Snohomish Summer/Fall	0.00%	0.56%	1.07%	0.67%	Snohomish
PS Yearling	0.00%	0.56%	0.28%	0.22%	NA
Spring Creek Hatchery	0.00%	0.52%	0.07%	0.06%	NA
Puget Sound Natural	0.00%	0.51%	0.21%	0.13%	Green
Willamette River Hatchery	0.00%	0.48%	0.08%	0.05%	NA
Spring Cowlitz Hatchery	0.00%	0.36%	0.14%	0.10%	NA
Fall Cowlitz Hatchery	0.00%	0.35%	0.04%	0.02%	NA
Stillaguamish Summer/Fall	0.00%	0.32%	1.39%	0.68%	Stillaguamish
Snake River Fall	0.00%	0.30%	0.52%	0.38%	Not Represented
Nooksack Spring	0.00%	0.27%	0.31%	0.14%	Not Represented
Alaska South SE	0.00%	0.27%	0.01%	0.01%	King Salmon Andrew Creek Blossom Keta Unuk Chickamin

[1] NA = a hatchery stock; Not represented = a wild stock without an escapement indicator.

Appendix D4. WCVI troll and outside sport.

FISHERY	WCVI TROLL AND OUTSIDE SPORT				
	2013	Average (1985-2012)			
Model Stock	% of Fishery Catch	% of Fishery Catch	% of Stock Catch	% of Stock Tot. Ret.	Associated Escapement Indicator Stocks
Fraser Late	19.94%	23.81%	22.98%	10.78%	Harrison
PS Hatchery Fingerling	8.63%	11.13%	14.69%	8.96%	NA
Columbia Upriver Bright	22.97%	8.83%	8.38%	4.49%	Columbia Upriver Bright
Spring Creek Hatchery	6.81%	6.94%	12.99%	10.21%	NA
Fall Cowlitz Hatchery	4.26%	6.85%	21.43%	9.90%	NA
Lower Bonneville Hatchery	1.26%	5.20%	29.76%	13.55%	NA
Oregon Coastal North Migrating	2.42%	4.61%	7.09%	3.35%	Oregon Coastal
Nooksack Fall	2.61%	4.38%	10.33%	7.88%	NA
WCVI Hatchery	0.00%	3.75%	6.07%	2.79%	NA
Mid-Columbia Brights	12.28%	3.54%	12.35%	5.39%	Not Represented
Columbia Upriver Summer	3.30%	2.99%	20.40%	9.23%	Columbia Upriver Summer
Washington Coastal Wild	2.66%	2.48%	9.13%	5.06%	Grays Harbor Fall Quillayute Fall Hoh Fall Queets Fall
Puget Sound Natural	0.60%	2.25%	16.83%	9.03%	Green
WA Coastal Hatchery	2.25%	2.17%	9.06%	4.86%	NA
Willamette River Hatchery	0.97%	2.03%	6.19%	2.94%	NA
PS Yearling	1.73%	1.66%	9.56%	6.79%	NA
Fraser Early	1.51%	1.52%	4.91%	1.13%	Upper Fraser Middle Fraser Thompson
WCVI Wild	0.00%	0.91%	6.04%	2.78%	WCVI
Skagit Summer/Fall	0.71%	0.91%	20.04%	6.69%	Skagit Summer/Fall
Lewis River Wild	1.19%	0.78%	9.97%	4.89%	Lewis River
Spring Cowlitz Hatchery	0.30%	0.66%	7.11%	4.49%	NA
Snake River Fall	2.35%	0.66%	21.40%	14.11%	Not Represented
North/Central BC	0.40%	0.51%	0.39%	0.19%	Yakoun Nass Skeena Area 6 Index Area 8 Index Rivers Inlet Smith Inlet
Lower GS Hatchery	0.16%	0.46%	2.77%	1.43%	NA
Snohomish Summer/Fall	0.16%	0.43%	14.63%	6.64%	Snohomish
Lower Georgia Strait	0.28%	0.24%	2.71%	1.51%	Lower Georgia Strait
Upper Georgia Strait	0.15%	0.13%	0.53%	0.33%	Upper Georgia Strait
Stillaguamish Summer/Fall	0.06%	0.10%	15.12%	6.37%	Stillaguamish
Nooksack Spring	0.04%	0.07%	10.70%	3.67%	Not Represented
Alaska South SE	0.00%	0.00%	0.00%	0.00%	King Salmon Andrew Creek Blossom Keta Unuk Chickamin

[1] NA = a hatchery stock; Not represented = a wild stock without an escapement indicator.

Appendix D5. Strait of Georgia sport and troll.

FISHERY	STRAIT OF GEORGIA SPORT AND TROLL				
	2013	Average (1985–2012)			
Model Stock	% of Fishery Catch	% of Fishery Catch	% of Stock Catch	% of Stock Tot. Ret.	Associated Escapement Indicator Stocks
Fraser Late	33.98%	46.07%	37.22%	18.23%	Harrison
Lower GS Hatchery	3.22%	9.47%	42.60%	24.43%	NA
Nooksack Fall	9.81%	9.14%	17.74%	13.30%	NA
PS Hatchery Fingerling	10.06%	6.81%	7.49%	4.50%	NA
Lower Georgia Strait	6.19%	5.46%	43.31%	26.23%	Lower Georgia Strait
Fraser Early	5.70%	4.38%	10.95%	2.59%	Upper Fraser Middle Fraser Thompson
PS Yearling	8.75%	4.50%	19.52%	13.68%	NA
Upper Georgia Strait	4.97%	3.26%	10.38%	6.28%	Upper Georgia Strait
Puget Sound Natural	0.63%	1.27%	8.06%	4.24%	Green
Skagit Summer/Fall	1.78%	1.26%	23.26%	7.69%	Skagit Summer/Fall
Columbia Upriver Bright	4.93%	1.20%	0.90%	0.47%	Columbia Upriver Bright
Washington Coastal Wild	1.01%	0.91%	2.67%	1.52%	Grays Harbor Fall Quillayute Fall Hoh Fall Queets Fall
Spring Creek Hatchery	1.74%	0.95%	1.41%	1.10%	NA
WA Coastal Hatchery	0.82%	0.79%	2.56%	1.48%	NA
WCVI Hatchery	0.84%	0.81%	1.30%	0.44%	NA
Lower Bonneville Hatchery	0.35%	0.63%	3.20%	1.31%	NA
North/Central BC	0.59%	0.64%	0.47%	0.21%	Yakoun Nass Skeena Area 6 Index Area 8 Index Rivers Inlet Smith Inlet
Snohomish Summer/Fall	0.40%	0.57%	15.57%	7.53%	Snohomish
Nooksack Spring	0.53%	0.47%	65.29%	24.05%	Not Represented
Columbia Upriver Summer	0.90%	0.45%	2.79%	1.16%	Columbia Upriver Summer
Mid-Columbia Brights	2.31%	0.40%	1.16%	0.50%	Not Represented
Stillaguamish Summer/Fall	0.21%	0.18%	21.31%	8.94%	Stillaguamish
WCVI Wild	0.10%	0.15%	1.31%	0.44%	WCVI
Willamette River Hatchery	0.11%	0.13%	0.33%	0.16%	NA
Spring Cowlitz Hatchery	0.04%	0.04%	0.42%	0.25%	NA
Fall Cowlitz Hatchery	0.00%	0.01%	0.03%	0.02%	NA
Lewis River Wild	0.00%	0.01%	0.14%	0.08%	Lewis River
Snake River Fall	0.03%	0.00%	0.11%	0.07%	Not Represented
Oregon Coastal North Migrating	0.00%	0.00%	0.00%	0.00%	Oregon Coastal
Alaska South SE	0.00%	0.00%	0.00%	0.00%	King Salmon Andrew Creek Blossom Keta Unuk Chickamin

[1] NA = a hatchery stock; Not represented = a wild stock without an escapement indicator.

Appendix D6. Washington/Oregon troll and sport.

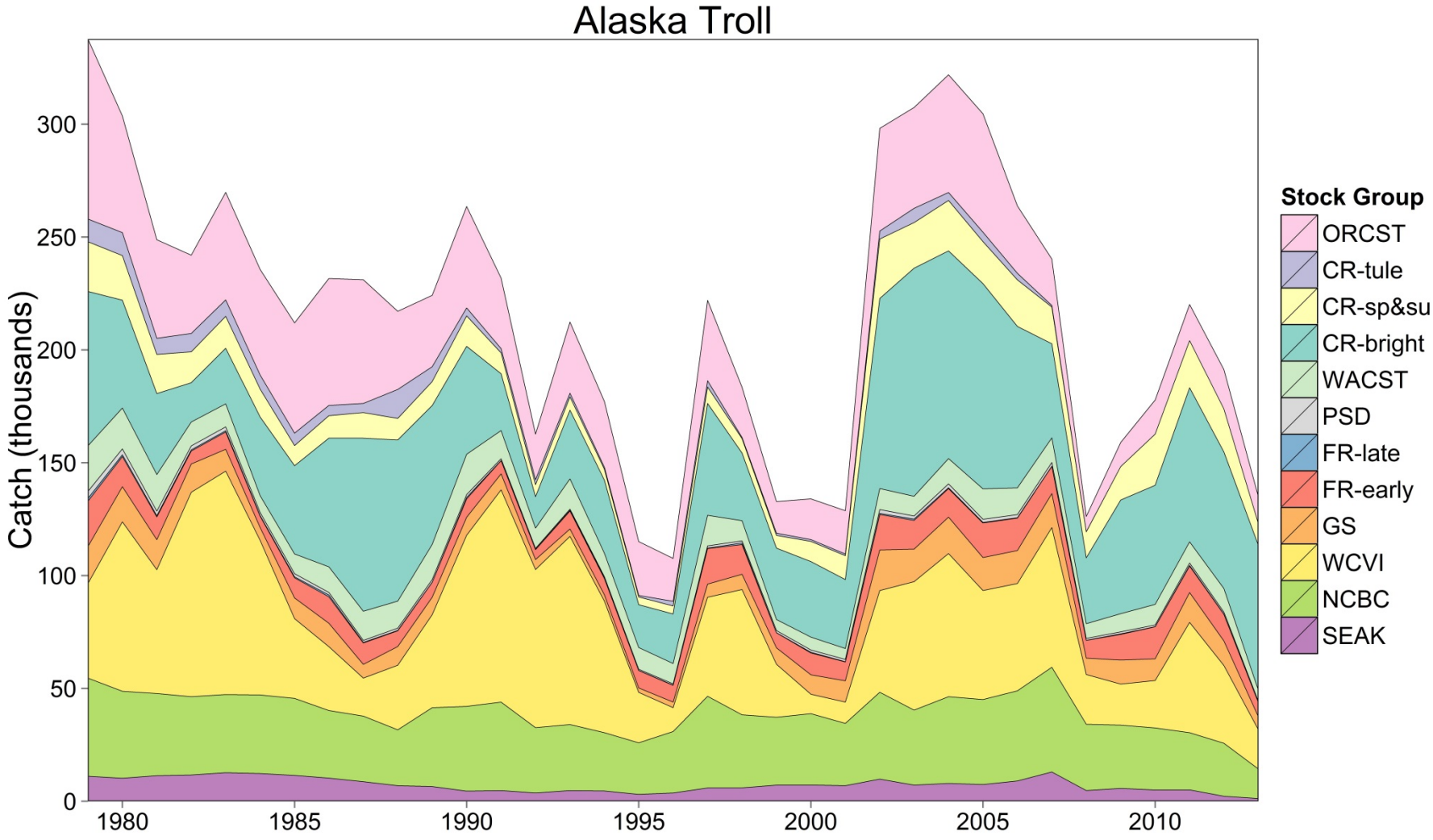
FISHERY	WA/OR TROLL AND SPORT				
	2013	Average (1985-2012)			
Model Stock	% of Fishery Catch	% of Fishery Catch	% of Stock Catch	% of Stock Tot. Ret.	Associated Escapement Indicator Stocks
Spring Creek Hatchery	31.09%	23.97%	29.59%	23.39%	NA
Fall Cowlitz Hatchery	18.93%	19.43%	40.90%	18.05%	NA
Fraser Late	10.77%	18.82%	12.11%	5.52%	Harrison
Lower Bonneville Hatchery	2.90%	10.11%	40.81%	17.32%	NA
Spring Cowlitz Hatchery	2.27%	4.46%	34.55%	19.81%	NA
PS Hatchery Fingerling	3.45%	4.41%	3.74%	2.19%	NA
Columbia Upriver Bright	11.39%	4.26%	2.71%	1.39%	Columbia Upriver Bright
Oregon Coastal North Migrating	1.49%	2.54%	2.72%	1.17%	Oregon Coastal
Willamette River Hatchery	0.91%	1.89%	3.92%	1.74%	NA
Nooksack Fall	0.86%	1.68%	2.47%	1.84%	NA
Mid-Columbia Brights	5.35%	1.46%	3.43%	1.41%	Not Represented
Lewis River Wild	2.89%	1.43%	13.83%	5.99%	Lewis River
Washington Coastal Wild	0.74%	1.13%	2.44%	1.33%	Grays Harbor Fall Quillayute Fall Hoh Fall Queets Fall
WA Coastal Hatchery	0.60%	0.97%	2.43%	1.29%	NA
Snake River Fall	4.68%	1.13%	22.39%	14.06%	Not Represented
Puget Sound Natural	0.24%	0.90%	4.39%	2.18%	Green
Columbia Upriver Summer	0.89%	0.77%	3.26%	1.44%	Columbia Upriver Summer
PS Yearling	0.32%	0.29%	1.08%	0.73%	NA
Fraser Early	0.15%	0.20%	0.52%	0.11%	Upper Fraser Middle Fraser Thompson
Alaska South SE	0.02%	0.08%	0.70%	0.26%	King Salmon Andrew Creek Blossom Keta Unuk Chickamin
Lower GS Hatchery	0.01%	0.03%	0.15%	0.08%	NA
WCVI Hatchery	0.04%	0.03%	0.04%	0.01%	NA
Lower Georgia Strait	0.01%	0.02%	0.16%	0.09%	Lower Georgia Strait
WCVI Wild	0.00%	0.01%	0.04%	0.01%	WCVI
Skagit Summer/Fall	0.00%	0.00%	0.06%	0.02%	Skagit Summer/Fall
Snohomish Summer/Fall	0.00%	0.00%	0.05%	0.02%	Snohomish
Upper Georgia Strait	0.00%	0.00%	0.00%	0.00%	Upper Georgia Strait
Stillaguamish Summer/Fall	0.00%	0.00%	0.00%	0.00%	Stillaguamish
North/Central BC	0.00%	0.00%	0.00%	0.00%	Yakoun Nass Skeena Area 6 Index Area 8 Index Rivers Inlet Smith Inlet
Nooksack Spring	0.00%	0.00%	0.00%	0.00%	Not Represented

[1] NA = a hatchery stock; Not represented = a wild stock without an escapement indicator.

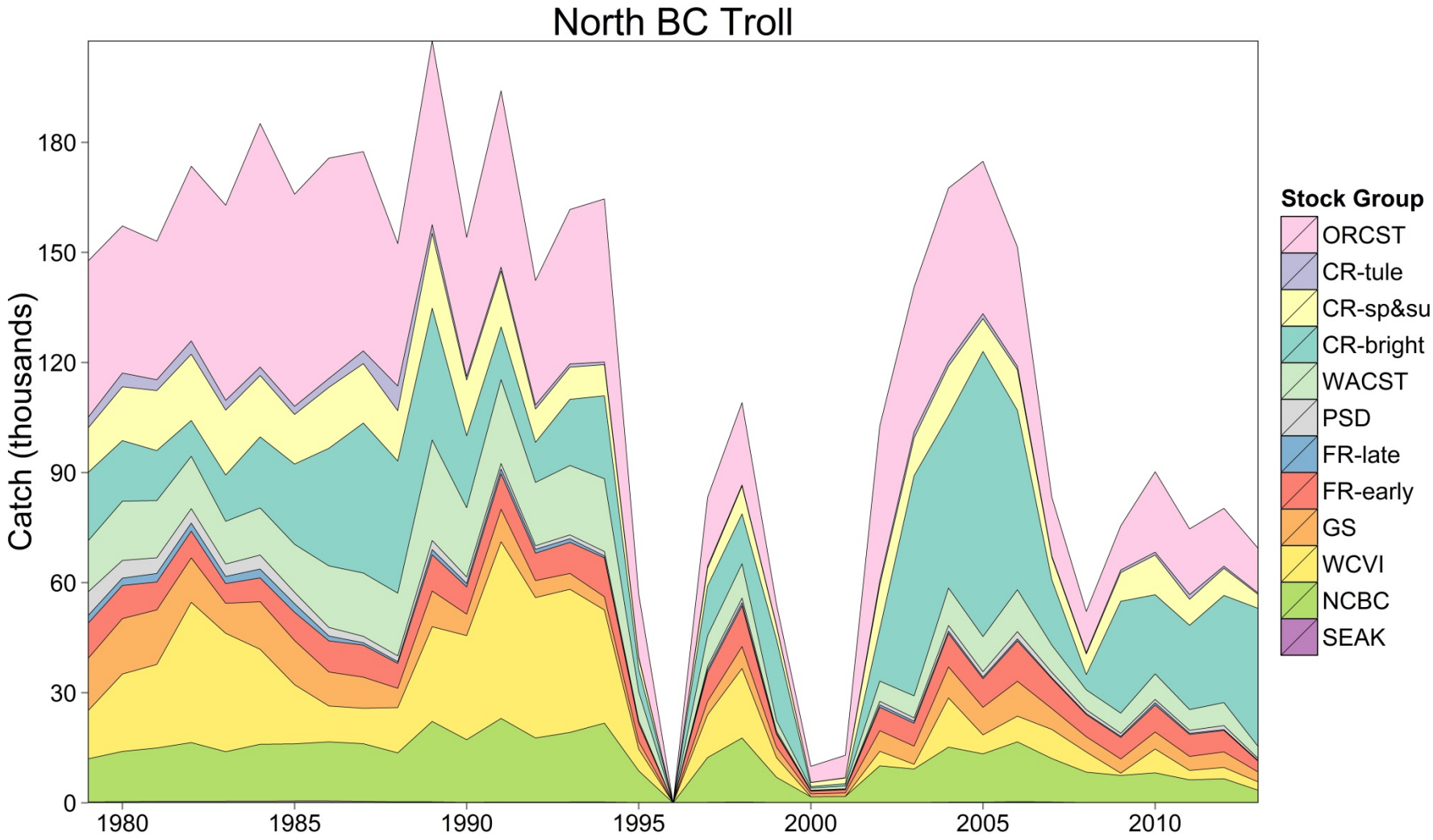
APPENDIX E: FIGURES OF CHINOOK MODEL-GENERATED STOCK COMPOSITION OF ACTUAL LANDED CATCH FOR ALL (AABM AND ISBM) MODEL FISHERIES, 1979-2013

Stock abbreviations in each figure correspond to the following model stocks and aggregations.

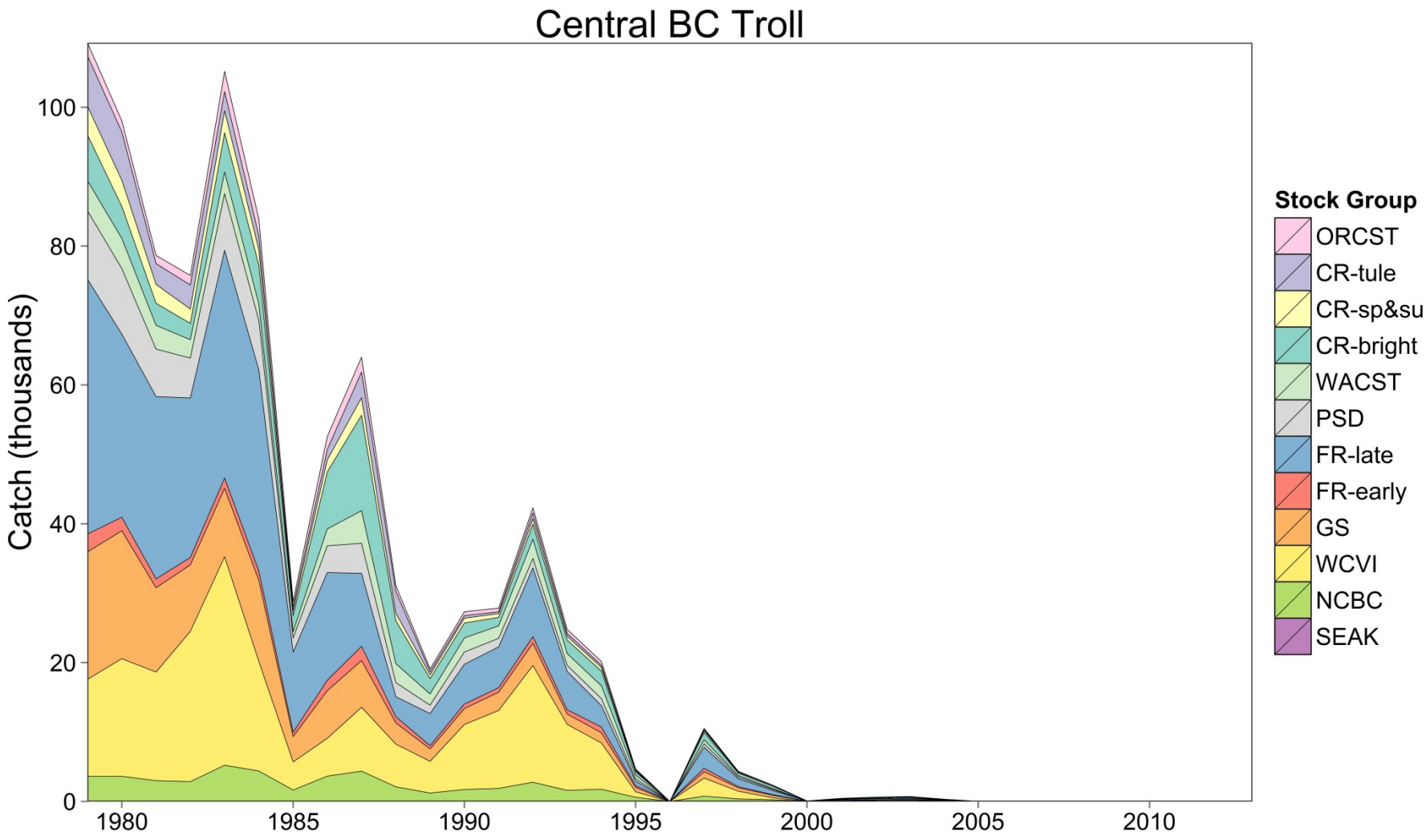
ORCST	Oregon Coast
CR-tule	Columbia River-Fall Tule stocks (Spring Creek, Lower River Hatchery, and Cowlitz Fall)
CR-sp&su	Columbia River Spring and Summer stocks (Willamette, Cowlitz Spring, Columbia Summers)
CR-bright	Columbia River Fall Bright stocks (Upriver, Mid-Columbia, Lewis River Wild, Lyons Ferry)
WACST	Washington Coast
PSD	Puget Sound stocks (Nooksack Fall and Spring, Natural Fall Fingerlings, Hatchery Fall Fingerlings, Hatchery Yearlings, Skagit Wild, Stillaguamish Wild, Snohomish Wild)
FR-late	Fraser River Late stock
FR-early	Fraser River Early stocks
GS	Georgia Strait stocks (Upper, Lower Natural, Lower Hatchery)
WCVI	West Coast Vancouver Island Stocks (hatchery and natural)
NCBC	North Central British Columbia stocks
SEAK	Southeast Alaska stocks



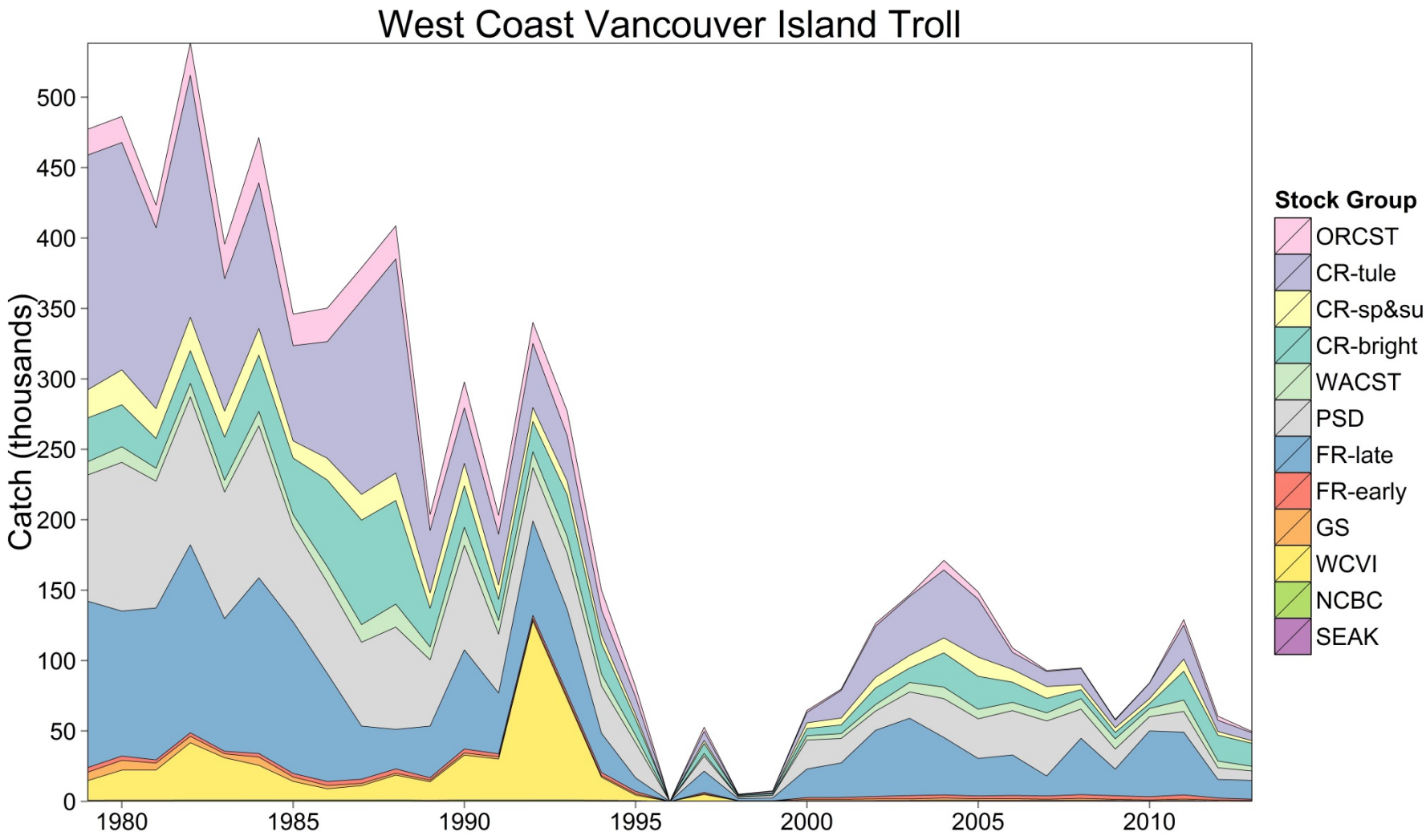
Appendix E1 Chinook Model estimates of landed catch stock composition for Alaska Troll 1979-2013



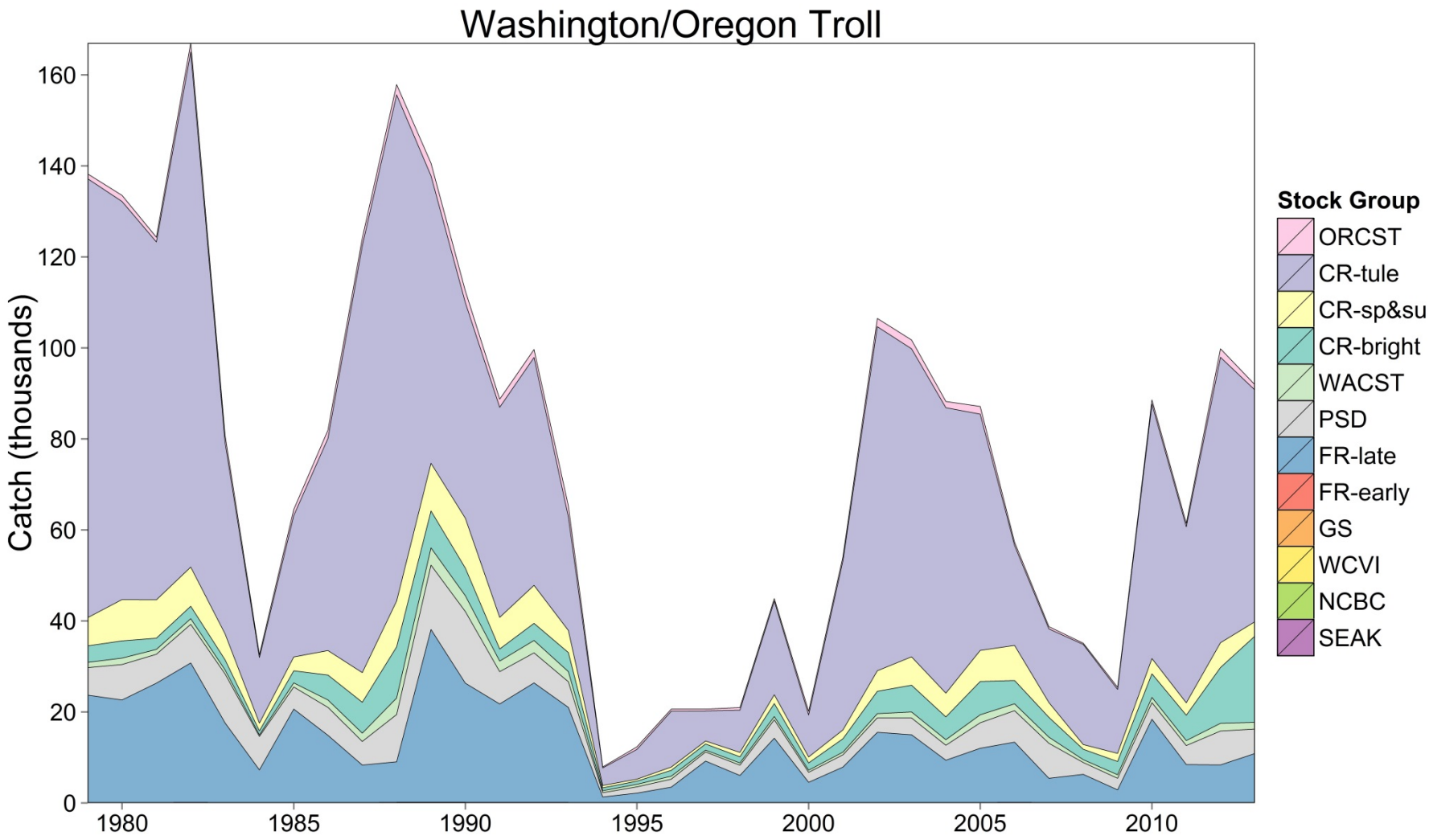
Appendix E2 Chinook Model estimates of landed catch stock composition for North BC Troll 1979-2013



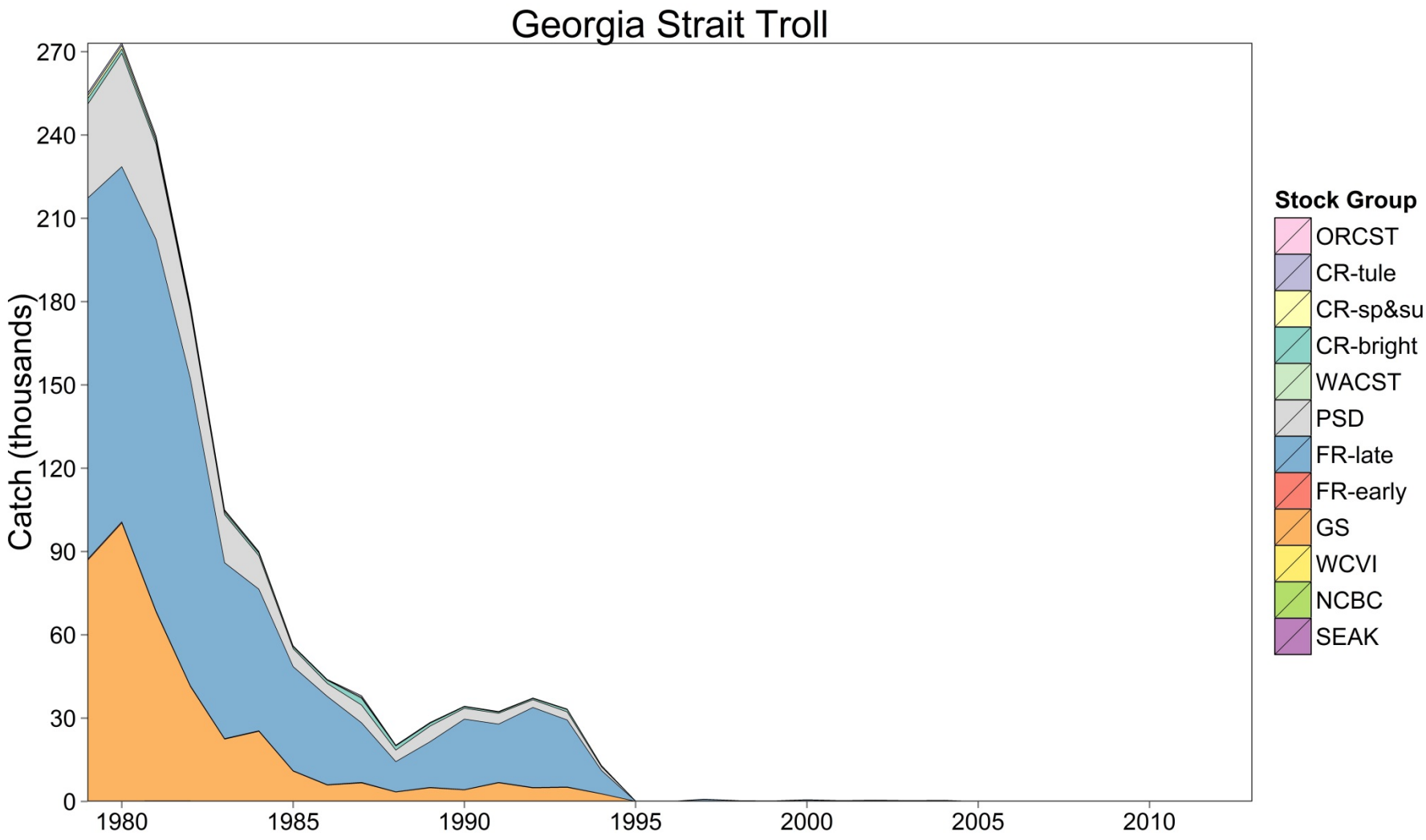
Appendix E3 Chinook Model estimates of landed catch stock composition for Central BC Troll 1979-2013



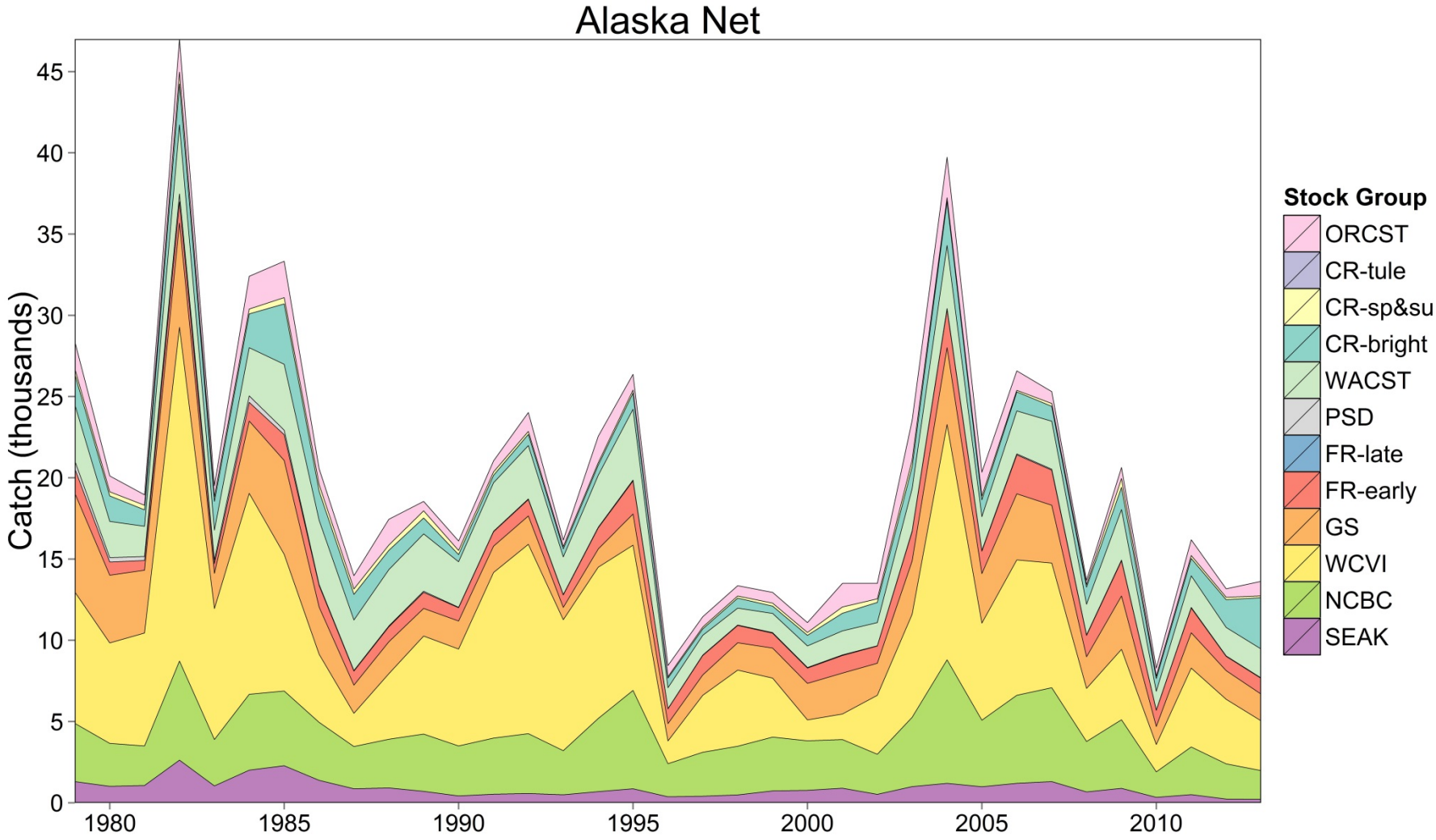
Appendix E4 Chinook Model estimates of landed catch stock composition for West Coast Vancouver Island Troll 1979-2013



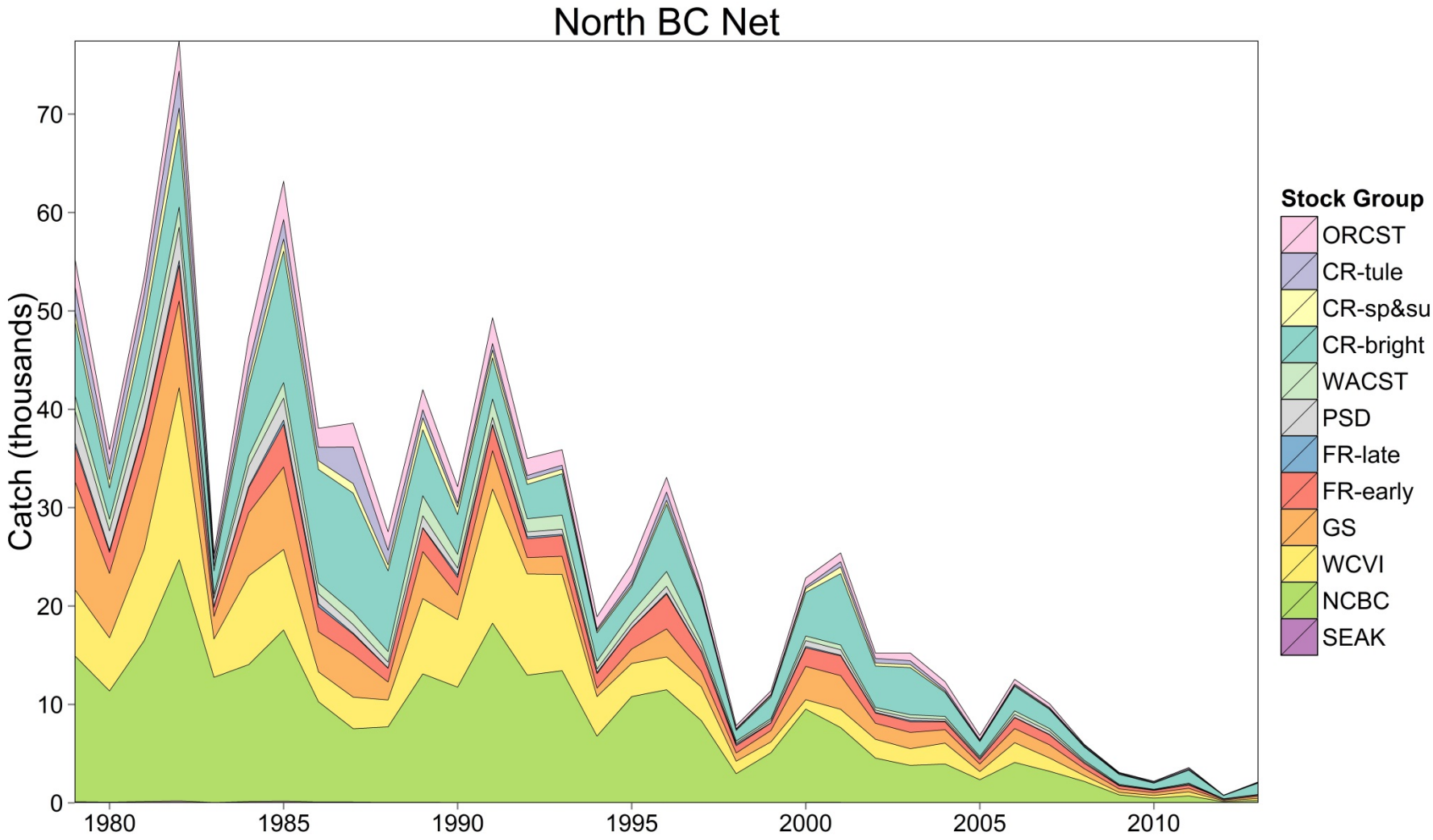
Appendix E5 Chinook Model estimates of landed catch stock composition for Washington/Oregon Troll 1979-2013



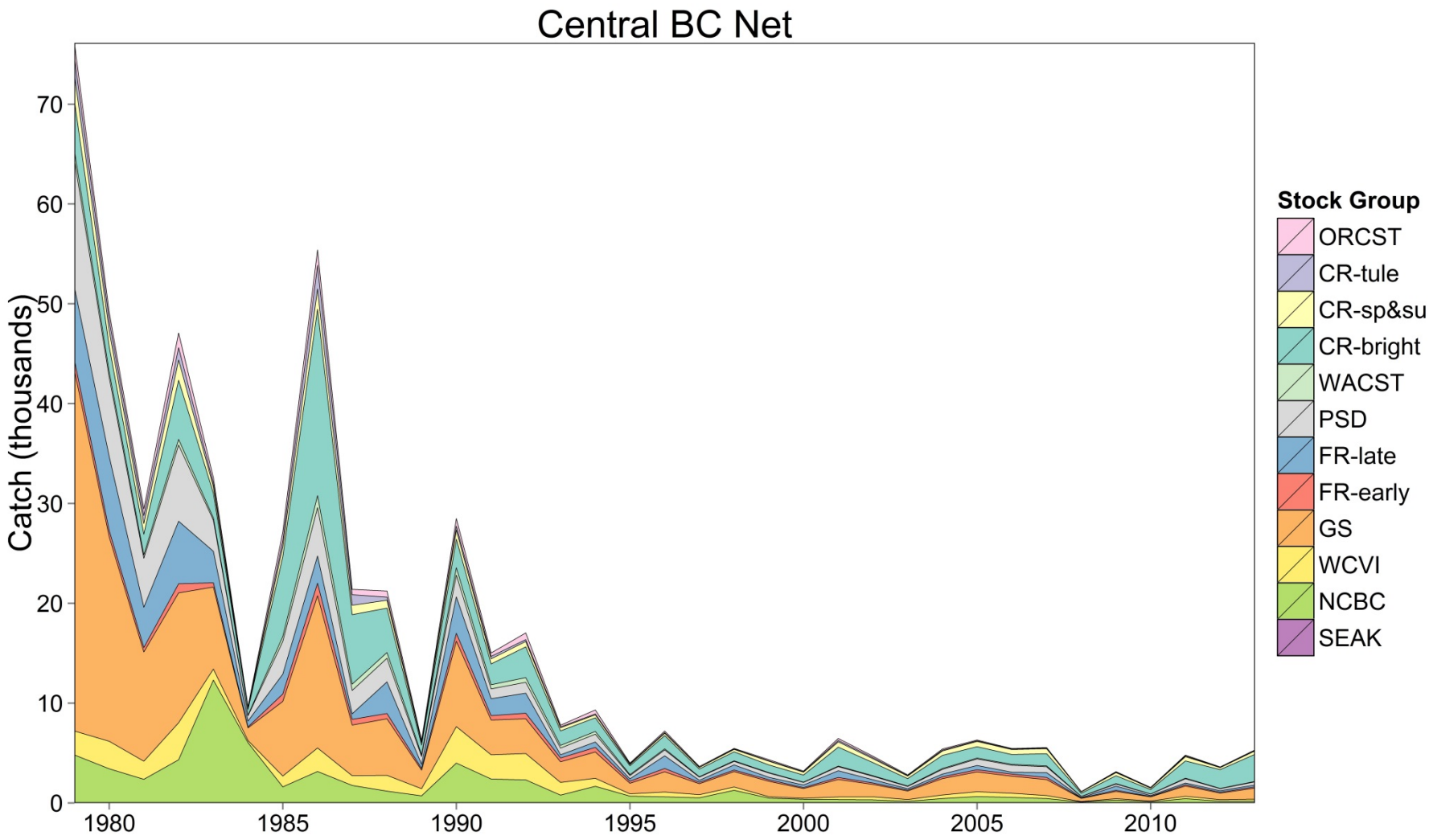
Appendix E6 Chinook Model estimates of landed catch stock composition for Georgia Strait Troll 1979-2013



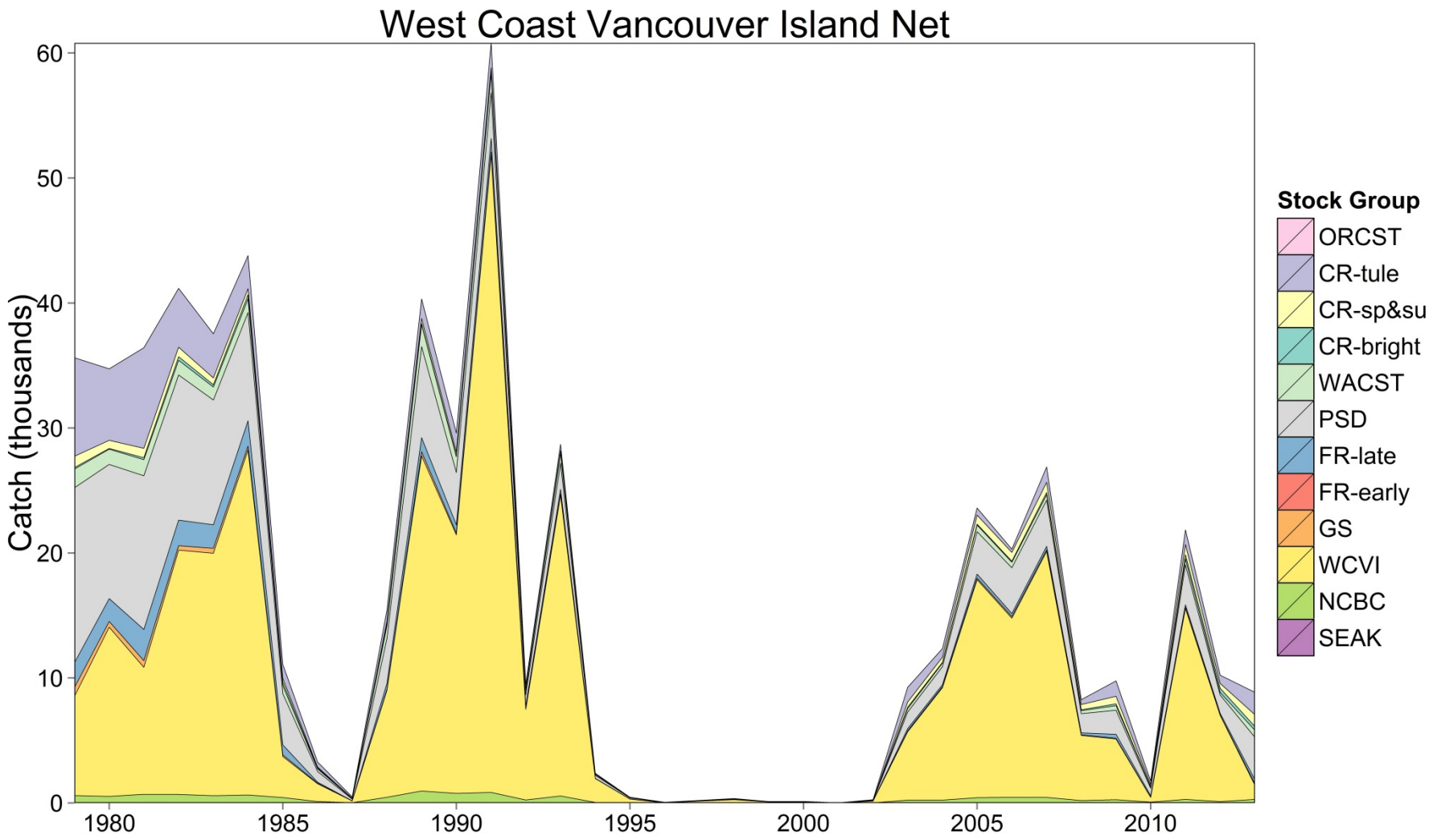
Appendix E7 Chinook Model estimates of landed catch stock composition for Alaska Net 1979-2013



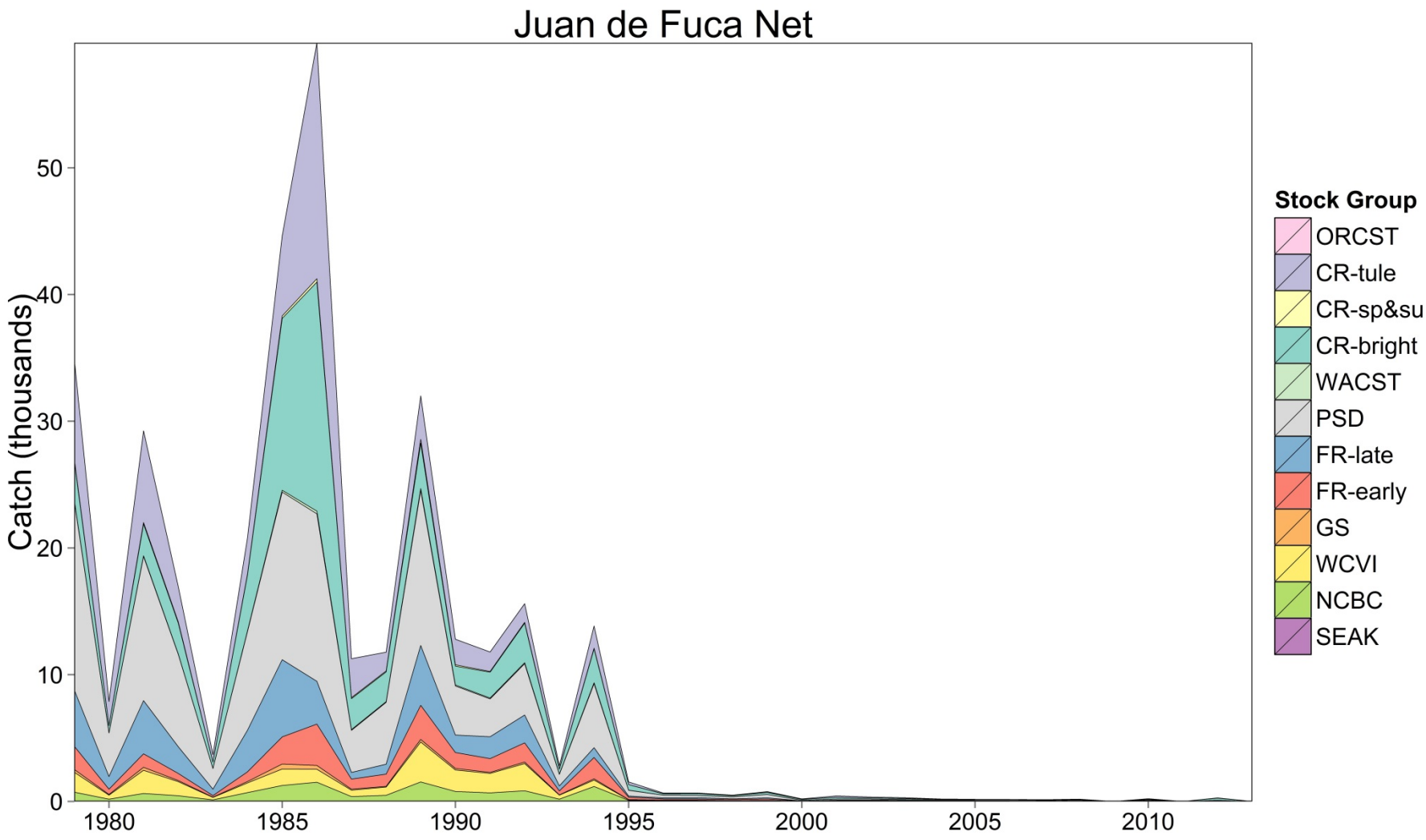
Appendix E8 Chinook Model estimates of landed catch stock composition for North BC Net 1979-2013



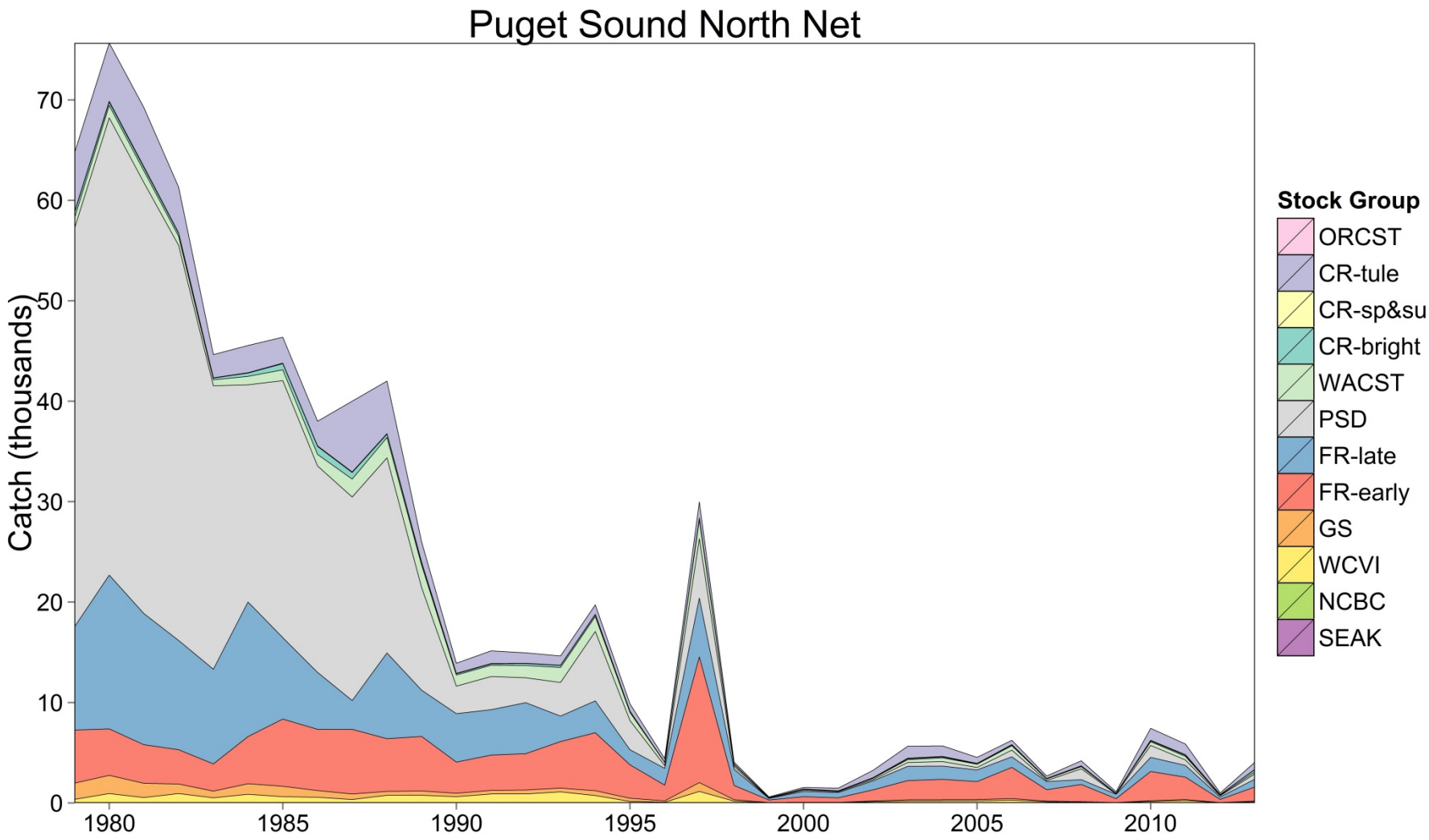
Appendix E9 Chinook Model estimates of landed catch stock composition for Central BC Net 1979-2013



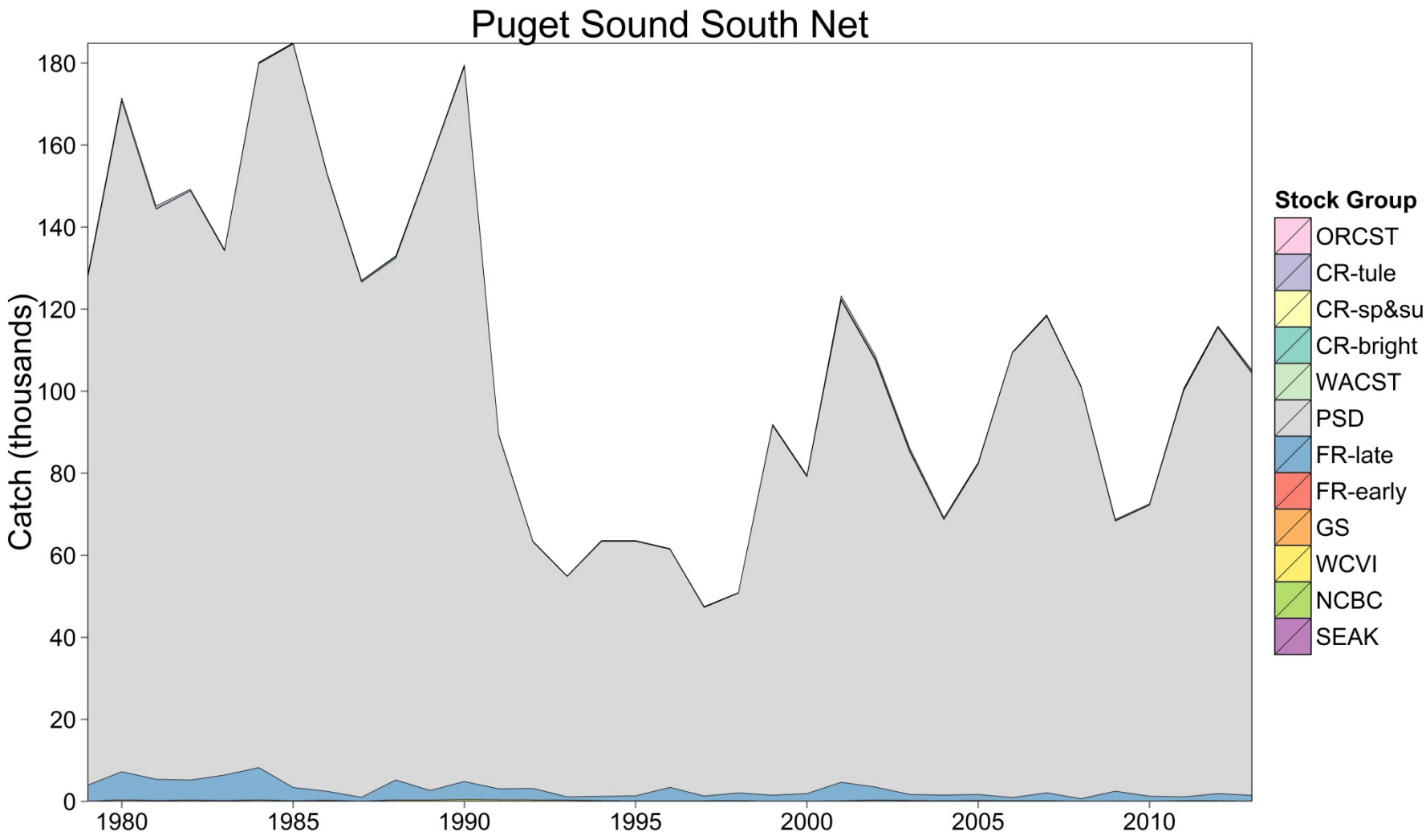
Appendix E10 Chinook Model estimates of landed catch stock composition for West Coast Vancouver Island Net 1979-2013



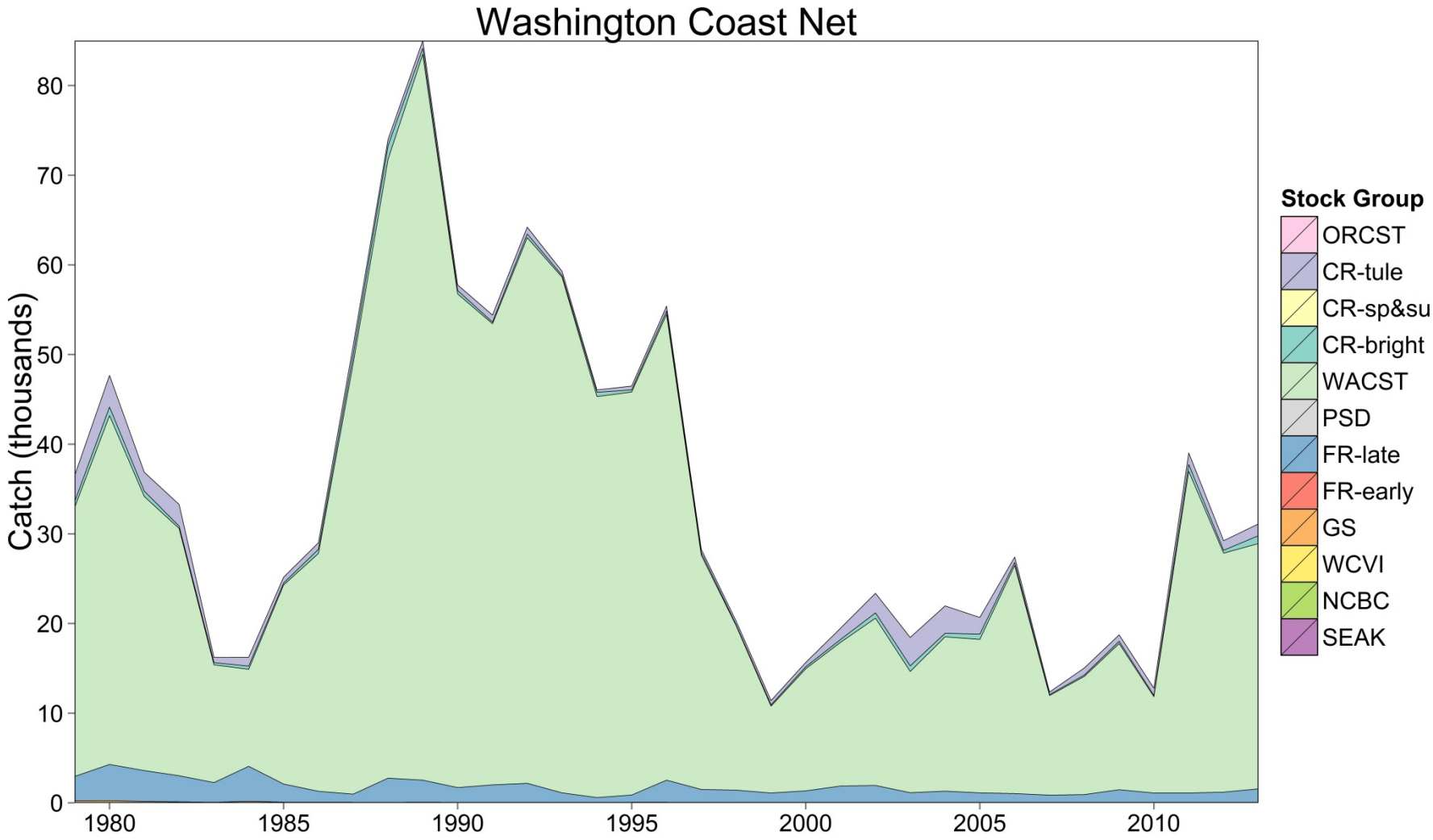
Appendix E11 Chinook Model estimates of landed catch stock composition for Juan de Fuca Net 1979-2013



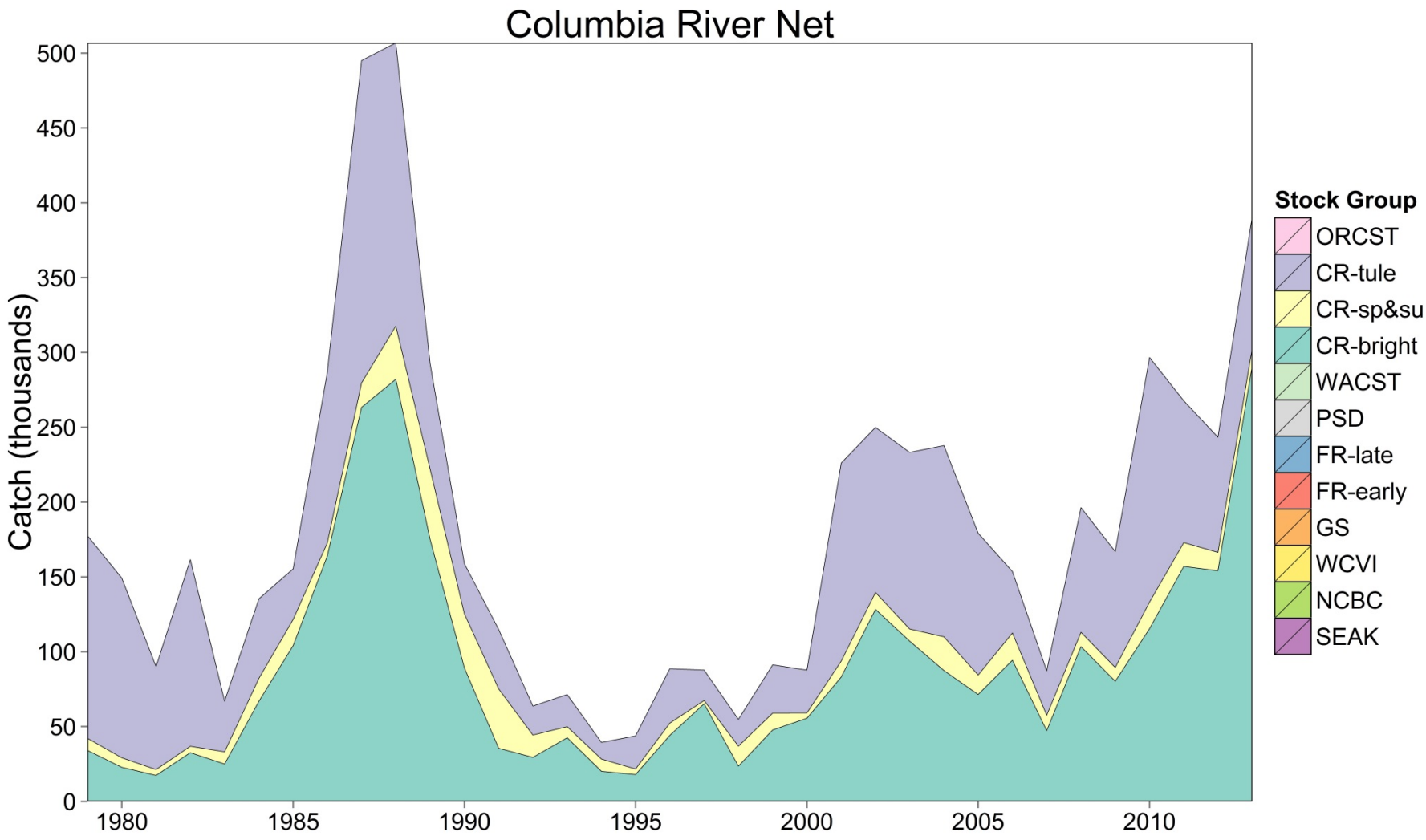
Appendix E12 Chinook Model estimates of landed catch stock composition for Puget Sound North Net 1979-2013



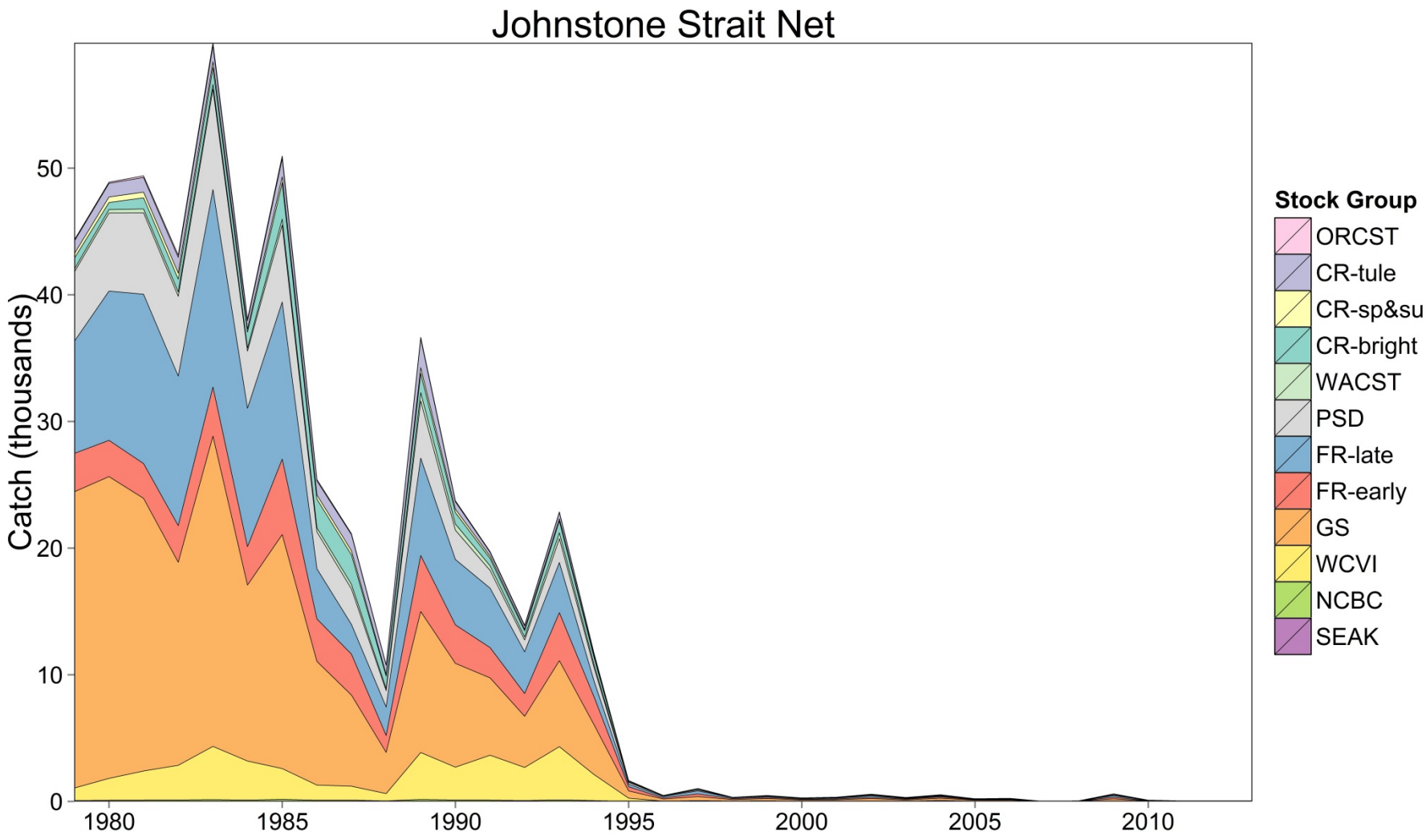
Appendix E13 Chinook Model estimates of landed catch stock composition for Puget Sound South Net 1979-2013



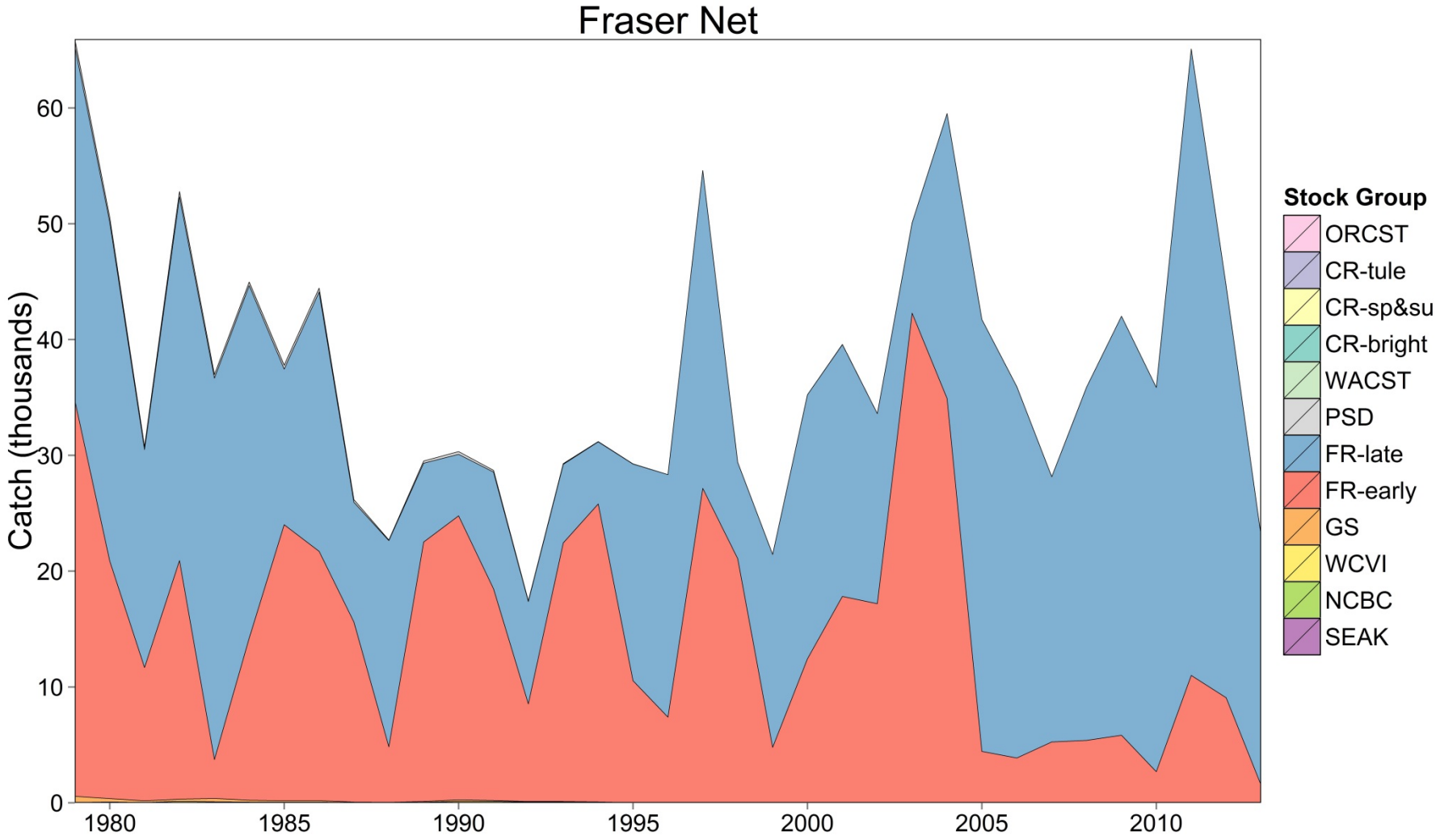
Appendix E14 Chinook Model estimates of landed catch stock composition for Washington Coast Net 1979-2013



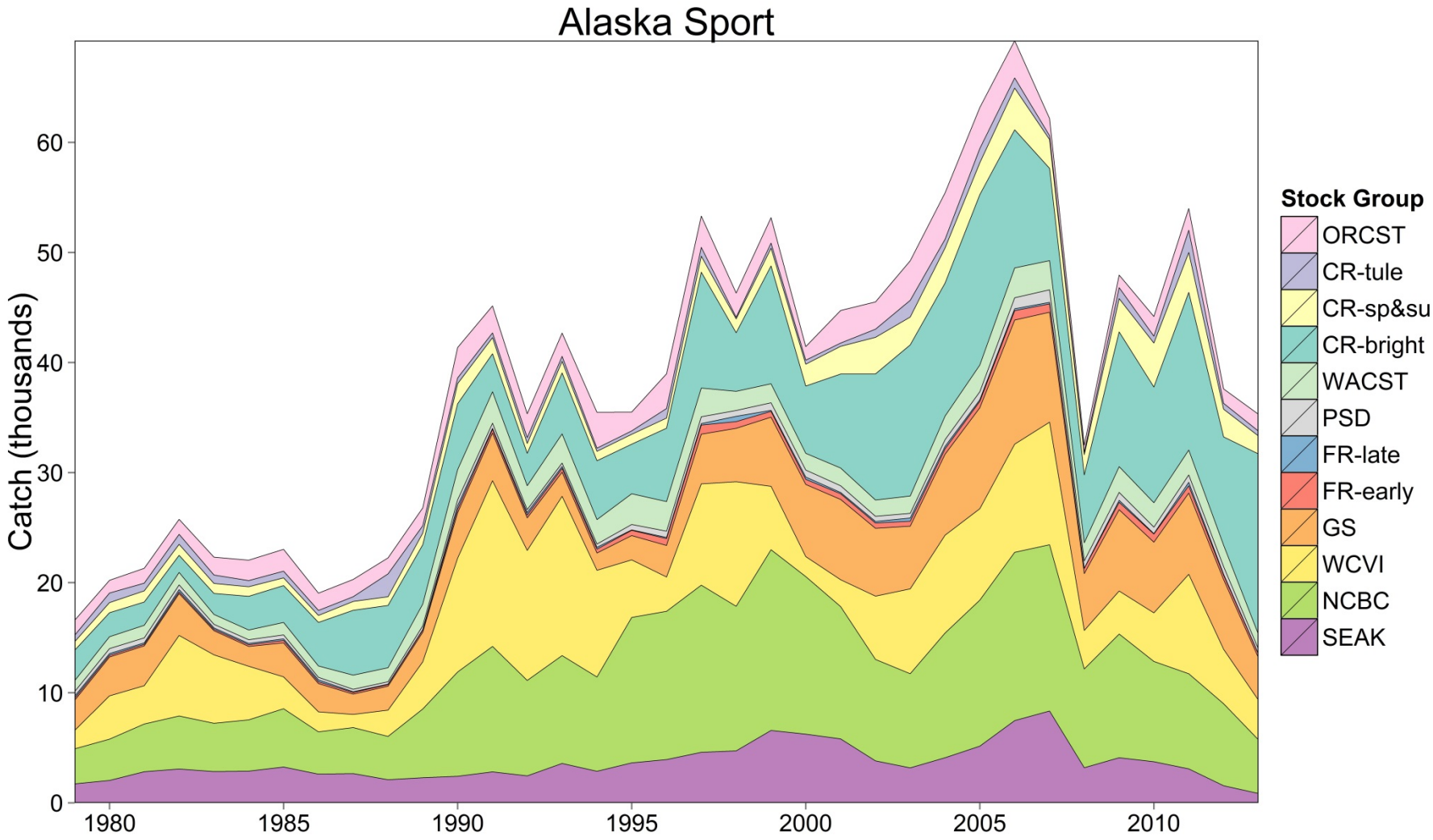
Appendix E15 Chinook Model estimates of landed catch stock composition for Columbia River Net 1979-2013



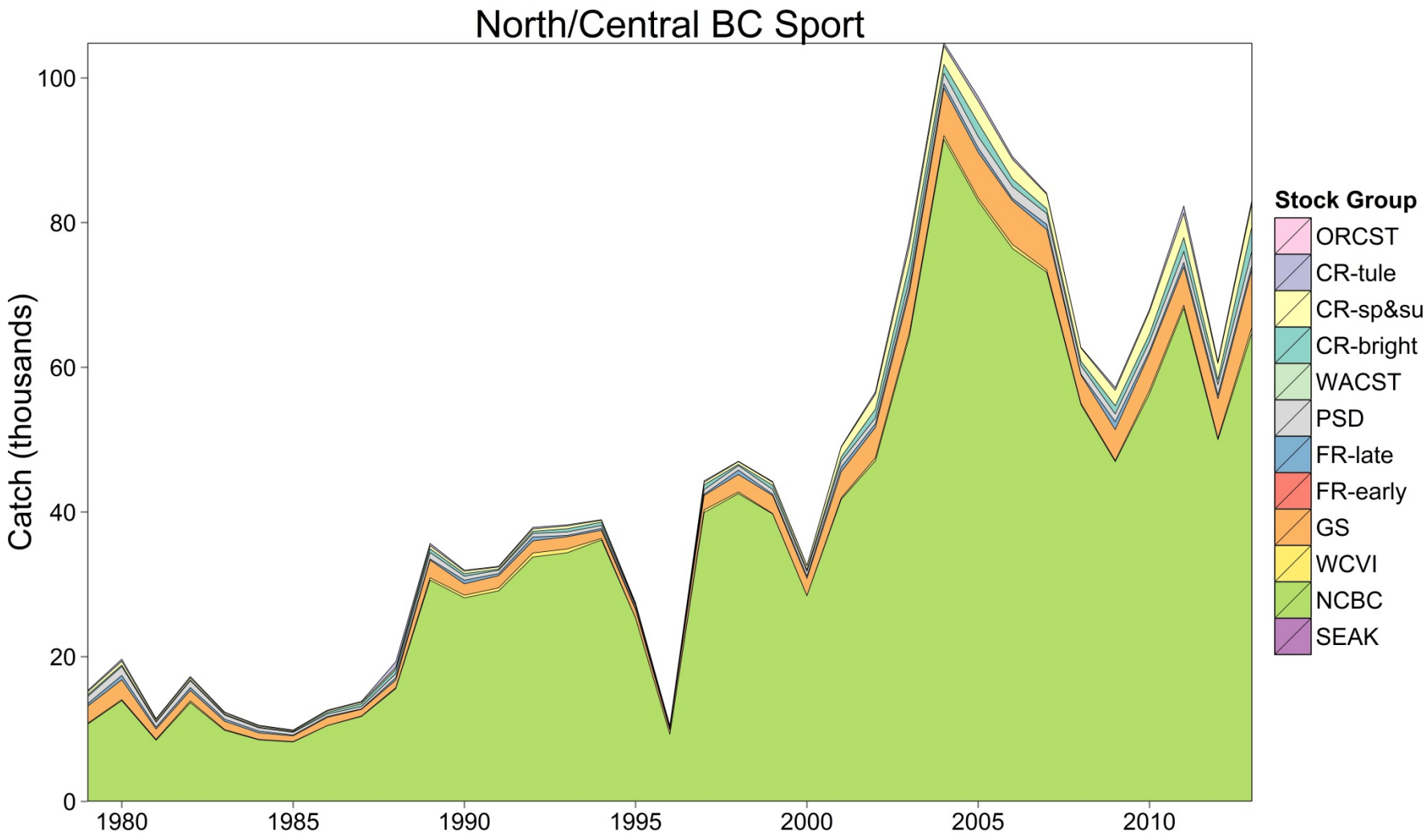
Appendix E16 Chinook Model estimates of landed catch stock composition for Johnstone Strait Net 1979-2013



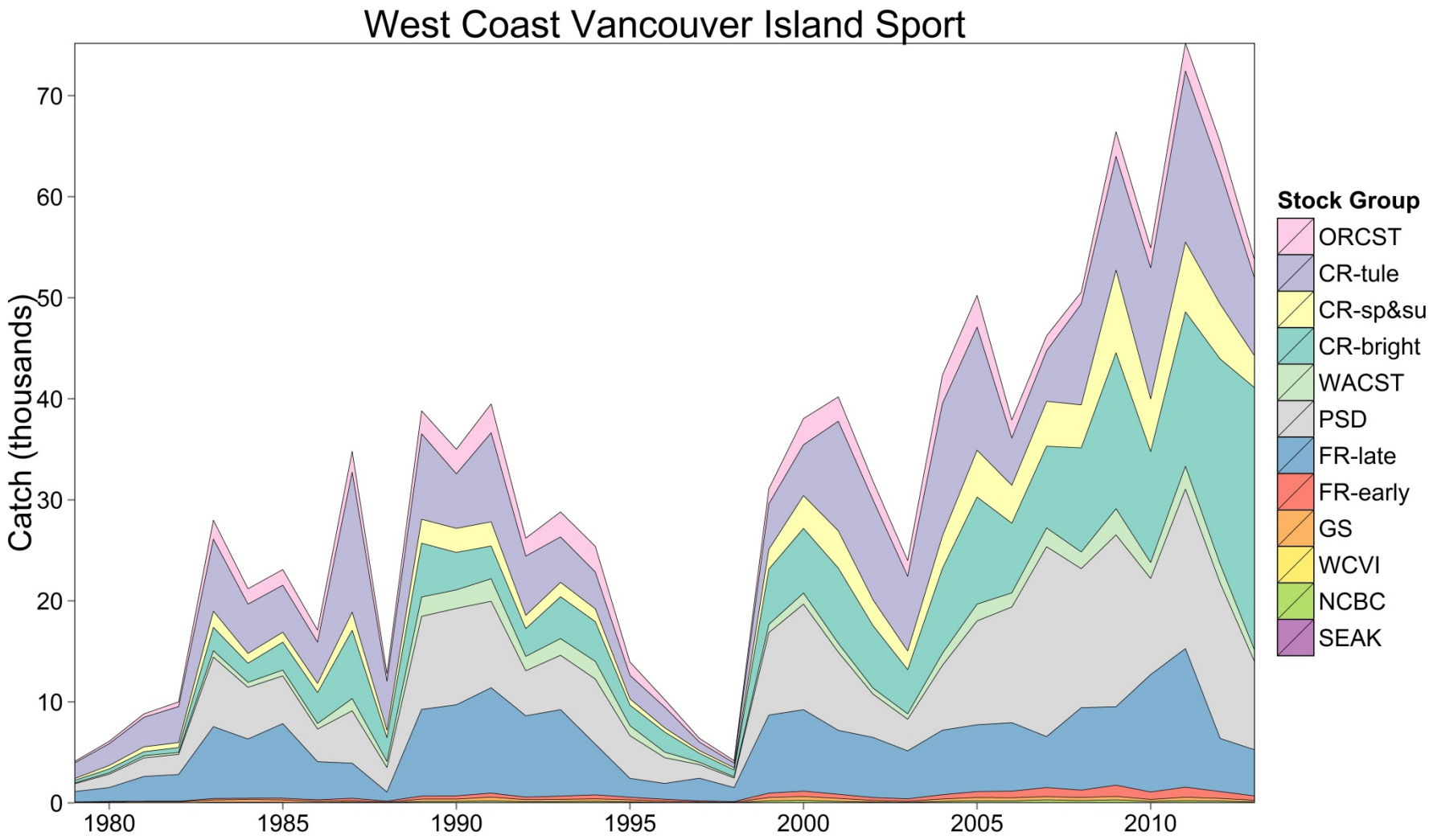
Appendix E17 Chinook Model estimates of landed catch stock composition for Fraser Net 1979-2013



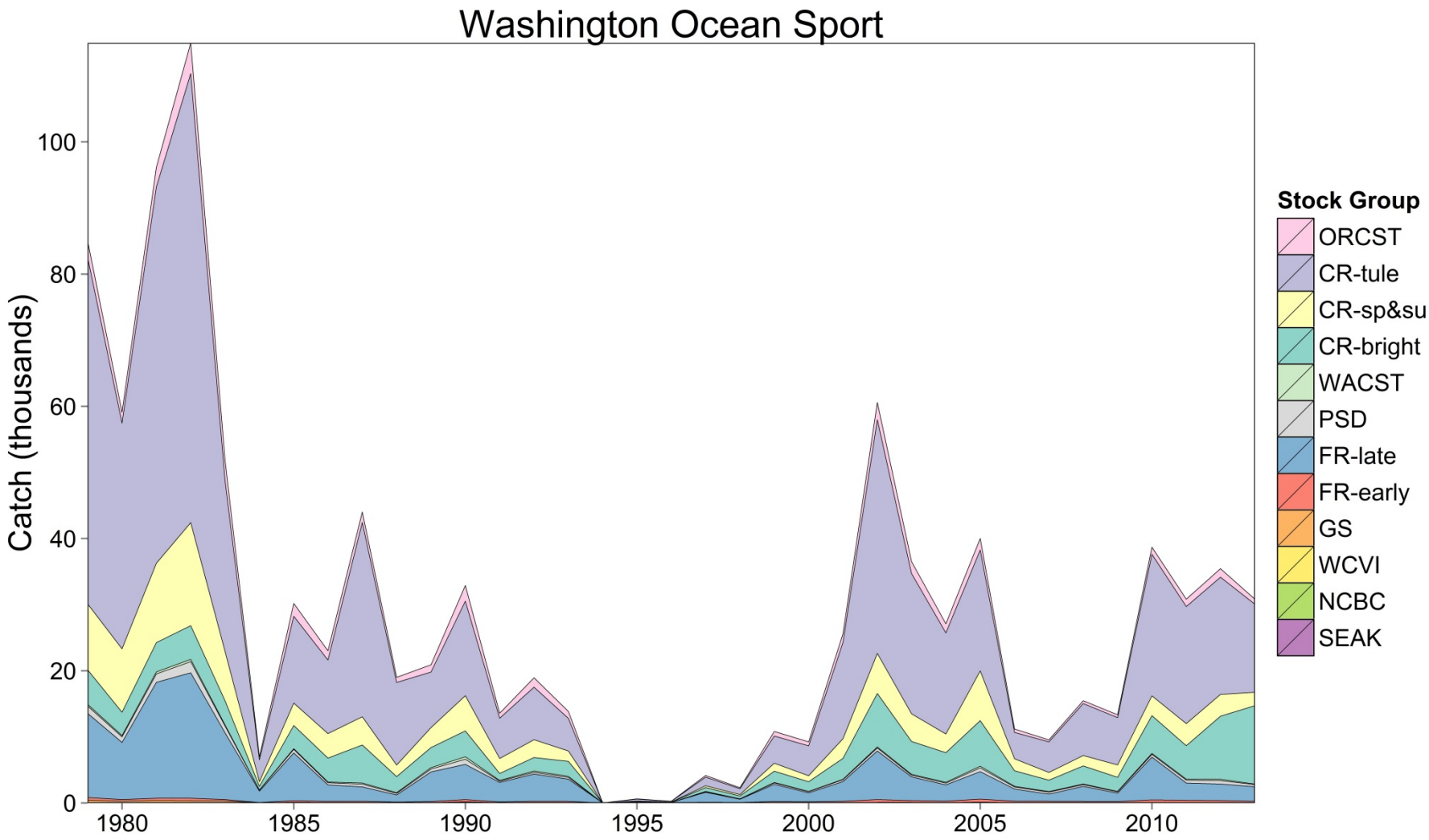
Appendix E18 Chinook Model estimates of landed catch stock composition for Alaska Sport 1979-2013



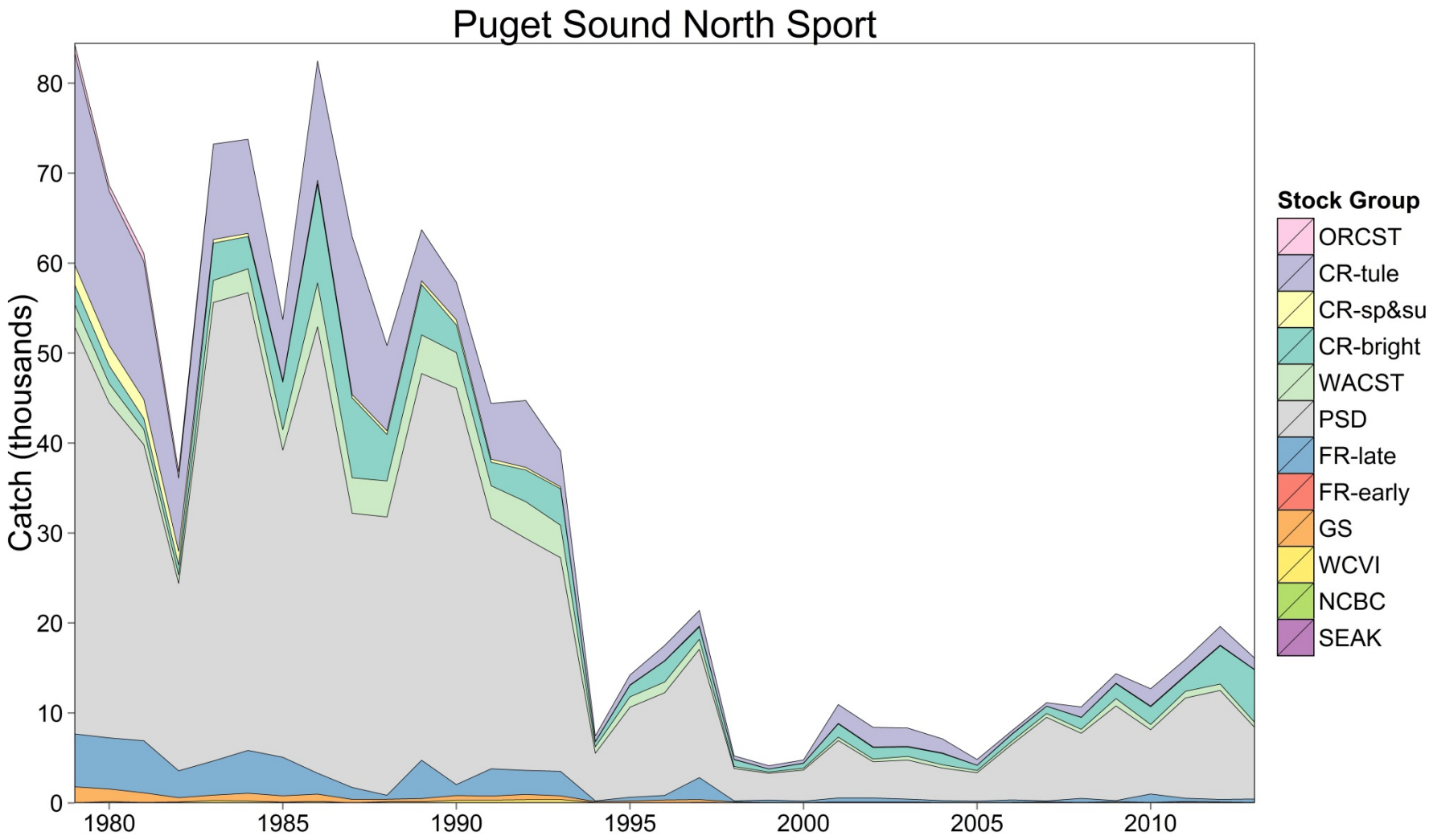
Appendix E19 Chinook Model estimates of landed catch stock composition for North/Central BC Sport 1979-2013



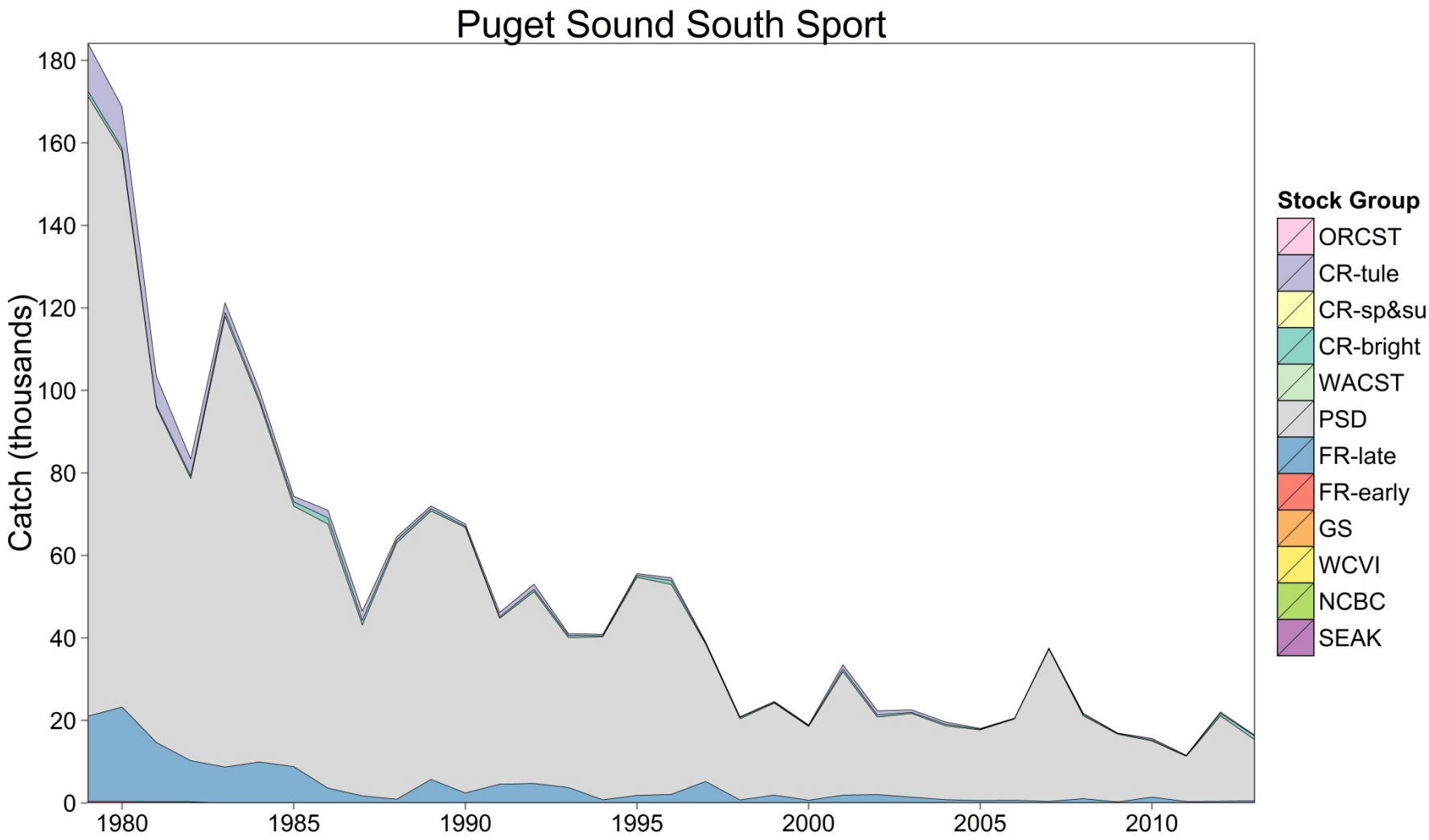
Appendix E20 Chinook Model estimates of landed catch stock composition for West Coast Vancouver Island Sport 1979-2013



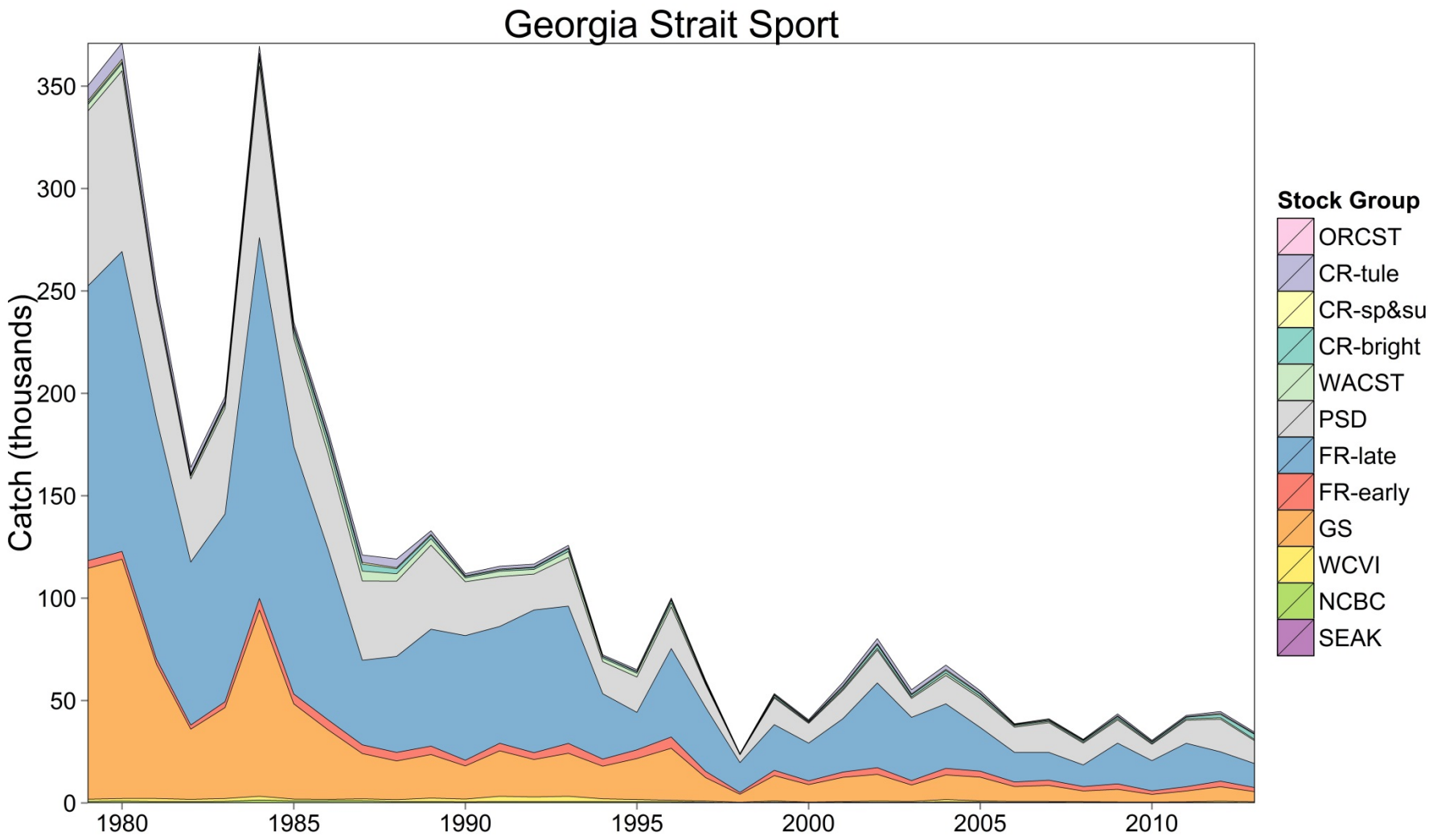
Appendix E21 Chinook Model estimates of landed catch stock composition for Washington Ocean Sport 1979-2013



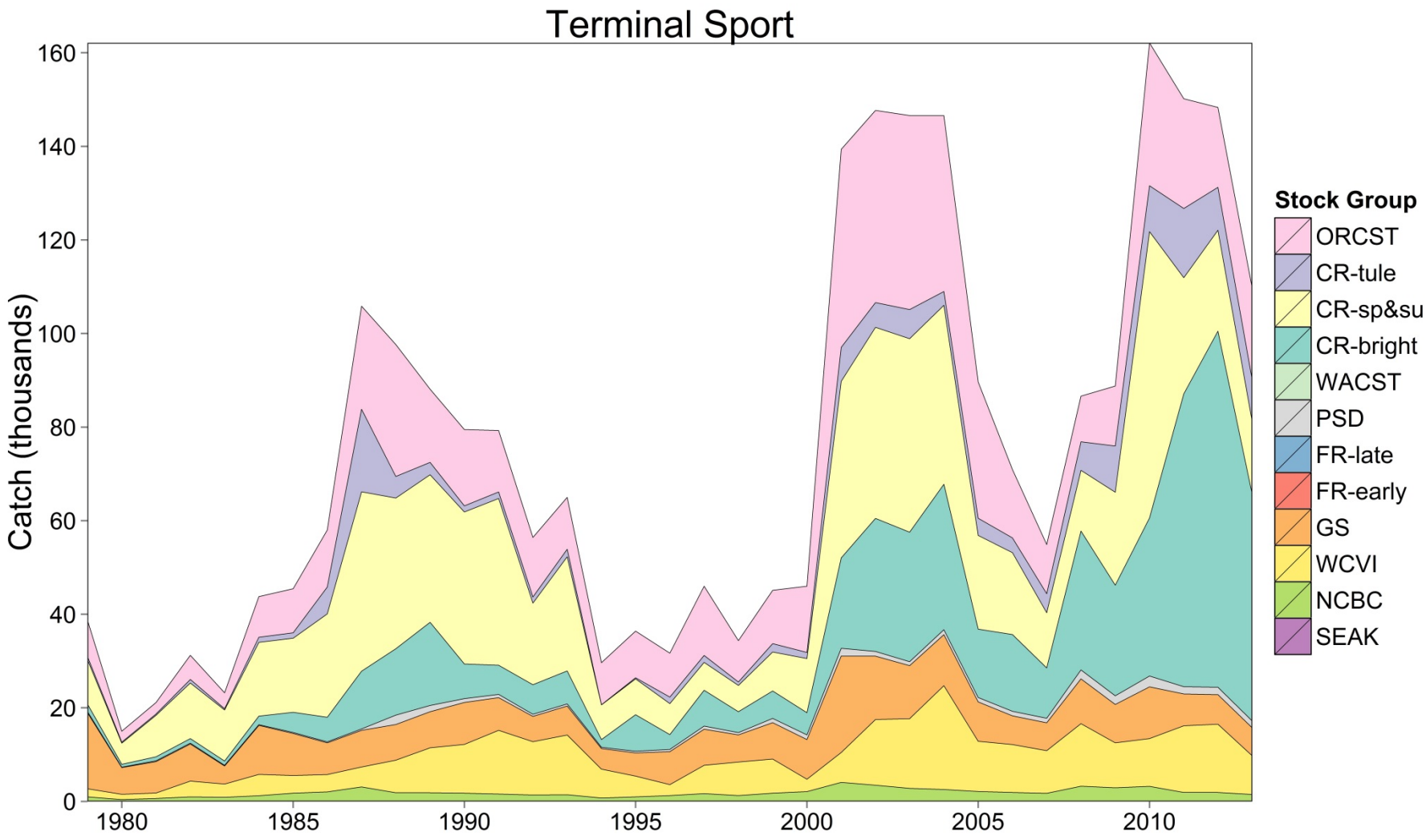
Appendix E22 Chinook Model estimates of landed catch stock composition for Puget Sound North Sport 1979-2013



Appendix E23 Chinook Model estimates of landed catch stock composition for Puget Sound South Sport 1979-2013



Appendix E24 Chinook Model estimates of landed catch stock composition for Georgia Strait Sport 1979-2013



Appendix E25 Chinook Model estimates of landed catch stock composition for Terminal Sport 1979-2013

APPENDIX F: INCIDENTAL MORTALITY RATES APPLIED IN THE CTC MODEL

Appendix F. Incidental mortality rates applied in the CTC model. Rates in original model were applied to all years. In the current model, rates in some fisheries vary in accordance to changes in management regulations.

		Rates in original Model			Rates applied in Model CLB1402			
Fishery Number	Fishery	Sublegal Rate	Legal Rate	Dropoff	Sublegal Rate	Legal Rate	Dropoff	Applicable Years
1	Alaska T	0.3	0.3	0	0.255	0.211	0.008	All
2	North T	0.3	0.3	0	0.255	0.211	0.017	1979–1995
2	North T				0.220	0.185	0.016	1996–current
3	Centr T	0.3	0.3	0	0.255	0.211	0.017	1979–1995
3	Centr T				0.220	0.185	0.016	1996–current
4	WCVI T	0.3	0.3	0	0.255	0.211	0.017	1979–1997
4	WCVI T				0.220	0.185	0.016	1998–current
5	WA/OR T	0.3	0.3	0	0.255	0.211	0.017	1979–1983
5	WA/OR T				0.220	0.185	0.016	1984–current
6	Str of Geo T	0.3	0.3	0	0.255	0.211	0.017	1979–1985,1987–1996
6	Str of Geo T				0.220	0.185	0.016	1986, 1998–current
7	Alaska N	0.9	0.9	0	0.9	0.9	0	All
8	North N	0.9	0.9	0	0.9	0.9	0	All
9	Centr N	0.9	0.9	0	0.9	0.9	0	All
10	WCVI N	0.9	0.9	0	0.9	0.9	0	All
11	J De F N	0.9	0.9	0	0.9	0.9	0	All
12	PgtNth N	0.9	0.9	0	0.9	0.9	0	All
13	PgtSth N	0.9	0.9	0	0.9	0.9	0	All
14	WashCst N	0.9	0.9	0	0.9	0.9	0	All
15	Col R N	0.9	0.9	0	0.9	0.9	0	All
16	John St N	0.9	0.9	0	0.9	0.9	0	All
17	Fraser N	0.9	0.9	0	0.9	0.9	0	All
18	Alaska S	0.3	0.3	0	0.123	0.123	0.036	All
19	Nor/Cen S	0.3	0.3	0	0.123	0.123	0.036	All
20	WCVI S	0.3	0.3	0	0.123	0.123	0.069	All
21	WashOcn S	0.3	0.3	0	0.123	0.123	0.069	All
22	PgtNth S	0.3	0.3	0	0.123	0.123	0.145	All
23	PgtSth S	0.3	0.3	0	0.123	0.123	0.145	All
24	Str of Geo S	0.3	0.3	0	0.322	0.322	0.069	1979–1981
24	Str of Geo S				0.123	0.123	0.069	1982–current
25	Col R S	0.3	0.3	0	0.123	0.123	0.069	All

APPENDIX G: TIME SERIES OF ABUNDANCE INDICES

Appendix G. Time series of abundance indices from 1979 to 2015 for SEAK, NBC, and WCVI AABM fisheries as estimated by CTC Chinook Model calibrations CLB1402 (1979-2015).

Year	Alaska T	North T	WCVI T
1979	0.96	1.04	1.11
1980	1.02	0.98	0.97
1981	0.92	0.94	0.93
1982	1.09	1.04	1.00
1983	1.26	1.18	0.91
1984	1.45	1.36	0.98
1985	1.31	1.29	0.97
1986	1.50	1.46	1.03
1987	1.73	1.73	1.20
1988	2.11	1.82	1.14
1989	1.78	1.64	0.99
1990	1.81	1.60	0.90
1991	1.75	1.51	0.77
1992	1.66	1.40	0.80
1993	1.65	1.40	0.70
1994	1.51	1.22	0.53
1995	1.07	0.98	0.42
1996	0.96	0.94	0.50
1997	1.25	1.11	0.60
1998	1.19	0.99	0.58
1999	1.10	0.95	0.52
2000	0.98	0.94	0.52
2001	1.18	1.22	0.82
2002	1.78	1.71	1.19
2003	2.23	1.92	1.24
2004	2.04	1.78	1.03
2005	1.81	1.54	0.86
2006	1.51	1.23	0.67
2007	1.15	0.93	0.52
2008	0.90	0.82	0.57
2009	1.04	0.95	0.58
2010	1.14	1.10	0.79
2011	1.41	1.19	0.81
2012	1.13	1.07	0.72
2013	1.63	1.51	1.04
2014	2.57	1.99	1.20
2015	1.88	1.50	0.99

Note: This time series is NOT the first postseason AI for each year and is for trend analysis only (Figures 3.10–3.12). For evaluation of overage and underage, use the first postseason AI instead (Source 1402 PABD).

APPENDIX H: ABUNDANCE INDICES IN TOTAL AND BY MODEL STOCK FOR AABM FISHERIES, FROM CALIBRATION 1402

LIST OF APPENDIX H TABLES

Appendix H1. Abundance indices (AIs) for the Southeast Alaska troll fishery by model stock and year (stock groups 1–15 this page; 16–30 on following page), from CLB 1402. Numbers shown represent the portion of the AI total estimated for each model stock; the summation across all 30 stock groups equals the AI total for each calendar year.

Year	Alaska South SE	North/Central	Fraser Early	Fraser Late	WCVI Hatchery	WCVI Natural	St. of Georgia Upper	St. of Georgia Lwr Nat	St. of Georgia Lwr Hat	Nooksack Fall	Pgt Sd Fing	Pgt Sd NatF	Pgt Sd Year	Nooksack Spring	Skagit Wild	AI Total
1979	0.03	0.12	0.06	0.00	0.05	0.07	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96
1980	0.03	0.13	0.05	0.00	0.11	0.15	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
1981	0.04	0.13	0.04	0.00	0.08	0.12	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
1982	0.04	0.14	0.03	0.00	0.19	0.21	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
1983	0.05	0.16	0.04	0.00	0.31	0.15	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26
1984	0.06	0.19	0.05	0.00	0.30	0.11	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45
1985	0.06	0.20	0.06	0.00	0.16	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31
1986	0.07	0.22	0.07	0.00	0.14	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50
1987	0.07	0.23	0.07	0.00	0.09	0.03	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.73
1988	0.06	0.25	0.07	0.00	0.21	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.11
1989	0.04	0.26	0.06	0.00	0.26	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.78
1990	0.03	0.26	0.06	0.00	0.41	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.81
1991	0.03	0.27	0.06	0.00	0.55	0.12	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.75
1992	0.03	0.26	0.06	0.00	0.55	0.13	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66
1993	0.04	0.24	0.06	0.00	0.51	0.12	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.65
1994	0.03	0.22	0.06	0.00	0.38	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.51
1995	0.03	0.23	0.07	0.00	0.16	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07
1996	0.03	0.23	0.08	0.00	0.07	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96
1997	0.03	0.24	0.09	0.00	0.19	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25
1998	0.04	0.23	0.08	0.00	0.29	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19
1999	0.05	0.24	0.06	0.00	0.15	0.03	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10
2000	0.05	0.26	0.06	0.00	0.05	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98
2001	0.05	0.26	0.08	0.00	0.08	0.01	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.18
2002	0.05	0.25	0.09	0.00	0.24	0.03	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.78
2003	0.04	0.25	0.10	0.00	0.36	0.04	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.22
2004	0.04	0.25	0.09	0.00	0.37	0.03	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04
2005	0.04	0.24	0.08	0.00	0.26	0.02	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.81
2006	0.05	0.23	0.09	0.00	0.24	0.03	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.51
2007	0.05	0.21	0.08	0.00	0.24	0.03	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.15
2008	0.03	0.19	0.07	0.00	0.13	0.02	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90
2009	0.03	0.18	0.08	0.00	0.10	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04
2010	0.03	0.17	0.09	0.00	0.12	0.02	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.14
2011	0.02	0.15	0.09	0.00	0.25	0.03	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41
2012	0.01	0.15	0.07	0.00	0.18	0.02	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13
2013	0.01	0.15	0.07	0.00	0.18	0.02	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63

-continued-

Table H1. Page 2 of 2 (stock groups 16–30).

Year	Stillaguamish Wild	Snohomish Wild	WA Coastal Hat	UpRiver Brights	Spring Creek Hat	Lwr Bonneville Hat	Fall Cowlitz Hat	Lewis R Wild	Willamette R	Spr Cowlitz Hat	Col R Summer	Oregon Coast	WA Coastal Wild	Lyons Ferry	Mid-Col R Brights	AI Total
1979	0.00	0.00	0.03	0.18	0.00	0.00	0.03	0.02	0.02	0.00	0.04	0.23	0.03	0.00	0.00	0.96
1980	0.00	0.00	0.03	0.14	0.00	0.00	0.03	0.02	0.03	0.00	0.04	0.17	0.04	0.00	0.00	1.02
1981	0.00	0.00	0.02	0.10	0.00	0.00	0.03	0.02	0.03	0.01	0.03	0.16	0.04	0.00	0.01	0.92
1982	0.00	0.00	0.02	0.06	0.00	0.00	0.03	0.01	0.03	0.00	0.02	0.19	0.03	0.00	0.01	1.09
1983	0.00	0.00	0.02	0.08	0.00	0.00	0.03	0.01	0.04	0.00	0.02	0.24	0.03	0.00	0.02	1.26
1984	0.00	0.00	0.02	0.20	0.00	0.00	0.03	0.01	0.04	0.00	0.03	0.33	0.03	0.00	0.02	1.45
1985	0.00	0.00	0.02	0.23	0.00	0.00	0.03	0.01	0.03	0.00	0.02	0.31	0.04	0.00	0.01	1.31
1986	0.00	0.00	0.02	0.33	0.00	0.00	0.03	0.01	0.04	0.00	0.03	0.35	0.05	0.00	0.02	1.50
1987	0.00	0.00	0.04	0.48	0.00	0.00	0.03	0.02	0.05	0.01	0.03	0.40	0.06	0.00	0.07	1.73
1988	0.00	0.00	0.05	0.51	0.00	0.00	0.14	0.03	0.06	0.00	0.03	0.37	0.07	0.00	0.13	2.11
1989	0.00	0.00	0.06	0.32	0.00	0.00	0.05	0.03	0.06	0.00	0.03	0.29	0.08	0.00	0.12	1.78
1990	0.00	0.00	0.05	0.24	0.00	0.00	0.02	0.02	0.07	0.00	0.02	0.31	0.07	0.00	0.08	1.81
1991	0.00	0.00	0.05	0.12	0.00	0.00	0.01	0.01	0.05	0.00	0.02	0.29	0.06	0.00	0.05	1.75
1992	0.00	0.00	0.05	0.10	0.00	0.00	0.02	0.01	0.03	0.00	0.02	0.26	0.05	0.00	0.04	1.66
1993	0.00	0.00	0.05	0.18	0.00	0.00	0.01	0.01	0.03	0.00	0.02	0.25	0.05	0.00	0.05	1.65
1994	0.00	0.00	0.05	0.21	0.00	0.00	0.01	0.01	0.02	0.00	0.02	0.28	0.05	0.00	0.05	1.51
1995	0.00	0.00	0.04	0.12	0.00	0.00	0.01	0.01	0.02	0.00	0.01	0.21	0.04	0.00	0.04	1.07
1996	0.00	0.00	0.04	0.13	0.00	0.00	0.02	0.01	0.02	0.00	0.02	0.18	0.04	0.00	0.05	0.96
1997	0.00	0.00	0.03	0.18	0.00	0.00	0.01	0.01	0.02	0.00	0.02	0.20	0.04	0.00	0.09	1.25
1998	0.00	0.00	0.02	0.12	0.00	0.00	0.00	0.01	0.02	0.00	0.02	0.15	0.04	0.00	0.06	1.19
1999	0.00	0.00	0.02	0.21	0.00	0.00	0.01	0.00	0.02	0.00	0.02	0.13	0.03	0.00	0.06	1.10
2000	0.00	0.00	0.02	0.18	0.00	0.00	0.01	0.01	0.03	0.00	0.04	0.13	0.02	0.00	0.05	0.98
2001	0.00	0.00	0.02	0.20	0.00	0.00	0.01	0.01	0.03	0.00	0.07	0.19	0.03	0.00	0.07	1.18
2002	0.00	0.00	0.03	0.33	0.00	0.00	0.02	0.02	0.07	0.00	0.10	0.27	0.03	0.00	0.16	1.78
2003	0.00	0.00	0.03	0.50	0.00	0.00	0.05	0.02	0.05	0.00	0.09	0.36	0.04	0.00	0.22	2.22
2004	0.00	0.00	0.03	0.38	0.00	0.00	0.03	0.02	0.06	0.00	0.08	0.38	0.04	0.00	0.15	2.04
2005	0.00	0.00	0.04	0.39	0.00	0.00	0.03	0.01	0.02	0.00	0.09	0.32	0.04	0.00	0.13	1.81
2006	0.00	0.00	0.04	0.26	0.00	0.00	0.02	0.02	0.03	0.00	0.08	0.19	0.04	0.00	0.11	1.51
2007	0.00	0.00	0.03	0.12	0.00	0.00	0.01	0.00	0.01	0.00	0.07	0.12	0.03	0.00	0.08	1.15
2008	0.00	0.00	0.03	0.12	0.00	0.00	0.00	0.00	0.01	0.00	0.06	0.06	0.03	0.00	0.08	0.90
2009	0.00	0.00	0.03	0.22	0.00	0.00	0.02	0.01	0.02	0.00	0.08	0.08	0.03	0.00	0.11	1.04
2010	0.00	0.00	0.03	0.23	0.00	0.00	0.01	0.01	0.05	0.00	0.09	0.11	0.03	0.00	0.09	1.14
2011	0.00	0.00	0.03	0.31	0.00	0.00	0.04	0.01	0.04	0.00	0.09	0.13	0.03	0.01	0.12	1.41
2012	0.00	0.00	0.03	0.21	0.00	0.00	0.01	0.01	0.03	0.00	0.08	0.12	0.03	0.01	0.11	1.13
2013	0.00	0.00	0.03	0.53	0.00	0.00	0.02	0.01	0.02	0.00	0.08	0.16	0.03	0.01	0.24	1.63

Appendix H2. Abundance indices (AIs) for the Northern BC troll fishery by stock and year (stock groups 1–15 this page; 16–30 on following page), from CLB 1402. Numbers shown represent the portion of the AI total estimated for each model stock; the summation across all 30 stock groups equals the AI total for each calendar year.

Year	Alaska South SE	North/Central	Fraser Early	Fraser Late	WCVI Hatchery	WCVI Natural	St. of Georgia Upper	St. of Georgia Lwr Nat	St. of Georgia Lwr Hat	Nooksack Fall	Pgt Sd Fing	Pgt Sd NatF	Pgt Sd Year	Nooksack Spring	Skagit Wild	AI Total
1979	0.00	0.08	0.07	0.01	0.04	0.05	0.06	0.02	0.02	0.01	0.00	0.00	0.00	0.02	0.01	1.04
1980	0.00	0.09	0.06	0.01	0.05	0.08	0.05	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.01	0.98
1981	0.00	0.09	0.05	0.01	0.06	0.08	0.06	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.01	0.94
1982	0.00	0.10	0.04	0.01	0.12	0.11	0.05	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.01	1.04
1983	0.00	0.11	0.05	0.01	0.17	0.08	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	1.18
1984	0.00	0.12	0.06	0.02	0.15	0.05	0.05	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.01	1.36
1985	0.00	0.13	0.07	0.02	0.09	0.03	0.06	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.01	1.29
1986	0.00	0.14	0.09	0.01	0.07	0.02	0.06	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.01	1.46
1987	0.00	0.15	0.09	0.01	0.07	0.02	0.06	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.73
1988	0.00	0.16	0.08	0.01	0.12	0.03	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	1.82
1989	0.00	0.17	0.08	0.01	0.16	0.04	0.06	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.64
1990	0.00	0.18	0.08	0.01	0.24	0.05	0.05	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	1.60
1991	0.00	0.18	0.07	0.01	0.30	0.07	0.05	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.51
1992	0.00	0.17	0.07	0.01	0.31	0.07	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.40
1993	0.00	0.16	0.07	0.01	0.27	0.07	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.40
1994	0.00	0.16	0.08	0.00	0.18	0.04	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.22
1995	0.00	0.15	0.08	0.00	0.08	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.98
1996	0.00	0.15	0.09	0.01	0.06	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.94
1997	0.00	0.16	0.11	0.01	0.12	0.03	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.11
1998	0.00	0.16	0.10	0.01	0.14	0.03	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.99
1999	0.00	0.16	0.09	0.01	0.08	0.02	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.95
2000	0.00	0.17	0.08	0.01	0.03	0.00	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.94
2001	0.00	0.18	0.09	0.01	0.06	0.01	0.07	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.22
2002	0.00	0.17	0.11	0.01	0.15	0.02	0.08	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.71
2003	0.00	0.17	0.12	0.01	0.19	0.02	0.08	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	1.92
2004	0.00	0.18	0.11	0.01	0.20	0.02	0.08	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.01	1.78
2005	0.00	0.17	0.10	0.01	0.14	0.01	0.08	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	1.54
2006	0.00	0.16	0.11	0.01	0.14	0.02	0.08	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.01	1.23
2007	0.00	0.15	0.10	0.00	0.12	0.02	0.06	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.93
2008	0.00	0.13	0.09	0.00	0.07	0.01	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.82
2009	0.00	0.12	0.10	0.00	0.06	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
2010	0.00	0.12	0.11	0.01	0.09	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10
2011	0.00	0.11	0.11	0.01	0.12	0.02	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19
2012	0.00	0.10	0.09	0.00	0.10	0.01	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	1.07
2013	0.00	0.10	0.09	0.01	0.12	0.01	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.51

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Table H2. Page 2 of 2 (stock groups 16–30).

Year	Stillaguamish Wild	Snohomish Wild	WA Coastal Hat	UpRiver Brights	Spring Creek Hat	Lwr Bonneville Hat	Fall Cowlitz Hat	Lewis R Wild	Willamette R	Spr Cowlitz Hat	Col R Summer	Oregon Coast	WA Coastal Wild	Lyons Ferry	Mid-Col R Brights	AI Total
1979	0.00	0.01	0.04	0.12	0.00	0.00	0.02	0.01	0.06	0.01	0.02	0.30	0.05	0.00	0.00	1.04
1980	0.00	0.01	0.04	0.09	0.00	0.00	0.02	0.01	0.06	0.01	0.02	0.25	0.06	0.00	0.00	0.98
1981	0.00	0.00	0.04	0.06	0.00	0.00	0.02	0.01	0.07	0.01	0.02	0.23	0.06	0.00	0.01	0.94
1982	0.00	0.00	0.03	0.04	0.00	0.00	0.02	0.01	0.08	0.01	0.02	0.29	0.05	0.00	0.01	1.04
1983	0.00	0.00	0.03	0.07	0.00	0.00	0.02	0.01	0.09	0.01	0.02	0.37	0.05	0.00	0.01	1.18
1984	0.00	0.00	0.03	0.14	0.00	0.00	0.02	0.01	0.08	0.01	0.02	0.47	0.06	0.00	0.01	1.36
1985	0.00	0.00	0.03	0.16	0.00	0.00	0.02	0.01	0.08	0.00	0.02	0.44	0.06	0.00	0.01	1.29
1986	0.00	0.00	0.05	0.24	0.00	0.00	0.02	0.01	0.10	0.01	0.02	0.48	0.08	0.00	0.02	1.46
1987	0.00	0.00	0.07	0.33	0.00	0.00	0.03	0.02	0.13	0.01	0.02	0.53	0.10	0.00	0.05	1.73
1988	0.00	0.00	0.09	0.32	0.00	0.00	0.08	0.02	0.14	0.01	0.02	0.46	0.12	0.00	0.09	1.82
1989	0.00	0.00	0.09	0.20	0.00	0.00	0.02	0.01	0.14	0.01	0.02	0.39	0.12	0.00	0.07	1.64
1990	0.00	0.00	0.08	0.15	0.00	0.00	0.01	0.01	0.14	0.00	0.01	0.39	0.11	0.00	0.05	1.60
1991	0.00	0.00	0.08	0.08	0.00	0.00	0.01	0.01	0.10	0.00	0.01	0.37	0.10	0.00	0.03	1.51
1992	0.00	0.00	0.08	0.07	0.00	0.00	0.01	0.01	0.07	0.01	0.01	0.33	0.08	0.00	0.03	1.40
1993	0.00	0.00	0.08	0.12	0.00	0.00	0.01	0.00	0.06	0.00	0.01	0.36	0.08	0.00	0.03	1.40
1994	0.00	0.00	0.07	0.13	0.00	0.00	0.01	0.01	0.05	0.00	0.01	0.33	0.07	0.00	0.03	1.22
1995	0.00	0.00	0.07	0.08	0.00	0.00	0.01	0.01	0.04	0.00	0.01	0.29	0.07	0.00	0.03	0.98
1996	0.00	0.00	0.06	0.09	0.00	0.00	0.01	0.01	0.04	0.00	0.01	0.24	0.07	0.00	0.04	0.94
1997	0.00	0.00	0.05	0.12	0.00	0.00	0.01	0.00	0.05	0.00	0.01	0.25	0.06	0.00	0.06	1.11
1998	0.00	0.00	0.03	0.08	0.00	0.00	0.00	0.00	0.05	0.00	0.02	0.20	0.05	0.00	0.04	0.99
1999	0.00	0.00	0.03	0.14	0.00	0.00	0.01	0.00	0.06	0.00	0.02	0.17	0.04	0.00	0.04	0.95
2000	0.00	0.00	0.03	0.11	0.00	0.00	0.00	0.00	0.07	0.00	0.04	0.23	0.04	0.00	0.03	0.94
2001	0.00	0.00	0.03	0.15	0.00	0.00	0.01	0.01	0.11	0.00	0.05	0.30	0.04	0.00	0.05	1.22
2002	0.00	0.00	0.04	0.24	0.00	0.00	0.02	0.01	0.15	0.00	0.06	0.44	0.05	0.00	0.11	1.71
2003	0.00	0.00	0.05	0.32	0.00	0.00	0.03	0.01	0.13	0.01	0.06	0.50	0.06	0.00	0.14	1.92
2004	0.00	0.00	0.06	0.25	0.00	0.00	0.01	0.01	0.10	0.01	0.06	0.48	0.07	0.00	0.10	1.78
2005	0.00	0.00	0.06	0.25	0.00	0.00	0.02	0.01	0.06	0.00	0.05	0.39	0.07	0.01	0.08	1.54
2006	0.00	0.00	0.06	0.16	0.00	0.00	0.01	0.00	0.05	0.01	0.05	0.22	0.06	0.01	0.07	1.23
2007	0.00	0.00	0.05	0.08	0.00	0.00	0.00	0.00	0.03	0.00	0.05	0.13	0.05	0.01	0.05	0.93
2008	0.00	0.00	0.04	0.10	0.00	0.00	0.00	0.00	0.04	0.00	0.05	0.09	0.04	0.01	0.06	0.82
2009	0.00	0.00	0.05	0.15	0.00	0.00	0.01	0.00	0.07	0.00	0.05	0.12	0.04	0.01	0.07	0.95
2010	0.00	0.00	0.05	0.16	0.00	0.00	0.01	0.00	0.10	0.00	0.06	0.18	0.05	0.01	0.06	1.10
2011	0.00	0.00	0.05	0.20	0.00	0.00	0.02	0.01	0.07	0.00	0.06	0.18	0.05	0.01	0.08	1.19
2012	0.00	0.00	0.05	0.16	0.00	0.00	0.01	0.01	0.06	0.00	0.06	0.19	0.05	0.01	0.08	1.07
2013	0.00	0.00	0.05	0.41	0.00	0.00	0.01	0.01	0.06	0.00	0.06	0.23	0.05	0.01	0.19	1.51

Appendix H3. Abundance indices (AIs) for the WCVI troll fishery by stock and year stock groups 1–15 this page; 16–30 on following page), from CLB 1402. Numbers shown represent the portion of the AI total estimated for each model stock; the summation across all 30 stock groups equals the AI total for each calendar year.

Year	Alaska South SE	North/Central	Fraser Early	Fraser Late	WCVI Hatchery	WCVI Natural	St. of Georgia Upper	St. of Georgia Lwr Nat	St. of Georgia Lwr Hat	Nooksack Fall	Pgt Sd Fing	Pgt Sd NatF	Pgt Sd Year	Nooksack Spring	Skagit Wild	AI Total
1979	0.00	0.00	0.01	0.28	0.01	0.02	0.00	0.01	0.01	0.08	0.04	0.03	0.02	0.00	0.02	1.11
1980	0.00	0.00	0.01	0.20	0.02	0.02	0.00	0.01	0.01	0.09	0.05	0.02	0.02	0.00	0.02	0.97
1981	0.00	0.00	0.00	0.24	0.02	0.03	0.00	0.00	0.01	0.09	0.05	0.02	0.02	0.00	0.02	0.93
1982	0.00	0.00	0.00	0.25	0.04	0.03	0.00	0.00	0.01	0.09	0.05	0.02	0.02	0.00	0.01	1.00
1983	0.00	0.00	0.01	0.21	0.05	0.02	0.00	0.00	0.00	0.10	0.06	0.03	0.02	0.00	0.01	0.90
1984	0.00	0.00	0.01	0.25	0.04	0.01	0.00	0.00	0.01	0.11	0.06	0.02	0.02	0.00	0.02	0.98
1985	0.00	0.00	0.01	0.29	0.03	0.01	0.00	0.00	0.01	0.09	0.05	0.02	0.01	0.00	0.01	0.98
1986	0.00	0.00	0.01	0.24	0.02	0.01	0.00	0.00	0.00	0.08	0.06	0.03	0.01	0.00	0.01	1.05
1987	0.00	0.00	0.01	0.12	0.02	0.01	0.00	0.00	0.00	0.06	0.08	0.03	0.01	0.00	0.01	1.21
1988	0.00	0.00	0.01	0.08	0.04	0.01	0.00	0.00	0.00	0.05	0.09	0.03	0.01	0.00	0.01	1.13
1989	0.00	0.00	0.01	0.18	0.05	0.01	0.00	0.00	0.00	0.06	0.10	0.03	0.02	0.00	0.01	0.98
1990	0.00	0.00	0.01	0.21	0.08	0.02	0.00	0.00	0.00	0.07	0.10	0.03	0.01	0.00	0.01	0.89
1991	0.00	0.00	0.01	0.16	0.09	0.02	0.00	0.00	0.00	0.04	0.07	0.03	0.01	0.00	0.00	0.77
1992	0.00	0.00	0.01	0.21	0.09	0.02	0.00	0.00	0.00	0.03	0.06	0.02	0.01	0.00	0.00	0.80
1993	0.00	0.00	0.01	0.17	0.08	0.02	0.00	0.00	0.00	0.03	0.06	0.02	0.01	0.00	0.00	0.70
1994	0.00	0.00	0.01	0.10	0.05	0.01	0.00	0.00	0.00	0.02	0.07	0.02	0.01	0.00	0.00	0.53
1995	0.00	0.00	0.01	0.05	0.02	0.00	0.00	0.00	0.00	0.02	0.08	0.02	0.01	0.00	0.00	0.43
1996	0.00	0.00	0.01	0.07	0.02	0.01	0.00	0.00	0.00	0.02	0.07	0.01	0.01	0.00	0.00	0.50
1997	0.00	0.00	0.01	0.17	0.04	0.01	0.00	0.00	0.00	0.03	0.07	0.01	0.01	0.00	0.01	0.60
1998	0.00	0.00	0.01	0.19	0.04	0.01	0.00	0.00	0.00	0.03	0.07	0.01	0.01	0.00	0.00	0.58
1999	0.00	0.00	0.01	0.11	0.02	0.00	0.00	0.00	0.00	0.03	0.08	0.01	0.01	0.00	0.01	0.51
2000	0.00	0.00	0.01	0.11	0.01	0.00	0.00	0.00	0.00	0.03	0.08	0.01	0.01	0.00	0.01	0.54
2001	0.00	0.00	0.01	0.12	0.02	0.00	0.00	0.00	0.00	0.04	0.09	0.02	0.01	0.00	0.01	0.85
2002	0.00	0.00	0.01	0.20	0.05	0.01	0.00	0.00	0.00	0.04	0.09	0.02	0.01	0.00	0.01	1.18
2003	0.00	0.00	0.01	0.23	0.06	0.01	0.00	0.00	0.00	0.02	0.09	0.01	0.01	0.00	0.01	1.22
2004	0.00	0.00	0.01	0.15	0.05	0.00	0.00	0.00	0.00	0.02	0.09	0.02	0.02	0.00	0.01	1.03
2005	0.00	0.00	0.01	0.10	0.04	0.00	0.00	0.00	0.00	0.02	0.10	0.01	0.02	0.00	0.01	0.85
2006	0.00	0.00	0.01	0.10	0.04	0.01	0.00	0.00	0.00	0.02	0.12	0.01	0.03	0.00	0.01	0.67
2007	0.00	0.00	0.01	0.05	0.03	0.00	0.00	0.00	0.00	0.02	0.12	0.02	0.03	0.00	0.01	0.52
2008	0.00	0.00	0.01	0.08	0.02	0.00	0.00	0.00	0.00	0.02	0.10	0.01	0.02	0.00	0.01	0.57
2009	0.00	0.00	0.01	0.07	0.02	0.00	0.00	0.00	0.00	0.02	0.09	0.01	0.02	0.00	0.01	0.58
2010	0.00	0.00	0.01	0.14	0.03	0.00	0.00	0.00	0.00	0.02	0.09	0.01	0.02	0.00	0.00	0.79
2011	0.00	0.00	0.01	0.14	0.04	0.00	0.00	0.00	0.00	0.03	0.10	0.01	0.02	0.00	0.01	0.82
2012	0.00	0.00	0.01	0.06	0.03	0.00	0.00	0.00	0.00	0.03	0.11	0.01	0.02	0.00	0.01	0.80
2013	0.00	0.00	0.01	0.08	0.04	0.00	0.00	0.00	0.00	0.03	0.11	0.01	0.02	0.00	0.01	1.08

-continued-

Table H3. Page 2 of 2 (stock groups 16–30).

Year	Stillaguamish Wild	Snohomish Wild	WA Coastal Hat	UpRiver Brights	Spring Creek Hat	Lwr Bonneville Hat	Fall Cowlitz Hat	Lewis R Wild	Willamette R	Spr Cowlitz Hat	Col R Summer	Oregon Coast	WA Coastal Wild	Lyons Ferry	Mid-Col R Brights	AI Total
1979	0.00	0.01	0.01	0.06	0.17	0.13	0.09	0.01	0.01	0.01	0.02	0.04	0.01	0.00	0.00	1.11
1980	0.00	0.01	0.01	0.04	0.14	0.10	0.09	0.01	0.01	0.02	0.02	0.04	0.01	0.00	0.00	0.97
1981	0.00	0.01	0.01	0.03	0.12	0.09	0.08	0.01	0.02	0.01	0.02	0.04	0.01	0.00	0.01	0.93
1982	0.00	0.01	0.01	0.03	0.13	0.10	0.09	0.01	0.02	0.01	0.01	0.04	0.01	0.00	0.01	1.00
1983	0.00	0.01	0.01	0.05	0.04	0.09	0.08	0.01	0.02	0.01	0.02	0.06	0.01	0.00	0.00	0.90
1984	0.00	0.01	0.01	0.07	0.05	0.08	0.07	0.01	0.02	0.01	0.02	0.07	0.01	0.00	0.00	0.98
1985	0.00	0.00	0.01	0.10	0.03	0.07	0.08	0.01	0.02	0.01	0.01	0.07	0.01	0.00	0.01	0.98
1986	0.00	0.00	0.01	0.14	0.02	0.12	0.09	0.01	0.02	0.01	0.02	0.07	0.02	0.00	0.04	1.05
1987	0.00	0.00	0.02	0.18	0.01	0.25	0.18	0.02	0.03	0.01	0.02	0.07	0.02	0.00	0.04	1.21
1988	0.00	0.00	0.02	0.14	0.03	0.12	0.28	0.02	0.03	0.01	0.02	0.07	0.03	0.00	0.03	1.13
1989	0.00	0.00	0.02	0.09	0.04	0.05	0.13	0.01	0.03	0.01	0.01	0.06	0.03	0.00	0.02	0.98
1990	0.00	0.00	0.02	0.06	0.04	0.03	0.06	0.01	0.03	0.01	0.01	0.06	0.02	0.00	0.01	0.89
1991	0.00	0.00	0.02	0.04	0.05	0.05	0.04	0.01	0.02	0.01	0.01	0.05	0.02	0.00	0.02	0.77
1992	0.00	0.00	0.02	0.05	0.04	0.06	0.05	0.01	0.01	0.01	0.01	0.05	0.02	0.00	0.02	0.80
1993	0.00	0.00	0.02	0.06	0.02	0.03	0.04	0.00	0.01	0.00	0.01	0.05	0.02	0.00	0.01	0.70
1994	0.00	0.00	0.01	0.05	0.02	0.02	0.02	0.01	0.01	0.00	0.01	0.05	0.01	0.00	0.01	0.53
1995	0.00	0.00	0.01	0.04	0.02	0.02	0.03	0.00	0.01	0.00	0.01	0.04	0.01	0.00	0.02	0.43
1996	0.00	0.00	0.01	0.06	0.03	0.02	0.04	0.00	0.01	0.00	0.01	0.04	0.01	0.00	0.03	0.50
1997	0.00	0.00	0.01	0.05	0.02	0.02	0.03	0.00	0.01	0.00	0.01	0.03	0.01	0.00	0.02	0.60
1998	0.00	0.00	0.01	0.06	0.02	0.02	0.02	0.00	0.01	0.00	0.01	0.03	0.01	0.00	0.02	0.58
1999	0.00	0.00	0.01	0.07	0.03	0.01	0.02	0.00	0.01	0.00	0.01	0.03	0.01	0.00	0.02	0.51
2000	0.00	0.00	0.01	0.06	0.02	0.02	0.02	0.01	0.01	0.00	0.03	0.03	0.01	0.00	0.04	0.54
2001	0.00	0.00	0.01	0.09	0.10	0.06	0.04	0.01	0.03	0.00	0.04	0.05	0.01	0.01	0.06	0.85
2002	0.00	0.00	0.01	0.14	0.18	0.08	0.07	0.01	0.03	0.01	0.06	0.07	0.01	0.01	0.06	1.18
2003	0.00	0.00	0.01	0.15	0.19	0.06	0.11	0.01	0.03	0.01	0.05	0.08	0.01	0.01	0.04	1.22
2004	0.00	0.00	0.01	0.13	0.17	0.04	0.09	0.01	0.02	0.01	0.05	0.07	0.01	0.01	0.04	1.03
2005	0.00	0.00	0.01	0.12	0.10	0.02	0.08	0.01	0.01	0.01	0.05	0.05	0.01	0.01	0.03	0.85
2006	0.00	0.00	0.01	0.07	0.03	0.01	0.04	0.00	0.01	0.01	0.04	0.03	0.01	0.01	0.03	0.67
2007	0.00	0.00	0.01	0.04	0.02	0.01	0.02	0.00	0.01	0.00	0.04	0.02	0.01	0.01	0.03	0.52
2008	0.00	0.00	0.01	0.07	0.06	0.02	0.02	0.00	0.01	0.00	0.04	0.01	0.01	0.01	0.03	0.57
2009	0.00	0.00	0.01	0.08	0.04	0.01	0.04	0.00	0.02	0.00	0.05	0.02	0.01	0.01	0.03	0.58
2010	0.00	0.00	0.01	0.10	0.09	0.02	0.05	0.00	0.02	0.00	0.05	0.03	0.01	0.01	0.04	0.79
2011	0.00	0.00	0.01	0.10	0.06	0.02	0.09	0.01	0.01	0.00	0.05	0.03	0.01	0.02	0.05	0.82
2012	0.00	0.00	0.01	0.12	0.06	0.03	0.04	0.01	0.01	0.00	0.04	0.03	0.01	0.02	0.13	0.80
2013	0.00	0.00	0.01	0.29	0.07	0.01	0.05	0.01	0.01	0.00	0.05	0.04	0.01	0.03	0.18	1.08

APPENDIX I: FISHERY EXPLOITATION RATE INDICES BY STOCK, AGE AND FISHERY, BASED ON CWT DATA

LIST OF APPENDIX I TABLES

Appendix I1. Alaska troll Stratified Proportion Fishery Index (SPFI) values as landed catch, based on CWT data.

YEAR	SPFI	WIN/SPR	JUNE OUT	JUNE IN	JULY OUT	JULY IN	FALL
1979	0.81	1.13	1.08	0.51	0.77	0.38	0.77
1980	1.29	0.64	0.94	1.46	1.56	1.85	1.56
1981	1.10	1.22	1.07	0.91	1.06	0.86	1.06
1982	0.80	1.01	0.91	1.12	0.61	0.91	0.61
1983	0.86	1.03	0.57	0.67	1.23	0.80	1.23
1984	0.61	0.36	0.92	1.14	0.52	0.27	0.52
1985	0.67	0.45	0.59	0.88	0.82	0.70	0.82
1986	0.45	0.43	0.15	0.42	1.23	0.52	1.23
1987	0.47	0.59	0.17	0.59	0.62	1.28	0.62
1988	0.41	1.37	0.00	0.15	0.64	1.14	0.64
1989	0.50	0.83	0.20	0.46	0.53	0.49	0.53
1990	0.69	0.64	0.11	0.93	1.12	1.06	1.12
1991	0.59	1.35	0.22	0.95	0.76	0.49	0.76
1992	0.38	1.03	0.06	0.53	0.39	0.21	0.39
1993	0.46	0.74	0.02	0.29	0.89	0.24	0.89
1994	0.40	0.66	0.04	0.13	0.65	0.15	0.65
1995	0.48	0.46	0.05	0.34	0.76	0.89	0.76
1996	0.42	0.56	0.09	0.61	0.54	0.47	0.54
1997	0.59	0.63	0.15	0.61	1.44	0.08	1.44
1998	0.39	0.81	0.05	0.16	0.92	0.38	0.92
1999	0.57	0.79	0.11	0.27	0.96	0.11	0.96
2000	0.44	0.88	0.09	0.11	1.41	0.05	1.41
2001	0.39	0.57	0.07	0.15	0.63	0.12	0.63
2002	0.51	0.42	0.06	0.13	1.11	0.15	1.11
2003	0.46	0.71	0.06	0.14	0.85	0.31	0.85
2004	0.41	0.84	0.07	0.18	0.92	0.28	0.92
2005	0.47	0.93	0.11	0.23	1.20	0.40	1.20
2006	0.62	1.55	0.12	0.72	1.37	0.11	1.37
2007	0.61	1.29	0.14	0.95	1.17	0.18	1.17
2008	0.45	0.84	0.08	0.79	0.68	0.09	0.68
2009	0.57	0.72	0.15	0.35	1.06	0.15	1.06
2010	0.36	1.15	0.04	0.28	0.72	0.09	0.72
2011	0.38	1.04	0.05	0.26	0.83	0.13	0.83
2012	0.60	1.63	0.09	0.19	1.05	0.09	1.05

ER Stock Identifiers			
Alaska Southeast	Age 4	Age 5	Age 6
Quinsam	Age 4	Age 5	
Robertson Creek	Age 3	Age 4	Age 5
Salmon River Hatchery	Age 4	Age 5	
Columbia Upriver Brights	Age 4	Age 5	
Willamette Spring Hatchery	Age 4	Age 5	

Appendix I2. Alaska troll Stratified Proportion Fishery Index (SPFI) values as total mortality, based on CWT data.

YEAR	SPFI	WIN/SPR	JUNE OUT	JUNE IN	JULY OUT	JULY IN	FALL
1979	0.79	1.09	1.07	0.50	0.74	0.38	0.74
1980	1.22	0.64	0.91	1.47	1.41	1.76	1.41
1981	1.10	1.22	1.10	0.88	1.07	0.81	1.07
1982	0.90	1.05	0.93	1.14	0.78	1.06	0.78
1983	0.97	1.00	0.59	0.72	1.65	0.73	1.65
1984	0.65	0.37	0.92	1.12	0.61	0.42	0.61
1985	0.77	0.46	0.57	0.84	1.07	0.68	1.07
1986	0.51	0.48	0.15	0.43	1.45	0.60	1.45
1987	0.54	0.60	0.16	0.54	0.75	1.68	0.75
1988	0.43	1.29	0.01	0.16	0.65	1.23	0.65
1989	0.56	0.80	0.20	0.44	0.61	0.57	0.61
1990	0.86	0.79	0.13	0.98	1.44	1.04	1.44
1991	0.61	1.27	0.21	0.88	0.79	0.62	0.79
1992	0.43	0.98	0.06	0.49	0.56	0.21	0.56
1993	0.51	0.71	0.02	0.27	1.04	0.25	1.04
1994	0.48	0.64	0.04	0.15	0.85	0.20	0.85
1995	0.56	0.47	0.05	0.35	0.93	0.91	0.93
1996	0.50	0.56	0.10	0.59	0.66	0.49	0.66
1997	0.58	0.62	0.15	0.56	1.38	0.10	1.38
1998	0.37	0.79	0.05	0.16	0.86	0.33	0.86
1999	0.62	0.78	0.11	0.26	1.06	0.15	1.06
2000	0.46	0.89	0.09	0.11	1.46	0.08	1.46
2001	0.40	0.55	0.07	0.14	0.66	0.15	0.66
2002	0.50	0.45	0.06	0.13	1.05	0.16	1.05
2003	0.45	0.72	0.06	0.13	0.80	0.28	0.80
2004	0.40	0.83	0.07	0.17	0.88	0.28	0.88
2005	0.48	1.03	0.11	0.29	1.18	0.37	1.18
2006	0.62	1.50	0.12	0.71	1.36	0.12	1.36
2007	0.60	1.27	0.14	0.95	1.14	0.17	1.14
2008	0.46	0.81	0.08	0.73	0.70	0.11	0.70
2009	0.58	0.73	0.14	0.34	1.07	0.17	1.07
2010	0.38	1.17	0.04	0.27	0.74	0.09	0.74
2011	0.37	1.05	0.05	0.25	0.80	0.12	0.80
2012	0.59	1.57	0.09	0.21	1.01	0.12	1.01

ER Stock Identifiers			
Alaska Southeast	Age 4	Age 5	Age 6
Quinsam	Age 4	Age 5	
Robertson Creek	Age 3	Age 4	Age 5
Salmon River Hatchery	Age 4	Age 5	
Columbia Upriver Brights	Age 4	Age 5	
Willamette Spring Hatchery	Age 4	Age 5	

Appendix I3. Landed catch exploitation rate indices by stock and age in the NBC troll fishery, based on CWT data. Base period is 1979–1982.

ER Stock Identifiers[1]													
Year	AKS Age 4	QUI Age 3	QUI Age 4	RBT Age 3	RBT Age 4	RBT Age 5	SRH Age 3	SRH Age 4	SRH Age 5	URB Age 4	URB Age 5	WSH Age 4	Fishery Index
1979		0.55	0.81	1.17	0.83	0.48	1.18			1.19		0.65	0.83
1980		0.80	1.00	1.05	0.86	0.77		0.93		0.99	1.27	1.18	0.95
1981		1.77	1.48	0.84	1.04	1.75	1.31		1.00	1.15	1.31	1.53	1.26
1982	1.00	0.88	0.71	0.94	1.28		0.51	1.07		0.67	0.42	0.64	0.84
1983	1.60	1.23	1.51	0.99	0.73	0.75	0.57	1.09	0.24	1.32		1.26	0.80
1984	1.15	0.25	0.51	0.40	1.37	1.68		1.42	1.17	2.11		0.51	1.19
1985	0.78	0.25	0.59	0.93	1.86	1.70	0.39		1.22	1.71	1.68	0.22	1.22
1986	0.72	0.96	0.86		0.91		0.11	1.14		1.25	1.99		1.01
1987	0.61	0.35	0.63	0.44			0.20	0.77	1.01	1.76	2.09		0.94
1988	2.02	0.19	0.71	0.30	0.62			0.65	0.34	1.08	2.35	0.79	0.70
1989	0.96	0.44	0.46	0.37	0.88	1.05	0.14	0.57	1.00	1.03	4.22	0.37	0.98
1990	1.92	0.36	0.98	0.28	0.71	0.55	0.18	0.51	0.92	1.25	2.38	0.30	0.80
1991	0.67	0.43	0.68	0.35	0.71	1.09	0.13	0.84	0.95			0.28	0.74
1992	0.12		1.91	0.27	0.58	0.63	0.13	0.51	0.44			0.10	0.58
1993	0.27			0.15	0.63	0.84	0.14	1.22	0.97	1.16		0.21	0.77
1994	0.05			0.30	0.72	0.86	0.22	1.11	1.01	0.94	2.07	0.12	0.88
1995	0.00				0.41	0.20	0.13	0.00	0.39		0.57	0.15	0.29
1996	0.00			0.00			0.00	0.00	0.00	0.00		0.00	0.00
1997		0.40	0.26	0.22	0.31		0.19	0.22	0.17	0.55		0.13	0.25
1998	0.00		0.00		0.51		0.07	0.96	0.53		1.26	0.00	0.51
1999	0.00	0.17	0.20		0.35	0.56	0.10	0.39	0.23	1.20		0.00	0.36
2000	0.00	0.00	0.06				0.05	0.55	0.16	0.00	0.00	0.01	0.14
2001		0.00	0.02	0.00			0.05	0.36	0.42	0.00		0.02	0.20
2002	0.47		0.15	0.00	0.44		0.19	0.62	0.69	0.21		0.18	0.42
2003	0.00	0.00	0.00	0.04	0.05	0.00	0.05	0.64	0.25	0.76	1.09	0.05	0.25
2004	0.94	0.00	0.06	0.09	0.20	0.44	0.09	0.52	0.44	0.74	1.38	0.18	0.40
2005	0.18	0.07	0.04	0.03	0.33	0.10	0.11	0.91	0.43	1.50	1.05	0.09	0.42
2006	0.38	0.08	0.07	0.09	0.26	0.27		0.99	0.71	1.41	1.52	0.05	0.57
2007	0.09		0.46		0.49	0.50	0.00	1.31	0.67			0.00	0.57
2008	0.11			0.08	0.61	0.19	0.07	0.69				0.05	0.33
2009	0.92		0.11	0.19	0.21		0.01	1.32	0.96	1.93		0.03	0.69
2010	0.21	0.00		0.13	0.09		0.21	1.08	0.42			0.13	0.35
2011	0.00	0.00	0.00	0.00	0.32		0.05	0.90	0.56	0.60		0.14	0.37
2012	0.23	0.00	0.10	0.08	0.21	0.37	0.05	1.11	0.63	1.38	2.87	0.07	0.62

[1] Stock Identifiers: AKS = ALASKA SPRING; QUI = QUINSAM; RBT = ROBERTSON CREEK; SRH = SALMON RIVER HATCHERY; URB = COLUMBIA UPRIVER BRIGHT; WSH = WILLAMETTE SPRING.

Appendix I4. NBC troll fishery Stratified Proportion Fishery Index (SPFI) values as landed catch, based on CWT data.

YEAR	SPFI
1979	0.95
1980	0.81
1981	1.26
1982	0.98
1983	0.94
1984	0.93
1985	0.90
1986	0.73
1987	0.72
1988	0.65
1989	0.65
1990	0.57
1991	0.63
1992	0.44
1993	0.50
1994	0.60
1995	0.25
1996	0.00
1997	0.20
1998	0.38
1999	0.30
2000	0.08
2001	0.08
2002	0.30
2003	0.21
2004	0.27
2005	0.38
2006	0.38
2007	0.36
2008	0.25
2009	0.52
2010	0.31
2011	0.29
2012	0.35

ER Stock Identifiers			
Alaska Southeast	Age 4	Age 5	Age 6
Quinsam	Age 4	Age 5	
Robertson Creek	Age 3	Age 4	Age 5
Salmon River Hatchery	Age 4	Age 5	
Columbia Upriver Brights	Age 4	Age 5	
Willamette Spring Hatchery	Age 4	Age 5	

Appendix I5. Total mortality exploitation rate indices by stock and age in the NBC troll fishery, based on CWT data. Base period is 1979–1982.

	ER Stock Identifiers[1]												
Year	AKS Age 4	QUI Age 3	QUI Age 4	RBT Age 3	RBT Age 4	RBT Age 5	SRH Age 3	SRH Age 4	SRH Age 5	URB Age 4	URB Age 5	WSH Age 4	Fishery Index
1979		0.56	0.82	1.15	0.83	0.48	1.16			1.20		0.63	0.83
1980		0.82	0.99	1.04	0.86	0.77		0.94		0.99	1.27	1.15	0.95
1981		1.73	1.47	0.86	1.04	1.76	1.26		1.00	1.15	1.32	1.48	1.26
1982	1.00	0.89	0.72	0.94	1.28		0.58	1.06		0.66	0.41	0.74	0.85
1983	1.53	1.19	1.49	1.01	0.73	0.76	0.62	1.09	0.24	1.30		1.25	0.81
1984	1.15	0.27	0.51	0.47	1.38	1.69		1.42	1.17	2.13		0.54	1.18
1985	0.75	0.30	0.59	0.92	1.86	1.73	0.43		1.23	1.71	1.70	0.23	1.21
1986	0.69	0.92	0.86		0.91		0.15	1.13		1.26	1.95		1.00
1987	0.68	0.44	0.66	0.54			0.31	0.81	1.01	1.81	2.12		0.96
1988	2.19	0.26	0.72	0.44	0.65			0.69	0.33	1.13	2.38	0.92	0.73
1989	1.02	0.53	0.44	0.47	0.88	1.06	0.24	0.61	1.01	1.06	4.23	0.41	1.00
1990	2.10	0.47	1.00	0.40	0.74	0.56	0.29	0.54	0.94	1.28	2.44	0.33	0.83
1991	0.73	0.62	0.69	0.44	0.73	1.12	0.24	0.85	0.97			0.31	0.77
1992	0.16		1.98	0.39	0.60	0.66	0.33	0.54	0.45			0.15	0.62
1993	0.32			0.24	0.65	0.86	0.24	1.26	0.99	1.23		0.24	0.80
1994	0.09			0.37	0.73	0.88	0.24	1.13	1.02	0.96	2.13	0.14	0.89
1995	0.00				0.43	0.22	0.16	0.00	0.42		0.61	0.20	0.31
1996	0.13			0.11			0.12	0.03	0.03	0.06		0.08	0.06
1997		0.35	0.25	0.19	0.32		0.16	0.22	0.17	0.56		0.11	0.24
1998	0.00		0.00		0.50		0.11	0.93	0.53		1.24	0.00	0.50
1999	0.00	0.17	0.19		0.34	0.55	0.15	0.39	0.22	1.20		0.00	0.35
2000	0.04	0.00	0.06				0.09	0.56	0.15	0.00	0.00	0.01	0.14
2001		0.00	0.01	0.04			0.09	0.36	0.41	0.00		0.03	0.20
2002	0.56		0.14	0.02	0.45		0.24	0.62	0.70	0.22		0.18	0.42
2003	0.03	0.00	0.00	0.06	0.05	0.00	0.11	0.65	0.25	0.78	1.10	0.06	0.25
2004	1.03	0.00	0.06	0.12	0.20	0.46	0.17	0.54	0.46	0.76	1.43	0.19	0.41
2005	0.24	0.07	0.04	0.06	0.34	0.10	0.19	0.94	0.44	1.56	1.11	0.11	0.43
2006	0.42	0.11	0.07	0.14	0.26	0.27		0.99	0.71	1.41	1.51	0.04	0.57
2007	0.10		0.44		0.49	0.50	0.09	1.32	0.68			0.02	0.57
2008	0.09			0.10	0.64	0.19	0.15	0.70				0.04	0.34
2009	0.93		0.11	0.20	0.21		0.10	1.33	0.96	1.95		0.03	0.69
2010	0.27	0.00		0.16	0.09		0.27	1.08	0.42			0.14	0.36
2011	0.05	0.00	0.00	0.02	0.34		0.11	0.98	0.60	0.67		0.15	0.40
2012	0.27	0.00	0.09	0.10	0.22	0.39	0.06	1.13	0.64	1.41	2.87	0.09	0.62

[1] Stock Identifiers: AKS = ALASKA SPRING; QUI = QUINSAM; RBT = ROBERTSON CREEK; SRH = SALMON RIVER HATCHERY; URB = COLUMBIA UPRIVER BRIGHT; WSH = WILLAMETTE SPRING.

Appendix I6. NBC troll fishery Stratified Proportion Fishery Index (SPFI) values as total mortality, based on CWT data.

YEAR	SPFI
1979	0.95
1980	0.79
1981	1.27
1982	0.99
1983	0.94
1984	0.92
1985	0.88
1986	0.74
1987	0.80
1988	0.70
1989	0.73
1990	0.64
1991	0.63
1992	0.48
1993	0.54
1994	0.58
1995	0.27
1996	0.00
1997	0.19
1998	0.36
1999	0.29
2000	0.10
2001	0.10
2002	0.32
2003	0.22
2004	0.29
2005	0.38
2006	0.38
2007	0.36
2008	0.28
2009	0.52
2010	0.35
2011	0.32
2012	0.34

ER Stock Identifiers			
Alaska Southeast	Age 4	Age 5	Age 6
Quinsam	Age 4	Age 5	
Robertson Creek	Age 3	Age 4	Age 5
Salmon River Hatchery	Age 4	Age 5	
Columbia Upriver Brights	Age 4	Age 5	
Willamette Spring Hatchery	Age 4	Age 5	

Appendix I7. Landed catch exploitation rate indices by stock and age in the WCVI troll fishery, based on CWT data. Base period is 1979–1982.

	ER Stock Identifiers[1]																							
Year	CWF Age 4	GAD Age 3	GAD Age 4	LRH Age 3	LRH Age 4	LRW Age 4	RBT Age 3	RBT Age 4	RBT Age 5	SAM Age 3	SAM Age 4	SAM Age 5	SPR Age 3	SPR Age 4	SPS Age 3	SPS Age 4	SRH Age 3	SRH Age 4	SUM Age 4	URB Age 3	URB Age 4	UWA Age 3	UWA Age 4	WSH Age 4	Fishery Index
1979				1.15			1.18	1.25			1.00	1.00	0.96	0.84		1.13	1.57			1.10	1.75	0.70	1.22	1.03	1.06
1980				0.56	0.90		1.41	1.43					1.16	1.39				1.09	0.70	1.06	0.94	1.38	0.85	1.10	1.02
1981	0.79	0.71		1.14	0.79	0.84	0.66	0.58	1.00				0.93	0.62	0.72		0.43		1.30		0.89	0.84	0.89	0.63	0.86
1982	1.21	1.29	1.00	1.15	1.31	1.16	0.75	0.73		1.00			0.94	1.14	1.28	0.87		0.91		0.84	0.42	1.08	1.05	1.24	1.05
1983	1.37		1.41	1.64	1.63	0.96	0.42	0.84	1.84		0.96		1.43	0.93	1.64	0.89	1.50			0.30	0.44	0.69	1.08	0.27	1.16
1984	1.30	2.05		2.10	2.87		1.34	1.12	1.04			1.07	1.29	1.37	1.61	0.96		0.39		0.68	1.27	1.69	0.73	0.70	1.40
1985	0.89		0.84	1.21	1.13		0.49	0.00					0.53	0.96	0.81	0.65				0.65	1.01	0.78	1.01	0.44	0.85
1986	1.27			1.20	1.21	0.47		1.09					1.17	0.99	0.89	1.07		0.18		1.15	1.39	0.84	1.09		1.06
1987	0.85			0.98		1.44	0.27						0.44		0.75	0.51	0.26	0.21		0.80	0.79	0.36	0.40		0.63
1988	0.84	0.42		1.13	1.37	1.05	0.44	0.57		0.60			0.95		0.30	0.68		0.64	1.12	0.07	1.88		0.77	0.87	0.90
1989	0.52	0.25	0.49	0.28	0.56	0.55	0.22	0.34	0.00	0.21	0.60		0.58	0.39	0.35	0.38	0.33		0.73		0.89			0.54	0.47
1990	0.72	1.09	0.93	1.12	0.41	1.21	0.66	0.51	1.49	0.41	0.87		0.90	0.72	0.75	0.82	0.71	0.43	1.44		1.67			0.84	0.87
1991			0.94	0.78		0.74	0.59	0.53	1.36	0.25	0.56	1.11	0.58	0.62	0.42	0.52	0.89	0.35	0.47					0.08	0.68
1992	1.14		0.32	0.67		0.32	1.55	2.43	5.09	1.05	0.26		0.43	0.74	0.73	0.71	1.28	2.42	0.72					0.17	0.79
1993				1.11	0.68		1.10	2.28	2.42	1.13	0.42		0.53	0.99	1.05	0.52	1.21	1.17		0.50	1.96			0.44	0.86
1994	0.12					0.22	0.61	0.66	1.28	0.06	0.70		0.81	0.64	0.22	0.46		0.38			0.95			0.26	0.53
1995		0.22				0.43		0.44	0.28	0.16	0.37		0.35	0.34	0.28	0.25	0.04							0.12	0.32
1996	0.00	0.00	0.00	0.00			0.00			0.00	0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00
1997	0.39		0.21	0.77			0.00	0.04		0.02	0.24		0.48	0.40	0.04	0.29	0.00	0.03	0.06		0.07			0.00	0.30
1998								0.00			0.08		0.05	0.00	0.00	0.03	0.00	0.00	0.00	0.01				0.04	0.03
1999		0.05		0.09					0.00		0.07		0.02		0.02	0.05	0.00	0.00	0.03		0.00			0.00	0.04
2000			1.21	0.09	1.73						1.10		0.04	0.75	0.03	0.71	0.00	0.00	0.21	0.09	0.51			0.08	0.69
2001		0.78	1.22	0.28	0.89	0.72	0.00			0.42	0.35		0.15	0.60	0.49	0.55	0.00	0.05	0.44	0.10	0.17			0.18	0.53
2002	0.56	0.17	0.62	0.29	0.39		0.02	0.00		0.26	0.40		0.28	0.69	0.42	0.49	0.00	0.00	0.49	0.07	0.27			0.28	0.42
2003	0.53	0.11	0.72	0.27	0.76	0.12	0.00	0.00			0.59		0.28	0.58	0.36	0.55	0.00	0.00	0.56	0.14	0.11			0.56	0.46
2004		0.08	1.18	0.37	1.04	0.12	0.03	0.02	0.00	0.18	0.57		0.35	0.81	0.11	0.83	0.18	0.25	0.25	0.13	0.49			2.16	0.59
2005	0.30	0.74	0.97	0.69	1.70	0.12	0.00	0.00		0.12	0.80		0.88	1.19	0.68	0.63	0.16	0.22	0.48	0.10	0.46			1.20	0.76
2006		0.27	0.92			0.46	0.00	0.00		0.39	0.77		0.56	1.38	0.52	0.73		0.28	0.32		0.73			1.44	0.71
2007		0.98	0.79	0.68				0.02		1.28	0.57		0.60	0.93	1.00	0.69	0.00		0.45		0.13			0.22	0.68
2008		0.47	0.38	0.41			0.00		0.00	0.71	0.34		0.21		0.50	0.32	0.23	0.00	0.24	0.24				0.17	0.32
2009	0.00	0.63	0.52	0.20	0.23			0.00		0.66	0.16		0.15	0.05	0.57	0.19	0.04	0.04	0.34		0.12			0.10	0.22
2010	0.11	0.95	0.43	0.33			0.04	0.26		0.99	0.13		0.24	0.35	0.49	0.12	0.00	0.00	0.20	0.10				0.22	0.27
2011	0.08	0.41	0.22	0.40	0.75		0.00	0.00		0.00	0.41		0.24	0.58	0.04	0.21	0.10	0.55	0.21	0.00	0.35			0.49	0.32
2012	0.21	0.22	0.25	0.15	0.00			0.00	0.17	0.30	0.05		0.12	0.46	0.40	0.17	0.06	0.34	0.44	0.11	0.30			1.05	0.21

[1] Stock Identifiers: CWF = COWLITZ FALL TULE; RBT = ROBERTSON CREEK; SRH = SALMON RIVER HATCHERY; WSH = WILLAMETTE SPRING; GAD = G ADAMS FALL FING; SAM = SAMISH FALL FING; SUM = COL RIVER SUMMERS; CHI = CHILLAWACK; LRH = LOWER RIVER TULE; SPR = SPRING CREEK TULE; URB = COLUMBIA UPRIVER BRIGHT; LRW = LEWIS RIVER WILD; SPS = SO SOUND FALL FING; UWA = U OF W FALL ACCEL (*discontinued*).

Appendix I8. WCVI troll fishery Stratified Proportion Fishery Index (SPFI) values as landed catch, based on CWT data.

YEAR	SPFI
1979	1.09
1980	1.16
1981	0.86
1982	0.89
1983	1.00
1984	1.34
1985	1.22
1986	0.91
1987	1.40
1988	1.71
1989	0.82
1990	1.12
1991	0.58
1992	1.69
1993	0.72
1994	0.51
1995	0.59
1996	0.00
1997	0.41
1998	0.02
1999	0.17
2000	0.67
2001	0.22
2002	0.21
2003	0.52
2004	0.39
2005	0.62
2006	0.42
2007	0.38
2008	0.36
2009	0.12
2010	0.11
2011	0.22
2012	0.21

ER Stock Identifiers			
Cowlitz Fall Tule	Age 4		
George Adams	Age 3	Age 4	
Lower River Hatchery	Age 3	Age 4	
Lewis River Wild	Age 4		
Robertson Creek	Age 3	Age 4	Age 5
Samish	Age 3	Age 4	
Spring Creek	Age 3	Age 4	
South Puget Sound Fingerling	Age 3	Age 4	
Salmon River Hatchery	Age 3	Age 4	Age 5
Columbia River Summers	Age 4		
Columbia Upriver Brights	Age 3	Age 4	
U of WA Accel. (*discontinued*)	Age 3	Age 4	
Willamette Spring Hatchery	Age 4		
Chilliwack	Age 3	Age 4	

Appendix I9. Total mortality exploitation rate indices by stock and age in the WCVI troll fishery, based on CWT data. Base period is 1979–1982.

	Stock Identifiers[1]																								
Year	CWF Age 4	GAD Age 3	GAD Age 4	LRH Age 3	LRH Age 4	LRW Age 4	RBT Age 3	RBT Age 4	RBT Age 5	SAM Age 3	SAM Age 4	SAM Age 5	SPR Age 3	SPR Age 4	SPS Age 3	SPS Age 4	SRH Age 3	SRH Age 4	SUM Age 4	URB Age 3	URB Age 4	UWA Age 3	UWA Age 4	WSH Age 4	Fishery Index
1979	0.03		1.05	1.16			1.19	1.25	1.50		1.00	1.08	0.97	0.85		1.14	1.40		1.07	1.38	1.75	0.70	1.23	1.01	1.06
1980	1.77			0.57	0.88		1.38	1.43	0.00			0.92	1.16	1.39			1.53	1.66	0.67	1.33	0.95	1.38	0.85	1.11	1.02
1981	0.51	0.72		1.13	0.78	0.85	0.67	0.60	1.05				0.94	0.62	0.73		0.43	0.00	1.26	0.23	0.89	0.83	0.87	0.65	0.83
1982	1.69	1.28	0.95	1.14	1.34	1.15	0.75	0.73	1.45	1.00			0.93	1.14	1.27	0.86	0.65	1.34		1.07	0.41	1.09	1.05	1.23	1.06
1983	0.00	1.69	1.33	1.63	1.65	0.97	0.45	0.84	1.98		0.96		1.43	0.92	1.58	0.89	1.29	0.50		0.44	0.43	0.70	1.08	0.33	1.13
1984	0.00	1.89	0.53	2.07	2.87		1.28	1.11	1.14			1.16	1.29	1.36	1.53	0.96		0.63		0.87	1.27	1.67	0.73	0.71	1.32
1985	1.51		0.79	1.21	1.15		0.51	0.00	0.39				0.54	0.96	0.89	0.65	0.45			0.86	1.03	0.81	1.03	0.51	0.86
1986	0.00			1.20	1.24	0.47	2.06	1.09	1.12				1.14	0.99	0.87	1.06	0.26	0.27		1.44	1.41	0.84	1.09	0.84	1.04
1987	1.31			1.09	1.70	1.50	0.33	0.00	0.00				0.53	0.00	0.87	0.53	0.34	0.36	0.00	1.26	0.85	0.46	0.43	0.61	0.64
1988	0.00	0.53		1.25	1.49	1.11	0.52	0.60	0.00	0.75			1.06	1.19	0.42	0.71	0.45	1.03	1.12	0.27	2.00		0.81	0.95	0.97
1989	2.25	0.40	0.47	0.30	0.61	0.57	0.28	0.36	0.00	0.39	0.61		0.63	0.42	0.48	0.39	0.43	0.88	0.72	0.47	0.93			0.57	0.53
1990	1.50	1.17	0.90	1.19	0.41	1.23	0.77	0.53	1.63	0.52	0.88	0.00	0.96	0.74	0.82	0.83	0.81	0.70	1.41	0.31	1.68			0.87	0.84
1991	0.00	0.06	0.92	0.82	0.98	0.77	0.82	0.57	1.46	0.27	0.58	1.20	0.63	0.65	0.53	0.53	1.16	0.60	0.46	1.35	2.31			0.12	0.75
1992	0.68	1.30	0.29	0.71	1.36	0.34	1.75	2.47	5.48	1.11	0.26	1.79	0.48	0.76	0.80	0.73	1.34	3.76	0.72	0.42	2.36			0.21	0.95
1993	0.00	0.00	1.65	1.18	0.71	0.00	1.16	2.34	2.64	1.21	0.43	0.00	0.58	1.01	1.11	0.53	1.13	1.85	2.04	0.76	2.00			0.50	0.91
1994	0.73	0.16	0.00	1.90	1.02	0.24	0.63	0.69	1.43	0.15	0.71	0.00	0.86	0.66	0.26	0.47	0.17	0.62	0.00	0.00	0.99			0.27	0.59
1995	0.00	0.23	1.03	0.00	0.00	0.48	0.00	0.47	0.36	0.19	0.41	0.52	0.43	0.42	0.31	0.28	0.04	0.41	0.00	0.37	0.00			0.14	0.34
1996	0.00	0.10	0.02	0.06	0.00	0.00	0.05	0.00	0.00	0.10	0.02	0.00	0.06	0.06	0.10	0.02	0.09	0.04	0.03	0.09	0.06			0.03	0.04
1997	0.00	0.00	0.21	0.71	0.53	0.00	0.00	0.04	0.00	0.03	0.25	2.05	0.45	0.41	0.05	0.30	0.00	0.04	0.06	0.00	0.07			0.00	0.43
1998	0.00	0.00	0.07	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.04	0.00	0.00	0.03	0.00	0.00	0.00	0.01	0.00			0.03	0.03
1999	0.00	0.05	0.15	0.08	0.00		0.00	0.00	0.00	0.00	0.07	0.22	0.01	0.00	0.02	0.05	0.00	0.00	0.02	0.00	0.00			0.00	0.06
2000	0.00	0.06	1.15	0.08	1.75	0.00	0.00	0.00	0.00	0.05	1.07	2.56	0.05	0.73	0.03	0.71	0.00	0.00	0.19	0.11	0.50			0.07	0.74
2001	0.31	0.66	1.19	0.26	0.87	0.70	0.00	0.00	0.00	0.37	0.34	0.00	0.14	0.58	0.44	0.54	0.00	0.08	0.42	0.13	0.17			0.16	0.45
2002	0.96	0.16	0.58	0.27	0.38	0.44	0.01	0.00	13.34	0.22	0.40		0.26	0.68	0.38	0.48	0.00	0.00	0.47	0.08	0.27			0.27	0.57
2003	1.39	0.10	0.67	0.25	0.76	0.12	0.00	0.00	0.00	0.15	0.57	0.82	0.26	0.57	0.32	0.54	0.00	0.00	0.54	0.16	0.10			0.52	0.48
2004	0.00	0.07	1.12	0.35	1.04	0.12	0.03	0.02	0.00	0.16	0.55	0.73	0.32	0.80	0.10	0.82	0.15	0.38	0.24	0.15	0.48			2.00	0.58
2005	2.26	0.65	0.92	0.62	1.70	0.12	0.00	0.00	0.00	0.12	0.79	1.64	0.83	1.17	0.61	0.62	0.13	0.34	0.46	0.12	0.45			1.11	0.86
2006	0.00	0.24	0.87	0.40	0.44	0.45	0.00	0.00	0.00	0.35	0.74	0.00	0.52	1.38	0.47	0.72	0.27	0.42	0.30	0.00	0.71			1.34	0.56
2007	0.00	0.85	0.75	0.62	0.67	0.41	0.00	0.02	0.00	1.11	0.57	1.47	0.55	0.90	0.88	0.69	0.00	0.00	0.43	0.82	0.13			0.20	0.67
2008	0.00	0.40	0.35	0.37	0.00	1.71	0.00	0.00	0.00	0.61	0.33	0.00	0.19	0.00	0.44	0.31	0.19	0.00	0.23	0.27	0.00			0.15	0.25
2009	0.00	0.55	0.49	0.19	0.22	0.63	0.00	0.00	0.00	0.56	0.15	0.00	0.14	0.05	0.51	0.18	0.03	0.06	0.33	0.00	0.11			0.09	0.21
2010	0.62	0.82	0.40	0.31	0.00	0.32	0.03	0.25	0.00	0.86	0.13	0.00	0.22	0.34	0.43	0.12	0.00	0.00	0.19	0.12	0.00			0.20	0.23
2011	0.00	0.37	0.20	0.37	0.74	0.47	0.00	0.00	3.10	0.00	0.40	0.00	0.23	0.56	0.04	0.20	0.08	0.84	0.20	0.00	0.35			0.46	0.34
2012	0.00	0.20	0.23	0.14	0.00	0.00	0.00	0.00	0.18	0.27	0.05	0.00	0.11	0.45	0.35	0.17	0.05	0.52	0.43	0.13	0.29			0.98	0.18

[1] Stock identifiers: CWF = COWLITZ FALL TULE; RBT = ROBERTSON CREEK; SRH = SALMON RIVER HATCHERY; WSH = WILLAMETTE SPRING; GAD = G ADAMS FALL FING; SAM = SAMISH FALL FING; SUM = COL RIVER SUMMERS; CHI = CHILLAWACK; LRH = LOWER RIVER TULE; SPR = SPRING CREEK TULE; URB = COLUMBIA UPRIVER BRIGHT; LRW = LEWIS RIVER WILD; SPS = SO SOUND FALL FING; UWA = U OF W FALL ACCEL (*discontinued*).

Appendix I10. WCVI troll fishery Stratified Proportion Fishery Index (SPFI) values as total mortality, based on CWT data.

YEAR	SPFI
1979	1.07
1980	1.15
1981	0.88
1982	0.90
1983	0.97
1984	1.34
1985	1.21
1986	0.90
1987	1.59
1988	1.80
1989	0.95
1990	1.15
1991	0.63
1992	1.74
1993	0.74
1994	0.51
1995	0.69
1996	0.00
1997	0.39
1998	0.02
1999	0.16
2000	0.63
2001	0.21
2002	0.20
2003	0.49
2004	0.37
2005	0.58
2006	0.40
2007	0.36
2008	0.34
2009	0.12
2010	0.10
2011	0.21
2012	0.19

ER Stock Identifiers			
Cowlitz Fall Tule	Age 4		
George Adams	Age 3	Age 4	
Lower River Hatchery	Age 3	Age 4	
Lewis River Wild	Age 4		
Robertson Creek	Age 3	Age 4	Age 5
Samish	Age 3	Age 4	
Spring Creek	Age 3	Age 4	
South Puget Sound Fingerling	Age 3	Age 4	
Salmon River Hatchery	Age 3	Age 4	Age 5
Columbia River Summers	Age 4		
Columbia Upriver Brights	Age 3	Age 4	
U of WA Accel. (*discontinued*)	Age 3	Age 4	
Willamette Spring Hatchery	Age 4		
Chilliwack	Age 3	Age 4	

APPENDIX J: PRESEASON FORECASTS INCLUDING 2014 AND POSTSEASON ESTIMATES FOR PSC MODEL STOCKS, 1999-2013

Appendix J1. Page 1 of 9.

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
AKS[1] (Alaska SSE)	1999	11,866	NA	12,654	NA	NA	94%
	2000	18,967	NA	15,909	NA	NA	119%
	2001	22,130	NA	21,226	NA	NA	104%
	2002	15,650	NA	19,473	NA	NA	80%
	2003	22,316	NA	14,206	NA	NA	157%
	2004	11,880	NA	16,420	NA	NA	72%
	2005	25,204	NA	16,102	NA	NA	157%
	2006	17,966	NA	20,866	NA	NA	86%
	2007	25,653	NA	15,095	NA	NA	170%
	2008	14,626	NA	13,865	NA	NA	105%
	2009	14,362	NA	11,296	NA	NA	127%
	2010	16,445	NA	16,194	NA	NA	102%
	2011	17,065	NA	11,938	NA	NA	143%
	2012	12,557	NA	6,784	NA	NA	185%
	2013	4,838	NA	8,175	NA	NA	59%
	2014	4,239	NA		NA		
	AVG.				NA	NA	117%
NTH[2] (North/ Central BC)	1999	149,593	NA	150,775	NA	NA	99%
	2000	159,818	NA	185,147	NA	NA	86%
	2001	189,088	NA	228,774	NA	NA	83%
	2002	228,073	NA	136,625	NA	NA	167%
	2003	154,103	NA	166,568	NA	NA	93%
	2004	171,070	NA	152,207	NA	NA	112%
	2005	154,552	NA	127,075	NA	NA	122%
	2006	132,710	NA	151,812	NA	NA	87%
	2007	156,017	NA	123,565	NA	NA	126%
	2008	131,262	NA	105,806	NA	NA	124%
	2009	119,761	NA	126,605	NA	NA	95%
	2010	136,998	NA	113,361	NA	NA	121%
	2011	119,323	NA	95,175	NA	NA	125%
	2012	98,010	NA	78,714	NA	NA	125%
	2013	86,819	NA	99,874	NA	NA	87%
	2014	94,878	NA		NA		
	AVG.				NA	NA	110%
RBH+RBT[2] (WCVI Hatchery + Natural)	1999	78,074	68,400	98,400	114%	70%	79%
	2000	21,040	15,040	37,090	140%	41%	57%
	2001	33,702	30,633	86,787	110%	35%	39%
	2002	128,068	109,882	109,882	117%	100%	117%
	2003	111,430	105,801	215,345	105%	49%	52%
	2004	166,548	144,180	247,500	116%	58%	67%
	2005	244,768	218,840	154,594	112%	142%	158%
	2006	152,483	138,878	197,097	110%	70%	77%
	2007	151,925	117,321	118,082	129%	99%	129%
	2008	67,347	60,255	98,744	112%	61%	68%
	2009	76,063	58,382	88,429	130%	66%	86%
	2010	75,748	61,586	92,534	123%	67%	82%
	2011	98,929	74,708	161,914	132%	46%	61%
	2012	70,838	54,765	84,432	129%	65%	84%
	2013	32,180	NA	173,632	NA	NA	19%
	2014	205,989	216,727		95%		
	AVG.				118%	69%	78%

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Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
GSQ[1]	1999	16,472	NA	16,142	NA	NA	102%
(Upper Strait	2000	19,452	NA	22,200	NA	NA	88%
of Georgia)	2001	25,828	NA	35,620	NA	NA	73%
	2002	41,492	NA	29,986	NA	NA	138%
	2003	36,882	NA	31,059	NA	NA	119%
	2004	39,766	NA	28,359	NA	NA	140%
	2005	38,798	NA	31,517	NA	NA	123%
	2006	39,171	NA	33,024	NA	NA	119%
	2007	41,711	NA	22,674	NA	NA	184%
	2008	30,065	NA	20,641	NA	NA	146%
	2009	26,173	NA	19,923	NA	NA	131%
	2010	26,624	NA	18,523	NA	NA	144%
	2011	23,998	NA	19,469	NA	NA	123%
	2012	25,756	NA	24,304	NA	NA	106%
	2013	31,498	NA	22,927	NA	NA	137%
	2014	30,162	NA		NA		
	AVG.				NA	NA	125%
GSH[2]	1999	23,648	NA	20,000	NA	NA	118%
(Lower Strait	2000	19,165	NA	20,286	NA	NA	94%
of Georgia	2001	17,547	NA	27,458	NA	NA	64%
Hatchery)	2002	25,051	NA	23,557	NA	NA	106%
	2003	21,222	NA	24,084	NA	NA	88%
	2004	16,573	NA	22,119	NA	NA	75%
	2005	21,046	NA	28,226	NA	NA	75%
	2006	18,169	NA	22,756	NA	NA	80%
	2007	24,378	NA	13,155	NA	NA	185%
	2008	11,765	NA	13,410	NA	NA	88%
	2009	17,551	NA	14,398	NA	NA	122%
	2010	7,999	NA	14,360	NA	NA	56%
	2011	14,671	NA	9,555	NA	NA	154%
	2012	10,104	NA	8,449	NA	NA	120%
	2013	5,568	NA	7,716	NA	NA	72%
	2014	6,116	NA		NA		
	AVG.				NA	NA	100%
GST[1]	1999	14,737	NA	9,032	NA	NA	163%
(Lower Strait	2000	11,094	NA	8,119	NA	NA	137%
of Georgia							
Natural)	2001	7,955	NA	8,836	NA	NA	90%
	2002	8,833	NA	8,188	NA	NA	108%
	2003	8,088	NA	5,374	NA	NA	151%
	2004	5,157	NA	3,700	NA	NA	139%
	2005	4,459	NA	5,415	NA	NA	82%
	2006	4,070	NA	7,469	NA	NA	54%
	2007	7,782	NA	4,778	NA	NA	163%
	2008	6,823	NA	4,926	NA	NA	139%
	2009	5,701	NA	2,966	NA	NA	192%
	2010	2,972	NA	5,676	NA	NA	52%
	2011	10,778	NA	7,873	NA	NA	137%
	2012	11,433	NA	6,070	NA	NA	188%
	2013	8,267	NA	5,668	NA	NA	146%
	2014	11,910	NA		NA		
	AVG.				NA	NA	129%

-continued-

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
FRE[2]	1999	163,342	NA	106,000	NA	NA	154%
(Fraser Early)	2000	118,058	NA	116,750	NA	NA	101%
	2001	122,333	NA	180,952	NA	NA	68%
	2002	170,232	NA	214,347	NA	NA	79%
	2003	202,363	NA	188,183	NA	NA	108%
	2004	185,450	NA	141,029	NA	NA	131%
	2005	151,591	NA	134,461	NA	NA	113%
	2006	141,517	NA	203,212	NA	NA	70%
	2007	196,060	NA	110,884	NA	NA	177%
	2008	128,347	NA	148,284	NA	NA	87%
	2009	153,593	NA	134,307	NA	NA	114%
	2010	144,214	NA	171,819	NA	NA	84%
	2011	174,183	NA	164,913	NA	NA	106%
	2012	175,729	NA	73,865	NA	NA	238%
	2013	83,719	NA	165,698	NA	NA	51%
	2014	176,008	NA		NA		
	AVG.				NA	NA	112%
FRL[1]	1999	144,316	82,650	189,400	175%	44%	76%
(Fraser Late)	2000	187,970	220,400	195,542	85%	113%	96%
	2001	141,745	131,800	141,196	108%	93%	100%
	2002	132,946	160,100	165,245	83%	97%	80%
	2003	127,144	114,780	313,929	111%	37%	41%
	2004	104,597	97,227	196,396	108%	50%	53%
	2005	121,315	108,061	124,704	112%	87%	97%
	2006	115,489	116,682	108,639	99%	107%	106%
	2007	122,402	107,311	105,385	114%	102%	116%
	2008	125,100	116,038	88,012	108%	132%	142%
	2009	119,892	91,391	87,365	131%	105%	137%
	2010	119,953	118,891	201,334	101%	59%	60%
	2011	353,646	284,604	178,224	124%	160%	198%
	2012	107,738	93,652	69,530	115%	135%	155%
	2013	70,178	73,584	103,422	95%	71%	68%
	2014	131,118	118,361		111%		
	AVG.				111%	93%	102%
NKS[1]	1999	1,068	NA	NA	NA	NA	NA
(Nooksack	2000	834	NA	NA	NA	NA	NA
Spring)	2001	982	NA	NA	NA	NA	NA
	2002	1,216	NA	NA	NA	NA	NA
	2003	1,301	NA	NA	NA	NA	NA
	2004	1,708	NA	NA	NA	NA	NA
	2005	1,549	NA	330	NA	NA	469%
	2006	583	677	630	86%	107%	93%
	2007	582	575	334	101%	172%	174%
	2008	371	378	351	98%	108%	106%
	2009	336	315	291	107%	108%	115%
	2010	374	390	390	96%	100%	96%
	2011	340	309	309	110%	100%	110%
	2012	271	243	1,236	112%	20%	22%
	2013	1,331	NA	NA	NA	NA	NA
	2014	1,361	1,273		107%		
	AVG.				102%	102%	148%

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Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
NKF[2]	1999	27,472	27,000	27,000	102%	100%	102%
(Nooksack/	2000	21,277	19,000	24,000	112%	79%	89%
Samish Fall	2001	33,974	36,450	36,450	93%	100%	93%
Fingerling)	2002	50,361	54,420	53,310	93%	102%	94%
	2003	48,259	45,750	45,750	105%	100%	105%
	2004	37,980	34,200	17,803	111%	192%	213%
	2005	19,808	19,523	14,841	101%	132%	133%
	2006	16,795	16,899	30,591	99%	55%	55%
	2007	22,086	18,834	23,485	117%	80%	94%
	2008	34,392	35,271	28,969	98%	122%	119%
	2009	26,072	23,014	21,548	113%	107%	121%
	2010	32,061	32,627	32,627	98%	100%	98%
	2011	39,144	37,902	37,975	81%	100%	103%
	2012	45,719	43,973	41,832	104%	105%	109%
	2013	50,065	48,257	42,068	104%	115%	119%
	2014	46,771	44,046		106%		
	AVG.				102%	106%	110%
SNO[2]	1999	5,823	5,600	5,600	104%	100%	104%
(Snohomish	2000	5,997	6,000	6,000	100%	100%	100%
Wild)	2001	5,876	5,760	5,760	102%	100%	102%
	2002	6,524	6,700	7,245	97%	92%	90%
	2003	6,033	5,450	5,450	111%	100%	111%
	2004	12,845	15,700	10,830	82%	145%	119%
	2005	10,161	NA	4,612	NA	NA	220%
	2006	7,824	8,729	8,438	90%	103%	93%
	2007	11,153	12,289	4,005	91%	307%	278%
	2008	6,103	6,541	8,490	93%	77%	72%
	2009	8,503	8,410	2,391	101%	352%	356%
	2010	8,050	9,858	9,858	82%	100%	82%
	2011	8,281	7,600	1,192	109%	638%	695%
	2012	2,506	2,775	5,355	90%	52%	47%
	2013	3,835	3,161	3,294	121%	96%	116%
	2014	3,416	3,327		103%		
	AVG.				98%	169%	172%
SKG[2]	1999	9,107	7,600	7,600	120%	100%	120%
(Skagit	2000	6,988	7,300	16,843	96%	43%	41%
Summer/	2001	9,064	9,183	14,005	99%	66%	65%
Fall Wild)	2002	12,635	13,455	19,807	94%	68%	64%
	2003	11,906	11,348	11,348	105%	100%	105%
	2004	18,761	20,359	21,757	92%	94%	86%
	2005	16,220	19,493	21,555	83%	90%	75%
	2006	22,402	21,811	21,246	103%	103%	105%
	2007	12,324	14,252	12,868	86%	111%	96%
	2008	18,598	18,302	14,035	102%	130%	133%
	2009	22,193	20,400	10,989	109%	186%	202%
	2010	9,894	11,853	7,926	83%	150%	125%
	2011	12,556	13,044	8,382	96%	156%	150%
	2012	10,020	8,337	8,337	120%	100%	120%
	2013	7,287	13,018	13,312	56%	98%	55%
	2014	15,221	17,874		85%		
	AVG.				96%	106%	103%

-continued-

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
PSN[2]	1999	28,800	28,400	28,400	101%	100%	101%
(Puget Sound	2000	15,364	10,000	20,050	154%	50%	77%
Natural)	2001	19,938	18,900	18,900	105%	100%	105%
	2002	20,008	19,801	21,477	101%	92%	93%
	2003	25,743	26,600	26,600	97%	100%	97%
	2004	24,616	23,200	33,333	106%	70%	74%
	2005	22,208	17,715	13,394	125%	132%	166%
	2006	20,182	21,301	23,555	95%	90%	86%
	2007	18,964	17,014	22,670	111%	75%	84%
	2008	23,118	21,100	23,193	110%	91%	100%
	2009	24,698	23,073	8,305	107%	278%	297%
	2010	14,734	15,128	19,491	97%	78%	76%
	2011	18,115	15,997	11,659	113%	137%	155%
	2012	14,396	13,860	17,594	104%	79%	82%
	2013	12,079	8,767	NA	138%	NA	NA
	2014	9,253	8,125		114%		
	AVG.				111%	105%	114%
STL[1]	1999	1,332	NA	1,098	NA	NA	121%
(Stillaguamish	2000	1,370	1,500	1,457	91%	91%	94%
Summer/Fall	2001	1,328	1,360	1,360	98%	98%	98%
Wild)	2002	1,372	1,449	1,588	95%	91%	86%
	2003	1,860	2,050	2,050	91%	207%	91%
	2004	1,795	NA	1,506	NA	NA	119%
	2005	1,377	NA	963	NA	NA	143%
	2006	1,113	1,169	1,254	95%	92%	89%
	2007	1,424	1,510	785	94%	192%	181%
	2008	689	637	1,800	108%	35%	38%
	2009	1,268	1,086	1,001	117%	108%	127%
	2010	898	817	817	110%	100%	110%
	2011	812	783	1,017	104%	77%	80%
	2012	569	395	1,534	144%	26%	37%
	2013	1,393	1,328	854	105%	156%	163%
	2014	1,000	850		118%		
	AVG.				105%	106%	105%
PSF+PSY[2]	1999	66,876	69,285	97,685	97%	71%	68%
(Puget Sound	2000	67,306	69,800	125,850	96%	55%	53%
Fingerling +	2001	102,899	105,955	124,855	97%	85%	82%
Yearling)	2002	114,889	124,608	92,234	92%	135%	125%
	2003	114,275	133,850	160,450	85%	83%	71%
	2004	127,902	132,300	130,922	97%	101%	98%
	2005	104,084	110,542	114,814	94%	96%	91%
	2006	107,292	113,486	141,591	95%	80%	76%
	2007	127,115	135,714	201,012	94%	68%	63%
	2008	166,071	159,200	161,118	104%	99%	103%
	2009	138,299	133,187	121,132	104%	110%	114%
	2010	138,238	140,074	181,842	99%	77%	76%
	2011	172,415	168,642	142,763	102%	118%	121%
	2012	153,462	153,989	195,888	100%	79%	78%
	2013	189,645	184,783	171,004	103%	108%	111%
	2014	191,307	188,039		102%		
	AVG.				97%	91%	89%

-continued-

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
WCN[2]	1999	42,129	43,780	27,945	96%	175%	151%
(Washington	2000	34,741	NA	27,290	NA	NA	127%
Coastal	2001	34,563	35,306	27,978	98%	99%	124%
Natural)	2002	33,902	33,489	33,489	101%	90%	101%
	2003	32,785	NA	25,479	NA	NA	129%
	2004	28,185	NA	29,715	NA	NA	95%
	2005	34,857	NA	37,255	NA	NA	94%
	2006	43,866	NA	34,150	NA	NA	128%
	2007	35,695	32,362	36,499	110%	89%	98%
	2008	32,187	26,923	39,246	120%	69%	82%
	2009	35,485	31,318	38,616	113%	81%	92%
	2010	39,215	NA	31,783	NA	NA	123%
	2011	32,205	NA	43,925	NA	NA	73%
	2012	45,153	41,500	27,812	109%	149%	162%
	2013	35,464	34,023	NA	104%	NA	NA
	2014	44,952	46,275		97%		
	AVG.				105%	107%	113%
WCH[2]	1999	35,239	42,752	8,964	82%	292%	393%
(Washington	2000	16,244	NA	14,447	NA	NA	112%
Coastal	2001	15,792	NA	22,859	NA	NA	69%
Hatchery)	2002	23,678	NA	21,351	NA	NA	111%
	2003	20,755	18,222	25,812	114%	44%	80%
	2004	28,900	NA	24,406	NA	NA	118%
	2005	28,626	NA	32,421	NA	NA	88%
	2006	36,950	NA	38,633	NA	NA	96%
	2007	41,801	40,497	35,880	103%	113%	117%
	2008	34,841	31,251	36,568	111%	85%	95%
	2009	41,756	42,595	36,908	98%	115%	113%
	2010	38,347	NA	35,638	NA	NA	108%
	2011	38,208	NA	38,810	NA	NA	98%
	2012	45,128	44,300	43,545	102%	102%	104%
	2013	33,629	25,304	NA	133%	NA	NA
	2014	40,866	42,907		95%		
	AVG.				105%	125%	122%
CWS[2]	1999	3,363	3,950	4,296	85%	92%	78%
(Cowlitz	2000	4,597	6,050	5,598	76%	108%	82%
Spring)	2001	3,891	4,849	5,508	80%	88%	71%
	2002	5,126	6,800	9,910	75%	69%	52%
	2003	8,821	11,700	22,691	75%	52%	39%
	2004	18,106	27,350	32,344	66%	85%	56%
	2005	16,291	24,850	15,700	66%	158%	104%
	2006	10,699	15,250	20,081	70%	76%	53%
	2007	8,946	10,600	11,959	84%	89%	75%
	2008	8,185	12,400	6,741	66%	184%	121%
	2009	5,122	14,400	7,183	36%	200%	71%
	2010	14,459	19,409	12,410	74%	156%	117%
	2011	8,427	10,602	6,264	79%	169%	135%
	2012	7,733	8,724	11,627	89%	75%	67%
	2013	9,348	7,727	12,147	121%	64%	77%
	2014	9,569	9,400		102%		
	AVG.				78%	111%	80%

-continued-

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
WSH[2] (Willamette Spring)	1999	46,187	49,875	55,801	93%	89%	83%
	2000	57,202	61,211	55,900	93%	110%	102%
	2001	59,207	59,600	84,000	99%	71%	70%
	2002	73,151	77,434	127,200	94%	61%	58%
	2003	108,530	112,521	129,700	96%	87%	84%
	2004	113,708	112,701	112,701	101%	100%	101%
	2005	105,111	122,280	59,500	86%	206%	177%
	2006	48,880	52,388	52,388	93%	100%	93%
	2007	44,542	61,071	44,509	73%	137%	100%
	2008	20,185	40,851	40,050	49%	102%	50%
	2009	44,161	41,205	38,110	107%	108%	116%
	2010	70,960	66,360	119,114	107%	56%	60%
	2011	117,375	109,600	84,603	107%	130%	139%
	2012	105,098	88,202	70,153	119%	126%	150%
	2013	58,436	65,982	53,062	89%	124%	110%
	2014	58,496	64,189		91%		
	AVG.				94%	107%	99%
SUM[2] (Columbia River Summer)	1999	21,651	20,900	22,276	104%	94%	97%
	2000	27,214	28,038	30,700	97%	91%	89%
	2001	27,029	24,500	54,521	110%	45%	50%
	2002	70,290	77,700	129,000	90%	60%	54%
	2003	97,280	87,600	83,084	111%	105%	117%
	2004	83,246	78,569	65,446	106%	120%	127%
	2005	66,190	62,400	60,060	106%	104%	110%
	2006	75,848	78,512	78,196	97%	100%	97%
	2007	56,948	45,555	37,200	125%	122%	153%
	2008	50,171	52,000	55,500	96%	94%	90%
	2009	68,114	70,700	53,878	96%	131%	126%
	2010	81,403	88,800	72,364	92%	123%	112%
	2011	89,000	91,900	80,574	97%	114%	110%
	2012	91,202	91,200	58,300	100%	156%	156%
	2013	72,042	73,500	67,570	98%	109%	107%
	2014	69,644	67,500		103%		
	AVG.				102%	105%	106%
BON+CWF[2] (Bonneville + Cowlitz Hatcheries)	1999	26,651	34,800	37,300	77%	93%	71%
	2000	17,095	23,700	27,000	72%	88%	63%
	2001	28,732	32,200	94,200	89%	34%	31%
	2002	100,401	137,600	156,400	73%	88%	64%
	2003	100,196	115,900	154,983	86%	75%	65%
	2004	64,696	77,100	108,300	84%	71%	60%
	2005	65,971	74,100	77,799	89%	95%	85%
	2006	49,173	55,800	58,317	88%	96%	84%
	2007	49,219	54,900	32,689	90%	168%	151%
	2008	58,557	59,000	60,268	99%	98%	97%
	2009	91,519	88,800	76,738	103%	116%	119%
	2010	95,581	90,600	103,055	105%	88%	93%
	2011	139,873	133,430	108,961	105%	122%	128%
	2012	132,629	126,999	84,798	104%	150%	156%
	2013	86,456	94,600	193,759	91%	49%	45%
	2014	219,085	110,000		199%		
	AVG.				97%	95%	87%

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Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
SPR[2]	1999	62,831	65,800	49,200	95%	134%	128%
(Spring Creek	2000	17,335	21,900	20,100	79%	109%	86%
Hatchery)	2001	56,089	56,600	125,000	99%	45%	45%
	2002	153,070	144,400	160,900	106%	90%	95%
	2003	89,116	96,900	180,600	92%	54%	49%
	2004	124,820	138,000	175,300	90%	79%	71%
	2005	92,021	114,100	93,145	81%	122%	99%
	2006	43,421	50,000	27,918	87%	179%	156%
	2007	19,421	21,800	14,583	89%	149%	133%
	2008	87,109	87,200	79,433	100%	110%	110%
	2009	46,652	59,300	48,970	79%	121%	95%
	2010	167,251	169,000	130,768	99%	129%	128%
	2011	105,900	116,400	70,577	91%	165%	150%
	2012	72,135	63,800	56,766	113%	112%	127%
	2013	36,276	38,000	86,569	95%	44%	42%
	2014	108,724	115,100		94%		
	AVG.				93%	110%	101%
URB[2]	1999	173,866	147,500	166,700	118%	88%	104%
(Columbia	2000	212,317	171,100	155,900	124%	110%	136%
Upriver	2001	150,973	127,200	232,500	119%	55%	65%
Bright)	2002	249,721	281,000	276,900	89%	101%	90%
	2003	246,890	280,400	373,200	88%	75%	66%
	2004	246,943	292,200	367,900	85%	79%	67%
	2005	318,535	352,200	268,744	90%	131%	119%
	2006	231,319	253,900	227,535	91%	112%	102%
	2007	168,594	182,400	114,491	92%	159%	147%
	2008	151,839	162,500	196,881	93%	83%	77%
	2009	259,415	259,900	212,047	100%	123%	122%
	2010	296,816	310,800	324,908	96%	96%	91%
	2011	388,138	398,200	322,234	97%	124%	120%
	2012	365,693	353,500	294,947	103%	120%	124%
	2013	437,422	432,500	784,117	101%	55%	56%
	2014	874,989	973,300		90%		
	AVG.				99%	101%	99%
LYF[1]	1999	542	NA	1,631	NA	NA	33%
(SNAke River	2000	1,243	NA	900	NA	NA	138%
Wild)	2001	733	734	2,652	100%	14%	28%
	2002	2,066	NA	2,185	NA	NA	95%
	2003	2,493	2,185	3,895	114%	56%	64%
	2004	4,323	3,725	4,000	116%	93%	108%
	2005	4,453	4,000	3,454	111%	116%	129%
	2006	8,285	3,500	2,743	237%	128%	302%
	2007	3,128	2,700	2,016	116%	134%	155%
	2008	2,718	2,534	1,598	107%	159%	170%
	2009	5,743	6,952	1,430	83%	486%	402%
	2010	2,609	2,610	9,583	100%	27%	27%
	2011	9,199	8,006	9,215	115%	87%	100%
	2012	10,401	8,683	11,115	120%	78%	94%
	2013	15,154	14,900	21,124	102%	71%	72%
	2014	31,106	31,642		98%		
	AVG.				117%	121%	128%

-continued-

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
MCB[2]	1999	37,997	38,300	50,100	99%	76%	76%
(Mid-Columbia	2000	53,460	50,600	36,800	106%	138%	145%
Bright)	2001	45,055	43,500	66,400	104%	66%	68%
	2002	102,085	96,200	108,300	106%	89%	94%
	2003	126,698	104,800	150,300	121%	70%	84%
	2004	94,895	90,400	117,600	105%	77%	81%
	2005	93,837	89,400	97,900	105%	91%	96%
	2006	90,780	88,300	80,471	103%	110%	113%
	2007	77,470	68,000	47,106	114%	144%	164%
	2008	59,481	54,000	75,489	110%	72%	79%
	2009	99,685	94,400	73,069	106%	129%	136%
	2010	82,454	72,600	78,937	114%	92%	104%
	2011	108,005	100,000	87,263	108%	115%	124%
	2012	100,809	90,800	61,850	111%	147%	163%
	2013	113,333	105,200	243,434	108%	43%	47%
	2014	377,357	360,100		105%		
	AVG.				108%	97%	105%
LRW[2]	1999	3,072	2,600	3,400	118%	76%	90%
(Lewis River	2000	4,053	3,500	10,200	116%	34%	40%
Wild)	2001	16,574	16,700	15,700	99%	106%	106%
	2002	18,910	18,200	24,900	104%	73%	76%
	2003	25,820	24,600	25,900	105%	95%	100%
	2004	24,590	24,100	21,200	102%	114%	116%
	2005	21,937	20,200	16,767	109%	120%	131%
	2006	19,818	16,600	17,896	119%	93%	111%
	2007	10,306	10,100	4,276	102%	236%	241%
	2008	4,479	3,800	7,120	118%	53%	63%
	2009	9,363	8,500	7,533	110%	113%	124%
	2010	11,034	9,700	10,862	114%	89%	102%
	2011	13,429	12,500	15,180	107%	82%	88%
	2012	17,806	16,200	13,926	110%	116%	128%
	2013	16,713	14,200	25,841	118%	55%	65%
	2014	42,365	34,200		124%		
	AVG.				111%	97%	105%
ORC[1]	1999	65,338	72,084	66,039	91%	109%	99%
(Oregon	2000	61,457	63,259	52,889	97%	120%	116%
Coastal)	2001	58,062	66,412	100,548	87%	66%	58%
	2002	73,055	73,914	149,649	99%	49%	49%
	2003	101,310	85,483	145,302	119%	59%	70%
	2004	135,716	131,904	129,579	103%	102%	105%
	2005	133,886	167,213	167,211	80%	100%	80%
	2006	125,550	136,373	112,797	92%	121%	111%
	2007	108,338	131,195	47,011	83%	279%	230%
	2008	53,417	70,101	39,615	76%	177%	135%
	2009	32,254	48,072	41,800	67%	115%	77%
	2010	51,234	59,806	64,799	86%	92%	79%
	2011	73,043	78,199	87,646	93%	89%	83%
	2012	82,789	80,749	87,540	103%	92%	95%
	2013	70,385	80,095	95,594	88%	84%	74%
	2014	81,984	109,029		75%		
	AVG.				90%	110%	97%

[1] Escapement, [2] Terminal Run; 3 Puget Sound run sizes for 2013 are preliminary postseason projections based on partial return information;
Note that model forecasts are from separate yearly calibrations, not a time series from the recent calibration

[1] Escapement, [2] Terminal Run; 3 Puget Sound run sizes for 2013 are preliminary postseason projections based on partial return information;
Note that model forecasts are from separate yearly calibrations, not a time series from the recent calibration

APPENDIX K: ISSUES WITH ERA AND MODEL CALIBRATION

Changes to data and analysis involved in the ERA

In 2014, a standardized fishery structure of 186 fisheries across all PST jurisdictions was implemented in the CAS database for the ERA. Formerly, the fishery structure used to create the Cfiles, a text file summarizing the estimated recoveries for an individual CWT, was agency-specific. Implementation of the expanded fishery strata required extensive review and modifications to the fishery definition tables in the CAS database. Three strata for escapement complete the output to the Cfiles for a total of 189 reporting strata. Two of the categories are new in 2014 and are described later.

The 189 Cfile reporting strata were mapped to a reduced total of 69 PSC reporting strata for output from the cohort analysis procedure. The 69 reporting strata (with escapement to the stream of origin being the 69th) was an increase from the previous 33 strata. The expanded reporting strata allowed for improved definition of stock-specific terminal fisheries, as well as country-specific designation of the true terminal fisheries for each CWT indicator. Previously, terminal freshwater fishery impacts were grouped under a single *terminal sport* or *terminal net* fishery regardless of whether the impacts occurred in the watershed of origin for the stock or in another watershed, or possibly even in the other country. Improved reporting strata for terminal fishery impacts will result in improved stock- and country-specific estimates of ISBM fishery impacts.

New and previously undefined strata for the estimated CWT recoveries were introduced in the list of 189 Cfile reporting strata and the 69 PSC reporting strata. These included Alaska Terminal Troll, and four categories for recoveries in freshwater areas outside of the watershed of origin (i.e., strays). The four stray categories are 1) any recovery in a freshwater fishery in Canada outside the terminal area defined for a stock, 2) any recovery in a freshwater fishery in the BC outside the terminal area defined for a stock, 3) any escapement recovery in Canada outside the stream of origin, and 4) any escapement recovery in the US outside the stream of origin. The new stray fishery and escapement reporting strata required modifications to the cohort analysis program. Modifications to the Visual Basic compute code were made so that the estimated recoveries in the stray categories were included in the estimation of the cohort sizes at age but were excluded from calculation of the true terminal fishery harvest rates. The structure of output files from the cohort analysis was modified to include the new stray categories to facilitate their use in subsequent calculations such as the ISBM indices. Formerly, if stray recoveries were included at all, and they occurred outside the other country of origin, they counted in the ISBM index of the home country.

Certain fishery strata were split into a finer scale. These included north of Falcon troll and south of Falcon troll (formerly WA/OR troll) and QCI AABM sport, North ISBM sport, Central sport and Johnston Strait sport (formerly NCBC sport). These finer scale strata will improve separation of AABM and ISBM fishery impacts and provide information of greater utility to agencies. The new fishery strata required modifications to programs that read output files from the cohort analysis procedure. An example is the program used to generate the mortality distribution tables to correctly report AABM and ISBM impacts.

Programs that process output from the cohort analysis of the CWT recoveries also required modification to read the new expanded list of 69 PSC reporting strata and to process the stray categories as required (e.g., the program used to generate the mortality distribution tables).

DFO carried out a review of escapement data and CWT estimates for the CWT indicators which resulted in updates, mostly minor, throughout the historical time series.

A cohort analysis was completed for two new CWT indicator stocks. Results have been added for the Stikine River (STI) transboundary stock and the Middle Shuswap River stock (MSH) in the Fraser River system. New terminal marine sport fishery definitions were introduced for all four upper Fraser CWT indicators, DOM, NIC, MSH and SHU.

A complete time series of CWT estimates, including model base period years, was developed for the South Thompson First Nations net fishery occurring in Little Shuswap Lake and Shuswap River.

Estimated CWT recoveries in the lower Fraser River First Nations net fishery were reviewed and updated for all years.

The entire escapement time series for the Atnarko River summer stock (ATN/ATS) was recalibrated to the recent series of annual mark–recapture estimates and the escapement CWTs re-estimated as well. Other modifications to the cohort analysis for this stock included defining CWTs sampled from the Bella Coola large mesh gillnet fishery as terminal for all years. Auxiliary fishery files were generated containing estimates of CWTs for all terminal fisheries (marine and freshwater) for those years where either CWT sampling had not occurred or catch estimates had not been made.

DFO introduced new catch region locations (with new recovery location codes) for the Taaq-wihak Economic Opportunity fishery, a First Nations hook-and-line fishery off the west coast of Vancouver Island.

Changes to data inputs to the Chinook Model calibration

Changes to escapement or terminal run data in the FCS (forecast) file:

- FRL – entire escapement time series outside of the base period from 1985 onwards was updated
- RBT – entire terminal run time series from 1979 onwards was reviewed and updated
- GSQ – escapement from 2008 onwards was updated
- GST – escapement time series from 2010 onwards was updated
- PSF – entire terminal run time series was updated
- LYF – escapement time series from 2005 onwards was updated

Stock-specific FP values were calculated and entered into the Northern Troll FPA file to represent changes in impacts that have occurred given the DFO management objective of limiting impacts on WCVI-origin Chinook salmon since 2000.

Three variants of the forecast for the WCVI stock aggregate were provided by Diana Dobson (DFO) this year in addition to the standard forecast. The standard forecast has been based on a

fixed set of fishery scalars relative to fishery impacts observed in the 1979–1981 base period, with the expansion to the total aggregate based on high quality terminal run data available for the Somass River stock, the watershed-of-origin for the Robertson Creek CWT indicator. The decision was made by the CTC to use a variant forecast, which was based on fishery scalars reflecting recent exploitation rates, with separate expansions for each of the three large hatchery systems and the natural systems, to obtain the total aggregate forecast. The variant forecast was almost twice the magnitude of the standard forecast (216,728 vs 111,550 for the aggregate terminal return) but was considered to better represent the trends in abundance of the contributing stocks.

The agency forecast for 2013 was used as input in the model forecast (.FCS) file in place of the observed return in 2013 for some stocks. The 2013 return was not available in time for the model calibration for three of the stocks (PSN, WCH and WCN) but was available for three others (CWS, SNO and STL). The 2013 forecast and observed return for the latter stocks is as follows:

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CWS (forecast for 2013 = 7727; 2013 observed return = 12147)
SNO (forecast for 2013 = 3161; 2013 observed return = 3294)
STL (forecast for 2013 = 1328; 2013 observed return = 854)
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APPENDIX L: PROGRESS REPORTS FOR INDIVIDUAL PROJECTS FUNDED IN 2013 UNDER THE CODED WIRE TAG IMPROVEMENT PROGRAM

LIST OF APPENDIX L TABLES

2013 Canada Project Reporting

Canadian FY 2013 was the last year of funding for Canadian coded wire tag implementation team (CWTIT) projects. Summaries for projects conducted in 2013 are below.

Appendix L 1. Canadian coded wire tag (CWT) project expenditures for 2013–2014, approved in February, 2013.

Party	Project Category	TR25 Issue	Project Title	Cost
Can.	Increased CWT marking of CN indicators	2	Incremental tagging of 13 Indicator Stocks (Robertson Creek, Cowichan, Big Qualicum, Quinsam, Lower Shuswap, Nicola, Chilliwack, Harrison, Taku, Stikine, Kitsumkalum, Atnarko, and Philips)[1]	$347,600
Can.	Increased deadpitch CWT recovery effort, all indicators	5	Increased effort in CWT recovery in indicator escapement programs (Quinsam, Cowichan, Big Qualicum, Harrison, Nicola, and Atnarko) [1]	$64,500
Can.	Uncertainty in estimates of escapement or terminal fishery catch	1, 6	Atnarko Chinook CWT Indicator Stock[1]	$110,000
Can.	Agency staffing (Programmer, Catch QA/QC Analyst, CWT Recovery Coordinator)	4, 6, 7, 8, 9, 10, 11, 13, 14,15,17, 18	Regional CWT Data System Programming, Regional CWT and Catch Estimation QA/QC, Regional Sport and First Nations Fishery CWT Recovery Coordination, and Salmonid Enhancement Database Improvements[1]	$325,000
Can.	Increased head recovery costs	2, 4, 5, 7	CWT Head Lab Processing and Data Management[1]	$200,000
Can.	Low sample rates in terminal fisheries, sport and First Nations CWT recovery improvements	4, 7, 9, 10, 11	Regional Commercial, Sport and First Nations Fishery CWT Recovery Improvements[1]	$277,900
Can.	Low sample rates in terminal fisheries, First Nations fishery CWT recovery improvements	4, 10	Improvements in CWT Recovery in Terminal First Nations Fisheries (Fraser River and Bella Coola) [1]	$85,000
Can.	Low sample rates in terminal fisheries, First Nations fishery CWT recovery improvements	4, 10	Improvements in Catch Estimates and CWT Recovery in Terminal Recreational Fisheries[1]	$10,000
Can.	Uncertainty in catch estimates and CWT expansions, data management	10	MRP Archive Data Recovery[1]	$20,000
Can.	Low sample rates in terminal and highly mixed stock fisheries	4, 7	Equipment Purchase	$60,000
			Canada Total	**$1,500,000**

[1] Multiyear projects.

Project title: Increased Coded Wire Tag (CWT) Marking of 9 Chinook Indicators
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $277,600
Total CWTIT funding approved to date (if funded previously): $1,385,100
Continued CWTIT Funding Needed (yes, no, maybe): Yes
Objectives and Relationship to PSC Technical Report 25: Issue 2 (Determination of tagging levels)

Project Description, Accomplishments, Results and Deliverables: This project involved increasing CWT application and release levels on nine Chinook indicator stocks in British Columbia in order to meet precision objectives in the estimation of fishery-specific exploitation rates. Tagging levels were set based on recent survival and fishery sampling rates in order to achieve stated precision objectives. The indicator stocks that received increased tagging through this project were:

1. Robertson Creek
2. Cowichan River
3. Big Qualicum River
4. Quinsam River
5. Chilliwack River
6. Harrison River
7. Nicola River
8. Lower Shuswap River
9. Atnarko River
10. Kitsumkalum

Increased tagging was initiated on selected stocks prior to brood year 2009 (e.g., Quinsam) through other external funding sources, but comprehensive increases in tagging levels began across all stocks in brood year 2009.

To date, CWT release targets have been met for all stocks in all brood years, save for the Cowichan River in brood years 2009, 2010, and 2013 when poor escapements or flooding prevented collection of adequate broodstock for full release targets. Infrastructure improvements at DFO hatcheries that were funded through the first year of CWTIT continue to allow expanded tagging to be completed on an annual basis. Returns and catches of marked three and four-year-old adult Chinook salmon to Salmonid Enhancement Program hatcheries in 2012 and 2013 from the first three years of expanded tagging have been strong, indicating that increased CWT recoveries are likely to be observed in future years as the releases from the expanded marking continue to mature and enter the various fishery and escapement strata.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Benefits to the CWT program include increased CWT recoveries in all fishery and escapement strata for the nine Chinook indicators, which will allow for increased precision in the estimation of exploitation rates in the various fishery strata.

Success: This project has been successful. The increase in tags applied has resulted in direct benefits in the precision of estimates of catch and escapement. Continued funding will be required to maintain current marking levels, otherwise marking will return to pre-2009 levels.

Project title: Taku Chinook Fishery Monitoring and Coded Wire Tag (CWT) Application
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $30,000
Total CWTIT funding approved to date (if funded previously): $120,000
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25 Issue 2 (Determination of tagging levels)

Project Description, Accomplishments, Results and Deliverables: This project funded the application of CWTs to wild outmigrating Taku Chinook salmon juveniles and sampling and recovery of CWTs from a directed Chinook salmon fishery established in 2005. In 2013, 5,500 wild smolts were tagged but there was no directed fishery to sample.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Prior to CWTIT funds being applied to this program the fishery was not sampled. Lack of information on the fishery impacts reduced DFO's ability to evaluate exploitation rates and refine the Taku Chinook salmon escapement goal. Over the period of CWT Improvement funding, fishery sampling rates of 20–70% have been achieved. This is the sole funding source for tagging wild Taku Chinook salmon. Without continued support, emigrants will not be tagged and the fishery will not be sampled—impacting PST requirements to monitor the fishery and determine exploitation rates.

Success: Yes, however additional data will be available when C tagged fish return.

Project title: Stikine River Chinook Coded Wire Tag (CWT) Application and Tag Recovery
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $30,000
Total CWTIT funding approved to date: $120,000
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Issue 2 (Determination of tagging levels)

Project Description, Accomplishments, Results and Deliverables: The objective of the project was to increase the CWT tagging and recovery levels of Stikine River Chinook salmon smolts. The specific tagging objective was an additional 35,000 Chinook salmon smolts annually. This project also funded sampling of adult returns to the Stikine River for CWTs.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: In 2013, a record 48,500 wild Stikine Chinook salmon smolts (including a key Little Tahltan stock grouping) were tagged. In addition, approximately 2% were measured for weight and length. Since the application of CWT Improvement funds, approximately 75% of the inriver fishery catch and approximately 30% of the US marine fishery catch were sampled for CWTs. Prior to CWT Improvement funding, sampling rates on Stikine River Chinook salmon were in the order of 20%.

Without continued support, CWT marking and fishery sampling rates will be significantly reduced, compromising the reliability of the CWT statistics (low precision in the CWT estimation) and stock specific estimates. Since the sunset of the CWTIT program in 2014, sampling rates declined to 30%. Some escapement monitoring continues (i.e., at the Little Tahltan weir and Verrett River spawning grounds).

Loss of CWT improvement resources impacts PST requirements to monitor fisheries (i.e., reduced CWTs in US fisheries to determine exploitation rates and lack of information to evaluate/refine Chinook salmon escapement goal).

Success: Yes the project has been a success; however, additional data will be available when existing tagged CWT fish return.

Project title: 2012–2013 Phillips River Chinook escapement estimation and increased Coded Wire Tag (CWT) application
Program Agency: Fisheries and Ocean Canada (DFO)
Approved funding for this cycle: $10,000 + 150,000 CWTs
Total CWTIT funding approved to date: $48,000
Continued CWTIT Funding Needed: Yes. Based on the recent success and increased CWT tag releases it will be key to maintain the program to ensure the recoveries of those tags in the escapement in future years.
Objectives and Relationship to PSC Technical Report 25: Issue 2 (Increased CWT marking of indicators), Issue 6 (Uncertainty in estimates of escapement or terminal fishery catch)

Project Description, Accomplishments, Results and Deliverables: There were two main objectives of this project:

1. Increase the number of CWT tag releases to 150,000 for this population.
2. Develop a mark–recapture program on a Mainland Inlet Chinook salmon population to provide accurate and precise estimates of tagged and untagged Chinook salmon escapement.

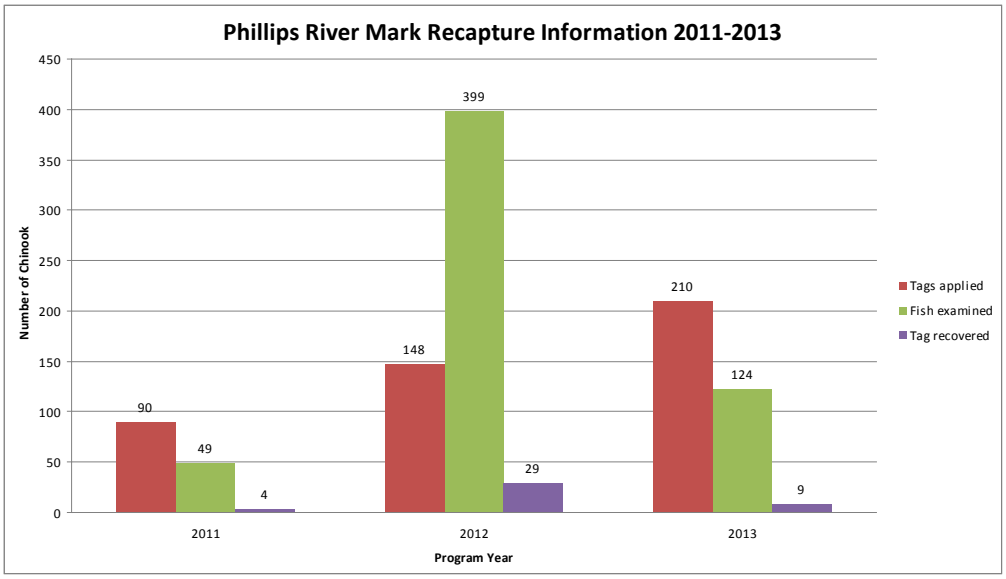
This project involved a two-stage mark–recapture of adult Chinook salmon returning to the Phillips River. Tags were applied via typical broodstock collection events and other seining in pools in the lower river and in pools above the lake in the upper river. Deadpitch activities were conducted throughout the watershed.

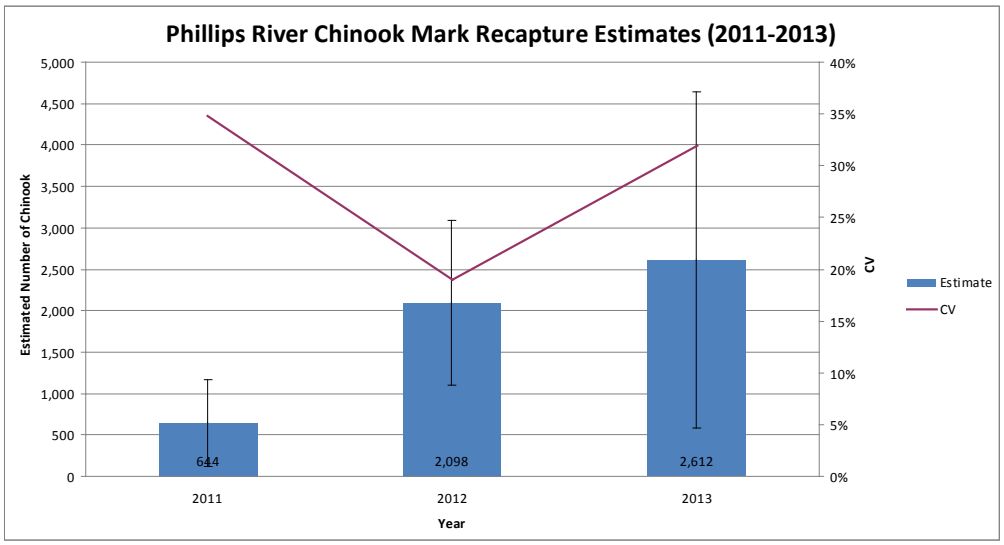
There was a significant improvement in the number of tags applied in 2013 relative to 2012; however, low river flows and increased bear activity resulted in a decrease in carcass recovery and precision for the 2013 estimate. It was also determined that the clipped contribution to the return was estimated at 22.6% (11.6% in 2012).

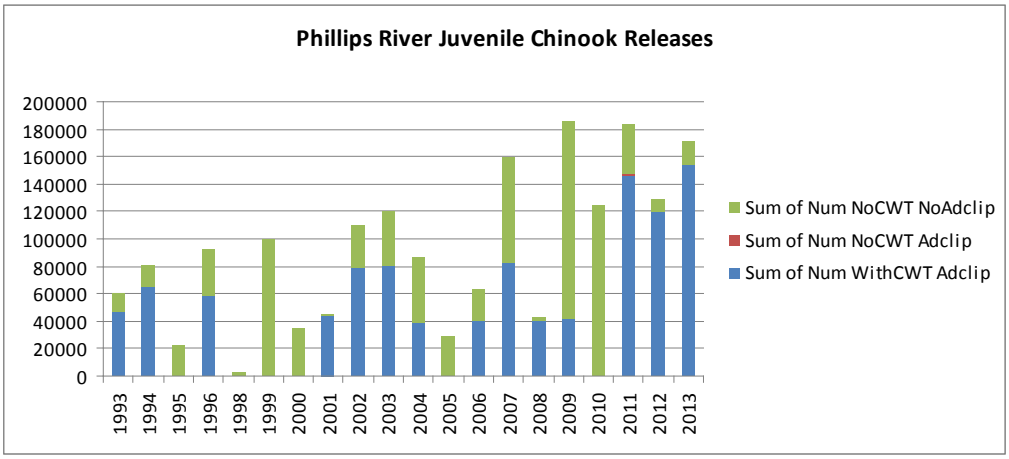
Escapement estimates have shown variable precision over the last three years of the study and brood collection in 2013 will result in the 150,000 CWT application target being met this spring for the 2014 release.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Benefits to the CWT program include the following:

1. The development of a low cost indicator program for a Chinook salmon population in the poorly monitored Mainland Inlet Area of the Southern BC coast appears feasible.
2. Over the duration of this project it has been demonstrated that we can achieve a precise estimate of Chinook salmon escapement to the Phillips River as well as clipped contribution.
3. This project has demonstrated that an increase in CWT tag releases to the level of 150,000 is achievable in this remote location.


Phillips River Mark Recapture Information 2011-2013
Number of Chinook
450
400
350
300
250
200
150
100
50
0
90
49
4
148
399
29
210
124
9
2011
2012
2013
Program Year
Tags applied
Fish examined
Tag recovered


Phillips River Chinook Mark Recapture Estimates (2011-2013)
Estimated Number of Chinook
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
644
2,098
2,612
40%
35%
30%
25%
20%
15%
10%
5%
0%
CV
2011
2012
2013
Year
Estimate
CV


Phillips River Juvenile Chinook Releases
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
1993
1994
1995
1996
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sum of Num NoCWT NoAdclip
Sum of Num NoCWT Adclip
Sum of Num WithCWT Adclip

Project title: Regional Coded Wire Tag (CWT) Data System Programming
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $90,000
Total CWTIT funding approved to date: $440,000
Continued CWTIT Funding Needed: No
Objectives and Relationship to PSC Technical Report 25: Issues 13, 14, 15, 17, 18 (Timeliness of reporting, incomplete/no exchange of CWT data, Inter/intra agency coordination, Updating CWT data difficulties, Inadequate CWT validation)

Project Description, Accomplishments, Results and Deliverables: This project involved hiring a programmer/analyst to provide systems analysis, design and programming support to the DFO CWT program system—the Mark Recovery Program (MRP). Prior to CWTIT funding, DFO had 1 full-time programmer/analyst performing MRP development and support. This was inadequate to keep up with technology and CWT program change requirements. The objectives for the 5-year funding period were to re-engineer the DFO system using current database and web development software to develop new programs to accomplish the following:

1. Improve data through improvements to validation, corrections to data, and corrections to historical algorithms.
2. Improve data management through new data entry interfaces to the central database.
3. Improve access to information for DFO users and exports to the Regional Mark Information Centre.
4. Improve interfaces with DFO hatcheries system, catch monitoring system, and escapement systems.
5. Perform system modifications for new data sources from other CWTIT projects.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: This is the fifth and final year of funding an additional programming position to support improvements to the MRP system. Prior to CWTIT funding, DFO had a significant backlog of programming issues and was not able to meet the bilateral reporting requirements effectively, as the MRP system was a legacy Fortran system originally developed over 25 years ago. With this additional resource, DFO made significant progress in reviewing old algorithms, converting the legacy system using current technology, and developing new interfaces to improve access to the information within DFO. This has allowed DFO to meet bilateral exchange deadlines and to make improvements to data quality. Because of the rewrite of the system, it will also be more cost effective for DFO to maintain and respond to change requirements in the future. While the majority of new development work is completed, there remain opportunities to improve the efficiencies of the Canadian CWT program such as developing the capacity to digitally scan CWTs and data collection forms into an indexed archive as part of the data entry process, and integrate technology such as data logging using hand-held devices or netbooks for the collection of sampling data.

Project title: Regional Sport and First Nations Fishery Coded Wire Tag (CWT) Program Coordination
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $85,000
Total CWTIT funding approved to date: $411,400
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Issues 4, 7, 9, 10, 11 (Low sample rates in terminal fisheries, Low sample rates in highly mixed stock fisheries, Nonrepresentative sampling, Incomplete coverage of fisheries or escapements, Voluntary sport fishery sampling program)

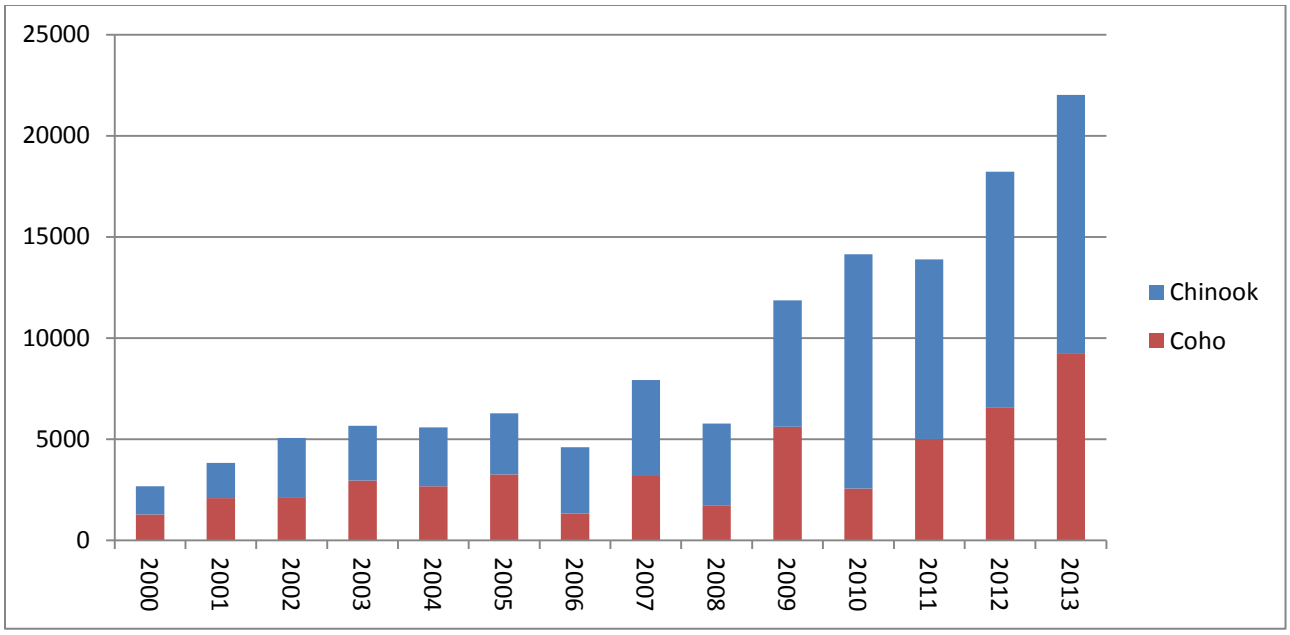
Project Description, Accomplishments, Results and Deliverables: This project involved hiring a senior fisheries technician to implement fisheries sampling improvements within DFO recreational and First Nations fisheries. Objectives are listed below.

1. Develop protocols and implement sampling programs to adequately represent First Nations fisheries.
2. Develop and implement program improvements to increase participation in the recreational voluntary head recovery program to increase sample rates representatively.
3. Provide technical support including design of standard operating protocols and/or infrastructure; review, implementation, and QA/QC for all aspects of CWT sampling within recreational and First Nations fisheries.
4. Promote and facilitate delivery of improvements to catch monitoring and sampling participation through communications or promotional materials.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: This is the fifth and final year of funding a fisheries technician position to make improvements to DFO sampling of recreational and First Nations fisheries. Prior to CWTIT funding, DFO had one CWT program fisheries technician to support sampling of all DFO fisheries (commercial, recreational, test and First Nations). With the addition of a second fisheries technician, DFO has made significant progress in improving sampling across all CWT fishery sampling programs in terminal areas and in mixed stock fisheries. With the increased workload associated with the oversight and delivery of recreational and First Nations sampling programs, continued funding in future years is essential to ensure that gains achieved are maintained across all DFO fishery sampling programs.

Terminal Native economic opportunity fishery sampling targets were met for Robertson Creek (Nuu-chah-nulth), BC Interior/Kamloops Lake (Secwepemc Fisheries Commision and Siska Traditions Society), and the West Coast Vancouver Island mixed stock fishery (T'aaq-wiihak). Terminal Native food, social and ceremonial fisheries sampling targets were met for Atnarko River and Robertson Creek (Hupacasalth and Tseshaht). Sampling programs were introduced and progress towards sampling targets has been made for Cowichan River, Lower Shuswap River and Harrison River indicator stocks.

Recreational Improvements can be generally viewed by reviewing the impressive increases in recreational samples since this project commenced in 2009 compared to historical results.



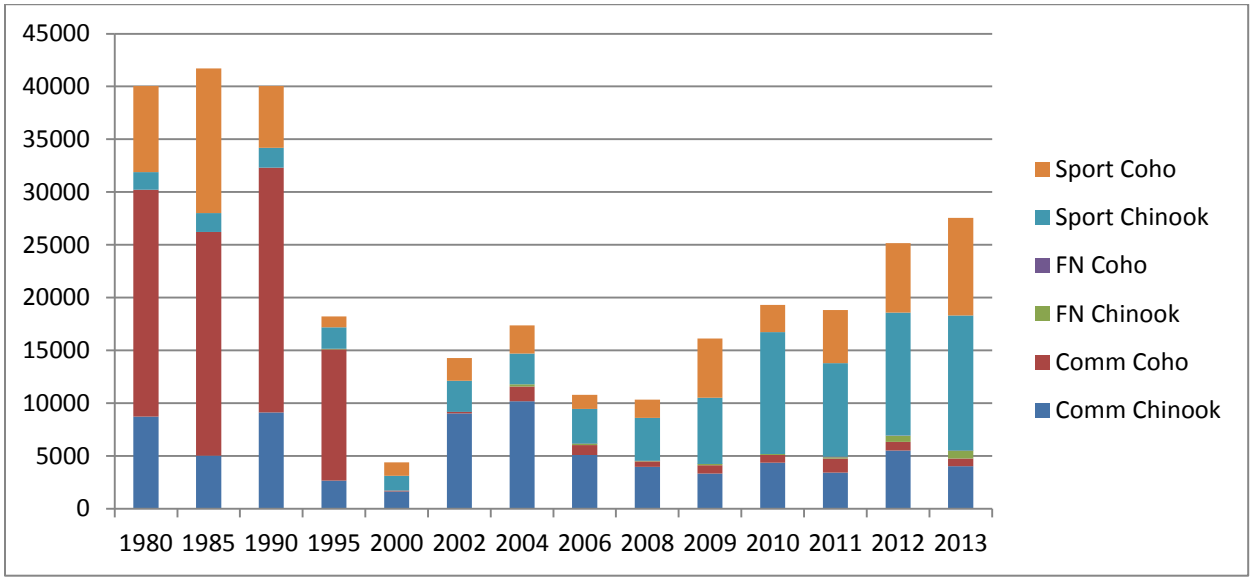
Project title: Coded Wire Tag (CWT) Head Lab Processing and Data Management
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $200,000
Total CWTIT funding approved to date: $507,000
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Issues 2, 4, 5, 7, 9, 10, 11, 12 (Tagging levels, Low sample rates in escapements, Low sample rates in terminal fisheries, Low sample rates in highly mixed stock fisheries, Nonrepresentative sampling, Incomplete coverage of fisheries or escapements, Voluntary sport fishery sampling program, Sampling to facilitate mark selective fishery evaluations)

Project Description, Accomplishments, Results and Deliverables: This project was required to pay for increased cost to ship, dissect, and perform data entry for increased quantities of head recoveries from DFO commercial, test, recreational and First Nations fisheries and escapement sampling programs. Funding was also used to develop new processes to improve efficiencies in the head lab such as introducing barcoded head labels and reviewing and modifying standard operating procedures. Increases in quantities of heads are attributed to the implementation of other CWT improvement projects including the following:

1. Increased tag rates in fisheries as a result of bilateral increases to tagging (Issues 1–3).
2. Increased escapement CWT recovery efforts (Issue 5).
3. Increased sampling rates, in commercial, test or research fisheries (Issue 4, 7).
4. Introduction of First Nations sampling programs (Issue 4, 7, 9).
5. Improvements to Voluntary Sport Head Recovery Program, resulting in increased sampling rates (Issue 4, 7, 11).
6. Introduction of sampling of freezer troll vessels in BC fisheries to improve representative sampling in this fishery (Issue 11).
7. Sampling of unmarked Chinook salmon (double index tagged fish) to support assessment of mark selective fisheries (Issue 12).

Head Dissections of Commercial, First Nations and Sport samples in DFO Head Lab.

	1980	1985	1990	1995	2000	2002	2004	2006	2008	2009	2010	2011	2012	2013
Commercial	30226	26226	32301	15095	1734	9173	11595	6033	4486	4132	5094	4776	6348	4757
Chinook	8727	5048	9129	2660	1631	9025	10172	5087	3958	3335	4363	3426	5506	4038
Coho	21499	21178	23172	12435	103	148	1423	946	528	797	731	1350	842	719
First Nations				68		27	197	147	66	125	79	152	608	769
Chinook				68		24	197	146	60	123	79	110	570	768
Coho						3		1	6	2		42	38	1
Sport	9824	15494	7731	3061	2671	5071	5584	4604	5782	11869	14127	13888	18167	22026
Chinook	1658	1797	1897	2023	1384	2938	2911	3270	4073	6259	11563	8868	11609	12776
Coho	8166	13697	5834	1038	1287	2133	2673	1334	1709	5610	2564	5020	6558	9250
Grand Total	40050	41720	40032	18224	4405	14271	17376	10784	10334	16126	19300	18816	25123	27552



Improvements can be generally viewed by reviewing the impressive increases in head recoveries since this project commenced in 2009 compared to historical results. Note that this table and graph does not include escapement samples (approx. 8,000 from 2009 to 2011, approx. 10,000 in 2012, approx. 14,000 in 2013).

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: This project ensures that funds and effort spent to complete other projects that increase tag recoveries of indicator stocks result in timely CWT data to support analysis. With increased head recoveries across all DFO CWT recovery programs, continued funding will be required in future years. This project also resulted in significant gains relative to the cost and throughput of samples in the DFO head lab to dissect, read and perform data entry. The cost per sample was reduced to between $4 and $6/sample (depending on source of sample), including overhead for lab space and equipment.

Project title: Regional Commercial, Sport and First Nations Fishery Coded Wire Tag (CWT) Recovery Improvements
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $277,900
Total CWTIT funding approved to date: $862,900
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Issues 4, 7, 9, 10, 11, 12 (Low sample rates in terminal fisheries, Low sample rates in highly mixed stock fisheries, Nonrepresentative sampling, Incomplete coverage of fisheries or escapements, Voluntary sport fishery sampling program, Sampling to facilitate mark selective fishery evaluations)

Project Description, Accomplishments, Results and Deliverables: This project is a portfolio of many projects being delivered throughout DFO fisheries to make strategic improvements to CWT sampling programs and CWT data. The focus of these projects is to make improvements that can be delivered during the increased CWTIT funding period to provide a legacy of improvements that can be sustained in the future, and to maintain sampling rates at required levels. Projects include the following:

1. Expand equipment to facilitate increases in recreational and First Nations sampling (i.e., freezers, freezer boxes, closed containers for brine solution).
2. Develop a communication strategy with recreational and First Nations fishers— participations in meetings, public relations events, etc.; and develop and distribute of communication or promotional materials.
3. Onsite review of existing sampling programs in all fisheries sectors and introduction of QA/QC through ongoing audits.
4. Review, development, and production of improved data collection materials (forms, labels, sample kits).
5. Introduction of sampling of freezer troll vessels in BC fisheries to improve representative sampling in this fishery.
6. Replacement, repairs, and upgrades to sampling infrastructure requirements such as electronic sampling equipment or sampling tables for commercial fisheries
7. Deploy staff to increase service levels for pick-ups of heads from recreational and First Nations fisheries and maintain commercial fishery sample rates at required levels.

Improvements can be generally viewed by reviewing the impressive increases in head recoveries shown since this project commenced in 2009 in the tables provided under the DFO CWT Head Lab Processing and Data Management project (previous project summary).

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: This project has made improvements in the quality and quantity of CWT data that is available for use in analysis across all DFO fishery sectors. Ongoing funding is required to sustain improvements to meet required sample rates and for life-cycle replacement of equipment. Specific Improvements to sport fishery sample rates follow.

Sport Fishery Sample Rates	2000–2004 period	2010–2012 period
Haida Gwaii/Queen Charlottes	13%	46%
West Coast Vancouver Island	13%	24%
Georgia Strait North	31%	37%
Georgia Strait South	23%	27%
Juan de Fuca	20%	22%

Project title: Salmonid Enhancement Program Coded Wire Tag (CWT) Head Data Coordinator/Archival CWT Database Review
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $75,000
Total CWTIT funding approved to date (if funded previously): $142,000
Continued CWTIT Funding Needed (yes, no, maybe): No
Objectives and Relationship to PSC Technical Report 25: Issues 10, 13, 15 (Intra-agency coordination, Timeliness of reporting, Uncertainty in catch estimates and CWT expansions, Data management)

Project Description, Accomplishments, Results and Deliverables: This project funded the staffing of a term biologist position in the Regional Salmonid Enhancement Program sector within DFO for 12 months. 2013/2014 was the second year for this project, which had two main objectives:

1. Develop a formal set of *Best Practices* for the collection, transfer and management of CWT heads and data at all escapement projects. This includes serving as a Regional Head Data Coordinator for all escapement programs on an in-season basis.
2. Review archival escapement data from DFO enhancement programs to ensure standardized analytical techniques and data verification procedures have been employed.

Through the Regional Head Data coordinator role, this project served to provide a single point of contact to lead the annual program to collect CWT heads and deliver them to the dissection lab in a timely manner. In the course of this project, a thorough review of the current data and head transfer program was conducted, efficiencies were identified, and a complete set of *Best Practices* was developed with the goal of improving data quality and delivery time, reducing costs at the dissection lab, and streamlining operations for current DFO staff. The development of *Best Practices* in the first year of this project led to ongoing implementation work in Year 2, and will result in lasting efficiencies through ongoing implementation at all escapement projects and at the head dissection lab.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Improvements in CWT data sharing from escapement projects directly benefit the CWT program by ensuring escapement data from the most recent return year continues to be made available in time for annual CTC CWT analysis in late winter. In addition to ensuring that complete and accurate datasets are provided for analysis, improvements made in the delivery and CWT dissection system serve to reduce costs in future years for processing of escapement heads. These savings will help to offset pressures from increased CWT recoveries expected as an outcome of the CWTI program, and will provide lasting improvements in the quality and timeliness of CWT reporting.

Success: Overall this project has been successful. Significant progress has been made on both key objectives in this project, with completion and implementation of the Best Practices. Due to a staffing change midway through Year 2 of this project, there were challenges in maintaining ongoing CWT Program support for a short period in 2013. The position was filled shortly afterwards, but there were impacts on the deliverables for this project, specifically objective 2. It was recognized at the beginning of this project that review of all CTC indicator data would not likely be completed in the first year of this project. The staffing change resulted in a focus on the highest priority objective and a reduction in progress on objective 2.

Project title: Mark Recovery Program (MRP) Archive Data Recovery Project
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $20,000
Total CWTIT funding approved to date: $40,000
Continued CWTIT Funding Needed: No
Objectives and Relationship to PSC Technical Report 25: Issues 13, 14 (Timeliness of reporting, Incomplete/no exchange of CWT data)

Project Description, Accomplishments, Results and Deliverables: This project involved hiring part-time staff to review over 40 years of archived material associated with the DFO CWT program. The objectives for the funding were as follows:

1. Create an inventory of archived material.
    a. Review and classify.
    b. Identify gaps in DFO CWT information system vs source documents or CWTs.
    c. Identify data recovery projects.
2. Develop a strategy for retention. Options include data recovery/data entry, digital conversion of paper forms, archive with retention requirements established, redistribute to appropriate existing DFO staff, or destroy.
3. Perform priority data recovery, digital archival of all historical paper forms.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: This project resulted in digitization of all historical sources of data (such as recoveries from commercial, sport, test, research, or First Nations fisheries) and identification of data or fields on data records that have never been entered into the CWT system. This project also resulted in the development of new protocols for digital management of DFO CWT program records which will improve access to data for QA/QC in the future. Finally, the reduction of archived material has eliminated future expenditures by DFO for the management of large quantities of archive material and allow for these funds to be spent on CWT program delivery.

Project title: Operational Support for Recreational Coded Wire Tag (CWT) sampling projects
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $25,000
Total CWTIT funding approved to date: $94,000
Continued CWTIT Funding Needed: No
Objectives and Relationship to PSC Technical Report 25: Issues 4, 7, 9, 10, 11 (Low sample rates in terminal fisheries, Low sample rates in highly mixed stock fisheries, Nonrepresentative sampling, Incomplete coverage of fisheries or escapements, Voluntary sport fishery sampling program)

Project Description, Accomplishments, Results and Deliverables: This project involved hiring a seasonal junior fisheries technician to support the implementation of fisheries sampling improvements within DFO recreational fisheries. This position was supervised by the senior fisheries technician (*Regional Sport and First Nations Fishery CWT Recovery Coordination* project). Objectives were as follows:

1. Perform audit inspections and recommend improvements to Voluntary Sport Head Recovery Program Depots in Southern BC.

2. Implement specific recreational fishery sampling improvement projects in Southern BC to adequately represent recreational fisheries.
3. Perform public relations and communication with Voluntary Sport Head Recovery Program Depots or fishers in Southern BC.
4. Perform QA/QC to improve recreational sampling data.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: This is the third year of funding seasonal fisheries technicians to make improvements to DFO sampling of recreational fisheries. Prior to CWTIT funding, DFO had one CWT program fisheries technician to support sampling of all DFO fisheries. With the addition of a second fisheries technician and seasonal staff, DFO has made significant progress in improving sampling through the voluntary sport head recovery program.

Project Title: Campbell/Quinsam Chinook Mark–Recapture Improvements (assess bias in random mixing of carcass mark–recapture)
Project agency: Fisheries and Ocean Canada
Approved funding for this cycle: $7,500
Total CWTIT funding approved to date: $37,500
Objectives and Relationship to PSC Technical Report 25: Issue 5 (Low sample rates in escapement)

Project Description, Accomplishments, Results and Deliverables: CWT improvement funding was used to increase the stream area sampled for CWTs, specifically the Second Island Channel in the Campbell River (2009–2013), allowing more access to carcasses in deep pools. In addition, this project assessed the assumption in a carcass mark–recapture that the tagged and untagged carcasses mix randomly in the population. Two methods were employed and compared.

1. Carcasses were tagged and placed back where they were found (random mixing unlikely unless there was some sort of flood event after that placement).
2. Carcasses were marked and then placed into the flow of the river.

Population estimates derived using the old method were 1–16% less than new method except in 2011 (16% more). In recent years we had three very dramatically different flow conditions in order to evaluate the various release methods. Additional sampling effort and expanded spatial coverage contributed an increase in CWT recoveries on the Campbell River with only a slight reduction in sampling rate on the Quinsam River. The old method was discontinued after 2012 and the new method was been adopted. In 2013, the resources were directed at additional spatial and temporal sampling effort.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Benefits to the CWT program include an improvement in the accuracy and precision of the mark–recapture estimates of escapement, and increased sampling effort and spatial coverage on the more challenging component of the system resulted in higher CWT recoveries on the Campbell River.

Project Title: Improved Coded Wire Tag (CWT) Recovery, Harrison River Indicator Stock Program
Project agency: DFO
Approved funding for this cycle: $16,000
Total CWTIT funding approved to date: $80,000
Objectives and Relationship to PSC Technical Report 25: Issue 5 (Sampling rates in escapement)

Project Description, Accomplishments, Results and Deliverables: This project provided funding for additional effort to expand marking and recovery effort during Harrison River Chinook salmon mark–recapture study, thus increasing the sampling rate and precision of the mark–recapture estimates.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: It is difficult to quantitatively assess success due to the annually variable rates of recovery resulting from different escapements of multiple species and annually variable environmental conditions. Sampling rates are dependent on the number of carcasses present, the prevalence of carcasses of other species, fluctuating water levels, predators, and a host of other factors. Carcass sampling rates on the Harrison River tend to be hindered by high water levels and large escapements of chum salmon, which result in considerable extra effort being required to find and recover carcasses of Chinook salmon. Increased Chinook salmon carcass recoveries result from the increased sampling effort, thus improving CWT recovery rates. The relationship is not linear so at any escapement level, the net benefit will differ, but proportional benefits are greater in years of more unstable flows and larger chum salmon returns.

Project Title: Cowichan Chinook Assessment Enhancements
Project agency: DFO
Approved funding for this cycle: $30,000
Total CWTIT funding approved to date: $150,000
Objectives and Relationship to PSC Technical Report 25: Issue 5 (Sampling rates in escapement), Issue 6 (Uncertainty in estimates of escapement or terminal fishery catch), Issue 10 (Incomplete coverage of escapement areas)

Project Description, Accomplishments, Results and Deliverables: The objective of this project was to improve escapement effort and survey coverage, biosampling rates, estimates of Chinook salmon mark rates, and improve head recoveries from escapement to the Cowichan River. Escapement sampling was improved by hiring a third crew of three technicians to collect deadpitch data for the Cowichan Chinook Assessment Project. This improved escapement sampling complements increased tagging rates in Cowichan Chinook salmon. The additional crew allowed for monitoring of Chinook salmon spawning activity and deadpitch activities in more areas within the Cowichan River, outside of the main spawning reaches. In addition, a data entry technician was hired to keypunch field data from the counting fence, the deadpitch, and the broodstock removals.

In 2013 the fence was installed on September 9, later than the usual start date of Labour Day (September 3). Water levels were sufficient at the start of the enumeration fence operation and fence activities proceeded normally until the final weekend in September when a rain event increased the discharge to 100 cubic meters per second, more than twice the capacity of the fence. The fence did not recover from this event and was removed on October 21 when water flows decreased to safe levels.

With a fence count unattainable, the estimate of natural spawners was based on a carcass mark–recapture program, which was enhanced by the presence of a third deadpitch crew. Two crews began the deadpitch program on October 30, and a third crew was added on November 18. All three crews

worked until the end of the project on December 12.

In 2013, 1080 carcasses were sampled, resulting in 926 scale samples, and 210 adipose fin clipped Chinook salmon (198 heads collected and submitted for processing). During the period when three crews were active, 872 carcasses were sampled, indicating that without the third crew 290 (approx. 1/3 of 872) may not have been sampled. Overall, 16% of the mark–recapture estimate of 6680 adults and jacks natural spawners were sampled by deadpitch crews. This rate was also enhanced by the low water conditions in November and December.

Benefits to CWT Program and PSC Salmon Management: Benefits to the CWT program and PSC Salmon Management include improved estimates of escapement to the Cowichan, improved escapement survey coverage, biosampling and head recovery rates, all of which providing increased certainty of CWT statistics.

Success: Overall this project was successful in improving escapement survey effort and coverage, biosampling rates, estimates of Chinook salmon mark rates, and recovery of Chinook salmon escapement to the Cowichan River.

Project Title: Improved Coded Wire Tag (CWT) Recovery, Nicola River Indicator Stock Program
Project agency: DFO
Approved funding for this cycle: $8,000
Total CWTIT funding approved to date: $32,000
Objectives and Relationship to PSC Technical Report 25: Issue 5 (Sampling rates in escapement)

Project Description, Accomplishments, Results and Deliverables: This project provided funding for contracting additional staff to expand recovery effort and sampling frequency during the Nicola River Chinook salmon deadpitch. By increasing the frequency at which the entire 50 km of river are surveyed, sampling rate was increased as carcasses are sampled prior to predator removal, thus increasing the sampling rate and precision of the mark–recapture estimates.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: It is difficult to quantitatively assess success to the annually variable rates of recovery resulting from different escapements of multiple species and annually variable environmental conditions. Sampling rates are dependent on the number of carcasses present, predators and other factors. Carcass sampling rates on the Nicola River tend to be hindered at escapements less than 10,000 due to the effects of predators. Until predator response is saturated, increasing recovery effort yields increased carcass recoveries by increasing the chances of encountering carcasses before predators, thus improving CWT recovery rates. The relationship is not linear so at any escapement level, the net benefit will differ, but proportional benefits are greater at depressed escapements.

Project title: Atnarko Chinook Coded Wire Tag (CWT) Indicator Program: Uncertainty in estimates of escapement and terminal CWT catch
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $110,000
Total CWTIT funding approved to date: $586,500
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Issues 1, 4, 6, 10 (Representation of production regions, Low sample rates in terminal fisheries, Uncertainties in estimates of escapement or catch, Incomplete coverage of fisheries or escapement)

Project Description, Accomplishments, Results and Deliverables: This project began in 2009 with the objective to expand the Atnarko assessment program to a Central Coast Chinook salmon indicator (noted as lacking in Technical Report 25, no indicator stocks on the BC mainland between the Skeena and Fraser rivers). The only northern indicator, Kitsumkalum, is a stream-type stock; Atnarko is an ocean type stock. Annually the project included application of 250,000 incremental CWTs, sampling of the terminal commercial, sport, and First Nations fisheries, and reintroduction of a mark–recapture program to improve escapement estimates and CWT recoveries.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: The majority of CWTIT resources were used to generate an accurate and precise (mean CV = 9%) estimate of escapement with high CWT sampling rates (mean = 19%). The spawning escapement ranged from 6,000 to 27,000 adult Chinook salmon during 2009–2013. Terminal First Nation and commercial gillnet fisheries were sampled intensively, with respective mean sample rates of 86% and 45%. During the early years, CWTIT resources supported the estimation of the terminal sport fishery catch and CWT sampling; however, extremely large floods in 2010 and 2011 caused major changes to the river and fishery access points rendering the creel survey method impractical. Subsequently, indirect catch monitoring methods have been used to estimate CWT recoveries in the terminal sport fishery.

Results for 2009–2012 annual escapement and terminal fishery monitoring programs were reported in TCCHINOOK (14)-1 v.2. The 2013 escapement mark–recapture program was successfully implemented. 1113 Chinook salmon were tagged, 5146 carcasses examined, and 185 tags recovered, providing a preliminary escapement estimate of 27,292 adults (CV 8.8%). There were 728 CWTs observed in the spawning escapement. In 2013 there was a high level of program support and compliance within the First Nations terminal food, social, and ceremonial fishery. Favorable water levels resulted in greater effort and catch (2,824). Greater than 31% of the First Nations food, social, and ceremonial fishery was sampled and 213 CWTs recovered. The 2013 Bella Coola commercial gillnet fishery caught 4450 Chinook salmon; CWT results are still pending.

Without continued funding, ongoing maintenance of the terminal mark–recapture program to estimate spawning escapement, terminal fishery sampling and incremental CWT application will not be possible. Incremental CWTs applied from 2009 to 2013 are still in circulation and the full benefits of increased tagging may not be realized in terminal fisheries and escapement without maintaining the incremental sampling programs.

Success: This project has been successful in improving the sample rates and precision in the estimation of CWTs in escapement and terminal catch.

Project title: 2013 Central Coast Chinook Mark-Incidence and Catch Estimation Program
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $10,000
Total CWTIT funding approved to date: $27,500
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Issue 10 (Uncertainty in catch estimates and CWT expansions)

Project Description, Accomplishments, Results and Deliverables: Historically mark rates from the Central BC sport fishery have not been available instead mark rates from other areas (global pooling) in DFO's Mark Recovery Program (MRP) have been substituted. The historical use of proxy mark rate and submission rate data in DFO's MRP to estimate Central BC sport fishery impacts has been problematic.

The objectives for this project included the following:

1. Obtain mark rate data for Central Coast sport fishery which is stratified both spatially and temporally from late June to late August when the majority of Chinook salmon are caught.
2. Develop independent catch estimates for Areas 7–9 by month using fisher boat launch trailer counts and creel survey data.
3. Determine the lodge underreporting bias for marked head submission by comparing logbook mark rates to those collected by DFO staff (Conservation and Protection officers).
4. Calculate submission rates for Central Coast sport fishery either through integration of data into MRP or independently.

Immediate benefits have been realized as a result of this program, including catch estimates for the previously unaccounted for independent angler (nonlodge based) component of the fishery, and data for calculation of Central BC (Area 7-10) submission rates as well as *estimated* expansion factors. The availability of these data has precluded the need to use mark rates from other areas (global pooling) in DFO's MRP.

Benefits to CWT Program and PSC Salmon Management: The observed submission rates during the past three years are higher than proxy data previously used in MRP, and corresponding expansion factors are believed to better represent Central BC sport fishing impacts on CWT stocks. This recreational fishery is a significant harvester of Chinook salmon (approx. 6,000 in 2012 and 2013). Appropriate expansion of CWT recoveries in MRP is required to produce consistent and reliable stock-specific fishery impacts.

Continuation of this project would not only provide reliable central coast submission rate data and *estimated* expansion factors in the future but would also yield insight into the variability of these data between years. Without an annual program to collect Central BC Chinook salmon mark rate and independent angler catch data, proxy data from other areas would once again be used in MRP to expand CWT recoveries. The deficiencies inherent with this method have been highlighted previously and were the primary reason for initiating this project in 2011.

Future program objectives include opportunity to reduce program cost and increase program efficiency as new methods for determining independent angler effort and CPUE information are developed. These could include the following:

1. Partner with the Wui'Kinuxv First Nations guardian program in Rivers Inlet to collect on water creel data.

2. Independent effort estimates may be determined solely via marina reservation records for Area 9.
3. Partner with local First Nations guardian programs to collect on water creel data, and additional land-based creel survey at Shearwater BC. Independent effort estimates in Areas 7 and 8 may be more efficiently collected with increased onground presence and interviews.

Success: Yes, based on improved catch estimates and stock- and fishery-specific impacts.

Project title: Lower Fraser Fisheries Alliance (LFFA) Coded Wire Tag (CWT) Recovery Improvements
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $25,000
Total CWTIT funding approved to date: $105,000
Continued CWTIT Funding Needed: No
Objectives and Relationship to PSC Technical Report 25: Issues 4 (Low sample rates in terminal fisheries), Issue 10 (Incomplete coverage of fisheries and escapement).

Project Description, Accomplishments, Results and Deliverables: The Lower Fraser Fisheries Alliance (LFFA) is an organization formed in March 2010 which has been empowered by its member First Nations from the mouth of the Fraser River to the Canyon (Lower Fraser Area; LFA) to establish a First Nation to First Nation (Tier 1) working relationship to address issues of common interest and work with the DFO toward resolutions for effective resource and fisheries management.

This project is a collaborative project between DFO and the LFFA to make improvements to CWT awareness and sampling in the LFA through the following activities:

1. Build understanding of the CWT program and the Salmon Head Recovery Program throughout the LFA by engaging First Nations leaders and communities.
2. Provide technical support to LFA First Nations monitoring organizations on the collection and provision of biological samples and high quality supporting data associated with the CWT program.
3. Develop a communication plan, identifying the audience, message, strategy, form, and timing of communication for First Nations in the LFA.
4. Develop communication presentations and products.
5. Provide communication, education and awareness sessions with LFA First Nations, targeted to First Nations Community leaders, fisheries managers, biologists and technical staff, and fishers.
6. Provide training in the collection of CWT biological samples and data to First Nations fishery monitoring programs to support and enhance existing First Nations fishery monitoring programs in the LFA.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: This is the third year of a collaborative project between the LFFA and LFA DFO targeting improvements to CWT sampling in the area addressing low sample rates in terminal fisheries. Both this project and the related project, *Operational Support for First Nations CWT Sampling*, benefit the CWT program by increasing awareness within LFA communities, aiding monitoring organizations to implement changes and build tools to support CWT sampling and data collection, and increasing the number of head samples collected from fisheries. Quantitative results are shown in Tables 1–4 in the related project.

Project title: Operational Support for First Nations Coded Wire Tag (CWT) Sampling Projects
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $25,000
Total CWTIT funding approved to date: $50,000
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Issue 4 (Low sample rates in terminal fisheries), Issue 10 (Incomplete coverage of fisheries and escapement)

Project Description, Accomplishments, Results and Deliverables: This project provided funding for a seasonal technician to provide support to Lower Fraser Area (LFA) DFO and First Nations monitoring groups, targeting increased sampling of Chinook and coho salmon for CWTs and improving collection of supporting mark rate information. The objectives for this year's funding are as follows:

1. Continue to build the relationship between DFO and the Lower Fraser Fisheries Alliance (LFFA) around CWT sampling in First Nations fisheries.
2. Work with staff from the LFFA on initiatives to increase understanding of the importance of the CWT Program within the LFA First Nations communities and monitoring organizations.
3. Provide support to LFA DFO and First Nations in order to increase the number of head samples collected from LFA First Nations fisheries and work on improving the systems for collection and quality of data on mark rates from LFA First Nations monitoring programs.

Qualitative and Quantitative (if appropriate for project) Benefits to CWT Program and PSC Salmon Management: This is the third year of a collaborative project between the LFFA and LFA DFO targeting improvements to CWT sampling in the area addressing low sample rates in terminal fisheries, and it was the second year funding was provided for DFO technical support. Both this project and the related LFFA funding provided in 2011–2014 benefit the CWT program by increasing awareness within LFA communities, aiding monitoring organizations to implement changes and build tools to support CWT sampling and data collection, and increasing the number of head samples collected from fisheries.

As displayed in Tables 1-4 below, both the total number of samples collected and the temporal and spatial distribution of those samples continued to improve this season for Chinook salmon. In addition, DFO and First Nations staff on the fisheries observed an increased awareness of the program this season including multiple incidences of fishers having samples ready for collection by the sampler in advance of a prompt. Samples recovered from coho salmon fisheries continue to be challenging even though the departmental messaging about the importance of the program has been consistent to that of Chinook salmon.

Table 1: Summary of Chinook and coho salmon head submissions by area from Lower Fraser First Nations Food, Social and Ceremonial fisheries, 2010–2013.

	Chinook				Coho			
Area	**2010**	**2011**	**2012**	**2013**	**2010**	**2011**	**2012**	**2013**
Below Port Mann	-	-	2	11	-	2	-	1
Port Mann to Mission	-	1	2	11	-	-	-	-
Mission to Harrison	-	1	3	***7***	-	1	16	-
Harrison to Hope	7	8	5	5	-	-	-	-
Hope to Sawmill	1	6	10	11	-	-	-	-
Total :	***8***	***16***	***22***	***45***	***-***	***3***	***16***	***1***

Table 2: Summary of percentage of annual Chinook and coho salmon head submissions collected by area from Lower Fraser First Nations Food, Social and Ceremonial fisheries, 2010–2013.

	Chinook				Coho			
Area	**2010**	**2011**	**2012**	**2013**	**2010**	**2011**	**2012**	**2013**
Below Port Mann	0%	0%	9%	24%	0%	67%	0%	100%
Port Mann to Mission	0%	6%	9%	24%	0%	0%	0%	0%
Mission to Harrison	0%	6%	14%	***16%***	0%	33%	100%	0%
Harrison to Hope	88%	50%	23%	11%	0%	0%	0%	0%
Hope to Sawmill	13%	38%	45%	24%	0%	0%	0%	0%
Total :	***100%***	***100%***	***100%***	***100%***	***0%***	***100%***	***100%***	***100%***

Table 3: Summary of Chinook and coho salmon head submissions by month from Lower Fraser First Nations Food, Social and Ceremonial fisheries, 2010–2013.

	Chinook				Coho			
Month	**2010**	**2011**	**2012**	**2013**	**2010**	**2011**	**2012**	**2013**
April	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-
June	8	3	1	5	-	-	-	-
July	-	2	14	10	-	-	-	-
August	-	9	7	25	-	1	-	-
September	-	2	-	5	-	-	-	-
October	-	-	-	-	-	2	16	1
Total :	***8***	***16***	***22***	***45***	***-***	***3***	***16***	***1***

Table 4: Summary of percentage of annual Chinook and coho salmon head submissions collected by month from Lower Fraser First Nations Food, Social and Ceremonial fisheries, 2010–2013.

	Chinook				Coho			
Month	**2010**	**2011**	**2012**	**2013**	**2010**	**2011**	**2012**	**2013**
April	0%	0%	0%	0%	0%	0%	0%	0%
May	0%	0%	0%	0%	0%	0%	0%	0%
June	100%	19%	5%	11%	0%	0%	0%	0%
July	0%	13%	64%	22%	0%	0%	0%	0%
August	0%	56%	32%	56%	0%	33%	0%	0%
September	0%	13%	0%	11%	0%	0%	0%	0%
October	0%	0%	0%	0%	0%	67%	100%	100%
Total :	**100%**	**100%**	**100%**	**100%**	**0%**	**100%**	**100%**	**100%**

Project title: Custom Sampling Table – Ucluelet Fisheries Plant (West Coast Vancouver Island)
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $10,000
Total CWTIT funding approved to date: $10,000
Continued CWTIT Funding Needed: No
Objectives and Relationship to PSC Technical Report 25: Issues 7, 12 (Low sample rates in highly mixed stock fisheries, Sampling to facilitate mark selective fishery evaluations)

Project Description, Accomplishments, Results and Deliverables: This project involved the design and production of a set of custom CWT sampling tables to be integrated into a West Coast Vancouver Island Chinook salmon troll fishery offload location in Ucluelet, BC. In reviewing the offload procedures, the table design was developed collaboratively with the plant management to meet the requirements of the CWT sampling program to access 100% of the catch for each vessel, while respecting industry requirements for minimal footprint at the site, high throughput, and careful handling of the catch to maintain economic value.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Deployment of this new equipment has resulted in in long-term improvements to the sampling infrastructure at a primary West Coast Vancouver Island offload location and improvements in efficiency and reliability of CWT recoveries in the Canadian troll fishery catch monitoring program while reducing handling of fish. In addition, the custom tables were designed to allow the tables or plans to be re-engineered, with only minor modification, for other offload locations as may be required in the future.

Project title: Coded Wire Tag (CWT) T-wands
Project agency: Fisheries and Oceans Canada (DFO)
Approved funding for this cycle: $50,000
Total CWTIT funding approved to date: $50,000
Continued CWTIT Funding Needed: No
Objectives and Relationship to PSC Technical Report 25: Issues 7, 12 (Low sample rates in highly mixed stock fisheries, Sampling to facilitate mark selective fishery evaluations)

Project Description, Accomplishments, Results and Deliverables: This project involved the replacement of CWT hand-held detection equipment for commercial fisheries sampling programs with the new Northwest Marine Technology T-wand to increase Canada's ability to accurately and efficiently sample CWTs in highly mixed stock fisheries with mass-marked Chinook salmon present.

The funding supported the purchase of 18 T-wands, with DFO in-kind trade-in of 18 working old blue hand-held wands.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Deployment of this new equipment has resulted in improvements in efficiency and reliability of CWT recoveries in Canadian catch monitoring programs while reducing handling of fish, costs for processing and transportation.

2013 US Project Reporting

A total of 12 US projects were funded in FY 2013 (Table L2). The total expenditure of US CWTIT projects in 2012 was $1,500,000. Below the table are summaries for each individual project, including a description of the project, deliverable benefits to the CWT system, and the issue covered in PSC Technical Report 25 (PSC 2008).

Appendix L 2. US CWT Project Expenditures for 2013–2014, approved in February, 2013.

Project Category	TR25 Issue	Project Title	Cost ($USD)
Replace outdated CWT equipment	12, 13	Replace WDFW Outdated Handheld CWT Wand Detectors [1]	$248,543
Low sample rates in mixed stock fisheries	7	Sampling Washington Ocean Salmon Fisheries [1]	$354,492
Low sample rates in mixed stock fisheries	7	SEAK Sport Catch Sampling [1]	$57,367
Indicator hatchery stock tagging, terminal fishery and escapement numbers, and sampling	1, 3, 4, 6	Mid-Oregon Coast CWT Recovery, and Escapement of Elk River Fall Chinook [1]	$125,195
Replace outdated CWT equipment	13	Purchase of Reading Stations at Alaska CWT Lab	$29,304
Reduce head processing costs and improve sampling efficiency	4, 7, 13	SEAK Commercial Port Sampling of *No Tags* [1]	$58,164
Replace outdated CWT equipment	12, 13	Replace 30 ODFW Outdated Handheld CWT Wand Detectors	$101,063
Purchase new CWT equipment	13, 14, 17, 18	Purchase Data Loggers for 10 Hatcheries for Tag and Release Data Electronically and Train Staff	$99,653
Administrative	19	Partial Funding for Co-Chair	$14,820
Indicator stock tagging of wild stock without hatchery representation	1, 2	Chilkat River Chinook Smolt CWT [1]	$86,801
Indicator stock tagging of wild stock without hatchery representation	1, 2	Stikine River Chinook Smolt CWT—Bilateral [1]	$134,562
Low sample rates in mixed stock fisheries	7, 8, 12	Improvements to Oregon Ocean CWT Sampling in CR Management Area	$112,597
CWT Lab equipment purchase and sampling	7, 10, 13	Purchase of T-Wands, Reading Station and Fishery Sampling—Makah Tribe	$46,459
CWT Lab and sampling equipment purchase	7, 13	Purchase of T-Wands and Reading Station—Lummi Tribe	$12,607
Administrative—CWT meeting costs	19	PSC—Fund Costs of Next 2 CWTIT Workshop	$13,200
Purchase new CWT equipment	7, 13	Purchase of Dissection and Reading Stations—Stillaguamish Tribe	$5,173
		GRAND TOTAL	$1,500,000

[1] Multiyear projects.

Project Title: Coded Wire Tag (CWT) Field Equipment Replacement—Handheld Wands
Project agency: WDFW, John Kerwin
Approved funding for this cycle: $248,543
Total CWTIT Funding approved to date: $479,269
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Issue 12 (Sampling methods to facilitate sampling of mark selective fisheries and CWT processing), Issue 13 (Timeliness of reporting)

Project Description, Accomplishments, Results and Deliverables: WDFW has approximately 500 CWT detection wands in current inventory. The WDFW sampling database lists approximately 240 sampling locations where Chinook and coho salmon are sampled for CWTs. Additionally, streams and rivers in every major river basin, as well as all WDFW hatchery facilities are surveyed annually for Chinook and coho salmon that contain CWTs. All of these locations require the necessary equipment to allow for adequate sampling of both marked and unmarked CWT-tagged fish. The purchase of 85 CWT detection wands represents the first influx of the new technology and significantly more sensitive wands for WDFW samplers to utilize.

During 2013, WDFW purchased 85 hand held wands of the new design developed by Northwest Marine Technology in 2011**.** These wands were utilized at port sampling locales that have high numbers of Chinook salmon sampled. Because there are unreliable CWT detection wands at other locations, WDFW will make an assessment of the CWT detection wands turned in by samplers at ports and other field sites, and use the most useful to replace the unreliable CWT detection wands. For example, some wands have been retrofitted with shields while others have not. WDFW will replace nonretrofitted wands with reliable retrofitted wands.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: There is increased accuracy of detecting CWTs in sampling using handheld wands. Some increase in speed and efficiency of sampling should be realized as well.

Success: Yes, the wands were purchased and will be used for the 2014 season for Washington fisheries.

Project title: Sampling Washington Ocean Salmon Fisheries
Project agency: Washington Department of Fish and Wildlife
Approved funding for this cycle: $354,492
Total CWTIT funding approved to date: $1,031,900
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Improving sample rates in mixed stock fisheries

Project Description, Accomplishments, Results and Deliverables: This project addresses the priority activity identified by the CWTIT for improving sampling rates in highly mixed stock fisheries (fisheries with multiple stocks). This project is an ongoing activity of the Washington Department of Fish and Wildlife that was supported by funding provided by the United States federal government (Anadromous Fish Grant – Public Law 304).

The ultimate use of these data is to determine harvest rates, stock composition and compliance with Pacific Salmon Treaty obligations for the United States, as well as to provide data used to forecast or estimate impacts of fisheries on various stocks. Fishery managers use these determinations to optimize the two goals of protecting weak stocks and providing recreational and commercial harvest opportunities.

Sampling rates in the 2013 Washington ocean recreational fishery remained well above the minimum 20% goal at 37% for Chinook and 39% for coho salmon. In the 2013 Washington non-Indian commercial troll fishery, rates of 45% on Chinook and 34% on coho salmon were maintained. The sampling encounter rate on CWT tagged fish increased notably in 2013; a total of 4,300 Chinook salmon CWTs and 4,600 coho salmon CWTs were recovered. Additionally, onboard and dockside Chinook salmon DNA samples totaled 2,600 in the recreational fishery and 1,850 (dockside only) in the non-Indian troll fishery.

Continued funding will be required to maintain current sampling levels. Without CWTIT funding, sampling rates are likely to fall below 20%.

Project title: SEAK Sport Catch Sampling
Project agency: Alaska Department of Fish and Game
Approved funding for this cycle: $57,367
Total CWTIT funding approved to date: $195,358
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Improving sample rates in mixed stock fisheries

Project Description, Accomplishments, Results and Deliverables: This project addresses the priority activity identified by the CWTIT for improving sampling rates in mixed stock fisheries (fisheries with multiple stocks). This Southeast Alaska (SEAK) regional project is an ongoing activity of the Alaska Department of Fish and Game, Division of Sport Fisheries, which was also supported by funding from federal funds (Dingle-Johnson) and other PSC funds, and this CWTIT money helps cover additional sampling.

This catch sampling data for the SEAK sport fisheries of Chinook and coho salmon is used to determine stock composition of the harvest, and compliance with Pacific Salmon Treaty obligations. The CWT recoveries provide important temporal and spatial information to fishery managers, help with estimating harvest rates by the various fisheries (including the sport fishery), and ultimately help with the sustained management of these important salmon resources.

The objectives of this project were to improve the sampling rates of sport harvested Chinook salmon in Juneau and Ketchikan, and to maintain the 20% sampling rate of Chinook salmon in Craig. Preliminary estimates indicate that unfortunately the sampling rates in 2013 were still low in Juneau (13.0%) and Ketchikan (10.4%) for 2013. Efforts and considerations to improve these sampling rates are ongoing. In 2013 we did maintain the 20% or above sampling rate for Chinook salmon at Craig (21.7%).

Revised preliminary sampling rates in the 2013 SEAK marine recreational fishery for the region was slightly below the minimum 20% goal at 18.2% for Chinook salmon and 19.6% for coho. A total of 9,798 Chinook and 61,073 coho salmon were examined for CWTs, with 651 Chinook and 994 coho salmon CWT being recovered. The 2013 sport fish SEAK CWT recovery information can be downloaded from the ADF&G Mark and Age Determination website. Additionally, a total of 4,204 Chinook salmon were sampled for genetic tissue from the SEAK marine recreational fishery.

Continued funding will be required to help work towards improving and maintaining target sampling levels.

Project Title: Mid-Oregon Coastal Production Region Coded Wire Tagging, Recovery and Escapement Estimation of Elk River Fall Chinook Salmon
Project agency: Oregon Department of Fish and Wildlife
Approved funding for this cycle: $125,195
Total CWTIT funding approved to date: $501,379
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Issue 1 (Inconsistent and incomplete representation of production regions by CWT indicator stocks)

Project Description, Accomplishments, Results and Deliverables: The Oregon Department of Fish and Wildlife is evaluating the appropriateness and feasibility of using the Elk River hatchery production of fall Chinook salmon as an exploitation rate indicator stock for the Mid-Oregon Coast aggregate. Due to funding shortfalls, this aggregate has been underrepresented in the PST CWT program for fisheries management. There is currently only one other exploitation rate indicator stock on the Oregon coast; it is located in the North Oregon Coast aggregate. Over the last three years with CWTIT program support, we have boosted the number of ad-clipped and CWT smolts released from Elk River Hatchery to over 200,000. This level of tagging should be attainable with this year's project as well. Brood stock collection has just begun on the Elk River for 2013.

In addition to tagging, with CWTIT program funding we have implemented a complete terminal tag recovery program consisting of terminal fishery evaluation, spawning ground surveys, and hatchery intake sampling. Our efforts for 2013 are just getting underway. During the previous three years, we were able to generate precise and accurate estimates of terminal catch, enumerate and sample hatchery swim-ins, and estimate hatchery and wild spawning escapement. These data will be used in combination with future return and harvest data to evaluate the utility of the Elk River hatchery stock as an exploitation rate indicator Stock.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Increased and consistent tagging levels result in more CWT recoveries and subsequent higher levels of precision in all fishery and escapement strata evaluated through PSC management. Appropriate levels of staffing for terminal tag recoveries result in more accurate and precise estimates in all terminal strata. This will provide us the data to evaluate the utility of the Elk River hatchery stock to represent the Mid-Oregon Coast aggregate.

Through the first three years of funding we purchased new NMT CWT detection wands and data loggers with UPC scanning capabilities. The data loggers have improved the efficiency and accuracy of data collection through the use of programmed dropdown menus and scripts to limit and to field check data entry. Data are regularly uploaded to central servers. There, the data can be reviewed by project staff for accuracy and to highlight any possible protocol issues. We estimate approximately 120 person* hours annually are saved through this process. The Elk River stock is a late returning stock with fish spawning through February. Therefore, a timely turnaround of data is crucial to incorporating these data and estimates into local and international fisheries management.

Project title: ADF&G Mark, Tag, and Age Lab Coded Wire Tag (CWT) Reading Station Upgrades
Project agency: Alaska Department of Fish and Game
Approved funding for this cycle: $29,304
Total CWTIT funding approved to date: $29,304
Continued CWTIT Funding Needed: No
Objectives and Relationship to PSC Technical Report 25: Equipment purchases to improve CWT data collection, accuracy, and timeliness

Project Description, Accomplishments, Results and Deliverables: The CWT reading stations at the Alaska Department of Fish and Game's Mark Tag and Age Laboratory were based on obsolete 30-year old closed-circuit television technologies and need to be replaced. If a workstation broke, it could not be repaired or replaced because the parts are out of date and unavailable. The loss of a single closed-circuit television reading station would translate to a significant loss in reader productivity (e.g., fewer CWT reads per day). Consequently, all reading stations needed to be upgraded before this issue became problematic.

We replaced eight CWT reading stations with a digital imaging system that consists of a dissecting microscope equipped with a digital video camera and a hi-resolution LCD monitor for viewing and reading CWTs. Four of the systems have 8" monitors and four have 10" monitors. The digital imaging systems were purchased, installed, and integrated into Mark Tag and Age Laboratory operations in early October.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Reading CWT tag codes directly from a high-resolution monitor is easier, more accurate, and more efficient than reading them through a low-resolution TV monitor. Unlike closed-circuit television, LCD displays do not have screen flicker which reduces eyestrain and fatigue and ultimately increases reader productivity and data quality. Unlike our previous reading stations, output from the digital imaging system can be sent directly to the lab's networked computers so that we can capture, store and send images of CWT codes. This added capability helps us confirm codes on CWTs prior to release, read difficult CWT recoveries, and verify previously read codes—all of which contribute significantly to the generation of quality data.

Recovery and identification of CWT codes is part of Alaska's obligation to treaties and agreements made as participating members of the PSC. These data play a key role in satisfying domestic agreements and international treaties, specifically with regards to the US–Canada Salmon Treaty obligations involving resource allocation and management of transboundary stocks. The Mark Tag and Age Laboratory serves as Alaska's centralized resource for tracking and managing salmon resources using CWTs and is therefore an integral part of the coordinated coastwide CWT program regulated and monitored by the PSC.

Project title: SEAK Commercial Port Sampling No Tags
Project agency: Alaska Department of Fish and Game
Approved funding for this cycle: $58,164
Total CWTIT funding approved to date: $304,616
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Issue 7 (CWT Tagging and Sampling Issues)

Project Description, Accomplishments, Results and Deliverables: Southeast Alaska has relied on visual sampling of adipose clipped fish to recover CWTs for over three decades and has provided high-quality data for regional and PSC analytical and management purposes. However, since 1995, an increasing

percentage of adipose clipped Chinook salmon without tags (No Tags) have been recovered in the Southeast Alaska Troll fisheries. The escalating presence of No Tags in Southeast Alaska fisheries has led to a decrease in CWT sample rates by statistical week and area. The effects of No Tags also include an increase in sampling time, shipping costs, tag detection/decoding time, and loss of revenue to seafood processors and direct marketers.

In an effort to increase or maintain CWT sample rates and decrease shipping costs, this project provided funding for four Fish and Wildlife Technicians in the ports of Sitka, Craig, and Wrangell and one Fishery Biologist in the port of Sitka.

During the summer troll fishery in 2013 Alaska Department of Fish and Game commercial port samplers examined over 30,000 Chinook salmon for the presence or absence of the adipose fin. Port samplers used NMT T-wands to check for the presence of a CWT in those fish observed as having a missing adipose fin. Port samplers applied standard CWT sampling protocol to those fish missing an adipose fin that signaled positively as having a CWT implanted in the head and recovered the heads of these fish from seafood processors. Over 5,000 Chinook salmon harvested in the Southeast Alaska summer troll fishery were observed to be missing their adipose fin, and 1,817 of those positively signaled as having a CWT. Sampling rates for each of the four troll fishery quadrants in Southeast Alaska increased in the Southern Outside and remained above the coastwide standard of 20% in the Southern Inside, Northern Inside, and Northern Outside.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Benefits to the CWT program include the increased sampling rate in the Southern Outside quadrant of the Southeast Alaska. Sampling rates in other areas of the 2013 Southeast Alaska summer troll fishery were maintained above the 20% coastwide standard. This increases the precision in the estimation of exploitation rates in the various fishery strata and other statistics needed for PSC management. The use of the electronic tag detection wand benefits the CWT Program as less salmon heads were recovered, bagged, and shipped to the ADF&G Mark, Tag, and Age Laboratory. This also benefits the industry as more fish were available for the *head-on* market and therefore mitigated the loss of revenue to seafood processors and buyers.

Project title: Replace Outdated Handheld Coded Wire Tag (CWT) Wand Detectors – 30 Wands
Project agency: Oregon Department of Fish and Wildlife
Approved funding for this cycle: $101,063
Total CWTIT funding approved to date: $181,773
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Issue 12 (Sampling methods to facilitate sampling of mark selective fisheries and CWT processing), Issue 13 (Timeliness of reporting)

Project Description, Accomplishments, Results and Deliverables: With the approved 2013 funding, ODFW purchased a second lot of 30 new T-wands. The first 10 T-wands of the 2013 order were just delivered on November 8. The remaining 20 T-wands will be delivered in two lots before the end of December, 2013. The late delivery resulted from a large backlog of other T-wand orders received by Norhtwest Marine Technology this year. This did not prove to be a serious setback because the first 30 T-wands delivered in late 2012 were available for sampling Oregon's key ocean and Columbia River commercial and sport fisheries in the spring and summer months of 2013.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: The significantly higher sensitivity of the T-wands (depth approx. 5+ cm vs the old blue wands at approx. 3 cm) will result in higher numbers of CWTs being detected in all fisheries, escapement back to the hatcheries, and

spawning grounds. This will be particularly true for the larger adult Chinook salmon sampled in the fisheries and elsewhere. T-wands also eliminate any further need to *mouth wand* adult Chinook salmon.

The new design of the T-wands allows samplers to grasp the wand just below the *T* part of the wand. This results in balanced movement of the T-wand and basically eliminates the continuous wrist movement and associated stress injuries experienced with the old blue wands.

Project title: ODFW Coded Wire Tag (CWT) Database Program Support Systems
Project agency: ODFW, Mark Engelking
Approved funding for this cycle: $99,653
Total CWTIT Funding approved to date: $520,653 on ODFW CWT Reporting System
Continued CWTIT Funding Needed: Yes for training and added functionality of the system
Objectives and Relationship to PSC Technical Report 25: Issue 13 (Timeliness of reporting), Issue 14 (Incomplete/no exchange of CWT data), Issue 17 (Updating data is difficult and updates cannot be tracked), Issue 18 (Validation is inadequate).

Project Description, Accomplishments, Results and Deliverables: There are several aspects to the project. The Agile Software Development process of adaptive and interactive software development was successfully used in the development of the CWT F application. The conversion of existing CWT data, reports, and processes for ocean fisheries to newer web-based technology (SQL c#.net) used by the CWT F application has been completed. This conversion improves management of CWT data and reporting of recoveries. Migration of historic ocean fisheries, Marine Resources Program, information from the COBOL Mark–Recovery application to the CWT F application is being validated for accuracy. The CWT F application will be used exclusively in 2014. ODFW defined 85 development stories for transforming Ocean Recreational Boat Survey data from PC computer-based processes to web-based technology. The ocean troll (commercial) fisheries processes now are linked to the commercial fish ticket application. This allows total salmon catch and sample estimations in the commercial ocean fishery. Relevant reports are available and others are in development to manage the ocean fisheries. These reports to support the ocean fisheries programs are available for management in 2014.

Upload processes for Washington Columbia Treaty fisheries data have been developed and tested. These processes will be used in 2014 for recovery and effort data management of Washington information in the Columbia River commercial and sport fisheries reported by Oregon.

CWT recovery information through paper forms and the manual data entry processes for CWT recovery and release information from hatcheries are to be replaced in 2014 by programmed data loggers and netbooks, which will provide electronic data uploads to the CWT F application database. To this end equipment has been purchased and software has been developed. A programmed Psion data logger is used to capture CWT recovery data from several hatcheries (including Bonneville Hatchery) and upload it to the CWT F application. Preliminary testing indicated a better alternative to the data loggers at some other hatcheries was rugged netbooks (small portable laptop computers) using Excel spreadsheets to capture data. Parallel testing of the netbooks at Salmon River and Sandy River hatcheries is in progress. It appears that netbooks have the advantage of requiring little training and upload processes are available in CWT F for this data. Development for CWT release programs is ongoing. The Psion data loggers that are both durable in field conditions and compatible with Microsoft Mobile 6 software are also in use at Columbia River Management. All snout identification tickets now have 128-code bar codes which code for alphanumeric characters; this allows direct reading of the tickets through the integrated bar code scanner on the data loggers. They are in parallel test and when accepted and approved will be used for next year's data acquisition.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Timeliness of reporting, access and retrieval of CWT data, updating of CWT data is simplified, and validation and accuracy of CWT data from Oregon is improved by the CWT F. It will be fully implemented in 2014. Updates to the CWT F application from Regional Mark Information Centre data is now a one step process. Creation of export files of release, recovery, location and catch sample data is a one-step process reducing errors from file manipulation and corruption of data. Data description files are created in conjunction with the data files.

Success: Yes, the project is mostly complete. Additional functionality and training are required to improve access to analysts in ODFW and inclusiveness of other applications (Fish Tickets, Hatchery Management Information System, Research, and Willamette BiOP projects). Continued data grooming, report development and bug fixing (as needed) will be necessary to upgrade performance of the system.

Project title: Chilkat River Chinook salmon fall Coded Wire Tag (CWT) project
Project agency: The Alaska Department of Fish and Game
Approved funding for this cycle: $86,801
Total CWTIT funding approved to date: $275,635
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Issue 1, 2 (Tagging and tagging levels)

Project Description, Accomplishments, Results and Deliverables: The Chilkat River is the third or fourth largest producer of Chinook salmon in Southeast Alaska. The Chilkat River Chinook salmon fall CWT project has been conducted since 2000. The same Chinook salmon brood year is also captured and implanted with CWTs the following spring. Conducting fall CWT projects significantly boosts the number of Chinook salmon implanted with CWTs that emigrate from the Chilkat River the following spring. Trapping areas in the Chilkat River drainage include the Tahini River, Kelsall River, and lower Chilkat River; trapping commences in mid-September and finishes in late October every year. Data produced from this project contributes towards estimating fall parr abundance, overwinter survival, smolt abundance, and marine harvest in mixed stock fisheries. The tagging goal of 22,000 has been reached in 11 of 13 years since 2000, and the fall mark fraction average for brood years 1999–2005 is 0.068.

For brood years 1999–2011, the number of Chilkat River Chinook salmon parr released with CWTs in the fall has averaged 28,332 compared to an average of 4,068 released in the spring. Average fall parr abundance for brood years 1999–2005 is 496,344 (SE=72,183), average overwinter survival is 34.3% (SE=8.5%), and average smolt emigration is 161,857 (SE=40,071). The average tagging fraction for brood years 1999–2005, represented by theta, is 0.096, and fall tagging accounts for 71% of this mark fraction.

Tags released in the fall contribute towards estimation of marine harvest, total return, marine exploitation rates and smolt to adult survival. Marine harvest for brood years 1999–2005 has averaged 844 (SE=324), total return average is 4,707 (SE=656), average marine exploitation is 17.6% (SE=4.1%), and marine survival has averaged 3.2% (SE=0.8%).

Data from the fall Chilkat River Chinook salmon CWT project contributes toward brood year production estimates, which is produced following the 7-year life cycle (through age-1.5 fish) of Chilkat Chinook salmon. These data are published through the ADF&G Fishery Data Series and are readily available to fishery managers throughout Alaska, British Columbia, and the Pacific Northwest.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Because the fall CWT project produces the majority of Chinook salmon with CWTs leaving the Chilkat River annually, operation of this project is essential to accurately estimate important parameters which aids fishery

management. Chilkat River Chinook salmon is a PSC indicator stock and contributes towards management of the Southeast Alaska sport fishery allocation in accordance with the Pacific Salmon Treaty.

Benefits to the CWT program include increased CWT recoveries in mixed stock fisheries and full run reconstruction for the Chilkat River Chinook salmon indicator stock. CWTs implanted during the fall project greatly increases the precision in the estimation of exploitation rates in commercial, sport, and subsistence fisheries, and produces other statistics needed for PSC management.

Project Title: Stikine River Chinook Smolt Coded Wire Tag (CWT)
Project agency: ADF&G (note this project is also funded by Canada), Phillip Richards
Approved funding for this cycle: $134,562
Total CWTIT Funding approved to date: $491,527
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: Issue 1 (Incomplete representation of production regions), Issue 2 (Determination of tagging levels)

Project Description, Accomplishments, Results and Deliverables: This bilateral project was designed to represent the Stikine River population of Chinook salmon, which averages run sizes of about 50,000 adults, and to increase the level of CWT tagging of smolts to 35,000 or more annually. In addition, approximately 2% were measured for weight and length. The tagging goal has been reached each year. Returning adults are sampled in marine fisheries, with most CWTs recovered in SEAK sport, gillnet and troll fisheries near Petersburg; fewer numbers are recovered in other areas of SEAK and NBC. The escapement and inriver fisheries are sampled to determine the marked rate by brood year, which provides a basis to estimate harvest contributions, exploitation rates, smolt and adult abundance, and survival rates. The US has paid the bulk of funding for the CWT portion of this program since its inception. Canada has paid for the bulk of escapement recoveries since its inception.

Continued CWTIT Funding Needed: Yes. Tagging rates could not have been achieved without this funding source.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: This program, along with the inriver run and escapement estimation program (funded by other sources) provides the tools to forecast and manage the terminal run of this stock per Chapter 1 of the 2009 Pacific Salmon Treaty Agreement.

Success: Yes; and additional data will be available when recently tagged broods recruit to fisheries in the future.

Project Title: Improvements to Oregon Ocean Coded Wire Tag (CWT) Sampling of Commercial Troll and Recreational Fisheries in the Columbia River Ocean Salmon Management Area
Project agency: Oregon Department of Fish and Wildlife, Eric Schindler
Approved funding for this cycle: $112, 597
Total CWTIT Funding approved to date: $313,834
Continued CWTIT Funding Needed: Yes, and other funding preferred
Objectives and Relationship to PSC Technical Report 25: Issue 7 (Low sampling rates in highly mixed stock fisheries), Issue 8 (Uncertainty in estimates of catch in high mixed stock fisheries), Issue 12 (Sampling methods to facilitate sampling of mark selective fisheries and CWT processing)

Project Description, Accomplishments, Results and Deliverables: The primary objectives of this project (initially begun with the 2011 ocean salmon fishing seasons) have been to implement full electronic sampling for CWTs, and to maintain the minimum required CWT sampling rate of 20% with emphasis on Chinook salmon in Oregon's ocean salmon fishery in the Columbia River Ocean Salmon Management Area. Implementation of this required a uniform approach for the entire Oregon ocean salmon fishery.

The objectives have been met and the project has been a success to date, although overall catches during the period have remained below historic levels and some challenges to maintaining sampling rates in the commercial salmon fishery have yet to be faced. In the 2013 ocean commercial troll salmon fishery, we recovered readable tags from 332 unmarked Chinook salmon (25 from the Columbia River Area), and these tags would not have been recovered without the support from CWTIT. An unexpected benefit has been the recovery of tags from unmarked Chinook salmon that were supposed to have been marked (missed clips or regenerated adipose fins may be the cause). Based on the tag recoveries from California stocks these unclipped recoveries of Chinook salmon made up approximately 1% of the total recoveries.

Tag recoveries from PSC stocks accounted for 44% (troll) and 61% (sport) of the CWT estimated hatchery stock contribution in the Columbia River Management Area in 2013, while only 17% (troll) and 11% (sport) of the estimated contribution from the fisheries South of Cape Falcon were from PST managed stocks. Nonclipped CWT Chinook salmon made up a decreasing percent of the CWTs recovered to the South, but still made up approximately 4% of the CWT recoveries south of Cape Falcon.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Coastwide, the implementation of full electronic sampling increased the recovery of CWTs by approximately 5% as a result of the recovery of nonclipped CWT Chinook salmon. Furthermore, tag recoveries from nonclipped CWT Chinook salmon in the Columbia River Area accounted for 17% of the total recoveries from the area. These recoveries were composed primarily of stocks from the Snake River and Central and Upper Columbia River. Without full electronic sampling, these recoveries would have been missed.

Success: Continued employment of full electronic sampling was successful in 2013 and sampling rates were maintained above the 20% objective coastwide. Seasonwide Chinook salmon sampling rates in the Columbia River Management Area were 41% for the commercial troll fishery and 42% for the recreational fisheries. South of Cape Falcon, Chinook salmon sampling rates were 27% for the commercial fisheries and 34% for the recreational fisheries.

Project title: Staff Support and Purchase of Equipment for Coded Wire Tag (CWT) Lab
Project agency: Makah Tribe
Approved funding for this cycle: $46,459
Total CWTIT funding approved to date: $51,771
Continued CWTIT Funding Needed: Yes
Objectives and Relationship to PSC Technical Report 25: 7.1.3. Sampling Issues for Highly Mixed-Stock Fisheries

Project Description, Accomplishments, Results and Deliverables: This project involved acquisition of hardware for the tag lab, and for sampling. In addition, it provided funding for additional staff to increase sampling rates.

The hardware purchased includes the following items:

1. Stand to stabilize the video microscope acquired in 2012 and used in reading tags.
2. T-wand to improve scanning fish for tags.
3. Pneumatic head-corer to speed up the process of extracting tags from heads.
4. Air compressor to power the head-corer.
5. Fume hood for ventilation in the tag lab.

Items 1 and 2 have been purchased and are in service in the CWT sampling program now.

Items 3 and 5 have been ordered and paid for, but we are awaiting delivery.

Item 4 has been purchased and delivered, but cannot be put into service until Item 3 is delivered and installed.

Staff support included hiring an assistant sampler during the summer salmon fishing season, and funding for additional pay for the port sampler.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Benefits already realized for the CWT program include increased sampling rates for both coho and Chinook salmon, compared with the rates in 2012, when the sampler did not have an assistant. Sampling rates for Chinook salmon increased from 33% in 2012 to 36% in 2013. For coho salmon, the sampling rates increased more dramatically, from 18% in 2012 to 32% in 2013. These increased sampling rates improve the precision in the estimation of exploitation rates in the Makah Tribe's fisheries. They will also provide Makah fishery management staff and other agency staff with more information on the stock composition of Makah Tribe's mixed stock fisheries. Finally, it will provide additional information used in cohort reconstruction and other stock assessment work.

Benefits expected from the hardware acquisition include more efficient processing of head in the tag lab, and more efficient reading of the tag codes. The latter benefit has already been partially realized by the purchase and operation of the video microscope in 2012, but we expect it to be further improved by the stand that will stabilize the microscope and the image of the tag on the video screen.

Project title: Lummi Coded Wire Tag (CWT) Equipment Acquisition
Project agency: Lummi Natural Resources Department
Approved funding for this cycle: $12,606
Total CWTIT funding approved to date: $12,606
Continued CWTIT Funding Needed: No
Objectives and Relationship to PSC Technical Report 25: Issues 13, 14, 15 (Timeliness of reporting, data exchange, interagency coordination)

Project Description, Accomplishments, Results and Deliverables: Lummi Natural Resources (LNR) aimed to build upon its previous capacity for the detection, collection, reading and reporting of CWTs taken from Chinook and coho salmon fisheries in Lummi's terminal fishing area. Funding received as part of this proposal has been used to acquire essential equipment and supplies for CWT sampling and processing, allowing for reliable CWT recovery data to be made available to the coast wide CWT program in a timely manner.

The harvest management division of LNR has utilized CWTIT funds to improve its salmonid harvest sampling program in an effort which has contributed reliable CWT recovery data to be used in the management of salmon stocks within Lummi's usual and accustomed fishing grounds. Lummi is the prominent fishing tribe participating in the mixed stock fisheries of Salmon Management Areas 7 and 7A, highlighting the need for enhancing the department's capacity for CWT sampling. As such, LNR requested and received funding for equipment upgrades and acquisitions. Specifically, LNR purchased two T-wands, one CWT jig, one CWT illuminator, and one video microscope. Such investments in equipment and supplies have helped ensure LNR's comanaging participation in sampling salmon harvests from area 7 and 7A fisheries for 2013 and beyond.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: Benefits to the CWT program include increased CWT recoveries in Regional Mark Information Centre region Northern Washington, increased turnaround time in reading and reporting tag results, and more involvement for the tribal comanagers in managing salmon fisheries.

Project title: Purchase of detection and reading station—Stillaguamish Tribe
Project agency: Lummi Natural Resources Department
Approved funding for this cycle: $5,173
Total CWTIT funding approved to date: $5,173
Continued CWTIT Funding Needed: No
Objectives and Relationship to PSC Technical Report 25: Issues 7 (Low sample rates in highly mixed stock fisheries), Issue 13 (Timeliness of reporting)

Project Description, Accomplishments, Results and Deliverables: The Stillaguamish Tribe annually samples spawning grounds and fisheries within the Stillaguamish Watershed for Chinook and coho salmon CWTs. All told, more than 30 miles of Chinook salmon habitat and 10 miles of coho salmon habitat are sampled during the spawning season, along with several inriver fishery locations. Heads are collected at these locations and brought back to our office and frozen. At the end of the fishing and spawning seasons we dissect out the CWTs and read them in our new laboratory, which is in the process of being outfitted. The proper equipment is needed to adequately and accurately carry out CWT dissection, and our lab needed a V-reader to help with the process.

Therefore, the Tribe purchased a new V-reader from Northwest Marine Technology. It replaced an older wand that was no longer working well for CWT dissection purposes.

Qualitative and Quantitative Benefits to CWT Program and PSC Salmon Management: The new V-reader will increase speed and efficiency of dissecting CWTS, and improve detection rates (more sensitive than old wand it is replacing).

Success: Yes, the V-reader was purchased and was used for the 2014 season in the Stillaguamish.