# PACIFIC SALMON COMMISSION 

 JOINT CHINOOKTECHNICAL COMMITTEE REPORT 2010 EXPLOITATION RATE ANALYSIS AND MODEL CALIBRATION

REPORT TCCHINOOK (11)-3

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## LIST OF ACRONYMS WITH DEFINITIONS

| AABM | Aggregate Abundance Based Management | MSF | Mark-Selective Fishery |
| :---: | :---: | :---: | :---: |
| AC | Allowable Catch | MSH | Maximum sustainable harvest |
| AI | Abundance Index | MSY | Maximum Sustainable Yield for a stock, in adult equivalents |
| ADF\&G | Alaska Department of Fish \& Game | MSY ER | Exploitation Rate sustainable at the escapement goal for a stock, in AEQs |
| AEQ | Adult Equivalent | NBC | Northern British Columbia Dixon Entrance to Kitimat including Queen Charlotte Islands |
| Agreement | June 30, 1999 PST Annex and the related Agreement | NA | Not Available |
| AUC | Area Under the Curve | NBC | Northern British Columbia Dixon Entrance to Kitimat including Queen Charlotte Islands |
| AWG | Analytical Working Group of the CTC | NM | Nautical Mile |
| BCAFC | British Columbia Aboriginal Fisheries Commission | NMFS | National Marine Fisheries Service |
| BTR | Base Terminal Run | NOC | Oregon Coastal North Migrating Stocks |
| C\&S | Ceremonial \& Subsistence | NPS | North Puget Sound |
| CBC | Central British Columbia Fishing area Kitimat to Cape Caution | NPS-S/F | North Puget Sound Summer/Fall Chinook stock |
| CCMP | Comprehensive Chinook Management Plan | NR | Not Representative |
| CDFO | Canadian Department of Fisheries \& Oceans | NWIFC | Northwest Indian Fisheries Commission |
| CI | Confidence Interval | ODFW | Oregon Department of Fish \& Wildlife |
| CNR | Chinook Non-retention | PFMC | Pacific Fisheries Management Council |
| CR | Columbia River | PS | Puget Sound |
| CRITFC | Columbia River Intertribal Fish Commission | PSC | Pacific Salmon Commission |
| CRFMP | Columbia River Fishery Management Plan | PSARC | Pacific Scientific Advice Review Committee |
| CTC | Chinook Technical Committee | PSMFC | Pacific States Marine Fisheries Commission |
| CUS | Columbia Upriver Spring Chinook stock | PST | Pacific Salmon Treaty |
| CWT | Coded Wire Tag | QDNR | Quinault Department of Natural Resources, Division of fisheries |
| DIT | Double Index Tag | QIN | Quinault Nation |
| ERA | Exploitation Rate Analysis | QCI | Queen Charlotte Islands |
| ESA | U.S. Endangered Species Act |  |  |
| Est+fw | Estuary Plus Fresh Water Area | RER | Recovery Exploitation Rate |
| FL | Fork Length | $\mathrm{S}_{\text {MSY }}$ | Escapement producing MSY |
| FMP | PFMC Framework Management Plan | SEAK | Southeast Alaska Cape Suckling to Dixon Entrance |
| FNC | First Nations Caucus | SG | Strait of Georgia |
| FOG | Fisheries Operational Guidelines | SPS | South Puget Sound |
| FR | Fraser River | SWVI | Southwest Vancouver Island |
| GCG | Gene Conservation Group | TAC | Technical Advisory Committee |
| GW | Gitwinksihlkw | TBR | Transboundary Rivers |
| GS | Strait of Georgia | TTC | Transboundary Technical Committee |
| HOR | Hatchery Origin Returns | UAF | University of Alaska Fairbanks |
| IDFG | Idaho Department of Fish \& Game | UFR | Upper Fraser River |
| IDL | InterDam Loss | UGS | Upper Strait of Georgia |
| IM | Incidental Mortality | USCTC | U.S. members of the CTC |
| ISBM | Individual stock based management | USFWS | U.S. Fish \& Wildlife Service |
| LFR | Lower Fraser River | UW | University of Washington |
| LGS | Lower Strait of Georgia | WA/OR | Ocean areas off Washington and Oregon <br> North of Cape Falcon |
| mar | Marine Area | WAC | Washington Coast (Grays Harbor northward) |
| mar+fw | Marine Plus Fresh Water Area | WACO | Washington, Oregon, Columbia River Chinook stock group |
| MOC | Mid Oregon Coast | WCVI | West Coast Vancouver Island excluding Area 20 |
| MRP | Mark-Recovery Program | WDFW | Washington Department of Fisheries and Wildlife |

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## EXECUTIVE SUMMARY

This report contains the principal results of the annual exploitation rate assessment of CWT data through 2009 and the final preseason Chinook model calibration for 2010 (CLB 1007). Results include the Abundance Indices (AIs) for the aggregate abundance based management (AABM) fisheries and individual stock based management (ISBM) indices for each party (country).

## AABM Abundance Indices and Associated Catches

The pre- and postseason AIs for the three AABM fisheries, Southeast Alaska All Gear (SEAK), Northern British Columbia Troll and Queen Charlotte Islands Sport (NBC), and West Coast Vancouver Island Troll and Outside Sport (WCVI) are presented in Table 1. The Agreement specifies that the AABM fisheries are to be managed through the use of the AIs. Each calibration provides the first postseason AIs for the previous year and the preseason AIs for the current year. Preseason AIs are used to set total allowable catch limits in the upcoming fishing season. Subsequently, postseason AIs (from the following year's calibration) are used to track catch overage and underage provisions. The first 2009 postseason AIs and the 2010 preseason AIs have now been finalized.

Table 1. Abundance Indices for 1999 to 2010 for the SEAK, NBC, and WCVI AABM fisheries.

|  | SEAK |  | NBC |  | WCVI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Preseason | Postseason | Preseason | Postseason | Preseason | Postseason |
| 1999 | 1.15 | 1.12 | 1.12 | 0.97 | 0.60 | 0.50 |
| 2000 | 1.14 | 1.10 | 1.00 | 0.95 | 0.54 | 0.47 |
| 2001 | 1.14 | 1.29 | 1.02 | 1.22 | 0.66 | 0.68 |
| 2002 | 1.74 | 1.82 | 1.45 | 1.63 | 0.95 | 0.92 |
| 2003 | 1.79 | 2.17 | 1.48 | 1.90 | 0.85 | 1.10 |
| 2004 | 1.88 | 2.06 | 1.67 | 1.83 | 0.90 | 0.98 |
| 2005 | 2.05 | 1.90 | 1.69 | 1.65 | 0.88 | 0.84 |
| 2006 | 1.69 | 1.73 | 1.53 | 1.50 | 0.75 | 0.68 |
| 2007 | 1.60 | 1.34 | 1.35 | 1.10 | 0.67 | 0.57 |
| 2008 | 1.07 | 1.01 | 0.96 | 0.93 | 0.76 | 0.64 |
| 2009 | 1.33 | 1.20 | 1.10 | 1.07 | 0.72 | 0.61 |
| 2010 | 1.35 |  | 1.17 |  | 0.96 |  |

In general, the AIs for 1999 through 2001 are low compared to AIs in the late 1980s and early 1990s but values increased substantially starting in 2002. The 2010 projected AI values have declined when compared to the high values for 2003 through 2006 in SEAK and NBC. In 2007, a decline in abundances was detected. The Agreement specifies an allowable catch for each AI for each fishery. The maximum allowable Treaty catch (total catch minus any hatchery add-on and exclusion catch) by fishery and year and the actual (observed) catches are shown in Table 2.

Table 2. Preseason allowable catches for 1999 to 2010, and postseason allowable catches and observed catches for 1999 to 2009, for AABM fisheries.

| PST Treaty Allowable and Observed Catches |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SEAK (T, N, S) ${ }^{\mathbf{1}}$ |  |  | NBC (T, S) |  |  | WCVI (T, S) |  |  |
| Year | Pre- season Allowable Catch | Post- season Allowable Catch | Observed Catch | Pre- season Allowable Catch | Post- season Allowable Catch | Observed Catch | Pre- season Allowable Catch | Post- season Allowable Catch | Observed Catch |
| 1999 | 192,800 | 184,200 | 198,842 | 145,600 | 126,100 | 86,726 | 128,300 | 107,000 | 36,413 |
| 2000 | 189,900 | 178,500 | 186,493 | 130,000 | 123,500 | 31,900 | 115,500 | 86,200 | 101,438 |
| 2001 | 189,900 | 250,300 | 186,919 | 132,600 | 158,900 | 43,500 | 141,200 | 145,500 | 117,670 |
| 2002 | 356,500 | 371,900 | 357,133 | 192,700 | 237,800 | 150,137 | 203,200 | 196,800 | 165,036 |
| 2003 | 366,100 | 439,600 | 379,519 | 197,100 | 277,200 | 191,657 | 181,800 | 268,900 | 175,821 |
| 2004 | 383,500 | 418,300 | $\begin{gathered} 417,019 \\ 421,666^{2} \\ \hline \end{gathered}$ | 243,600 | 267,000 | 241,508 | 192,500 | 209,600 | 216,624 |
| 2005 | 416,400 | 387,400 | 387,749 | 246,600 | 240,700 | 243,606 | 188,200 | 179,700 | 202,662 |
| 2006 | 346,800 | 354,500 | 358,601 | 223,200 | 200,000 | 215,985 | 160,400 | 145,500 | 146,883 |
| 2007 | 329,400 | 259,200 | 328,419 | 178,000 | 143,000 | 144,235 | 143,300 | 121,900 | 139,150 |
| 2008 | 170,000 | 152,800 | 172,322 | 124,800 | 120,900 | 95,647 | 162,600 | 136,900 | 145,726 |
| 2009 | 218,800 | 176,000 | 214,451 | 143,800 | 139,100 | 109,470 | 107,800 | 91,300 | 124,617 |
| 2010 | 221,800 |  |  | 152,100 |  |  | 143,700 |  |  |

${ }^{7}$ Nomenclature is T for troll, N for net, and S for sport.
${ }^{2}$ The lower value resulted from subtracting a disputed terminal exclusion catch for the Stikine River in 2004. Catch accounting has since been defined in the Transboundary Agreement.

Table 3 shows the differences between the postseason allowable catches and the observed catches in AABM fisheries for 1999-2009, and the cumulative differential for those years. All three AABM fisheries have cumulative underages. In SEAK, observed catches have been below final allowable catches for three of the eleven years; the cumulative differential is $0.5 \%$ or $-0.6 \%$. In NBC, observed catches have been below the final allowable catches in eight of the eleven years; the cumulative differential is $-23.6 \%$. In WCVI, observed catches have been below allowable catches in four of the eleven years; the cumulative differential is $-6.9 \%$.

Table 3. Deviations in numbers of Chinook salmon and percentages from catch targets derived from the first postseason AI (Table 2) for Pacific Salmon Treaty AABM fisheries in 1999 to 2009.

| Year | SEAK |  | NBC |  | WCVI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Fish | Percent Difference | Number of Fish | Percent Difference | Number of Fish | Percent Difference |
| 1999 | +14,642 | +7.9\% | -39,374 | -31.2\% | -70,587 | -66.0\% |
| 2000 | +7,993 | +4.5\% | -91,600 | -74.2\% | +15,238 | +17.7\% |
| 2001 | -63,381 | -25.3\% | -115,400 | -72.6\% | -27,830 | -19.1\% |
| 2002 | -14,767 | -4.0\% | -87,663 | -36.9\% | -31,764 | -16.1\% |
| 2003 | -60,081 | -13.7\% | -85,543 | -30.9\% | -93,079 | -34.6\% |
| 2004 | $\begin{aligned} & \hline-1,281^{1} \\ & +3,366 \end{aligned}$ | $\begin{array}{r} -0.3 \% \\ +0.8 \% \end{array}$ | -25,492 | -9.5\% | +7,024 | +3.4\% |
| 2005 | +349 | +0.1\% | +2,906 | +1.2\% | +22,962 | +12.8\% |
| 2006 | +4,101 | +1.2\% | +15,985 | +8.0\% | +1,383 | +1.0\% |
| 2007 | +69,219 | +26.7\% | +1,235 | +0.9\% | +17,250 | +14.2\% |
| 2008 | +19,522 | +12.8\% | -25,253 | -20.9\% | +8,826 | +6.4\% |
| 2009 | +38,451 | +21.8\% | -29,630 | -21.3\% | +33,317 | +36.5\% |
| Cum. | $\begin{aligned} & +14,666 \\ & +19,314 \end{aligned}$ | $\begin{array}{r} +0.5 \% \\ 0.6 \% \end{array}$ | -479,829 | -23.6\% | -117,260 | -6.9\% |

${ }^{\text {T}}$ The lower value resulted from subtracting a disputed terminal exclusion catch for the Stikine River in 2004. Catch accounting has since been defined in the Transboundary Agreement.

## ISBM Indices

For ISBM fisheries, the Agreement specified that Canada and the United States would reduce base period exploitation rates on specified stocks by $36.5 \%$ and $40 \%$, equivalent to ISBM indices of $63.5 \%$ and $60 \%$, respectively. This requirement is contained in Chapter 3 section 8(c) of the treaty and is referred to as the 'general obligation' and does not apply to stock groups that achieve their CTC agreed escapement goals. Estimated ISBM fishery indices are shown in Table 4 for Canadian fisheries and Table 5 for United States (U.S.) fisheries. Both tables present CWTbased indices for 2008, and Chinook model-based indices for 2010. The agreement specifies that the ISBM indices be forecasted preseason and evaluated postseason for each escapement indicator stock listed in Attachments I to V of the Chinook Chapter.

## CWT-based Indices in 2008

Canadian ISBM indices from the CWT-based estimates for 2008 were reduced more than required under the agreement for four of the five CWT indices which could be calculated, the exception being WCVI Falls (Table 4).

Five of the 15 U.S. ISBM indices for the CWT-based estimates for 2008 were reduced more than required. The other 10 U.S. CWT-based ISBM indices exceeded 0.60. Four of these stocks (Upriver Brights, Quillayute, Hoh, and Mid-Columbia Summers) met or exceeded their respective escapement goals, and thus are exempted from the general obligation (Table 5).

## Predicted ISBM Indices for 2010

Six of the 18 ISBM indices for Canada, based on outputs from calibration 1007, are predicted to exceed the allowable value of 0.635 for Canadian ISBM fisheries in 2010 (Table 4). Five of these six stocks are Puget Sound Natural Summer/Fall stocks, and do not have CTC-accepted escapement goals. One of the six stocks, the Lewis River, has a CTC escapement goal, but was below goal in 2009.

Eight of the 23 U.S. ISBM indices based on calibration 1007 are predicted to be above the allowable limit of 0.60 for U.S. ISBM fisheries in 2010 (Table 5). All have CTC agreed escapement goals: Hoh, Quillayute, Upriver Brights, Deschutes, Mid-Columbia Summers, Nehalem, Siletz, and Siuslaw. Of the stocks with goals, four were at or above goal in 2009, two were slightly under goal (Mid. Col. Summer, and Hoh) and two (the Oregon stocks) were below goal in 2009.

Table 4. Canadian 2008 ISBM indices based on CWT and the 2010 indices predicted from the PSC Chinook Model.

|  |  | Canadian ISBM Indices |  |
| :---: | :---: | :---: | :---: |
| Stock Group | Escapement Indicator Stock | CWT Indices for 2008 | Model Indices for 2010 |
| Lower Strait of Georgia ${ }^{3}$ | Cowichan Nanaimo | $\begin{aligned} & \hline 0.242^{4} \\ & \text { NA }^{1,5} \end{aligned}$ | $0.203{ }^{6}$ |
| Fraser Late ${ }^{3}$ | Harrison River ${ }^{2}$ | $0.031{ }^{7}$ | 0.138 |
| North Puget Sound Natural Springs ${ }^{3}$ | Nooksack | NA | 0.568 |
|  | Skagit | NA | 0.568 |
| Upper Strait of Georgia ${ }^{3}$ | Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish | 0.073 | 0.122 |
| Fraser Early (spring and summers) ${ }^{3}$ | Upper Fraser, Mid Fraser, Thompson | NA | 0.121 |
| West Coast Vancouver Island Falls ${ }^{3}$ | WCVI (Artlish, Burman, Kaouk, Tahsis, Tashish, Marble) | $0.652{ }^{8}$ | 0.122 |
| Puget Sound Natural Summer / Falls ${ }^{3}$ | Skagit | NA | 0.709 |
|  | Stillaguamish | NA | 0.791 |
|  | Snohomish | NA | 0.718 |
|  | Lake Washington | NA | $0.690{ }^{9}$ |
|  | Green River | 0.106 | $0.670^{9}$ |
| North / Central B. C ${ }^{3}$. | Yakoun, Nass, Skeena, Area 8 | NA | 0.177 |
| Washington Coastal Fall Naturals | Hoko, Grays Harbor, Queets ${ }^{2}$, Hoh ${ }^{2}$, Quillayute ${ }^{2}$ | NA | 0.134 |
| Columbia River Falls | Upriver Brights ${ }^{2}$ | NA | 0.110 |
|  | Deschutes ${ }^{2}$ | NA | 0.110 |
|  | Lewis ${ }^{2}$ | NA | 0.920 |
| Columbia R Summers | Mid-Columbia Summers ${ }^{2}$ | NA | 0.084 |
| Far North Migrating OR Coastal Falls | Nehalem ${ }^{2}$, Siletz ${ }^{2}$, Siuslaw ${ }^{2}$ | NA | NA |

${ }^{1}$ Not available (NA) because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc).
${ }^{2}$ Stock or stock group with a CTC agreed escapement goal.
${ }^{3}$ Stock groups listed in Annex 4, Chapter 3, Attachment IV.
${ }^{4}$ 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. 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.
${ }^{5}$ Several problems have been identified in the approach previously used to calculate the CWT-based indices for Nanaimo Chinook. Until these problems are resolved, indices for this stock will not be reported.
${ }^{6}$ Although model-based indices were previously calculated separately for Cowichan and Nanaimo, these did not adequately represent impacts on either LGS stock because the model-based data represent an aggregate of the two 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.
${ }^{7}$ The terminal sport harvest rates for Chilliwack Hatchery Chinook, the indicator stock, were removed from the calculation for the Harrison River naturals because sport harvest has been essentially zero on the natural population.
${ }^{8}$ ISBM indices for WCVI naturals are based on information from Robertson Cr. hatchery stock, including terminal harvest rates. Prior to this report, harvest rates for terminal net and sport fisheries were treated as equal between the naturals and the hatchery indicator. However, this ignored the fact that since 1999, there has been no terminal net harvest of the vast majority of natural stocks on WCVI. Consequently, indices for WCVI naturals were adjusted to reflect this zero terminal net harvest rate. In addition, some inconsistencies were noted in the treatment of terminal harvest rates between the model and CWT indices for this stock group. These inconsistencies were eliminated.
${ }^{9}$ For Canadian ISBM fisheries, the same distribution and Index value are used for Lake Washington and Green R.

Table 5. U.S. 2008 ISBM indices based on CWT and the 2010 indices predicted from the PSC Chinook Model.

| Stock Group | Escapement IndicatorStock | U.S. ISBM Indices |  |
| :---: | :---: | :---: | :---: |
|  |  | CWT Indices for 2008 | Model Indices for 2010 |
| Washington Coastal Fall Naturals ${ }^{3}$ | Hoko | NA ${ }^{1}$ | 0.130 |
|  | Grays Harbor | 0.390 | 0.382 |
|  | Queets ${ }^{4}$ | 0.610 | 0.285 |
|  | Hoh ${ }^{2}$ | 0.950 | 0.987 |
|  | Quillayute ${ }^{2}$ | 1.160 | 0.963 |
| Columbia River Falls ${ }^{3}$ | Upriver Brights ${ }^{2}$ | 1.830 | 0.801 |
|  | Deschutes ${ }^{2}$ | 0.540 | 1.004 |
|  | Lewis ${ }^{2}$ | 0.630 | 0.505 |
| Puget Sound Natural Summer / Falls ${ }^{3}$ | Skagit | NA | 0.261 |
|  | Stillaguamish | NA | 0.117 |
|  | Snohomish | NA | 0.125 |
|  | Lake Washington | NA | 0.517 |
|  | Green R | 0.280 | 0.520 |
| Fraser Late ${ }^{3}$ | Harrison River ${ }^{2}$ | 0.260 | 0.209 |
| Columbia R Summers ${ }^{3}$ | Mid-Columbia Summers | 6.800 | 1.142 |
| Far North Migrating OR Coastal Falls ${ }^{3}$ | Nehalem ${ }^{2}$ | 0.920 | $0.916^{5}$ |
|  | Siletz ${ }^{2}$ | 0.670 | $0.698^{5}$ |
|  | Siuslaw ${ }^{2}$ | 0.640 | $2.028^{5}$ |
| North Puget Sound Natural Springs ${ }^{3}$ | Nooksack | 0.210 | 0.181 |
|  | Skagit | NA | 0.245 |
| Lower Strait of Georgia | Cowichan, | 4.040 | 0.216 |
|  | Nanaimo | NA | NA |
| Upper Strait of Georgia | Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish | NA | NC ${ }^{4}$ |
| Fraser Early (spring and summers) | Upper Fraser, Mid Fraser, Thompson | NA | 0.111 |
| West Coast Vancouver Island Falls | WCVI (Artlish, Burman, Kaouk, Tahsis, Tashish, Marble) | NA | 0.213 |
| North / Central B. C. | Yakoun, Nass, Skeena, Area 8 | NA | $\mathrm{NC}^{4}$ |

${ }^{4}$ Not available (NA) because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc).
${ }^{2}$ Stock with a CTC agreed escapement goal.
${ }^{3}$ Stock groups listed in Annex 4, Chapter 3, Attachment V.
${ }^{4} \mathrm{NC}$ means that the current model assumes the stock is not caught in U.S. ISBM fisheries.
${ }^{5}$ Oregon coast stocks are based on a three year average harvest rate in in-river fisheries and are thus high. In addition Base Period harvest rates were low in terminal area fisheries.

## 1 INTRODUCTION

This report describes the methods and results of the cohort analysis, used to estimate exploitation rates from coded wire tag (CWT) data, and the Pacific Salmon Commission (PSC) Chinook model calibration. The results of the 2010 preseason calibration (CLB 1007) are based on the exploitation rate analysis (ERA) using CWT data through fishery year 2008, coast-wide data on catch, spawning escapements and age structure through 2009, and forecasts of Chinook returns expected in 2010. This chapter includes:

1) estimated postseason abundance indices for 1979 through 2009 and the preseason projection for 2010 for the aggregate abundance based management (AABM) fisheries,
2) estimated non-ceiling indices, referred to as the individual stock based management (ISBM) indices in this report, for 1999 to 2008 and modeled ISBM projections for the 2010 ISBM fisheries,
3) estimated stock composition for 1979 through 2009 and a projection for 2010 for the AABM and other fisheries, and
4) estimated fishery indices (harvest rates) for the AABM fisheries.

Appendix A shows the relationship between the exploitation rate indicator stocks, model stocks, and Pacific Salmon Treaty (PST) Annex stocks. Appendices B to I present some additional output from the exploitation rate analysis and model calibration beyond the summaries presented in this report. Appendix B provides the time series of ISBM CWT indices, and ISBM model indices from calibration 1007. Appendix C shows the percent distribution of landed catch and total mortality by catch year for exploitation rate indicator stocks. Appendix E has the time series of brood year exploitation rates for the CWT indicator stocks. Appendix F shows the model estimates of stock composition in AABM and other sport and troll fisheries. Appendix G lists the incidental mortality rates used in the CTC model. Appendix H gives the time series of total abundance indices (AIs) for the AABM fisheries, and Appendix I provides the AIs for each model stock for each AABM fishery. Appendix J presents the time series of CWT-based fishery exploitation rate indices by stock, age, and fishery. CWT data quality issues and their resolution are detailed in Appendix K.

### 1.1 Methods

The exploitation rate assessment is performed through cohort analysis of CWT release and recovery data (CTC 1988). Cohort analysis is the reconstruction of the exploitation history of a given stock and brood year and is used to produce a variety of statistics, including total exploitation rates, age and fishery specific exploitation rates, maturation rates, pre-age 2 recruitment survival indices (Appendix D), and annual distribution of fishery-related mortalities.

Estimates of age and fishery-specific exploitation and maturation rates from the cohort analysis are combined with data on catches, escapements, non-retention, and enhancement to complete the annual calibration of the CTC Model. The calibration procedure estimates pre-age 2 survival to recruitment for the stocks included in the model.

Results from the annual preseason calibration of the Chinook model are used to calculate: 1) AIs for the three AABM fisheries; 2) postseason AIs for the previous year; and 3) preseason and
postseason ISBM indices. Projected AIs for 2010 are used to determine the allowable 2010 catch of Treaty Chinook for AABM fisheries. Postseason AIs are used to appraise the season's allowable catches and to evaluate compliance for AABM fisheries. For the ISBM fisheries, the Agreement specifies that Canada and the United States will reduce the exploitation rate from the 1979-1982 base period by $36.5 \%$ and $40.0 \%$, respectively, on stocks that have not achieved their Chinook Technical Committee (CTC) agreed escapement goals. The ISBM index is used to estimate the annual reduction in exploitation rates relative to the base period. Postseason ISBM indices for 2009 are computed using results of the exploitation rate analysis. Forecasts of the 2010 ISBM indices are computed using the PSC Chinook salmon model. The Agreement specifies that the postseason ISBM indices estimated through exploitation rate analysis of CWT recoveries will be used to assess the ISBM index.

## 2 EXPLOITATION RATE ASSESSMENT (THROUGH FISHERY YEAR 2008)

The exploitation rate assessment is performed through cohort analysis, a procedure that reconstructs the exploitation history of a given stock and brood year using CWT release and recovery data (CTC 1988). The procedure produces a variety of statistics, including total exploitation rates, age and fishery specific exploitation rates, maturation rates, pre-age 2 recruitment survival indices, and annual distribution of fishery-related mortalities. Estimates of age and fishery-specific exploitation and maturation rates from the cohort analysis are combined with data on catches, escapements, non-retention, and enhancement to complete the annual calibration of the PSC Chinook salmon model. The calibration procedure estimates pre-age 2 recruitment survivals for the stocks included in the model.

The CTC currently monitors 43 exploitation rate indicator stocks that are coded-wire tagged, but only 40 were used for analyses in this chapter (Table 2-1). This is primarily because some of these stock codes have been discontinued while new ones have been added. The historic time series was expanded for: Nanaimo, Nicola, Dome, and Lower Shuswap, and three wild indicator tag codes in Southeast Alaska (Taku, Unuk and Chikamin). An exploitation rate indicator stock is not used in the ERA if the number of CWT recoveries is very limited (minimum of 35 estimated recoveries for a given stock and age combination) or there is no quantitative estimate of tags in the spawning escapement (see footnotes in Table 2-2). Indicator stocks used for exploitation rate analysis and the type of analyses performed for these stocks are shown in Table 2-2. The relationship between the exploitation rate indicator stocks, model stocks, and PST Annex stocks are shown in Appendix A. Extrapolation of results to similar stocks and/or generalizations about fishery impacts will only be appropriate to the extent that the exploitation rate indicator stocks are representative of the stock groups they are intended to represent.

### 2.1 Brood Year Exploitation Rates (Appendix E)

Brood year exploitation rates provide the best measure of the cumulative impact of fisheries upon all age classes of a stock. The rates are computed as the ratio of adult equivalents (AEQ) total fishing mortality to AEQ total fishing mortality plus escapement. The AEQ factor represents the proportion of fish of a given age that would, in the absence of fishing, subsequently leave the ocean to return to the terminal area on the spawning migration. The numerator of the brood year exploitation rate may be partitioned into components for AEQ reported catch and AEQ incidental mortality, with each component occurring in either ocean fisheries or freshwater fisheries.

Table 2-1. Exploitation rate indicator and DIT stocks, their location, run type, and smolt age.

| Stock/Area | Exploitation Rate Indicator <br> Stocks | Hatchery | Run Type | Age |
| :--- | :--- | :--- | :--- | :--- |
| Southeast Alaska | Alaska Spring | Crystal Lake, Whitman <br> Lake, Little Port Walter, <br> Deer Mountain, Neets Bay | Spring | Age 1 |
| North/Central BC | Kitsumkalum | Terrace | Summer | Age 1 |
| WCVI | Robertson Creek | Robertson Cr. | Fall | Age 0 |
| Strait of Georgia | Quinsam | Quinsam | Fall | Age 0 |
|  | Puntledge | Suntledge | Age 0 |  |
|  | Big Qualicum | Coall | Age 0 |  |
|  | Cowichan | Nanaimo | Nanaimo | Fall |

${ }^{1}$ DIT tags associated with this stock.
${ }^{2}$ No longer adipose fin clipped
${ }^{3}$ Subyearlings have been CWT-tagged since brood year 1986, except for brood years 1993 through 1997

Table 2-2. The 40 CWT exploitation rate indicator stocks used in the exploitation rate analysis and the data derived from them: fishery, ISBM and survival indices, brood exploitation rates (BER), and stock catch distribution (Dist) with quantitative escapement estimates (Esc) and tagging during the base period years 1979-1982.

| Exploitation Rate Indicator Stocks | Fishery Index | ISBM <br> Index | BER ${ }^{1}$ | Survival Index | Dist | Esc | Base Tagging |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alaska Spring | Yes | - | Total | Yes | Yes | Yes | Yes |
| Kitsumkalum | - | - | Total | Yes | Yes | Yes | - |
| Robertson Creek | Yes | Yes | Ocean ${ }^{1}$ | Yes | Yes | Yes | Yes |
| Quinsam | Yes | Yes | Total | Yes | Yes | Yes | Yes |
| Puntledge | Yes | - | Total | Yes | Yes | Yes | Yes |
| Big Qualicum | Yes | Yes | Total | Yes | Yes | Yes | Yes |
| Nanaimo | - | Yes | Total | Yes | Yes | Yes | Yes |
| Dome | - | - | Total | - | Yes | Yes | - |
| Lower Shuswap | - | - | Total | - | Yes | Yes | Yes |
| Nicola | - | - | Total | - | Yes | Yes | - |
| Cowichan | Yes | Yes | Total | Yes | Yes | Yes | - |
| Chilliwack (Harrison Fall Stock) | - | Yes | Total | Yes | Yes | Yes | - |
| Nooksack Spring Fingerling | - | - |  | - | Yes | Yes | - |
| Nooksack Spring Yearling | - | Yes | 4 | Yes | Yes | Yes ${ }^{3}$ | - |
| Skagit Spring Fingerling | - | - | Ocean | - | Yes | Yes | - |
| Skagit Spring Yearling | - | - | Ocean | Yes | Yes | Yes ${ }^{3}$ | - |
| Samish Fall Fingerling | Yes | - | Ocean | Yes | Yes | Yes ${ }^{3}$ | Yes |
| Skagit Summer Fingerling | - | - | Ocean | - | Yes | Yes | - |
| Stillaguamish Summer Fingerling | - | Yes |  | - | Yes | - | - |
| Nisqually Fall Fingerling | - | - | 4 | - | Yes | - | Yes |
| University of Washington |  |  |  |  |  |  |  |
| Accelerated | Yes | 2 | 2 | - | Yes | Yes ${ }^{3}$ | Yes |
| George Adams Fall Fingerling | Yes | 2 | 2 | Yes | Yes | Yes ${ }^{3}$ | Yes |
| South Puget Sound Fall Fingerling | Yes | Yes | Ocean | Yes | Yes | Yes ${ }^{3}$ | Yes |
| South Puget Sound Fall Yearling | Yes | 2 | 2 | Yes | Yes | Yes ${ }^{3}$ | Yes |
| Squaxin Pens Fall Yearling | - | 2 | 2 | Yes | Yes | Yes ${ }^{3}$ | - |
| White River Spring Yearling | - | - | 4 | Yes | Yes | Yes ${ }^{3}$ | Yes |
| Elwha Fall Fingerling | - | - | 4 | Yes | Yes | - | - |
| Hoko Fall Fingerling | - | - | Ocean | Yes | Yes | Yes | - |
| Sooes Fall Fingerling | - | - | Ocean | Yes | Yes | Yes | - |
| Queets Fall Fingerling | - | Yes | 4 | Yes | Yes | - | Yes |
| Willamette Spring | Yes | - | Ocean | Yes | Yes | Yes | Yes |
| Columbia Summers | Yes | Yes | Total | Yes | Yes | Yes | - |
| Cowlitz Tule | Yes | - | Ocean | Yes | Yes | Yes | Yes |
| Spring Creek Tule | Yes | - | 2 | Yes | Yes | Yes | - |
| Columbia Lower River Hatchery | Yes | - | 2 | Yes | Yes | Yes | Yes |
| Upriver Bright | Yes | Yes | Total | Yes | Yes | Yes | Yes |
| Hanford Wild | - | - | Total | Yes | Yes | Yes | - |
| Lyons Ferry | - | - | Total | Yes | Yes | Yes | - |
| Lewis River Wild | Yes | Yes | Total | Yes | Yes | Yes | Yes |
| Salmon River | Yes | Yes | Ocean | Yes | Yes | Yes | Yes |

[^0]The exploitation rate on an indicator stock may differ from the exploitation rate on the wild stock it represents if the indicator stock is of hatchery origin and subject to mark-selective fisheries (MSFs), or terminal fisheries directed at harvesting surplus hatchery production. In the case of the brood year exploitation rate, this difference was addressed by computing a rate for ocean fisheries and a total for all fisheries. Ocean fisheries were defined to include marine sport and troll fisheries and CWT recoveries of ocean age 2 and age 3 fish in all non-terminal net fisheries. By partitioning the fisheries in this way, the most appropriate measure of brood year exploitation rate on wild stocks could be selected. The method selected for each exploitation rate indicator stock is given in Table 2-2. If broods are incomplete, but have data through age 4 (age 5 for spring stocks), then average maturation rates are applied to predict the completed brood value.

The brood year exploitation rate (BYEXP) is calculated as:

$$
\text { BYEXP }_{B Y, F}=\frac{\sum_{a=\text { Minage }}^{\text {Maxage }}\left(\sum_{f \in\{F\}} \text { TotMorts }_{B Y, a, f} * A E Q_{B Y, a, f}\right)}{\sum_{a=\text { Minage }}^{\text {Maxage }}\left(\sum_{f=1}^{\text {Nummisheriss }} \text { TotMorts }_{B Y, a, f} * A E Q_{B Y, a, f}+E s c_{B Y, a}\right)}
$$

The AEQ rate is calculated as:

$$
\begin{align*}
& A E Q_{B Y, a-1, f}=\text { MatRte }_{a-1, B Y}+\left(1-\text { MatRte }_{a-1, B Y}\right) * \text { Surv }_{a} * A E Q_{B Y, a, f}  \tag{Equation 2.2}\\
& A E Q_{B Y, \text { Maxageef }} \equiv 1.0
\end{align*}
$$

See Table 2-3 for a description of notation.

Table 2-3. Parameter definitions for all equations except those used for the stratified proportional fishery index (SPFI) in SEAK.

```
    Parameter. Description
            a= age class
            A= set of all ages that meet selection criteria
            AE\mp@subsup{Q}{BY,a.f}{}= adult equivalent factor in brood year BY, age }a\mathrm{ , and fishery f}\mathrm{ (for terminal fisheries,
                AEQ = 1.0 for all ages)
    Age2CohSurv }\mp@subsup{}{BY}{}=\mathrm{ cohort survival of CWT fish to age 2 (pre-fishery) for brood year BY
            AvgMatRte }=\mathrm{ average maturation rate for age a
            BPER = base period years (1979 through 1982)
        BYEXP }\mp@subsup{B}{BY,F}{}=\mathrm{ brood year exploitation rate in adult equivalent for brood year BY and fishery F
    BPISBMER 
            BY= brood year
        Cohort }\mp@subsup{}{BY,a}{}=\mathrm{ cohort by brood year BY and age a (where stock is implied from context)
        Cohorts,BY,a}= cohort by stock s, brood year BY and age a (where stocks are defined explicitly in a
                        summation)
            CY= calendar year
        CYDist cY,F = proportion of total stock mortality (or escapement) in a calendar year CY
                attributable to a fishery or a set of fisheries F
            CY end = end year for average
            CY start = start year for average
            dts,a}=\mathrm{ distribution parameter for timestep t, stock s, and age a
            Esc}\mp@subsup{c}{\textrm{Y},\textrm{a}}{}=\mathrm{ escapement past all fisheries for either brood year BY or calendar year CY and age a
        ER s,af,CY}= exploitation rate (based on total mortality) at age a divided by cohort size at age a
                        for stock s in fishery f in year CY
            EV
            f= a single fishery
            f\in{F}= a fishery f}\mathrm{ within the set of fisheries of interest
                    F= ocean, terminal or other sets of fisheries or spawning escapements
            FIf,CY}=\mathrm{ fishery exploitation rate index for fishery f in year CY
        FP ac.s.CY,f}= ratio of ER (a,a,f,CY to BPISBMER
    ISBMIdx CY = ISBM index for calendar year CY
    ISBMIdx CY = ISBM index for calendar year CY
    MatRte e-l-,BY}=\mathrm{ maturity rate at next younger age by brood year
        Maxage = maximum age of stock (generally age 6 for stream type stocks, age 5 for ocean type
                        stocks)
        Minage = minimum age of stock (generally age 3 for stream type stocks, age 2 for ocean type
                stocks)
    Morts }\mp@subsup{\}{CY,a,f}{}= landed or total fishing mortality in year CY and age a in fishery 
            NM
    Numfisheries = total number of fisheries
        RT
                given current abundance, current size limits, and base period exploitation rates
            s= a particular stock
            S= set of all stocks that meet selection criteria
            SC}\mp@subsup{C}{BY}{}=\mathrm{ ratio of the estimated and model predicted terminal run for brood year BY
            Surva}=\mathrm{ survival rate (1-NM ) by age
TotMorts }\mp@subsup{\mp@code{BY,a,f}}{}{=}\mathrm{ total fishing related mortality for brood year BY or calendar year CY or during the
                base period BPER and age }a\mathrm{ in fishery f
TotCWTRelease }\mp@subsup{}{BY}{}=\mathrm{ number of CWT fish released in the indicator group in brood year BY
```


### 2.2 Brood Year Survival Rates and Indices (Appendix D)

The brood year survival of CWT-tagged smolts after release is calculated for most exploitation rate indicator stocks (Table 2.2). This survival rate is frequently referred to as the marine survival of the tag group but also includes any mortality occurring in freshwater following release. Interpretation of this survival rate is stock specific. Two measures of survival indices or patterns are computed: survival to the age 2 cohort based on CWT recoveries, and the "environmental variable" (EV) determined from the calibration of the PSC Chinook model (described in the following section). The CWT-based estimate is our most direct measure of a brood's survival, but this measure is not available until the brood is complete (i.e., all ages have returned to spawn). The model EV parameter, however, provides a more current measure of the survival rates expected in brood years contributing to present and future fisheries.

For CWT data, the survival rate for a stock and brood year is the estimated age 2 cohort (from the cohort analysis) divided by the number of CWT fish released.

$$
\begin{equation*}
\text { Age } 2 \text { CohSurv }_{B Y}=\frac{\text { Cohort }_{B Y, 2}}{\text { TotCWTRelease }_{B Y}} \tag{Equation 2.3}
\end{equation*}
$$

where Cohort $_{B Y, 2}$ is calculated recursively from the oldest age down to age- 2 using:

$$
\begin{equation*}
\text { Cohort }_{B Y, a}=\frac{\sum_{f=1}^{\text {Numfisheriss }_{\text {TotMorts }}^{B Y, a, f}}+\text { Esc }_{B Y, a}+\text { Cohort }_{B Y, a+1}}{1-N M_{a}} \tag{Equation 2.4}
\end{equation*}
$$

If ocean age- 5 tags are absent, the age- 4 cohort size is estimated using the following formula:

$$
\text { Cohort }_{B Y, 4}=\frac{\sum_{f \in P \text { peecrminal }} \text { TotMorts }_{B Y, 4, f}+\frac{\text { Esc }_{B Y, 4}+\sum_{f \in \text { ferminal }}^{\text {TotMorts }_{B Y, 4, f}}}{\text { AvgMatRte }_{4}}}{1-\mathrm{NM}_{4}}
$$

Equation 2.5

### 2.3 Stock Distribution Patterns (Appendix C)

Brood year exploitation rates can indicate the fisheries that exploit a stock and the rates that occur on a specific brood, but do not indicate the exploitation pattern on a stock during one calendar year (across broods). Stock mortality distributions (reported catch or total) in a calendar year are calculated over all ages in the fisheries (if at least three brood years contribute to recoveries) as follows:

$$
\begin{equation*}
\text { CYDist }_{C Y, F}=\frac{\sum_{a=\text { Minageff }\{F\}} \operatorname{Morts}_{C Y, a, f} * A E Q_{B Y=C Y-a, a, f}}{\sum_{a=\text { Minage } e}\left(\sum_{f=1}^{\text {Maxage }} \text { Morts }_{C Y, a, f} * A E Q_{B Y=C Y-a, a, f}+E s c_{C Y, a}\right)} \tag{Equation 2.6}
\end{equation*}
$$

It should be noted that mortality distributions may not indicate the relative distribution of an indicator stock. For example, closure of a fishery would result in no reported catch but this would not necessarily indicate zero abundance of the stock in that fishing area.

### 2.4 Fishery Indices (Appendix J)

When the Pacific Salmon Treaty was negotiated in 1985, catch ceilings and increases in stock abundance were expected to reduce harvest rates in fisheries. The fishery index (FI) provided a means to assess performance against this expectation. Relative to the base period, an index less than 1.0 represents a decrease from base period harvest rates while an index greater than 1.0 represents an increase. While the determination of allowable catch for AABM fisheries in the 1999 Agreement is different from the original PST catch ceilings, these fishery indices continue to provide a useful index of change in harvest rates in these fisheries. Fishery indices are used to measure relative changes in fishery harvest rates because it is not possible to directly estimate the fishery harvest rates.

Fishery indices are computed in AEQs for both reported catch and total mortality (reported catch plus estimated incidental mortality). The total mortality index provides a consistent means of representing changes in reported catch and incidental mortality, including those associated with regulatory measures such as minimum size limits and CNR periods. The AEQ exploitation rate (ER) is estimated by;

$$
\begin{equation*}
E R_{s, a, f, C Y}=\frac{\text { TotMorts }_{s, a, f, C Y} * A E Q_{s, B Y=C Y-a, a, f}}{\text { Cohort }_{s, B Y=C Y-a, a} *\left(1-N M_{a}\right)} \tag{Equation 2.7}
\end{equation*}
$$

and a ratio of means (ROM) estimator is used to calculate the fishery index (FI),

For AABM fisheries, indices are presented for troll gear only, although the catch limitations also apply to recreational fisheries and net fisheries in SEAK and the recreational fisheries in NBC and WCVI. As in past years, recoveries from the troll fishery were used because the majority of the catch and the most reliable CWT sampling occur in these fisheries. In addition, there are data limitations in the base period for the sport fisheries. Because the allocation of the catch among gear types has changed in some fisheries (e.g., the proportion of the catch harvested by the sport fishery has increased in the SEAK and NBC fisheries), the indices may not represent the harvest impact of all gear types.

The CTC uses fishery indices to reflect changes in fishery impacts relative to the base period (fishery years 1979-1982). The ROM estimator of the fishery index limits inclusion of stocks to
those with adequate tagging during the base period, but fishing patterns for some fisheries have changed substantially since then. One example of this is the SEAK troll fishery where the catch during the winter season has increased, the spring fishery has been largely curtailed, and the summer season has become markedly shorter. Because stock complexes are dynamic throughout the year, stock specific impacts of the SEAK fishery have likely changed over time as season structure has been altered. To incorporate changes in stock composition and to include stocks without base period data, the CTC examined alternative derivations of fishery indices (CTC 1996).

The CTC determined that a useful fishery index should reflect both changes in harvest rates and stock distribution. Three general, desirable characteristics were identified:

1) the index should measure changes in fishery harvest rates if the distribution of stocks is unchanged from the base period;
2) the index should have an expected value of 1.0 for random variation around the base period fishery harvest rate, cohort size, and stock distributions; and
3) the index should weight changes in stock distribution by abundance.

After exploring several alternatives, the CTC concluded that the best estimate for a fishery index would consist of the product of a fishery harvest rate index and an index of stock abundance weighted by average distribution (i.e., the proportion of a cohort vulnerable to the fishery). To that effect a report by the CTC (2009) stated that for all AABM fisheries the stratified proportional harvest rate index (SPFI) was the most accurate and precise in estimating the harvest rate occurring in a fishery. This assessment supported the application of the SPFI adjusted for untagged stocks as presented by Alaska Department of Fish and Game (ADF\&G), and is also developed for WCVI and NBC.

For computation of the SPFI, the CWT harvest rate $\left(h_{t, c y}\right)$ must initially be set to an arbitrary value between 0 and 1. Then, the distribution parameter $\left(d_{t, s, a}\right)$ is calculated (Equation 2.9), and the result is substituted into Equation 2.10 below to recursively recalculate $h_{t, c y}$ and subsequently $d_{t, s, a}$. The largest stock-age distribution parameter in a stratum is then set to 1 to create a unique solution. See Table 2-4 for notation description.

$$
\begin{gather*}
d_{t, s, a}=\sum_{C Y} r_{t, C Y, s, a} / \sum_{C Y}\left(h_{t, C Y} * n_{C Y, s, a}\right)  \tag{Equation 2.9}\\
h_{t, C Y}=\sum_{s} \sum_{a} r_{t, C Y, s, a} / \sum_{s} \sum_{a}\left(d_{t, s, a} * n_{C Y, s, a}\right)
\end{gather*}
$$

Equation 2.10

The resulting unique solution is inserted into the following equations to compute the yearly harvest rates for each strata and the overall fishery.

$$
\begin{equation*}
H_{t, C Y}=\left[\left(\frac{\sum_{s}^{s} \sum_{a} c_{t, C Y, s, a}}{\sum_{s} \sum_{a} r_{t, C Y, s, a}}\right) *\left(C_{t, C Y}-A_{t, C Y}\right)\right] /\left[\left(C_{t, C Y}-A_{t, C Y}\right) / h_{t, C Y}\right] \tag{Equation 2.11}
\end{equation*}
$$

$$
\begin{gathered}
H_{. C Y}=\sum_{t}\left[\left(\frac{\sum_{s}^{s} \sum_{a} c_{t, C Y, s, a}}{\sum_{s} \sum_{a} r_{t, C Y, s, a}}\right) *\left(C_{t, C Y}-A_{t, C Y}\right)\right] / \sum_{t}\left[\left(C_{t, C Y}-A_{t, C Y}\right) / h_{t, C Y}\right] \\
S_{t, C Y}=H_{t, C Y} / \sum_{C Y=1979}^{1982} H_{t, C Y} \\
S_{. C Y}=H_{. C Y} / \sum_{C Y=1979}^{1982} H_{C Y}
\end{gathered}
$$

Table 2-4. Parameter definitions for equations used for SPFI in SEAK.

$$
\begin{aligned}
& \hline \text { Parameter } \text { Description } \\
& A_{t, C Y}= \text { Alaska hatchery origin catch by strata } t, \text { year } C Y \\
& c_{t, C Y, s, a}= \text { adult equivalent CWT catch by strata } t, \text { year } C Y, \text { stock } s \text { and age } a \\
& C_{t, C Y}= \text { catch by strata } t, \text { year } C Y \\
& d_{t, s, a}= \text { distribution parameter by strata } t, \text { stock } s \text { and age } a \\
& h_{t, C Y}= \text { CWT harvest rate by strata } t, \text { year } C Y \\
& H_{. C Y}= \text { harvest rate by year } C Y \\
& H_{t, C Y}= \text { harvest rate by strata } t, \text { year } C Y \\
& n_{C Y, s, a}= \text { CWT cohort size by year } C Y, \text { stock } s \text { and age } a \\
& r_{t, C Y, s, a}= \text { CWT recoveries by strata } t, \text { year } C Y, \text { stock } s \text { and age } a \\
& S_{\cdot C Y}= \text { SPFI by year } C Y \\
& S_{t, C Y}= \text { SPFI by strata } t, \text { year } C Y \\
& \hline
\end{aligned}
$$

### 2.5 ISBM Indices

The CTC (1996) proposed a non-ceiling fishery index as a measure of the pass-through provision in the 1985 PST. This index compares an 'expected' AEQ mortality (assuming base period exploitation rates and current stock abundance) with the observed AEQ mortality on a stock within a calendar year, over all non-ceiling fisheries of a party (Table 2-5). Index values less than 1.0 indicate that the exploitation rates have decreased relative to the base period. Under the 2008 PSC Agreement the CTC is required to continue to use the ISBM indices to measure the performance of ISBM fisheries. Paragraph 8, chapter 3 of the agreement states:
8. With respect to ISBM fisheries, the Parties agree that:
(a) fisheries shall be managed over time to contribute to the achievement of agreed MSY or other biologically-based escapement objectives that are consistent with recovering and sustaining healthy and productive stocks and fisheries. Escapement objectives may be expressed in terms of numbers of spawners associated with MSY or derived from exploitation rate limits for naturally spawning stocks;
(b) either or both Parties may implement domestic policies that constrain their respective fishery impacts on depressed Chinook stocks to a greater extent than is required by this Paragraph;
(c) for the purposes of this Chapter, and based on stock-specific information exchanged preseason, Canada and the United States shall limit the total adult equivalent mortality rate in the aggregate of their respective ISBM fisheries to no greater than 63.5 percent and 60 percent, respectively, of that which occurred during the 1979 to 1982 base period on the indicator stocks identified in Attachments IV and V12 for stocks not achieving their management objectives. This limit shall be referred to as the general obligation. For those stocks for which the general obligation is insufficient to meet the agreed MSY or other biologically-based escapement objectives, the Party in whose waters the stock originates shall further constrain its fisheries to the extent necessary to achieve the agreed MSY or other biologicallybased escapement objectives, provided that a Party is not required to constrain its fisheries to an extent greater than the average of that which occurred in the years 1991to 1996. Notwithstanding the foregoing, a Party need not constrain its ISBM impacts on a stock originating in its waters to an extent greater than necessary to achieve the agreed MSY or other biologically-based escapement objectives;

Table 2-5. Fisheries included in the ISBM index by nation.

| Fisheries Included in ISBM Index |  |
| :--- | :--- |
| United States | Canada |
| Washington/Oregon Ocean Troll | Central BC Troll |
| Puget Sound Northern Net | Strait of Georgia Troll |
| Puget Sound Southern Net | North BC Net |
| Washington Coastal Net | Central BC Net |
| Freshwater Terminal Net | West Coast Vancouver Island Net |
| Washington/Oregon Ocean Sport | Strait of Juan de Fuca Net |
| Puget Sound Northern Sport | Johnstone Strait Net |
| Puget Sound Southern Sport | Fraser Net |
| Freshwater Terminal Sport | Freshwater BC Net |
|  | Strait of Georgia Sport |
|  | Strait of Juan de Fuca Sport |
|  | Freshwater BC Sport |

The formula proposed by the CTC in 1991 and referred to in CTC (1996) for a stock/country combination is:

$$
\begin{equation*}
\text { ISBMIdx } x_{C Y}=\frac{\sum_{f \in\{F\}} \sum_{a=\text { Minage }}^{\text {Maxage }}\left(\text { TotMorts }_{C Y, f, a} * A E Q_{B Y=C Y-a, a, f}\right)}{\sum_{f \in\{F\}} \sum_{a=\text { Minage }}^{\text {Maxage }}\left(\text { BPISBMER }_{f, a} * \text { Cohort }_{B Y=C Y-a, a}\right)} \tag{Equation 2.15}
\end{equation*}
$$

where,

$$
\text { BPISBMER }_{f, a}=\frac{\sum_{B P E R=79}^{82} \frac{\left(\text { TotMorts }_{B P E R, f, a} * A E Q_{B Y=B P E R-a, a, f}\right)}{\text { Cohort }_{B Y=B P E R-a, a}}}{4}
$$

Direct application of the PSC Chinook salmon model alone or CWT data alone was not possible in the computation of all ISBM indices because some fisheries required a finer resolution than the CTC model currently provides or because some terminal fisheries target solely on marked
hatchery fish which makes the estimated CWT-based exploitation rate non-representative of the untagged stocks. In order to estimate total mortalities for some stocks and fisheries, the following stock specific methods were used:

1) For the terminal fisheries with marked exploitation rates that were not representative of the untagged stocks of interest, external estimates were used instead of the model estimates. For 2010, two preseason models, the Fisheries Resource Assessment Model (FRAM) and the Columbia River Harvest Model, were used to generate the external estimates for Puget Sound net and sport, and the Columbia River net and sport fisheries, respectively. For the CWT-based estimates, some indicator stocks did not have 1979 1982 base period recoveries. For these stocks, base period exploitation rates for the model stock associated with the wild stock were used, if available.
2) For 2010, many ISBM fisheries or stock/fishery combinations had no preseason predictions of exploitation and in some cases, no prediction of abundance. In those cases, the previous year exploitation rates were assumed.
3) In 1999-2009, external estimates of impacts in terminal ISBM fisheries were used to generate harvest-rate scalars (FPs for model generated estimates) or to modify estimated CWT recoveries (for CWT-based estimates) for many stocks. This was necessary because terminal impacts on some CWT exploitation rate indicator stocks were not representative of the fishery impacts on the untagged stock of interest.
4) For the CWT-based estimates, some indicator stocks did not have 1979-1982 base period recoveries. For these stocks, base period exploitation rates for the model stock associated with the wild stock were used, if available.

Table 2-6 and Table 2-7 show which model stock or, CWT exploitation rate indicator stock, was used to represent a wild stock. The tables also summarize the methods (if any) used to compute external estimates of total mortalities for the model stocks or to adjust the total mortalities derived from CWT data for exploitation rate indicator stocks for the computation of the ISBM indices.

Table 2-6. Methods for computing FPs input to the CTC Chinook Model to produce ISBM indices. See bullets above for stock specific methods.

| Stock Group | Escapement Indicator Stock | Model Stock | Stock Specific Method 2010 |
| :---: | :---: | :---: | :---: |
| Lower Strait of Georgia | Cowichan ${ }^{1}$ <br> Nanaimo ${ }^{1}$ | GST | $\begin{aligned} & 2 \\ & 2 \\ & \hline \end{aligned}$ |
| Fraser Late | Harrison | FRL | 1,2 |
| North Puget Sound Natural Spring | Nooksack Spring Skagit Spring | NKS | $\begin{aligned} & 1,2 \\ & 1,2 \\ & \hline \end{aligned}$ |
| Upper Strait of Georgia | Klinaklini <br> Kakweikan <br> Wakeman <br> Kingcome <br> Nimpkish | GSQ | Model defaults |
| Fraser Early (springs and summers) | Upper Fraser Mid Fraser Thompson | FRE | 2 |
| West Coast Vancouver Island Falls | Artlish <br> Burman <br> Kauok <br> Tahsis <br> Tashish <br> Marble | RBT | 2 |
| Puget Sound Natural Summer/Falls | Skagit <br> Stillaguamish <br> Snohomish <br> Lake Washington Green River | $\begin{aligned} & \hline \text { SKG } \\ & \text { STL } \\ & \text { SNO } \\ & \text { PSN } \\ & \text { PSN } \\ & \hline \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ |
| North/Central BC | Yakoun Nass Skeena Area 8 | NTH | Model defaults |
| Washington Coastal Fall Naturals | Hoko <br> Grays Harbor <br> Queets <br> Hoh <br> Quillayute | WCN | $\begin{aligned} & 2 \\ & 2 \\ & 2 \\ & 2 \\ & 2 \\ & \hline \end{aligned}$ |
| Columbia River Falls | Upriver Brights Deschutes Lewis | $\begin{aligned} & \hline \text { URB } \\ & \text { URB } \\ & \text { LRW } \\ & \hline \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \\ & 1 \\ & \hline \end{aligned}$ |
| Columbia River Summers | Mid-Columbia Summers | SUM | 2 |
| Far North Migrating Oregon Coastal Falls | Nehalem <br> Siletz <br> Siuslaw | SRH | $\begin{aligned} & 2 \\ & 2 \\ & 2 \\ & \hline \end{aligned}$ |

[^1]Table 2-7. Methods used to adjust CWT data for computation of the ISBM indices.

| Stock Group | Escapement Indicator Stock | Exploitation Rate Indicator Stock | Stock Specific Method |
| :---: | :---: | :---: | :---: |
| Lower Strait of Georgia | Cowichan Nanaimo | Cowichan NC | $\begin{gathered} \hline 4 \\ \mathrm{NC} \end{gathered}$ |
| Fraser Late | Harrison | Chilliwack (Harrison Fall Stock) | Not needed |
| North Puget Sound Natural Spring | Nooksack Spring Skagit Spring | Nooksack Spring N/A | $\begin{gathered} 4 \\ \text { N/A } \\ \hline \end{gathered}$ |
| Upper Strait of Georgia | Klinaklini Kakweikan Wakeman Kingcome Nimpkish | Quinsam | Not needed |
| Fraser Early (springs and summers) | Upper Fraser Mid Fraser Thompson | N/A | N/A |
| West Coast Vancouver Island Falls | Artlish <br> Burman <br> Kauok <br> Tahsis <br> Tashish <br> Marble | Robertson Creek | 3 |
| Puget Sound Natural Summer/Falls | Skagit Stillaguamish Snohomish Lake Washington Green River | N/A <br> Stillaguamish Fall Fingerling <br> N/A <br> N/A <br> South Puget Sound Fall Fingerlings | 4 <br> Not needed <br> N/A <br> N/A <br> Not needed |
| North/Central BC | Yakoun Nass Skeena Area 8 | N/A | N/A |
| Washington Coastal Fall Naturals | Hoko <br> Grays Harbor <br> Queets <br> Hoh <br> Quillayute | Queets <br> Queets <br> Queets <br> Queets <br> Queets | 3 3 Not needed 3 3 |
| Columbia River Falls | Upriver Brights Deschutes Lewis | Upriver Bright Upriver Bright Lewis River Wild | Not needed 3 <br> Not needed |
| Columbia River Summers | Mid-Columbia Summers | Columbia Summers | Not needed |
| Far North Migrating Oregon Coastal Falls | Nehalem Siletz <br> Siuslaw | Salmon River Hatchery Salmon River Hatchery Salmon River Hatchery | $\begin{aligned} & 3 \\ & 3 \\ & 3 \\ & \hline \end{aligned}$ |

### 2.6 Assumptions of the CWT ERA Analyses

Assumptions used in the cohort analysis and other procedures used in the ERA are summarized below. Detailed discussions of assumptions and parameter values have been reported previously (CTC 1988). The analysis is necessary to calculate the fishery indices for the AABM fisheries and the non-ceiling index for the ISBM fisheries. The primary assumptions of the cohort analysis are:

1) CWT recovery data are obtained in a consistent manner from year to year or can be adjusted to make them comparable. Many of the analyses rely upon indices that are computed as the ratio of a statistic in a particular year to the value associated with a base period. Use of ratios may reduce or eliminate the effect of data biases that are consistent from year to year.
2) For ocean age 2 and older fish, natural mortality varies by age but is constant across years. Natural mortality rates applied by age are: age $2,40 \%$; age $3,30 \%$; age $4,20 \%$; and age 5 and older $10 \%$ (i.e., after fishing mortality and maturation of the age 4 cohort, $10 \%$ of the remaining immature fish die due to natural sources before becoming age 5 fish and before the commencement of fishing the next year).
3) All stocks within a fishery have the same size distribution for each age and the size distribution at age is constant among years.
4) The spatial and temporal catch distribution of sublegal-size fish of a given age from a stock is the same as legal-size fish of a given age of that stock.
5) Incidental mortality rates per encounter are constant between years. The rates vary by fish size (legal or sublegal) and fishery and are those published by the CTC (1997) for troll and sport fisheries. The rates used in CLB 1007 are listed in Appendix M.
6) The procedures for estimating the mortality of CWT fish of legal size during periods of Chinook non-retention (CNR) assume that the stock distribution in any year remains unchanged from the period of legal catch retention in the same year. However, gear and/or area restrictions during CNR fisheries are believed to reduce the number of encounters of legal-size fish. To account for this, the number of legal encounters during the CNR fishery was adjusted by a selectivity factor. A factor of 0.34 was used for the WCVI and Strait of Georgia (GS) troll fisheries. This value was the average selectivity factor calculated from 3 years of observer data in the Alaska troll fishery. A factor of 0.20 was used in the North Central British Columbia (NCBC) troll fishery. This factor corresponds to the proportion of fishing areas that remain open during non-retention periods. A selectivity factor was not required for the SEAK troll fishery since an independent estimate of legal and sublegal encounters has been provided annually.
7) Maturation rates for brood years in which all ages have not matured (incomplete broods) are equal to the average of completed brood years. Maturation rates are stock specific.
8) Recoveries of age 4 (age 5 for spring stocks) and older Chinook salmon in ocean net fisheries are assumed to be mature fish (ocean terminal catches).
9) In addition, when using the fishery indices as a measure of the change in fishery harvest rates between years, the temporal and spatial distribution of stocks in and among fisheries and years is assumed to be stable.

For AABM fisheries, the fishery indices are presented for both reported catch (same as landed catch) and total mortality; only total mortality indices are presented for the ISBM fisheries. The difference between reported catch and total mortality is incidental mortality, which includes the mortality of legal-size fish in CNR fisheries and the mortality of sublegal-size fish in both retention and CNR fisheries. Management strategies have changed considerably for fisheries of interest to the PSC since 1985. Regulatory changes have included size limit changes, extended periods of CNR in troll fisheries, and mandatory release of Chinook caught in some net fisheries. Estimates of incidental mortality are crucial for assessment of total fishery impacts, yet they cannot be determined directly from CWT recovery data. There are four categories of incidental mortality that are estimated in the Chinook model and the CWT cohort analysis. Legal and sublegal fishery specific mortality rates are applied to the following types of Chinook encounters:

1) Shakers: Chinook below the legal size limit that are encountered, brought to the boat, and released during a Chinook retention fishery.
2) Sublegal CNR: Chinook below the legal size limit that are encountered, brought to the boat, and released during a Chinook non-retention fishery. The mortality rate per encounter applied to sublegal CNR is the same applied to shakers.
3) Legal CNR: Chinook above the legal size limit that are encountered, brought to the boat, and released during a Chinook non-retention fishery.
4) Drop-off: Chinook above or below the legal size limit that are encountered, but are lost from the gear before they reach the boat during either retention or non-retention fisheries. Dropoff mortality is assumed the same for legal and sublegal fish, but can vary by gear type.

There are several methods used to estimate the number of CNR mortalities in the model and the CWT cohort analysis. The 'season length' method uses the relative length of the Chinook retention and non-retention periods. This is usually expressed in days or boat-days. In a related method, direct estimates of CNR encounters provided by the agencies are related to the size of the landed catch. The CWT cohort analysis can also use a method based on catchability coefficients where no associated Chinook retention period exists for the fishery. The 'season length' method used in the exploitation rate assessment was described in CTC (1988). The Chinook model also can also use a method, known as the 'RT' method, based on the difference between the base period and the current year exploitation rates, and current cohort sizes. In both the season length and RT methods, the stock composition of the legal CNR encounters is assumed to be the same as the stock composition of the legal catch. The stock composition of the shakers and sublegal CNR encounters is estimated using the non-vulnerable portions of the cohorts for stocks that contribute to the landed catch. The procedures used to estimate incidental mortality in the Chinook model have been described by the CTC AWG (1991) and CTC (2004).

For some fisheries or years, CWT recoveries are either lacking or cannot be used in certain analyses of this exploitation rate assessment. In some of these situations the model can be used for ER assessment.

### 2.7 Results of ERA (Appendix C, D and E):

The purpose of the Exploitation Rate Analysis (ERA) is to estimate post-season how stocks and fisheries perform across the various AABM and ISBM fisheries. To this effect, we report numerous statistics by region and stock that are assembled in Appendix C through E. Appendix C summarizes tag distributions for each stock by year and region (specifically AABM and ISBM fisheries) and escapement. Appendix D is summarizing survival by stock using indexed survival from the tags and comparing them to associated model stocks. Summaries of how these two relate are reported with a correlation coefficient in each of these graphs. Finally Appendix E summarizes the exploitation rate for complete broods for pre-terminal and terminal fisheries by stock.

## 3 MODEL CALIBRATION AND OUTPUT

### 3.1 Model Calibration

This section describes the calibration data and procedures. For reference, a list of stocks and fisheries in the model is provided in Appendix A. Estimation of the model base period parameters is discussed in detail in the model documentation (CTC AWG 1991). For 2010, the model used was the same as used during the Pacific Salmon Treaty negotiations (CLB 9812), but with the exception that the actual catches, escapements, and other data through 2009 were added. In addition, CTC-accepted escapement goals were used where available and the form of the Ricker production function was adjusted for those stocks with newly accepted goals (e.g. Harrison River fall Chinook).

### 3.1.1 Calibration Data

The first step in the annual calibration process is to gather new or revised data and update the appropriate model input files. The frequency of updates depends on the frequency of data changes made by the reporting agencies, the magnitude of the change, and the significance of the change to the current model application. For example, the file containing run size data is updated as preseason forecasts and postseason estimates become available since model predictions are sensitive to preseason forecasts and postseason estimates of terminal runs. Months in which forecasts are made for each stock, and the month the final return estimate becomes available, are presented in Table 3-1.

The model is recalibrated annually to incorporate observed data from the previous year and available abundance forecasts for next year. In addition, recalibration may also occur when significant changes in one or more of the following model input files are made.

BSE (base). This file contains basic information describing the structure of the model, including, but not limited to, the number of stocks, age classes and fisheries, the names of fisheries and the proportion of each age class that was not vulnerable to the gear during the base period, identification of terminal fisheries, stock names and production parameters. This file may be modified annually to incorporate productivity parameters that correspond to new CTC agreed escapement goals.

CEI (ceiling). This file contains historical catch data for the 19 fisheries (both AABM and ISBM) that are modeled as ceiling or catch quota fisheries (as opposed to fisheries modeled solely through control of exploitation rates) through the most recent fishing season.

CNR (Chinook non-retention). Data used by the model to estimate mortalities during CNR periods are read from the CNR file. The data in the CNR file depends on which method is used to calculate CNR mortality. It may include direct estimates of encounters during the CNR period or indicators of fishing effort in the CNR period relative to the retention period.

Table 3-1. Months when final return estimates are available for the previous year and preseason forecasts of abundance are available for the next fishing year from agencies.

| Model Stock | Month Final Return Estimate Available | Month(s) Forecast Available |
| :---: | :---: | :---: |
| Alaska South SE | January | None |
| North/Central BC | November | None |
| WCVI Natural | January | February |
| WCVI Hatchery | January | February |
| Upper Strait of Georgia | January | None |
| Lower Strait of Georgia Hatchery | December | None |
| Lower Strait of Georgia Natural | December | None |
| Fraser Early | January | None |
| Fraser Late | February | February |
| Nooksack Spring | June | Not Used |
| Nooksack Fall (Samish) | June | February |
| Snohomish Wild | June | February |
| Skagit Wild | June | February |
| Puget Sound Natural Fingerling | June | February |
| Stillaguamish Wild | June | February |
| Puget Sound Hatchery Fingerling | June | February |
| Puget Sound Hatchery Yearling | June | February |
| Washington Coastal Wild | June | None |
| Washington Coastal Hatchery | June | None |
| Cowlitz Spring Hatchery | June | December |
| Willamette River Hatchery | June | December |
| Columbia River Summer | September | March |
| Fall Cowlitz Hatchery | April | February, April ${ }^{1}$ |
| Spring Creek Hatchery | April | February, April |
| Lower Bonneville Hatchery | April | February, April |
| Upriver Brights | April | February, April |
| Snake River Wild Fall | April | April |
| Mid-Columbia River Bright | April | February, April |
| Lewis River Wild | April | February, April |
| Oregon Coast | February | February |

${ }^{1}$ A preliminary ocean escapement forecast is released in February. An updated ocean escapement forecast reflecting the ocean fishery option adopted by PFMC is released in April.

ENH (enhancement file). This file contains productivity parameters and smolt production for 13 hatchery stocks and one natural stock (Lower Georgia Strait Naturals) with supplementation. Smolt production is expressed as the deviation from the average production during the model base period; as a result, values in the ENH file can be negative if releases in a given year are less
than the average reported for the model base period. Additional discussion of the productivity parameters may be found in the model documentation (CTC AWG 1991).

FCS (forecast). Estimates of terminal run sizes or escapements and agency supplied preseason forecasts are included in the FCS file. Age-specific information is used for those stocks and years with age data (Table 3-2).

FP (fishery policy). This file contains scalars that are specific to year, fishery, stock and age that are applied to base period fishery exploitation rates. The FPs are used to scale fishery exploitation rates relative to the model base period and can be used for a variety of purposes. For example, in the ocean areas off the Washington and Oregon North of Cape Falcon (WA/OR) troll fishery, the FPs are used to model the differential impacts on Columbia River and Puget Sound stocks as the proportion of the catch occurring in the Strait of Juan de Fuca varies. The source of the FPs is generally the reported catch fishery index computed from CWT data in the annual exploitation rate analysis or the ratios of harvest rates computed from terminal area run reconstructions.

IDL (interdam loss). The IDL file contains stock-specific conversion factors for the Columbia River Summer, Columbia Upriver Bright, Spring Creek Tule, and Snake River Fall stocks provided each year by Columbia River fishery managers. The factors represent the fraction of the stock that can be accounted for after mainstem dam passage in the Columbia River; losses can be attributed to direct mortality at the various dams, mortality in the reservoirs between dams, fall-backs, tailrace spawning, and other factors. The interdam loss factor is equal to one minus the conversion factor.

IM (changes in incidental mortality rates). The IM file contains the incidental mortality rates by fishery for legal and sublegal fish that differ from those used in the base period due to alterations in gear, regulations, or fishery conduct.

MAT (maturity and adult equivalent factors). The MAT file has annual estimates of maturation rates and adult equivalent factors for 11 stocks (AKS, BON, CWF, FRL, GSH, LRW, ORC, RBH, RBT, SPR, URB, and WSH). These estimates replace the base period rates in the BSE file. The annual estimates are obtained from the annual exploitation rate analysis. The average value is used for years beyond the last year for which estimates are available (due to incomplete broods and the one year lag for completion of the annual exploitation rate analysis).

PNV (proportion non-vulnerable). A PNV file is created for each fishery for which a size limit change has occurred since the model base period. Each file contains age-specific estimates of the proportion of fish not vulnerable to the fishing gear or smaller in length than the minimum size limit. The PNVs were estimated from empirical size distribution data; in some instances independent surveys of encounter rates were used to adjust the PNV for age 2 fish to account for the proportion of the cohort that was not vulnerable to the fishing gear.

STK (stock). This file contains the stock and age-specific starting (base period) cohort sizes, the base period exploitation rates on the vulnerable cohort for each model fishery, maturation schedules, and adult equivalent factors. This file is updated if new stocks or fisheries are added, new CWT codes are used to represent distribution patterns of existing model stocks, or a re-
estimation of base period data occurs. Modification of this file will result in a model different from that used in the negotiations (CLB 9812).

The calibration is controlled through a file designated with an OP7 extension.
Table 3-2. Methods used to forecast the abundance of stocks in the PSC Chinook Model. Externally provided forecast type codes are $\mathrm{S}=$ sibling; $\mathrm{R}=$ return rate; $\mathrm{C}=$ model internally estimated projection.

| Model Stock | Forecast Characteristics |  |  | Comments |
| :---: | :---: | :---: | :---: | :---: |
|  | Forecast Type | Preseason Age-specific | Postseason Age-specific |  |
| Alaska South SE | C | - | Yes | Calibrated to escapement |
| North/Central BC | C | - | No | Calibrated to terminal run |
| WCVI Hatchery + Natural (RBH and RBT model stocks) | S | Yes | Yes | Robertson Creek Hatchery forecasts plus expansion for other WCVI stocks based on ratio of terminal run sizes |
| Upper Strait of Georgia | C | - | Partial | Calibrated to escapement |
| Lower Strait of Georgia Hatchery | C | - | Yes | Calibrated to escapement to GSH hatchery systems and Squamish River |
| Lower Strait of Georgia | C | - | Yes | Calibrated to escapement to Cowichan and Nanaimo Rivers |
| Fraser Early | C | - | No | Calibrated to terminal run |
| Fraser Late | S | Yes | Yes | Combined forecasts for Harrison River and Chilliwack Hatchery |
| Nooksack Spring | C | Partial | No | No data since 1987 |
| Nooksack Fall (Samish) | R | No | No | 2001-2002 return rate |
| Snohomish Wild | R | No | No | Recruits per Spawner |
| Skagit Wild | S | Yes | Yes | Cohort return rate |
| Puget Sound Natural Fingerling | R | No | No | Calibrated to terminal run |
| Stillaguamish Wild | R | No | No | Recruits per Spawner |
| Puget Sound Hatchery <br> Fingerling + Yearling | R | No | No | Age-specific forecasts not available for all components |
| Washington Coastal Wild | R | No | No | Calibrated to terminal run |
| Washington Coastal Hatchery | C | No | No | Calibrated to terminal run |
| Cowlitz Spring Hatchery | S | Yes | Yes | Prediction is to mouth of tributary streams. |
| Willamette River Hatchery | S | Yes | Yes | Prediction is to mouth of Willamette River |
| Columbia River Summer | S | No | No | Changed in 2001 to 5-year average |
| Spring Creek Hatchery | S | Yes | Yes | Run reconstruction used to estimate Columbia River mouth return |
| Lower Bonneville Hatchery | S | Yes | Yes | Run reconstruction used to estimate Columbia River mouth return |
| Upriver Brights | S | Yes | Yes | Run reconstruction used to estimate Columbia River mouth return |
| Snake River Wild Fall | C | - | No | Calibrated to escapement to Lower Granite. External forecast is sometimes available. |
| Mid-Columbia River Bright | S | Yes | Yes | Run reconstruction used to estimate Columbia River mouth return |
| Lewis River Wild | S | Yes | Yes | Run reconstruction used to estimate Columbia River mouth return |
| Oregon Coast | S | Yes | Yes | Weighted average age composition from four index rivers |

### 3.1.2 Calibration Procedures

The objective of the calibration is to estimate stock and brood year specific environmental variant (EV) scalars. The calibration uses an iterative algorithm to estimate the EV scalars for each brood year and model stock to account for annual variability in natural mortality in the initial year of ocean residence. EV scalars are applied to production resulting from brood year escapements and the base period spawner-recruit function to produce the age 1 abundance by stock. Fishing impacts and natural mortalities are then applied through model processes. EVs also adjust for biases resulting from errors in the data or assumptions used to estimate the base period parameters for the spawner-recruit function.

EVs are estimated through the following steps for stocks calibrated to age-specific terminal run sizes:
(1) Predicted terminal runs are computed for each year using the input files discussed above and with values of all stock productivity scalars (EVs set equal to 1 ).
(2) The ratio of the observed terminal run and model predicted terminal run $\left(S C_{B Y}\right)$ is computed for each brood year. For example, if the estimated and model predicted terminal runs for the 1979 brood were 900 and 1,500 age 3 fish in 1982, 4,000 and 4,500 age 4 fish in 1983, and 1,000 and 1,500 age 5 fish in 1983, the ratio would be computed as:

$$
\begin{gathered}
S C_{B Y}=\frac{\sum_{a=\text { Minage }}^{\text {Maxage }}(\text { ObservedTerminalRun })_{a}}{\sum_{a=\text { Minage }}^{\text {Maxage }}(\text { Model Predicted TerminalRun })_{a}} \\
S C_{B Y}=\frac{900+4000+1000}{1500+4500+1500}
\end{gathered}
$$

Equation 3.1

In the absence of age-specific estimates of the terminal run, the components are computed by multiplying the total terminal run by the model predictions of age composition.
(3) The EV for iteration $n$ and brood year $B Y$ is computed as:

$$
\begin{equation*}
E V_{n, B Y}=E V_{n-1, B Y} * S C_{B Y} \tag{Equation 3.3}
\end{equation*}
$$

(4) Steps 1-3 are repeated until the absolute change in the EVs for all stocks is less than a predetermined tolerance level (currently set at 0.05 ). This value could be changed if required depending on the coarseness needed for resolution.

$$
\left|\frac{E V_{n, B Y}-E V_{n-1, B Y}}{E V_{n-1}}\right|<0.05
$$

Several options for the calibration are provided in the OP7 control file. The options include the ability to control the brood years for which the EVs are estimated in each iteration and also the type of convergence criteria. For the 2005 calibration, EVs were estimated for all brood years in each iteration. Convergence was defined to occur when the absolute value of the difference in EVs between successive iterations did not exceed 0.05 .

Stock-specific calibration options are specified in the FCS file and discussed below:
Minimum Number of Age Classes. Data for all age classes will not be available when the EVs are estimated for recent broods. Since considerable uncertainty may exist in a single data point, application of the calibration algorithm can be restricted to cases in which a specific minimum number of age classes are present.

Minimum Age. Considerable uncertainty often exists in the estimates of terminal runs or escapements for younger age classes, particularly age 2 . The minimum age class to include in the calibration algorithm is specified in the FCS file.

Estimation of Age Composition. Age-specific estimates of the terminal run or escapement may not be available. An option is provided to estimate the age composition using base period maturation and exploitation rates.

The forecasts provided by the management agencies typically represent terminal runs or escapements without adjustments for changes in ocean fisheries. Since the forecasts implicitly include exploitation in pre-terminal fisheries, the expansion of the forecasts to total cohort size should be made using the average exploitation rate for the period of years in the forecast database.

The 2010 calibration was completed in two stages to facilitate computation of the average exploitation rates and incorporation of the agency forecasts. The Stage 1 calibration provided initial estimates of exploitation rate scalars for fishing years 1979 through 2009 using updated catch and escapement data through 2009. Average exploitation rate scalars ( $\overline{F P}$ ) were then computed and used as input values for 2009 fisheries in the Stage 2 calibration, except for the WCVI and Fraser Late (FRL) stocks whose forecasts already account for changes in the ocean fisheries.

The $\overline{F P}$ s for each model fishery were obtained from the Stage 1 calibration using the following formula:

$$
\begin{equation*}
\overline{F P}_{a, s, C Y, f}=\frac{\sum_{C Y=C Y_{\text {satr }}}^{C Y_{\text {end }}} R T_{C Y} * F P_{s, a, C Y, f}}{\left(C Y_{\text {end }}-C Y_{\text {start }}\right)} \tag{Equation 3.5}
\end{equation*}
$$

The range of years used to compute the average FP varied between stocks and was fishery and age-specific. The input files used in the Stage 2 calibration were identical to those used in Stage 1 with two exceptions:
(1) the average exploitation rate scale factors for each fishery were inserted into the FP file for 2010; and
(2) the Stage 1 EVs were used as starting values for the Stage 2 calibration.

To determine the acceptability of a calibration by the CTC (i.e., whether an annual calibration is deemed final by the CTC), several results are examined:
(1) accuracy of the reconstructed catches in the fisheries (these values will consistently differ from the actual catches if the calibration is not able to recreate exactly the actual catches in the years 1979 through 1984, the model years used prior to implementation of the ceiling algorithm);
(2) accuracy of model predicted terminal runs or escapements relative to the data used for calibration of each stock;
(3) comparison of model predicted age structure in terminal runs or escapements with data used for calibration (consistent biases in age structure are addressed by changing maturation rates);
(4) patterns in the EVs compared with marine survival patterns generated by the annual exploitation rate analysis;
(5) comparison of CWT and model estimates of fishery harvest rate indices ;
(6) comparison of model estimates of mortality distributions for individual stocks to those generated from the annual CWT-based exploitation rate analysis; and
(7) comparison of model estimated AIs with those AIs estimated by model CLB 9812.

Calibration usually involves an iterative process until a judgment is made by the CTC that an acceptable fit to all the data was achieved. This decision usually involves an inspection and trial-and-error process. The determination of whether or not further calibrations are necessary is based principally on the significance of deviations from observed or estimated values for stocks and fisheries most relevant to the issues to be evaluated and on the time constraints established for completion of the calibration.

### 3.2 Model Calibration Evaluation

Previous reports included evaluations of model performance for the most current model year, including comparisons of model estimates of catch and escapement/terminal run sizes to actual estimates of catch and escapement/terminal run size. This year, the model catches and stock escapements or terminal run sizes estimated by CLB 1007 were evaluated along with other aspects of the calibration. The calibration was distributed to the CTC membership for review and subsequently approved. Correlations between model and CWT fishery indices are normally conducted, however while these comparisons were made as part of the normal calibration checking process, the results are not presented in this report.

Fishery mortality indices generated by CLB 1007 can be compared to the CWT-based exploitation rate analysis. Model and CWT-based fishery mortality indices use the same equation, but the former are derived from model estimates of catch for all model stocks instead of CWT recovery data from specific exploitation rate indicator stocks. The CWT fishery mortality indices are considered the most accurate. Two fishery indices are presented; reported catch and total mortality estimated using two methods. The first method is a ratio of means (ROM) and the second is the stratified proportional fishery index (SPFI; CTC 2005). In general, the model results are closely associated with the CWT-based indices and changes in fishery exploitation rates.

The SEAK fishery mortality index from the model closely follows the trend of the CWT derived estimate from 1979 through 1989 for both landed catch and total mortality (Figure 3-1 and Figure 3-2). Between 1989 and 2000, the model estimate of both landed catch and total mortality indices is less than the CWT-derived estimate for most years but since 2001, the model estimate is higher. Since 1990, the model estimates also show less variability compared to the CWT-derived indices.


Figure 3-1. Estimated CWT based SPFI (through 2008) and model landed catch fishery indices (through 2008) for the SEAK troll fishery


Figure 3-2. Estimated CWT based SPFI (through 2008) and model total mortality fishery indices (through 2008) for the SEAK troll fishery.

### 3.2.1 SPFI developed for NBC and WCVI AABM Fisheries

Based on the results that came out of the Harvest Rate Index Analysis in 2009 (CTC 2009), a recommendation was made to use the SPFI estimator for the fishery index in all AABM fisheries. As a result, the CTC created the SPFI for WCVI and NBC fisheries and compared them to the model and CWT based ROM estimator of the fishery index for each of the fisheries analyzed (Figure 3-3 through Figure 3-6). It should be noted that the intent of assessing how the SPFI effects results in the calibration procedures was intended to be assessed, this has been deferred to the next evaluation. The CTC_AWG will assess the use of the SPFI in the 2011 calibration as well.

The model-derived fishery mortality indices for NBC generally follow the same trend as CWTderived indices (Figure 3-3 and Figure 3-4). However, since 1991, the model-based estimates have exceeded the CWT-derived estimates in all but three years for both landed catch and total mortality indices. Since 2001, this difference has been noticeably large.


Figure 3-3. Estimated CWT ROM (FI), SPFI (through 2008) and model landed catch fishery indices (through 2008) for the NBC troll fishery.


Figure 3-4. Estimated CWT ROM (FI), SPFI (through 2008) and model total mortality fishery indices (through 2008) for the NBC troll fishery.

Since the base period, the model-derived landed catch fishery index estimates and trends for the WCVI troll fishery have been similar to CWT based ROM FI estimates (Figure 3-5 and Figure 3-6). Starting in 2000, model and CWT based ROM estimates have diverged significantly for both landed catch and total mortality, with the CWT indices being consistently higher than model indices. To adjust for this the SPFI was developed that captures temporal and spatial changes in the fishery, and is now reported along with the ROM FI (Figure 3-5 and Figure 3-6).


Figure 3-5. Estimated CWT ROM (FI), SPFI (through 2008) and model landed catch fishery indices (through 2008) for the WCVI troll fishery.


Figure 3-6. Estimated CWT ROM (FI), SPFI (through 2008) and model total mortality fishery indices (through 2008) for the WCVI troll fishery.

### 3.3 AABM Abundance Indices and Associated Catches

Beginning with the 1999 fishing season, the PST specified that the AABM fisheries are to be managed through the use of the preseason AIs, where specific allowable harvest corresponds to a given AI for each fishery. The preseason AIs that were used to establish harvest management targets are listed in Table 3-3. The 2010 preseason AI for the SEAK troll fishery is 1.35 , for the NBC troll fishery it is 1.17, and for the WCVI troll fishery is 0.96 . This is the second year of the new annex to the Pacific Salmon treaty that adjusts for a drop in catches and associated harvest rates in Southeast Alaska, and West Coast of Vancouver island AABM fisheries in response to conservation concerns coast wide. The NBC AABM fishery remained at the same allowable catch and harvest rates as the previous annex. In-season predictors may also be used for inseason adjustments to the preseason AI's for the SEAK troll fishery. However, the in-season AI is highly influenced by the pre-season AI and has not provided a reliable estimate of the postseason AI. Therefore it has not been used in SEAK since 2001

The postseason AI is considered a more accurate estimate of the abundance index for the AABM fisheries, and is used to compute a final allowable catch for each fishery to evaluate overage or underage of the landed catch relative to the harvest objective. Postseason AIs for 1999-2009 are also listed in Table 3-3.

Table 3-3 Abundance indices (AI) for 1999 to 2010 for the SEAK, NBC, and WCVI troll fisheries.

|  | SEAK |  | NBC |  | WCVI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Preseason | Postseason | Preseason | Postseason | Preseason | Postseason |
| 1999 | 1.15 | 1.12 | 1.12 | 0.97 | 0.60 | 0.50 |
| 2000 | 1.14 | 1.10 | 1.00 | 0.95 | 0.54 | 0.47 |
| 2001 | 1.14 | 1.29 | 1.02 | 1.22 | 0.66 | 0.68 |
| 2002 | 1.74 | 1.82 | 1.45 | 1.63 | 0.95 | 0.92 |
| 2003 | 1.79 | 2.17 | 1.48 | 1.90 | 0.85 | 1.10 |
| 2004 | 1.88 | 2.06 | 1.67 | 1.83 | 0.90 | 0.98 |
| 2005 | 2.05 | 1.90 | 1.69 | 1.65 | 0.88 | 0.84 |
| 2006 | 1.69 | 1.73 | 1.53 | 1.50 | 0.75 | 0.68 |
| 2007 | 1.60 | 1.34 | 1.35 | 1.10 | 0.67 | 0.57 |
| 2008 | 1.07 | 1.01 | 0.96 | 0.93 | 0.76 | 0.64 |
| 2009 | 1.33 | 1.20 | 1.10 | 1.07 | 0.72 | 0.61 |
| 2010 | 1.35 |  | 1.17 |  | 0.96 |  |

The 2008 PSC Agreement specifies the allowable catch for various values of the AI for each fishery. Catches for 1999-2008 were from Table 1 in the Chinook Annex to the 1999 PSC Agreement. In the 2008 PSC Agreement, the relationship between the AI and the allowable catch changed for SEAK and WCVI; thus the allowable catches for 2009 were derived from Table 1 of the Chinook Annex to the 2008 PSC Agreement. The allowable treaty catch by fishery and year based on pre- and postseason AIs and the actual (observed) catches are given in Table 3-4.

Table 3-4 Observed catches and postseason allowable catches for 1999 to 2009, and preseason allowable catches for 1999 to 2010, for AABM fisheries.

| PST Treaty Allowable and Observed Catches |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | SEAK (T, N, S) ${ }^{1}$ |  |  | NBC (T, S) |  |  | WCVI (T, S) |  |  |
|  | Preseason Allowable Catch | Postseason Allowable Catch | Observed Catch | Preseason Allowable Catch | Postseason Allowable Catch | Observed Catch | Preseason Allowable Catch |  | Observed Catch |
| 1999 | 192,800 | 184,200 | 198,842 | 145,600 | 126,100 | 86,726 | 128,300 | 107,000 | 36,413 |
| 2000 | 189,900 | 178,500 | 186,493 | 130,000 | 123,500 | 31,900 | 115,500 | 86,200 | 101,438 |
| 2001 | 189,900 | 250,300 | 186,919 | 132,600 | 158,900 | 43,500 | 141,200 | 145,500 | 117,670 |
| 2002 | 356,500 | 371,900 | 357,133 | 192,700 | 237,800 | 150,137 | 203,200 | 196,800 | 165,036 |
| 2003 | 366,100 | 439,600 | 379,519 | 197,100 | 277,200 | 191,657 | 181,800 | 268,900 | 175,821 |
| 2004 | 383,500 | 418,300 | $\begin{gathered} \hline 417,019 \\ 421,666^{2} \end{gathered}$ | 243,600 | 267,000 | 241,508 | 192,500 | 209,600 | 216,624 |
| 2005 | 416,400 | 387,400 | 387,749 | 246,600 | 240,700 | 243,606 | 188,200 | 179,700 | 202,662 |
| 2006 | 346,800 | 354,500 | 358,601 | 223,200 | 200,000 | 215,985 | 160,400 | 145,500 | 146,883 |
| 2007 | 329,400 | 259,200 | 328,419 | 178,000 | 143,000 | 144,235 | 143,300 | 121,900 | 139,150 |
| 2008 | 170,000 | 152,800 | 172,322 | 124,800 | 120,900 | 95,647 | 162,600 | 136,900 | 145,726 |
| 2009 | 218,800 | 176,000 | 241,451 | 143,800 | 139,100 | 109,470 | 107,800 | 91,300 | 124,617 |
| 2010 | 221,800 |  |  | 152,100 |  |  | 143,700 |  |  |

[^2]
### 3.3.1 Explanation of the change from the preseason AI to postseason AI

Chinook Model calibration 1007 resulted in a postseason decrease of the 2009 preseason AIs for all three AABM fisheries (see Table 3-3 and Table 3-4). The change relative to the preseason forecast was greater than typical for the SEAK and WCVI AABMs ( $9.8 \%$ and $15.3 \%$, respectively) though small for the NCBC AABM ( $2.7 \%$ ). Due to the location of break points in the step function underlying the AI to total allowable catch (TAC) relationship for SEAK, the decrease in the postseason assessment of the TAC was $19.6 \%$ instead of $9.8 \%$. Taken together, these postseason changes indicated a noteworthy decrease in the estimated overall abundance of Chinook available to fisheries in 2009 and were sufficiently unusual as to warrant investigation.

Most of the change can be attributed to the fact that for the 22 stocks with agency-provided terminal run or escapement forecasts, the total adult return for 20 of them was less than the preseason forecast. The lower-than-expected returns were not confined to any particular region. The difference between the forecast and actual return in some cases was substantial both in terms of the percentage change relative to the forecast and in actual numbers of fish. The agencyprovided forecasts are a key input to the Chinook Model and while it is understood that they have an associated average error, rarely does such a high proportion err in the same direction.


Figure 3-7. The 2009 agency-provided forecasts of total adults used as input to Chinook Model calibration 0907 ( 09 FCS bars at the left y-axis scale) and the difference between the actual return and preseason forecast (OBS-FCS diamonds at the right y -axis scale). Bar labels below the x -axis consist of a three-letter acronym for each stock (or stock aggregate) followed by a dash and two letters for the region of origin. Black bars indicate those stocks (2) with a stream-type juvenile life history; grey bars indicate an ocean-type juvenile life history. The horizontal dashed line at 0 indicates no difference between the forecast and actual return. Negative values indicate that the observed return was less than the forecast.

The fact that the majority of the actual returns were below the forecasts suggests a common effect most likely experienced in the ocean environment. Age-specific forecasts are available for 11 of the 22 stocks with preseason forecasts. Examination of the change in specific age classes of adults present in the forecast relative to the actual return indicates that fish entering the ocean as smolts in 2005 and 2006 (4 and 5 year olds for ocean-type Chinook and 5 and 6 year olds for stream-type Chinook) mostly returned below forecast (Figure 3-8). Fish entering the ocean as smolts in 2007 ( 3 year olds for ocean-type Chinook and 4 year olds for stream-type Chinook) more often returned above forecast. While not proof of a cause and effect, it appears that the ocean environment was less favorable to smolt survival in 2005 and 2006 and more favorable in 2007.


Figure 3-8. Difference in number of Chinook between the 2009 age-specific preseason forecast provided by agencies and the actual return. Each adult age class is related to the year of ocean entry by the smolts. Stock and region bar labels are the same as in Figure 3-7 for 12 stocks with age-specific forecasts. Bars falling below 0 on the $y$-axis indicate a decrease in the actual return compared to the forecast. Black and grey bars indicate, respectively, a stream-type or an oceantype juvenile life history

Despite the decreases in 2009 vulnerable cohort abundance estimated postseason from Chinook Model calibration 1007 for each of the three AABM fisheries, the same calibration forecasted
notable increases in the vulnerable AABM cohort abundances for 2010. These result in corresponding increases of $26.1 \%, 9.3 \%$ and $57.4 \%$ in the TACs for the SEAK, NBC and the WCVI AABM fisheries, respectively, relative to the 2009 postseason TACs. Many kinds of inputs contribute to and influence the annual preseason calibration results and for calibration 1007, these mostly resulted in forecasts of increased abundance for many stocks (Figure 3-9). The amount of increase (or decrease) varies by stock among the AABM fisheries.


Figure 3-9 Percentage change in the 2010 stock-specific vulnerable cohort abundances relative to the postseason estimates for 2009 for the three AABM aggregate fisheries. Three letter acronyms for each of the 30 stocks or stock aggregates included in the calibration are shown below the x -axis. Blue bars are for the SEAK AABM, maroon bars for the NBC AABM and light blue bars for the WCVI AABM.

### 3.3.2 Model estimates of stock composition of AABM fisheries, 1979-2009

There are 30 model stocks (Appendix A). However, the majority of model catches in AABM fisheries are often composed of a few smaller set of major stocks 9 (Figure 3-10 through Figure 3-12). The relative abundance, as per CLB 1007, for each major stock is shown in those graphs. In general, postseason AIs had a peak during the late 1980s (87, 88, \& 89) and another in 2003 and 2004.

The major model stocks contributing to the SEAK AIs are: Oregon Coastal, Upriver Brights, WCVI Natural and Hatchery, North/Central BC, Fraser Early, and Southeast Alaska (Figure

3-10). The "other" category is primarily driven by Upper Georgia Strait, Columbia River Summers, and Mid Columbia River Brights.


Figure 3-10. Total abundance indices for the SEAK troll fishery with annual stock composition indicated by abundance indices for major model stocks from CLB 1007.

The major model stock groups contributing to the NBC AABM fishery AIs are: Oregon Coastal, Upriver Brights, WCVI Natural and Hatchery, North/Central BC, Washington Coastal Wild and Hatchery, Upper and Lower Georgia Strait, and Fraser Early (Figure 3-11). The "other" category is primarily driven by Columbia River Summers, Mid Columbia River Brights and Willamette Springs.


Figure 3-11. Total abundance indices for the Northern BC troll fishery with annual stock composition indicated by abundance indices for major model stocks from CLB 1007.

The major model stock groups in the WCVI fishery are: Oregon Coastal, Upriver Brights, Washington Coastal, WCVI Natural and Hatchery, North/Central BC, Fraser Early, and Southeast Alaska (Figure 3-12). The "Other" category is comprised primarily of Columbia River Summers, Puget Sound, and Columbia River Tules fish.


Figure 3-12. Total abundance indices for the WCVI troll fishery with annual stock composition indicated by abundance indices for major model stocks from CLB 1007.

### 3.4 Overages and Underages

Until an approach for full implementation of overage/underage provisions has been developed and accepted by the PSC, the Commissioners have instructed the CTC to track and report overages and underages relative to agreed-upon harvest objectives.

### 3.4.1 AABM Fisheries

Table 3-5 shows the differences between the postseason allowable catches and the observed catches in AABM fisheries for 1999-2009, and the cumulative differential for those years. Two out of three AABM fisheries have cumulative underages. In SEAK, observed catches have been below final allowable catches for three of the eleven years; the cumulative differential is $0.5 \%$ or $0.6 \%$. In NBC, observed catches have been below the final allowable catches in eight of the eleven years; the cumulative differential is $-23.6 \%$. In WCVI, observed catches have been below allowable catches in four of the eleven years; the cumulative differential is $-6.9 \%$.

Table 3-5 Deviations in numbers of Chinook salmon and percentages from catch targets derived from the first postseason AI (Table 3-3) for Pacific Salmon Treaty AABM fisheries in 1999 to 2008.

| Year | SEAK |  | NBC |  | WCVI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Fish | Percent Difference | Number of Fish | Percent Difference | Number of Fish | Percent Difference |
| 1999 | +14,642 | +7.9\% | -39,374 | -31.2\% | -70,587 | -66.0\% |
| 2000 | +7,993 | +4.5\% | -91,600 | -74.2\% | +15,238 | +17.7\% |
| 2001 | -63,381 | -25.3\% | -115,400 | -72.6\% | -27,830 | -19.1\% |
| 2002 | -14,767 | -4.0\% | -87,663 | -36.9\% | -31,764 | -16.1\% |
| 2003 | -60,081 | -13.7\% | -85,543 | -30.9\% | -93,079 | -34.6\% |
| 2004 | $\begin{aligned} & \hline-1,281^{1} \\ & +3,366 \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.3 \% \\ & +0.8 \% \end{aligned}$ | -25,492 | -9.5\% | +7,024 | +3.4\% |
| 2005 | +349 | +0.1\% | +2,906 | +1.2\% | +22,962 | +12.8\% |
| 2006 | +4,101 | +1.2\% | +15,985 | +8.0\% | +1,383 | +1.0\% |
| 2007 | +69,219 | +26.7\% | +1,235 | +0.9\% | +17,250 | +14.2\% |
| 2008 | +19,522 | +12.8\% | -25,253 | -20.9\% | +8,826 | +6.4\% |
| 2009 | +38,451 | +21.8\% | -29,630 | -21.3\% | +33,317 | +36.5\% |
| Cum. | $\begin{gathered} \hline+14,666 \\ 19,314^{1} \end{gathered}$ | $\begin{aligned} & 0.5 \% \\ & 0.6 \%{ }^{1} \end{aligned}$ | -479,829 | -23.6\% | -117,260 | -6.9\% |

${ }^{1}$ The lower value results from subtracting a terminal exclusion catch for the Stikine River in 2004, which is in dispute.

### 3.5 ISBM Indices by Stock

For ISBM fisheries, the 2008 PSC Agreement specifies that Canada and the United States will reduce base period exploitation rates on specified stocks by $36.5 \%$ and $40 \%$, equivalent to ISBM indices of $63.5 \%$ and $60 \%$ percent, respectively. This requirement is referred to as the 'general obligation' and does not apply to stocks that achieve their CTC agreed escapement goal.
Estimated ISBM fishery indices are shown in Table 3-6 for Canadian fisheries and Table 3-7 for U.S. fisheries. Both tables present CWT-based indices for 2008, and Chinook model-based predicted indices for 2010. The agreement specifies that the indices for postseason assessment be assessed using the CWT-based estimates, 2008 is the most recent analysis available. CWTbased indices for 1999-2008 and model-based indices for 2001-2010 are presented in Appendix B.

Table 3-6 Canadian 2008 ISBM indices based on CWT and the 2010 indices predicted from the PSC Chinook Model.

|  |  | Canadian ISBM Indices |  |
| :---: | :---: | :---: | :---: |
| Stock Group | Escapement Indicator Stock | CWT Indices for 2008 | Model Indices for 2010 |
| Lower Strait of Georgia ${ }^{3}$ | Cowichan <br> Nanaimo | $\begin{aligned} & \hline 0.242^{4} \\ & \text { NA }^{1,5} \end{aligned}$ | $0.203{ }^{6}$ |
| Fraser Late ${ }^{3}$ | Harrison River ${ }^{2}$ | $0.031{ }^{7}$ | 0.138 |
| North Puget Sound Natural | Nooksack | NA | 0.568 |
| Springs ${ }^{3}$ | Skagit | NA | 0.568 |
| Upper Strait of Georgia ${ }^{3}$ | Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish | 0.073 | 0.122 |
| Fraser Early (spring and summers) ${ }^{3}$ | Upper Fraser, Mid Fraser, Thompson | NA | 0.121 |
| West Coast Vancouver Island Falls ${ }^{3}$ | WCVI (Artlish, Burman, Kaouk, Tahsis, Tashish, Marble) | $0.652^{8}$ | 0.122 |
| Puget Sound Natural Summer / Falls ${ }^{3}$ | Skagit | NA | 0.709 |
|  | Stillaguamish | NA | 0.791 |
|  | Snohomish | NA | 0.718 |
|  | Lake Washington | NA | $0.690{ }^{9}$ |
|  | Green River | 0.106 | $0.670^{9}$ |
| North / Central B. C ${ }^{3}$. | Yakoun, Nass, Skeena, Area 8 | NA | 0.177 |
| Washington Coastal Fall Naturals | Hoko, Grays Harbor, Queets ${ }^{2}$, Hoh ${ }^{2}$, Quillayute ${ }^{2}$ | NA | 0.134 |
| Columbia River Falls | Upriver Brights ${ }^{2}$ | NA | 0.110 |
|  | Deschutes ${ }^{2}$ | NA | 0.110 |
|  | Lewis ${ }^{2}$ | NA | 0.920 |
| Columbia R Summers | Mid-Columbia Summers ${ }^{2}$ | NA | 0.084 |
| Far North Migrating OR Coastal Falls | Nehalem ${ }^{2}$, Siletz ${ }^{2}$, Siuslaw ${ }^{2}$ | NA | NA |

${ }^{1}$ Not available (NA) because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc).
${ }^{2}$ Stock or stock group with a CTC agreed escapement goal.
${ }^{3}$ Stock groups listed in Annex 4, Chapter 3, Attachment IV.
${ }^{4}$ 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. 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.
${ }^{5}$ Several problems have been identified in the approach previously used to calculate the CWT-based indices for Nanaimo Chinook. Until these problems are resolved, indices for this stock will not be reported.
${ }^{6}$ Although model-based indices were previously calculated separately for Cowichan and Nanaimo, these did not adequately represent impacts on either LGS stock because the model-based data represent an aggregate of the two 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.
${ }^{7}$ The terminal sport harvest rates for Chilliwack Hatchery Chinook, the indicator stock, were removed from the calculation for the Harrison River naturals because sport harvest has been essentially zero on the natural population. ${ }^{8}$ ISBM indices for WCVI naturals are based on information from Robertson Cr. hatchery stock, including terminal harvest rates. Prior to this report, harvest rates for terminal net and sport fisheries were treated as equal between the naturals and the hatchery indicator. However, this ignored the fact that since 1999, there has been no terminal net harvest of the vast majority of natural stocks on WCVI. Consequently, indices for WCVI naturals were adjusted to reflect this zero terminal net harvest rate. In addition, some inconsistencies were noted in the treatment of terminal harvest rates between the model and CWT indices for this stock group. These inconsistencies were eliminated.
${ }^{9}$ For Canadian ISBM fisheries, the same distribution and Index value are used for Lake Washington and Green R.

Table 3-7 U.S. 2008 ISBM indices based on CWT and the 2010 indices predicted from the PSC Chinook Model.

| Stock Group | Escapement Indicator Stock | U.S. ISBM Indices |  |
| :---: | :---: | :---: | :---: |
|  |  | CWT Indices for 2008 | Model Indices for 2010 |
| Washington Coastal Fall Naturals ${ }^{3}$ | Hoko | NA ${ }^{1}$ | 0.130 |
|  | Grays Harbor | 0.390 | 0.382 |
|  | Queets ${ }^{4}$ | 0.610 | 0.285 |
|  | Hoh ${ }^{2}$ | 0.950 | 0.987 |
|  | Quillayute ${ }^{2}$ | 1.160 | 0.963 |
| Columbia River Falls ${ }^{3}$ | Upriver Brights ${ }^{2}$ | 1.830 | 0.801 |
|  | Deschutes ${ }^{2}$ | 0.540 | 1.004 |
|  | Lewis ${ }^{2}$ | 0.630 | 0.505 |
| Puget Sound Natural Summer <br> / Falls ${ }^{3}$ | Skagit | NA | 0.261 |
|  | Stillaguamish | NA | 0.117 |
|  | Snohomish | NA | 0.125 |
|  | Lake Washington | NA | 0.517 |
|  | Green R | 0.280 | 0.520 |
| Fraser Late ${ }^{3}$ | Harrison River ${ }^{2}$ | 0.260 | 0.209 |
| Columbia R Summers ${ }^{3}$ | Mid-Columbia Summers | 6.800 | 1.142 |
| Far North Migrating OR Coastal Falls ${ }^{3}$ | Nehalem ${ }^{2}$ | 0.920 | $0.916^{5}$ |
|  | Siletz ${ }^{2}$ | 0.670 | $0.698^{5}$ |
|  | Siuslaw ${ }^{2}$ | 0.640 | $2.028^{5}$ |
| North Puget Sound Natural | Nooksack | 0.210 | 0.181 |
| Springs ${ }^{3}$ | Skagit | NA | 0.245 |
| Lower Strait of Georgia | Cowichan, | 4.040 | 0.216 |
|  | Nanaimo | NA | NA |
| Upper Strait of Georgia | Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish | NA | NC ${ }^{4}$ |
| Fraser Early (spring and summers) | Upper Fraser, Mid Fraser, Thompson | NA | 0.111 |
| West Coast Vancouver Island Falls | WCVI (Artlish, Burman, Kaouk, Tahsis, Tashish, Marble) | NA | 0.213 |
| North / Central B. C. | Yakoun, Nass, Skeena, Area 8 | NA | $\mathrm{NC}^{4}$ |

${ }^{1}$ Not available (NA) because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc).
${ }^{2}$ Stock with a CTC agreed escapement goal.
${ }^{3}$ Stock groups listed in Annex 4, Chapter 3, Attachment V.
${ }^{4} \mathrm{NC}$ means that the current model assumes the stock is not caught in U.S. ISBM fisheries.
${ }^{5}$ Oregon coast stocks are based on a three year average harvest rate in in-river fisheries and are thus high. In addition Base Period harvest rates were low in terminal area fisheries.

### 3.5.1 CWT-based Indices in 2008

Figure 3-13 and Figure 3-14 show the historical ISBM indices based on CWT recoveries for 1999-2008. It should be noted that this index is ignored if escapement goals are met. In the eventuality that a goal is not being met, then the general obligation needs to be achieved.

Canadian ISBM indices from the CWT-based estimates for 2008 were reduced more than required under the agreement for four of the five CWT indices which could be calculated, the exception being WCVI Falls (Figure 3-14). Several inconsistencies were identified in the way these indices had been computed in the past, as noted in the footnotes 4-9 in Table 3-6. Most of them were inconsistencies between the ways indices had been calculated by the model versus in the CWT exploitation rate assessment. However, in the case of Lower Georgia Strait, Nanaimo was dropped from the CWT-based index because of concern about the way the terminal fishery rates were estimated. In addition, Nanaimo and Cowichan stocks are no longer reported separately in the model-based index because a way to split the two stocks in the base period has not yet been developed.


Figure 3-13. CWT-based ISBM indices for Canadian fisheries for 1999-2008.
Five of the 15 U.S. ISBM indices for the CWT-based estimates for 2008 were reduced more than required. The other 10 U.S. CWT-based ISBM indices exceeded 0.60 . These 10 stocks (Upriver Brights, Quillayute, Queets, Hoh, Lewis, Mid-Columbia Summers, Nehalem, Siletz, Siuslaw and Cowichan) have agreed escapement goals. Four of these stocks (Upriver Brights, Quillayute, Hoh, and Mid-Columbia Summers) met or exceeded their respective escapement goals, and thus are exempted from the general obligation.


Figure 3-14. CWT-based ISBM indices for U.S. fisheries for 1999-2008.

### 3.5.2 Predicted ISBM Indices for 2010

Six of the 18 ISBM indices for Canada that are based on outputs from calibration 1007 are predicted to exceed the allowable value of 0.635 for Canadian ISBM fisheries in 2010 (Table 3-6). Five of these six stocks are Puget Sound Natural Summer/Fall stocks, and do not have CTC-accepted escapement goals. One of the six stocks, the Lewis River, has a CTC escapement goal, but was below goal in 2009.

Eight of the 23 U.S. ISBM indices based on calibration 1007 are predicted to be above the allowable limit of 0.60 for U.S. ISBM fisheries in 2010 (Table 3-7). All eight have CTC agreed escapement goals: Hoh, Quillayute, Upriver Brights, Deschutes, Mid-Columbia Summers, Nehalem, Siletz, and Siuslaw. Of the stocks with goals, four were at or above goal in 2009, and two were slightly under goal (Mid. Col. Summer, and Hoh) and two of the Oregon stocks were below goal in 2009.

### 3.6 General Forecast Methods

For those stocks with externally provided forecasts of abundance in 2010, management agencies used two general methods to predict terminal returns or escapements:

Sibling Models. Empirical relationships between abundance (commonly measured as terminal run size) of age $a$ fish in calendar year $C Y$ and the comparable abundance of age
$a+1$ fish in year $C Y+1$ are used to predict abundance in 2010 from data collected in previous years (forecast type S in Table 3-2 ).

Average Return Rate Models. Return rates of adults by age from smolts or parents are averaged over past brood years, then these averages are used to discount abundance of smolts or parents for brood years that will be exploited in 2010 (forecast type R in Table 3-2).

### 3.6.1 Agency Stock Forecast Used In The Model

A summary of model-produced and agency-produced forecasts from 1999-2009 is shown in Table 3-8. The relationship between the model stocks in Table 3-8 and exploitation rate indicator stocks and PST Annex stocks are shown in Appendix A. A major factor influencing how well the model can predict Chinook abundance in AABM fisheries is how well the model can predict the returns of Chinook (in terms of ocean escapement or spawning escapement) in the forecast year. During model calibration, agency forecasts are input to the model for all model stocks for which model forecasts are available. Thus, for model stocks with external forecasts, the variation between model forecasts and actual returns can be broken into two parts: the ability of the model to match the input agency forecasts, and the ability of the agency forecasts to accurately predict the actual return of Chinook in the upcoming year. In Table 3-8 the column labeled 'Model Fcst/Agency Fcst' shows the percentage deviation of the model prediction from the agency forecast. The column labeled 'Agency Fcst/Postseason' shows the percentage deviation of the agency forecast from the actual return. The column labeled 'Model Fcst/Postseason' shows the percentage deviation of the model prediction of the return from the actual return. A value of $100 \%$ would indicate that the predicted and actual values were the same.

The model forecasts are similar to the agency forecasts on average. This result is strongly influenced by the incorporation of the agency forecasts into the model calibration procedure. The mean absolute percent error (MAPE) of all 'Model Fcst/Agency Fcst' is $11.9 \%$, and the average percent error is $-0.6 \%$. For all agency forecasts, the MAPE is $35.2 \%$ and the average percent error is $-5.2 \%$ with respect to the postseason estimate. For model forecasts, the MAPE is $37.4 \%$ with respect to the postseason estimate, whereas, the average percent error is $-9.6 \%$

The effect of the error in predicting terminal returns or escapement on the AABM abundance indices varies between fisheries and stocks. There is no clear directional bias of this error. For example, a small stock (small in ocean abundance terms) that is over or under predicted will generally not have a large effect on a fishery's abundance index. Errors in predicting a large stock may or may not affect a fishery's index, depending on the contribution of that stock to the fishery in question (see Appendix F for the model estimated stock composition of selected ocean fisheries). In addition, since the abundance index is an index, rather than an absolute measure of abundance, over or under prediction of a stock's terminal return or escapement would not affect the abundance index of a fishery if the bias in the prediction is consistent over all years in the index, including the base period.

Table 3-8 $\quad$ Preseason forecasts and postseason estimates for PSC model stocks, 1999-2010.

| Stock | Year | Model Forecast | Agency Forecast | Postseason Return | Model Fcst/ Agency Fcst | Agency Fcst/ <br> Postseason | Model Fcst/ Postseason |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AKS ${ }^{1}$ | 1999 | 11,866 | n/a | 12,274 | n/a | n/a | 97\% |
| (Alaska SSE) | 2000 | 18,967 | n/a | 16,196 | n/a | n/a | 117\% |
|  | 2001 | 22,130 | $\mathrm{n} / \mathrm{a}$ | 21,850 | n/a | n/a | 101\% |
|  | 2002 | 15,650 | $\mathrm{n} / \mathrm{a}$ | 18,790 | n/a | n/a | 83\% |
|  | 2003 | 22,316 | n/a | 14,676 | n/a | n/a | 152\% |
|  | 2004 | 11,880 | n/a | 17,414 | n/a | n/a | 68\% |
|  | 2005 | 25,204 | $\mathrm{n} / \mathrm{a}$ | 16,102 | n/a | n/a | 157\% |
|  | 2006 | 17,988 | n/a | 20,866 | n/a | n/a | 86\% |
|  | 2007 | 25,653 | $\mathrm{n} / \mathrm{a}$ | 15,095 | n/a | n/a | 170\% |
|  | 2008 | 14,626 | $\mathrm{n} / \mathrm{a}$ | 13,865 | n/a | n/a | 105\% |
|  | 2009 | 14,332 | n/a | 11,296 | n/a | n/a | 127\% |
|  | 2010 | 16,445 | n/a |  |  |  |  |
|  | AVG. |  |  |  | n/a | n/a | 115\% |
| NTH $^{2}$(North/Central BC) | 1999 | 149,593 | n/a | 154,294 | n/a | $\mathrm{n} / \mathrm{a}$ | 97\% |
|  | 2000 | 159,818 | n/a | 188,482 | n/a | n/a | 85\% |
|  | 2001 | 189,088 | n/a | 214,541 | n/a | n/a | 88\% |
|  | 2002 | 228,073 | $\mathrm{n} / \mathrm{a}$ | 150,870 | n/a | n/a | 151\% |
|  | 2003 | 161,995 | n/a | 170,410 | n/a | n/a | 95\% |
|  | 2004 | 171,070 | n/a | 158,967 | n/a | $\mathrm{n} / \mathrm{a}$ | 108\% |
|  | 2005 | 154,552 | $\mathrm{n} / \mathrm{a}$ | 139,303 | n/a | n/a | 111\% |
|  | 2006 | 133,627 | n/a | 159,959 | n/a | $\mathrm{n} / \mathrm{a}$ | 84\% |
|  | 2007 | 156,017 | n/a | 126,159 | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | 124\% |
|  | 2008 | 131,262 | n/a | 113,642 | n/a | n/a | 116\% |
|  | 2009 | 113,024 | n/a | 126,605 | n/a | n/a | 89\% |
|  | 2010 | 136,998 | n/a |  |  |  |  |
|  | AVG. |  |  |  | n/a | n/a | 104\% |
| $\begin{gathered} \hline \mathrm{RBH}^{2} \mathrm{RBT}^{2} \\ \text { (WCVI } \\ \text { Hatchery + } \\ \text { Natural) } \end{gathered}$ | 1999 | 78,074 | 68,400 | 101,683 | 114\% | 67\% | 77\% |
|  | 2000 | 21,040 | 15,040 | 37,047 | 140\% | 41\% | 57\% |
|  | 2001 | 33,702 | 30,633 | 87,004 | 110\% | 35\% | 39\% |
|  | 2002 | 128,068 | 109,882 | 167,731 | 117\% | 66\% | 76\% |
|  | 2003 | 111,430 | 105,801 | 215,346 | 105\% | 49\% | 52\% |
|  | 2004 | 166,548 | 144,180 | 257,517 | 116\% | 56\% | 65\% |
|  | 2005 | 244,768 | 218,840 | 156,837 | 112\% | 140\% | 156\% |
|  | 2006 | 152,662 | 138,878 | 197,097 | 110\% | 70\% | 77\% |
|  | 2007 | 151,925 | 117,321 | 118,082 | 129\% | 99\% | 129\% |
|  | 2008 | 67,347 | 60,255 | 101,096 | 112\% | 61\% | 67\% |
|  | 2009 | 63,200 | 58,382 | 88,429 | 108\% | n/a | 71\% |
|  | 2010 | 75,748 | 61,586 |  | 123\% |  |  |
|  | AVG. |  |  |  | 116\% | 68\% | 79\% |

Table 3-8 Continued.


Table 3-8 Continued.


Table 3-8 Continued.

| Stock | Year | Model <br> Forecast | Agency Forecast | Postseason Return | Model Fcst/ Agency Fcst | Agency Fcst/ <br> Postseason | Model Fcst/ Postseason |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NKF ${ }^{2}$ | 1999 | 27,472 | 27,000 | 41,186 | 102\% | 66\% | 67\% |
| (Nooksack/ | 2000 | 21,277 | 19,000 | 32,646 | 112\% | 58\% | 65\% |
| Samish Fall | 2001 | 33,974 | 36,450 | 64,685 | 93\% | 56\% | 53\% |
| Fingerling) | 2002 | 50,361 | 54,420 | 54,302 | 93\% | 100\% | 93\% |
|  | 2003 | 48,259 | 45,750 | 30,047 | 105\% | 152\% | 161\% |
|  | 2004 | 37,980 | 34,200 | 17,913 | 111\% | 191\% | 212\% |
|  | 2005 | 19,808 | 19,523 | 15,872 | 101\% | 123\% | 125\% |
|  | 2006 | 16,854 | 16,899 | 30,591 | 100\% | 55\% | 55\% |
|  | 2007 | 22,086 | 18,834 | 25,895 | 117\% | 73\% | 85\% |
|  | 2008 | 34,392 | 35,271 | 29,126 | 98\% | 121\% | 118\% |
|  | 2009 | 20,813 | 23,014 | 21,548 | 90\% | 107\% | 97\% |
|  | 2010 | 32,061 | 32,627 |  | 98\% |  |  |
|  | AVG. |  |  |  | 102\% | 100\% | 103\% |
| $\mathrm{SNO}^{2}$ <br> (Snohomish <br> Wild) | 1999 | 5,823 | 5,600 | 4,832 | 104\% | 116\% | 121\% |
|  | 2000 | 5,997 | 6,000 | 6,116 | 100\% | 98\% | 98\% |
|  | 2001 | 5,876 | 5,760 | 5,414 | 102\% | 106\% | 109\% |
|  | 2002 | 6,524 | 6,700 | 7,267 | 97\% | 92\% | 90\% |
|  | 2003 | 6,033 | 5,450 | 5,571 | 111\% | 98\% | 108\% |
|  | 2004 | 12,845 | 15,700 | 10,700 | 82\% | 147\% | 120\% |
|  | 2005 | 10,161 | n/a | 4,611 | n/a | n/a | 220\% |
|  | 2006 | 7,831 | 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 | 7,558 | 8410 | 2,391 | 90\% | 352\% | 316\% |
|  | 2010 | 8,050 | 9,858 |  | 82\% |  |  |
|  | AVG. |  |  |  | 96\% | 150\% | 148\% |
| $\begin{gathered} \hline \text { SKG }^{2} \\ \text { (Skagit } \\ \text { Summer/ } \\ \text { Fall Wild) } \end{gathered}$ | 1999 | 9,107 | 7,600 | 5,139 | 120\% | 148\% | 177\% |
|  | 2000 | 6,988 | 7,300 | 16,266 | 96\% | 45\% | 43\% |
|  | 2001 | 9,064 | 9,184 | 14,193 | 99\% | 65\% | 64\% |
|  | 2002 | 12,635 | 13,455 | 18,114 | 94\% | 74\% | 70\% |
|  | 2003 | 11,906 | 11,348 | 10,583 | 105\% | 107\% | 113\% |
|  | 2004 | 18,761 | 20,359 | 22,144 | 92\% | 92\% | 85\% |
|  | 2005 | 16,220 | 19,493 | 22,784 | 83\% | 86\% | 71\% |
|  | 2006 | 22,765 | 21,811 | 21,246 | 104\% | 103\% | 107\% |
|  | 2007 | 12,324 | 14,252 | 12,646 | 86\% | 113\% | 97\% |
|  | 2008 | 18,598 | 18,302 | 14,254 | 102\% | 128\% | 130\% |
|  | 2009 | 19,607 | 20,400 | 10,989 | 96\% | 186\% | 178\% |
|  | 2010 | 9,894 | 11,853 |  | 83\% |  |  |
|  | AVG. |  |  |  | 98\% | 104\% | 103\% |

Table 3-8 Continued.


Table 3-8 Continued.

| Stock | Year | Model <br> Forecast | Agency Forecast | Postseason Return | Model Fcst/ Agency Fcst | Agency Fcst/ <br> Postseason | Model Fcst/ Postseason |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WCN ${ }^{2}$ | 1999 | 42,129 | 43,780 | 25,065 | 96\% | 175\% | 168\% |
| (Washington | 2000 | 34,741 | n/a | 27,528 | n/a | $\mathrm{n} / \mathrm{a}$ | 126\% |
| Coastal | 2001 | 34,563 | 35,306 | 35,495 | 98\% | 99\% | 97\% |
| Natural) | 2002 | 33,902 | 33,489 | 37,393 | 101\% | 90\% | 91\% |
|  | 2003 | 32,785 | n/a | 41,469 | n/a | n/a | 79\% |
|  | 2004 | 28,185 | $\mathrm{n} / \mathrm{a}$ | 60,101 | n/a | $\mathrm{n} / \mathrm{a}$ | 47\% |
|  | 2005 | 34,857 | $\mathrm{n} / \mathrm{a}$ | 44,319 | n/a | $\mathrm{n} / \mathrm{a}$ | 79\% |
|  | 2006 | 45,084 | $\mathrm{n} / \mathrm{a}$ | 38,761 | $\mathrm{n} / \mathrm{a}$ | n/a | 116\% |
|  | 2007 | 35,695 | 32,362 | 26,093 | 110\% | 124\% | 137\% |
|  | 2008 | 32,187 | 26,923 | 32,418 | 120\% | 83\% | 99\% |
|  | 2009 | 29,758 | 31,318 | 38,616 | 95\% | 81\% | 77\% |
|  | 2010 | 39,215 | n/a |  |  |  |  |
|  | AVG. |  |  |  | 103\% | 109\% | 101\% |
| $\mathrm{WCH}^{2}$ <br> (Washington Coastal Hatchery) | 1999 | 35,239 | 42,752 | 14,664 | 82\% | 292\% | 240\% |
|  | 2000 | 16,244 | n/a | 22,545 | n/a | $\mathrm{n} / \mathrm{a}$ | 72\% |
|  | 2001 | 15,792 | $\mathrm{n} / \mathrm{a}$ | 23,156 | n/a | n/a | 68\% |
|  | 2002 | 23,678 | n/a | 34,685 | n/a | n/a | 68\% |
|  | 2003 | 20,755 | 18,222 | 41,839 | 114\% | 44\% | 50\% |
|  | 2004 | 28,900 | n/a | 40,078 | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | 72\% |
|  | 2005 | 28,626 | $\mathrm{n} / \mathrm{a}$ | 42,656 | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | 67\% |
|  | 2006 | 37,879 | n/a | 52,403 | $\mathrm{n} / \mathrm{a}$ | n/a | 72\% |
|  | 2007 | 41,801 | 40,497 | 24,682 | 103\% | 164\% | 169\% |
|  | 2008 | 34,841 | 31,251 | 27,190 | 111\% | 115\% | 128\% |
|  | 2009 | 35,603 | 42,595 | 36,908 | 84\% | 115\% | 96\% |
|  | 2010 | 38,347 | n/a |  |  |  |  |
|  | AVG. |  |  |  | 99\% | 146\% | 100\% |
| CWS ${ }^{2}$ <br> (Cowlitz <br> Spring) | 1999 | 3,363 | 3,950 | 4,799 | 85\% | 82\% | 70\% |
|  | 2000 | 4,922 | 6,050 | 6,132 | 81\% | 99\% | 80\% |
|  | 2001 | 3,684 | 4,849 | 7,182 | 76\% | 68\% | 51\% |
|  | 2002 | 5,534 | 6,800 | 11,644 | 81\% | 58\% | 48\% |
|  | 2003 | 9,550 | 11,700 | 25,584 | 82\% | 46\% | 37\% |
|  | 2004 | 20,802 | 27,350 | 28,696 | 76\% | 95\% | 72\% |
|  | 2005 | 18,349 | 24,850 | 16,227 | 74\% | 153\% | 113\% |
|  | 2006 | 12,841 | 15,250 | 19,685 | 84\% | 77\% | 65\% |
|  | 2007 | 9,945 | 10,600 | 19,519 | 94\% | 54\% | 51\% |
|  | 2008 | 9,544 | 12,400 | 6,838 | 77\% | 181\% | 140\% |
|  | 2009 | 5,122 | 14,400 | 7,183 | 36\% | 200\% | 71\% |
|  | 2010 | 18,927 | 19,409 |  | 98\% |  |  |
|  | AVG. |  |  |  | 77\% | 101\% | 73\% |

Table 3-8 Continued.


Table 3-8 Continued.


Table 3-8 Continued.

${ }^{1}$ Escapement
${ }^{2}$ Terminal Run
**Note that the model forecasts are the forecasts from separate yearly calibrations, not a time series of values from the most recent calibration ${ }^{* *}$

## 4 EVALUATION OF MARK-SELECTIVE FISHERIES

Chinook salmon released from Puget Sound hatcheries and Columbia River Chinook spring run have been mass-marked since brood 1998. Mass marking of Columbia River fall Chinook started with brood year 2005 and for brood year 2009 most of the Chinook production intended for harvest released in Washington and Oregon has been mass marked (SFEC 2009). Mark selective fisheries (MSFs) have been in place in Puget Sound (including US Juan de Fuca) since 2003, on the Columbia since 2001, and in BC Juan de Fuca since 2008 (Table 4-1).

### 4.1 Catch in MSFs

MSFs have been in place in Puget Sound in Washington Areas 5 and 6, part of Puget Sound north sport (PSN Sp) since 2003, during the summer and in 2005 a winter MSF started in Washington Areas 8.1 and 8.2 (Puget Sound other sport, PSO S). In 2007, additional MSFs were implemented in Washington Areas 9, 10 and 11 (PSO S) in the summer months and in Areas 7 (PSN S), 9 and 10 (PSO S) in the winter months (Table 4-1 and Table 4-2). Total landed catch in MSFs in marine sport fisheries remained fairly constant from 2003 to 2005, around 3,000 to 4,000 , but then increased in 2007 to about 25,000, while landed catch in non-selective fisheries ranged from 20,000 to 26,000 over the same period (Figure 4-1). MSFs have been implemented in freshwater areas (TERM S) since 2003 (Figure 4-1 and Table 4-3), with total estimated MSF catch ranging from 1,000 to 7,000 . The percent of total MSF catch in the three PSC sport fisheries in Puget Sound (Figure 4-1) is at about 50\% in PSN and increased from 0 to $50 \%$ in PSO. In the terminal area sport fishery (TERM S) the percent MSF has increased from 19 to $44 \%$ (Figure 4-1) from 2003 to 2007 (Table 4-3).

Chinook MSFs have been in place in the Columbia and Willamette rivers since 2001 (Figure $4-2$ ). Most of the catch from MSFs is directed on mass marked spring Chinook from the Willamette, Cowlitz, Kalama, Lewis rivers in the lower Columbia, tributaries in the upper Columbia upstream of Bonneville Dam, and in the Snake River (Figure 4-2), while MSFs on fall Chinook have been small throughout this period compared to non-selective fisheries (Figure 4-2).

A mixed-bag, partial MSF has occurred in the BC Juan de Fuca sport fishery since 2008. The fishery had a minimum size limit of 45 cm , with a 2 Chinook per day bag limit, however wild Chinook could not be retained if they exceeded 67 cm Fork Length. This partial MSF occurred from March 1-May 15, 2008 and from March 2-May 14, 2009. The mixed-bag, partial MSF was regulation was intended to protect Fraser River spring-run age 1.2 and age 1.3 stock groups as they migrated to return to the Fraser River.

Table 4-1. Mark selective fisheries occurring from 2003-2009 ( $\downarrow$ ). See SFEC (2009) for more detailed information on MSF proposals and fisheries.

| Fishery | Location | Period | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sport | BC Strait of Juan de Fuca, selected subareas | March-April |  |  |  |  |  | $\checkmark$ |
| Sport <br> Sport <br> Sport <br> Sport <br> Sport <br> Sport <br> Sport <br> Sport <br> Sport <br> Sport <br> Sport | WA PS Area 5 WA PS Area 6 WA PS Area 7 WA PS Area 8.1 WA PS Area 8.2 WA PS Area 9 WA PS Area 9 WA PS Area 10 WA PS Area 10 WA PS Area 11 WA PS Area 13 | Summer <br> Summer <br> Winter <br> Winter <br> Winter <br> Summer <br> Winter <br> Summer <br> Winter <br> Summer <br> Summer | $\begin{aligned} & \sqrt{ } \\ & \sqrt{2} \end{aligned}$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{2} \end{aligned}$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{2} \\ & \sqrt{ } \\ & \sqrt{ } \end{aligned}$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \end{aligned}$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{2} \\ & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \end{aligned}$ |  |
| Sport <br> Sport <br> Sport <br> Sport <br> Sport | Nooksack River Skykomish River Carbon \& Puyallup River Upper Skagit River Nisqually River | Sep-Dec Jun-July Aug-Dec Jun-July Jul-Jan | $\begin{aligned} & \sqrt{ } \\ & \sqrt{2} \end{aligned}$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \end{aligned}$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \end{aligned}$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{2} \\ & \sqrt{2} \\ & \sqrt{2} \end{aligned}$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{2} \\ & \sqrt{2} \\ & \sqrt{2} \end{aligned}$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{2} \\ & \sqrt{2} \\ & \sqrt{2} \\ & \sqrt{2} \end{aligned}$ |
| Sport <br> Sport <br> Commercial <br> (tangle net) <br> Commercial, <br> (large net) <br> Sport | Columbia River Lower Columbia River Lower Columbia River <br> Lower Columbia River <br> Columbia River | Summer <br> Spring <br> Spring <br> Spring <br> Fall | $\begin{aligned} & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \end{aligned}$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \end{aligned}$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \end{aligned}$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \end{aligned}$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \end{aligned}$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \\ & \sqrt{ } \end{aligned}$ |
| Sport <br> Sport | Yakima River Lower Snake River | Spring Fall |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport Sport | Willamette River Oregon coast | Spring |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\begin{aligned} & \sqrt{ } \\ & \sqrt{2} \end{aligned}$ |



Figure 4-1. Estimated total number of Chinook landed in Selective and Non-Selective fisheries (left y-axis) and \% of catch in MSFs (right y-axis) in Puget Sound for catch years 2003-2009.


Figure 4-2. Estimated total catch in Columbia River mark selective and non selective sport fisheries and catches during spring (May-June) and summer-fall seasons (JulDec) for catch years 2003-2009.

Table 4－2．Retained or landed catch and total encounters（landed＋released）and total mortalities（landed＋release mortalities）by size and mark category in MSFs for Puget Sound，and Juan de Fuca marine sport fisheries（PSN，PSO，JDF）for 2003－ 2009.

| 苞 |  | ジ末 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Puget Sound North （PSN） | Area 5／6 | 2003 | Jul－Aug | 3，417 | 76 | 4，850 | 8，627 | 36\％ | 3，192 | 680 | 512 | 905 |
|  | Area 5／6 | 2004 | Jul－Aug | 3，571 | 5 | 4，598 | 6，365 | 42\％ | 3，375 | 636 | 402 | 430 |
|  | Area 5／6 | 2005 | Jul－Aug | 2，025 | 53 | 3，125 | 3，237 | 49\％ | 1，924 | 311 | 320 | 283 |
|  | Area 5／6 | 2006 | Jul－Aug | 3，641 | 25 | 4，494 | 5，095 | 47\％ | 3，443 | 482 | 368 | 400 |
|  | Area 5／6 | 2007 | Jul－Aug | 3，972 | 124 | 5，235 | 3，839 | 58\％ | 3，684 | 433 | 540 | 300 |
|  | Area 5 | 2008 | Jul | 2，819 | 0 | 3，298 | 2，199 | 60\％ | 2，836 | 280 | 58 | 66 |
|  | Area 5 | 2009 | Jul－Aug | 5，958 | 440 | 16，504 | 20，958 | 44\％ | 4，952 | 1009 | 3，079 | 3，223 |
|  | Area 7 | 2008 | Feb | 1，300 | 2 | 1，767 | 1，199 | 60\％ | 1，330 | 158 | 73 | 31 |
|  | Area 7 | 2009 | Feb－Apr | 1，420 | 9 | 1，769 | 734 | 71\％ | 1，452 | 115 | 28 | 3 |
| Puget Sound Other （PSO） | Area 8－1， 2 | 2005－06 | Oct－Apr | 1，112 | 40 | 3，262 | 2，010 | 62\％ | 1，038 | 145 | 504 | 253 |
|  | Area 8－1， 2 | 2006－07 | Oct－Apr | 1，177 | 33 | 11，781 | 5，853 | 67\％ | 1，059 | 61 | 2，239 | 1，123 |
|  | Area 8－1， 2 | 2007－08 | Nov－Apr | 1，543 | 23 | 4，040 | 1，388 | 74\％ | 1，574 | 96 | 458 | 176 |
|  | Area 8－1，2 | 2009 | Jan－Apr | 912 | 29 | 4，045 | 1，467 | 73\％ | 932 | 37 | 620 | 276 |
|  | Area 9 | 2007 | Jul | 5，239 | 32 | 6，757 | 1，667 | 80\％ | 5，081 | 191 | 462 | 110 |
|  | Area 9 | 2008 | Jan－Apr | 1，405 | 3 | 2，880 | 682 | 19\％ | 1，362 | 49 | 330 | 75 |
|  | Area 9 | 2008 | Jul－Aug | 4，045 | 3 | 7，854 | 5，436 | 59\％ | 4，124 | 244 | 653 | 765 |
|  | Area 9 | 2008－09 | Nov，Jan－Apr | 885 | 14 | 4，535 | 3，009 | 60\％ | 905 | 38 | 704 | 567 |
|  | Area 9 | 2009 | Jul－Aug | 3，229 | 20 | 11，947 | 4，196 | 74\％ | 3，298 | 211 | 1，651 | 581 |
|  | Area 10 | 2007 | Jul | 1，539 | 38 | 4，301 | 1，044 | 80\％ | 1，451 | 95 | 640 | 123 |
|  | Area 10 | 2007－08 | Dec－Jan | 635 | 21 | 2，575 | 545 | 83\％ | 551 | 45 | 468 | 72 |
|  | Area 10 | 2008 | Jul－Aug | 1，031 | 3 | 1，348 | 898 | 60\％ | 1，046 | 79 | 42 | 77 |
|  | Area 10 | 2008－09 | Dec－Jan | 251 | 0 | 1，297 | 498 | $72 \%$ | 257 | 5 | 202 | 92 |
|  | Area 10 | 2009 | Jul－Aug | 1，621 | 22 | 4，329 | 1，121 | 79\％ | 1，654 | 34 | 498 | 203 |
|  | Area 11 | 2007 | Jun－Sep | 10，546 | 95 | 17，534 | 4，779 | 79\％ | 10，208 | 468 | 1，736 | 433 |
|  | Area 11 | 2008 | Jun－Sep | 7，377 | 23 | 10，434 | 2，269 | 82\％ | 7，440 | 318 | 494 | 54 |
|  | Area 11 | 2009 | Jun－Sep | 3，277 | 37 | 7，582 | 4，623 | 62\％ | 3，348 | 228 | 767 | 663 |
| BC <br> Juan de <br> Fuca（JDF） | Area 19， 20 | 2008 | Apr－May | 122 | 51 | $122^{1}$ | $68^{1}$ | 64\％ | $122^{2}$ | $64^{2}$ | $5^{2}$ | $3^{2}$ |
|  | Area 19，20 | 2009 | Mar－May | 152 | 26 | $152^{1}$ | $105{ }^{1}$ | 59\％ | $152^{2}$ | $41^{2}$ | $24^{2}$ | $16^{2}$ |

${ }^{1}$ Legal sized Chinook
${ }^{2}$ IM and drop－off rates same as used in CTC Catch \＆Escapement report：drop－off（6．9）and IM release rate（12．3）．

Table 4-3. MSFs in Puget Sound TERM Sport for Chinook salmon 2003-2008. Catches of marked fish are reported where available for the calendar year; either from PSMFC catch sample database (a), preliminary catch record card estimates (b) or creel survey estimates (c). Fishery and years that were sampled are indicated by an (s).

| Fishery | Location | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sport | Nooksack River |  | $5^{\mathrm{b}}$ | $186^{\mathrm{b}}$ | $119^{\mathrm{b}}$ | $162^{\mathrm{a}}$ | $25^{\mathrm{a}}$ |
| Sport | Skykomish River | $177^{\mathrm{b}}$ | $85^{\mathrm{b}}$ | $76^{\mathrm{b}}$ | $78^{\mathrm{b}}$ | $637^{\mathrm{a}}$ | $572^{\mathrm{a}}$ |
| Sport | Carbon \& Puyallup River | $1,287^{\mathrm{a}, \mathrm{s}}$ | $1,019^{\mathrm{a}, \mathrm{s}}$ | $1,590^{\mathrm{a}, \mathrm{s}}$ | $1,736^{\mathrm{a}, \mathrm{s}}$ | $2,525^{\mathrm{a}, \mathrm{s}}$ | $1,560^{\mathrm{a}}$ |
| Sport | Upper Skagit and Cascade River |  |  | $173^{\mathrm{a}, \mathrm{s}}$ | $458^{\mathrm{a}, \mathrm{s}}$ | $724^{\mathrm{a}, \mathrm{s}}$ | $508^{\mathrm{a}}$ |
| Sport | Nisqually River |  |  | $1,179^{\mathrm{b}}$ | $3,711^{\mathrm{b}}$ | $3,080^{\mathrm{a}}$ | $1,568^{\mathrm{a}}$ |

### 4.2 Size of MSFs

The size of a MSF relative to the total exploitation of a stock can be measured using the percentage of the total landed catch in net, sport and troll fisheries of tagged and marked PSC indicator stocks that is landed in MSFs (Table 4-4). In Puget Sound the percentage of the total landed tagged and marked catch that occurs in MSFs increases over this period for stocks in South Puget Sound, particularly in 2007, when the MSFs expanded to most areas in Puget Sound (Figure 4-3). The Skagit spring tag groups (fingerlings and yearlings) also show a high percentage of catch in MSFs, due to the terminal freshwater MSF targeting these fish, where 80$98 \%$ of the fish sampled in the Skagit MSF were tagged and marked fish (Table 4-3).

In the Columbia River, all of the tributary (terminal) sport fisheries for spring Chinook, including the Willamette, are MSF .

Table 4-4. Estimated landed catch of tagged and marked PSC Chinook Indicator Stocks in BC, Washington and Oregon in all net, troll and sport fisheries for catch years $2003-2008^{\mathrm{A}}$ and $\%$ of total tagged and marked catch that was landed in MSFs.

| Region | Stock | $2003$ <br> Total | $\% \text { MSF }$ | $\begin{array}{r} 2004 \\ \text { Total } \end{array}$ | \% MSF | $\begin{array}{r} 2005 \\ \text { Total } \end{array}$ | $\% \text { MSF }$ | $\begin{gathered} 2006 \\ \text { Total } \end{gathered}$ | $\% \text { MSF }$ | $\begin{gathered} \hline 2007 \\ \text { Total } \end{gathered}$ | $\% \text { MSF }$ | 2008 <br> Total | $\% \text { MSF }$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ALASKA | Alaska Spring | 2,340 |  | 3,245 |  | 5,782 |  | 5,527 |  | 4,920 |  | 4,164 |  |
| CANADA | Atnarko Summer | 148 |  | 160 |  | 312 |  | 300 |  | 96 |  | 50 |  |
|  | Big Qualicum | 89 |  | 113 |  | 221 |  | 140 |  | 211 |  | 140 | 6.0\% |
|  | Chehalis (Harrison Fall Stock) | 140 4.7\% |  | 293 3.0\% |  | 260 |  | 226 |  | 78 |  | 509 1.7\% |  |
|  | Chilliwack (Harrison Fall Stock) | 1,273 | 1.6\% | 1,419 1.5\% |  | 1,195 0.9\% |  | 594 1.0\% |  | 365 2.1\% |  | 1,027 4.0\% |  |
|  | Cowichan Fall | 230 | 1.1\% | 274 0.6\% |  | 184 2.0\% |  | 174 |  | 49 |  | 140 |  |
|  | Dome Creek Spring | 126 |  | 1 |  | 161 |  | 14 |  | 10 |  | 93 |  |
|  | Kitsumkalum Summer | 196 |  | 559 |  | 434 |  | 299 |  | 439 |  | 698 |  |
|  | Lower Shuswap River Summers | 617 |  | 600 |  | 457 |  | 715 |  | 127 |  | 569 |  |
|  | Nanaimo River Fall | 259 | 2.8\% | 253 |  | 141 2.6\% |  | 49 |  | 438 0.8\% |  | 44 |  |
|  | Nicola River Spring | 240 |  | 138 |  | 101 |  | 69 |  | 43 |  | 68 |  |
|  | Puntledge Summer | 21 |  | 26 |  | 78 |  | 64 |  | 56 |  | 50 |  |
|  | Quinsam Fall | 203 |  | 318 |  | 388 |  | 287 |  | 265 |  | 99 |  |
|  | Robertson Creek | 1,167 |  | 2,666 |  | 2,328 |  | 1,758 |  | 1,628 |  | 827 |  |
|  | CANADA Total | 4,709 | 0.8\% | 6,822 | 0.5\% | 6,261 | 0.3\% | 4,687 | 0.1\% | 3,806 | 0.3\% | 4,314 | 1.3\% |
| COLUMBIA | Cowlitz Fall Tule | 304 |  | 116 | 3.6\% | 98 |  | 54 |  | 50 |  | 64 | 6.4\% |
|  | Hanford Wild | 642 |  | 840 |  | 359 |  | 325 |  | 175 |  | 141 |  |
|  | Columbia Lower River Hatchery | 1,076 | 1.6\% | 915 | 0.2\% | 348 |  | 45 |  | 40 |  | 228 |  |
|  | Lewis River Wild | 205 | 2.8\% | 351 |  | 190 |  | 352 |  | 112 |  | 41 |  |
|  | Lyons Ferry | 117 |  | 191 | 2.1\% | 145 | 5.1\% | 116 |  | 247 | 1.2\% | 1,335 0.3\% |  |
|  | Spring Creek Tule | 3,286 | 0.3\% | 3,065 | 0.5\% | 1,408 4.217 |  | 472 1.4\% |  | 574 1.7\% |  | 1,462 2.6\% |  |
|  | Columbia Summers | 4,270 | 0.2\% | 3,864 | 0.4\% |  |  | 2,531 0.1\% |  | 2,145 0.2\% |  | 878 0.5\% |  |
|  | Upriver Brights | 1,052 |  | 996 | 0.4\% | 1,499 |  | $9320.4 \%$ |  | 309 1.6\% |  | 418 |  |
|  | Willamette Spring | 1,331 | 1.5\% | 2,044 | 3.5\% | 761 | 17.5\% | 694 | 36.0\% | 422 | 43.1\% | 864 | 0.5\% |
|  | COLUMBIA Total | 12,283 | 0.5\% | 12,382 | 0.9\% | 9,024 | 1.6\% | 5,520 | 4.8\% | 4,075 | 5.0\% | 5,431 | 1.0\% |
| OREGON | Elk River | 2,418 |  | 2,525 |  | 1,257 |  | 1,384 |  | 1,320 |  | 1,424 |  |
|  | Salmon River | 2,716 |  | 2,891 |  | 3,144 |  | 1,435 |  | 425 |  | 278 |  |
|  | OREGON Total | 5,134 |  | 5,416 |  | 4,401 |  | 2,819 |  | 1,745 |  | 1,702 |  |

Table 4-4. Continued

|  |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Stock | Total | \% MSF | Total | \% MSF | Total | \% MSF | Total | \% MSF | Total | \% MSF | Total | \% MSF |
| WA PS | George Adams Fall Fingerling | 547 | 2.6\% | 625 | 5.9\% | 909 | 5.4\% | 551 | 3.9\% | 863 | 16.5\% | 462 | 14.1\% |
|  | Green River Fall Fingerling | 459 | 6.5\% | 466 | 3.0\% | 305 | 2.5\% | 661 | 3.0\% | 884 | 7.0\% | 715 | 13.3\% |
|  | Grovers Creek Fall Fingerling | 787 | 7.0\% | 743 | 4.7\% | 732 | 3.2\% | 878 | 5.7\% | 810 | 15.7\% | 360 | 31.7\% |
|  | Nisqually Fall Fingerling | 1,154 | 2.8\% | 921 | 1.4\% | 446 | 3.7\% | 1,830 | 2.2\% | 1,906 | 11.1\% | 723 | 13.6\% |
|  | Nooksack Fall Fingerling | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
|  | Nooksack Spring Fingerling | 219 |  | 449 |  | 366 | 2.0\% | 326 | 2.0\% | 290 | 1.5\% | 625 | 4.6\% |
|  | Samish Fall Fingerling | 524 | 0.5\% | 354 | 1.8\% | 525 | 4.0\% | 1,306 | 1.9\% | 1,361 | 2.9\% | 1,226 | 9.2\% |
|  | Skagit Spring Fingerling | 224 | 1.1\% | 348 | 1.3\% | 400 | 11.3\% | 728 | 48.0\% | 1,207 | 36.1\% | 520 | 7.8\% |
|  | Skagit Spring Yearling | 436 | 1.7\% | 446 | 2.3\% | 470 | 19.0\% | 459 | 56.6\% | 449 | 50.8\% | 229 | 16.0\% |
|  | Skykomish Fall Fingerling | 84 | 5.6\% | 234 | 5.8\% | 202 | 1.8\% | 272 | 9.0\% | 435 | 5.2\% | 135 | 16.8\% |
|  | South Puget Sound Fall Yearling | 5 |  | 21 |  | 226 | 7.0\% | 208 | 5.2\% | 227 | 23.7\% | 61 | 53.2\% |
|  | Skagit Summer Fingerling | 314 | 0.8\% | 184 | 2.3\% | 311 | 2.1\% | 292 | 2.7\% | 395 | 0.8\% | 449 | 1.8\% |
|  | Stillaguamish Fall Fingerling | 6 |  | 0 |  | 122 | 4.6\% | 158 | 3.2\% | 322 | 1.5\% | 369 | 22.4\% |
|  | White River Fall Fingerling | 0 |  | 0 |  | 0 |  | 30 | 3.9\% | 331 | 22.9\% | 51 | 30.3\% |
|  | WA PS Total | 4,757 | 3.2\% | 4,788 | 2.9\% | 5,016 | 5.8\% | 7,698 | 10.7\% | 9,480 | 14.9\% | 5,926 | 12.7\% |
| WA CST | Hoko Fall Fingerling | 219 |  | 279 | 1.5\% | 234 | 2.0\% | 232 | 1.6\% | 272 | 1.6\% | 127 |  |
|  | \#N/A | 0 |  | 0 |  | 0 |  | 0 |  | 6 | 91.6\% | 34 |  |
|  | Quinault Fall Fingerling | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 112 |  |
|  | Queets Fall Fingerling | 930 |  | 1,250 |  | 1,313 |  | 694 |  | 488 |  | 511 |  |
|  | Sooes Fall Fingerling | 356 | 1.3\% | 362 | 1.2\% | 344 |  | 156 | 2.4\% | 37 |  | 51 |  |
|  | WA CST Total | 1,506 | 0.3\% | 1,891 | 0.4\% | 1,890 | 0.2\% | 1,082 | 0.7\% | 803 | 1.2\% | 834 |  |



Figure 4-3. Percent of total landed tagged harvest for Chinook indicator stocks caught in MSFs for run years 2003-2008 for regions Washington Puget Sound (WAPS) and coast (WACST), British Columbia (BC) and Columbia River (COLR)..

### 4.3 Impact of MSFs on unmarked Chinook salmon.

PSC indicator stocks that have been double index tagged (DIT) can be used to evaluate the impact of MSFs on the unmarked stocks represented by the unmarked tag group in a DIT pair ${ }^{1}$. The ratio of unmarked to marked fish $(\lambda)$ for a DIT group provides a relationship between the two tag groups and a measure to evaluate the impact of MSFs on the DIT stock. A comparison of the ratio of unmarked to marked measured at release and measured again at escapement provides a method to evaluate the total impact of MSFs. This is the odds ratio, $\frac{\lambda^{\text {Escapement }}}{\lambda^{\text {Release }}}$ (Agresti 1984) and it provides a measure to evaluate the impact of MSFs on a stock with DIT representation, where an odds ratio of one indicates that the ratio did not change from release to escapement and a ratio larger than one indicates a higher removal of marked fish compared to the DIT unmarked fish, which is assumed to be due to MSFs (Figure 4-4). For Puget Sound DIT stocks, Green River (SPS), Skagit springs (SKS), Skykomish (SKY) and Nisqually (NIS) show the strongest indication that there is a differential impact of MSFs on marked and unmarked DIT groups.. All of these DIT stocks except the Green River are subject to terminal sport MSFs

[^3]which target the hatchery production including the DIT returns. For the Nisqually stock the odds ratios are significantly higher than one for all brood years after 2002.

### 4.4 Summary

MSFs have occurred since 2003 in Puget Sound and since 2001 in the Columbia River. Beginning in 2007, MSFs expanded to all areas of Puget Sound. Landed harvest in MSFs has increased to represent around $50 \%$ of the Puget Sound total sport harvest. For some Puget Sound and Columbia River spring stocks, MSF sport fisheries can represent a high proportion of the total fishery impacts, especially for those stocks with significant MSFs in the terminal areas. This expansion in MSFs is resulting in differential impacts on marked and unmarked components of some stocks. For those stocks subject to significant MSFs, the associated differential impacts on marked and unmarked stocks requires that the analysis of CWT data and the model structure account for these differences.


Figure 4-4. Estimated odds ratio (Ratio of unmarked to marked ratios estimated at hatchery escapement and at release) by brood year with $95 \%$ confidence intervals for Fraser River and Puget Sound DIT stocks..

## 5 PROGRESS REPORT ON IMPROVEMENTS TO THE COASTWIDE CWT PROGRAM

The CWT Improvement Program is a new activity identified in the 2008 Agreement. The objective of this program is to implement over a five year period, beginning no later than 2010, critical improvements to the coast-wide CWT programs operated by the Parties' respective management agencies. The bilateral CWT Improvement Team (CWTIT) is tasked with making recommendations regarding projects to improve the CWT system, including data quality, sampling or reporting efficiency, and the precision and accuracy of statistics such as abundance, exploitation rates, survival estimates, etc. for Chinook salmon. Canada implemented the program in 2009, a year earlier than in the U.S. due to differences in the timing of fiscal years. For this reason, results for the 2009 funding year are available for Canadian programs only.

### 5.1 Report on Canadian Projects Undertaken in Fiscal Year 2009

1) Increased CWT Marking and Purchase ( $\$ 973,000 \mathrm{CAD}$ )

CWTs were purchased for nearly all indicator stocks targeted for increased CWT release for the duration of the CWT improvement program. Some of these CWTs were applied to augment releases in 2009 for several of the Canadian Chinook indicator stocks (Table 5-1). Increased tagging was not possible for releases of some indicator stocks in 2009 because of time constraints on tagging, limited capacity, and resources at Big Qualicum and Quinsam hatcheries where smoltification begins in April. The tagging at DFO hatcheries is conducted by two contractors or by CDFO hatchery staff. In order to meet the incremental tagging levels additional taggers were required. A training workshop was therefore, arranged in the fall/winter of 2009. In some hatcheries additional tagging equipment and water lines were required to support additional tagging in 2010. At other hatcheries, additional brood stock was captured in the fall of 2009 to provide sufficient production to meet the incremental tagging targets.

Table 5-1. Additional tagging activities in 2009 for B.C. Chinook salmon exploitation rate indicator stocks.

| Indicator Stock | Additional Tagging Activity |
| :--- | :--- |
| Taku | Additional tagging crews for wild tagging (15,000 smolts) |
| Stikine | Additional tagging crews for wild tagging (42,000 smolts) |
| Kitsumkalum | Production and tagging of 30,000 yearling smolts |
| Robertson | Additional tagging of 250,000 smolts |
| Cowichan | Additional tagging of 400,000 smolts |
| Harrison | Additional tagging of 200,000 smolts |
| Middle Shuswap | Additional tagging of 100,000 smolts |
| Quinsam | Equipment, staff training |
| Big Qualicum | Equipment, staff training |
| Lower Shuswap | Staff training, production planning to improve fish health, additional <br> tagging of 50,000 smolts |
| Nicola | Increased production, staff training |
| Chilliwack | Staff training |

5) Increased Deadpitch Sampling (\$74,000 CAD)

CWT data quality at spawning grounds and hatcheries was improved using different strategies. The number of CWTs recovered was increased by several means. For the Quinsam, Chilliwack, Harrison, and Nicola programs, carcass sampling effort was increased by hiring additional staff or by having the existing crew work additional days during peak periods of carcass. For the Cowichan River program, an additional crew was hired to survey spawning areas outside of the standard survey reaches. For Kitsumkalum, all live fish with clipped adipose fins were sacrificed during the tag application phase of the mark recapture program; this provided 50 more observed tags in 2009 over the standard protocol (sampling rate is not yet determined). At Robertson, hatchery samples were systematically re-sampled to improve the quality assurance and quality control (QA/QC) on any missed tags.
6) Increased Head Recovery Processing (\$40,000 CAD)

Increased sampling rates at spawning grounds and commercial, sport, and First Nation fisheries resulted in higher CWT dissection and lab processing activities. The quantity of samples processed in the head lab increased by about $25 \%$ over 2008 (Table 5-2).

Table 5-2. Total number of Chinook salmon heads processed from fisheries in 2008 and 2009.

| Fishery | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ |
| :--- | ---: | ---: |
| Northern Sport | 416 | 738 |
| Central Sport | 9 | 253 |
| West Coast Vancouver Island Sport | 2,633 | 4,093 |
| Alberni Canal Sport | 23 | 23 |
| Johnstone Strait Sport | 119 | 162 |
| Georgia Strait North Sport | 134 | 65 |
| Georgia Strait South Sport | 535 | 837 |
| Freshwater Sport | 119 | 74 |
| Northern Troll | 1,167 | 2,152 |
| Northwest Vancouver Island Troll | 464 | 368 |
| Southwest Vancouver Island Troll | 2,016 | 656 |

Further, additional samples resulted from a) DIT non-AFC sampling established in the Chilliwack river escapement program to perform field testing of 'upgraded' wands and acquire additional data for DIT analysis; b) improved representative sampling of the freezer troll fleet in Northern BC and West Coast Vancouver Island troll fisheries, c) Area 8 First Nations and commercial net fishery sampling as part of the Atnarko Exploitation Rate Indicator (below), and d) increased escapement sampling rates.

Significant attempts were made in 2009 to improve the random and representative sampling rate of the freezer troll component ('frozen at sea' landings) of the Northern Troll fishery. The freezer troll landings contributed $74 \%$ of the total Northern Troll catch in 2008 and $76 \%$ in 2009. In both years, $50 \%$ of the freezer troll fleet was required as a condition of license to retain heads from all kept Chinook. A sampling rate of $50 \%$ should be observed if all landings met QA/QC standards that were also established. The QA/QC standards address such issues as 'head cut quality' and the closeness in match between the number of heads and number of bodies counted from the same landing. The sampling rate actually achieved was $14 \%$ in 2008 after exclusion of
landings that failed the QA/QC criteria. This was increased to $19 \%$ in 2009. Further improvements in the final achieved sampling rate are planned for 2010
7) Programmer $(\$ 80,000)$

A programmer was hired for a term contract of 4 months to address issues related to improving CWT data quality, processing, and accessibility of CWT data starting in early September 2009. The staffing process for a full-time position was completed in March 2010. Until the full-time position was filled, existing staff also worked on high priority projects such as improving data quality and managing new streams of head recoveries (e.g. First Nations, Atnarko indicator) during the fall and winter of 2009 to improve data quality, completeness, and accessibility of CWT data. These improvements were reflected in data submitted to the US-based Regional Mark Information System (RMIS) through PSC Data Sharing commitments.
8) Sport and First Nation CWT Recovery Improvements (\$87,000 CAD)

## Sport Fisheries:

CDFO introduced several measures in 2009 with the intent to increase the voluntary head submission rate from recreational fisheries and to improve the data associated with the Sport Head Recovery Program (SHRP). These include:

- Public relations/outreach initiatives - attendance at stakeholder meetings to increase profile and awareness of the SHRP and solicit feedback.
- Expansion of the south coast BC region creel program to include opportunistic direct visual sampling of CWTs and increased communication with recreational anglers from CDFO creel survey staff.
- Introduction of bags/boxes for head samples collected from fishing lodges and resorts
- Solicitation of advice from CDFO area staff regarding expansion of the head depot program and requirements for modifications to depot infrastructure to improve access, visibility and utility.
- Implementation of a variety of projects throughout BC to expand or improve SHRP depots (e.g. signage, maintenance, etc.).
- Development of new sport sampling standard protocols including introduction of standard data collection forms to document head depots, servicing activities at depots, and to track problems and responses to problems occurring at depots.
- Development and implementation of new minimum head depot service standards to increase service level to areas based on regional input, fishery dynamics and storage methods/capacity.
- Collaboration with CDFO area-based staff to modify head collection program to make improvements in remote areas (Northern West Coast Vancouver Island, North Island, Central Coast, Northern BC).


## First Nations Fisheries:

Coordination and communication is ongoing with First Nations to build collaborative CWT sampling programs. Public Relations/outreach initiatives are important to improve CWT sampling in First Nations fisheries. In 2009, Mark Recovery Program (MRP) technicians/biologists attended stakeholder meetings to increase the profile and awareness of the program and solicit feedback. CDFO provided support (training, equipment, sampling forms) to

Lower Fraser First Nations to collect CWT samples from commercial and Food, Social and Ceremonial (FSC) fisheries as an integrated process in the Lower Fraser First Nations catch monitoring program. The Mid-Fraser First Nations, the Cowichan Tribes, and the Bella Coola Tribes have expanded their First Nation fishery catch monitoring program to collect CWT samples and improve the precision of catch estimates. Additional work commenced with Alberni Inlet/Somass First Nations to develop capacity for collaboration in the collection of CWTs from commercial and FSC fisheries. Sampling procedures, forms, data entry and programming were modified to support these new data sources.
9) Sport and First Nation CWT Recovery Coordinator (\$71,000 CAD)

A full time technician was hired to coordinate the collection of heads from CWT marked salmon encountered in all sport and First Nations fisheries. Existing staff and contractors performed extra duties to increase head recoveries in sport and First Nations fisheries as described above in item 5.

## 10) Atnarko Exploitation Rate Indicator (\$135,000 CAD)

The spawning escapement estimation program was completed successfully. Sample sizes in the tagging and carcass recovery phases exceeded the CTC data standards for escapement indicator stocks (spawning population estimate CV less than 15\%). 925 Chinook were tagged and 2,630 carcasses were examined for marks, of which 220 were marked. The dead pitch sampling rate was $18 \%$ for males, $37 \%$ for females, and $20 \%$ for jacks. In total, there were 9,469 adult male and female spawners ( $\mathrm{CV}=6 \%$ ), and 1,532 jacks $(\mathrm{CV}=17 \%)$.

Sampling the Area 8 commercial gillnet fishery was satisfactory. Total catch by the end of July was 4,069 Chinook and 1,399 ( $34 \%$ ) were sampled for CWTs, with 110 CWT recovered. Unfortunately, no fish were sampled during the fishery opening in the first week of July due to miscommunication with fish processors in Vancouver. CDFO discussed the importance of this circumstance with the processors and measures were taken to prevent the situation from occurring again.

The Bella Coola River First Nation fishery sampling was successful. Total catch was about 3,763 Chinook and 3,346 were examined for fin clips, with 58 snouts collected for CWT dissection.

The creel survey program was satisfactory at interviewing anglers for catch rates and CWT sampling. About 200 anglers were interviewed among 370 anglers counted. . The effort survey, however, was unsuccessful due to high water levels. Large numbers of shore-access anglers during the high water periods were not visible during the aerial surveys. This was because anglers were hidden by trees. The preliminary catch estimate is about 550 fish.

The scale age validation has large samples of paired scales and CWTs collected in terminal fisheries and the spawning grounds to improve aging accuracy of mature fish. The wild smolt age sampling program, however, was cancelled in 2009 because contractors could not be arranged on short notice.

### 5.2 Canadian Projects Undertaken in Fiscal Year 2010

The CWTIT was established on November 13, 2009, per the Terms of Reference from the PSC entitled Pacific Salmon Commission: Bilateral Approach to Implementation of Improvements to the Coast-wide Coded Wire Tagging (CWT) Program. Canadian and US CWTIT members met three times during this funding cycle to coordinate reporting and selection of proposals for 2010.

Projects were evaluated by the CWTIT on the basis of those providing the most perceived benefits to the CWT program for the associated cost. Table $5-3$ provides a summary of the recommended projects by project category. Project categories are based on the themes specified in PSC Technical Report 25, An Action Plan in Response to Coded Wire Tag (CWT) Expert Panel Recommendations 2008.

The projects recommended by Canada represent a complete expenditure of the $\$ 1.5$ million available under this program for 2010. Projects identified in the list of recommended Canadian projects were not ranked because they are a continuation or expansion of priority projects initiated in 2009-10. All but one, are requesting multi-year funding. One project, 'Purchase of a Tagging Trailer', was recommended and approved for funding in 2009-10, but not implemented pending further investigation of costs and logistics. The CWTIT believes that the recommended projects will provide short- and long-term benefits to the CWT program and benefits to abundance-based management of Chinook under jurisdiction of the PST.

Table 5-3. Proposed Canadian Expenditures for 2010-11.

| Project Category | TR25 Issue | Project Title (* Multiple Year Project) | Cost |
| :---: | :---: | :---: | :---: |
| Increased CWT Marking of CN Indicators | Issue 2 | Indicator Tagging* | \$322,000 |
| Increased Deadpitch CWT Recovery Effort, all Indicators | Issue 5 | Indicator CWT Recovery in Escapement* | \$83,500 |
| Increased CWT Marking of CN Indicators | Issue 2 | Automated Tagging Trailer Purchase* | \$483,000 |
| Data Quality, Coordination and Reporting Issues | $\begin{gathered} \text { Issue } 4,6-11 \text {, } \\ 14-15, \& 17- \\ 18 \\ \hline \end{gathered}$ | Staffing: MRP Programmer, QA/QC Analyst, CWT Recovery Coordinator* | \$250,000 |
| Increased Head Recovery Costs | Issues 2, 4, 5, 7 | CWT Head Lab Processing and Data Management* | \$95,000 |
| Low Sample Rates in Terminal Fisheries, Sport and FN CWT recovery improvements | Issues <br> $4 \& 7 \& 9 \& 10 \&$ <br> 11 | Regional Commercial, Sport \& FN Fishery CWT Recovery Improvements* | \$140,000 |
| Low Sample Rates in Terminal Fisheries, and FN CWT recovery improvements | Issue 4\& 10 | FN Fishery CWT Recovery Improvements* | \$37,000 |
| Uncertainty in Estimates of Escapement or Terminal Fishery Catch | Issue 1\& 6 | Atnarko Chinook CWT Indicator Stock* | \$84,500 |
| Uncertainty in Catch and Low Sample Rates in Terminal Fisheries | Issue 4\& 6 | Atnarko River Sport Fishery CWT Sampling \& Creel Survey* | \$5,000 |
|  |  | Grand total | \$1,500,000 |

The CWTIT has been asked to identify projects that affect CWT programs in other agencies in Canada and the U.S. Increased CWT releases by CDFO will increase CWT recoveries in U.S. fisheries. Preliminary analysis, based on recent tagging rates, suggest an additional 493-533 CWTs will be recovered from U.S. fisheries and 824-986 from Canadian fisheries.

### 5.3 U.S. Projects Undertaken in Fiscal Year 2010

A total of 12 U.S. projects were funded in FY 2010 (Table 5-4) for a total of $\$ 1,494,433$. These projects are described below. Each description includes the CWT issue listed in the PSC CWT Workgroup Tech Report 25 (PSC 2008) that the program is intended to address (Table 5-5)

1) Oregon CWT Data Reporting System ( $\$ 410,000$ USD) Progress through 30 November
TR 25 Issue (Primary): 13, 14, 15, 17, 18
Objective was to replace the antiquated ODFW CWT reporting system to increase accuracy, timeliness and accessibility to CWT data for Oregon fisheries, escapements and hatcheries. Purchasing of new data loggers was included, which will match those of WDFW. This is an 18month grant. Progress: the project is on target to finish by Oct., 2011 and is about one-third complete. Four staff of the contractor and 5 staff of ODFW are involved and the path taken appears to be professional and proceeding well. Contemporary products from Microsoft are being used, which are common and supported. ODFW will replace their fish-ticket reporting system at the same time. Improvement: The project will eliminate the delays, omissions and sometimes poor quality of past data and reporting will be five months earlier. Success very likely. No future request is anticipated for this project.

## 2) Washington CWT Data Reporting System ( $\mathbf{\$ 2 3 5}, 519$ USD) Progress through 30 November TR 25 Issue (Primary): 13

Objectives were to replace the CWT reading system and upgrade a majority of the WDFW CWT reporting system to increase accuracy, timeliness and accessibility to CWT data for Washington fisheries, escapements and hatcheries. This is a 12-month grant. Progress: the project is on task to finish by June 30, 2011 and is one-third complete. Replacement of the old method of reading CWTs via bioscopes (the first third of the project) has been completed successfully and is two times faster and more accurate. Improvement: The project will improve accuracy and timeliness of reporting, to "near real-time reporting". Success likely. No future request is anticipated for this project.

## 3) SEAK Seine CWT Expansion Strata ( $\mathbf{2 8 8 , 8 4 5}$ USD) Progress through 30 November <br> TR 25 Issue (Primary): 7

Objectives were to redo the reporting strata for the seine fishery in SEAK in order to be able to use samples from mixed districts, reduce strata with few or no fish sampled, and provide more
accurate CWT data for this fishery. This is a 12-month grant. Progress: the project is two-thirds complete. By combining statistical weeks into bi-weekly periods and by combining some districts, past sampling numbers were boosted $10-15 \%$ and unsampled strata decreased substantially. Improvement: The project will improve accuracy and precision of Chinook CWT data for SEAK, both past and future. Success-Yes. No future request is anticipated for this project.

## 4) SEAK Tag Lab Increased Heads (\$64,980 USD)

## Progress through 30 November

TR 25 Issue (Primary): 7
Objectives were to provide funds to cover a portion of cost the associated with the increased number of "NO TAGS" in heads shipped to the SEAK CWT Lab, for freight and personnel. This is a 12-month grant. Progress: the project is two-thirds complete. The occurrence of heads from Chinook with ad-clips, but without CWTs has increased from $10 \%$ to over $50 \%$ in the past few years in most SEAK fisheries due to mass marking in the WA, OR and ID. Improvement: The project helped maintain the timeliness and accuracy of CWT data from Chinook caught in SEAK. Success-Yes. Future requests are anticipated for this project.

## 5) Stikine River Smolt Tagging ( $\mathbf{\$ 1 2 1 , 2 6 4}$ USD) Progress through 30 November TR 25 Issue (Primary): 1, 2

Objectives were to tag wild Chinook smolts in the Stikine River in spring 2011 (1 $1^{\text {st }}$ US funding, $3{ }^{\text {rd }}$ Canada), to subsequently estimate total adult and smolt production, exploitation, survival and provide run reconstruction for TBR and CTC work. Note that this is a joint stock assessment project and Canada CWTIT funds supported part of this project in 2009 and 2010. No surrogate hatchery exists. Progress: About 44,000 wild smolts were tagged with CWTs in 2010 with joint efforts and we expect similar success in 2011 due to improvements in capture methodology. Improvement: This project will provide high-quality data for which to manage the terminal run with Canada and account for harvest sharing, and to estimate parameters directly from wild-stock tagging. Success-Yes. Future requests are anticipated for this project.

## 6) Chilkat River Smolt Tagging (\$91,119 USD)

Progress through 30 November
TR 25 Issue (Primary): 1, 2
Objectives were to tag wild Chinook smolt in the Chilkat River in fall 2010, to subsequently estimate total adult and smolt production, exploitation, survival and provide run reconstruction for the CTC and ADF\&G. No surrogate hatchery exists. Progress: About 38,000 wild Chinook were tagged with CWTs in fall 2011, which is a record for this stock. Improvement: This project will provide high-quality data for this wild stock and use as a CTC ERA stock. SuccessYes. Future requests are anticipated for this project.

## 7) Elk River Tagging, Creel and Escapement (\$112,565 USD)

Progress through 30 November
TR 25 Issue (Primary): 1, 3

Objectives were to tag Chinook from the Elk River Hatchery, the proposed mid-Oregon CWT indicator stock, to estimate freshwater harvest and escapement and sample them for CWTs. All aspects of the project were still in progress. Progress: It appears the tagging goal $(200,000)$ will be met next May and completion of the in river work will likely provide precise estimates of in river harvest, escapement and expansions for CWTs. Improvement: This project will likely provide high quality data for this mid-Oregon Coast stock and permit use as a CTC ERA stock. Success-likely. Future requests are anticipated for this project.
8) Lower Columbia River Esc. CWT Expansions (\$20,112 USD) Progress through 30 November
TR 25 Issue (Primary): 6
Objectives are to develop sampling designs for CWT recoveries in the lower Columbia River and to estimate hatchery and wild components within stocks. Progress: This project has not started and is planned for 2011. Improvement: This project should provide more representative expansions of CWTs from LCR Tule stocks on the spawning grounds. Success-unknown. Future requests are unknown.

## 9) SEAK—Wanding to Reduce the Number of NO TAGs Shipped (\$42,580 USD)

 Progress through 30 November TR 25 Issue (Primary): 7Objective was to purchase 6 hand-held wands to reduce the number of heads shipped to the Alaska Tag Lab from ad-clipped Chinook, but without CWTs, i.e. NO TAGs, in the SEAK winter troll fishery, after training and quality control tests were completed. A pilot study will be conducted on a portion of the winter troll fishery to detect CWTs in Chinook with adipose fins. Progress: This project is one-half done; 2,663 fish were sampled, and of 384 fish with ad-clips, 195 signaled positive. Validation is underway. Improvement: This project will keep sampling rates higher by improving sampling efficiency. Success-Yes. Future requests are unknown.
10) SEAK-Increased Sampling in Net and Terminal Fisheries (\$43,408 USD)

Progress through 30 November
TR 25 Issue (Primary): 4,7
Objectives were to increase the sampling rates in commercial net (seine and gillnet) and terminal commercial fisheries, by funding additional port samplers in three ports. Progress: Sampling for this project was completed during 2010 and rates were increased in most fisheries; however, low catches of Chinook in purse seine fisheries hampered some efforts. Improvement: Higher sampling rates in specified fisheries. Success-Yes. Future requests are unknown.
11) Puget Sound Freshwater Sport Sampling ( $\mathbf{\$ 1 8 2 , 4 5 5}$ USD)Progress through 30 November
TR 25 Issue (Primary): 4, 6
Objectives were to increase the sampling rates in freshwater sport fisheries in Puget Sound and to develop an indirect method for estimation of the number of CWTs present in these fisheries in
the past and future. Intensive creel surveys were conducted on 4 rivers (Skagit, Skokomish, Nisqually and Skykomish) to estimate total harvest, effort, CWTs, marked rate, unmarked mortality and to collect biological data. Progress: Sampling for this project was completed during 2010 and results will be reported next spring. Improvement: Higher sampling rates in specified fisheries. Success-Yes for direct sampling. Future requests are anticipated.

## 12) Decision Theoretic Tool for Sampling and Marking (\$141,586 USD) Progress through 30 November <br> TR 25 Issue (Primary): Chapter 6

Objective was to develop a decision-theoretic tool to simultaneously analyze interdependencies between investments in marking and sampling. Progress: Contract was not in place until 9/20/2010. Contribution rates (CRs) (rather than harvest rates) have been developed, enabling isolation of recoveries, release size, survival rate to age 2 , sample rate and uncertainty in catch or escapement. Base period ERs have been converted to CRs, with scalars of individual fisheries. Algorithms have been developed to adjust CRs in response to HR scalars under steady-state conditions. R-code to analyze effects of changes in CWT tagging and recovery programs has been developed to replicate the single-stock tool described in TR 25 . R-code to expand to multiple stock simulations, R-Code optimization, cost vs. sampling rate, release size and sampling rate to achieve the desired precision in ERs has been developed. A user interface is under design and development. Improvement: Tool to guide funding decisions regionally and in PST area. Success-likely. Future requests are not anticipated.

Table 5-4. U.S. CWT Improvement Projects FY2010.

| Project Category | TR25 Issue(2) | Project Title | Cost (\$USD) |
| :--- | :--- | :--- | :--- |
| Database reporting/improvement | $13,14,15,17,18$ | Oregon CWT Data Reporting System | $\$ 410,000$ |
|  <br> CWT Reading | 13 | Washington CWT Data Reporting <br> System | $\$ 235,519$ |
| Database reporting/improvement | 7 | SEAK Seine CWT Expansion Strata | $\$ 28,845$ |
| Addressed cost of NO TAGs in <br> SEAK | 7 | SEAK Tag Lab Increased Heads | $\$ 64,980$ |
| Wild Stock tagging with no hatchery <br> indicator | 1,2 | Stikine River Smolt Tagging | $\$ 121,264$ |
| Wild Stock tagging with no hatchery <br> indicator | 1,2 | Chilkat River Smolt Tagging | $\$ 91,119$ |
| Hatchery Stock tagging, Creel and <br> Esc. estimation and sampling | 1,3 | Elk River Tagging, Creel and Esc | $\$ 112,565$ |
| Develop methods for esc. CWT <br> expansions in the lower CR, mostly <br> Tules | 6 | Lower Columbia River Esc. CWT <br> Expansions | $\$ \mathbf{\$ 2 0 , 1 1 2}$ |
| Wand ad-clipped Chinook in SEAK <br> Winter Troll Fishery | 7 | SEAK-Wanding to Reduce the <br> Number of NO TAGs Shipped | $\$ 42,580$ |
| Sampling in fisheries with low <br> sampling rates | SEAK-Increased Sampling in Net and <br> Terminal Fisheries | $\$ 43,408$ |  |
| Sampling in fisheries with low <br> sampling rates | 4,7 | Puget Sound Freshwater Sport <br> Sampling | $\$ 182,455$ |
| Modeling Tool to guide funding <br> decision | Ch 6 | Decision Theoretic Tool for Sampling <br> and Marking | $\$ 141,586$ |
|  | GRAND TOTAL | $\$ 1,494,433$ |  |

Table 5-5. Key to issues in PSC Technical Report 25.

| TR 25 Issue No. | Description |
| :--- | :--- |
| 1 | Incomplete and inconsistent representation of production regions |
| 2 | Determination of tagging levels |
| 3 | Representation of hatchery production |
| 4 | Low sample rates in terminal fisheries |
| 5 | Low sample rates in escapements |
| 6 | Uncertainty in estimates of escapement or terminal fisheries |
| 7 | Low sample rates in highly mixed stock fisheries |
| 8 | Uncertainty in estimates of catch in high mixed stock fisheries |
| 9 | Non-representative sampling |
| 10 | Incomplete coverage of fisheries or escapement |
| 11 | Voluntary sport fishery sampling programs |
| 12 | Sampling methods to facilitate sampling of mark selective fisheries and |
| 13 | CWT processing |
| 14 | Timeliness of reporting |
| 15 | Incomplete/no exchange of CWT data |
| 16 | Inter/intra-agency coordination |
| 17 | Unclear authority to establish and enforce standards |
| 18 | Updating data is difficult and updates cannot be tracked |
| Chapter 6 | Validation is inadequate |

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## 7 APPENDICES

## Appendix A. Relationship between exploitation rate indicator stocks, escapement indicator stocks, model stocks, and additional management action stocks identified in the PST annex.

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Appendix A. 1 Indicator stocks for Southeast Alaska and Transboundary Rivers.

| Area | Annex <br> Stock <br> Group ${ }^{1}$ | Annex Indicator Stocks | Run <br> Type | Escapement Indicator Stock | Escapement Objective | Model Stock | Escapement Goal in Model | Exploitation Rate Indicator Stock | CWT <br> Acronym |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SEAK/TBR |  |  | Spring | Taku | 19,000-36,000 | Alaska <br> South SE | $9,110$ | NA | AKS |
|  |  |  |  | Stikine | 14,000-28,000 |  |  | NA |  |
| Yakutat |  |  |  | Situk | 500-1,000 |  |  | NA |  |
|  |  |  |  | Alsek | 3,500-5,300 |  |  | NA |  |
| SEAK <br> Northern Inside |  |  |  | Chilkat | 1,750-3,500 |  |  | NA |  |
|  |  |  |  | King Salmon | 120-240 |  |  |  |  |
| SEAK Central Inside |  |  |  | Andrew Creek | 650-1,500 |  |  | (Little Port Walter, Neets Bay Hatchery, |  |
| SEAK <br> Southern Inside |  |  |  | Unuk | 1,800-3,800 |  |  | Whitman Lake Hatchery, |  |
|  |  |  |  | Chickamin | 450-900 |  |  | Carroll Inlet Releases, Deer Mountain Hatchery, |  |
|  |  |  |  | Blossom | 250-500 |  |  | Crystal Lake Hatchery) |  |
|  |  |  |  | Keta | 250-500 |  |  |  |  |

${ }^{1}$ SEAK fisheries will be managed to achieve escapement objectives for Southeast Alaska and Transboundary River Chinook stocks. NA = not available

Appendix A. 2 Indicator stocks for Canada.

| Area | Annex Stock Group | Annex Indicator Stocks | Run Type | Escapement Indicator Stock | Escapement Objective | Model Stock | Escapement Goal in Model | Exploitation Rate Indicator Stock | CWT <br> 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 | Spring/Summer | Nass |  |  |  |  |  |
| NBC-Area 4 |  | Skeena |  | Skeena |  |  |  |  |  |
| CBC-Area 8 |  |  | Spring | Dean |  |  |  |  |  |
| CBC-Area 9 |  |  | Spring/Fall | Rivers Inlet |  |  |  |  |  |
| 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 | Cowichan, Nanaimo | Summer/ Fall | Lower Strait of Georgia (Cowichan / Nanaimo) | Escapement goal range for aggregate | Lower Strait of Georgia Hatchery | 5,318 | Puntledge | PPS |
|  |  |  |  |  |  |  |  | Big Qualicum | BQR |
|  |  |  | Fall |  |  | 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 |
|  | Fraser Late | Harrison River | Fall | Harrison River | 75,100-98,500 | Fraser Late | 75,100 | Chilliwack | CHI |

Appendix A. 3 Indicator stocks for Puget Sound.

| Area | Annex Stock Group | Annex <br> Indicator Stocks | Run <br> Type | Escapement Indicator Stock | Escapement Objective | Model Stock | Escapement Goal in Model | Exploitation Rate Indicator Stock | CWT <br> Acrony m |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North/ <br> Central <br> Puget <br> Sound | North Puget <br> Sound Natural <br> Springs | Nooksack | Spring | Nooksack | Escapement goal range by stock | Nooksack Spring | 4,000 | Nooksack Spring Fingerling <br> Nooksack Spring Yearling | $\begin{aligned} & \text { NSF } \\ & \text { NKS } \end{aligned}$ |
|  |  | Skagit |  | Skagit spring |  |  |  | Skagit Spring Fingerling <br> Skagit Spring Yearling | $\begin{aligned} & \text { SKF } \\ & \mathrm{SKS} \end{aligned}$ |
|  | North Puget Sound Natural Summer/Falls | Nooksack | Summer/ <br> Fall |  | Escapement goal range by stock | Nooksack Fall | 11,923 | Samish Fall Fingerling | SAM |
|  |  | Snohomish |  | Snohomish |  | Snohomish Wild | 5,250 | Skykomish | SKY |
|  |  | Skagit group |  | Skagit sum/fall |  | Skagit Wild | 9,778 | Skagit Summer Fingerling | SSF |
|  |  | Lake <br> Washington |  | Lake <br> Washington Falls |  | Puget Sound <br> Natural <br> Fingerling | 16,966 | NA |  |
|  |  | Green River |  | Green River |  |  |  |  |  |
|  |  | Stillaguamish |  | Stillaguamish |  | Stillaguamish Wild | 2,000 | Stillaguamish Fall Fingerling | STL |
|  |  |  |  |  |  |  |  | Nisqually Fall Fingerling | NIS |
|  |  |  |  |  |  |  |  | Univ. of Washington Accelerated Fall | UWA |
| Hood Canal | Not an Annex stock |  | Fall |  |  |  |  | George Adams Fall Fingerling | GAD |
| South <br> Puget <br> Sound | Not an annex stock |  | Fall |  |  | Puget Sound <br> Hatchery <br> Fingerling | 24,769 | South Puget Sound Fall Fingerling | SPS |
|  |  |  |  |  |  | Puget Sound <br> Hatchery <br> Yearling | 9,136 | South Puget Sound Fall Yearling | SPY |
|  |  |  |  |  |  |  |  | Squaxin Pens Fall Yearling | SQP |
|  |  |  | Spring |  |  |  |  | White River Spring Yearling | WRY |

NA = not available

Appendix A. 4 Indicator stocks for the Washington Coast.

| Area | Annex Stock Group | Annex Indicator Stocks | Run Type | Escapement Indicator Stock | Escapement Objective | Model Stock | Escapement Goal in Model | Exploitation Rate Indicator Stock | CWT <br> Acronym |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WA Coast/ Juan de Fuca | Washington Coastal Fall Naturals | Hoko | Fall | Hoko |  |  |  | Elwha Fall Fingerling | ELW |
|  |  |  |  |  |  |  |  | Hoko Fall Fingerling | HOK |
|  |  | Grays <br> Harbor |  | Grays Harbor Fall | Escapement goal range by stock | Washington Coastal Wild | 21,500 | NA |  |
|  |  | Queets |  | Queets Fall |  |  |  | Sooes Fall Fingerling | SOO |
|  |  | Hoh |  | Hoh Fall |  |  |  | NA |  |
|  |  | Quillayute |  | Quillayute Fall |  |  |  | NA |  |
|  |  | Queets |  | Queets Fall |  |  |  | Queets Fall Fingerling | QUE |
|  | Not an annex stock |  | Fall |  |  | Washington <br> Coastal <br> Hatchery | 6,703 | NA |  |
|  | Not an annex stock |  | Spring | Grays Harbor Spring |  |  |  | NA |  |
|  | Not an annex stock |  | Spring/ <br> Summer | Queets <br> Spring/Summer |  |  |  | NA |  |
|  |  |  |  | Hoh Spring/Summer |  |  |  | NA |  |
|  | Not an annex stock |  | Summer | Quillayute Summer |  |  |  | NA |  |

[^4]Appendix A.5.Indicator stocks for Columbia River and Oregon Coast.

| Area | Annex Stock Group | Annex Indicator Stocks | Run <br> Type | Escapement Indicator Stock | Escapement Objective | Model Stock | Escapement Goal in Model | Exploitation Rate Indicator Stock | CWT <br> Acronym |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Columbia River | Not an Annex stock |  | Spring |  |  | Cowlitz Spring Hatchery | 2,500 | NA |  |
|  |  |  |  |  |  | Willamette River Hatchery | 13,500 | Willamette Spring | WSH |
|  | Columbia River Summers | Mid- <br> Columbia <br> Summers | Summer | Mid Columbia Summer | 17,857 ${ }^{1}$ | Columbia River Summer | 17,857 | Columbia Summers | SUM |
|  | Columbia <br> River Falls |  | Fall |  |  | Fall Cowlitz Hat. | 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 |  | Columbia Upriver Brights | 40,000 | Columbia Upriver Bright | URB |
|  |  |  |  |  |  |  |  | Hanford Wild | HAN |
|  |  | Deschutes |  | Deschutes River Fall |  |  |  | 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 <br> Oregon <br> Coast | Far North <br> Migrating Oregon Coastal Falls | Nehalem | Fall | Nehalem | 6,989 | Oregon Coast | 62,382 | Salmon River |  |
|  |  | Siuslaw |  | Siuslaw | 12,925 |  |  |  |  |
|  |  | Siletz |  | Siletz | 2,944 |  |  |  |  |
| Mid-Oregon Coast | Not an Annex stock |  | Fall | Umpqua |  |  |  | NA |  |
|  |  |  |  | Mid South Oregon Coastal Falls |  |  |  | NA |  |

${ }^{1}$ Interim goal for modeling based on stock recruitment analysis of model data.
NA - not available

## Appendix B. ISBM indices.

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Appendix B.1. ISBM Indices for Canadian fisheries, CWT-based exploitation rate analysis (1999-2008).

|  | Escapement Indicator | CWT Indices ${ }^{1}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stocks | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Lower Strait of Georgia | Cowichan <br> Nanaimo ${ }^{5}$ | $\begin{aligned} & 0.517 \\ & 0.163 \end{aligned}$ | $\begin{aligned} & 0.196 \\ & 0.154 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.260 \\ & 0.260 \\ & \hline \end{aligned}$ | $\begin{array}{r} 0.247 \\ 0.247 \\ \hline \end{array}$ | $\begin{array}{r} 0.363 \\ 6 \\ \text { NA }^{7} \\ \hline \end{array}$ | $\begin{gathered} 0.284 \\ \text { NA } \\ \hline \end{gathered}$ | $\begin{gathered} 0.132 \\ \text { NA } \end{gathered}$ | $\begin{gathered} 0.191 \\ \text { NA } \\ \hline \end{gathered}$ | $\begin{gathered} 0.043 \\ \text { NA } \end{gathered}$ | $\begin{gathered} 0.242 \\ \text { NA } \\ \hline \end{gathered}$ |
| Fraser Late | Harrison River ${ }^{3}$ | 0.112 | 0.073 | 0.090 | 0.105 | $\begin{gathered} 0.055 \\ 9 \end{gathered}$ | 0.032 | 0.058 | 0.032 | 0.035 | 0.031 |
| North Puget <br> Sound <br> Natural <br> Springs | Nooksack, Skagit | $\begin{aligned} & 0.183 \\ & \text { NA }^{2} \end{aligned}$ | $\begin{aligned} & 1.176 \\ & \text { NA } \end{aligned}$ | $\begin{gathered} 0.040 \\ \text { NA } \end{gathered}$ | $\begin{aligned} & 0.023 \\ & \text { NA } \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.046 \\ & \text { NA } \end{aligned}$ | NA <br> NA | NA <br> NA | NA <br> NA | NA NA | NA <br> NA |
| Upper Strait of Georgia | Klinaklini, <br> Kakweikan, <br> Wakeman, <br> Kingcome, <br> Nimpkish | 0.021 | 0.123 | 0.040 | 0.063 | 0.006 | 0.018 | 0.028 | 0.079 | 0.268 | 0.073 |
| Fraser Early (spring and summers) | Upper Fraser, Mid Fraser, Thompson | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| West Coast <br> Vancouver <br> Island Falls | WCVI (Artlish, Burman, Kauok, Tahsis, Tashish, Marble) | 0.431 | 0.083 | 0.060 | 0.248 | 0.496 | 0.488 | 0.267 | 0.267 | 0.906 | 0.652 |
|  | Skagit | NA ${ }^{2}$ | 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 |
| Puget Sound | Snohomish | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Natural <br> Summer / | Lake <br> Washington | $\mathrm{NA}^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Falls | Green River | 0.171 | 0.154 | 0.350 | 0.323 | 0.328 | 0.162 | 0.085 | 0.109 | 0.076 | 0.106 |
| North / <br> Central B. C. | Yakoun, Nass, Skeena, Area 8 | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Washington Coastal Fall Naturals ${ }^{4}$ | Hoko, Grays Harbor, Queets, Hoh, Quillayute | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Columbia <br> River Falls ${ }^{4}$ | Upriver Brights <br> Deschutes <br> Lewis ${ }^{3}$ | $\begin{aligned} & N A^{2} \\ & N A^{2} \\ & N A^{2} \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | NA <br> NA NA | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | NA <br> NA <br> NA | NA <br> NA NA | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | NA <br> NA <br> NA |
| Columbia R <br> Summers ${ }^{4}$ | Mid-Columbia Summers ${ }^{3}$ | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Far North <br> Migrating <br> OR Coastal <br> Falls ${ }^{4}$ | Nehalem ${ }^{3}$, <br> Siletz ${ }^{3}$, Siuslaw $^{3}$ | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA |

1 The CWT-based estimates, not the model estimates, are to be used in postseason assessments.
2 NA means not available because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc).
3 Stock or stock group with an agreed CTC escapement goal.
4 Stock group not in Annex Attachment IV.

5 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.
6 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. 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.
7 Several problems have been identified in the approach previously used to calculate the CWT-based indices for Nanaimo Chinook; indices for this stock will not be reported as their utility is questionable.
8 Although model-based indices were previously calculated separately for Cowichan and Nanaimo Chinook; these did not adequately represent impacts on either LGS stock. This is because the model-based data represent an aggregate of the two 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.
9 The terminal sport harvest rates for Chilliwack Hatchery Chinook, the indicator stock, were removed from the calculation for the Harrison River naturals this year because sport harvest has been essentially zero on the natural population.
10 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.
11 For the Canadian ISBM fisheries, both Lake Washington and Green are assumed to have the same distribution and thus the same index value.
12 ISBM indices for WCVI naturals are based on information from Robertson Cr. hatchery stock, including terminal harvest rates. Prior to this report, harvest rates for terminal net and sport fisheries were treated as equal between the naturals and the hatchery indicator. However, this ignored the fact that since 1999, there has been no terminal net harvest of the vast majority of natural stocks on the WCVI. Consequently, indices for WCVI naturals were adjusted to reflect this zero terminal net harvest rate. In addition, some inconsistencies were noted in the treatment of terminal harvest rates between the model and CWT indices for this stock group. These inconsistencies were eliminated.
13 The US CWT based indices for Fraser Late from 2005 onward do not accurately reflect the impacts on the natural stock because a considerable proportion of the recoveries in the US fisheries have occurred in mark-selective fisheries in which only clipped hatchery-origin fish are retained. The US indices since 2005 indicate greater impacts than would have occurred on the natural stocks and are no longer being reported.
14 NC means that the current model assumes the stock is not caught in U.S. ISBM fisheries.

Appendix B.2. ISBM Indices for U.S. fisheries, CWT-based exploitation rate analysis (19992008).

|  | Escapement Indicator | CWT Indices ${ }^{1}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stocks | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Washington Coastal Fall Naturals | Hoko | $\mathrm{NA}^{2}$ | 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 | 1.270 |
|  | Queets | 1.000 | 0.850 | 1.440 | 0.840 | 0.850 | 0.840 | 2.050 | 0.600 | 1.050 | 0.610 |
|  | Hoh | 1.540 | 2.750 | 1.660 | 0.950 | 1.340 | 1.220 | 1.030 | 1.290 | 2.230 | 1.270 |
|  | Quillayute | 1.300 | 2.470 | 1.480 | 1.420 | 0.990 | 1.150 | 1.030 | 1.180 | 1.470 | 1.270 |
| Columbia <br> River Falls | Upriver <br> Brights | 1.370 | 2.530 | 1.350 | 1.320 | 1.430 | 1.740 | 1.780 | 3.080 | 3.100 | 1.830 |
|  | Deschutes | 0.510 | 0.710 | 0.520 | 0.590 | 0.049 | 0.510 | 0.670 | 0.580 | 0.510 | 1.860 |
|  | Lewis ${ }^{3}$ | 0.000 | 0.360 | 0.580 | 0.560 | 1.030 | 0.170 | 0.980 | 1.330 | 0.790 | 0.630 |
| Puget Sound Natural Summer / Falls | Skagit | $\mathrm{NA}^{2}$ | 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 ${ }^{2}$ |
|  | Snohomish | $\mathrm{NA}^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA |
|  | Lake |  |  |  |  |  |  |  |  |  |  |
|  | Washington | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA |
|  | Green R | 0.500 | 0.700 | 1.180 | 1.070 | 1.030 | 1.010 | 0.170 | 0.370 | 0.380 | 0.280 |
| Fraser Late | Harrison River ${ }^{3}$ | 0.470 | 0.130 | 0.310 | 0.410 | 0.640 | 0.320 | NA ${ }^{13}$ | NA | NA | NA |
| Columbia R Summers | Mid- |  |  |  |  |  |  |  |  |  |  |
|  | Columbia |  |  |  |  |  |  |  |  |  |  |
|  | Summers ${ }^{3}$ | 1.640 | 4.820 | 5.320 | 7.250 | 10.040 | 2.690 | 6.080 | 0.480 | 1.840 | 6.800 |
| Far North Migrating OR Coastal Falls | Nehalem ${ }^{3}$ | 1.960 | 1.970 | 1.940 | 2.170 | 3.110 | 1.800 | 2.000 | 3.480 | 2.010 | 0.660 |
|  | Siletz ${ }^{3}$ | 0.820 | 1.160 | 1.190 | 1.310 | 1.590 | 2.290 | 1.190 | 2.340 | 1.600 | 0.660 |
|  | Siuslaw ${ }^{3}$ | 1.220 | 2.450 | 2.180 | 2.560 | 3.820 | 1.030 | 1.630 | 2.230 | 1.000 | 0.660 |
| North Puget <br> Sound <br> Natural <br> Springs <br> Lower | Nooksack | 0.440 | 0.000 | 0.040 | $\mathrm{NA}^{2}$ | NA | NA | NA | NA | NA | 0.210 |
|  | Skagit | $\mathrm{NA}^{2}$ | NA | NA | 1.120 | NA | NA | NA | NA | NA | NA |
| Lower Strait of Georgia ${ }^{4}$ | Cowichan, | $\mathrm{NA}^{2}$ | 0.690 | 11.350 | 5.780 | 4.990 | 7.250 | 10.230 | 15.070 | 1.550 | 4.040 |
|  | Nanaimo ${ }^{5,7}$ | $\mathrm{NA}^{2}$ | 0.690 | 11.350 | 5.780 | 4.990 |  |  |  |  |  |
| Upper Strait of Georgia ${ }^{4}$ | Klinaklini, <br> Kakweikan, <br> Wakeman, <br> Kingcome, <br> Nimpkish | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Fraser Early (spring and summers) ${ }^{4}$ | Upper Fraser, Mid Fraser, Thompson | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| West Coast Vancouver Island Falls ${ }^{4}$ | WCVI |  |  |  |  |  |  |  |  |  |  |
|  | (Artlish, |  |  |  |  |  |  |  |  |  |  |
|  | Burman, |  |  |  |  |  |  |  |  |  |  |
|  | Kauok, |  |  |  |  |  |  |  |  |  |  |
|  | Tahsis, |  |  |  |  |  |  |  |  |  |  |
|  | Tashish, |  |  |  |  |  |  |  |  |  |  |
|  | Marble) | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| North / <br> Central B. C | Yakoun, |  |  |  |  |  |  |  |  |  |  |
|  | Nass, Skeena, |  |  |  |  |  |  |  |  |  |  |
|  |  | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Appendix B.3. ISBM Indices for Canadian fisheries, from the Chinook model (1999-2010) used to establish the AI for each year. Order of the stock groups corresponds to Annex 4, Chapter 3, Attachment IV and V of the PST 1999 Revised Annexes.

|  | Escapement Indicator Stocks | Model Indices |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{c\|} \hline 1999 \\ \text { CLB0107 } \\ \hline \end{array}$ | $\begin{gathered} \hline 2000 \\ \text { CLB0107 } \end{gathered}$ | $\begin{gathered} \hline 2001 \\ \text { CLB0107 } \end{gathered}$ | $\begin{gathered} 2002 \\ \text { CLB0206 } \end{gathered}$ | $\begin{array}{c\|} \hline 2003 \\ \text { CLB0308 } \end{array}$ | $\begin{array}{c\|} \hline 2004 \\ \text { CLB0404 } \end{array}$ | $\begin{gathered} \hline 2005 \\ \text { CLB0506 } \\ \hline \end{gathered}$ | $\begin{gathered} 2006 \\ \text { CLB0604 } \end{gathered}$ | $\begin{gathered} 2007 \\ \text { CLB0705 } \end{gathered}$ | $\begin{array}{c\|} \hline 2008 \\ \text { CLB0807 } \\ \hline \end{array}$ | $\begin{gathered} 2009 \\ \text { CLB0907 } \end{gathered}$ | $\begin{gathered} \hline 2010 \\ \text { CLB1007 } \end{gathered}$ |
| LowerStrait of Georgia | Cowichan <br> Nanaimo ${ }^{5}$ | $\begin{aligned} & \hline 0.304 \\ & 0.209 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.232 \\ & 0.113 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.325 \\ & 0.246 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.541 \\ & 0.190 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.490 \\ & 0.498 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.593 \\ & 0.695 \\ & \hline \end{aligned}$ | $0.381{ }^{8}$ | $0.590{ }^{8}$ | $0.240{ }^{8}$ | $0.315^{8}$ | $0.494{ }^{8}$ | $0.203{ }^{8}$ |
| 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 |
| NorthPuget |  | 0.233 | 0.156 | 0.241 | 0.195 | 0.251 | 0.273 | 0.314 | 0.993 | 0.563 | 0.470 | 0.988 | 0.568 |
| SoundNatural Springs | Nooksack, Skagit | NA ${ }^{2}$ | NA | NA | NA | 0.251 | 0.273 | 0.314 | 0.993 | 0.563 | 0.470 | 0.988 | 0.568 |
| 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 |
| FraserEarly (spring and summers) | Upper Fraser, Mid <br> 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 |
| West Coast Vancouver Island Falls | WCVI <br> (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 |
|  | 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 |
|  | 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 |
| Puget Sound | 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 |
| Natural | LakeWashington | 0.332 | 0.202 | 0.355 | 0.275 | 0.508 | 0.446 | $0.497^{11}$ | 0.898 | 0.735 | 0.722 | 0.918 | 0.690 |
| Summer / Falls | Green River | 0.333 | 0.202 | 0.356 | 0.275 | 0.508 | 0.466 | $0.497^{11}$ | 0.914 | 0.752 | 0.721 | 0.919 | 0.670 |
| North / Central B.C. | 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 |
| Washington Coastal Fall Naturals ${ }^{4}$ | Hoko, Grays Harbor, Queets, Hoh, Quillayute | 0.201 | 0.161 | 0.354 | 0.292 | 0.292 | 0.435 | 0.457 | 0.363 | 0.194 | 0.387 | 0.328 | 0.134 |
|  | Upriver Brights | 0.124 | 0.104 | 0.377 | 0.429 | 0.686 | 0.663 | 0.640 | 0.523 | 0.129 | 0.612 | 0.517 | 0.110 |
| Columbia | Deschutes | 0.124 | 0.104 | 0.377 | 0.429 | 0.686 | 0.663 | 0.640 | 0.523 | 0.129 | 0.612 | 0.517 | 0.110 |
| River Falls ${ }^{4}$ | Lewis ${ }^{3}$ | 0.056 | 0.180 | 0.180 | 0.171 | 0.515 | 0.480 | 0.546 | 0.315 | 0.030 | 0.432 | 0.832 | 0.920 |
| Columbia R Summers ${ }^{4}$ | Mid-Columbia Summers ${ }^{3}$ | 0.109 | 0.085 | 0.144 | 0.198 | 0.352 | 0.333 | 0.406 | 0.335 | 0.119 | 0.361 | 0.285 | 0.084 |
| Far North Migrating OR Coastal Falls ${ }^{4}$ | $\begin{aligned} & \text { Nehalem }^{3}, \text { Siletz }^{3}, \\ & \text { Siuslaw }^{3} \end{aligned}$ | 0.094 | 0.110 | 0.505 | 0.514 | 0.689 | 0.672 | 0.674 | 0.515 | 0.078 | 0.088 | 0.543 | NA |

Appendix B.4. ISBM Indices for U.S. fisheries, from the Chinook model (1999-2010) used to establish the AI for each year. Order of the stock groups corresponds to Annex 4, Chapter 3, Attachment IV and V of the PST 1999 Revised Annexes.

|  | Escapement Indicator Stocks | Model Indices |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1999 CLB0107 | 2000 CLB0107 | $\begin{gathered} 2001 \\ \text { CLB0107 } \end{gathered}$ | 2002 CLB0206 | 2003 CLB0308 | $\begin{gathered} 2004 \\ \text { CLB0404 } \end{gathered}$ | 2005 CLB0506 | $\begin{gathered} 2006 \\ \text { CLB0604 } \end{gathered}$ | 2007 CLB0705 | $\begin{gathered} 2008 \\ \text { CLB0807 } \\ \hline \end{gathered}$ | 2009 CLB0907 | 2010 CLB1007 |
| 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 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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 |
| 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 |
|  | 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 |
|  | Lewis ${ }^{3}$ | 0.110 | 0.160 | 1.700 | 0.930 | 0.851 | 1.008 | 1.058 | 1.861 | 1.466 | 0.436 | 0.470 | 0.505 |
| 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 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | Green R | 0.500 | 0.480 | 0.600 | 0.350 | 0.263 | 0.260 | 0.202 | 0.361 | 0.278 | 0.380 | 0.555 | 0.520 |
| Fraser Late Columbia R Summers | Harrison River ${ }^{3}$ | 0.660 | 0.390 | 0.620 | 0.720 | 0.981 | 1.058 | 0.670 | 0.787 | 0.563 | 0.378 | 0.410 | 0.209 |
|  | Mid-Columbia Summers ${ }^{3}$ | 0.110 | 0.090 | 0.140 | 0.820 | 0.794 | 0.715 | 0.545 | 0.696 | 0.943 | 1.254 | 1.236 | 1.142 |
| Far North <br> MigratingOR <br> CoastalFalls | Nehalem ${ }^{3}$ | 2.670 | 2.660 | 2.750 | 2.610 | 2.346 | 2.230 | 2.090 | 1.912 | 2.183 | 1.968 | 2.003 | 0.916 |
|  | Siletz ${ }^{3}$ | 1.810 | 1.790 | 1.870 | 1.330 | 1.302 | 1.288 | 1.233 | 1.237 | 1.399 | 1.592 | 1.217 | 0.698 |
|  | Siuslaw ${ }^{3}$ | 0.940 | 0.930 | 0.950 | 3.340 | 2.856 | 2.816 | 2.643 | 1.095 | 1.241 | 0.971 | 1.632 | 2.028 |
| NorthPuget SoundNatural Springs | Nooksack | 0.150 | 0.200 | 0.010 | 0.000 | 0.121 | 0.974 | 0.222 | 0.121 | NA | NA | 0.107 | 0.181 |
|  | Skagit | ID | ID | 0.070 | 0.060 | 0.119 | 0.663 | 0.213 | 0.161 | NA | NA | 0.143 | 0.245 |
| Lower Strait of Georgia ${ }^{4}$ | Cowichan, Nanaimo ${ }^{5}$ | $\begin{aligned} & 0.170 \\ & 0.170 \end{aligned}$ | $\begin{aligned} & \hline 0.210 \\ & 0.210 \end{aligned}$ | $0.480$ <br> 0.480 | $\begin{aligned} & \hline 0.220 \\ & 0.220 \end{aligned}$ | $\begin{aligned} & \hline 0.452 \\ & 0.452 \end{aligned}$ | $\begin{aligned} & \hline 0.915 \\ & 0.915 \end{aligned}$ | $0.407{ }^{8}$ | $0.271{ }^{8}$ | $0.288{ }^{8}$ | $0.333{ }^{8}$ | $0.367{ }^{8}$ | $0.216^{8}$ |
|  |  | 0.170 | 0.210 | 0.480 | 0.220 | 0.452 | 0.915 | $0.40{ }^{8}$ | 0.271 | 0.288 | 0.333 | $0.36{ }^{8}$ | 0.216 |
| Upper Strait of Georgia ${ }^{4}$ | Wakeman,Kingcome, Nimpkish | $\mathrm{NC}{ }^{13}$ | NC | NC | NC | NC | NC | NC | NC | NC | NC | NC | NC |
| Fraser Early (spring \& summers) ${ }^{4}$ | Upper Fraser, Mid Fraser, Thompson | 0.080 | 0.150 | 0.700 | 0.150 | 0.277 | 0.839 | 0.257 | 0.224 | 0.219 | 0.100 | 0.156 | 0.111 |
| West Coast Vancouver Island Falls ${ }^{4}$ | WCVI(Artlish,Burman, Kaouk, Tahsis, Tashish, Marble) | 0.260 | 0.380 | 0.730 | 0.270 | 0.658 | 0.540 | 0.290 | 0.128 | 0.311 | 0.365 | 0.146 | 0.213 |
| North / Central B.C. | Yakoun, Nass, Skeena, Area 8 | NC ${ }^{13}$ | NC | NC | NC | NC | NC | NC | NC | NC | NC | NC | NC |

## Appendix C. Percent distribution of landed catch and total mortality among fisheries and escapement for exploitation rate indicator stocks by calendar year.


#### Abstract

These data result from cohort analysis of CWT recoveries for the indicator stocks; data within a row for each calendar year sum to $100 \%$. Some changes are present in these distribution tables compared to those presented in previous reports due to changes in the CWT database. Two computational rules are used to determine whether data are reported for any particular calendar year: at least three year classes of CWT recoveries and at least 10 estimated CWTs must be available in any calendar year.


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## Appendix C.1. Percent distribution of Alaska Spring reported catch among fisheries and escapement.

| Catch <br> Year | Estimated\# ofCWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | 824 | 40.4\% | 3.9\% | 5.5\% | 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\% | 0.0\% | 0.0\% | 11.4\% | 38.5\% |
| 1982 | 2654 | 20.7\% | 5.2\% | 3.4\% | 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\% | 0.0\% | 3.4\% | 65.7\% |
| 1983 | 5592 | 25.3\% | 1.3\% | 6.3\% | 1.7\% | 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\% | 0.0\% | 4.8\% | 60.4\% |
| 1984 | 10319 | 21.5\% | 2.6\% | 12.9\% | 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\% | 0.0\% | 2.0\% | 59.7\% |
| 1985 | 15884 | 24.4\% | 4.7\% | 11.2\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 2.3\% | 55.1\% |
| 1986 | 16246 | 23.5\% | 4.5\% | 11.7\% | 0.6\% | 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\% | 0.9\% | 4.1\% | 54.5\% |
| 1987 | 15950 | 27.2\% | 2.6\% | 6.7\% | 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\% | 0.2\% | 7.9\% | 54.4\% |
| 1988 | 15058 | 28.1\% | 1.8\% | 9.7\% | 1.1\% | 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\% | 0.2\% | 7.3\% | 51.6\% |
| 1989 | 11305 | 21.6\% | 4.8\% | 8.8\% | 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\% | 4.9\% | 6.0\% | 53.0\% |
| 1990 | 13877 | 31.4\% | 2.4\% | 9.6\% | 1.8\% | 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\% | 0.0\% | 11.1\% | 43.5\% |
| 1991 | 14133 | 35.2\% | 3.5\% | 9.7\% | 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\% | 0.0\% | 11.9\% | 38.7\% |
| 1992 | 6908 | 22.9\% | 6.6\% | 10.9\% | 0.4\% | 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\% | 0.2\% | 12.2\% | 46.6\% |
| 1993 | 5948 | 18.5\% | 3.5\% | 11.1\% | 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\% | 2.3\% | 9.1\% | 55.0\% |
| 1994 | 5370 | 13.9\% | 12.3\% | 12.0\% | 0.4\% | 0.1\% | 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\% | 3.7\% | 4.1\% | 53.1\% |
| 1995 | 5935 | 24.5\% | 4.9\% | 11.2\% | 0.3\% | 0.3\% | 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\% | 8.8\% | 8.4\% | 41.3\% |
| 1996 | 6135 | 22.2\% | 4.6\% | 14.8\% | 0.0\% | 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\% | 5.2\% | 15.1\% | 37.8\% |
| 1997 | 5506 | 23.7\% | 4.7\% | 13.0\% | 0.0\% | 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\% | 3.6\% | 18.1\% | 36.8\% |
| 1998 | 3644 | 24.5\% | 6.7\% | 12.6\% | 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\% | 0.0\% | 0.0\% | 3.3\% | 15.2\% | 36.4\% |
| 1999 | 5785 | 18.2\% | 2.4\% | 14.2\% | 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\% | 2.8\% | 14.0\% | 47.8\% |
| 2000 | 6320 | 20.0\% | 2.6\% | 12.2\% | 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\% | 2.3\% | 11.8\% | 50.7\% |
| 2001 | 6754 | 14.7\% | 2.2\% | 9.0\% | 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\% | 0.0\% | 1.9\% | 8.9\% | 63.0\% |
| 2002 | 5905 | 10.8\% | 1.8\% | 7.3\% | 1.0\% | 0.7\% | 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\% | 2.0\% | 8.4\% | 68.0\% |
| 2003 | 5893 | 15.8\% | 1.7\% | 7.9\% | 0.7\% | 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\% | 10.1\% | 63.5\% |
| 2004 | 8322 | 15.6\% | 5.2\% | 5.4\% | 0.4\% | 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\% | 0.4\% | 9.4\% | 63.0\% |
| 2005 | 7858 | 23.2\% | 5.6\% | 11.3\% | 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\% | 0.1\% | 19.8\% | 39.0\% |
| 2006 | 10249 | 32.4\% | 3.9\% | 5.8\% | 0.7\% | 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\% | 1.9\% | 9.8\% | 45.3\% |
| 2007 | 9873 | 29.2\% | 3.1\% | 6.2\% | 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\% | 1.1\% | 9.8\% | 50.1\% |
| 2008 | 9050 | 20.3\% | 3.7\% | 4.1\% | 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\% | 1.2\% | 15.5\% | 54.8\% |
| 1979-2008 | 8475 | 23.2\% | 4.0\% | 9.4\% | 0.5\% | 0.2\% | 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\% | 1.7\% | 9.7\% | 51.0\% |
| 1979-1984 | 4847 | 27.0\% | 3.2\% | 7.0\% | 0.9\% | 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\% | 5.4\% | 56.1\% |
| 1985-1995 | 11510 | 24.7\% | 4.7\% | 10.2\% | 0.7\% | 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\% | 2.0\% | 7.7\% | 49.7\% |
| 1996-1998 | 5095 | 23.4\% | 5.3\% | 13.5\% | 0.0\% | 0.5\% | 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\% | 4.0\% | 16.1\% | 37.0\% |
| 1999-2008 | 7601 | 20.0\% | 3.2\% | 8.3\% | 0.4\% | 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\% | 1.4\% | 11.7\% | 54.5\% |

Calibration and Exploitation Rate

Appendix C.2. Percent distribution of Alaska Spring total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | 1080 | 46.0\% | 3.4\% | 10.9\% | 0.6\% | 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\% | 9.4\% | 29.4\% |
| 1982 | 3189 | 29.1\% | 5.0\% | 5.5\% | 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\% | 0.0\% | 4.0\% | 54.7\% |
| 1983 | 6815 | 34.4\% | 1.2\% | 8.0\% | 1.8\% | 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\% | 0.0\% | 4.7\% | 49.6\% |
| 1984 | 12610 | 29.8\% | 2.4\% | 15.8\% | 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\% | 0.0\% | 1.9\% | 48.8\% |
| 1985 | 19489 | 29.5\% | 8.8\% | 12.8\% | 0.9\% | 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\% | 0.9\% | 2.1\% | 44.9\% |
| 1986 | 19650 | 26.7\% | 10.5\% | 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\% | 1.0\% | 3.7\% | 45.0\% |
| 1987 | 18709 | 33.8\% | 4.5\% | 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\% | 0.2\% | 7.2\% | 46.4\% |
| 1988 | 16663 | 29.9\% | 4.2\% | 10.5\% | 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\% | 0.2\% | 7.1\% | 46.6\% |
| 1989 | 14287 | 24.1\% | 14.2\% | 9.6\% | 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\% | 4.3\% | 5.1\% | 41.9\% |
| 1990 | 17306 | 37.5\% | 5.5\% | 10.1\% | 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\% | 0.0\% | 9.8\% | 34.9\% |
| 1991 | 16102 | 37.5\% | 6.4\% | 10.0\% | 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\% | 0.0\% | 11.0\% | 34.0\% |
| 1992 | 9931 | 19.8\% | 29.1\% | 9.1\% | 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\% | 0.2\% | 8.9\% | 32.4\% |
| 1993 | 6788 | 22.2\% | 6.1\% | 12.3\% | 0.2\% | 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\% | 2.2\% | 8.4\% | 48.2\% |
| 1994 | 7615 | 16.1\% | 28.2\% | 11.3\% | 0.4\% | 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\% | 3.0\% | 3.1\% | 37.5\% |
| 1995 | 7149 | 28.7\% | 8.3\% | 11.7\% | 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\% | 8.6\% | 7.5\% | 34.3\% |
| 1996 | 688 | 24.8\% | 6.3\% | 15.6\% | 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\% | 4.9\% | 14.1\% | 33.7\% |
| 1997 | 61 | 25.6\% | 6.4\% | 14.1\% | 0.0\% | 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\% | 3.4\% | 17.2\% | 33.1\% |
| 1998 | 4289 | 25.9\% | 10.3\% | 14.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 14.1\% | 30.9\% |
| 1999 | 6729 | 21.7\% | 3.2\% | 17.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 13.3\% | 41.1\% |
| 2000 | 7207 | 23.4\% | 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\% | 2.7\% | 11.4\% | 44.5\% |
| 2001 | 7308 | 17.4\% | 3.0\% | 10.3\% | 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\% | 0.0\% | 1.9\% | 8.7\% | 58.3\% |
| 2002 | 6429 | 13.1\% | 2.4\% | 9.1\% | 1.1\% | 0.8\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 8.5\% | 62.5\% |
| 2003 | 6344 | 18.0\% | 2.2\% | 9.5\% | 0.8\% | 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\% | 10.2\% | 59.0\% |
| 2004 | 9376 | 17.9\% | 8.7\% | 6.7\% | 0.5\% | 0.7\% | 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\% | 0.4\% | 9.1\% | 56.0\% |
| 2005 | 9282 | 26.4\% | 7.4\% | 13.5\% | 0.4\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 18.5\% | 33.0\% |
| 2006 | 11755 | 36.6\% | 4.6\% | 6.9\% | 0.7\% | 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\% | 2.1\% | 9.4\% | 39.5\% |
| 2007 | 11397 | 33.2\% | 5.2\% | 7.1\% | 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\% | 1.3\% | 9.4\% | 43.4\% |
| 2008 | 9775 | 22.5\% | 5.3\% | 4.5\% | 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\% | 1.3\% | 15.3\% | 50.7\% |
| 1979-2008 | 10010 | 26.8\% | 7.4\% | 10.7\% | 0.6\% | 0.2\% | 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\% | 1.7\% | 9.0\% | 43.4\% |
| 1979-1984 | 5924 | 34.8\% | 3.0\% | 10.1\% | 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\% | 0.0\% | 5.0\% | 45.6\% |
| 1985-1995 | 13972 | 27.8\% | 11.4\% | 10.6\% | 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\% | 1.9\% | 6.7\% | 40.5\% |
| 1996-1998 | 5763 | 25.4\% | 7.7\% | 14.5\% | 0.0\% | 0.5\% | 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\% | 3.9\% | 15.2\% | 32.6\% |
| 1999-2008 | 8560 | 23.0\% | 4.6\% | 9.8\% | 0.4\% | 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\% | 1.5\% | 11.4\% | 48.8\% |


| Appendix C.3. |  | Percent distribution of Big Qualicum River Fall reported catch among fisheries and escapement. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 4744 | 3.4\% | 0.9\% | 0.3\% | 1.7\% | 0.4\% | 2.2\% | 0.1\% | 21.2\% | 15.3\% | 9.4\% | 12.1\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 29.9\% |
| 1980 | 2734 | 1.4\% | 1.6\% | 0.4\% | 4.3\% | 1.4\% | 4.2\% | 0.0\% | 15.3\% | 20.1\% | 6.6\% | 12.8\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.3\% | 0.2\% | 0.0\% | 0.0\% | 3.7\% | 27.7\% |
| 1981 | 1425 | 1.9\% | 0.3\% | 0.4\% | 1.3\% | 0.8\% | 1.5\% | 0.3\% | 17.8\% | 33.4\% | 11.4\% | 14.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.6\% | 0.0\% | 0.0\% | 4.1\% | 12.1\% |
| 1982 | 740 | 4.5\% | 0.4\% | 1.2\% | 4.5\% | 0.4\% | 4.3\% | 0.0\% | 12.7\% | 11.4\% | 5.8\% | 20.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.7\% | 0.0\% | 0.0\% | 1.6\% | 30.9\% |
| 1983 | 629 | 5.4\% | 0.3\% | 0.3\% | 4.9\% | 1.0\% | 1.1\% | 0.0\% | 13.5\% | 14.8\% | 6.8\% | 19.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 8.3\% | 23.7\% |
| 1984 | 497 | 1.4\% | 0.4\% | 0.0\% | 1.4\% | 5.8\% | 1.4\% | 0.0\% | 8.9\% | 38.8\% | 6.6\% | 9.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 20.7\% |
| 1985 | 690 | 3.9\% | 0.3\% | 0.0\% | 1.7\% | 1.7\% | 1.4\% | 0.0\% | 1.7\% | 24.3\% | 3.8\% | 19.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 9.7\% | 29.4\% |
| 1986 | 1205 | 1.9\% | 0.2\% | 0.0\% | 0.7\% | 2.8\% | 1.4\% | 0.0\% | 8.1\% | 30.8\% | 12.6\% | 15.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% | 20.1\% |
| 1987 | 738 | 8.7\% | 0.0\% | 0.9\% | 3.9\% | 2.7\% | 4.2\% | 0.0\% | 2.0\% | 22.6\% | 2.4\% | 7.7\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 6.6\% | 36.6\% |
| 1988 | 395 | 2.8\% | 0.5\% | 0.0\% | 2.3\% | 1.3\% | 2.8\% | 2.0\% | 1.8\% | 25.3\% | 1.3\% | 14.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 39.0\% |
| 1989 | 501 | 4.2\% | 1.6\% | 0.6\% | 3.2\% | 1.8\% | 4.8\% | 0.0\% | 1.8\% | 19.4\% | 0.6\% | 9.2\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 18.0\% | 33.7\% |
| 1990 | 632 | 4.7\% | 1.9\% | 0.0\% | 6.0\% | 2.4\% | 3.0\% | 0.0\% | 3.5\% | 14.6\% | 1.6\% | 17.9\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 4.6\% | 37.8\% |
| 1991 | 624 | 2.4\% | 1.3\% | 0.0\% | 2.1\% | 1.9\% | 1.9\% | 0.0\% | 5.3\% | 28.2\% | 1.1\% | 8.5\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 10.9\% | 35.4\% |
| 1992 | 558 | 2.3\% | 0.0\% | 2.5\% | 5.4\% | 7.7\% | 3.4\% | 0.0\% | 9.0\% | 26.3\% | 5.9\% | 5.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 25.6\% |
| 1993 | 409 | 1.2\% | 1.2\% | 0.0\% | 1.5\% | 3.2\% | 1.7\% | 0.0\% | 3.4\% | 36.9\% | 3.9\% | 9.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 4.6\% | 31.5\% |
| 1994 | 252 | 4.4\% | 0.0\% | 0.0\% | 1.6\% | 2.0\% | 2.8\% | 0.0\% | 4.4\% | 23.4\% | 1.6\% | 6.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 6.0\% | 45.2\% |
| 1995 | 201 | 7.0\% | 0.0\% | 0.0\% | 1.5\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 10.9\% | 0.0\% | 7.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.0\% | 60.7\% |
| 1996 | 279 | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 44.1\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 2.2\% | 48.0\% |
| 1997 | 207 | 2.9\% | 0.0\% | 0.0\% | 4.8\% | 1.9\% | 0.0\% | 7.2\% | 1.0\% | 8.7\% | 1.4\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.8\% | 50.2\% |
| 1998 | 184 | 7.1\% | 0.5\% | 0.0\% | 0.0\% | 5.4\% | 0.0\% | 0.0\% | 0.0\% | 10.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.7\% | 67.4\% |
| 1999 | 263 | 5.3\% | 2.3\% | 0.0\% | 3.4\% | 3.8\% | 0.0\% | 3.4\% | 0.0\% | 8.7\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 66.5\% |
| 2000 | 222 | 14.0\% | 0.9\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 7.7\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 68.0\% |
| 2001 | 462 | 4.1\% | 6.9\% | 0.0\% | 0.0\% | 9.5\% | 0.6\% | 0.0\% | 0.0\% | 8.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 66.5\% |
| 2002 | 295 | 10.2\% | 0.0\% | 3.1\% | 3.4\% | 5.8\% | 2.4\% | 3.1\% | 0.0\% | 5.8\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 59.7\% |
| 2003 | 244 | 7.8\% | 0.4\% | 1.6\% | 0.0\% | 11.9\% | 3.3\% | 0.0\% | 0.0\% | 8.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 66.4\% |
| 2004 | 363 | 7.2\% | 0.0\% | 0.3\% | 5.0\% | 2.8\% | 1.7\% | 0.0\% | 0.0\% | 5.8\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 74.9\% |
| 2005 | 517 | 8.7\% | 0.4\% | 0.0\% | 1.9\% | 12.0\% | 5.2\% | 2.7\% | 0.0\% | 5.8\% | 0.0\% | 0.8\% | 0.0\% | 0.6\% | 0.0\% | 0.6\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 57.1\% |
| 2006 | 583 | 4.1\% | 1.2\% | 1.9\% | 1.4\% | 4.3\% | 0.5\% | 0.0\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 79.2\% |
| 2007 | 555 | 10.6\% | 0.2\% | 0.7\% | 5.0\% | 7.4\% | 0.5\% | 2.0\% | 0.0\% | 5.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 62.2\% |
| 2008 | 378 | 4.2\% | 0.8\% | 0.3\% | 1.6\% | 6.9\% | 0.8\% | 6.9\% | 0.0\% | 6.3\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 1.9\% | 0.0\% | 0.0\% | 2.1\% | 66.1\% |
| 1979-2008 | 718 | 5.0\% | 0.8\% | 0.5\% | 2.5\% | 3.8\% | 1.9\% | 0.9\% | 4.4\% | 17.5\% | 2.9\% | 7.2\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.8\% | 0.3\% | 0.0\% | 0.0\% | 5.5\% | 45.7\% |
| 1979-1984 | 1795 | 3.0\% | 0.7\% | 0.4\% | 3.0\% | 1.6\% | 2.5\% | 0.1\% | 14.9\% | 22.3\% | 7.8\% | 14.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.3\% | 0.0\% | 0.0\% | 4.2\% | 24.2\% |
| 1985-1995 | 564 | 4.0\% | 0.6\% | 0.4\% | 2.7\% | 2.7\% | 2.5\% | 0.2\% | 3.7\% | 23.9\% | 3.2\% | 11.1\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.7\% | 0.4\% | 0.0\% | 0.0\% | 7.9\% | 35.9\% |
| 1996-1998 | 223 | 4.3\% | 0.2\% | 0.0\% | 1.6\% | 2.8\% | 0.0\% | 2.4\% | 0.3\% | 21.2\% | 0.5\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 10.2\% | 55.2\% |
| 1999-2008 | 388 | 7.6\% | 1.3\% | 0.8\% | 2.2\% | 6.7\% | 1.5\% | 1.8\% | 0.0\% | 6.6\% | 0.3\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 0.2\% | 1.5\% | 0.2\% | 0.0\% | 0.0\% | 2.4\% | 66.7\% |

Appendix C.4. Percent distribution of Big Qualicum River Fall total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 5214 | 4.3\% | 0.9\% | 0.4\% | 2.2\% | 0.4\% | 2.8\% | 0.1\% | 20.4\% | 14.9\% | 11.8\% | 11.7\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 27.2\% |
| 1980 | 2953 | 1.4\% | 1.7\% | 0.4\% | 4.9\% | 1.3\% | 5.0\% | 0.0\% | 15.0\% | 19.9\% | 7.6\% | 12.8\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.3\% | 0.2\% | 0.0\% | 0.0\% | 3.6\% | 25.6\% |
| 1981 | 1567 | 2.0\% | 0.3\% | 0.4\% | 1.6\% | 0.8\% | 1.8\% | 0.3\% | 17.2\% | 32.7\% | 13.3\% | 13.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.6\% | 0.0\% | 0.0\% | 4.0\% | 11.0\% |
| 1982 | 796 | 5.3\% | 0.5\% | 1.4\% | 4.9\% | 0.4\% | 4.9\% | 0.0\% | 12.4\% | 11.3\% | 6.4\% | 20.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.8\% | 0.0\% | 0.0\% | 1.6\% | 28.8\% |
| 1983 | 694 | 5.5\% | 0.3\% | 0.7\% | 5.0\% | 1.2\% | 1.2\% | 0.0\% | 14.7\% | 14.6\% | 7.2\% | 18.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 8.4\% | 21.5\% |
| 1984 | 550 | 2.0\% | 0.4\% | 0.0\% | 1.5\% | 6.5\% | 1.6\% | 0.0\% | 9.3\% | 37.8\% | 7.3\% | 9.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 18.7\% |
| 1985 | 797 | 6.4\% | 1.0\% | 0.0\% | 2.1\% | 2.1\% | 1.6\% | 0.0\% | 2.3\% | 23.0\% | 4.4\% | 18.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 9.5\% | 25.5\% |
| 1986 | 1350 | 2.7\% | 1.3\% | 0.0\% | 0.8\% | 2.8\% | 1.4\% | 0.0\% | 9.9\% | 29.5\% | 13.5\% | 14.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.5\% | 17.9\% |
| 1987 | 793 | 9.6\% | 0.0\% | 1.0\% | 4.3\% | 2.9\% | 4.8\% | 0.0\% | 2.1\% | 22.6\% | 2.8\% | 7.6\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 6.7\% | 34.0\% |
| 1988 | 458 | 2.6\% | 1.3\% | 0.0\% | 2.6\% | 1.3\% | 3.3\% | 2.0\% | 2.0\% | 29.0\% | 1.3\% | 14.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 5.0\% | 33.6\% |
| 1989 | 605 | 4.3\% | 5.3\% | 0.8\% | 3.6\% | 1.8\% | 5.1\% | 0.0\% | 2.0\% | 20.8\% | 0.5\% | 8.1\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 18.2\% | 27.9\% |
| 1990 | 742 | 5.3\% | 3.9\% | 0.0\% | 7.0\% | 2.6\% | 3.2\% | 0.0\% | 3.9\% | 15.8\% | 1.8\% | 17.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 4.6\% | 32.2\% |
| 1991 | 741 | 3.0\% | 2.7\% | 0.0\% | 2.4\% | 1.9\% | 2.2\% | 0.0\% | 6.3\% | 30.5\% | 1.3\% | 7.7\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 11.2\% | 29.8\% |
| 1992 | 676 | 3.7\% | 0.0\% | 2.7\% | 6.1\% | 7.5\% | 3.6\% | 0.0\% | 10.9\% | 27.2\% | 6.2\% | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 5.6\% | 2\% |
| 1993 | 492 | 1.6\% | 2.4\% | 0.0\% | 1.6\% | 3.0\% | 1.8\% | 0.0\% | 4.5\% | 39.4\% | 4.7\% | 8.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 4.7\% | 26.2\% |
| 1994 | 277 | 5.1\% | 0.0\% | 0.0\% | 1.8\% | 1.8\% | 2.9\% | 0.0\% | 5.1\% | 25.6\% | 1.8\% | 5.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 41.2\% |
| 1995 | 232 | 7.8\% | 0.0\% | 0.0\% | 2.2\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 12.1\% | 0.0\% | 11.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.3\% | 52.6\% |
| 1996 | 329 | 3.3\% | 0.0\% | 0.0\% | 0.6\% | 0.9\% | 0.3\% | 0.0\% | 0.0\% | 49.2\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 2.4\% | 40.7\% |
| 1997 | 235 | 3.4\% | 0.0\% | 0.0\% | 5.5\% | 2.6\% | 0.0\% | 6.8\% | 0.9\% | 9.4\% | 1.7\% | 4.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.9\% | 44.3\% |
| 1998 | 199 | 7.5\% | 0.5\% | 0.0\% | 0.0\% | 7.0\% | 0.0\% | 0.0\% | 0.0\% | 12.6\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.5\% | 62.3\% |
| 1999 | 289 | 6.2\% | 3.8\% | 0.0\% | 3.8\% | 4.8\% | 0.0\% | 3.8\% | 0.0\% | 10.0\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 60.6\% |
| 2000 | 242 | 16.5\% | 1.2\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 8.7\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 62.4\% |
| 2001 | 523 | 4.8\% | 11.3\% | 0.0\% | 0.0\% | 11.5\% | 0.6\% | 0.0\% | 0.0\% | 9.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 58.7\% |
| 2002 | 337 | 11.3\% | 0.0\% | 3.3\% | 3.6\% | 6.5\% | 2.1\% | 3.3\% | 0.0\% | 6.2\% | 0.0\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 52.2\% |
| 2003 | 271 | 8.9\% | 0.7\% | 2.2\% | 0.0\% | 15.1\% | 3.3\% | 0.0\% | 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\% | 59.8\% |
| 2004 | 387 | 8.5\% | 0.0\% | 0.3\% | 5.9\% | 3.9\% | 1.6\% | 0.0\% | 0.0\% | 7.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 70.3\% |
| 2005 | 585 | 10.1\% | 0.5\% | 0.0\% | 2.1\% | 15.2\% | 5.3\% | 2.9\% | 0.0\% | 6.3\% | 0.0\% | 1.0\% | 0.0\% | 0.5\% | 0.0\% | 0.7\% | 3.6\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 50.4\% |
| 2006 | 621 | 5.3\% | 2.4\% | 2.3\% | 1.6\% | 4.8\% | 0.6\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 74.4\% |
| 2007 | 616 | 13.1\% | 0.2\% | 1.0\% | 5.4\% | 9.1\% | 0.6\% | 2.1\% | 0.0\% | 5.5\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 56.0\% |
| 2008 | 417 | 6.0\% | 1.0\% | 0.5\% | 1.9\% | 7.7\% | 1.0\% | 7.4\% | 0.0\% | 7.2\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 2.6\% | 0.0\% | 0.0\% | 2.4\% | 60.0\% |
| 1979-2008 | 800 | 5.9\% | 1.5\% | 0.6\% | 2.8\% | 4.5\% | 2.1\% | 1.0\% | 4.6\% | 18.4\% | 3.2\% | 7.3\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.9\% | 0.4\% | 0.0\% | 0.0\% | 5.7\% | 40.9\% |
| 1979-1984 | 1962 | 3.4\% | 0.7\% | 0.6\% | 3.3\% | 1.8\% | 2.9\% | 0.1\% | 14.8\% | 21.9\% | 8.9\% | 14.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.4\% | 0.0\% | 0.0\% | 4.2\% | 22.1\% |
| 1985-1995 | 651 | 4.7\% | 1.6\% | 0.4\% | 3.1\% | 2.8\% | 2.7\% | 0.2\% | 4.4\% | 25.0\% | 3.5\% | 10.8\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.8\% | 0.5\% | 0.0\% | 0.0\% | 8.0\% | 31.1\% |
| 1996-1998 | 254 | 4.8\% | 0.2\% | 0.0\% | 2.0\% | 3.5\% | 0.1\% | 2.3\% | 0.3\% | 23.7\% | 0.6\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 10.9\% | 49.1\% |
| 1999-2008 | 429 | 9.1\% | 2.1\% | 0.9\% | 2.4\% | 8.2\% | 1.5\% | 2.0\% | 0.0\% | 7.4\% | 0.4\% | 0.8\% | 0.0\% | 0.1\% | 0.0\% | 0.2\% | 1.7\% | 0.3\% | 0.0\% | 0.0\% | 2.5\% | 60.5\% |

Appendix C.5. Percent distribution of Chilliwack River Fall reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | 2226 | 0.5\% | 0.0\% | 0.0\% | 0.3\% | 0.2\% | 33.7\% | 0.0\% | 5.5\% | 23.0\% | 2.3\% | 7.8\% | 0.0\% | 3.8\% | 0.0\% | 0.4\% | 4.7\% | 3.8\% | 0.0\% | 0.0\% | 0.9\% | 13.2\% |
| 1986 | 2112 | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.2\% | 19.7\% | 0.0\% | 8.0\% | 20.0\% | 2.4\% | 15.7\% | 0.0\% | 2.5\% | 0.0\% | 0.2\% | 4.4\% | 6.2\% | 0.0\% | 0.0\% | 0.9\% | 19.1\% |
| 1987 | 2641 | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.3\% | 17.0\% | 0.6\% | 15.5\% | 20.5\% | 0.4\% | 2.5\% | 0.0\% | 4.0\% | 0.0\% | 0.2\% | 4.1\% | 2.8\% | 0.0\% | 0.0\% | 1.1\% | 30.0\% |
| 1988 | 2253 | 0.4\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 17.6\% | 0.0\% | 6.8\% | 11.0\% | 0.0\% | 2.6\% | 0.0\% | 4.3\% | 0.0\% | 0.1\% | 3.8\% | 2.1\% | 0.0\% | 0.0\% | 2.5\% | 48.4\% |
| 1989 | 1121 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.2\% | 0.0\% | 1.5\% | 16.1\% | 0.0\% | 4.6\% | 0.0\% | 6.0\% | 0.0\% | 0.2\% | 4.4\% | 1.4\% | 0.0\% | 0.0\% | 0.6\% | 44.6\% |
| 1990 | 1535 | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 8.6\% | 2.4\% | 3.6\% | 10.6\% | 0.1\% | 6.7\% | 0.0\% | 7.7\% | 0.0\% | 0.5\% | 16.2\% | 6.2\% | 0.0\% | 0.0\% | 1.0\% | 35.3\% |
| 1991 | 2855 | 0.2\% | 0.1\% | 0.0\% | 0.4\% | 0.2\% | 18.7\% | 0.7\% | 8.1\% | 12.9\% | 0.2\% | 5.4\% | 0.0\% | 14.2\% | 0.0\% | 0.1\% | 6.7\% | 5.0\% | 0.0\% | 0.0\% | 1.5\% | 25.6\% |
| 1992 | 3944 | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 18.8\% | 0.2\% | 5.7\% | 10.2\% | 0.6\% | 1.6\% | 0.0\% | 8.7\% | 0.0\% | 0.2\% | 1.0\% | 3.6\% | 0.0\% | 0.0\% | 1.1\% | 47.7\% |
| 1993 | 1911 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 12.5\% | 0.4\% | 7.2\% | 7.2\% | 0.0\% | 1.4\% | 0.0\% | 7.4\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 1.5\% | 60.9\% |
| 1994 | 654 | 0.3\% | 0.2\% | 0.0\% | 0.6\% | 0.0\% | 6.7\% | 2.3\% | 2.9\% | 5.7\% | 0.3\% | 7.8\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 4.9\% | 4.4\% | 0.0\% | 0.0\% | 5.2\% | 57.2\% |
| 1995 | 2012 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 9.0\% | 0.4\% | 0.0\% | 5.6\% | 0.0\% | 2.1\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 1.5\% | 1.8\% | 0.0\% | 0.0\% | 1.0\% | 77.0\% |
| 1996 | 1536 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 14.8\% | 0.0\% | 2.5\% | 0.0\% | 4.8\% | 0.0\% | 0.0\% | 1.0\% | 3.3\% | 0.0\% | 0.0\% | 2.3\% | 70.6\% |
| 1997 | 2277 | 0.7\% | 0.0\% | 0.0\% | 0.2\% | 0.4\% | 10.5\% | 3.1\% | 0.0\% | 13.0\% | 0.4\% | 2.7\% | 0.0\% | 5.3\% | 0.0\% | 0.1\% | 2.5\% | 3.6\% | 0.0\% | 0.0\% | 2.9\% | 54.7\% |
| 1998 | 3124 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.2\% | 0.3\% | 0.0\% | 2.8\% | 0.0\% | 0.4\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.4\% | 0.5\% | 0.0\% | 0.0\% | 1.2\% | 90.4\% |
| 1999 | 3245 | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 0.3\% | 2.0\% | 0.0\% | 9.3\% | 0.0\% | 0.4\% | 0.0\% | 12.5\% | 0.0\% | 0.5\% | 0.7\% | 0.4\% | 0.0\% | 0.0\% | 1.5\% | 72.0\% |
| 2000 | 2593 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 5.5\% | 2.4\% | 0.0\% | 3.6\% | 0.0\% | 0.0\% | 0.0\% | 3.8\% | 0.0\% | 0.1\% | 0.5\% | 0.5\% | 0.0\% | 0.0\% | 2.4\% | 80.7\% |
| 2001 | 3830 | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 3.9\% | 1.6\% | 0.0\% | 6.2\% | 0.0\% | 0.5\% | 0.0\% | 6.1\% | 0.0\% | 0.4\% | 0.9\% | 2.7\% | 0.0\% | 0.0\% | 10.9\% | 66.6\% |
| 2002 | 5029 | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 9.3\% | 5.0\% | 0.0\% | 3.3\% | 0.0\% | 0.6\% | 0.0\% | 7.5\% | 0.0\% | 1.2\% | 0.3\% | 1.5\% | 0.0\% | 0.0\% | 4.6\% | 66.1\% |
| 2003 | 4558 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 6.2\% | 2.5\% | 0.0\% | 2.6\% | 0.0\% | 0.3\% | 0.0\% | 7.7\% | 0.0\% | 0.5\% | 0.4\% | 1.1\% | 0.0\% | 0.0\% | 6.1\% | 72.4\% |
| 2004 | 6649 | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 5.3\% | 2.2\% | 0.0\% | 0.7\% | 0.0\% | 0.7\% | 0.0\% | 6.3\% | 0.0\% | 0.2\% | 0.1\% | 0.9\% | 0.0\% | 0.0\% | 4.5\% | 78.9\% |
| 2005 | 3962 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 7.6\% | 4.0\% | 0.0\% | 3.1\% | 0.0\% | 3.4\% | 0.0\% | 3.5\% | 0.0\% | 0.9\% | 0.8\% | 0.8\% | 0.0\% | 0.0\% | 5.7\% | 69.8\% |
| 2006 | 2946 | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 7.4\% | 2.0\% | 0.0\% | 2.1\% | 0.0\% | 0.6\% | 0.0\% | 2.4\% | 0.0\% | 0.3\% | 0.2\% | 1.2\% | 0.0\% | 0.0\% | 4.2\% | 79.1\% |
| 2007 | 1696 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 7.5\% | 3.2\% | 0.0\% | 0.8\% | 0.0\% | 2.8\% | 0.0\% | 2.4\% | 0.0\% | 0.2\% | 0.5\% | 0.7\% | 0.0\% | 0.2\% | 5.7\% | 75.8\% |
| 2008 | 2774 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.8\% | 4.8\% | 0.0\% | 1.7\% | 0.0\% | 0.6\% | 0.0\% | 4.2\% | 0.0\% | 1.7\% | 0.9\% | 1.5\% | 0.0\% | 0.0\% | 9.4\% | 63.3\% |
| 1979-2008 | 2812 | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 10.8\% | 1.7\% | 2.7\% | 8.6\% | 0.3\% | 3.1\% | 0.0\% | 5.5\% | 0.0\% | 0.3\% | 2.5\% | 2.4\% | 0.0\% | 0.0\% | 3.3\% | 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\% |
| 1985-1995 | 2115 | 0.3\% | 0.0\% | 0.0\% | 0.3\% | 0.2\% | 16.6\% | 0.6\% | 5.9\% | 13.0\% | 0.6\% | 5.3\% | 0.0\% | 5.6\% | 0.0\% | 0.2\% | 4.7\% | 3.5\% | 0.0\% | 0.0\% | 1.6\% | 41.7\% |
| 1996-1998 | 2312 | 0.4\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 3.6\% | 1.2\% | 0.0\% | 10.2\% | 0.1\% | 1.9\% | 0.0\% | 4.4\% | 0.0\% | 0.0\% | 1.3\% | 2.5\% | 0.0\% | 0.0\% | 2.1\% | 71.9\% |
| 1999-2008 | 3728 | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 6.5\% | 3.0\% | 0.0\% | 3.3\% | 0.0\% | 1.0\% | 0.0\% | 5.7\% | 0.0\% | 0.6\% | 0.5\% | 1.1\% | 0.0\% | 0.0\% | 5.5\% | 72.5\% |

Appendix C.6. Percent distribution of Chilliwack River Fall total fishing mortalities among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | 2571 | 1.0\% | 0.1\% | 0.0\% | 0.4\% | 0.2\% | 33.5\% | 0.0\% | 6.5\% | 21.4\% | 2.3\% | 7.2\% | 0.0\% | 3.8\% | 0.0\% | 0.4\% | 5.8\% | 5.2\% | 0.0\% | 0.0\% | 0.8\% | 11.4\% |
| 1986 | 2590 | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.2\% | 21.0\% | 0.0\% | 10.0\% | 17.7\% | 2.6\% | 13.9\% | 0.0\% | 2.7\% | 0.0\% | 0.2\% | 5.7\% | 8.7\% | 0.0\% | 0.0\% | 0.8\% | 15.6\% |
| 1987 | 3002 | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.3\% | 20.0\% | 0.6\% | 17.0\% | 19.3\% | 0.5\% | 2.3\% | 0.0\% | 4.2\% | 0.0\% | 0.2\% | 4.2\% | 3.0\% | 0.0\% | 0.0\% | 1.1\% | 26.4\% |
| 1988 | 2480 | 0.4\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 18.3\% | 0.0\% | 6.9\% | 11.5\% | 0.0\% | 2.6\% | 0.0\% | 4.4\% | 0.0\% | 0.1\% | 5.4\% | 3.7\% | 0.0\% | 0.0\% | 2.5\% | 44.0\% |
| 1989 | 1434 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 25.7\% | 0.0\% | 2.0\% | 19.8\% | 0.0\% | 4.0\% | 0.0\% | 6.7\% | 0.0\% | 0.1\% | 4.4\% | 1.6\% | 0.0\% | 0.0\% | 0.6\% | 34.9\% |
| 1990 | 2145 | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 11.1\% | 2.1\% | 3.7\% | 11.3\% | 0.1\% | 5.4\% | 0.0\% | 7.7\% | 0.0\% | 0.5\% | 21.1\% | 9.7\% | 0.0\% | 0.0\% | 0.7\% | 25.3\% |
| 1991 | 3617 | 0.2\% | 0.1\% | 0.0\% | 0.4\% | 0.2\% | 20.5\% | 0.7\% | 9.8\% | 13.8\% | 0.2\% | 4.6\% | 0.0\% | 14.5\% | 0.0\% | 0.1\% | 7.5\% | 5.8\% | 0.0\% | 0.0\% | 1.3\% | 20.2\% |
| 1992 | 4479 | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 21.2\% | 0.2\% | 7.2\% | 11.1\% | 0.7\% | 1.5\% | 0.0\% | 9.2\% | 0.0\% | 0.2\% | 1.1\% | 4.0\% | 0.0\% | 0.0\% | 1.1\% | 42.0\% |
| 1993 | 2079 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 14.1\% | 0.4\% | 9.1\% | 7.8\% | 0.0\% | 1.3\% | 0.0\% | 7.9\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 1.5\% | 55.9\% |
| 1994 | 792 | 0.5\% | 0.4\% | 0.0\% | 0.9\% | 0.0\% | 8.7\% | 2.5\% | 3.7\% | 6.8\% | 0.4\% | 8.3\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 6.9\% | 7.4\% | 0.0\% | 0.0\% | 4.7\% | 47.2\% |
| 1995 | 2257 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 14.2\% | 0.4\% | 0.0\% | 6.8\% | 0.0\% | 2.7\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 2.0\% | 2.8\% | 0.0\% | 0.0\% | 1.0\% | 68.7\% |
| 1996 | 1767 | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 2.8\% | 0.4\% | 0.0\% | 17.8\% | 0.0\% | 2.9\% | 0.0\% | 4.6\% | 0.0\% | 0.0\% | 1.5\% | 6.0\% | 0.0\% | 0.0\% | 2.2\% | 61.3\% |
| 1997 | 2606 | 0.8\% | 0.0\% | 0.0\% | 0.2\% | 0.5\% | 13.4\% | 3.0\% | 0.0\% | 14.9\% | 0.5\% | 3.0\% | 0.0\% | 5.9\% | 0.0\% | 0.1\% | 2.7\% | 4.5\% | 0.0\% | 0.0\% | 2.7\% | 47.8\% |
| 1998 | 3215 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.2\% | 0.3\% | 0.0\% | 3.5\% | 0.0\% | 0.6\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 0.5\% | 1.2\% | 0.0\% | 0.0\% | 1.2\% | 87.9\% |
| 1999 | 3484 | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 0.3\% | 2.1\% | 0.0\% | 11.4\% | 0.0\% | 0.4\% | 0.0\% | 14.8\% | 0.0\% | 0.5\% | 0.8\% | 0.6\% | 0.0\% | 0.0\% | 1.5\% | 67.0\% |
| 2000 | 2747 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 6.2\% | 2.9\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 0.0\% | 0.1\% | 0.9\% | 1.4\% | 0.0\% | 0.0\% | 2.4\% | 76.2\% |
| 2001 | 4278 | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.3\% | 4.0\% | 1.8\% | 0.0\% | 7.6\% | 0.0\% | 0.5\% | 0.0\% | 7.2\% | 0.0\% | 0.4\% | 1.3\% | 6.5\% | 0.0\% | 0.0\% | 10.6\% | 59.6\% |
| 2002 | 5414 | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.3\% | 9.6\% | 5.7\% | 0.0\% | 4.1\% | 0.0\% | 0.7\% | 0.0\% | 9.0\% | 0.0\% | 1.3\% | 0.4\% | 2.5\% | 0.0\% | 0.0\% | 4.6\% | 61.4\% |
| 2003 | 4797 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 6.4\% | 3.1\% | 0.0\% | 3.1\% | 0.0\% | 0.3\% | 0.0\% | 9.0\% | 0.0\% | 0.5\% | 0.4\% | 1.6\% | 0.0\% | 0.0\% | 6.3\% | 68.8\% |
| 2004 | 6875 | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 5.6\% | 2.5\% | 0.0\% | 0.8\% | 0.0\% | 0.7\% | 0.0\% | 7.4\% | 0.0\% | 0.2\% | 0.1\% | 1.3\% | 0.0\% | 0.0\% | 4.7\% | 76.3\% |
| 2005 | 4124 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.3\% | 7.8\% | 4.6\% | 0.0\% | 3.6\% | 0.0\% | 3.4\% | 0.0\% | 4.0\% | 0.0\% | 0.9\% | 1.0\% | 1.3\% | 0.0\% | 0.0\% | 5.9\% | 67.1\% |
| 2006 | 3046 | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 7.8\% | 2.2\% | 0.0\% | 2.5\% | 0.0\% | 0.6\% | 0.0\% | 3.0\% | 0.0\% | 0.3\% | 0.3\% | 2.0\% | 0.0\% | 0.0\% | 4.4\% | 76.5\% |
| 2007 | 1865 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 9.3\% | 3.9\% | 0.0\% | 1.2\% | 0.0\% | 2.9\% | 0.0\% | 2.9\% | 0.0\% | 0.2\% | 1.0\% | 3.3\% | 0.0\% | 0.2\% | 5.7\% | 69.0\% |
| 2008 | 2911 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.8\% | 5.3\% | 0.0\% | 2.1\% | 0.0\% | 0.7\% | 0.0\% | 5.2\% | 0.0\% | 1.8\% | 1.0\% | 1.9\% | 0.0\% | 0.0\% | 9.6\% | 60.3\% |
| 1979-2008 | 3107 | 0.3\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 12.2\% | 1.9\% | 3.2\% | 9.4\% | 0.3\% | 2.9\% | 0.0\% | 6.0\% | 0.0\% | 0.3\% | 3.2\% | 3.6\% | 0.0\% | 0.0\% | 3.2\% | 52.9\% |
| 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\% |
| 1985-1995 | 2495 | 0.4\% | 0.1\% | 0.0\% | 0.3\% | 0.2\% | 18.9\% | 0.6\% | 6.9\% | 13.4\% | 0.6\% | 4.9\% | 0.0\% | 5.8\% | 0.0\% | 0.2\% | 5.8\% | 4.8\% | 0.0\% | 0.0\% | 1.5\% | 35.6\% |
| 1996-1998 | 2529 | 0.6\% | 0.0\% | 0.0\% | 0.1\% | 0.3\% | 5.5\% | 1.2\% | 0.0\% | 12.1\% | 0.2\% | 2.2\% | 0.0\% | 4.7\% | 0.0\% | 0.0\% | 1.6\% | 3.9\% | 0.0\% | 0.0\% | 2.0\% | 65.7\% |
| 1999-2008 | 3954 | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 6.9\% | 3.4\% | 0.0\% | 4.1\% | 0.0\% | 1.0\% | 0.0\% | 6.7\% | 0.0\% | 0.6\% | 0.7\% | 2.3\% | 0.0\% | 0.0\% | 5.6\% | 68.2\% |

Appendix C.7. Percent distribution of Chilkat River reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1997 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1998 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1999 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2000 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2001 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | 355 | 6.5\% | 9.9\% | 7.9\% | 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\% | 75.8\% |
| 2005 | 354 | 6.5\% | 5.9\% | 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\% | 85.6\% |
| 2006 | 185 | 4.9\% | 2.7\% | 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\% | 0.0\% | 90.3\% |
| 2007 | 156 | 7.1\% | 9.0\% | 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\% | 78.8\% |
| 2008 | 216 | 9.3\% | 9.3\% | 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\% | 0.0\% | 0.0\% | 0.0\% | 80.1\% |
| 1979-2008 | 253 | 6.8\% | 7.3\% | 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\% | 82.1\% |
| 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\% |
| 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\% |
| 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\% |
| 1999-2008 | 253 | 6.8\% | 7.3\% | 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\% | 82.1\% |

Appendix C.8. Percent distribution of Chilkat River total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1997 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1998 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1999 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2000 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2001 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | 385 | 7.0\% | 15.1\% | 8.1\% | 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\% | 69.9\% |
| 2005 | 366 | 7.1\% | 7.9\% | 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\% | 0.0\% | 82.8\% |
| 2006 | 189 | 5.8\% | 3.2\% | 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\% | 0.0\% | 88.4\% |
| 2007 | 177 | 8.5\% | 15.8\% | 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\% | 69.5\% |
| 2008 | 221 | 9.5\% | 10.9\% | 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\% | 0.0\% | 0.0\% | 0.0\% | 78.3\% |
| 1979-2008 | 268 | 7.6\% | 10.6\% | 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\% | 77.8\% |
| 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\% |
| 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\% |
| 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\% |
| 1999-2008 | 268 | 7.6\% | 10.6\% | 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\% | 77.8\% |

Appendix C.9. Percent distribution of Cowichan River Fall reported catch among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | 1072 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 1.3\% | 0.0\% | 18.8\% | 32.4\% | 1.4\% | 17.6\% | 0.0\% | 0.7\% | 0.0\% | 0.3\% | 3.1\% | 2.0\% | 0.0\% | 0.7\% | 1.8\% | 19.8\% |
| 1991 | 2860 | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 1.5\% | 3.4\% | 0.8\% | 7.3\% | 52.4\% | 0.2\% | 5.6\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 3.7\% | 0.9\% | 0.0\% | 0.5\% | 0.8\% | 21.6\% |
| 1992 | 3227 | 0.1\% | 0.0\% | 0.0\% | 0.4\% | 0.9\% | 9.6\% | 1.4\% | 17.2\% | 45.1\% | 1.1\% | 5.4\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 1.4\% | 1.3\% | 0.0\% | 0.9\% | 0.5\% | 14.6\% |
| 1993 | 3306 | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 1.5\% | 7.8\% | 1.6\% | 10.1\% | 48.7\% | 0.5\% | 4.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.9\% | 0.5\% | 0.0\% | 1.3\% | 0.7\% | 21.6\% |
| 1994 | 1024 | 0.6\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 4.1\% | 0.9\% | 4.6\% | 31.0\% | 0.2\% | 8.6\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 3.7\% | 0.5\% | 0.0\% | 4.4\% | 2.3\% | 38.4\% |
| 1995 | 1355 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 0.7\% | 0.0\% | 30.0\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.7\% | 0.0\% | 1.8\% | 3.9\% | 54.5\% |
| 1996 | 1023 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 39.8\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 3.5\% | 0.0\% | 5.8\% | 2.2\% | 45.7\% |
| 1997 | 787 | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 2.3\% | 1.1\% | 0.0\% | 18.8\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 2.4\% | 0.0\% | 0.4\% | 2.2\% | 68.0\% |
| 1998 | 398 | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.5\% | 1.8\% | 0.0\% | 19.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 9.5\% | 7.3\% | 53.8\% |
| 1999 | 419 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 4.1\% | 0.0\% | 32.9\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.7\% | 6.7\% | 0.0\% | 0.0\% | 2.9\% | 6.0\% | 44.6\% |
| 2000 | 694 | 1.2\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 4.8\% | 0.0\% | 12.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 1.3\% | 0.0\% | 0.6\% | 6.2\% | 67.9\% |
| 2001 | 619 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 10.7\% | 0.0\% | 0.0\% | 24.1\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 11.6\% | 1.0\% | 0.0\% | 8.1\% | 2.3\% | 41.7\% |
| 2002 | 635 | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 4.4\% | 3.0\% | 0.0\% | 18.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 3.8\% | 4.1\% | 0.0\% | 14.2\% | 13.7\% | 34.8\% |
| 2003 | 314 | 2.2\% | 0.3\% | 0.0\% | 2.5\% | 2.9\% | 10.2\% | 2.9\% | 0.0\% | 26.4\% | 3.5\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 6.7\% | 2.5\% | 0.0\% | 5.4\% | 3.8\% | 29.9\% |
| 2004 | 322 | 0.0\% | 0.3\% | 0.0\% | 0.9\% | 4.0\% | 17.4\% | 11.8\% | 0.0\% | 18.9\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 6.2\% | 1.9\% | 0.0\% | 4.3\% | 3.1\% | 28.6\% |
| 2005 | 290 | 0.0\% | 0.3\% | 0.0\% | 1.4\% | 4.8\% | 25.5\% | 2.1\% | 0.0\% | 7.6\% | 0.0\% | 1.0\% | 0.0\% | 0.3\% | 0.0\% | 1.0\% | 15.2\% | 1.0\% | 0.0\% | 8.6\% | 0.0\% | 31.0\% |
| 2006 | 258 | 1.2\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 22.9\% | 11.2\% | 0.0\% | 13.6\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 0.8\% | 5.0\% | 4.7\% | 0.0\% | 7.4\% | 0.0\% | 30.2\% |
| 2007 | 220 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.2\% | 1.4\% | 0.0\% | 4.1\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 6.8\% | 0.0\% | 0.0\% | 6.8\% | 0.0\% | 71.4\% |
| 2008 | 210 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.3\% | 13.3\% | 0.0\% | 21.9\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 5.2\% | 0.0\% | 0.0\% | 7.1\% | 0.0\% | 36.7\% |
| 1979-2008 | 1002 | 0.6\% | 0.1\% | 0.0\% | 0.4\% | 1.1\% | 7.8\% | 3.4\% | 3.0\% | 26.2\% | 0.4\% | 2.4\% | 0.0\% | 0.6\% | 0.0\% | 0.2\% | 4.9\% | 1.5\% | 0.0\% | 4.8\% | 3.0\% | 39.7\% |
| 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\% |
| 1985-1995 | 2141 | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 0.7\% | 5.0\% | 0.9\% | 9.7\% | 39.9\% | 0.6\% | 7.2\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 2.5\% | 1.0\% | 0.0\% | 1.6\% | 1.7\% | 28.4\% |
| 1996-1998 | 736 | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.9\% | 1.3\% | 0.0\% | 26.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 2.0\% | 0.0\% | 5.2\% | 3.9\% | 55.8\% |
| 1999-2008 | 398 | 0.6\% | 0.1\% | 0.0\% | 0.6\% | 1.5\% | 11.5\% | 5.4\% | 0.0\% | 18.0\% | 0.4\% | 0.2\% | 0.0\% | 0.9\% | 0.0\% | 0.3\% | 7.1\% | 1.6\% | 0.0\% | 6.5\% | 3.5\% | 41.7\% |

Appendix C.10. Percent distribution of Cowichan River Fall total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Brood | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Brood | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | 1545 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.6\% | 2.8\% | 0.1\% | 17.3\% | 40.3\% | 1.4\% | 13.5\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% | 4.5\% | 2.5\% | 0.0\% | 0.5\% | 1.5\% | 13.7\% |
| 1991 | 3642 | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 1.5\% | 4.5\% | 0.7\% | 10.4\% | 53.4\% | 0.4\% | 4.9\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 3.8\% | 1.0\% | 0.0\% | 0.5\% | 0.8\% | 17.0\% |
| 1992 | 4058 | 0.1\% | 0.1\% | 0.0\% | 0.4\% | 0.9\% | 9.8\% | 1.2\% | 20.2\% | 45.6\% | 1.1\% | 4.6\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 1.4\% | 1.4\% | 0.0\% | 0.8\% | 0.5\% | 11.6\% |
| 1993 | 3979 | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 1.4\% | 8.2\% | 1.4\% | 12.5\% | 50.4\% | 0.5\% | 3.5\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.9\% | 0.5\% | 0.0\% | 1.1\% | 0.7\% | 18.0\% |
| 1994 | 1204 | 0.6\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 4.4\% | 0.8\% | 5.4\% | 34.7\% | 0.2\% | 8.5\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 4.6\% | 0.7\% | 0.0\% | 4.1\% | 2.6\% | 32.6\% |
| 1995 | 1568 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% | 0.6\% | 0.0\% | 33.5\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 1.1\% | 0.0\% | 1.7\% | 4.3\% | 47.1\% |
| 1996 | 1193 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 1.1\% | 0.0\% | 44.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 5.2\% | 0.0\% | 5.4\% | 2.5\% | 39.1\% |
| 1997 | 886 | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 3.0\% | 1.1\% | 0.0\% | 22.2\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 3.5\% | 0.0\% | 0.3\% | 2.6\% | 60.4\% |
| 1998 | 442 | 4.3\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.5\% | 1.8\% | 0.0\% | 22.2\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.8\% | 0.0\% | 0.0\% | 9.3\% | 8.4\% | 48.4\% |
| 1999 | 495 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 4.0\% | 0.0\% | 37.4\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.6\% | 8.9\% | 0.0\% | 0.0\% | 2.6\% | 6.3\% | 37.8\% |
| 2000 | 764 | 1.6\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 5.0\% | 0.0\% | 14.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 2.4\% | 0.0\% | 0.5\% | 7.3\% | 61.6\% |
| 2001 | 728 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 10.0\% | 0.0\% | 0.0\% | 27.2\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 13.7\% | 3.0\% | 0.0\% | 7.4\% | 2.5\% | 35.4\% |
| 2002 | 729 | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 4.0\% | 3.2\% | 0.0\% | 19.9\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 4.3\% | 5.9\% | 0.0\% | 13.2\% | 14.7\% | 30.3\% |
| 2003 | 379 | 2.4\% | 0.3\% | 0.0\% | 2.6\% | 3.4\% | 9.2\% | 3.2\% | 0.0\% | 28.0\% | 4.7\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 8.2\% | 4.0\% | 0.0\% | 4.7\% | 4.0\% | 24.8\% |
| 2004 | 372 | 0.0\% | 0.5\% | 0.0\% | 0.8\% | 5.1\% | 16.1\% | 12.1\% | 0.0\% | 21.2\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 7.0\% | 2.2\% | 0.0\% | 4.0\% | 3.5\% | 24.7\% |
| 2005 | 340 | 0.0\% | 0.3\% | 0.0\% | 1.5\% | 5.6\% | 24.4\% | 2.1\% | 0.0\% | 8.2\% | 0.0\% | 1.5\% | 0.0\% | 0.3\% | 0.0\% | 0.9\% | 19.1\% | 1.8\% | 0.0\% | 7.9\% | 0.0\% | 26.5\% |
| 2006 | 277 | 1.1\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 22.0\% | 11.9\% | 0.0\% | 14.8\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 0.7\% | 5.4\% | 5.4\% | 0.0\% | 7.2\% | 0.0\% | 28.2\% |
| 2007 | 245 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.6\% | 2.4\% | 0.0\% | 7.8\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 9.0\% | 0.0\% | 0.0\% | 6.5\% | 0.0\% | 64.1\% |
| 2008 | 226 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.7\% | 14.2\% | 0.0\% | 23.9\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 5.8\% | 0.0\% | 0.0\% | 7.1\% | 0.0\% | 34.1\% |
| 1979-2008 | 1214 | 0.7\% | 0.1\% | 0.0\% | 0.4\% | 1.3\% | 7.8\% | 3.5\% | 3.5\% | 28.9\% | 0.4\% | 2.3\% | 0.0\% | 0.6\% | 0.0\% | 0.2\% | 5.9\% | 2.1\% | 0.0\% | 4.5\% | 3.3\% | 34.5\% |
| 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\% |
| 1985-1995 | 2666 | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 0.7\% | 5.9\% | 0.8\% | 11.0\% | 43.0\% | 0.6\% | 6.3\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 3.0\% | 1.2\% | 0.0\% | 1.4\% | 1.7\% | 23.3\% |
| 1996-1998 | 840 | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 1.3\% | 1.3\% | 0.0\% | 29.5\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 2.9\% | 0.0\% | 5.0\% | 4.5\% | 49.3\% |
| 1999-2008 | 456 | 0.7\% | 0.1\% | 0.0\% | 0.6\% | 1.8\% | 10.9\% | 5.8\% | 0.0\% | 20.3\% | 0.5\% | 0.2\% | 0.0\% | 0.9\% | 0.0\% | 0.3\% | 8.6\% | 2.5\% | 0.0\% | 6.1\% | 3.8\% | 36.7\% |

Appendix C.11. Percent distribution of Cowlitz Fall Tule reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | 378 | 5.6\% | 0.0\% | 0.0\% | 2.4\% | 6.3\% | 16.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 10.8\% | 0.0\% | 12.7\% | 0.0\% | 0.0\% | 0.0\% | 14.8\% | 0.0\% | 27.5\% |
| 1982 | 435 | 3.7\% | 0.0\% | 0.2\% | 1.4\% | 0.0\% | 14.9\% | 0.9\% | 0.0\% | 0.0\% | 0.5\% | 3.2\% | 0.0\% | 18.4\% | 0.0\% | 10.6\% | 2.1\% | 0.0\% | 0.0\% | 7.6\% | 1.8\% | 34.7\% |
| 1983 | 564 | 3.7\% | 0.0\% | 0.0\% | 6.7\% | 0.0\% | 17.9\% | 0.0\% | 0.0\% | 0.4\% | 3.7\% | 1.1\% | 0.0\% | 6.9\% | 0.0\% | 17.6\% | 0.4\% | 0.0\% | 0.0\% | 4.4\% | 1.1\% | 36.2\% |
| 1984 | 748 | 4.4\% | 0.0\% | 0.0\% | 7.2\% | 0.8\% | 24.3\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 1.9\% | 0.0\% | 4.5\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 15.0\% | 3.5\% | 36.0\% |
| 1985 | 677 | 3.7\% | 0.3\% | 0.0\% | 4.0\% | 0.0\% | 11.4\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 5.6\% | 0.0\% | 4.4\% | 0.0\% | 5.2\% | 0.4\% | 0.4\% | 0.0\% | 6.1\% | 8.1\% | 49.9\% |
| 1986 | 1392 | 0.4\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 12.7\% | 0.0\% | 0.0\% | 0.4\% | 0.6\% | 1.9\% | 0.0\% | 12.9\% | 0.0\% | 5.3\% | 0.2\% | 0.4\% | 0.0\% | 30.7\% | 6.8\% | 27.4\% |
| 1987 | 1315 | 3.7\% | 0.3\% | 0.0\% | 3.9\% | 0.0\% | 9.7\% | 1.0\% | 0.0\% | 0.0\% | 1.2\% | 0.8\% | 0.0\% | 11.4\% | 0.0\% | 7.2\% | 0.1\% | 0.5\% | 0.0\% | 22.8\% | 8.4\% | 29.0\% |
| 1988 | 1447 | 1.7\% | 0.3\% | 0.0\% | 1.9\% | 0.0\% | 15.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 15.3\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 24.0\% | 10.4\% | 27.7\% |
| 1989 | 578 | 3.3\% | 0.0\% | 0.7\% | 4.5\% | 0.0\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 17.8\% | 0.0\% | 3.1\% | 0.0\% | 0.3\% | 0.0\% | 7.1\% | 7.1\% | 48.1\% |
| 1990 | 274 | 4.4\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 14.2\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 3.3\% | 0.0\% | 9.5\% | 0.0\% | 7.7\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 1.1\% | 51.8\% |
| 1991 | 124 | 9.7\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 5.6\% | 3.2\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 10.5\% | 0.0\% | 4.0\% | 0.0\% | 0.0\% | 0.0\% | 11.3\% | 5.6\% | 45.2\% |
| 1992 | 186 | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 17.7\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 7.0\% | 2.2\% | 4.8\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 59.1\% |
| 1993 | 325 | 3.4\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 6.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 17.5\% | 0.0\% | 7.4\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 15.1\% | 43.4\% |
| 1994 | 213 | 4.2\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 88.7\% |
| 1995 | 169 | 0.6\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 1.8\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 4.7\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 1.2\% | 1.8\% | 83.4\% |
| 1996 | 269 | 4.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 3.3\% | 83.3\% |
| 1997 | 164 | 4.9\% | 0.0\% | 9.8\% | 3.0\% | 0.0\% | 4.9\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 5.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 68.3\% |
| 1998 | 81 | 3.7\% | 0.0\% | 0.0\% | 7.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.9\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 76.5\% |
| 1999 | 139 | 4.3\% | 0.0\% | 3.6\% | 0.0\% | 5.8\% | 4.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.6\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.4\% | 56.1\% |
| 2000 | 98 | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.2\% | 12.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.3\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 5.1\% | 51.0\% |
| 2001 | 459 | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.5\% | 0.0\% | 9.4\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 2.4\% | 70.8\% |
| 2002 | 529 | 6.2\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 7.8\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 25.7\% | 0.0\% | 21.4\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 3.8\% | 27.6\% |
| 2003 | 519 | 5.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 10.0\% | 1.9\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 17.1\% | 0.0\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 8.9\% | 5.2\% | 42.6\% |
| 2004 | 207 | 4.3\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 6.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.9\% | 0.0\% | 9.2\% | 0.0\% | 1.4\% | 0.0\% | 9.2\% | 2.4\% | 48.3\% |
| 2005 | 230 | 2.6\% | 7.4\% | 0.0\% | 2.6\% | 0.0\% | 4.3\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.8\% | 0.0\% | 5.2\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 3.9\% | 59.6\% |
| 2006 | 138 | 5.8\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 5.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 10.9\% | 64.5\% |
| 2007 | 133 | 2.3\% | 1.5\% | 0.0\% | 5.3\% | 0.0\% | 10.5\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.0\% | 0.0\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 60.9\% |
| 2008 | 187 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 5.3\% | 0.0\% | 1.6\% | 0.0\% | 2.7\% | 10.2\% | 69.5\% |
| 1979-2008 | 428 | 3.6\% | 0.4\% | 0.5\% | 2.4\% | 0.5\% | 8.9\% | 1.2\% | 0.0\% | 0.3\% | 0.5\% | 0.9\% | 0.0\% | 10.6\% | 0.1\% | 5.6\% | 0.2\% | 0.3\% | 0.0\% | 6.7\% | 4.8\% | 52.4\% |
| 1979-1984 | 531 | 4.3\% | 0.0\% | 0.1\% | 4.4\% | 1.8\% | 18.3\% | 0.2\% | 0.0\% | 0.1\% | 1.6\% | 2.5\% | 0.0\% | 10.2\% | 0.0\% | 10.2\% | 0.6\% | 0.0\% | 0.0\% | 10.5\% | 1.6\% | 33.6\% |
| 1985-1995 | 609 | 3.4\% | 0.1\% | 0.1\% | 2.3\% | 0.1\% | 9.5\% | 0.6\% | 0.0\% | 0.1\% | 0.8\% | 1.4\% | 0.0\% | 10.4\% | 0.2\% | 4.2\% | 0.2\% | 0.5\% | 0.0\% | 10.0\% | 5.8\% | 50.3\% |
| 1996-1998 | 171 | 4.2\% | 0.0\% | 3.3\% | 3.5\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 7.1\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 1.5\% | 76.0\% |
| 1999-2008 | 264 | 3.5\% | 0.9\% | 0.4\% | 1.4\% | 0.6\% | 6.6\% | 2.7\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 12.2\% | 0.0\% | 6.8\% | 0.0\% | 0.3\% | 0.0\% | 3.6\% | 5.8\% | 55.1\% |

Appendix C.12. Percent distribution of Cowlitz Fall Tule total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | 423 | 5.9\% | 0.0\% | 0.0\% | 2.4\% | 6.1\% | 18.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 12.5\% | 0.0\% | 12.5\% | 0.5\% | 0.0\% | 0.0\% | 13.5\% | 0.0\% | 24.6\% |
| 1982 | 507 | 4.1\% | 0.0\% | 0.4\% | 1.6\% | 0.0\% | 17.2\% | 1.0\% | 0.0\% | 0.0\% | 0.4\% | 3.4\% | 0.0\% | 20.1\% | 0.0\% | 10.8\% | 2.8\% | 0.0\% | 0.0\% | 6.7\% | 1.8\% | 29.8\% |
| 1983 | 614 | 4.2\% | 0.0\% | 0.0\% | 7.2\% | 0.0\% | 18.9\% | 0.0\% | 0.0\% | 0.3\% | 3.9\% | 1.0\% | 0.0\% | 7.8\% | 0.0\% | 17.8\% | 0.5\% | 0.0\% | 0.0\% | 4.2\% | 1.0\% | 33.2\% |
| 1984 | 792 | 5.2\% | 0.0\% | 0.0\% | 7.4\% | 0.9\% | 25.3\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 1.9\% | 0.0\% | 4.8\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 14.5\% | 3.5\% | 34.0\% |
| 1985 | 743 | 4.0\% | 0.9\% | 0.0\% | 4.4\% | 0.0\% | 12.7\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 5.7\% | 0.0\% | 5.1\% | 0.0\% | 5.7\% | 0.5\% | 0.7\% | 0.0\% | 5.8\% | 8.6\% | 45.5\% |
| 1986 | 1533 | 0.5\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 14.0\% | 0.0\% | 0.0\% | 0.3\% | 0.7\% | 1.8\% | 0.0\% | 14.5\% | 0.0\% | 5.5\% | 0.3\% | 0.5\% | 0.0\% | 29.8\% | 6.7\% | 24.9\% |
| 1987 | 1480 | 5.6\% | 0.6\% | 0.0\% | 4.6\% | 0.0\% | 11.3\% | 0.9\% | 0.0\% | 0.0\% | 1.4\% | 0.7\% | 0.0\% | 12.2\% | 0.0\% | 7.1\% | 0.1\% | 0.5\% | 0.0\% | 21.2\% | 8.0\% | 25.7\% |
| 1988 | 1557 | 1.8\% | 0.6\% | 0.0\% | 2.1\% | 0.0\% | 17.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 15.9\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 22.8\% | 10.5\% | 25.8\% |
| 1989 | 613 | 4.2\% | 0.0\% | 0.7\% | 4.7\% | 0.0\% | 7.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 18.8\% | 0.0\% | 3.3\% | 0.0\% | 0.3\% | 0.0\% | 6.9\% | 7.3\% | 45.4\% |
| 1990 | 297 | 4.4\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 15.5\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 3.7\% | 0.0\% | 10.1\% | 0.0\% | 7.7\% | 0.0\% | 4.0\% | 0.0\% | 0.0\% | 1.0\% | 47.8\% |
| 1991 | 137 | 12.4\% | 0.0\% | 0.0\% | 3.6\% | 0.0\% | 6.6\% | 2.9\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 11.7\% | 0.0\% | 3.6\% | 0.0\% | 0.0\% | 0.0\% | 10.9\% | 5.8\% | 40.9\% |
| 1992 | 203 | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 20.2\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 7.9\% | 2.5\% | 5.4\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 0.0\% | 54.2\% |
| 1993 | 367 | 4.1\% | 0.0\% | 0.0\% | 3.0\% | 0.0\% | 7.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 18.8\% | 0.0\% | 7.4\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 16.6\% | 38.4\% |
| 1994 | 217 | 5.1\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 87.1\% |
| 1995 | 174 | 1.7\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 2.3\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 4.6\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 1.1\% | 1.7\% | 81.0\% |
| 1996 | 279 | 5.4\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 3.6\% | 80.3\% |
| 1997 | 174 | 5.7\% | 0.0\% | 10.9\% | 3.4\% | 0.0\% | 5.7\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 64.4\% |
| 1998 | 84 | 4.8\% | 0.0\% | 0.0\% | 8.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.7\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 73.8\% |
| 1999 | 152 | 6.6\% | 0.0\% | 3.9\% | 0.0\% | 6.6\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.2\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.1\% | 51.3\% |
| 2000 | 109 | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.3\% | 13.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.5\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 5.5\% | 45.9\% |
| 2001 | 482 | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.0\% | 0.0\% | 10.2\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 2.9\% | 67.4\% |
| 2002 | 578 | 6.7\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 7.3\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.5\% | 0.0\% | 21.5\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 4.2\% | 25.3\% |
| 2003 | 547 | 5.3\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 9.9\% | 2.2\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 18.3\% | 0.0\% | 6.9\% | 0.0\% | 0.0\% | 0.0\% | 8.6\% | 5.5\% | 40.4\% |
| 2004 | 221 | 5.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 5.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.5\% | 0.0\% | 9.5\% | 0.0\% | 2.3\% | 0.0\% | 9.0\% | 2.7\% | 45.2\% |
| 2005 | 241 | 2.9\% | 8.7\% | 0.0\% | 2.9\% | 0.0\% | 4.1\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.3\% | 0.0\% | 5.4\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 4.1\% | 56.8\% |
| 2006 | 141 | 5.7\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.1\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 12.1\% | 63.1\% |
| 2007 | 153 | 3.3\% | 3.3\% | 0.0\% | 5.2\% | 0.0\% | 9.8\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.0\% | 0.0\% | 4.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 52.9\% |
| 2008 | 202 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 5.9\% | 0.0\% | 4.5\% | 0.0\% | 2.5\% | 11.4\% | 64.4\% |
| 1979-2008 | 465 | 4.4\% | 0.5\% | 0.6\% | 2.7\% | 0.6\% | 9.6\% | 1.3\% | 0.0\% | 0.3\% | 0.6\% | 0.9\% | 0.0\% | 11.7\% | 0.1\% | 5.8\% | 0.2\% | 0.5\% | 0.0\% | 6.4\% | 5.0\% | 48.9\% |
| 1979-1984 | 584 | 4.9\% | 0.0\% | 0.1\% | 4.6\% | 1.8\% | 20.0\% | 0.2\% | 0.0\% | 0.1\% | 1.6\% | 2.4\% | 0.0\% | 11.3\% | 0.0\% | 10.3\% | 1.0\% | 0.0\% | 0.0\% | 9.7\% | 1.6\% | 30.4\% |
| 1985-1995 | 666 | 4.2\% | 0.2\% | 0.1\% | 2.8\% | 0.2\% | 10.7\% | 0.6\% | 0.0\% | 0.1\% | 0.9\% | 1.5\% | 0.0\% | 11.2\% | 0.2\% | 4.3\% | 0.2\% | 0.6\% | 0.0\% | 9.5\% | 6.0\% | 47.0\% |
| 1996-1998 | 179 | 5.3\% | 0.0\% | 3.6\% | 4.0\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 7.5\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 1.6\% | 72.8\% |
| 1999-2008 | 283 | 4.0\% | 1.2\% | 0.4\% | 1.4\% | 0.7\% | 6.4\% | 3.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 13.8\% | 0.0\% | 7.1\% | 0.0\% | 0.7\% | 0.0\% | 3.5\% | 6.3\% | 51.3\% |

Appendix C.13. Percent distribution of Dome Creek Spring reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | 212 | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 92.9\% |
| 1995 | 463 | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 5.8\% | 0.0\% | 12.3\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 3.2\% | 75.2\% |
| 1996 | 358 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 5.0\% | 0.0\% | 39.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 4.2\% | 49.2\% |
| 1997 | 281 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.4\% | 0.0\% | 7.1\% | 0.0\% | 31.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 58.0\% |
| 1998 | 385 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.4\% | 0.0\% | 64.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 26.5\% |
| 1999 | 30 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 36.7\% | 20.0\% | 20.0\% |
| 2000 | 127 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.6\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 54.3\% | 0.0\% | 30.7\% |
| 2001 | 244 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 2.5\% | 0.0\% | 0.0\% | 16.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 50.4\% | 3.3\% | 26.6\% |
| 2002 | 148 | 0.0\% | 0.0\% | 0.0\% | 10.8\% | 0.0\% | 12.2\% | 0.0\% | 0.0\% | 10.1\% | 0.0\% | 18.2\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 45.3\% |
| 2003 | 149 | 0.0\% | 0.0\% | 0.0\% | 5.4\% | 0.0\% | 0.0\% | 6.0\% | 0.0\% | 12.1\% | 0.0\% | 61.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.4\% |
| 2004 | < 10 CWTs | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2005 | 202 | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 57.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.4\% | 27.7\% |
| 2006 | 142 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.6\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 56.3\% | 0.0\% | 33.1\% |
| 2007 | 28 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.7\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 0.0\% | 0.0\% | 0.0\% | 21.4\% | 0.0\% | 42.9\% | 0.0\% | 21.4\% |
| 2008 | 22 | 13.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 59.1\% | 0.0\% | 27.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1979-2008 | 187 | 1.0\% | 0.0\% | 0.0\% | 1.4\% | 0.1\% | 1.6\% | 0.4\% | 0.0\% | 11.8\% | 0.0\% | 20.8\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.1\% | 1.6\% | 0.0\% | 20.5\% | 3.7\% | 36.3\% |
| 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\% |
| 1985-1995 | 338 | 0.5\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 6.2\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 2.6\% | 84.0\% |
| 1996-1998 | 341 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.4\% | 0.1\% | 0.0\% | 5.5\% | 0.0\% | 45.1\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.4\% | 0.5\% | 0.0\% | 0.0\% | 2.8\% | 44.6\% |
| 1999-2008 | 110 | 1.4\% | 0.0\% | 0.0\% | 2.0\% | 0.1\% | 2.0\% | 0.6\% | 0.0\% | 15.2\% | 0.0\% | 16.5\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 30.7\% | 4.2\% | 24.3\% |

Appendix C.14. Percent distribution of Dome Creek Spring total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Brood | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | 221 | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 4.5\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 1.8\% | 89.1\% |
| 1995 | 480 | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 7.1\% | 0.0\% | 12.3\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 3.3\% | 72.5\% |
| 1996 | 379 | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 1.1\% | 0.3\% | 0.0\% | 0.0\% | 6.1\% | 0.0\% | 38.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 4.2\% | 46.4\% |
| 1997 | 293 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.3\% | 0.0\% | 8.5\% | 0.0\% | 31.1\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 55.6\% |
| 1998 | 431 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.4\% | 0.0\% | 68.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 23.7\% |
| 1999 | 34 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 26.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 35.3\% | 20.6\% | 17.6\% |
| 2000 | 137 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.3\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 53.3\% | 0.0\% | 28.5\% |
| 2001 | 265 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 2.3\% | 0.0\% | 0.0\% | 18.9\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 49.4\% | 3.4\% | 24.5\% |
| 2002 | 154 | 0.0\% | 0.0\% | 0.0\% | 11.0\% | 0.0\% | 11.7\% | 0.0\% | 0.0\% | 11.0\% | 0.0\% | 19.5\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 43.5\% |
| 2003 | 152 | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 0.0\% | 7.2\% | 0.0\% | 12.5\% | 0.0\% | 59.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.1\% |
| 2004 | 11 | 0.0\% | 0.0\% | 0.0\% | 9.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 54.5\% | 9.1\% | 18.2\% |
| 2005 | 214 | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 55.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.9\% | 7.5\% | 26.2\% |
| 2006 | 147 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.4\% | 0.0\% | 0.0\% | 4.8\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 57.1\% | 0.0\% | 32.0\% |
| 2007 | 32 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.4\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 31.3\% | 0.0\% | 37.5\% | 0.0\% | 18.8\% |
| 2008 | 26 | 15.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 61.5\% | 0.0\% | 23.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1979-2008 | 198 | 1.1\% | 0.0\% | 0.0\% | 2.1\% | 0.1\% | 1.7\% | 0.5\% | 0.0\% | 13.6\% | 0.0\% | 20.6\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.1\% | 2.4\% | 0.0\% | 19.2\% | 3.6\% | 34.1\% |
| 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\% |
| 1985-1995 | 350 | 0.5\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 5.8\% | 0.0\% | 6.4\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 2.6\% | 80.8\% |
| 1996-1998 | 368 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.4\% | 0.5\% | 0.1\% | 0.0\% | 6.3\% | 0.0\% | 45.9\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.5\% | 0.8\% | 0.0\% | 0.0\% | 2.7\% | 41.9\% |
| 1999-2008 | 117 | 1.5\% | 0.0\% | 0.0\% | 3.0\% | 0.1\% | 2.0\% | 0.7\% | 0.0\% | 17.3\% | 0.0\% | 15.8\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 28.8\% | 4.1\% | 22.4\% |

Appendix C.15. Percent distribution of Elk River reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | 117 | 10.3\% | 0.0\% | 0.9\% | 14.5\% | 0.0\% | 12.8\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 12.0\% | 0.0\% | 44.4\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1982 | 873 | 2.1\% | 1.5\% | 0.6\% | 5.2\% | 0.0\% | 14.8\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 1.9\% | 0.0\% | 50.7\% | 0.0\% | 2.6\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.7\% |
| 1983 | 2640 | 2.9\% | 0.1\% | 0.0\% | 6.5\% | 0.0\% | 7.7\% | 0.2\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 11.9\% | 0.0\% | 0.5\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 68.5\% |
| 1984 | 1845 | 2.8\% | 0.0\% | 0.0\% | 5.1\% | 0.2\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.3\% | 0.0\% | 9.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 73.7\% |
| 1985 | 1346 | 2.2\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 7.1\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 82.0\% |
| 1986 | 792 | 1.4\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 13.1\% | 0.5\% | 0.0\% | 0.5\% | 2.3\% | 0.0\% | 0.0\% | 36.1\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 41.7\% |
| 1987 | 1475 | 0.9\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 6.6\% | 0.9\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 29.6\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 55.5\% |
| 1988 | 1337 | 0.6\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 4.8\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 0.0\% | 26.6\% | 0.0\% | 0.8\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.2\% | 62.5\% |
| 1989 | 898 | 0.8\% | 0.0\% | 0.4\% | 1.8\% | 0.6\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 39.3\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 53.7\% |
| 1990 | 336 | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 25.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 67.6\% |
| 1991 | 331 | 0.0\% | 0.6\% | 0.0\% | 2.7\% | 0.0\% | 6.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 6.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 80.7\% |
| 1992 | 390 | 2.1\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 6.9\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 13.1\% | 0.0\% | 0.5\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 9.2\% | 64.9\% |
| 1993 | 711 | 1.3\% | 0.0\% | 0.0\% | 1.7\% | 0.6\% | 4.4\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.1\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.7\% | 58.8\% |
| 1994 | 1266 | 2.1\% | 0.2\% | 0.0\% | 1.7\% | 0.5\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.7\% | 0.0\% | 21.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.2\% | 50.2\% |
| 1995 | 2671 | 1.5\% | 0.1\% | 0.4\% | 0.9\% | 0.2\% | 1.7\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 16.1\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 19.3\% | 58.6\% |
| 1996 | 4589 | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 30.1\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 7.9\% | 59.8\% |
| 1997 | 3892 | 12.8\% | 0.1\% | 0.0\% | 1.6\% | 0.3\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 19.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.6\% | 46.2\% |
| 1998 | 5907 | 6.9\% | 0.0\% | 0.0\% | 3.2\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.7\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.5\% | 67.4\% |
| 1999 | 5811 | 5.0\% | 0.0\% | 0.3\% | 1.5\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 15.4\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.4\% | 60.9\% |
| 2000 | 4781 | 5.7\% | 0.0\% | 0.1\% | 1.4\% | 0.5\% | 0.7\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.9\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.1\% | 53.7\% |
| 2001 | 16488 | 2.3\% | 0.1\% | 0.2\% | 1.2\% | 0.0\% | 0.6\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.4\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.6\% | 71.8\% |
| 2002 | 10694 | 4.8\% | 0.0\% | 0.5\% | 3.6\% | 0.6\% | 0.9\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.3\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 70.6\% |
| 2003 | 6102 | 5.3\% | 0.0\% | 0.3\% | 3.2\% | 0.4\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.7\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.6\% | 53.3\% |
| 2004 | 10820 | 3.7\% | 0.0\% | 0.2\% | 1.8\% | 0.3\% | 1.8\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 73.9\% |
| 2005 | 2848 | 8.4\% | 0.0\% | 0.2\% | 4.7\% | 1.6\% | 4.2\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.3\% | 51.1\% |
| 2006 | 2665 | 5.5\% | 0.0\% | 0.0\% | 4.4\% | 1.4\% | 4.9\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.5\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.5\% | 49.6\% |
| 2007 | 2204 | 7.3\% | 0.0\% | 0.7\% | 3.9\% | 0.9\% | 1.6\% | 0.5\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 25.3\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.3\% | 40.7\% |
| 2008 | 4007 | 3.8\% | 0.0\% | 0.0\% | 3.6\% | 1.6\% | 1.5\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.7\% | 64.2\% |
| 1979-2008 | 3494 | 3.8\% | 0.1\% | 0.2\% | 3.1\% | 0.4\% | 4.1\% | 0.3\% | 0.0\% | 0.0\% | 0.4\% | 0.7\% | 0.0\% | 20.7\% | 0.0\% | 0.6\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 8.4\% | 57.1\% |
| 1979-1984 | 1369 | 4.5\% | 0.4\% | 0.4\% | 7.8\% | 0.0\% | 10.5\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 3.5\% | 0.0\% | 29.3\% | 0.0\% | 1.4\% | 0.3\% | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 40.2\% |
| 1985-1995 | 1050 | 1.3\% | 0.2\% | 0.1\% | 2.1\% | 0.2\% | 5.0\% | 0.4\% | 0.0\% | 0.0\% | 0.4\% | 0.4\% | 0.0\% | 22.1\% | 0.0\% | 0.6\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% | 61.5\% |
| 1996-1998 | 4796 | 7.0\% | 0.0\% | 0.0\% | 1.6\% | 0.2\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 20.7\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 12.0\% | 57.8\% |
| 1999-2008 | 6642 | 5.2\% | 0.0\% | 0.2\% | 2.9\% | 0.7\% | 1.7\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.6\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.5\% | 59.0\% |

Appendix C.16. Percent distribution of Elk River total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | 298 | 8.7\% | 0.3\% | 0.7\% | 13.8\% | 0.0\% | 18.5\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 5.0\% | 0.0\% | 48.0\% | 0.0\% | 1.7\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1982 | 1087 | 2.9\% | 1.3\% | 0.7\% | 6.0\% | 0.0\% | 15.6\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 1.7\% | 0.0\% | 52.3\% | 0.0\% | 2.4\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.0\% |
| 1983 | 2777 | 3.7\% | 0.1\% | 0.0\% | 6.9\% | 0.0\% | 8.3\% | 0.1\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 13.3\% | 0.0\% | 0.5\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 65.1\% |
| 1984 | 1901 | 3.8\% | 0.0\% | 0.0\% | 5.3\% | 0.2\% | 6.8\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.3\% | 0.0\% | 10.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 71.5\% |
| 1985 | 1389 | 2.6\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 8.1\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 79.5\% |
| 1986 | 918 | 2.1\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 13.9\% | 0.4\% | 0.0\% | 0.4\% | 2.4\% | 0.0\% | 0.0\% | 40.4\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 35.9\% |
| 1987 | 1617 | 1.1\% | 0.0\% | 0.0\% | 4.8\% | 0.0\% | 7.8\% | 0.9\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 32.3\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 50.6\% |
| 1988 | 1439 | 0.8\% | 0.0\% | 0.0\% | 4.5\% | 0.0\% | 5.8\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.2\% | 0.0\% | 29.0\% | 0.0\% | 0.8\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.2\% | 58.0\% |
| 1989 | 958 | 1.0\% | 0.0\% | 0.5\% | 1.9\% | 0.6\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 41.9\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 50.3\% |
| 1990 | 357 | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 28.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 63.6\% |
| 1991 | 351 | 0.0\% | 1.1\% | 0.0\% | 3.4\% | 0.0\% | 8.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 8.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 76.1\% |
| 1992 | 497 | 4.4\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 11.3\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 18.5\% | 0.0\% | 0.6\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 8.2\% | 50.9\% |
| 1993 | 878 | 3.2\% | 0.0\% | 0.0\% | 3.0\% | 0.6\% | 6.9\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.4\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.0\% | 47.6\% |
| 1994 | 1397 | 4.5\% | 0.6\% | 0.0\% | 2.4\% | 0.6\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.8\% | 0.0\% | 21.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.7\% | 45.5\% |
| 1995 | 2925 | 2.8\% | 0.2\% | 0.7\% | 1.5\% | 0.3\% | 2.6\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 16.2\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 20.5\% | 53.5\% |
| 1996 | 4816 | 2.3\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 30.9\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 8.6\% | 57.0\% |
| 1997 | 439 | 16.0\% | 0.1\% | 0.0\% | 1.8\% | 0.4\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 21.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.4\% | 41.0\% |
| 1998 | 6252 | 8.3\% | 0.0\% | 0.0\% | 3.6\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.1\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.0\% | 63.7\% |
| 1999 | 6407 | 7.7\% | 0.0\% | 0.4\% | 1.7\% | 0.3\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 17.7\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.5\% | 55.2\% |
| 2000 | 5444 | 8.0\% | 0.1\% | 0.1\% | 1.6\% | 0.6\% | 0.7\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 26.1\% | 0.0\% | 0.7\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 14.8\% | 47.2\% |
| 2001 | 17339 | 3.2\% | 0.1\% | 0.2\% | 1.5\% | 0.0\% | 0.6\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.8\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.4\% | 68.3\% |
| 2002 | 11332 | 6.0\% | 0.0\% | 0.6\% | 4.2\% | 0.8\% | 0.9\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.8\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.8\% | 66.6\% |
| 2003 | 6545 | 6.2\% | 0.0\% | 0.3\% | 3.6\% | 0.5\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.4\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.2\% | 49.7\% |
| 2004 | 11209 | 4.3\% | 0.0\% | 0.3\% | 2.0\% | 0.4\% | 1.8\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.1\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 71.4\% |
| 2005 | 3094 | 9.9\% | 0.0\% | 0.2\% | 5.2\% | 1.9\% | 4.1\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.4\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.5\% | 47.0\% |
| 2006 | 3005 | 6.8\% | 0.0\% | 0.0\% | 5.0\% | 1.9\% | 5.2\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.3\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.6\% | 44.0\% |
| 2007 | 2550 | 9.7\% | 0.1\% | 0.9\% | 4.5\% | 0.9\% | 1.5\% | 0.4\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 27.3\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.8\% | 35.2\% |
| 2008 | 4234 | 5.1\% | 0.0\% | 0.0\% | 3.9\% | 1.9\% | 1.6\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.2\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.7\% | 60.7\% |
| 1979-2008 | 3765 | 4.9\% | 0.2\% | 0.2\% | 3.5\% | 0.4\% | 4.9\% | 0.3\% | 0.0\% | 0.0\% | 0.4\% | 0.4\% | 0.0\% | 22.7\% | 0.0\% | 0.6\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 8.6\% | 52.5\% |
| 1979-1984 | 1516 | 4.8\% | 0.4\% | 0.4\% | 8.0\% | 0.0\% | 12.3\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 1.8\% | 0.0\% | 31.0\% | 0.0\% | 1.1\% | 0.5\% | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 37.9\% |
| 1985-1995 | 1157 | 2.2\% | 0.4\% | 0.1\% | 2.5\% | 0.2\% | 6.3\% | 0.4\% | 0.0\% | 0.0\% | 0.5\% | 0.4\% | 0.0\% | 24.7\% | 0.0\% | 0.6\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 5.8\% | 55.6\% |
| 1996-1998 | 5154 | 8.9\% | 0.0\% | 0.0\% | 1.9\% | 0.3\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 22.0\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 12.3\% | 53.9\% |
| 1999-2008 | 7116 | 6.7\% | 0.0\% | 0.3\% | 3.3\% | 0.9\% | 1.7\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.4\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.0\% | 54.5\% |

Appendix C.17. Percent distribution of Elwha River reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | 642 | 24.3\% | 1.7\% | 0.0\% | 2.3\% | 0.5\% | 18.1\% | 0.9\% | 0.8\% | 6.4\% | 0.8\% | 6.2\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 12.1\% | 13.4\% | 0.0\% | 0.2\% | 0.0\% | 11.4\% |
| 1987 | 401 | 14.7\% | 0.0\% | 0.0\% | 4.5\% | 2.0\% | 14.2\% | 2.5\% | 0.7\% | 9.0\% | 2.2\% | 5.7\% | 0.0\% | 3.0\% | 0.2\% | 0.0\% | 6.5\% | 18.7\% | 0.0\% | 0.0\% | 0.0\% | 16.0\% |
| 1988 | 430 | 5.3\% | 0.5\% | 0.5\% | 3.7\% | 2.3\% | 13.7\% | 6.0\% | 0.5\% | 0.0\% | 1.4\% | 1.2\% | 0.0\% | 4.4\% | 0.0\% | 0.0\% | 8.1\% | 8.4\% | 0.0\% | 4.0\% | 0.0\% | 40.0\% |
| 1989 | 279 | 6.1\% | 1.8\% | 0.0\% | 4.7\% | 2.2\% | 5.7\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.4\% | 9.3\% | 13.3\% | 0.0\% | 2.2\% | 0.0\% | 48.4\% |
| 1990 | 39 | 0.0\% | 0.0\% | 0.0\% | 12.8\% | 0.0\% | 15.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 10.3\% | 0.0\% | 5.1\% | 0.0\% | 51.3\% |
| 1991 | 14 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.1\% | 0.0\% | 7.1\% | 0.0\% | 0.0\% | 71.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1992 | 58 | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 43.1\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 8.6\% | 0.0\% | 17.2\% | 0.0\% | 0.0\% | 0.0\% | 22.4\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% |
| 1993 | 129 | 9.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.0\% | 11.6\% | 1.6\% | 10.9\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 28.7\% | 0.0\% | 3.1\% | 0.0\% | 17.8\% |
| 1994 | 76 | 3.9\% | 0.0\% | 0.0\% | 9.2\% | 0.0\% | 17.1\% | 0.0\% | 3.9\% | 2.6\% | 0.0\% | 7.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 55.3\% |
| 1995 | 117 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 26.5\% | 2.6\% | 0.0\% | 0.0\% | 2.6\% | 6.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.9\% | 10.3\% | 0.0\% | 0.0\% | 0.0\% | 47.0\% |
| 1996 | 289 | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 3.1\% | 0.0\% | 2.1\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 0.0\% | 0.0\% | 0.0\% | 81.3\% |
| 1997 | 182 | 13.7\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 4.9\% | 0.0\% | 0.0\% | 6.6\% | 0.0\% | 3.3\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 11.5\% | 0.0\% | 0.0\% | 0.0\% | 57.1\% |
| 1998 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1999 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2000 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2001 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2005 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2006 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2007 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2008 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1979-2008 | 221 | 6.9\% | 0.3\% | 0.0\% | 3.2\% | 0.8\% | 15.6\% | 2.5\% | 0.6\% | 3.2\% | 0.9\% | 4.0\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 9.5\% | 11.9\% | 0.0\% | 1.2\% | 0.0\% | 35.8\% |
| 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\% |
| 1985-1995 | 218 | 6.5\% | 0.4\% | 0.0\% | 3.7\% | 1.0\% | 18.2\% | 2.7\% | 0.7\% | 2.9\% | 1.0\% | 4.3\% | 0.0\% | 4.0\% | 0.0\% | 0.0\% | 11.4\% | 12.5\% | 0.0\% | 1.4\% | 0.0\% | 29.1\% |
| 1996-1998 | 236 | 8.6\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 2.5\% | 1.6\% | 0.0\% | 4.9\% | 0.0\% | 2.7\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 8.9\% | 0.0\% | 0.0\% | 0.0\% | 69.2\% |
| 1999-2008 | 0 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 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 C.18. Percent distribution of Elwha River total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | 721 | 23.9\% | 3.2\% | 0.0\% | 2.5\% | 0.7\% | 17.6\% | 1.1\% | 0.8\% | 6.0\% | 1.0\% | 6.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 11.1\% | 14.8\% | 0.0\% | 0.1\% | 0.0\% | 10.1\% |
| 1987 | 463 | 14.5\% | 0.0\% | 0.0\% | 5.2\% | 1.9\% | 16.0\% | 2.4\% | 0.9\% | 8.4\% | 2.6\% | 5.2\% | 0.0\% | 3.0\% | 0.2\% | 0.0\% | 5.8\% | 20.1\% | 0.0\% | 0.0\% | 0.0\% | 13.8\% |
| 1988 | 463 | 5.4\% | 0.9\% | 0.6\% | 3.9\% | 2.4\% | 15.6\% | 6.0\% | 0.4\% | 0.0\% | 1.5\% | 1.3\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 7.8\% | 8.9\% | 0.0\% | 3.7\% | 0.0\% | 37.1\% |
| 1989 | 299 | 6.0\% | 5.7\% | 0.0\% | 4.7\% | 2.0\% | 5.7\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 0.3\% | 8.7\% | 14.0\% | 0.0\% | 2.0\% | 0.0\% | 45.2\% |
| 1990 | 41 | 0.0\% | 0.0\% | 0.0\% | 12.2\% | 0.0\% | 17.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 12.2\% | 0.0\% | 4.9\% | 0.0\% | 48.8\% |
| 1991 | 28 | 3.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 25.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 0.0\% | 7.1\% | 0.0\% | 0.0\% | 50.0\% | 10.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1992 | 81 | 2.5\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 38.3\% | 3.7\% | 1.2\% | 1.2\% | 0.0\% | 7.4\% | 0.0\% | 13.6\% | 0.0\% | 0.0\% | 0.0\% | 28.4\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% |
| 1993 | 157 | 12.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.3\% | 10.2\% | 2.5\% | 11.5\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 28.7\% | 0.0\% | 2.5\% | 0.0\% | 14.6\% |
| 1994 | 86 | 8.1\% | 0.0\% | 0.0\% | 9.3\% | 0.0\% | 18.6\% | 0.0\% | 4.7\% | 2.3\% | 0.0\% | 8.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 48.8\% |
| 1995 | 153 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 32.7\% | 2.6\% | 0.0\% | 0.0\% | 3.9\% | 6.5\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.7\% | 13.7\% | 0.0\% | 0.0\% | 0.0\% | 35.9\% |
| 1996 | 311 | 4.2\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 1.6\% | 3.2\% | 0.0\% | 3.5\% | 0.0\% | 2.6\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 7.4\% | 0.0\% | 0.0\% | 0.0\% | 75.6\% |
| 1997 | 197 | 15.2\% | 0.0\% | 0.5\% | 2.0\% | 0.0\% | 5.1\% | 0.0\% | 0.0\% | 6.6\% | 0.0\% | 3.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 13.7\% | 0.0\% | 0.0\% | 0.0\% | 52.8\% |
| 1998 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1999 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2000 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2001 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2005 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2006 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2007 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2008 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1979-2008 | 250 | 8.0\% | 0.8\% | 0.1\% | 3.5\% | 0.8\% | 17.4\% | 2.4\% | 0.9\% | 3.3\% | 1.0\% | 3.6\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 7.4\% | 14.4\% | 0.0\% | 1.1\% | 0.0\% | 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\% |
| 1985-1995 | 249 | 7.6\% | 1.0\% | 0.1\% | 3.9\% | 1.0\% | 20.2\% | 2.6\% | 1.1\% | 2.9\% | 1.2\% | 3.8\% | 0.0\% | 3.6\% | 0.0\% | 0.0\% | 8.9\% | 15.2\% | 0.0\% | 1.3\% | 0.0\% | 25.7\% |
| 1996-1998 | 254 | 9.7\% | 0.0\% | 0.3\% | 1.7\% | 0.0\% | 3.3\% | 1.6\% | 0.0\% | 5.1\% | 0.0\% | 2.8\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 10.6\% | 0.0\% | 0.0\% | 0.0\% | 64.2\% |
| 1999-2008 | 0 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 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 C.19. Percent distribution of George Adams Fall Fingerling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | 796 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.9\% | 0.0\% | 0.3\% | 4.1\% | 0.5\% | 0.6\% | 0.0\% | 3.0\% | 0.0\% | 0.4\% | 30.4\% | 10.3\% | 0.0\% | 7.7\% | 0.0\% | 21.9\% |
| 1983 | 575 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.8\% | 0.5\% | 0.0\% | 3.5\% | 1.6\% | 5.7\% | 0.0\% | 0.2\% | 0.0\% | 0.9\% | 21.0\% | 24.9\% | 0.0\% | 8.7\% | 0.0\% | 17.2\% |
| 1984 | 979 | 0.0\% | 0.1\% | 0.0\% | 0.5\% | 0.4\% | 18.1\% | 0.0\% | 1.2\% | 4.5\% | 3.2\% | 1.9\% | 0.0\% | 2.2\% | 0.0\% | 0.4\% | 12.7\% | 20.2\% | 0.0\% | 18.6\% | 0.0\% | 15.9\% |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | 1657 | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 8.5\% | 1.7\% | 0.0\% | 3.8\% | 0.0\% | 4.8\% | 0.0\% | 12.9\% | 0.2\% | 0.9\% | 18.1\% | 14.8\% | 0.0\% | 20.3\% | 1.4\% | 12.2\% |
| 1990 | 1340 | 0.1\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 19.3\% | 5.0\% | 0.0\% | 4.7\% | 0.3\% | 1.6\% | 0.0\% | 15.0\% | 0.0\% | 0.4\% | 11.3\% | 17.7\% | 0.0\% | 17.0\% | 0.3\% | 6.8\% |
| 1991 | 982 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.4\% | 4.5\% | 0.0\% | 2.2\% | 0.0\% | 0.4\% | 0.0\% | 8.6\% | 0.0\% | 0.0\% | 18.8\% | 17.2\% | 0.0\% | 14.5\% | 0.8\% | 4.4\% |
| 1992 | 192 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.6\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 5.7\% | 0.0\% | 20.3\% | 0.0\% | 0.0\% | 2.6\% | 39.6\% | 0.0\% | 6.8\% | 0.0\% | 7.3\% |
| 1993 | 114 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 34.2\% | 7.9\% | 0.9\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 0.0\% | 0.0\% | 4.4\% | 21.9\% | 0.0\% | 0.0\% | 0.0\% | 18.4\% |
| 1994 | 43 | 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\% | 14.0\% | 7.0\% | 0.0\% | 0.0\% | 0.0\% | 72.1\% |
| 1995 | 206 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.8\% | 3.9\% | 0.0\% | 3.9\% | 0.0\% | 2.4\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 4.4\% | 18.4\% | 0.0\% | 0.0\% | 0.0\% | 58.3\% |
| 1996 | 339 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 0.0\% | 12.7\% | 0.0\% | 2.1\% | 0.0\% | 5.9\% | 0.0\% | 0.6\% | 0.0\% | 13.3\% | 0.0\% | 0.0\% | 0.0\% | 60.8\% |
| 1997 | 363 | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.4\% | 1.7\% | 0.0\% | 3.0\% | 0.0\% | 0.3\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.8\% | 18.7\% | 0.0\% | 0.0\% | 0.0\% | 66.1\% |
| 1998 | 447 | 0.7\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 1.1\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 1.8\% | 7.2\% | 0.0\% | 0.0\% | 0.0\% | 86.4\% |
| 1999 | 831 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 9.0\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 0.0\% | 1.3\% | 2.3\% | 9.5\% | 0.0\% | 0.6\% | 0.0\% | 68.6\% |
| 2000 | 826 | 0.4\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 21.1\% | 8.5\% | 0.0\% | 2.7\% | 0.0\% | 0.1\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.4\% | 5.9\% | 0.0\% | 0.0\% | 11.6\% | 45.5\% |
| 2001 | 779 | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 12.3\% | 2.1\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 6.4\% | 0.0\% | 1.0\% | 5.6\% | 8.5\% | 0.0\% | 5.4\% | 0.5\% | 55.1\% |
| 2002 | 961 | 1.5\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 11.2\% | 10.2\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 1.0\% | 7.2\% | 4.7\% | 0.0\% | 3.9\% | 9.4\% | 44.1\% |
| 2003 | 950 | 0.5\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 11.6\% | 2.0\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 6.4\% | 0.0\% | 0.2\% | 4.2\% | 6.1\% | 0.0\% | 6.3\% | 11.9\% | 47.9\% |
| 2004 | 1315 | 0.5\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 14.7\% | 3.0\% | 0.2\% | 2.3\% | 0.0\% | 0.3\% | 0.0\% | 6.1\% | 0.0\% | 0.5\% | 7.2\% | 5.5\% | 0.0\% | 4.6\% | 1.2\% | 53.7\% |
| 2005 | 1545 | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.8\% | 11.8\% | 8.4\% | 0.0\% | 5.6\% | 0.0\% | 0.0\% | 0.0\% | 6.8\% | 0.0\% | 1.3\% | 2.6\% | 6.8\% | 0.0\% | 2.8\% | 6.3\% | 46.3\% |
| 2006 | 1089 | 0.4\% | 0.2\% | 0.0\% | 0.7\% | 0.0\% | 12.2\% | 1.8\% | 0.0\% | 4.4\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 0.0\% | 0.4\% | 7.6\% | 8.4\% | 0.0\% | 6.2\% | 1.3\% | 51.2\% |
| 2007 | 1595 | 0.2\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 10.1\% | 1.6\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 0.2\% | 2.5\% | 11.2\% | 0.0\% | 10.3\% | 11.0\% | 46.6\% |
| 2008 | 1114 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 4.0\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.4\% | 0.7\% | 6.1\% | 8.3\% | 0.0\% | 10.1\% | 0.0\% | 63.0\% |
| 1979-2008 | 828 | 0.3\% | 0.1\% | 0.0\% | 0.1\% | 0.1\% | 11.9\% | 3.6\% | 0.4\% | 3.4\% | 0.2\% | 1.1\% | 0.0\% | 5.7\% | 0.0\% | 0.4\% | 8.1\% | 13.3\% | 0.0\% | 6.3\% | 2.4\% | 42.6\% |
| 1979-1984 | 783 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 18.3\% | 0.2\% | 0.5\% | 4.0\% | 1.7\% | 2.8\% | 0.0\% | 1.8\% | 0.0\% | 0.6\% | 21.4\% | 18.5\% | 0.0\% | 11.6\% | 0.0\% | 18.3\% |
| 1985-1995 | 648 | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 14.8\% | 3.3\% | 1.1\% | 2.9\% | 0.0\% | 2.1\% | 0.0\% | 9.5\% | 0.0\% | 0.2\% | 10.5\% | 19.5\% | 0.0\% | 8.4\% | 0.4\% | 27.1\% |
| 1996-1998 | 383 | 0.9\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 2.5\% | 0.0\% | 5.5\% | 0.0\% | 0.8\% | 0.0\% | 3.6\% | 0.0\% | 0.2\% | 0.9\% | 13.1\% | 0.0\% | 0.0\% | 0.0\% | 71.1\% |
| 1999-2008 | 1100 | 0.5\% | 0.1\% | 0.0\% | 0.2\% | 0.1\% | 11.0\% | 5.1\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 0.0\% | 0.7\% | 4.6\% | 7.5\% | 0.0\% | 5.0\% | 5.3\% | 52.2\% |

Appendix C.20. Percent distribution of George Adams Fall Fingerling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | 859 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.7\% | 0.0\% | 0.2\% | 4.1\% | 0.6\% | 0.8\% | 0.0\% | 2.9\% | 0.0\% | 0.5\% | 29.2\% | 12.3\% | 0.0\% | 7.5\% | 0.0\% | 20.3\% |
| 1983 | 899 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.7\% | 0.3\% | 0.0\% | 2.4\% | 1.2\% | 4.2\% | 0.0\% | 0.1\% | 0.0\% | 0.6\% | 19.7\% | 41.7\% | 0.0\% | 6.0\% | 0.0\% | 11.0\% |
| 1984 | 1066 | 0.0\% | 0.1\% | 0.0\% | 0.6\% | 0.5\% | 18.1\% | 0.0\% | 1.2\% | 4.4\% | 3.2\% | 1.8\% | 0.0\% | 2.3\% | 0.0\% | 0.4\% | 12.9\% | 22.1\% | 0.0\% | 17.8\% | 0.0\% | 14.6\% |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | 1955 | 0.0\% | 0.8\% | 0.0\% | 0.1\% | 0.0\% | 10.3\% | 1.8\% | 0.0\% | 3.9\% | 0.1\% | 4.3\% | 0.0\% | 13.0\% | 0.2\% | 0.8\% | 17.5\% | 17.6\% | 0.0\% | 17.9\% | 1.4\% | 10.3\% |
| 1990 | 1547 | 0.7\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 21.2\% | 4.7\% | 0.0\% | 4.9\% | 0.4\% | 1.5\% | 0.0\% | 15.5\% | 0.0\% | 0.4\% | 10.5\% | 18.2\% | 0.0\% | 15.4\% | 0.3\% | 5.9\% |
| 1991 | 1059 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.5\% | 4.5\% | 0.0\% | 2.3\% | 0.0\% | 0.4\% | 0.0\% | 8.7\% | 0.0\% | 0.0\% | 17.8\% | 18.8\% | 0.0\% | 13.7\% | 0.8\% | 13.3\% |
| 1992 | 217 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.6\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 5.1\% | 0.0\% | 20.3\% | 0.0\% | 0.0\% | 2.3\% | 41.5\% | 0.0\% | 6.0\% | 0.0\% | 6.5\% |
| 1993 | 135 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 34.1\% | 7.4\% | 1.5\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 8.1\% | 0.0\% | 0.0\% | 4.4\% | 25.2\% | 0.0\% | 0.0\% | 0.0\% | 15.6\% |
| 1994 | 48 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.7\% | 10.4\% | 0.0\% | 0.0\% | 0.0\% | 64.6\% |
| 1995 | 261 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.6\% | 3.8\% | 0.0\% | 4.2\% | 0.0\% | 3.4\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 4.2\% | 28.0\% | 0.0\% | 0.0\% | 0.0\% | 46.0\% |
| 1996 | 369 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 4.6\% | 0.0\% | 14.4\% | 0.0\% | 2.2\% | 0.0\% | 5.7\% | 0.0\% | 0.5\% | 0.0\% | 15.4\% | 0.0\% | 0.0\% | 0.0\% | 55.8\% |
| 1997 | 398 | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 1.5\% | 0.0\% | 3.0\% | 0.0\% | 0.8\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.8\% | 24.1\% | 0.0\% | 0.0\% | 0.0\% | 60.3\% |
| 1998 | 585 | 0.7\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 1.2\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 2.1\% | 27.0\% | 0.0\% | 0.0\% | 0.0\% | 66.0\% |
| 1999 | 897 | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 9.1\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 5.8\% | 0.0\% | 1.4\% | 2.2\% | 12.7\% | 0.0\% | 0.6\% | 0.0\% | 63.5\% |
| 2000 | 948 | 0.4\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 20.6\% | 8.8\% | 0.0\% | 2.8\% | 0.0\% | 0.2\% | 0.0\% | 3.6\% | 0.0\% | 0.0\% | 0.3\% | 11.5\% | 0.0\% | 0.0\% | 11.7\% | 39.7\% |
| 2001 | 889 | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 11.7\% | 2.1\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 6.9\% | 0.0\% | 1.0\% | 5.5\% | 15.4\% | 0.0\% | 5.1\% | 0.6\% | 48.3\% |
| 2002 | 1053 | 1.7\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 11.0\% | 11.1\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 4.4\% | 0.0\% | 1.0\% | 7.0\% | 7.0\% | 0.0\% | 3.6\% | 9.8\% | 40.3\% |
| 2003 | 1044 | 0.6\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 11.5\% | 2.3\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 6.9\% | 0.0\% | 0.2\% | 4.1\% | 9.1\% | 0.0\% | 6.0\% | 12.5\% | 43.6\% |
| 2004 | 1451 | 0.6\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 14.5\% | 3.3\% | 0.1\% | 2.5\% | 0.0\% | 0.6\% | 0.0\% | 6.7\% | 0.0\% | 0.6\% | 7.6\% | 8.5\% | 0.0\% | 4.5\% | 1.3\% | 48.7\% |
| 2005 | 1734 | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 1.0\% | 11.4\% | 8.9\% | 0.0\% | 6.4\% | 0.0\% | 0.0\% | 0.0\% | 7.3\% | 0.0\% | 1.3\% | 2.5\% | 10.0\% | 0.0\% | 2.7\% | 6.8\% | 41.2\% |
| 2006 | 1184 | 0.4\% | 0.3\% | 0.0\% | 0.8\% | 0.0\% | 11.9\% | 1.9\% | 0.0\% | 5.1\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% | 0.0\% | 0.4\% | 7.5\% | 11.5\% | 0.0\% | 6.0\% | 1.4\% | 47.1\% |
| 2007 | 1942 | 0.3\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 9.4\% | 1.6\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 0.2\% | 2.4\% | 22.1\% | 0.0\% | 8.9\% | 10.5\% | 38.3\% |
| 2008 | 1200 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 4.4\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.4\% | 0.7\% | 6.4\% | 11.3\% | 0.0\% | 10.1\% | 0.0\% | 58.5\% |
| 1979-2008 | 945 | 0.4\% | 0.1\% | 0.0\% | 0.2\% | 0.1\% | 12.0\% | 3.6\% | 0.5\% | 3.6\% | 0.2\% | 1.1\% | 0.0\% | 5.8\% | 0.0\% | 0.4\% | 8.0\% | 18.3\% | 0.0\% | 5.7\% | 2.5\% | 37.4\% |
| 1979-1984 | 941 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 17.5\% | 0.1\% | 0.5\% | 3.6\% | 1.7\% | 2.3\% | 0.0\% | 1.8\% | 0.0\% | 0.5\% | 20.6\% | 25.4\% | 0.0\% | 10.4\% | 0.0\% | 15.3\% |
| 1985-1995 | 746 | 0.1\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 15.9\% | 3.2\% | 1.4\% | 3.0\% | 0.1\% | 2.1\% | 0.0\% | 9.5\% | 0.0\% | 0.2\% | 10.5\% | 22.8\% | 0.0\% | 7.6\% | 0.4\% | 23.2\% |
| 1996-1998 | 451 | 0.8\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 2.4\% | 0.0\% | 6.1\% | 0.0\% | 1.0\% | 0.0\% | 3.5\% | 0.0\% | 0.2\% | 0.9\% | 22.2\% | 0.0\% | 0.0\% | 0.0\% | 60.7\% |
| 1999-2008 | 1234 | 0.6\% | 0.1\% | 0.0\% | 0.3\% | 0.1\% | 10.7\% | 5.4\% | 0.0\% | 3.3\% | 0.0\% | 0.1\% | 0.0\% | 5.2\% | 0.0\% | 0.7\% | 4.6\% | 11.9\% | 0.0\% | 4.7\% | 5.4\% | 46.9\% |

Appendix C.21. Percent distribution of Hanford Wild Brights reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | 440 | 8.4\% | 0.5\% | 0.0\% | 4.3\% | 0.0\% | 8.4\% | 3.6\% | 0.0\% | 0.0\% | 0.5\% | 0.7\% | 0.0\% | 0.5\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 22.5\% | 6.1\% | 43.6\% |
| 1991 | 591 | 8.6\% | 0.0\% | 1.4\% | 9.5\% | 0.5\% | 4.7\% | 0.0\% | 0.0\% | 0.8\% | 0.2\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 23.4\% | 3.9\% | 45.5\% |
| 1992 | 287 | 16.4\% | 1.7\% | 1.4\% | 5.9\% | 0.0\% | 16.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 18.5\% | 1.7\% | 36.2\% |
| 1993 | 378 | 14.0\% | 0.0\% | 2.1\% | 2.9\% | 1.3\% | 5.3\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 16.1\% | 7.4\% | 42.1\% |
| 1994 | 724 | 14.4\% | 0.8\% | 0.0\% | 4.8\% | 0.0\% | 4.4\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 1.4\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.6\% | 5.4\% | 55.2\% |
| 1995 | 655 | 11.0\% | 0.0\% | 3.7\% | 4.3\% | 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\% | 9.8\% | 7.0\% | 62.0\% |
| 1996 | 591 | 9.8\% | 0.0\% | 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\% | 28.4\% | 7.8\% | 53.5\% |
| 1997 | 632 | 16.3\% | 0.6\% | 0.9\% | 3.6\% | 2.4\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.9\% | 7.0\% | 53.5\% |
| 1998 | 326 | 12.9\% | 0.0\% | 0.0\% | 8.6\% | 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\% | 17.5\% | 6.4\% | 54.0\% |
| 1999 | 259 | 9.7\% | 0.4\% | 1.9\% | 12.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.0\% | 6.2\% | 57.9\% |
| 2000 | 219 | 16.4\% | 0.5\% | 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\% | 29.2\% | 5.5\% | 46.6\% |
| 2001 | 346 | 4.3\% | 1.2\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.5\% | 14.5\% | 57.5\% |
| 2002 | 841 | 13.9\% | 0.0\% | 1.3\% | 0.7\% | 0.5\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 10.0\% | 10.7\% | 58.3\% |
| 2003 | 1488 | 12.6\% | 0.0\% | 0.9\% | 3.9\% | 0.9\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 14.3\% | 9.2\% | 57.0\% |
| 2004 | 1782 | 17.6\% | 0.0\% | 3.0\% | 6.2\% | 2.9\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.2\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 13.7\% | 4.1\% | 48.7\% |
| 2005 | 445 | 11.9\% | 0.0\% | 0.0\% | 8.1\% | 2.5\% | 4.3\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 12.4\% | 15.3\% | 41.1\% |
| 2006 | 542 | 17.2\% | 0.0\% | 0.9\% | 5.0\% | 0.0\% | 2.8\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.3\% | 19.4\% | 36.5\% |
| 2007 | 260 | 21.9\% | 0.0\% | 1.2\% | 6.9\% | 6.9\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.7\% | 12.7\% | 37.3\% |
| 2008 | 182 | 27.5\% | 0.0\% | 4.4\% | 1.6\% | 2.2\% | 3.8\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.4\% | 8.2\% | 28.0\% |
| 1979-2008 | 578 | 13.9\% | 0.3\% | 1.4\% | 4.7\% | 1.1\% | 3.3\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.9\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 16.8\% | 8.3\% | 48.1\% |
| 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\% |
| 1985-1995 | 512 | 12.1\% | 0.5\% | 1.4\% | 5.3\% | 0.3\% | 6.9\% | 0.9\% | 0.0\% | 0.1\% | 0.1\% | 0.7\% | 0.0\% | 1.2\% | 0.0\% | 0.4\% | 0.0\% | 0.1\% | 0.0\% | 17.1\% | 5.3\% | 47.4\% |
| 1996-1998 | 516 | 13.0\% | 0.2\% | 0.3\% | 4.1\% | 1.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.9\% | 7.1\% | 53.6\% |
| 1999-2008 | 636 | 15.3\% | 0.2\% | 1.6\% | 4.4\% | 1.6\% | 2.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.9\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 15.7\% | 10.6\% | 46.9\% |

Appendix C.22. Percent distribution of Hanford Wild Brights total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Brood | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | 470 | 9.4\% | 0.9\% | 0.4\% | 5.1\% | 0.0\% | 8.9\% | 3.6\% | 0.0\% | 0.0\% | 0.4\% | 0.6\% | 0.0\% | 0.6\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 21.7\% | 6.6\% | 40.9\% |
| 1991 | 625 | 10.6\% | 0.0\% | 1.4\% | 10.4\% | 0.5\% | 5.1\% | 0.0\% | 0.0\% | 1.0\% | 0.2\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 22.2\% | 4.0\% | 43.0\% |
| 1992 | 342 | 17.5\% | 8.5\% | 1.5\% | 6.7\% | 0.0\% | 16.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 15.8\% | 1.5\% | 30.4\% |
| 1993 | 423 | 19.1\% | 0.0\% | 2.1\% | 3.1\% | 1.2\% | 6.1\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 14.7\% | 7.3\% | 37.6\% |
| 1994 | 779 | 17.1\% | 2.1\% | 0.0\% | 5.3\% | 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\% | 11.8\% | 5.5\% | 51.3\% |
| 1995 | 700 | 13.0\% | 0.0\% | 4.1\% | 5.4\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.3\% | 7.1\% | 58.0\% |
| 1996 | 631 | 12.7\% | 0.0\% | 0.0\% | 1.0\% | 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\% | 27.1\% | 7.9\% | 50.1\% |
| 1997 | 662 | 17.8\% | 0.9\% | 1.1\% | 3.6\% | 3.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.4\% | 7.3\% | 51.1\% |
| 1998 | 344 | 14.8\% | 0.0\% | 0.0\% | 9.6\% | 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\% | 16.9\% | 6.7\% | 51.2\% |
| 1999 | 281 | 13.2\% | 1.1\% | 2.1\% | 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\% | 0.0\% | 11.4\% | 6.4\% | 53.4\% |
| 2000 | 234 | 20.1\% | 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\% | 27.8\% | 5.6\% | 43.6\% |
| 2001 | 365 | 6.0\% | 1.6\% | 1.1\% | 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\% | 20.0\% | 15.3\% | 54.5\% |
| 2002 | 903 | 17.7\% | 0.0\% | 1.4\% | 0.8\% | 0.6\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 9.5\% | 11.1\% | 54.3\% |
| 2003 | 1537 | 13.7\% | 0.0\% | 0.9\% | 4.1\% | 1.1\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 14.1\% | 9.7\% | 55.2\% |
| 2004 | 1873 | 18.9\% | 0.0\% | 3.1\% | 6.6\% | 3.9\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.2\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 13.1\% | 4.2\% | 46.3\% |
| 2005 | 472 | 13.1\% | 0.0\% | 0.0\% | 8.7\% | 3.0\% | 4.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 11.9\% | 15.9\% | 38.8\% |
| 2006 | 575 | 18.8\% | 0.0\% | 1.0\% | 5.2\% | 0.0\% | 2.8\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.6\% | 19.8\% | 34.4\% |
| 2007 | 287 | 25.4\% | 0.0\% | 1.0\% | 7.3\% | 7.7\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.0\% | 12.5\% | 33.8\% |
| 2008 | 201 | 33.3\% | 0.0\% | 4.5\% | 1.5\% | 2.0\% | 3.5\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.4\% | 8.0\% | 25.4\% |
| 1979-2008 | 616 | 16.4\% | 0.8\% | 1.5\% | 5.1\% | 1.2\% | 3.4\% | 0.6\% | 0.0\% | 0.1\% | 0.0\% | 0.3\% | 0.0\% | 0.9\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 15.9\% | 8.5\% | 44.9\% |
| 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\% |
| 1985-1995 | 556 | 14.4\% | 1.9\% | 1.6\% | 6.0\% | 0.3\% | 7.4\% | 0.9\% | 0.0\% | 0.2\% | 0.1\% | 0.7\% | 0.0\% | 1.2\% | 0.0\% | 0.4\% | 0.0\% | 0.2\% | 0.0\% | 15.9\% | 5.3\% | 43.5\% |
| 1996-1998 | 546 | 15.1\% | 0.3\% | 0.4\% | 4.7\% | 1.3\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.1\% | 7.3\% | 50.8\% |
| 1999-2008 | 673 | 18.0\% | 0.3\% | 1.8\% | 4.7\% | 1.8\% | 1.9\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.9\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 14.9\% | 10.9\% | 44.0\% |

Appendix C.23. Percent distribution of Hoko Fall Fingerling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | 248 | 4.8\% | 0.8\% | 0.0\% | 7.7\% | 0.0\% | 10.9\% | 0.0\% | 0.0\% | 1.6\% | 0.4\% | 21.4\% | 0.0\% | 0.8\% | 0.0\% | 0.4\% | 0.4\% | 21.4\% | 0.0\% | 0.0\% | 0.0\% | 29.4\% |
| 1990 | 588 | 15.8\% | 1.9\% | 0.5\% | 8.0\% | 0.0\% | 17.0\% | 0.0\% | 0.5\% | 0.3\% | 0.7\% | 4.3\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.7\% | 14.5\% | 0.0\% | 0.2\% | 0.0\% | 35.2\% |
| 1991 | 1242 | 15.2\% | 0.0\% | 0.0\% | 5.0\% | 0.6\% | 6.9\% | 0.5\% | 0.0\% | 0.4\% | 1.1\% | 1.0\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 1.0\% | 8.1\% | 0.0\% | 0.1\% | 0.0\% | 59.8\% |
| 1992 | 572 | 7.7\% | 1.7\% | 1.2\% | 4.4\% | 0.7\% | 9.8\% | 2.1\% | 0.0\% | 0.5\% | 1.2\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.2\% | 0.0\% | 66.6\% |
| 1993 | 303 | 6.6\% | 0.0\% | 2.0\% | 6.6\% | 0.0\% | 14.9\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 4.3\% | 0.0\% | 0.3\% | 0.0\% | 59.4\% |
| 1994 | 332 | 13.6\% | 2.1\% | 2.4\% | 14.8\% | 0.0\% | 11.4\% | 2.1\% | 0.0\% | 2.1\% | 0.6\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 47.9\% |
| 1995 | 748 | 12.6\% | 0.0\% | 4.1\% | 6.1\% | 0.5\% | 2.9\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 71.8\% |
| 1996 | 639 | 10.5\% | 0.0\% | 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\% | 0.0\% | 0.5\% | 0.0\% | 85.3\% |
| 1997 | 886 | 13.9\% | 0.0\% | 0.0\% | 1.5\% | 0.6\% | 1.0\% | 0.8\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 81.6\% |
| 1998 | 1130 | 9.0\% | 0.0\% | 0.4\% | 5.9\% | 0.0\% | 0.0\% | 0.4\% | 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\% | 84.1\% |
| 1999 | 751 | 6.4\% | 0.0\% | 0.7\% | 7.2\% | 1.2\% | 0.0\% | 1.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 82.8\% |
| 2000 | 503 | 4.4\% | 0.2\% | 1.8\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 92.0\% |
| 2001 | 515 | 6.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 90.1\% |
| 2002 | 671 | 17.3\% | 0.0\% | 0.9\% | 4.3\% | 3.0\% | 1.5\% | 0.0\% | 0.0\% | 2.1\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 69.6\% |
| 2003 | 956 | 13.8\% | 0.1\% | 2.6\% | 3.0\% | 0.0\% | 0.0\% | 0.5\% | 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\% | 78.2\% |
| 2004 | 1059 | 10.9\% | 0.0\% | 1.0\% | 8.3\% | 1.5\% | 0.7\% | 0.8\% | 0.0\% | 4.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 71.4\% |
| 2005 | 591 | 11.2\% | 0.2\% | 1.2\% | 11.0\% | 5.2\% | 0.0\% | 1.2\% | 0.0\% | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 63.5\% |
| 2006 | 773 | 9.8\% | 1.3\% | 2.2\% | 6.0\% | 3.4\% | 0.0\% | 1.3\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 74.3\% |
| 2007 | 320 | 19.1\% | 0.3\% | 4.4\% | 8.4\% | 5.6\% | 0.9\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 57.8\% |
| 2008 | 115 | 21.7\% | 0.0\% | 7.8\% | 10.4\% | 17.4\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 36.5\% |
| 1979-2008 | 647 | 11.5\% | 0.4\% | 1.9\% | 5.9\% | 2.0\% | 3.9\% | 0.6\% | 0.0\% | 1.5\% | 0.2\% | 1.8\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.1\% | 2.7\% | 0.0\% | 0.1\% | 0.0\% | 66.9\% |
| 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\% |
| 1985-1995 | 576 | 10.9\% | 0.9\% | 1.5\% | 7.5\% | 0.3\% | 10.5\% | 0.7\% | 0.1\% | 0.9\% | 0.6\% | 5.2\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 0.3\% | 7.3\% | 0.0\% | 0.1\% | 0.0\% | 52.9\% |
| 1996-1998 | 885 | 11.1\% | 0.0\% | 1.4\% | 2.5\% | 0.2\% | 0.3\% | 0.4\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 83.7\% |
| 1999-2008 | 625 | 12.1\% | 0.2\% | 2.4\% | 5.9\% | 3.7\% | 0.3\% | 0.5\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 71.6\% |

Appendix C.24. Percent distribution of Hoko Fall Fingerling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | 352 | 10.8\% | 3.4\% | 0.3\% | 8.5\% | 0.0\% | 13.6\% | 0.0\% | 0.0\% | 1.7\% | 1.1\% | 16.2\% | 0.0\% | 0.6\% | 0.0\% | 0.6\% | 1.4\% | 21.0\% | 0.0\% | 0.0\% | 0.0\% | 20.7\% |
| 1990 | 675 | 18.1\% | 3.9\% | 0.6\% | 8.6\% | 0.0\% | 17.2\% | 0.0\% | 0.4\% | 0.3\% | 0.9\% | 3.7\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.6\% | 14.4\% | 0.0\% | 0.1\% | 0.0\% | 30.7\% |
| 1991 | 1325 | 18.0\% | 0.0\% | 0.1\% | 5.2\% | 0.5\% | 7.1\% | 0.5\% | 0.0\% | 0.4\% | 1.1\% | 0.9\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 0.9\% | 8.8\% | 0.0\% | 0.1\% | 0.0\% | 56.1\% |
| 1992 | 652 | 8.4\% | 7.8\% | 1.5\% | 5.4\% | 0.6\% | 10.0\% | 2.0\% | 0.0\% | 0.6\% | 1.1\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 0.2\% | 0.0\% | 58.4\% |
| 1993 | 348 | 11.8\% | 1.1\% | 2.3\% | 7.8\% | 0.0\% | 14.9\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 4.6\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 4.3\% | 0.0\% | 0.3\% | 0.0\% | 51.7\% |
| 1994 | 391 | 19.7\% | 5.1\% | 2.8\% | 13.6\% | 0.0\% | 10.7\% | 2.0\% | 0.0\% | 2.0\% | 0.5\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 40.7\% |
| 1995 | 830 | 16.1\% | 0.0\% | 4.7\% | 7.8\% | 0.6\% | 3.7\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 64.7\% |
| 1996 | 685 | 13.6\% | 0.0\% | 4.4\% | 0.7\% | 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\% | 0.0\% | 0.4\% | 0.0\% | 79.6\% |
| 1997 | 921 | 16.4\% | 0.0\% | 0.0\% | 1.6\% | 0.7\% | 1.2\% | 0.9\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 78.5\% |
| 1998 | 1147 | 9.9\% | 0.0\% | 0.3\% | 6.4\% | 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\% | 82.8\% |
| 1999 | 771 | 7.8\% | 0.0\% | 0.6\% | 7.8\% | 1.3\% | 0.0\% | 1.4\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 80.7\% |
| 2000 | 520 | 6.0\% | 0.2\% | 2.9\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 89.0\% |
| 2001 | 539 | 8.3\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 86.1\% |
| 2002 | 712 | 19.8\% | 0.0\% | 1.0\% | 4.8\% | 3.5\% | 1.7\% | 0.0\% | 0.0\% | 2.2\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 65.6\% |
| 2003 | 980 | 15.0\% | 0.1\% | 2.9\% | 3.3\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 76.3\% |
| 2004 | 1117 | 12.3\% | 0.0\% | 1.2\% | 9.2\% | 2.1\% | 0.7\% | 0.9\% | 0.0\% | 5.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 67.7\% |
| 2005 | 638 | 12.9\% | 0.2\% | 1.3\% | 12.1\% | 6.3\% | 0.0\% | 1.3\% | 0.0\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 58.8\% |
| 2006 | 804 | 10.8\% | 1.9\% | 2.4\% | 6.3\% | 3.9\% | 0.0\% | 1.4\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 71.4\% |
| 2007 | 339 | 20.1\% | 0.3\% | 4.7\% | 8.8\% | 6.8\% | 0.9\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 54.6\% |
| 2008 | 128 | 24.2\% | 0.0\% | 8.6\% | 10.2\% | 18.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.8\% |
| 1979-2008 | 694 | 14.0\% | 1.2\% | 2.3\% | 6.4\% | 2.2\% | 4.2\% | 0.6\% | 0.0\% | 1.6\% | 0.3\% | 1.5\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.2\% | 2.8\% | 0.0\% | 0.1\% | 0.0\% | 62.3\% |
| 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\% |
| 1985-1995 | 653 | 14.7\% | 3.0\% | 1.8\% | 8.1\% | 0.2\% | 11.0\% | 0.6\% | 0.1\% | 0.9\% | 0.7\% | 4.3\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.4\% | 7.4\% | 0.0\% | 0.1\% | 0.0\% | 46.1\% |
| 1996-1998 | 918 | 13.3\% | 0.0\% | 1.6\% | 2.9\% | 0.2\% | 0.8\% | 0.4\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 80.3\% |
| 1999-2008 | 655 | 13.7\% | 0.3\% | 2.8\% | 6.2\% | 4.2\% | 0.3\% | 0.6\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.3\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 68.3\% |

Appendix C.25. Percent distribution of Kitsumkalum River Summer reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | 65 | 50.8\% | 0.0\% | 0.0\% | 18.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1985 | 184 | 26.1\% | 0.0\% | 1.6\% | 7.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 51.6\% |
| 1986 | 213 | 8.9\% | 0.0\% | 0.0\% | 14.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 65.7\% |
| 1987 | 231 | 7.4\% | 0.0\% | 0.0\% | 9.1\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 71.4\% |
| 1988 | 161 | 17.4\% | 0.6\% | 1.9\% | 3.1\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 46.6\% |
| 1989 | 800 | 10.9\% | 0.3\% | 6.8\% | 5.0\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 59.1\% |
| 1990 | 606 | 10.7\% | 0.0\% | 2.8\% | 6.8\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 7.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.6\% | 64.9\% |
| 1991 | 294 | 14.6\% | 0.0\% | 3.7\% | 8.8\% | 6.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 16.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.8\% | 41.8\% |
| 1992 | 669 | 13.9\% | 0.0\% | 1.9\% | 7.0\% | 5.4\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 60.7\% |
| 1993 | 230 | 10.4\% | 0.9\% | 2.2\% | 10.0\% | 4.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 53.5\% |
| 1994 | 126 | 11.1\% | 0.0\% | 0.0\% | 5.6\% | 6.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 57.9\% |
| 1995 | 184 | 12.0\% | 0.0\% | 2.7\% | 7.1\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.3\% | 42.4\% |
| 1996 | 505 | 8.5\% | 0.2\% | 6.1\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 63.8\% |
| 1997 | 624 | 10.4\% | 0.0\% | 7.5\% | 0.0\% | 4.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.2\% | 62.7\% |
| 1998 | 490 | 8.6\% | 0.0\% | 3.1\% | 0.0\% | 2.0\% | 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\% | 0.0\% | 3.5\% | 81.6\% |
| 1999 | 697 | 13.9\% | 0.0\% | 9.2\% | 0.0\% | 10.2\% | 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\% | 1.4\% | 64.4\% |
| 2000 | 329 | 8.2\% | 0.0\% | 7.9\% | 0.0\% | 6.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 67.5\% |
| 2001 | 507 | 10.1\% | 0.0\% | 8.9\% | 0.6\% | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 65.3\% |
| 2002 | 909 | 13.9\% | 0.2\% | 5.7\% | 1.5\% | 10.2\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 63.3\% |
| 2003 | 601 | 14.0\% | 0.0\% | 1.7\% | 5.2\% | 5.7\% | 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\% | 3.3\% | 70.2\% |
| 2004 | 901 | 8.1\% | 2.6\% | 5.4\% | 0.9\% | 7.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 73.4\% |
| 2005 | 324 | 14.8\% | 0.0\% | 2.5\% | 2.5\% | 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\% | 6.2\% | 67.9\% |
| 2006 | 281 | 12.8\% | 1.8\% | 1.8\% | 2.8\% | 5.7\% | 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\% | 5.3\% | 64.8\% |
| 2007 | 502 | 11.6\% | 0.4\% | 2.8\% | 1.6\% | 8.6\% | 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\% | 1.0\% | 73.7\% |
| 2008 | 459 | 6.1\% | 0.2\% | 2.2\% | 2.4\% | 13.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.4\% | 51.4\% |
| 1979-2008 | 436 | 13.4\% | 0.3\% | 3.5\% | 4.8\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 59.4\% |
| 1979-1984 | 65 | 50.8\% | 0.0\% | 0.0\% | 18.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1985-1995 | 336 | 13.0\% | 0.2\% | 2.1\% | 7.6\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 14.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 56.0\% |
| 1996-1998 | 540 | 9.2\% | 0.1\% | 5.6\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 69.4\% |
| 1999-2008 | 551 | 11.3\% | 0.5\% | 4.8\% | 1.7\% | 7.9\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 66.2\% |

Appendix C.26. Percent distribution of Kitsumkalum River Summer total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | 82 | 56.1\% | 0.0\% | 0.0\% | 19.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 24.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1985 | 195 | 29.2\% | 0.0\% | 1.5\% | 7.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 48.7\% |
| 1986 | 216 | 10.2\% | 0.0\% | 0.0\% | 13.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 64.8\% |
| 1987 | 264 | 12.5\% | 0.0\% | 2.7\% | 9.8\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 62.5\% |
| 1988 | 202 | 23.3\% | 1.5\% | 5.0\% | 7.4\% | 4.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 37.1\% |
| 1989 | 849 | 13.9\% | 0.7\% | 6.9\% | 5.3\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 55.7\% |
| 1990 | 634 | 11.8\% | 0.0\% | 3.3\% | 7.9\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 6.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.8\% | 62.0\% |
| 1991 | 332 | 18.7\% | 0.0\% | 4.2\% | 10.8\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 15.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.6\% | 37.0\% |
| 1992 | 694 | 15.1\% | 0.0\% | 2.0\% | 7.9\% | 5.6\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 58.5\% |
| 1993 | 242 | 11.6\% | 1.7\% | 2.1\% | 11.6\% | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 50.8\% |
| 1994 | 135 | 13.3\% | 0.0\% | 0.0\% | 6.7\% | 8.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 54.1\% |
| 1995 | 218 | 13.3\% | 0.0\% | 2.8\% | 9.6\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 35.8\% |
| 1996 | 546 | 10.3\% | 0.2\% | 6.8\% | 0.2\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 59.0\% |
| 1997 | 667 | 11.8\% | 0.0\% | 8.7\% | 0.0\% | 5.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.2\% | 58.6\% |
| 1998 | 509 | 10.4\% | 0.0\% | 3.5\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 78.6\% |
| 1999 | 742 | 15.1\% | 0.0\% | 10.1\% | 0.0\% | 11.9\% | 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\% | 1.5\% | 60.5\% |
| 2000 | 359 | 9.7\% | 0.0\% | 10.3\% | 0.0\% | 7.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 61.8\% |
| 2001 | 597 | 11.6\% | 0.0\% | 9.7\% | 0.7\% | 5.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 55.4\% |
| 2002 | 1012 | 14.9\% | 0.4\% | 6.3\% | 1.7\% | 12.2\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 5.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 56.8\% |
| 2003 | 634 | 15.6\% | 0.0\% | 1.9\% | 5.8\% | 6.8\% | 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\% | 3.3\% | 66.6\% |
| 2004 | 971 | 8.4\% | 4.2\% | 5.7\% | 0.9\% | 10.2\% | 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\% | 1.1\% | 68.1\% |
| 2005 | 345 | 17.1\% | 0.0\% | 2.9\% | 2.6\% | 7.5\% | 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\% | 63.8\% |
| 2006 | 301 | 15.0\% | 2.0\% | 2.3\% | 3.0\% | 7.0\% | 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\% | 5.3\% | 60.5\% |
| 2007 | 533 | 13.5\% | 0.8\% | 3.2\% | 1.7\% | 9.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 69.4\% |
| 2008 | 495 | 7.1\% | 0.4\% | 2.6\% | 2.6\% | 15.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.3\% | 47.7\% |
| 1979-2008 | 471 | 15.6\% | 0.5\% | 4.2\% | 5.5\% | 5.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 55.0\% |
| 1979-1984 | 82 | 56.1\% | 0.0\% | 0.0\% | 19.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 24.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1985-1995 | 362 | 15.7\% | 0.3\% | 2.8\% | 9.0\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 14.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 51.6\% |
| 1996-1998 | 574 | 10.8\% | 0.1\% | 6.3\% | 0.1\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 65.4\% |
| 1999-2008 | 599 | 12.8\% | 0.8\% | 5.5\% | 1.9\% | 9.5\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 4.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 61.1\% |

Appendix C.27. Percent distribution of Lower River Hatchery Tule reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | 396 | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.7\% | 1.3\% | 0.0\% | 3.3\% | 0.5\% | 7.6\% | 0.0\% | 18.7\% | 1.0\% | 12.1\% | 3.0\% | 10.1\% | 0.0\% | 5.6\% | 0.0\% | 19.4\% |
| 1981 | 2765 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.0\% | 0.3\% | 0.0\% | 1.8\% | 0.5\% | 2.5\% | 0.0\% | 21.5\% | 0.0\% | 8.1\% | 0.5\% | 3.4\% | 0.0\% | 1.3\% | 0.3\% | 28.6\% |
| 1982 | 3176 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 26.1\% | 0.5\% | 0.0\% | 0.9\% | 1.8\% | 0.3\% | 0.0\% | 18.6\% | 0.2\% | 7.6\% | 1.9\% | 1.3\% | 0.0\% | 14.1\% | 0.1\% | 26.5\% |
| 1983 | 1793 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 34.6\% | 0.4\% | 0.0\% | 1.4\% | 2.3\% | 0.8\% | 0.0\% | 11.3\% | 0.0\% | 4.4\% | 1.3\% | 4.2\% | 0.0\% | 5.5\% | 0.0\% | 33.6\% |
| 1984 | 1465 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 50.1\% | 0.3\% | 0.5\% | 0.8\% | 3.2\% | 1.6\% | 0.0\% | 5.9\% | 0.0\% | 1.2\% | 0.7\% | 1.0\% | 0.0\% | 10.7\% | 1.6\% | 22.5\% |
| 1985 | 995 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.0\% | 0.7\% | 0.0\% | 1.1\% | 0.9\% | 1.6\% | 0.0\% | 15.7\% | 0.3\% | 3.8\% | 1.3\% | 1.3\% | 0.0\% | 2.5\% | 0.6\% | 42.1\% |
| 1986 | 1341 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 9.4\% | 2.7\% | 0.0\% | 2.5\% | 0.0\% | 8.1\% | 0.0\% | 6.9\% | 0.0\% | 2.2\% | 1.4\% | 3.4\% | 0.0\% | 9.8\% | 5.9\% | 47.7\% |
| 1987 | 7478 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 26.9\% | 2.5\% | 0.0\% | 0.5\% | 1.6\% | 0.2\% | 0.0\% | 16.6\% | 0.5\% | 4.0\% | 0.7\% | 1.5\% | 0.0\% | 19.4\% | 4.0\% | 21.3\% |
| 1988 | 2511 | 0.3\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 29.0\% | 2.4\% | 0.0\% | 1.0\% | 0.6\% | 0.0\% | 0.0\% | 11.5\% | 0.5\% | 0.9\% | 0.3\% | 0.5\% | 0.0\% | 23.6\% | 1.8\% | 27.3\% |
| 1989 | 254 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 22.4\% | 0.0\% | 2.4\% | 0.0\% | 2.0\% | 0.0\% | 5.9\% | 0.8\% | 49.2\% |
| 1990 | 288 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 16.3\% | 0.0\% | 6.9\% | 0.0\% | 1.4\% | 0.0\% | 0.3\% | 2.8\% | 50.3\% |
| 1991 | 441 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.0\% | 2.0\% | 0.0\% | 0.7\% | 0.2\% | 2.5\% | 0.0\% | 9.3\% | 0.0\% | 4.3\% | 0.2\% | 1.1\% | 0.0\% | 2.0\% | 9.5\% | 58.0\% |
| 1992 | 1150 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.3\% | 1.9\% | 0.0\% | 0.0\% | 0.5\% | 1.0\% | 0.0\% | 28.0\% | 0.0\% | 5.4\% | 0.0\% | 1.9\% | 0.0\% | 0.8\% | 3.7\% | 40.5\% |
| 1993 | 486 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.5\% | 4.5\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 19.8\% | 0.0\% | 2.5\% | 0.0\% | 4.1\% | 0.0\% | 2.1\% | 4.3\% | 43.6\% |
| 1994 | 29 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.6\% | 0.0\% | 0.0\% | 10.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 62.1\% |
| 1995 | 30 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 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\% | 86.7\% |
| 1996 | 62 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 0.0\% | 85.5\% |
| 199 | 211 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.1\% | 4.7\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 8.5\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 8.5\% | 54.5\% |
| 1998 | 104 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.8\% | 1.0\% | 9.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 21.2\% | 60.6\% |
| 1999 | 307 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 9.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.8\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 6.2\% | 68.7\% |
| 2000 | 222 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.6\% | 12.2\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 2.7\% | 3.6\% | 59.0\% |
| 2001 | 1064 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.2\% | 2.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 19.3\% | 0.0\% | 3.6\% | 0.1\% | 0.3\% | 0.0\% | 1.4\% | 4.8\% | 59.8\% |
| 2002 | 1660 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.7\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.7\% | 0.0\% | 7.8\% | 0.1\% | 0.0\% | 0.0\% | 8.5\% | 3.1\% | 45.7\% |
| 2003 | 1699 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.2\% | 5.7\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 15.2\% | 0.0\% | 7.0\% | 0.0\% | 0.7\% | 0.0\% | 7.2\% | 2.3\% | 45.3\% |
| 2004 | 1446 | 0.5\% | 0.0\% | 0.0\% | 0.3\% | 0.3\% | 23.0\% | 8.6\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 8.5\% | 0.0\% | 3.7\% | 0.0\% | 0.1\% | 0.0\% | 16.9\% | 1.2\% | 36.4\% |
| 2005 | 552 | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 31.9\% | 7.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.1\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 16.8\% | 0.2\% | 34.1\% |
| 2006 | 82 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.1\% | 14.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.8\% | 1.2\% | 54.9\% |
| 2007 | 141 | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 14.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 5.0\% | 2.8\% | 69.5\% |
| 2008 | 345 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.9\% | 9.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 7.0\% | 0.0\% | 0.0\% | 0.0\% | 25.2\% | 3.5\% | 39.1\% |
| 1979-2008 | 1120 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 18.3\% | 3.7\% | 0.0\% | 1.0\% | 0.4\% | 1.0\% | 0.0\% | 11.4\% | 0.1\% | 3.7\% | 0.4\% | 1.4\% | 0.0\% | 7.4\% | 3.6\% | 47.3\% |
| 1979-1984 | 1919 | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 31.7\% | 0.6\% | 0.1\% | 1.6\% | 1.7\% | 2.6\% | 0.0\% | 15.2\% | 0.2\% | 6.7\% | 1.5\% | 4.0\% | 0.0\% | 7.4\% | 0.4\% | 26.1\% |
| 1985-1995 | 1364 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.3\% | 1.5\% | 0.0\% | 1.5\% | 0.4\% | 1.6\% | 0.0\% | 13.3\% | 0.1\% | 2.9\% | 0.4\% | 1.6\% | 0.0\% | 6.3\% | 3.9\% | 48.1\% |
| 1996-1998 | 126 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 6.0\% | 4.8\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 9.9\% | 66.9\% |
| 1999-2008 | 752 | 0.1\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 15.3\% | 7.2\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 9.2\% | 0.0\% | 3.7\% | 0.0\% | 0.2\% | 0.0\% | 9.7\% | 2.9\% | 51.3\% |

Appendix C.28. Percent distribution of Lower River Hatchery Tule total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | 709 | 0.4\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 33.0\% | 0.7\% | 0.0\% | 2.0\% | 0.8\% | 5.1\% | 0.0\% | 22.6\% | 0.7\% | 8.6\% | 2.7\% | 9.2\% | 0.0\% | 3.2\% | 0.0\% | 10.9\% |
| 1981 | 3307 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.8\% | 0.3\% | 0.0\% | 1.6\% | 0.5\% | 2.3\% | 0.0\% | 24.0\% | 0.0\% | 7.8\% | 0.6\% | 3.6\% | 0.0\% | 1.2\% | 0.3\% | 23.9\% |
| 1982 | 3679 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 29.2\% | 0.5\% | 0.0\% | 0.8\% | 2.0\% | 0.3\% | 0.0\% | 20.1\% | 0.2\% | 7.4\% | 2.1\% | 1.4\% | 0.0\% | 12.8\% | 0.1\% | 22.9\% |
| 1983 | 2036 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 36.5\% | 0.4\% | 0.0\% | 1.3\% | 2.5\% | 0.8\% | 0.0\% | 12.4\% | 0.0\% | 4.4\% | 1.6\% | 5.3\% | 0.0\% | 5.2\% | 0.0\% | 29.6\% |
| 1984 | 1631 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 51.8\% | 0.2\% | 0.5\% | 0.8\% | 3.4\% | 1.5\% | 0.0\% | 6.3\% | 0.0\% | 1.2\% | 0.9\% | 1.3\% | 0.0\% | 10.3\% | 1.5\% | 20.2\% |
| 1985 | 1104 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.1\% | 0.7\% | 0.0\% | 1.1\% | 0.9\% | 1.5\% | 0.0\% | 17.8\% | 0.3\% | 3.8\% | 1.4\% | 1.5\% | 0.0\% | 2.4\% | 0.5\% | 38.0\% |
| 1986 | 1880 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 8.9\% | 2.5\% | 0.0\% | 1.9\% | 0.0\% | 6.9\% | 0.0\% | 6.3\% | 0.0\% | 1.9\% | 1.9\% | 21.5\% | 0.0\% | 7.6\% | 6.4\% | 34.0\% |
| 1987 | 9048 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 33.0\% | 2.2\% | 0.0\% | 0.4\% | 1.9\% | 0.2\% | 0.0\% | 17.3\% | 0.5\% | 3.6\% | 0.6\% | 1.4\% | 0.0\% | 17.3\% | 3.5\% | 17.6\% |
| 1988 | 2694 | 0.3\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 31.7\% | 2.4\% | 0.0\% | 1.0\% | 0.6\% | 0.0\% | 0.0\% | 11.8\% | 0.5\% | 0.9\% | 0.3\% | 0.5\% | 0.0\% | 22.4\% | 1.9\% | 25.5\% |
| 1989 | 277 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 25.3\% | 0.0\% | 2.2\% | 0.0\% | 2.5\% | 0.0\% | 5.4\% | 0.7\% | 45.1\% |
| 1990 | 324 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 18.2\% | 0.0\% | 7.1\% | 0.0\% | 1.9\% | 0.0\% | 0.3\% | 3.1\% | 44.8\% |
| 1991 | 504 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.9\% | 2.2\% | 0.0\% | 1.0\% | 0.2\% | 2.4\% | 0.0\% | 10.9\% | 0.0\% | 4.8\% | 0.4\% | 2.6\% | 0.0\% | 2.0\% | 10.9\% | 50.8\% |
| 1992 | 1335 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.5\% | 1.8\% | 0.0\% | 0.0\% | 0.6\% | 0.8\% | 0.0\% | 30.3\% | 0.0\% | 5.2\% | 0.0\% | 2.0\% | 0.0\% | 0.7\% | 4.1\% | 34.9\% |
| 1993 | 532 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.9\% | 4.3\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 20.9\% | 0.0\% | 2.4\% | 0.0\% | 4.5\% | 0.0\% | 1.9\% | 4.5\% | 39.8\% |
| 1994 | 32 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.3\% | 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\% | 56.3\% |
| 1995 | 31 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 12.9\% | 83.9\% |
| 1996 | 62 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 0.0\% | 85.5\% |
| 1997 | 234 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.9\% | 4.3\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 9.0\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 9.8\% | 49.1\% |
| 1998 | 113 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 0.9\% | 10.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 23.0\% | 55.8\% |
| 1999 | 323 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 9.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.0\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 7.7\% | 65.3\% |
| 2000 | 248 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.1\% | 13.7\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 4.0\% | 0.0\% | 2.4\% | 4.0\% | 52.8\% |
| 2001 | 1164 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.2\% | 2.6\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 22.1\% | 0.0\% | 3.8\% | 0.1\% | 1.1\% | 0.0\% | 1.4\% | 5.8\% | 54.6\% |
| 2002 | 1815 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.7\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.5\% | 0.0\% | 8.2\% | 0.1\% | 0.0\% | 0.0\% | 8.3\% | 3.5\% | 41.8\% |
| 2003 | 1822 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.8\% | 6.6\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 17.2\% | 0.0\% | 7.2\% | 0.0\% | 0.9\% | 0.0\% | 7.1\% | 2.5\% | 42.3\% |
| 2004 | 1505 | 0.5\% | 0.0\% | 0.0\% | 0.3\% | 0.3\% | 22.7\% | 9.5\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 9.2\% | 0.0\% | 3.9\% | 0.0\% | 0.1\% | 0.0\% | 16.6\% | 1.3\% | 35.0\% |
| 2005 | 570 | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 31.8\% | 8.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.5\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 16.7\% | 0.2\% | 33.0\% |
| 2006 | 85 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.6\% | 16.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.4\% | 1.2\% | 52.9\% |
| 2007 | 148 | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 15.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.8\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 3.4\% | 66.2\% |
| 2008 | 372 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.8\% | 10.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 0.0\% | 7.3\% | 0.0\% | 0.0\% | 0.0\% | 25.3\% | 4.3\% | 36.3\% |
| 1979-2008 | 1296 | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 20.3\% | 3.9\% | 0.0\% | 1.1\% | 0.5\% | 0.9\% | 0.0\% | 12.6\% | 0.1\% | 3.6\% | 0.4\% | 2.3\% | 0.0\% | 6.9\% | 4.0\% | 43.1\% |
| 1979-1984 | 2272 | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 36.9\% | 0.4\% | 0.1\% | 1.3\% | 1.8\% | 2.0\% | 0.0\% | 17.1\% | 0.2\% | 5.9\% | 1.6\% | 4.2\% | 0.0\% | 6.5\% | 0.4\% | 21.5\% |
| 1985-1995 | 1615 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.6\% | 1.5\% | 0.0\% | 1.6\% | 0.5\% | 1.4\% | 0.0\% | 14.4\% | 0.1\% | 2.9\% | 0.4\% | 3.5\% | 0.0\% | 5.8\% | 4.4\% | 42.8\% |
| 1996-1998 | 136 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 7.3\% | 5.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 6.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 10.9\% | 63.5\% |
| 1999-2008 | 805 | 0.1\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 15.4\% | 8.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 10.4\% | 0.0\% | 3.9\% | 0.0\% | 0.6\% | 0.0\% | 9.6\% | 3.4\% | 48.0\% |

Appendix C.29. Percent distribution of Lewis River Wild reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | 1125 | 6.4\% | 0.0\% | 0.0\% | 3.3\% | 2.1\% | 6.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.9\% | 0.0\% | 2.1\% | 0.0\% | 2.6\% | 0.1\% | 0.2\% | 0.0\% | 4.1\% | 13.2\% | 57.7\% |
| 1982 | 924 | 6.0\% | 1.3\% | 0.2\% | 3.0\% | 0.0\% | 10.7\% | 0.0\% | 0.4\% | 0.0\% | 1.4\% | 1.5\% | 0.0\% | 4.1\% | 0.9\% | 7.5\% | 0.6\% | 0.8\% | 0.0\% | 4.7\% | 15.3\% | 41.7\% |
| 1983 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | 635 | 4.9\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 6.8\% | 2.5\% | 0.0\% | 0.0\% | 2.2\% | 0.9\% | 0.0\% | 3.3\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 26.6\% | 11.5\% | 39.1\% |
| 1987 | 1099 | 4.1\% | 0.0\% | 0.0\% | 4.7\% | 0.0\% | 8.4\% | 0.9\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 2.7\% | 0.4\% | 0.9\% | 0.0\% | 0.3\% | 0.0\% | 25.3\% | 5.1\% | 46.0\% |
| 1988 | 923 | 4.4\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 8.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 4.6\% | 0.0\% | 1.1\% | 0.0\% | 1.1\% | 0.0\% | 23.1\% | 14.5\% | 38.8\% |
| 1989 | 1280 | 1.8\% | 0.2\% | 0.2\% | 4.5\% | 0.5\% | 5.1\% | 0.5\% | 0.0\% | 0.0\% | 0.2\% | 1.5\% | 0.0\% | 4.9\% | 0.2\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 9.2\% | 6.6\% | 63.9\% |
| 1990 | 1138 | 5.4\% | 0.0\% | 0.0\% | 1.7\% | 0.6\% | 12.1\% | 0.8\% | 0.0\% | 0.0\% | 0.4\% | 0.6\% | 0.0\% | 4.0\% | 0.0\% | 1.8\% | 0.0\% | 1.1\% | 0.0\% | 3.3\% | 2.2\% | 65.8\% |
| 1991 | 884 | 6.0\% | 0.1\% | 0.0\% | 3.8\% | 1.1\% | 5.9\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.7\% | 0.0\% | 2.4\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 15.8\% | 6.0\% | 56.6\% |
| 1992 | 552 | 1.6\% | 0.0\% | 0.0\% | 3.8\% | 0.7\% | 6.2\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.7\% | 0.0\% | 0.9\% | 0.0\% | 4.5\% | 21.7\% | 55.1\% |
| 1993 | 384 | 3.6\% | 0.0\% | 1.0\% | 4.9\% | 0.0\% | 7.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.8\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 6.8\% | 8.6\% | 64.3\% |
| 1994 | 250 | 6.4\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 83.2\% |
| 1995 | 528 | 6.6\% | 0.0\% | 2.3\% | 3.2\% | 0.0\% | 5.3\% | 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\% | 24.6\% | 57.6\% |
| 1996 | 324 | 7.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 4.6\% | 84.0\% |
| 1997 | 222 | 12.6\% | 0.0\% | 0.0\% | 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\% | 3.2\% | 81.1\% |
| 1998 | 101 | 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\% | 2.0\% | 2.0\% | 83.2\% |
| 1999 | 53 | 11.3\% | 0.0\% | 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\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 79.2\% |
| 2000 | 67 | 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\% | 16.4\% | 3.0\% | 77.6\% |
| 2001 | 223 | 4.9\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 8.5\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.8\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 3.1\% | 69.1\% |
| 2002 | 361 | 11.4\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 6.1\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 2.5\% | 60.9\% |
| 2003 | 459 | 9.4\% | 0.0\% | 0.0\% | 1.5\% | 1.1\% | 5.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.4\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 6.8\% | 5.9\% | 58.8\% |
| 2004 | 2145 | 6.0\% | 0.0\% | 0.5\% | 3.0\% | 0.7\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 1.9\% | 82.6\% |
| 2005 | 373 | 3.5\% | 0.0\% | 0.0\% | 12.1\% | 6.2\% | 4.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 12.1\% | 8.8\% | 50.7\% |
| 2006 | 574 | 13.6\% | 0.0\% | 0.5\% | 6.4\% | 1.6\% | 8.5\% | 0.9\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% | 19.0\% | 39.9\% |
| 2007 | 188 | 33.0\% | 0.0\% | 1.1\% | 6.4\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.9\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 44.1\% |
| 2008 | 125 | 7.2\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 13.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.6\% | 0.0\% | 0.8\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 5.6\% | 60.8\% |
| 1979-2008 | 597 | 7.6\% | 0.1\% | 0.4\% | 3.5\% | 0.7\% | 5.4\% | 0.6\% | 0.0\% | 0.1\% | 0.4\% | 0.4\% | 0.0\% | 2.9\% | 0.1\% | 1.1\% | 0.0\% | 0.3\% | 0.0\% | 7.3\% | 7.6\% | 61.7\% |
| 1979-1984 | 1024 | 6.2\% | 0.6\% | 0.1\% | 3.2\% | 1.1\% | 8.3\% | 0.0\% | 0.2\% | 0.0\% | 1.4\% | 1.2\% | 0.0\% | 3.1\% | 0.4\% | 5.0\% | 0.4\% | 0.5\% | 0.0\% | 4.4\% | 14.2\% | 49.7\% |
| 1985-1995 | 767 | 4.5\% | 0.0\% | 0.4\% | 3.4\% | 0.3\% | 6.9\% | 0.5\% | 0.0\% | 0.0\% | 0.6\% | 0.8\% | 0.0\% | 2.6\% | 0.1\% | 0.8\% | 0.0\% | 0.3\% | 0.0\% | 11.6\% | 10.1\% | 57.0\% |
| 1996-1998 | 216 | 9.4\% | 0.0\% | 0.0\% | 2.7\% | 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\% | 1.0\% | 3.3\% | 82.7\% |
| 1999-2008 | 457 | 10.3\% | 0.0\% | 0.5\% | 3.9\% | 1.3\% | 5.0\% | 1.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 1.1\% | 0.0\% | 0.3\% | 0.0\% | 5.4\% | 5.0\% | 62.4\% |

Appendix C.30. Percent distribution of Lewis River Wild total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | 1221 | 7.2\% | 0.0\% | 0.0\% | 3.8\% | 2.1\% | 7.5\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 1.0\% | 0.0\% | 2.5\% | 0.0\% | 2.9\% | 0.2\% | 0.2\% | 0.0\% | 4.0\% | 13.8\% | 53.2\% |
| 1982 | 988 | 7.2\% | 1.2\% | 0.2\% | 3.5\% | 0.0\% | 11.6\% | 0.0\% | 0.4\% | 0.0\% | 1.6\% | 1.4\% | 0.0\% | 4.3\% | 0.8\% | 7.5\% | 0.6\% | 0.8\% | 0.0\% | 4.6\% | 15.3\% | 39.0\% |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | 686 | 6.1\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 8.0\% | 2.6\% | 0.0\% | 0.0\% | 2.2\% | 1.0\% | 0.0\% | 3.8\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 25.7\% | 11.7\% | 36.2\% |
| 1987 | 1182 | 5.6\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 9.6\% | 0.9\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 2.9\% | 0.4\% | 0.9\% | 0.0\% | 0.3\% | 0.0\% | 24.5\% | 5.3\% | 42.7\% |
| 1988 | 1010 | 5.1\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 10.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 5.0\% | 0.0\% | 1.1\% | 0.0\% | 1.4\% | 0.0\% | 22.0\% | 15.2\% | 35.4\% |
| 1989 | 1353 | 2.4\% | 0.7\% | 0.3\% | 5.1\% | 0.4\% | 5.8\% | 0.5\% | 0.0\% | 0.0\% | 0.2\% | 1.6\% | 0.0\% | 5.4\% | 0.3\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 9.0\% | 7.1\% | 60.5\% |
| 1990 | 1214 | 7.5\% | 0.0\% | 0.0\% | 1.9\% | 0.6\% | 13.4\% | 0.8\% | 0.0\% | 0.0\% | 0.5\% | 0.7\% | 0.0\% | 4.2\% | 0.0\% | 1.9\% | 0.0\% | 1.3\% | 0.0\% | 3.2\% | 2.3\% | 61.7\% |
| 1991 | 921 | 7.1\% | 0.2\% | 0.0\% | 4.1\% | 1.2\% | 6.4\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.7\% | 0.0\% | 2.5\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 15.4\% | 6.6\% | 54.3\% |
| 1992 | 582 | 1.7\% | 0.0\% | 0.0\% | 4.3\% | 0.7\% | 6.7\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 0.7\% | 0.0\% | 1.0\% | 0.0\% | 4.5\% | 23.2\% | 52.2\% |
| 1993 | 405 | 4.4\% | 0.0\% | 1.2\% | 5.7\% | 0.0\% | 8.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 1.5\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 6.7\% | 8.9\% | 61.0\% |
| 1994 | 265 | 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\% | 1.5\% | 0.0\% | 78.5\% |
| 1995 | 564 | 7.6\% | 0.0\% | 2.3\% | 3.9\% | 0.0\% | 6.4\% | 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\% | 25.4\% | 53.9\% |
| 1996 | 332 | 9.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 4.8\% | 81.9\% |
| 1997 | 227 | 14.1\% | 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\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 79.3\% |
| 1998 | 101 | 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\% | 2.0\% | 2.0\% | 83.2\% |
| 1999 | 62 | 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\% | 67.7\% |
| 2000 | 73 | 6.8\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.1\% | 2.7\% | 71.2\% |
| 2001 | 237 | 5.9\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 8.9\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 3.4\% | 65.0\% |
| 2002 | 392 | 14.5\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 5.9\% | 5.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.6\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 2.6\% | 56.1\% |
| 2003 | 478 | 10.5\% | 0.0\% | 0.0\% | 1.7\% | 1.3\% | 5.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.3\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 6.1\% | 56.5\% |
| 2004 | 2181 | 6.6\% | 0.0\% | 0.6\% | 3.3\% | 0.9\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 2.0\% | 81.2\% |
| 2005 | 394 | 4.1\% | 0.0\% | 0.0\% | 12.9\% | 7.4\% | 4.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 11.7\% | 9.1\% | 48.0\% |
| 2006 | 599 | 14.5\% | 0.0\% | 0.5\% | 6.5\% | 1.8\% | 8.3\% | 1.0\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 5.5\% | 19.7\% | 38.2\% |
| 2007 | 208 | 38.0\% | 0.0\% | 1.0\% | 6.3\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.2\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 39.9\% |
| 2008 | 131 | 8.4\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 13.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 0.0\% | 0.8\% | 0.0\% | 3.8\% | 0.0\% | 0.0\% | 6.1\% | 58.0\% |
| 1979-2008 | 632 | 9.2\% | 0.1\% | 0.5\% | 3.8\% | 0.8\% | 6.0\% | 0.7\% | 0.0\% | 0.1\% | 0.4\% | 0.4\% | 0.0\% | 3.3\% | 0.1\% | 1.2\% | 0.0\% | 0.4\% | 0.0\% | 7.0\% | 7.9\% | 58.2\% |
| 1979-1984 | 1104 | 7.2\% | 0.6\% | 0.1\% | 3.7\% | 1.1\% | 9.6\% | 0.0\% | 0.2\% | 0.0\% | 1.6\% | 1.2\% | 0.0\% | 3.4\% | 0.4\% | 5.2\% | 0.4\% | 0.5\% | 0.0\% | 4.3\% | 14.5\% | 46.1\% |
| 1985-1995 | 818 | 5.7\% | 0.1\% | 0.4\% | 4.1\% | 0.3\% | 7.9\% | 0.5\% | 0.0\% | 0.0\% | 0.7\% | 0.8\% | 0.0\% | 2.9\% | 0.1\% | 0.8\% | 0.0\% | 0.4\% | 0.0\% | 11.2\% | 10.6\% | 53.6\% |
| 1996-1998 | 220 | 10.4\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 3.4\% | 81.5\% |
| 1999-2008 | 476 | 12.7\% | 0.0\% | 0.8\% | 3.9\% | 1.4\% | 5.2\% | 1.3\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% | 0.0\% | 1.1\% | 0.0\% | 0.4\% | 0.0\% | 5.1\% | 5.2\% | 58.2\% |

Appendix C.31. Percent distribution of Lyons Ferry reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | 797 | 2.8\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 18.7\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 1.0\% | 0.0\% | 10.5\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 29.7\% | 3.6\% | 29.5\% |
| 1989 | 683 | 2.8\% | 0.0\% | 0.0\% | 6.3\% | 0.0\% | 16.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 12.3\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 27.2\% | 3.1\% | 26.5\% |
| 1990 | 622 | 5.3\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 16.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 9.6\% | 0.0\% | 3.4\% | 0.0\% | 1.4\% | 0.0\% | 26.4\% | 1.0\% | 32.8\% |
| 1991 | 225 | 2.7\% | 0.0\% | 1.8\% | 4.9\% | 0.0\% | 8.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 4.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 12.9\% | 1.3\% | 60.9\% |
| 1992 | 168 | 1.2\% | 1.2\% | 0.0\% | 3.6\% | 0.0\% | 10.1\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 6.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.3\% | 1.8\% | 62.5\% |
| 1993 | 252 | 3.6\% | 0.0\% | 0.0\% | 4.4\% | 0.0\% | 10.3\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 2.0\% | 0.0\% | 7.9\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 13.9\% | 0.0\% | 55.6\% |
| 1994 | 628 | 5.6\% | 0.5\% | 1.3\% | 5.6\% | 0.0\% | 6.5\% | 0.0\% | 0.0\% | 0.6\% | 0.6\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.6\% | 0.5\% | 61.6\% |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1997 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1998 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1999 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2000 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2001 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | 398 | 6.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 11.3\% | 3.5\% | 71.1\% |
| 2004 | 787 | 2.4\% | 0.0\% | 0.0\% | 1.4\% | 1.4\% | 1.7\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 2.5\% | 77.8\% |
| 2005 | 436 | 3.4\% | 0.2\% | 0.0\% | 3.2\% | 1.4\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 2.5\% | 0.0\% | 1.6\% | 0.0\% | 13.1\% | 0.9\% | 66.1\% |
| 2006 | 349 | 4.3\% | 0.0\% | 0.0\% | 0.6\% | 2.9\% | 0.9\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 7.7\% | 1.1\% | 73.4\% |
| 2007 | 2601 | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 1.1\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.5\% | 0.0\% | 0.1\% | 0.0\% | 2.3\% | 2.0\% | 93.3\% |
| 2008 | 5182 | 0.3\% | 0.0\% | 0.0\% | 0.2\% | 0.3\% | 4.7\% | 1.9\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 0.0\% | 1.8\% | 0.0\% | 0.1\% | 0.0\% | 6.7\% | 1.7\% | 79.2\% |
| 1979-2008 | 1010 | 3.2\% | 0.1\% | 0.2\% | 2.8\% | 0.5\% | 7.7\% | 0.6\% | 0.0\% | 0.1\% | 0.2\% | 0.9\% | 0.0\% | 5.7\% | 0.0\% | 1.5\% | 0.0\% | 0.2\% | 0.0\% | 13.8\% | 1.8\% | 60.8\% |
| 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\% |
| 1985-1995 | 482 | 3.4\% | 0.2\% | 0.4\% | 4.5\% | 0.0\% | 12.4\% | 0.6\% | 0.0\% | 0.1\% | 0.3\% | 1.6\% | 0.0\% | 7.2\% | 0.0\% | 1.4\% | 0.0\% | 0.2\% | 0.0\% | 19.0\% | 1.6\% | 47.1\% |
| 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\% |
| 1999-2008 | 1626 | 2.9\% | 0.0\% | 0.0\% | 0.9\% | 1.0\% | 2.2\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 0.0\% | 1.6\% | 0.0\% | 0.3\% | 0.0\% | 7.6\% | 2.0\% | 76.8\% |

Appendix C.32. Percent distribution of Lyons Ferry total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | 874 | 3.1\% | 0.0\% | 0.1\% | 4.0\% | 0.0\% | 21.2\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.9\% | 0.0\% | 11.4\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 27.8\% | 3.5\% | 26.9\% |
| 1989 | 757 | 3.8\% | 0.0\% | 0.0\% | 7.0\% | 0.0\% | 18.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 12.9\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 25.5\% | 3.2\% | 23.9\% |
| 1990 | 651 | 5.5\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 17.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 10.0\% | 0.0\% | 3.5\% | 0.0\% | 1.7\% | 0.0\% | 25.7\% | 1.1\% | 31.3\% |
| 1991 | 239 | 3.3\% | 0.0\% | 2.5\% | 5.4\% | 0.0\% | 10.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 4.6\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 12.6\% | 1.3\% | 57.3\% |
| 1992 | 197 | 1.5\% | 8.1\% | 0.0\% | 4.1\% | 0.0\% | 11.7\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 6.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.6\% | 2.0\% | 53.3\% |
| 1993 | 277 | 5.4\% | 0.7\% | 0.4\% | 5.8\% | 0.0\% | 11.6\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 1.8\% | 0.0\% | 7.9\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 13.4\% | 0.0\% | 50.5\% |
| 1994 | 658 | 6.4\% | 1.2\% | 1.2\% | 5.5\% | 0.0\% | 6.8\% | 0.0\% | 0.0\% | 0.6\% | 0.6\% | 3.2\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 14.4\% | 0.6\% | 58.8\% |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1997 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1998 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1999 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2000 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2001 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | 423 | 7.8\% | 0.0\% | 0.0\% | 0.5\% | 0.2\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 0.0\% | 1.4\% | 0.0\% | 0.2\% | 0.0\% | 11.3\% | 4.5\% | 66.9\% |
| 2004 | 812 | 2.7\% | 0.0\% | 0.0\% | 1.6\% | 1.8\% | 1.6\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% | 0.0\% | 2.0\% | 0.0\% | 0.2\% | 0.0\% | 4.9\% | 2.8\% | 75.4\% |
| 2005 | 457 | 3.9\% | 0.2\% | 0.0\% | 3.5\% | 1.8\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 2.6\% | 0.0\% | 2.6\% | 0.0\% | 13.1\% | 1.1\% | 63.0\% |
| 2006 | 364 | 5.2\% | 0.0\% | 0.0\% | 0.5\% | 3.6\% | 0.8\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.1\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 7.7\% | 1.4\% | 70.3\% |
| 2007 | 2726 | 0.1\% | 0.0\% | 0.0\% | 0.3\% | 0.5\% | 1.6\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.8\% | 0.0\% | 1.9\% | 0.0\% | 2.6\% | 2.9\% | 89.0\% |
| 2008 | 5322 | 0.5\% | 0.0\% | 0.0\% | 0.2\% | 0.4\% | 4.8\% | 2.1\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 0.0\% | 1.9\% | 0.0\% | 0.1\% | 0.0\% | 7.0\% | 2.2\% | 77.1\% |
| 1979-2008 | 1058 | 3.8\% | 0.8\% | 0.3\% | 3.2\% | 0.6\% | 8.5\% | 0.7\% | 0.0\% | 0.1\% | 0.2\% | 0.9\% | 0.0\% | 6.2\% | 0.0\% | 1.6\% | 0.0\% | 0.5\% | 0.0\% | 13.3\% | 2.0\% | 57.2\% |
| 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\% |
| 1985-1995 | 522 | 4.2\% | 1.4\% | 0.6\% | 5.1\% | 0.0\% | 13.8\% | 0.6\% | 0.0\% | 0.1\% | 0.3\% | 1.7\% | 0.0\% | 7.6\% | 0.0\% | 1.5\% | 0.0\% | 0.3\% | 0.0\% | 18.1\% | 1.7\% | 43.2\% |
| 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\% |
| 1999-2008 | 1684 | 3.4\% | 0.0\% | 0.0\% | 1.1\% | 1.4\% | 2.3\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% | 0.0\% | 1.7\% | 0.0\% | 0.9\% | 0.0\% | 7.8\% | 2.5\% | 73.6\% |

Appendix C.33. Percent distribution of Nanaimo River Fall reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | 515 | 4.1\% | 0.0\% | 0.0\% | 1.9\% | 2.7\% | 1.7\% | 0.8\% | 1.0\% | 36.3\% | 12.8\% | 20.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 1.0\% | 0.0\% | 0.0\% | 5.6\% | 11.7\% |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | 741 | 0.3\% | 0.3\% | 0.0\% | 0.8\% | 2.2\% | 0.5\% | 0.9\% | 6.1\% | 34.0\% | 0.8\% | 11.5\% | 0.0\% | 0.8\% | 0.1\% | 0.0\% | 2.8\% | 0.7\% | 0.0\% | 0.0\% | 7.8\% | 30.4\% |
| 1992 | 1600 | 0.1\% | 0.0\% | 0.0\% | 0.8\% | 3.2\% | 5.4\% | 0.3\% | 7.3\% | 30.4\% | 1.3\% | 7.2\% | 0.0\% | 0.4\% | 0.0\% | 0.1\% | 0.8\% | 0.6\% | 0.0\% | 0.0\% | 1.2\% | 40.8\% |
| 1993 | 1331 | 0.1\% | 0.2\% | 0.0\% | 1.5\% | 1.9\% | 2.5\% | 0.5\% | 4.8\% | 48.9\% | 1.1\% | 5.2\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.2\% | 1.1\% | 0.0\% | 0.0\% | 2.9\% | 28.6\% |
| 1994 | 397 | 0.5\% | 0.0\% | 0.0\% | 0.8\% | 2.3\% | 4.0\% | 1.3\% | 0.8\% | 24.7\% | 0.0\% | 8.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.8\% | 55.4\% |
| 1995 | 1199 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 1.2\% | 0.9\% | 0.0\% | 15.4\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.3\% | 4.1\% | 74.1\% |
| 1996 | 723 | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.6\% | 0.0\% | 54.8\% | 0.0\% | 2.4\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.6\% | 2.6\% | 0.0\% | 4.6\% | 5.1\% | 27.5\% |
| 1997 | 223 | 6.3\% | 0.0\% | 0.0\% | 3.6\% | 0.0\% | 1.3\% | 0.4\% | 0.0\% | 31.4\% | 2.2\% | 1.3\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 4.0\% | 3.1\% | 0.0\% | 0.0\% | 3.1\% | 41.7\% |
| 1998 | 189 | 1.1\% | 3.7\% | 0.0\% | 5.3\% | 3.2\% | 0.5\% | 0.0\% | 0.0\% | 18.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 14.3\% | 51.9\% |
| 1999 | 251 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 2.4\% | 0.0\% | 23.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 2.0\% | 0.0\% | 1.2\% | 2.8\% | 62.9\% |
| 2000 | 162 | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 6.2\% | 0.0\% | 23.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.6\% | 17.9\% | 42.6\% |
| 2001 | 290 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 7.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 0.0\% | 3.4\% | 0.0\% | 83.8\% |
| 2002 | 767 | 0.3\% | 0.1\% | 0.0\% | 0.0\% | 0.9\% | 1.2\% | 0.0\% | 0.0\% | 33.2\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 3.0\% | 0.0\% | 4.8\% | 0.3\% | 53.7\% |
| 2003 | 754 | 0.5\% | 0.3\% | 0.0\% | 0.0\% | 5.6\% | 3.8\% | 0.7\% | 0.0\% | 15.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 1.6\% | 1.6\% | 0.0\% | 1.1\% | 0.3\% | 68.2\% |
| 2004 | 805 | 1.2\% | 0.0\% | 0.0\% | 0.6\% | 6.3\% | 5.2\% | 2.0\% | 0.0\% | 8.6\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 1.5\% | 2.1\% | 0.0\% | 6.1\% | 1.2\% | 64.2\% |
| 2005 | 494 | 0.6\% | 0.0\% | 0.6\% | 1.6\% | 9.1\% | 6.5\% | 1.6\% | 0.0\% | 6.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.8\% | 0.0\% | 20.0\% | 0.0\% | 50.2\% |
| 2006 | 1216 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.8\% | 0.0\% | 4.8\% | 0.0\% | 92.5\% |
| 2007 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2008 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1979-2008 | 686 | 1.0\% | 0.3\% | 0.0\% | 1.0\% | 2.5\% | 2.3\% | 1.1\% | 1.2\% | 24.3\% | 1.1\% | 3.5\% | 0.0\% | 0.2\% | 0.1\% | 0.0\% | 1.4\% | 1.3\% | 0.0\% | 3.1\% | 4.0\% | 51.8\% |
| 1979-1984 | 515 | 4.1\% | 0.0\% | 0.0\% | 1.9\% | 2.7\% | 1.7\% | 0.8\% | 1.0\% | 36.3\% | 12.8\% | 20.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 1.0\% | 0.0\% | 0.0\% | 5.6\% | 11.7\% |
| 1985-1995 | 1054 | 0.2\% | 0.1\% | 0.0\% | 0.8\% | 2.1\% | 2.7\% | 0.8\% | 3.8\% | 30.7\% | 0.6\% | 6.8\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.8\% | 0.9\% | 0.0\% | 0.1\% | 3.3\% | 45.9\% |
| 1996-1998 | 378 | 2.4\% | 1.5\% | 0.0\% | 3.0\% | 1.4\% | 0.6\% | 0.3\% | 0.0\% | 34.7\% | 0.7\% | 1.6\% | 0.0\% | 0.1\% | 0.4\% | 0.0\% | 1.5\% | 1.9\% | 0.0\% | 1.9\% | 7.5\% | 40.4\% |
| 1999-2008 | 592 | 0.5\% | 0.0\% | 0.1\% | 0.3\% | 3.0\% | 2.6\% | 1.6\% | 0.0\% | 14.9\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 1.9\% | 1.3\% | 0.0\% | 5.9\% | 2.8\% | 64.8\% |

Appendix C.34. Percent distribution of Nanaimo River Fall total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | 539 | 4.3\% | 0.0\% | 0.0\% | 1.9\% | 2.8\% | 1.7\% | 0.7\% | 1.1\% | 37.3\% | 12.8\% | 19.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 1.1\% | 0.0\% | 0.0\% | 5.8\% | 11.1\% |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | 978 | 0.2\% | 0.4\% | 0.0\% | 0.9\% | 2.6\% | 2.1\% | 0.8\% | 8.4\% | 37.7\% | 1.2\% | 9.9\% | 0.0\% | 0.8\% | 0.2\% | 0.0\% | 3.3\% | 1.0\% | 0.0\% | 0.0\% | 7.4\% | 23.0\% |
| 1992 | 1942 | 0.2\% | 0.0\% | 0.0\% | 1.0\% | 3.4\% | 6.1\% | 0.3\% | 9.8\% | 33.7\% | 1.5\% | 6.6\% | 0.0\% | 0.5\% | 0.0\% | 0.1\% | 0.9\% | 0.9\% | 0.0\% | 0.0\% | 1.3\% | 33.6\% |
| 1993 | 1597 | 0.1\% | 0.3\% | 0.0\% | 1.8\% | 1.8\% | 2.8\% | 0.5\% | 6.3\% | 52.1\% | 1.4\% | 4.5\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.2\% | 1.0\% | 0.0\% | 0.0\% | 2.9\% | 23.9\% |
| 1994 | 448 | 0.7\% | 0.0\% | 0.0\% | 0.9\% | 2.7\% | 4.5\% | 1.3\% | 0.9\% | 28.6\% | 0.0\% | 8.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.9\% | 49.1\% |
| 1995 | 1342 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 1.8\% | 1.0\% | 0.0\% | 18.6\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 0.3\% | 5.1\% | 66.2\% |
| 1996 | 883 | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.8\% | 0.3\% | 0.5\% | 0.0\% | 58.4\% | 0.0\% | 2.5\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.6\% | 3.3\% | 0.0\% | 4.0\% | 5.4\% | 22.5\% |
| 1997 | 264 | 6.8\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 1.5\% | 0.4\% | 0.0\% | 33.3\% | 2.3\% | 2.3\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 4.9\% | 4.2\% | 0.0\% | 0.0\% | 3.4\% | 35.2\% |
| 1998 | 226 | 1.3\% | 5.8\% | 0.0\% | 6.2\% | 4.4\% | 0.4\% | 0.0\% | 0.0\% | 20.8\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 15.5\% | 43.4\% |
| 1999 | 275 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 2.2\% | 0.0\% | 26.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 3.3\% | 0.0\% | 1.1\% | 3.3\% | 57.5\% |
| 2000 | 175 | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 6.3\% | 0.0\% | 25.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 20.0\% | 39.4\% |
| 2001 | 401 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 1.2\% | 0.0\% | 0.0\% | 17.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% | 10.7\% | 0.0\% | 3.0\% | 0.0\% | 60.6\% |
| 2002 | 892 | 0.4\% | 0.1\% | 0.0\% | 0.0\% | 1.9\% | 1.3\% | 0.0\% | 0.0\% | 35.4\% | 0.0\% | 2.7\% | 0.0\% | 0.1\% | 0.2\% | 0.0\% | 2.7\% | 4.0\% | 0.0\% | 4.5\% | 0.3\% | 46.2\% |
| 2003 | 834 | 0.6\% | 0.4\% | 0.1\% | 0.2\% | 7.3\% | 4.0\% | 0.8\% | 0.0\% | 17.4\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.6\% | 0.0\% | 2.0\% | 3.0\% | 0.0\% | 1.4\% | 0.4\% | 61.6\% |
| 2004 | 865 | 1.4\% | 0.0\% | 0.0\% | 0.7\% | 8.4\% | 5.1\% | 2.2\% | 0.0\% | 9.8\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 1.5\% | 2.8\% | 0.0\% | 6.0\% | 1.4\% | 59.8\% |
| 2005 | 517 | 0.6\% | 0.0\% | 0.6\% | 1.5\% | 10.8\% | 6.2\% | 1.7\% | 0.0\% | 7.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 1.0\% | 0.0\% | 19.9\% | 0.0\% | 48.0\% |
| 2006 | 1311 | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 0.6\% | 0.5\% | 0.5\% | 0.0\% | 4.8\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.6\% | 1.7\% | 0.0\% | 4.9\% | 0.2\% | 85.8\% |
| 2007 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2008 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1979-2008 | 793 | 1.1\% | 0.5\% | 0.0\% | 1.1\% | 3.1\% | 2.5\% | 1.1\% | 1.6\% | 27.3\% | 1.1\% | 3.6\% | 0.0\% | 0.2\% | 0.1\% | 0.0\% | 1.7\% | 2.5\% | 0.0\% | 3.0\% | 4.3\% | 45.1\% |
| 1979-1984 | 539 | 4.3\% | 0.0\% | 0.0\% | 1.9\% | 2.8\% | 1.7\% | 0.7\% | 1.1\% | 37.3\% | 12.8\% | 19.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 1.1\% | 0.0\% | 0.0\% | 5.8\% | 11.1\% |
| 1985-1995 | 1261 | 0.2\% | 0.1\% | 0.0\% | 0.9\% | 2.4\% | 3.5\% | 0.8\% | 5.1\% | $34.2 \%$ | 0.8\% | 6.6\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.9\% | 1.4\% | 0.0\% | 0.1\% | 3.5\% | 39.2\% |
| 1996-1998 | 458 | 2.7\% | 2.4\% | 0.0\% | 3.5\% | 1.7\% | 0.8\% | 0.3\% | 0.0\% | 37.5\% | 0.8\% | 2.0\% | 0.0\% | 0.1\% | 0.5\% | 0.0\% | 1.8\% | 2.5\% | 0.0\% | 1.6\% | 8.1\% | 33.7\% |
| 1999-2008 | 659 | 0.6\% | 0.1\% | 0.1\% | 0.3\% | 4.0\% | 2.6\% | 1.7\% | 0.0\% | 18.0\% | 0.0\% | 0.3\% | 0.0\% | 0.2\% | 0.1\% | 0.0\% | 2.3\% | 3.3\% | 0.0\% | 5.7\% | 3.2\% | 57.4\% |

Appendix C.35. Percent distribution of Nicola River Spring reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | 2149 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 3.1\% | 0.7\% | 0.0\% | 3.6\% | 0.0\% | 0.7\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 38.8\% | 52.4\% |
| 1995 | 2622 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.6\% | 1.1\% | 0.3\% | 0.0\% | 2.4\% | 0.0\% | 8.4\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 3.9\% | 82.6\% |
| 1996 | 355 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 16.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 80.8\% |
| 1997 | 234 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 0.0\% | 14.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 0.0\% | 0.0\% | 5.6\% | 69.7\% |
| 1998 | 973 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 19.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.9\% | 71.5\% |
| 1999 | 3011 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 25.3\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 71.9\% |
| 2000 | 2200 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 29.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.0\% | 62.5\% |
| 2001 | 2150 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.1\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 7.3\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.3\% | 83.7\% |
| 2002 | 2110 | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.3\% | 0.8\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 3.8\% | 0.0\% | 0.7\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 89.4\% |
| 2003 | 2207 | 0.1\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.7\% | 0.4\% | 0.0\% | 1.9\% | 0.0\% | 20.8\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.2\% | 68.8\% |
| 2004 | 436 | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 3.4\% | 0.0\% | 23.9\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 68.1\% |
| 2005 | 458 | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 5.2\% | 0.0\% | 25.3\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.4\% | 52.4\% |
| 2006 | 448 | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 18.5\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.7\% | 67.0\% |
| 2007 | 133 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.8\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.3\% | 46.6\% |
| 2008 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1979-2008 | 1392 | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.3\% | 1.4\% | 0.1\% | 0.0\% | 2.5\% | 0.0\% | 16.8\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 8.4\% | 69.1\% |
| 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\% |
| 1985-1995 | 2386 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.4\% | 2.1\% | 0.5\% | 0.0\% | 3.0\% | 0.0\% | 4.5\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 21.3\% | 67.5\% |
| 1996-1998 | 521 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 16.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 4.3\% | 74.0\% |
| 1999-2008 | 1461 | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.2\% | 1.7\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 19.6\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.9\% | 67.8\% |

Appendix C.36. Percent distribution of Nicola River Spring total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | 2229 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 3.2\% | 0.8\% | 0.0\% | 4.0\% | 0.0\% | 0.7\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 40.0\% | 50.5\% |
| 1995 | 2697 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.7\% | 1.3\% | 0.4\% | 0.0\% | 2.6\% | 0.0\% | 9.8\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 4.0\% | 80.3\% |
| 1996 | 366 | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.3\% | 0.5\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 17.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 78.4\% |
| 1997 | 298 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.4\% | 0.0\% | 25.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.4\% | 0.0\% | 0.0\% | 4.7\% | 54.7\% |
| 1998 | 1028 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 22.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.0\% | 67.7\% |
| 1999 | 3021 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 25.3\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 71.7\% |
| 2000 | 2311 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 0.0\% | 31.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 59.5\% |
| 2001 | 2174 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.1\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 7.2\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 82.8\% |
| 2002 | 2128 | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.3\% | 0.8\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 3.9\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 88.6\% |
| 2003 | 2228 | 0.1\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.8\% | 0.5\% | 0.0\% | 2.1\% | 0.0\% | 20.7\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.5\% | 68.1\% |
| 2004 | 444 | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 23.6\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 66.9\% |
| 2005 | 467 | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 6.0\% | 0.0\% | 24.8\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.1\% | 51.4\% |
| 2006 | 455 | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 18.2\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.2\% | 65.9\% |
| 2007 | 137 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.6\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 21.9\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 24.1\% | 45.3\% |
| 2008 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1979-2008 | 1427 | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.4\% | 1.5\% | 0.1\% | 0.0\% | 2.9\% | 0.0\% | 18.1\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 8.7\% | 66.6\% |
| 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\% |
| 1985-1995 | 2463 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.4\% | 2.3\% | 0.6\% | 0.0\% | 3.3\% | 0.0\% | 5.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 22.0\% | 65.4\% |
| 1996-1998 | 564 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.6\% | 0.2\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 21.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 4.1\% | 66.9\% |
| 1999-2008 | 1485 | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.3\% | 1.7\% | 0.1\% | 0.0\% | 2.8\% | 0.0\% | 19.7\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.2\% | 66.7\% |

Appendix C.37. Percent distribution of Nisqually Fall Fingerling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | 197 | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 14.7\% | 0.0\% | 2.5\% | 10.2\% | 0.0\% | 6.1\% | 0.0\% | 4.6\% | 0.0\% | 0.0\% | 10.2\% | 46.7\% | 0.0\% | 1.0\% | 0.0\% | 1.5\% |
| 1984 | 205 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.2\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 2.4\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 15.6\% | 21.0\% | 0.0\% | 21.0\% | 0.0\% | 5.9\% |
| 1985 | 66 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.3\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 0.0\% | 7.6\% | 0.0\% | 0.0\% | 21.2\% | 16.7\% | 0.0\% | 10.6\% | 0.0\% | 4.5\% |
| 1986 | 114 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.9\% | 0.0\% | 0.0\% | 13.2\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.3\% | 14.9\% | 0.0\% | 23.7\% | 0.0\% | 19.3\% |
| 1987 | 150 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.7\% | 0.0\% | 1.3\% | 12.0\% | 2.0\% | 2.0\% | 0.0\% | 5.3\% | 0.0\% | 0.0\% | 2.0\% | 16.0\% | 0.0\% | 33.3\% | 2.7\% | 12.7\% |
| 1988 | 277 | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 2.2\% | 5.4\% | 0.0\% | 4.0\% | 13.7\% | 2.2\% | 5.4\% | 0.0\% | 8.7\% | 0.0\% | 0.0\% | 7.2\% | 10.5\% | 0.0\% | 10.1\% | 0.0\% | 30.0\% |
| 1989 | 1035 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 4.4\% | 6.3\% | 0.0\% | 2.5\% | 0.0\% | 4.3\% | 0.0\% | 13.3\% | 2.1\% | 0.4\% | 12.4\% | 17.5\% | 0.0\% | 28.1\% | 0.4\% | 8.0\% |
| 1990 | 1290 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.6\% | 5.8\% | 0.0\% | 3.1\% | 0.2\% | 0.2\% | 0.0\% | 10.2\% | 0.0\% | 0.1\% | 2.1\% | 11.7\% | 0.0\% | 35.8\% | 0.0\% | 8.2\% |
| 1991 | 243 | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 8.2\% | 2.1\% | 0.0\% | 3.3\% | 0.0\% | 2.5\% | 0.0\% | 16.5\% | 0.0\% | 0.8\% | 6.6\% | 23.5\% | 0.0\% | 16.5\% | 0.0\% | 18.1\% |
| 1992 | 384 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 7.6\% | 4.2\% | 0.0\% | 2.9\% | 0.0\% | 2.9\% | 0.0\% | 7.6\% | 0.0\% | 0.0\% | 10.2\% | 16.7\% | 0.0\% | 8.1\% | 0.0\% | 39.3\% |
| 1993 | 594 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.5\% | 1.9\% | 0.3\% | 3.5\% | 0.0\% | 3.2\% | 0.0\% | 2.9\% | 0.0\% | 0.7\% | 3.4\% | 18.4\% | 0.0\% | 19.0\% | 0.0\% | 34.3\% |
| 1994 | 1002 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 0.5\% | 0.0\% | 2.4\% | 0.0\% | 2.5\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 5.2\% | 19.9\% | 0.0\% | 17.1\% | 0.4\% | 46.7\% |
| 1995 | 1736 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 5.4\% | 3.1\% | 0.0\% | 1.7\% | 0.0\% | 0.4\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 1.5\% | 24.4\% | 0.0\% | 30.8\% | 0.0\% | 29.6\% |
| 1996 | 962 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 3.3\% | 0.0\% | 0.8\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 1.6\% | 21.3\% | 0.0\% | 40.5\% | 0.0\% | 29.4\% |
| 1997 | 626 | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.5\% | 2.7\% | 5.6\% | 0.0\% | 0.6\% | 0.0\% | 0.2\% | 0.0\% | 0.8\% | 0.0\% | 1.0\% | 0.8\% | 21.9\% | 0.0\% | 17.9\% | 1.3\% | 46.5\% |
| 1998 | 1097 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.5\% | 0.7\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.5\% | 11.3\% | 0.0\% | 35.9\% | 0.7\% | 47.9\% |
| 1999 | 1474 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 2.7\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.3\% | 1.3\% | 18.9\% | 0.0\% | 42.7\% | 0.0\% | 27.8\% |
| 2000 | 579 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.2\% | 3.1\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 1.6\% | 2.6\% | 15.7\% | 0.0\% | 43.2\% | 0.0\% | 14.0\% |
| 2001 | 965 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 2.9\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 0.4\% | 0.4\% | 15.4\% | 0.0\% | 29.2\% | 0.0\% | 42.6\% |
| 2002 | 1365 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.0\% | 3.4\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 0.0\% | 0.6\% | 0.6\% | 7.8\% | 0.0\% | 41.2\% | 3.2\% | 32.0\% |
| 2003 | 1587 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 5.5\% | 1.6\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 4.3\% | 0.0\% | 0.0\% | 0.4\% | 11.2\% | 0.0\% | 43.5\% | 1.8\% | 29.9\% |
| 2004 | 1629 | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 1.1\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 6.8\% | 0.0\% | 0.6\% | 0.6\% | 8.0\% | 0.0\% | 31.2\% | 0.0\% | 44.6\% |
| 2005 | 1160 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.5\% | 2.0\% | 0.0\% | 3.4\% | 0.0\% | 0.3\% | 0.0\% | 3.7\% | 0.0\% | 1.9\% | 0.6\% | 6.1\% | 0.0\% | 10.3\% | 0.0\% | 66.1\% |
| 2006 | 2793 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 1.6\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 5.2\% | 0.0\% | 0.3\% | 0.8\% | 5.9\% | 0.0\% | 38.8\% | 0.0\% | 39.3\% |
| 2007 | 2981 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 10.1\% | 1.4\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 4.4\% | 0.0\% | 0.3\% | 0.8\% | 10.5\% | 0.0\% | 35.7\% | 0.0\% | 36.0\% |
| 2008 | 972 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 3.4\% | 0.0\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.4\% | 0.8\% | 10.2\% | 0.0\% | 47.8\% | 0.0\% | 26.2\% |
| 1979-2008 | 980 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 9.2\% | 2.2\% | 0.3\% | 3.7\% | 0.2\% | 1.6\% | 0.0\% | 4.7\% | 0.1\% | 0.4\% | 4.7\% | 16.2\% | 0.0\% | 27.4\% | 0.4\% | 28.5\% |
| 1979-1984 | 201 | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 23.0\% | 0.0\% | 1.3\% | 5.8\% | 0.0\% | 4.3\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 12.9\% | 33.8\% | 0.0\% | 11.0\% | 0.0\% | 3.7\% |
| 1985-1995 | 626 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.3\% | 11.5\% | 2.4\% | 0.5\% | 5.3\% | 0.4\% | 2.8\% | 0.0\% | 6.9\% | 0.2\% | 0.2\% | 7.6\% | 17.3\% | 0.0\% | 21.2\% | 0.3\% | 22.8\% |
| 1996-1998 | 895 | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.3\% | 1.1\% | 2.5\% | 0.0\% | 1.8\% | 0.0\% | 0.3\% | 0.0\% | 1.0\% | 0.0\% | 0.3\% | 0.9\% | 18.2\% | 0.0\% | 31.4\% | 0.7\% | 41.3\% |
| 1999-2008 | 1550 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 6.5\% | 2.3\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 3.8\% | 0.0\% | 0.6\% | 0.9\% | 11.0\% | 0.0\% | 36.4\% | 0.5\% | 35.9\% |

Appendix C.38. Percent distribution of Nisqually Fall Fingerling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | 287 | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 13.9\% | 0.0\% | 1.7\% | 7.3\% | 0.0\% | 4.9\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 8.4\% | 56.8\% | 0.0\% | 1.0\% | 0.0\% | 1.0\% |
| 1984 | 244 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.1\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 2.5\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 15.2\% | 24.6\% | 0.0\% | 18.9\% | 0.0\% | 4.9\% |
| 1985 | 84 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.6\% | 3.6\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 0.0\% | 7.1\% | 0.0\% | 0.0\% | 21.4\% | 21.4\% | 0.0\% | 9.5\% | 0.0\% | 3.6\% |
| 1986 | 128 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.4\% | 0.0\% | 0.0\% | 12.5\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.9\% | 19.5\% | 0.0\% | 21.9\% | 0.0\% | 17.2\% |
| 1987 | 187 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.4\% | 0.0\% | 1.1\% | 10.7\% | 2.7\% | 1.6\% | 0.0\% | 5.9\% | 0.0\% | 0.0\% | 1.6\% | 21.4\% | 0.0\% | 28.3\% | 2.1\% | 10.2\% |
| 1988 | 381 | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 2.6\% | 5.8\% | 0.0\% | 3.7\% | 15.0\% | 2.1\% | 4.5\% | 0.0\% | 8.1\% | 0.0\% | 0.0\% | 7.9\% | 19.7\% | 0.0\% | 8.1\% | 0.0\% | 21.8\% |
| 1989 | 1155 | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 5.4\% | 6.0\% | 0.0\% | 3.0\% | 0.0\% | 3.8\% | 0.0\% | 14.6\% | 2.2\% | 0.3\% | 11.7\% | 18.4\% | 0.0\% | 26.6\% | 0.4\% | 7.2\% |
| 1990 | 1387 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.5\% | 5.9\% | 0.0\% | 3.2\% | 0.2\% | 0.1\% | 0.0\% | 10.5\% | 0.0\% | 0.1\% | 1.9\% | 13.0\% | 0.0\% | 33.8\% | 0.0\% | 7.6\% |
| 1991 | 274 | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 9.1\% | 1.8\% | 0.0\% | 3.6\% | 0.0\% | 2.2\% | 0.0\% | 17.2\% | 0.0\% | 0.7\% | 6.2\% | 25.9\% | 0.0\% | 15.0\% | 0.0\% | 16.1\% |
| 1992 | 516 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 7.2\% | 3.7\% | 0.0\% | 2.9\% | 0.0\% | 2.1\% | 0.0\% | 7.0\% | 0.0\% | 0.0\% | 11.8\% | 28.5\% | 0.0\% | 6.6\% | 0.0\% | 29.3\% |
| 1993 | 688 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.7\% | 1.7\% | 0.4\% | 4.1\% | 0.0\% | 2.9\% | 0.0\% | 3.2\% | 0.0\% | 0.7\% | 3.8\% | 20.9\% | 0.0\% | 17.9\% | 0.0\% | 29.7\% |
| 1994 | 1416 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 0.4\% | 0.0\% | 2.3\% | 0.0\% | 2.6\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 5.2\% | 38.1\% | 0.0\% | 13.0\% | 0.4\% | 33.1\% |
| 1995 | 1996 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 8.0\% | 3.0\% | 0.0\% | 2.0\% | 0.0\% | 0.7\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 1.5\% | 27.7\% | 0.0\% | 28.8\% | 0.0\% | 25.8\% |
| 1996 | 1068 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 1.2\% | 0.0\% | 3.6\% | 0.0\% | 0.9\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 1.5\% | 26.2\% | 0.0\% | 37.6\% | 0.0\% | 26.5\% |
| 1997 | 732 | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.5\% | 3.1\% | 5.3\% | 0.0\% | 0.7\% | 0.0\% | 0.4\% | 0.0\% | 0.8\% | 0.0\% | 1.0\% | 0.8\% | 29.2\% | 0.0\% | 16.4\% | 1.4\% | 39.8\% |
| 1998 | 1368 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.4\% | 0.7\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.5\% | 25.6\% | 0.0\% | 31.1\% | 0.7\% | 38.4\% |
| 1999 | 1656 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 2.7\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 0.3\% | 1.3\% | 23.4\% | 0.0\% | 40.8\% | 0.0\% | 24.8\% |
| 2000 | 723 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.7\% | 3.0\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 1.4\% | 2.2\% | 28.6\% | 0.0\% | 35.4\% | 0.0\% | 11.2\% |
| 2001 | 1167 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 2.8\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% | 0.0\% | 0.4\% | 0.4\% | 25.9\% | 0.0\% | 26.0\% | 0.0\% | 35.2\% |
| 2002 | 1512 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.8\% | 3.6\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 0.6\% | 0.6\% | 12.2\% | 0.0\% | 39.2\% | 3.4\% | 28.9\% |
| 2003 | 1740 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 5.3\% | 1.9\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 0.0\% | 0.0\% | 0.4\% | 15.1\% | 0.0\% | 41.6\% | 1.9\% | 27.3\% |
| 2004 | 1804 | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 1.2\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 7.4\% | 0.0\% | 0.7\% | 0.7\% | 12.8\% | 0.0\% | 29.7\% | 0.0\% | 40.2\% |
| 2005 | 1322 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.5\% | 2.1\% | 0.0\% | 3.9\% | 0.0\% | 0.3\% | 0.0\% | 4.2\% | 0.0\% | 2.0\% | 0.7\% | 13.6\% | 0.0\% | 9.8\% | 0.0\% | 58.0\% |
| 2006 | 3039 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 1.7\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 0.0\% | 0.4\% | 0.8\% | 8.7\% | 0.0\% | 38.1\% | 0.0\% | 36.1\% |
| 2007 | 3233 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 9.9\% | 1.4\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 0.0\% | 0.4\% | 0.8\% | 14.5\% | 0.0\% | 34.2\% | 0.0\% | 33.2\% |
| 2008 | 1073 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 3.5\% | 0.0\% | 4.7\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.5\% | 0.8\% | 13.7\% | 0.0\% | 46.1\% | 0.0\% | 23.8\% |
| 1979-2008 | 1122 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 9.6\% | 2.2\% | 0.3\% | 3.7\% | 0.2\% | 1.4\% | 0.0\% | 4.8\% | 0.1\% | 0.4\% | 4.6\% | 22.5\% | 0.0\% | 25.2\% | 0.4\% | 24.3\% |
| 1979-1984 | 266 | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 22.5\% | 0.0\% | 0.9\% | 4.3\% | 0.0\% | 3.7\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 11.8\% | 40.7\% | 0.0\% | 9.9\% | 0.0\% | 3.0\% |
| 1985-1995 | 747 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.4\% | 12.5\% | 2.4\% | 0.5\% | 5.4\% | 0.5\% | 2.4\% | 0.0\% | 7.0\% | 0.2\% | 0.2\% | 7.6\% | 23.1\% | 0.0\% | 19.0\% | 0.3\% | 18.3\% |
| 1996-1998 | 1056 | 0.1\% | 0.2\% | 0.0\% | 0.0\% | 0.3\% | 1.4\% | 2.4\% | 0.0\% | 1.9\% | 0.0\% | 0.4\% | 0.0\% | 1.0\% | 0.0\% | 0.3\% | 0.9\% | 27.0\% | 0.0\% | 28.4\% | 0.7\% | 34.9\% |
| 1999-2008 | 1727 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 6.2\% | 2.4\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 0.7\% | 0.9\% | 16.9\% | 0.0\% | 34.1\% | 0.5\% | 31.9\% |

Appendix C.39. Percent distribution of Nooksack Spring Yearling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | 191 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.9\% | 0.0\% | 4.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 84.8\% |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | 116 | 0.0\% | 0.0\% | 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\% | 13.8\% | 6.9\% | 0.0\% | 0.0\% | 0.0\% | 73.3\% |
| 1990 | 41 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.6\% | 0.0\% | 14.6\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 4.9\% | 34.1\% | 0.0\% | 0.0\% | 0.0\% | 29.3\% |
| 1991 | 285 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 7.0\% | 0.0\% | 32.6\% | 0.0\% | 6.3\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 7.0\% | 5.3\% | 0.0\% | 1.4\% | 0.0\% | 36.1\% |
| 1992 | 857 | 0.4\% | 0.4\% | 0.0\% | 0.0\% | 0.4\% | 17.5\% | 2.3\% | 1.3\% | 11.0\% | 0.9\% | 1.6\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.4\% | 7.8\% | 0.0\% | 0.0\% | 0.0\% | 55.2\% |
| 1993 | 618 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.4\% | 7.6\% | 2.3\% | 12.5\% | 0.0\% | 6.5\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 5.3\% | 11.5\% | 0.0\% | 0.0\% | 0.0\% | 49.2\% |
| 1994 | 511 | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 0.0\% | 6.1\% | 28.2\% | 0.0\% | 1.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 6.3\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 49.3\% |
| 1995 | 171 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 7.0\% | 0.0\% | 0.0\% | 0.0\% | 67.3\% |
| 1996 | 186 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 3.2\% | 0.0\% | 12.4\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 79.6\% |
| 1997 | 113 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 14.2\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 15.9\% | 0.0\% | 0.0\% | 0.0\% | 58.4\% |
| 1998 | 114 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 6.1\% | 0.0\% | 15.8\% | 0.0\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 5.3\% | 0.0\% | 2.6\% | 0.0\% | 59.6\% |
| 1999 | 195 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 1.0\% | 0.0\% | 23.6\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 1.5\% | 1.0\% | 0.0\% | 3.1\% | 0.0\% | 64.6\% |
| 2000 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2001 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2005 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2006 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2007 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2008 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1979-2008 | 283 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 2.6\% | 2.7\% | 0.8\% | 16.9\% | 0.1\% | 3.6\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 3.9\% | 8.6\% | 0.0\% | 0.6\% | 0.0\% | 58.9\% |
| 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\% |
| 1985-1995 | 349 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 2.1\% | 1.2\% | 17.1\% | 0.1\% | 4.3\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 5.1\% | 9.7\% | 0.0\% | 0.2\% | 0.0\% | 55.6\% |
| 1996-1998 | 138 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 4.9\% | 0.0\% | 14.1\% | 0.0\% | 2.6\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 1.8\% | 8.1\% | 0.0\% | 0.9\% | 0.0\% | 65.9\% |
| 1999-2008 | 195 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 1.0\% | 0.0\% | 23.6\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 1.5\% | 1.0\% | 0.0\% | 3.1\% | 0.0\% | 64.6\% |

Appendix C.40. Percent distribution of Nooksack Spring Yearling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | 237 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.8\% | 2.5\% | 9.3\% | 0.4\% | 4.6\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 8.0\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 68.4\% |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | 124 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.5\% | 8.9\% | 0.0\% | 0.0\% | 0.0\% | 68.5\% |
| 1990 | 71 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.5\% | 1.4\% | 0.0\% | 26.8\% | 1.4\% | 12.7\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 2.8\% | 28.2\% | 0.0\% | 0.0\% | 0.0\% | 16.9\% |
| 1991 | 336 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 6.8\% | 0.0\% | 36.9\% | 0.0\% | 6.3\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 6.5\% | 6.8\% | 0.0\% | 1.2\% | 0.0\% | 30.7\% |
| 1992 | 1001 | 1.7\% | 1.5\% | 0.0\% | 0.0\% | 0.4\% | 19.5\% | 2.3\% | 1.7\% | 12.0\% | 1.0\% | 1.6\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.4\% | 9.7\% | 0.0\% | 0.0\% | 0.0\% | 47.3\% |
| 1993 | 666 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 7.7\% | 3.3\% | 14.3\% | 0.0\% | 6.2\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 5.1\% | 12.3\% | 0.0\% | 0.0\% | 0.0\% | 45.6\% |
| 1994 | 530 | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 0.0\% | 6.0\% | 29.8\% | 0.0\% | 0.9\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 6.0\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 47.5\% |
| 1995 | 192 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 24.5\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 12.0\% | 0.0\% | 0.0\% | 0.0\% | 59.9\% |
| 1996 | 198 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.5\% | 3.0\% | 0.0\% | 14.6\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 5.6\% | 0.0\% | 0.0\% | 0.0\% | 74.7\% |
| 1997 | 128 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.5\% | 0.0\% | 15.6\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 21.9\% | 0.0\% | 0.0\% | 0.0\% | 51.6\% |
| 1998 | 128 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 0.0\% | 6.3\% | 0.0\% | 17.2\% | 0.0\% | 6.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 8.6\% | 0.0\% | 2.3\% | 0.0\% | 53.1\% |
| 1999 | 207 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 1.4\% | 0.0\% | 26.1\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 1.4\% | 1.9\% | 0.0\% | 2.9\% | 0.0\% | 60.9\% |
| 2000 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2001 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2005 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2006 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2007 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2008 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1979-2008 | 318 | 0.2\% | 0.1\% | 0.0\% | 0.0\% | 0.5\% | 3.7\% | 2.9\% | 1.1\% | 19.6\% | 0.2\% | 3.4\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 4.4\% | 10.3\% | 0.0\% | 0.5\% | 0.0\% | 52.1\% |
| 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\% |
| 1985-1995 | 395 | 0.3\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 5.2\% | 2.4\% | 1.7\% | 20.2\% | 0.4\% | 4.1\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 5.8\% | 10.7\% | 0.0\% | 0.1\% | 0.0\% | 48.1\% |
| 1996-1998 | 151 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.2\% | 4.9\% | 0.0\% | 15.8\% | 0.0\% | 2.9\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 1.6\% | 12.0\% | 0.0\% | 0.8\% | 0.0\% | 59.8\% |
| 1999-2008 | 207 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 1.4\% | 0.0\% | 26.1\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 1.4\% | 1.9\% | 0.0\% | 2.9\% | 0.0\% | 60.9\% |

Appendix C.41. Percent distribution of Nooksack Spring Fingerling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | 949 | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 4.0\% | 0.0\% | 17.0\% | 0.0\% | 4.8\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.2\% | 6.4\% | 0.0\% | 0.1\% | 0.0\% | 64.2\% |
| 1997 | 1943 | 3.5\% | 0.2\% | 0.7\% | 0.2\% | 0.1\% | 1.7\% | 4.1\% | 0.0\% | 10.1\% | 0.1\% | 0.4\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.5\% | 5.2\% | 0.0\% | 0.8\% | 0.0\% | 72.1\% |
| 1998 | 1476 | 8.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 3.2\% | 0.0\% | 3.0\% | 0.0\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 82.9\% |
| 1999 | 1611 | 1.6\% | 0.9\% | 0.0\% | 0.0\% | 0.9\% | 2.2\% | 5.3\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 83.7\% |
| 2000 | 867 | 4.5\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 20.5\% | 4.6\% | 0.0\% | 11.6\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 57.7\% |
| 2001 | 1338 | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.1\% | 4.4\% | 0.0\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.5\% | 0.7\% | 0.0\% | 0.3\% | 0.0\% | 77.4\% |
| 2002 | 1242 | 5.5\% | 0.0\% | 0.5\% | 0.8\% | 1.1\% | 17.6\% | 2.1\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.4\% | 0.2\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 69.9\% |
| 2003 | 733 | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 13.6\% | 2.3\% | 0.0\% | 5.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 1.8\% | 0.0\% | 1.0\% | 0.0\% | 71.1\% |
| 2004 | 645 | 1.2\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 31.9\% | 4.8\% | 0.0\% | 8.8\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.5\% | 0.0\% | 48.5\% |
| 2005 | 805 | 3.4\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 31.9\% | 3.9\% | 0.0\% | 7.5\% | 0.0\% | 0.4\% | 0.0\% | 0.5\% | 0.0\% | 0.2\% | 0.0\% | 0.7\% | 0.0\% | 0.9\% | 0.0\% | 50.3\% |
| 2006 | 517 | 1.9\% | 0.0\% | 0.4\% | 1.2\% | 0.0\% | 32.3\% | 6.2\% | 0.0\% | 7.4\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.2\% | 2.9\% | 0.0\% | 2.3\% | 0.4\% | 43.7\% |
| 2007 | 525 | 5.3\% | 0.0\% | 1.0\% | 0.4\% | 0.0\% | 24.8\% | 9.0\% | 0.0\% | 6.9\% | 0.0\% | 0.2\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 0.8\% | 0.4\% | 47.8\% |
| 2008 | 944 | 1.1\% | 0.1\% | 0.0\% | 0.3\% | 0.0\% | 20.8\% | 12.9\% | 0.0\% | 13.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.4\% | 0.4\% | 4.7\% | 0.0\% | 2.6\% | 0.0\% | 42.5\% |
| 1979-2008 | 1046 | 3.2\% | 0.1\% | 0.2\% | 0.3\% | 0.3\% | 16.1\% | 5.1\% | 0.0\% | 7.7\% | 0.0\% | 0.4\% | 0.0\% | 0.8\% | 0.0\% | 0.1\% | 0.2\% | 2.2\% | 0.0\% | 0.7\% | 0.1\% | 62.4\% |
| 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\% |
| 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\% |
| 1996-1998 | 1456 | 4.3\% | 0.1\% | 0.2\% | 0.1\% | 0.4\% | 1.1\% | 3.8\% | 0.0\% | 10.0\% | 0.0\% | 1.8\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.3\% | 4.1\% | 0.0\% | 0.3\% | 0.0\% | 73.1\% |
| 1999-2008 | 923 | 2.9\% | 0.1\% | 0.2\% | 0.3\% | 0.3\% | 20.6\% | 5.5\% | 0.0\% | 7.0\% | 0.0\% | 0.1\% | 0.0\% | 0.9\% | 0.0\% | 0.1\% | 0.2\% | 1.7\% | 0.0\% | 0.8\% | 0.1\% | 59.3\% |

Appendix C.42. Percent distribution of Nooksack Spring Fingerling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | 1098 | 3.5\% | 0.0\% | 0.2\% | 0.0\% | 1.0\% | 1.0\% | 4.2\% | 0.0\% | 18.7\% | 0.0\% | 5.6\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.2\% | 9.5\% | 0.0\% | 0.1\% | 0.0\% | 55.5\% |
| 1997 | 2071 | 3.9\% | 0.4\% | 0.8\% | 0.2\% | 0.1\% | 2.1\% | 4.1\% | 0.0\% | 11.3\% | 0.0\% | 1.3\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.4\% | 6.3\% | 0.0\% | 0.8\% | 0.0\% | 67.6\% |
| 1998 | 1519 | 8.8\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 3.6\% | 0.0\% | 3.4\% | 0.0\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 80.6\% |
| 1999 | 1675 | 2.0\% | 1.7\% | 0.0\% | 0.0\% | 1.0\% | 2.2\% | 5.7\% | 0.0\% | 4.3\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 80.5\% |
| 2000 | 925 | 5.3\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 21.0\% | 5.1\% | 0.0\% | 13.3\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 54.1\% |
| 2001 | 1393 | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.2\% | 5.0\% | 0.0\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.5\% | 1.6\% | 0.0\% | 0.3\% | 0.0\% | 74.4\% |
| 2002 | 1280 | 6.3\% | 0.0\% | 0.5\% | 0.9\% | 1.4\% | 17.7\% | 2.3\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.5\% | 0.2\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 67.8\% |
| 2003 | 777 | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 14.2\% | 3.0\% | 0.0\% | 6.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 3.3\% | 0.0\% | 0.9\% | 0.0\% | 67.1\% |
| 2004 | 685 | 1.5\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 31.5\% | 5.4\% | 0.0\% | 10.5\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.4\% | 0.0\% | 45.7\% |
| 2005 | 848 | 3.8\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 32.4\% | 4.4\% | 0.0\% | 8.3\% | 0.0\% | 0.5\% | 0.0\% | 0.5\% | 0.0\% | 0.2\% | 0.0\% | 1.1\% | 0.0\% | 0.8\% | 0.0\% | 47.8\% |
| 2006 | 558 | 2.3\% | 0.0\% | 0.5\% | 1.3\% | 0.0\% | 32.1\% | 6.8\% | 0.0\% | 8.6\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.2\% | 3.9\% | 0.0\% | 2.2\% | 0.4\% | 40.5\% |
| 2007 | 600 | 5.7\% | 0.0\% | 1.7\% | 0.3\% | 0.0\% | 24.7\% | 9.5\% | 0.0\% | 7.8\% | 0.0\% | 0.2\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 7.0\% | 0.0\% | 0.7\% | 0.3\% | 41.8\% |
| 2008 | 1027 | 1.6\% | 0.2\% | 0.0\% | 0.4\% | 0.0\% | 19.7\% | 13.4\% | 0.0\% | 15.3\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.5\% | 0.4\% | 5.6\% | 0.0\% | 2.6\% | 0.0\% | 39.0\% |
| 1979-2008 | 1112 | 3.9\% | 0.2\% | 0.3\% | 0.3\% | 0.3\% | 16.2\% | 5.6\% | 0.0\% | 8.8\% | 0.0\% | 0.6\% | 0.0\% | 0.8\% | 0.0\% | 0.1\% | 0.2\% | 3.4\% | 0.0\% | 0.7\% | 0.1\% | 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\% |
| 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\% |
| 1996-1998 | 1563 | 5.4\% | 0.2\% | 0.3\% | 0.1\% | 0.4\% | 1.6\% | 3.9\% | 0.0\% | 11.1\% | 0.0\% | 2.3\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.2\% | 5.6\% | 0.0\% | 0.3\% | 0.0\% | 67.9\% |
| 1999-2008 | 977 | 3.4\% | 0.2\% | 0.3\% | 0.3\% | 0.3\% | 20.6\% | 6.1\% | 0.0\% | 8.1\% | 0.0\% | 0.1\% | 0.0\% | 0.9\% | 0.0\% | 0.1\% | 0.2\% | 2.7\% | 0.0\% | 0.8\% | 0.1\% | 55.9\% |

Appendix C.43. Percent distribution of Puntledge River Summer reported catch among fisheries and escapement.

| $\begin{aligned} & \text { Catch } \\ & \text { Year } \\ & \hline \end{aligned}$ | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 1470 | 1.5\% | 0.3\% | 0.2\% | 2.6\% | 0.3\% | 0.7\% | 0.0\% | 19.9\% | 16.9\% | 8.0\% | 12.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 37.0\% |
| 1980 | 761 | 2.4\% | 0.0\% | 0.4\% | 2.0\% | 1.3\% | 5.3\% | 0.0\% | 16.2\% | 23.1\% | 5.8\% | 10.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.5\% |
| 1981 | 506 | 0.8\% | 0.0\% | 0.0\% | 4.5\% | 4.0\% | 0.0\% | 0.0\% | 21.9\% | 37.5\% | 7.3\% | 8.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.0\% |
| 1982 | 507 | 0.8\% | 0.4\% | 0.0\% | 3.7\% | 1.2\% | 1.8\% | 0.0\% | 5.5\% | 16.2\% | 14.4\% | 22.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.3\% |
| 1983 | 489 | 1.0\% | 0.2\% | 0.0\% | 8.0\% | 3.1\% | 2.5\% | 0.0\% | 12.7\% | 13.3\% | 16.2\% | 8.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 35.2\% |
| 1984 | 300 | 0.0\% | 1.0\% | 0.0\% | 2.0\% | 1.0\% | 2.0\% | 0.0\% | 5.3\% | 17.7\% | 5.0\% | 5.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 60.3\% |
| 1985 | 133 | 10.5\% | 0.8\% | 2.3\% | 6.0\% | 6.0\% | 0.0\% | 0.0\% | 0.0\% | 32.3\% | 1.5\% | 14.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 26.3\% |
| 1986 | 180 | 5.6\% | 0.0\% | 4.4\% | 2.8\% | 0.0\% | 2.8\% | 0.0\% | 10.6\% | 32.2\% | 3.9\% | 11.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 26.1\% |
| 1987 | 148 | 2.7\% | 0.7\% | 0.0\% | 12.2\% | 10.1\% | 0.0\% | 4.7\% | 0.0\% | 16.9\% | 2.0\% | 6.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 43.9\% |
| 1988 | 92 | 12.0\% | 0.0\% | 0.0\% | 0.0\% | 14.1\% | 0.0\% | 0.0\% | 0.0\% | 17.4\% | 0.0\% | 5.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 51.1\% |
| 1989 | 62 | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 48.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 48.4\% |
| 1990 | 96 | 8.3\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 8.3\% | 3.1\% | 14.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 61.5\% |
| 1991 | 97 | 6.2\% | 6.2\% | 0.0\% | 0.0\% | 9.3\% | 0.0\% | 0.0\% | 0.0\% | 26.8\% | 0.0\% | 11.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 40.2\% |
| 1992 | 87 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 3.4\% | 33.3\% | 0.0\% | 21.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 37.9\% |
| 1993 | 70 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.4\% | 0.0\% | 0.0\% | 0.0\% | 48.6\% | 0.0\% | 7.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.9\% |
| 1994 | 28 | 7.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 53.6\% | 0.0\% | 10.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.6\% |
| 1995 | 36 | 5.6\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.6\% | 0.0\% | 13.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 47.2\% |
| 1996 | 45 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.7\% | 0.0\% | 0.0\% | 0.0\% | 28.9\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 62.2\% |
| 1997 | 26 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.7\% | 0.0\% | 0.0\% | 0.0\% | 7.7\% | 0.0\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 80.8\% |
| 1998 | < 10 CWTs | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1999 | 48 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.4\% | 0.0\% | 6.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 83.3\% |
| 2000 | 61 | 0.0\% | 1.6\% | 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\% | 0.0\% | 0.0\% | 0.0\% | 88.5\% |
| 2001 | 213 | 2.8\% | 0.9\% | 0.0\% | 0.0\% | 0.9\% | 2.3\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 90.1\% |
| 2002 | 112 | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 8.9\% | 0.0\% | 9.8\% | 0.0\% | 3.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 73.2\% |
| 2003 | 108 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.3\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 85.2\% |
| 2004 | 98 | 14.3\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 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\% | 73.5\% |
| 2005 | 306 | 1.6\% | 0.0\% | 0.0\% | 1.3\% | 9.2\% | 0.7\% | 0.0\% | 0.0\% | 11.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 75.5\% |
| 2006 | 221 | 6.8\% | 8.6\% | 0.0\% | 0.9\% | 2.7\% | 0.0\% | 1.8\% | 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\% | 76.9\% |
| 2007 | 158 | 20.3\% | 5.7\% | 1.9\% | 1.3\% | 5.7\% | 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\% | 63.3\% |
| 2008 | 102 | 2.0\% | 2.0\% | 2.9\% | 0.0\% | 5.9\% | 0.0\% | 8.8\% | 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\% | 71.6\% |
| 1979-2008 | 219 | 4.0\% | 1.1\% | 0.4\% | 1.6\% | 7.1\% | 0.7\% | 0.8\% | 3.2\% | 19.1\% | 2.2\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 53.2\% |
| 1979-1984 | 672 | 1.1\% | 0.3\% | 0.1\% | 3.8\% | 1.8\% | 2.0\% | 0.0\% | 13.6\% | 20.8\% | 9.4\% | 11.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 35.7\% |
| 1985-1995 | 94 | 5.6\% | 0.9\% | 0.6\% | 1.9\% | 5.3\% | 0.3\% | 0.4\% | 1.3\% | 31.7\% | 1.0\% | 10.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 40.4\% |
| 1996-1998 | 26 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 34.0\% | 0.0\% | 0.0\% | 0.0\% | 12.2\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 51.8\% |
| 1999-2008 | 143 | 5.2\% | 2.0\% | 0.5\% | 0.3\% | 4.3\% | 0.6\% | 2.0\% | 0.0\% | 6.2\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 78.1\% |

Appendix C.44. Percent distribution of Puntledge River Summer total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 1551 | 1.8\% | 0.3\% | 0.3\% | 2.9\% | 0.3\% | 1.2\% | 0.0\% | 19.6\% | 17.1\% | 9.1\% | 12.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 35.1\% |
| 1980 | 822 | 2.8\% | 0.0\% | 0.5\% | 2.3\% | 1.3\% | 6.1\% | 0.0\% | 16.2\% | 22.9\% | 6.6\% | 10.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.0\% |
| 1981 | 547 | 0.7\% | 0.0\% | 0.0\% | 5.5\% | 4.0\% | 0.0\% | 0.0\% | 21.4\% | 37.3\% | 8.6\% | 8.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.9\% |
| 1982 | 567 | 1.2\% | 0.5\% | 0.0\% | 4.2\% | 1.4\% | 2.1\% | 0.0\% | 5.6\% | 15.7\% | 16.4\% | 22.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.8\% |
| 1983 | 531 | 1.9\% | 0.2\% | 0.0\% | 8.5\% | 3.2\% | 2.6\% | 0.0\% | 12.8\% | 13.2\% | 17.3\% | 7.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.4\% |
| 1984 | 314 | 0.0\% | 1.0\% | 0.0\% | 2.2\% | 1.3\% | 2.2\% | 0.0\% | 5.7\% | 18.2\% | 5.7\% | 6.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 57.6\% |
| 1985 | 153 | 13.1\% | 1.3\% | 3.9\% | 6.5\% | 6.5\% | 0.0\% | 0.0\% | 0.0\% | 30.7\% | 1.3\% | 13.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.9\% |
| 1986 | 199 | 5.0\% | 0.0\% | 5.5\% | 3.0\% | 0.0\% | 3.0\% | 0.0\% | 12.6\% | 31.2\% | 4.5\% | 11.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.6\% |
| 1987 | 162 | 2.5\% | 1.2\% | 0.0\% | 15.4\% | 10.5\% | 0.0\% | 4.3\% | 0.0\% | 16.7\% | 3.1\% | 6.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 40.1\% |
| 1988 | 100 | 11.0\% | 0.0\% | 0.0\% | 0.0\% | 16.0\% | 0.0\% | 0.0\% | 0.0\% | 20.0\% | 0.0\% | 6.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 47.0\% |
| 1989 | 71 | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 54.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 42.3\% |
| 1990 | 101 | 8.9\% | 0.0\% | 0.0\% | 0.0\% | 4.0\% | 0.0\% | 0.0\% | 0.0\% | 8.9\% | 4.0\% | 15.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 58.4\% |
| 1991 | 121 | 6.6\% | 11.6\% | 0.0\% | 0.0\% | 9.9\% | 0.0\% | 0.0\% | 0.0\% | 28.9\% | 0.0\% | 10.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.2\% |
| 1992 | 98 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 4.1\% | 38.8\% | 0.0\% | 20.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.7\% |
| 1993 | 79 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.4\% | 0.0\% | 0.0\% | 0.0\% | 53.2\% | 0.0\% | 6.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.1\% |
| 1994 | 32 | 9.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 56.3\% | 0.0\% | 9.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 25.0\% |
| 1995 | 42 | 4.8\% | 4.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.3\% | 0.0\% | 16.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 40.5\% |
| 1996 | 49 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 0.0\% | 0.0\% | 0.0\% | 34.7\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 57.1\% |
| 1997 | 27 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.1\% | 0.0\% | 0.0\% | 0.0\% | 7.4\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 77.8\% |
| 1998 | 11 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 81.8\% | 0.0\% | 0.0\% | 0.0\% | 9.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.1\% |
| 1999 | 52 | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.5\% | 0.0\% | 7.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 76.9\% |
| 2000 | 63 | 1.6\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 85.7\% |
| 2001 | 217 | 3.2\% | 1.4\% | 0.0\% | 0.0\% | 1.4\% | 2.3\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 88.5\% |
| 2002 | 122 | 5.7\% | 0.0\% | 0.0\% | 0.0\% | 11.5\% | 0.0\% | 11.5\% | 0.0\% | 4.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 67.2\% |
| 2003 | 113 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.5\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 81.4\% |
| 2004 | 105 | 17.1\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 10.5\% | 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 | 329 | 2.1\% | 0.0\% | 0.0\% | 1.5\% | 11.6\% | 0.6\% | 0.0\% | 0.0\% | 14.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 70.2\% |
| 2006 | 252 | 9.1\% | 14.3\% | 0.0\% | 1.2\% | 3.2\% | 0.0\% | 2.0\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 67.5\% |
| 2007 | 177 | 21.5\% | 10.2\% | 2.3\% | 1.1\% | 6.8\% | 0.0\% | 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\% | 0.0\% | 56.5\% |
| 2008 | 116 | 2.6\% | 2.6\% | 6.0\% | 0.0\% | 7.8\% | 0.0\% | 9.5\% | 0.0\% | 8.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 62.9\% |
| 1979-2008 | 237 | 4.6\% | 1.7\% | 0.6\% | 1.8\% | 7.5\% | 0.8\% | 0.9\% | 3.3\% | 20.8\% | 2.6\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 48.8\% |
| 1979-1984 | 722 | 1.4\% | 0.3\% | 0.1\% | 4.3\% | 1.9\% | 2.4\% | 0.0\% | 13.6\% | 20.7\% | 10.6\% | 11.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.3\% |
| 1985-1995 | 105 | 5.8\% | 1.7\% | 0.9\% | 2.3\% | 5.6\% | 0.3\% | 0.4\% | 1.5\% | 33.9\% | 1.2\% | 10.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 35.9\% |
| 1996-1998 | 29 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.0\% | 0.0\% | 0.0\% | 0.0\% | 17.1\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 48.0\% |
| 1999-2008 | 155 | 6.5\% | 3.1\% | 0.8\% | 0.4\% | 5.4\% | 0.6\% | 2.3\% | 0.0\% | 7.6\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 72.5\% |

Appendix C.45. Percent distribution of Queets Fall Fingerling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | 96 | 9.4\% | 0.0\% | 0.0\% | 13.5\% | 0.0\% | 11.5\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 3.1\% | 0.0\% | 2.1\% | 6.3\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 25.0\% | 0.0\% | 24.0\% |
| 1982 | 231 | 12.6\% | 2.6\% | 0.0\% | 18.2\% | 1.3\% | 13.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 10.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.9\% | 0.0\% | 24.2\% |
| 1983 | 147 | 29.9\% | 0.0\% | 0.0\% | 16.3\% | 0.0\% | 6.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 0.7\% | 11.6\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 10.2\% | 0.0\% | 20.4\% |
| 1984 | 144 | 16.0\% | 0.7\% | 0.0\% | 19.4\% | 2.1\% | 8.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.6\% | 0.0\% | 22.9\% |
| 1985 | 250 | 15.6\% | 0.0\% | 0.0\% | 31.6\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 12.4\% | 0.0\% | 33.6\% |
| 1986 | 284 | 17.3\% | 0.0\% | 1.1\% | 11.6\% | 0.0\% | 7.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 1.1\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.4\% | 0.0\% | 50.4\% |
| 1987 | 537 | 22.3\% | 0.2\% | 0.0\% | 11.7\% | 0.9\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.6\% | 0.0\% | 0.6\% | 1.5\% | 0.0\% | 0.2\% | 0.6\% | 0.0\% | 21.0\% | 0.0\% | 38.7\% |
| 1988 | 727 | 14.4\% | 0.8\% | 1.7\% | 7.8\% | 0.0\% | 4.0\% | 1.1\% | 0.0\% | 0.0\% | 2.5\% | 0.4\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 15.8\% | 0.0\% | 47.3\% |
| 1989 | 569 | 11.1\% | 0.0\% | 0.0\% | 9.1\% | 1.1\% | 7.6\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.2\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 27.2\% | 0.0\% | 41.1\% |
| 1990 | 1265 | 12.6\% | 0.0\% | 0.0\% | 5.5\% | 1.8\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.3\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.0\% | 0.0\% | 58.9\% |
| 1991 | 1102 | 20.5\% | 0.2\% | 1.1\% | 9.7\% | 1.3\% | 4.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 15.4\% | 0.0\% | 46.3\% |
| 1992 | 631 | 8.4\% | 0.8\% | 2.2\% | 7.8\% | 1.9\% | 17.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 1.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 18.4\% | 0.0\% | 41.7\% |
| 1993 | 613 | 15.5\% | 0.0\% | 0.7\% | 14.0\% | 2.1\% | 12.6\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 2.0\% | 0.0\% | 0.8\% | 0.0\% | 16.0\% | 0.0\% | 35.6\% |
| 1994 | 1049 | 16.1\% | 0.3\% | 0.5\% | 21.7\% | 1.5\% | 4.1\% | 1.0\% | 0.0\% | 0.3\% | 0.2\% | 0.4\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.9\% | 0.0\% | 32.4\% |
| 1995 | 746 | 17.3\% | 0.0\% | 1.6\% | 6.0\% | 3.4\% | 0.7\% | 0.4\% | 0.0\% | 0.3\% | 0.0\% | 0.1\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 33.1\% | 0.0\% | 36.2\% |
| 1996 | 714 | 10.4\% | 0.0\% | 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\% | 0.0\% | 17.5\% | 0.6\% | 70.2\% |
| 1997 | 903 | 34.4\% | 0.3\% | 0.0\% | 6.1\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.8\% | 0.0\% | 37.3\% |
| 1998 | 638 | 23.7\% | 0.0\% | 3.0\% | 19.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 12.1\% | 4.4\% | 37.0\% |
| 1999 | 740 | 9.2\% | 0.0\% | 1.4\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 8.1\% | 0.0\% | 77.8\% |
| 2000 | 44 | 23.0\% | 0.0\% | 9.7\% | 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\% | 3.8\% | 0.0\% | 50.0\% |
| 2001 | 448 | 23.4\% | 0.0\% | 5.8\% | 4.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 1.3\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 40.6\% | 0.0\% | 22.3\% |
| 2002 | 1632 | 25.4\% | 0.0\% | 3.3\% | 4.8\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 24.9\% | 0.0\% | 38.7\% |
| 2003 | 1448 | 20.8\% | 0.1\% | 3.6\% | 10.6\% | 4.8\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 21.0\% | 0.0\% | 37.6\% |
| 2004 | 2549 | 15.2\% | 0.4\% | 3.1\% | 6.7\% | 6.5\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.3\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 11.6\% | 0.0\% | 54.1\% |
| 2005 | 2523 | 14.5\% | 0.0\% | 3.3\% | 6.8\% | 2.6\% | 3.6\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 19.9\% | 0.0\% | 48.4\% |
| 2006 | 1076 | 23.6\% | 0.4\% | 2.6\% | 13.1\% | 3.3\% | 4.1\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.7\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 16.6\% | 0.0\% | 34.4\% |
| 2007 | 599 | 28.5\% | 0.0\% | 3.8\% | 11.2\% | 13.9\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.3\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 16.4\% | 0.0\% | 23.0\% |
| 2008 | 1001 | 13.1\% | 0.0\% | 1.2\% | 7.1\% | 4.4\% | 0.8\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.0\% | 0.0\% | 50.8\% |
| 1979-2008 | 825 | 18.0\% | 0.2\% | 1.8\% | 11.1\% | 2.0\% | 4.2\% | 0.2\% | 0.0\% | 0.0\% | 0.3\% | 0.4\% | 0.0\% | 0.4\% | 1.7\% | 0.2\% | 0.1\% | 0.4\% | 0.0\% | 18.2\% | 0.2\% | 40.6\% |
| 1979-1984 | 154 | 17.0\% | 0.8\% | 0.0\% | 16.9\% | 0.8\% | 9.9\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 1.7\% | 0.0\% | 1.2\% | 8.3\% | 0.0\% | 0.3\% | 0.8\% | 0.0\% | 18.9\% | 0.0\% | 22.9\% |
| 1985-1995 | 707 | 15.6\% | 0.2\% | 0.8\% | 12.4\% | 1.3\% | 6.1\% | 0.2\% | 0.0\% | 0.1\% | 0.6\% | 0.4\% | 0.0\% | 0.2\% | 0.9\% | 0.2\% | 0.0\% | 0.7\% | 0.0\% | 18.2\% | 0.0\% | 42.0\% |
| 1996-1998 | 752 | 22.8\% | 0.1\% | 1.5\% | 8.4\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 16.8\% | 1.6\% | 48.2\% |
| 1999-2008 | 1246 | 19.7\% | 0.1\% | 3.8\% | 8.1\% | 3.8\% | 1.1\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.4\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 18.4\% | 0.0\% | 43.7\% |

Appendix C.46. Percent distribution of Queets Fall Fingerling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | 115 | 12.2\% | 0.0\% | 0.0\% | 18.3\% | 0.0\% | 13.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 2.6\% | 0.0\% | 1.7\% | 5.2\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 21.7\% | 0.0\% | 20.0\% |
| 1982 | 251 | 14.3\% | 2.4\% | 0.0\% | 19.9\% | 1.2\% | 12.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 10.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 15.9\% | 0.0\% | 22.3\% |
| 1983 | 198 | 46.5\% | 0.0\% | 0.0\% | 13.1\% | 0.0\% | 5.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 0.5\% | 8.6\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 7.6\% | 0.0\% | 15.2\% |
| 1984 | 154 | 16.2\% | 0.6\% | 0.0\% | 21.4\% | 2.6\% | 7.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.7\% | 0.0\% | 21.4\% |
| 1985 | 292 | 20.2\% | 0.0\% | 0.0\% | 33.6\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 10.6\% | 0.0\% | 28.8\% |
| 1986 | 329 | 25.2\% | 0.0\% | 1.2\% | 11.2\% | 0.0\% | 7.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.9\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.3\% | 0.0\% | 43.5\% |
| 1987 | 606 | 28.5\% | 0.3\% | 0.0\% | 11.7\% | 1.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.5\% | 0.0\% | 0.5\% | 1.3\% | 0.0\% | 0.2\% | 0.7\% | 0.0\% | 18.8\% | 0.0\% | 34.3\% |
| 1988 | 825 | 17.8\% | 1.7\% | 1.6\% | 9.5\% | 0.1\% | 5.6\% | 1.0\% | 0.0\% | 0.0\% | 2.4\% | 0.4\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 3.4\% | 0.0\% | 14.2\% | 0.0\% | 41.7\% |
| 1989 | 661 | 16.8\% | 0.2\% | 0.2\% | 10.6\% | 1.1\% | 8.9\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.3\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 23.9\% | 0.0\% | 35.4\% |
| 1990 | 1351 | 15.2\% | 0.1\% | 0.1\% | 6.4\% | 1.9\% | 7.1\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.3\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.6\% | 0.0\% | 55.1\% |
| 1991 | 1198 | 24.4\% | 0.3\% | 1.2\% | 10.1\% | 1.4\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 14.4\% | 0.0\% | 42.6\% |
| 1992 | 759 | 14.0\% | 3.7\% | 2.4\% | 8.7\% | 1.8\% | 17.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.8\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 15.5\% | 0.0\% | 34.7\% |
| 1993 | 698 | 19.2\% | 0.0\% | 0.7\% | 15.3\% | 2.0\% | 13.6\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 1.9\% | 0.0\% | 1.0\% | 0.0\% | 14.3\% | 0.0\% | 31.2\% |
| 1994 | 1210 | 23.4\% | 0.7\% | 0.4\% | 21.3\% | 1.5\% | 4.0\% | 1.0\% | 0.0\% | 0.2\% | 0.2\% | 0.3\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.3\% | 0.0\% | 28.1\% |
| 1995 | 832 | 21.8\% | 0.0\% | 1.8\% | 7.5\% | 3.8\% | 0.8\% | 0.4\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 29.9\% | 0.0\% | 32.5\% |
| 1996 | 803 | 17.9\% | 0.0\% | 1.5\% | 1.1\% | 0.1\% | 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\% | 15.9\% | 0.5\% | 62.4\% |
| 1997 | 971 | 38.2\% | 0.4\% | 0.0\% | 6.2\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.6\% | 0.0\% | 34.7\% |
| 1998 | 676 | 25.3\% | 0.0\% | 3.1\% | 19.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 11.5\% | 4.4\% | 34.9\% |
| 1999 | 788 | 13.7\% | 0.0\% | 1.9\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 7.7\% | 0.0\% | 73.1\% |
| 2000 | 512 | 27.0\% | 0.0\% | 12.1\% | 14.1\% | 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\% | 3.5\% | 0.0\% | 43.4\% |
| 2001 | 504 | 28.6\% | 0.0\% | 6.7\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 1.2\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 36.9\% | 0.0\% | 19.8\% |
| 2002 | 1784 | 29.3\% | 0.0\% | 3.6\% | 5.1\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 23.2\% | 0.0\% | 35.4\% |
| 2003 | 1573 | 22.9\% | 0.1\% | 3.9\% | 11.4\% | 5.8\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 19.6\% | 0.0\% | 34.6\% |
| 2004 | 2761 | 17.3\% | 0.8\% | 3.2\% | 7.2\% | 8.3\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.3\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 10.9\% | 0.0\% | 49.9\% |
| 2005 | 2621 | 15.7\% | 0.0\% | 3.5\% | 7.2\% | 3.1\% | 3.5\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 19.4\% | 0.0\% | 46.6\% |
| 2006 | 1174 | 26.2\% | 0.4\% | 2.9\% | 13.6\% | 3.8\% | 4.1\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.6\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 15.4\% | 0.0\% | 31.5\% |
| 2007 | 714 | 32.9\% | 0.0\% | 4.3\% | 11.2\% | 15.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.3\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 14.1\% | 0.0\% | 19.3\% |
| 2008 | 1051 | 16.3\% | 0.0\% | 1.1\% | 7.0\% | 4.7\% | 0.8\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.1\% | 0.0\% | 48.4\% |
| 1979-2008 | 908 | 22.4\% | 0.4\% | 2.1\% | 11.8\% | 2.2\% | 4.4\% | 0.2\% | 0.0\% | 0.0\% | 0.3\% | 0.4\% | 0.0\% | 0.4\% | 1.5\% | 0.2\% | 0.1\% | 0.4\% | 0.0\% | 16.6\% | 0.2\% | 36.5\% |
| 1979-1984 | 180 | 22.3\% | 0.8\% | 0.0\% | 18.2\% | 0.9\% | 9.7\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 1.4\% | 0.0\% | 1.2\% | 7.1\% | 0.0\% | 0.5\% | 0.9\% | 0.0\% | 17.0\% | 0.0\% | 19.7\% |
| 1985-1995 | 796 | 20.6\% | 0.6\% | 0.9\% | 13.3\% | 1.3\% | 6.6\% | 0.2\% | 0.0\% | 0.0\% | 0.6\% | 0.4\% | 0.0\% | 0.1\% | 0.8\% | 0.2\% | 0.0\% | 0.8\% | 0.0\% | 16.3\% | 0.0\% | 37.1\% |
| 1996-1998 | 817 | 27.1\% | 0.1\% | 1.5\% | 9.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 15.7\% | 1.6\% | 44.0\% |
| 1999-2008 | 1348 | 23.0\% | 0.1\% | 4.3\% | 8.5\% | 4.4\% | 1.0\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.4\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 17.1\% | 0.0\% | 40.2\% |

Appendix C.47. Percent distribution of Quinsam River Fall reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 1558 | 4.7\% | 5.0\% | 0.7\% | 5.4\% | 3.0\% | 0.0\% | 0.0\% | 2.5\% | 4.2\% | 10.1\% | 23.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 41.4\% |
| 1980 | 1573 | 14.6\% | 5.0\% | 2.9\% | 10.4\% | 5.2\% | 0.0\% | 0.0\% | 1.6\% | 5.2\% | 16.3\% | 21.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.4\% |
| 1981 | 1583 | 11.0\% | 2.4\% | 1.6\% | 12.8\% | 6.5\% | 0.6\% | 0.0\% | 2.1\% | 9.9\% | 12.3\% | 17.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.7\% |
| 1982 | 1124 | 16.2\% | 7.0\% | 5.0\% | 8.3\% | 2.2\% | 0.4\% | 0.0\% | 0.0\% | 3.8\% | 6.3\% | 26.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 24.2\% |
| 1983 | 1142 | 21.1\% | 1.5\% | 0.3\% | 14.4\% | 2.7\% | 0.7\% | 0.0\% | 0.3\% | 4.5\% | 11.6\% | 25.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.5\% |
| 1984 | 1177 | 14.2\% | 5.9\% | 4.6\% | 6.3\% | 4.0\% | 0.8\% | 0.0\% | 0.9\% | 6.8\% | 4.9\% | 21.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.3\% |
| 1985 | 1577 | 25.7\% | 5.8\% | 4.3\% | 5.1\% | 1.0\% | 0.1\% | 0.0\% | 0.0\% | 4.1\% | 3.6\% | 19.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 30.9\% |
| 1986 | 1559 | 13.8\% | 4.3\% | 2.8\% | 6.6\% | 2.9\% | 0.0\% | 0.0\% | 0.1\% | 6.1\% | 7.2\% | 26.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.0\% |
| 1987 | 1320 | 10.7\% | 3.6\% | 2.8\% | 6.3\% | 6.5\% | 0.4\% | 0.4\% | 0.2\% | 3.9\% | 6.1\% | 24.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 34.8\% |
| 1988 | 1546 | 18.6\% | 1.8\% | 1.2\% | 6.5\% | 2.8\% | 0.7\% | 0.9\% | 0.2\% | 3.5\% | 2.4\% | 9.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 51.7\% |
| 1989 | 1665 | 12.6\% | 2.8\% | 2.8\% | 3.9\% | 3.2\% | 0.3\% | 0.0\% | 0.0\% | 7.3\% | 1.9\% | 17.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 47.1\% |
| 1990 | 1136 | 16.0\% | 2.0\% | 0.5\% | 6.2\% | 8.3\% | 1.3\% | 0.0\% | 1.6\% | 1.8\% | 4.6\% | 14.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 43.0\% |
| 1991 | 771 | 10.4\% | 2.9\% | 1.4\% | 5.8\% | 12.3\% | 0.5\% | 0.8\% | 0.6\% | 3.9\% | 9.3\% | 14.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 37.9\% |
| 1992 | 599 | 12.0\% | 0.5\% | 2.5\% | 10.5\% | 6.5\% | 0.3\% | 0.0\% | 0.3\% | 3.3\% | 9.7\% | 10.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 43.9\% |
| 1993 | 335 | 7.8\% | 3.3\% | 1.2\% | 5.7\% | 8.7\% | 1.2\% | 0.0\% | 0.6\% | 9.9\% | 5.7\% | 22.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.4\% |
| 1994 | 302 | 5.3\% | 6.0\% | 4.0\% | 9.3\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 6.0\% | 1.3\% | 17.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 45.4\% |
| 1995 | 234 | 7.3\% | 4.7\% | 0.0\% | 9.4\% | 6.4\% | 0.0\% | 0.0\% | 0.0\% | 6.8\% | 0.0\% | 15.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 49.6\% |
| 1996 | 260 | 6.5\% | 0.4\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 0.0\% | 16.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 66.2\% |
| 1997 | 423 | 9.2\% | 3.3\% | 2.6\% | 4.0\% | 6.9\% | 0.7\% | 5.2\% | 0.0\% | 9.0\% | 3.5\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 53.2\% |
| 1998 | 550 | 14.0\% | 2.2\% | 2.0\% | 0.0\% | 8.0\% | 0.0\% | 0.0\% | 0.0\% | 5.5\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 67.8\% |
| 1999 | 901 | 7.9\% | 3.1\% | 3.9\% | 2.0\% | 18.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.3\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 62.0\% |
| 2000 | 780 | 12.8\% | 2.2\% | 4.9\% | 0.4\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 71.3\% |
| 2001 | 1215 | 9.7\% | 1.4\% | 1.8\% | 0.1\% | 4.3\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 80.9\% |
| 2002 | 886 | 14.8\% | 3.2\% | 0.9\% | 0.6\% | 11.2\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 67.0\% |
| 2003 | 481 | 17.7\% | 1.7\% | 0.8\% | 0.0\% | 20.0\% | 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\% | 0.0\% | 59.5\% |
| 2004 | 713 | 8.7\% | 14.2\% | 1.7\% | 0.3\% | 14.4\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 59.0\% |
| 2005 | 862 | 17.2\% | 2.8\% | 2.8\% | 0.3\% | 14.6\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 60.0\% |
| 2006 | 789 | 16.1\% | 4.7\% | 1.1\% | 0.6\% | 7.7\% | 0.0\% | 0.6\% | 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\% | 64.9\% |
| 2007 | 561 | 19.6\% | 2.9\% | 1.1\% | 3.0\% | 12.5\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 54.4\% |
| 2008 | 388 | 10.6\% | 1.3\% | 0.3\% | 0.8\% | 7.5\% | 0.0\% | 0.0\% | 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\% | 75.8\% |
| 1979-2008 | 934 | 12.9\% | 3.6\% | 2.1\% | 4.8\% | 7.4\% | 0.3\% | 0.3\% | 0.4\% | 4.5\% | 3.9\% | 11.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 48.1\% |
| 1979-1984 | 1360 | 13.6\% | 4.5\% | 2.5\% | 9.6\% | 3.9\% | 0.4\% | 0.0\% | 1.2\% | 5.7\% | 10.2\% | 22.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 25.8\% |
| 1985-1995 | 1004 | 12.7\% | 3.4\% | 2.1\% | 6.8\% | 5.8\% | 0.4\% | 0.2\% | 0.3\% | 5.1\% | 4.7\% | 17.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 40.7\% |
| 1996-1998 | 411 | 9.9\% | 2.0\% | 1.5\% | 1.3\% | 6.4\% | 0.2\% | 1.7\% | 0.0\% | 6.9\% | 1.2\% | 6.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 62.4\% |
| 1999-2008 | 758 | 13.5\% | 3.7\% | 1.9\% | 0.8\% | 11.5\% | 0.0\% | 0.1\% | 0.0\% | 2.5\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 65.5\% |

Appendix C.48. Percent distribution of Quinsam River Fall total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 1701 | 5.5\% | 4.9\% | 1.1\% | 6.7\% | 3.0\% | 0.1\% | 0.0\% | 2.4\% | 4.1\% | 11.7\% | 22.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 37.9\% |
| 1980 | 1721 | 14.8\% | 4.8\% | 3.2\% | 11.0\% | 5.1\% | 0.0\% | 0.0\% | 1.5\% | 5.1\% | 17.3\% | 21.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.9\% |
| 1981 | 1709 | 11.1\% | 2.3\% | 1.8\% | 13.9\% | 6.7\% | 0.6\% | 0.0\% | 2.1\% | 9.8\% | 13.0\% | 16.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.9\% |
| 1982 | 1272 | 18.8\% | 6.9\% | 5.4\% | 8.8\% | 2.2\% | 0.4\% | 0.0\% | 0.0\% | 3.6\% | 6.7\% | 25.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.4\% |
| 1983 | 1322 | 24.8\% | 1.4\% | 0.3\% | 14.5\% | 2.9\% | 0.7\% | 0.0\% | 0.2\% | 4.2\% | 11.6\% | 24.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.1\% |
| 1984 | 1278 | 16.3\% | 5.9\% | 5.3\% | 6.5\% | 4.1\% | 0.9\% | 0.0\% | 0.9\% | 6.7\% | 5.0\% | 20.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.9\% |
| 1985 | 1827 | 27.0\% | 11.1\% | 4.3\% | 4.8\% | 1.0\% | 0.1\% | 0.0\% | 0.0\% | 3.8\% | 3.4\% | 17.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 26.7\% |
| 1986 | 1892 | 14.2\% | 10.7\% | 3.2\% | 6.7\% | 3.0\% | 0.0\% | 0.0\% | 0.2\% | 5.4\% | 7.3\% | 24.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 24.7\% |
| 1987 | 1596 | 13.9\% | 8.8\% | 2.9\% | 7.1\% | 5.9\% | 0.4\% | 0.3\% | 0.2\% | 3.4\% | 7.0\% | 21.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.8\% |
| 1988 | 1661 | 18.9\% | 3.4\% | 1.3\% | 7.0\% | 3.1\% | 0.8\% | 0.9\% | 0.2\% | 3.8\% | 2.6\% | 9.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 48.2\% |
| 1989 | 1910 | 13.4\% | 9.3\% | 2.8\% | 4.0\% | 3.1\% | 0.3\% | 0.0\% | 0.0\% | 7.5\% | 2.0\% | 16.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 41.1\% |
| 1990 | 1271 | 17.5\% | 4.2\% | 0.6\% | 6.9\% | 8.4\% | 1.4\% | 0.0\% | 1.7\% | 1.9\% | 5.0\% | 14.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 38.4\% |
| 1991 | 862 | 11.4\% | 6.0\% | 1.5\% | 6.3\% | 11.9\% | 0.6\% | 0.7\% | 0.7\% | 4.1\% | 10.0\% | 13.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.9\% |
| 1992 | 682 | 15.1\% | 1.9\% | 2.6\% | 11.1\% | 6.6\% | 0.3\% | 0.0\% | 0.4\% | 3.4\% | 10.0\% | 10.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 38.6\% |
| 1993 | 386 | 8.5\% | 6.2\% | 1.3\% | 6.5\% | 8.5\% | 1.3\% | 0.0\% | 0.8\% | 10.6\% | 6.5\% | 20.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.0\% |
| 1994 | 357 | 6.4\% | 13.7\% | 3.9\% | 9.5\% | 4.8\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 1.4\% | 15.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 38.4\% |
| 1995 | 291 | 8.6\% | 7.6\% | 0.0\% | 11.3\% | 6.9\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 0.0\% | 19.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 39.9\% |
| 1996 | 287 | 7.3\% | 0.7\% | 0.0\% | 1.4\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 7.0\% | 0.0\% | 19.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 59.9\% |
| 1997 | 486 | 10.3\% | 5.1\% | 3.1\% | 4.3\% | 8.2\% | 0.8\% | 4.9\% | 0.0\% | 9.5\% | 3.7\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 46.3\% |
| 1998 | 608 | 15.5\% | 3.6\% | 2.3\% | 0.0\% | 10.2\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 61.3\% |
| 1999 | 1018 | 9.4\% | 4.7\% | 4.8\% | 2.2\% | 20.4\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.4\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 54.9\% |
| 2000 | 854 | 14.3\% | 3.0\% | 5.5\% | 0.4\% | 6.1\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 65.1\% |
| 2001 | 1272 | 10.8\% | 2.0\% | 2.0\% | 0.1\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 77.3\% |
| 2002 | 950 | 15.8\% | 4.0\% | 0.9\% | 0.6\% | 13.6\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 62.5\% |
| 2003 | 545 | 20.0\% | 2.4\% | 0.9\% | 0.0\% | 23.9\% | 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\% | 0.0\% | 52.5\% |
| 2004 | 885 | 8.2\% | 23.4\% | 1.7\% | 0.2\% | 16.7\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 47.6\% |
| 2005 | 938 | 18.2\% | 3.3\% | 3.0\% | 0.4\% | 17.4\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 55.1\% |
| 2006 | 841 | 17.5\% | 5.7\% | 1.3\% | 0.7\% | 8.7\% | 0.0\% | 0.7\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 60.9\% |
| 2007 | 628 | 21.0\% | 4.6\% | 1.1\% | 3.2\% | 14.2\% | 0.0\% | 0.0\% | 0.0\% | 6.4\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 48.6\% |
| 2008 | 407 | 12.0\% | 2.5\% | 0.2\% | 0.7\% | 8.1\% | 0.0\% | 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\% | 72.2\% |
| 1979-2008 | 1049 | 14.2\% | 5.8\% | 2.3\% | 5.2\% | 8.1\% | 0.3\% | 0.3\% | 0.4\% | 4.6\% | 4.2\% | 11.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 43.1\% |
| 1979-1984 | 1500 | 15.2\% | 4.4\% | 2.9\% | 10.2\% | 4.0\% | 0.4\% | 0.0\% | 1.2\% | 5.6\% | 10.9\% | 21.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.4\% |
| 1985-1995 | 1158 | 14.1\% | 7.5\% | 2.2\% | 7.4\% | 5.7\% | 0.5\% | 0.2\% | 0.4\% | 5.1\% | 5.0\% | 16.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 35.2\% |
| 1996-1998 | 460 | 11.0\% | 3.2\% | 1.8\% | 1.9\% | 7.5\% | 0.3\% | 1.6\% | 0.0\% | 7.5\% | 1.2\% | 7.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 55.9\% |
| 1999-2008 | 834 | 14.7\% | 5.6\% | 2.2\% | 0.9\% | 13.4\% | 0.0\% | 0.1\% | 0.0\% | 2.7\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 59.7\% |

Appendix C.49. Percent distribution of Robertson Creek Fall reported catch among fisheries and escapement.

| Catch Year | $\begin{array}{r} \text { Estimated } \\ \text { \# of } \\ \text { CWTs } \\ \hline \end{array}$ | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 4911 | 17.9\% | 0.8\% | 0.7\% | 11.5\% | 0.3\% | 8.1\% | 0.1\% | 0.5\% | 1.2\% | 10.9\% | 10.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 32.6\% |
| 1980 | 4616 | 26.9\% | 7.0\% | 0.9\% | 8.1\% | 0.1\% | 7.0\% | 0.4\% | 0.0\% | 0.1\% | 8.3\% | 5.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 10.2\% | 3.0\% | 22.5\% |
| 1981 | 2219 | 29.7\% | 1.6\% | 0.8\% | 12.1\% | 0.5\% | 5.3\% | 0.7\% | 0.0\% | 0.6\% | 8.2\% | 5.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 12.6\% | 5.0\% | 16.5\% |
| 1982 | 3176 | 25.0\% | 3.4\% | 1.5\% | 13.5\% | 0.1\% | 5.8\% | 0.4\% | 0.0\% | 0.9\% | 7.5\% | 6.4\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.6\% | 0.2\% | 0.0\% | 13.5\% | 6.0\% | 15.3\% |
| 1983 | 2537 | 36.0\% | 3.3\% | 0.6\% | 10.5\% | 0.3\% | 5.2\% | 0.0\% | 0.0\% | 0.3\% | 8.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 17.5\% | 4.6\% | 10.4\% |
| 1984 | 1963 | 26.6\% | 4.0\% | 0.0\% | 14.6\% | 0.0\% | 6.9\% | 0.0\% | 0.0\% | 0.8\% | 3.0\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 17.3\% | 15.9\% | 7.6\% |
| 1985 | 916 | 14.1\% | 5.8\% | 0.0\% | 17.8\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.8\% | 0.5\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 1.5\% | 17.7\% | 31.2\% |
| 1986 | 546 | 13.9\% | 4.6\% | 0.0\% | 8.1\% | 0.7\% | 4.4\% | 0.9\% | 0.0\% | 0.0\% | 1.1\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.4\% | 25.6\% | 35.0\% |
| 1987 | 1399 | 6.5\% | 1.5\% | 0.6\% | 6.1\% | 0.5\% | 2.2\% | 0.1\% | 0.0\% | 0.5\% | 2.9\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.1\% | 0.0\% | 0.0\% | 20.8\% | 54.3\% |
| 1988 | 2543 | 9.9\% | 2.1\% | 0.9\% | 6.6\% | 1.1\% | 4.1\% | 4.7\% | 0.0\% | 0.6\% | 1.2\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.2\% | 0.0\% | 7.9\% | 13.9\% | 44.4\% |
| 1989 | 3995 | 8.0\% | 2.5\% | 0.4\% | 7.8\% | 1.0\% | 1.6\% | 1.7\% | 0.0\% | 0.8\% | 0.8\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 19.3\% | 16.9\% | 36.9\% |
| 1990 | 6288 | 15.8\% | 1.1\% | 1.3\% | 7.4\% | 0.9\% | 6.3\% | 2.0\% | 0.0\% | 0.3\% | 2.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 9.8\% | 8.8\% | 41.9\% |
| 1991 | 9369 | 16.9\% | 1.1\% | 3.0\% | 9.1\% | 0.8\% | 4.4\% | 1.1\% | 0.0\% | 0.3\% | 2.7\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 14.3\% | 12.6\% | 32.3\% |
| 1992 | 7822 | 13.7\% | 3.0\% | 1.7\% | 7.2\% | 1.5\% | 18.8\% | 2.1\% | 0.0\% | 0.1\% | 3.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 0.4\% | 5.9\% | 41.1\% |
| 1993 | 5736 | 13.9\% | 1.0\% | 2.5\% | 7.1\% | 1.4\% | 13.8\% | 2.6\% | 0.0\% | 0.5\% | 2.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 7.5\% | 13.1\% | 33.2\% |
| 1994 | 3141 | 15.8\% | 2.2\% | 3.7\% | 9.5\% | 1.1\% | 5.3\% | 4.3\% | 0.0\% | 0.4\% | 1.1\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 12.6\% | 17.0\% | 25.6\% |
| 1995 | 1181 | 15.2\% | 0.0\% | 4.0\% | 3.0\% | 1.9\% | 1.5\% | 3.1\% | 0.0\% | 1.4\% | 0.3\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 7.1\% | 9.2\% | 52.7\% |
| 1996 | 684 | 5.6\% | 0.1\% | 1.9\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 87.4\% |
| 1997 | 2095 | 10.3\% | 3.1\% | 3.8\% | 4.2\% | 3.0\% | 0.1\% | 2.9\% | 0.0\% | 0.5\% | 1.8\% | 0.4\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 20.3\% | 43.3\% |
| 1998 | 3193 | 16.0\% | 1.2\% | 4.9\% | 6.1\% | 2.8\% | 0.0\% | 4.5\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 15.9\% | 43.8\% |
| 1999 | 1195 | 11.5\% | 0.4\% | 7.4\% | 5.4\% | 6.5\% | 0.0\% | 3.2\% | 0.0\% | 0.8\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 17.7\% | 40.3\% |
| 2000 | 233 | 5.6\% | 0.0\% | 0.0\% | 0.0\% | 4.3\% | 0.0\% | 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\% | 0.0\% | 88.4\% |
| 2001 | 910 | 3.0\% | 0.0\% | 1.6\% | 0.0\% | 0.4\% | 0.0\% | 2.1\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 89.2\% |
| 2002 | 1899 | 11.1\% | 0.3\% | 1.5\% | 3.5\% | 3.7\% | 0.4\% | 2.9\% | 0.0\% | 0.6\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.7\% | 15.1\% | 53.1\% |
| 2003 | 2751 | 12.5\% | 1.9\% | 3.0\% | 0.7\% | 4.3\% | 0.0\% | 1.7\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 14.2\% | 52.8\% |
| 2004 | 4610 | 11.8\% | 7.5\% | 2.6\% | 2.4\% | 4.5\% | 0.2\% | 1.3\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 12.6\% | 12.6\% | 43.2\% |
| 2005 | 3048 | 13.6\% | 2.5\% | 3.6\% | 2.8\% | 9.8\% | 0.0\% | 1.7\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.7\% | 8.0\% | 25.7\% |
| 2006 | 2648 | 9.8\% | 1.9\% | 2.4\% | 2.3\% | 5.6\% | 0.0\% | 3.6\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 26.5\% | 10.9\% | 35.6\% |
| 2007 | 2054 | 15.6\% | 1.7\% | 3.4\% | 5.2\% | 6.4\% | 0.1\% | 4.1\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.0\% | 12.6\% | 22.1\% |
| 2008 | 1480 | 7.6\% | 0.1\% | 1.4\% | 2.3\% | 4.9\% | 0.0\% | 1.2\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.7\% | 13.2\% | 45.8\% |
| 1979-2008 | 2972 | 14.7\% | 2.2\% | 2.0\% | 6.5\% | 2.4\% | 3.5\% | 1.8\% | 0.0\% | 0.8\% | 2.2\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 0.0\% | 10.2\% | 11.4\% | 40.1\% |
| 1979-1984 | 3237 | 27.0\% | 3.3\% | 0.7\% | 11.7\% | 0.2\% | 6.4\% | 0.3\% | 0.1\% | 0.6\% | 7.7\% | 5.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 11.8\% | 6.6\% | 17.5\% |
| 1985-1995 | 3903 | 13.1\% | 2.3\% | 1.6\% | 8.1\% | 1.0\% | 5.9\% | 2.1\% | 0.0\% | 0.5\% | 1.6\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.2\% | 0.0\% | 7.4\% | 14.7\% | 39.0\% |
| 1996-1998 | 1991 | 10.6\% | 1.5\% | 3.5\% | 3.4\% | 2.9\% | 0.0\% | 2.5\% | 0.0\% | 0.9\% | 0.8\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 12.1\% | 58.2\% |
| 1999-2008 | 2083 | 10.2\% | 1.6\% | 2.7\% | 2.5\% | 5.0\% | 0.1\% | 2.2\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.3\% | 10.6\% | 49.6\% |

Appendix C.50. Percent distribution of Robertson Creek Fall total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 5637 | 19.9\% | 0.7\% | 0.7\% | 13.0\% | 0.3\% | 9.1\% | 0.1\% | 0.5\% | 1.1\% | 12.1\% | 9.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 28.4\% |
| 1980 | 5006 | 27.5\% | 7.0\% | 1.0\% | 8.6\% | 0.1\% | 7.5\% | 0.4\% | 0.0\% | 0.1\% | 8.8\% | 5.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 9.6\% | 3.0\% | 20.7\% |
| 1981 | 2628 | 32.0\% | 1.5\% | 1.0\% | 13.2\% | 0.5\% | 5.9\% | 0.6\% | 0.0\% | 0.6\% | 9.0\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 11.3\% | 4.6\% | 14.0\% |
| 1982 | 3690 | 28.0\% | 3.2\% | 1.6\% | 14.3\% | 0.1\% | 6.2\% | 0.4\% | 0.0\% | 0.8\% | 7.9\% | 5.9\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.6\% | 0.2\% | 0.0\% | 12.1\% | 5.6\% | 13.1\% |
| 1983 | 2860 | 40.1\% | 3.0\% | 0.6\% | 10.2\% | 0.3\% | 5.0\% | 0.0\% | 0.0\% | 0.3\% | 7.7\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 16.0\% | 4.4\% | 9.2\% |
| 1984 | 2176 | 30.3\% | 3.7\% | 0.0\% | 14.2\% | 0.0\% | 6.8\% | 0.0\% | 0.0\% | 0.7\% | 2.9\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 15.9\% | 15.4\% | 6.8\% |
| 1985 | 1085 | 15.2\% | 13.9\% | 0.0\% | 16.6\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.7\% | 0.5\% | 5.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 1.3\% | 16.0\% | 26.4\% |
| 1986 | 718 | 17.0\% | 12.4\% | 0.0\% | 8.8\% | 1.1\% | 4.5\% | 0.8\% | 0.0\% | 0.0\% | 1.3\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.3\% | 21.6\% | 26.6\% |
| 1987 | 1593 | 9.9\% | 2.8\% | 1.1\% | 7.6\% | 0.6\% | 2.7\% | 0.2\% | 0.0\% | 0.5\% | 3.5\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.1\% | 0.0\% | 0.0\% | 19.8\% | 47.6\% |
| 1988 | 2810 | 11.0\% | 3.7\% | 1.2\% | 7.4\% | 1.1\% | 4.7\% | 4.9\% | 0.0\% | 0.7\% | 1.4\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.2\% | 0.0\% | 7.4\% | 13.6\% | 40.1\% |
| 1989 | 4769 | 10.4\% | 7.8\% | 0.5\% | 9.0\% | 1.0\% | 1.9\% | 1.6\% | 0.0\% | 0.8\% | 1.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 17.1\% | 15.6\% | 30.9\% |
| 1990 | 7261 | 19.2\% | 2.3\% | 1.6\% | 9.0\% | 0.9\% | 6.8\% | 1.9\% | 0.0\% | 0.3\% | 2.4\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 8.9\% | 8.2\% | 36.3\% |
| 1991 | 10503 | 19.7\% | 1.8\% | 3.2\% | 9.9\% | 0.8\% | 4.8\% | 1.0\% | 0.0\% | 0.3\% | 3.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 13.2\% | 12.1\% | .8\% |
| 1992 | 9840 | 15.2\% | 12.8\% | 1.6\% | 7.2\% | 1.4\% | 17.8\% | 1.8\% | 0.0\% | 0.1\% | 2.9\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 0.3\% | 5.0\% | 32.7\% |
| 1993 | 6334 | 15.7\% | 2.0\% | 2.5\% | 7.6\% | 1.4\% | 14.6\% | 2.5\% | 0.0\% | 0.5\% | 2.1\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 7.0\% | 12.7\% | 30.1\% |
| 1994 | 3478 | 17.5\% | 5.3\% | 3.6\% | 9.3\% | 1.1\% | 5.2\% | 4.2\% | 0.0\% | 0.4\% | 1.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 11.6\% | 16.4\% | 23.1\% |
| 1995 | 1290 | 17.1\% | 0.0\% | 4.6\% | 3.6\% | 2.2\% | 1.9\% | 3.3\% | 0.0\% | 1.5\% | 0.4\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 6.6\% | 9.9\% | 48.2\% |
| 1996 | 792 | 9.1\% | 0.1\% | 4.5\% | 2.8\% | 2.4\% | 0.9\% | 0.0\% | 0.0\% | 1.8\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 75.5\% |
| 1997 | 2445 | 13.2\% | 7.0\% | 4.3\% | 4.8\% | 3.4\% | 0.2\% | 2.7\% | 0.0\% | 0.6\% | 2.0\% | 0.5\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% | 18.6\% | 37.1\% |
| 1998 | 3348 | 16.4\% | 1.7\% | 5.0\% | 6.2\% | 3.4\% | 0.0\% | 4.7\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 16.2\% | 41.8\% |
| 1999 | 1262 | 12.3\% | 0.6\% | 7.5\% | 5.4\% | 7.3\% | 0.0\% | 3.3\% | 0.0\% | 0.8\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 18.2\% | 38.1\% |
| 2000 | 243 | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 6.6\% | 0.0\% | 0.0\% | 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\% | 84.8\% |
| 2001 | 955 | 4.3\% | 0.0\% | 3.0\% | 0.0\% | 0.6\% | 0.0\% | 2.4\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 85.0\% |
| 2002 | 2069 | 13.0\% | 0.4\% | 1.9\% | 3.9\% | 4.5\% | 0.4\% | 3.1\% | 0.0\% | 0.6\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.3\% | 15.9\% | 48.8\% |
| 2003 | 3005 | 13.9\% | 2.3\% | 3.5\% | 0.8\% | 5.3\% | 0.0\% | 2.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.4\% | 15.2\% | 48.3\% |
| 2004 | 5383 | 12.4\% | 13.3\% | 2.7\% | 2.5\% | 5.5\% | 0.1\% | 1.3\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 11.2\% | 12.6\% | 37.0\% |
| 2005 | 3351 | 14.7\% | 2.9\% | 4.0\% | 3.0\% | 11.9\% | 0.0\% | 1.8\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.5\% | 8.1\% | 23.4\% |
| 2006 | 2890 | 11.5\% | 3.2\% | 2.6\% | 2.6\% | 6.1\% | 0.0\% | 3.7\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 25.2\% | 11.0\% | 32.6\% |
| 2007 | 2295 | 17.3\% | 2.4\% | 4.0\% | 5.3\% | 7.8\% | 0.1\% | 4.3\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 25.7\% | 12.5\% | 19.8\% |
| 2008 | 1603 | 10.5\% | 0.2\% | 1.6\% | 2.7\% | 5.2\% | 0.0\% | 1.2\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.0\% | 13.3\% | 42.3\% |
| 1979-2008 | 3377 | 16.7\% | 3.9\% | 2.3\% | 7.0\% | 2.8\% | 3.6\% | 1.8\% | 0.0\% | 0.8\% | 2.4\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 0.0\% | 9.4\% | 11.1\% | 35.9\% |
| 1979-1984 | 3666 | 29.6\% | 3.2\% | 0.8\% | 12.3\% | 0.2\% | 6.7\% | 0.3\% | 0.1\% | 0.6\% | 8.1\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 10.8\% | 6.3\% | 15.4\% |
| 1985-1995 | 4516 | 15.3\% | 5.9\% | 1.8\% | 8.7\% | 1.1\% | 6.1\% | 2.0\% | 0.0\% | 0.5\% | 1.8\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.2\% | 0.0\% | 6.7\% | 13.7\% | 33.7\% |
| 1996-1998 | 2195 | 12.9\% | 2.9\% | 4.6\% | 4.6\% | 3.0\% | 0.3\% | 2.4\% | 0.0\% | 1.0\% | 0.9\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 12.3\% | 51.5\% |
| 1999-2008 | 2306 | 11.6\% | 2.5\% | 3.1\% | 2.6\% | 6.1\% | 0.1\% | 2.3\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.5\% | 10.9\% | 46.0\% |

Appendix C.51. Percent distribution of Samish Fall Fingerling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | 1777 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.3\% | 6.8\% | 1.9\% | 0.9\% | 16.3\% | 0.2\% | 3.7\% | 0.0\% | 7.4\% | 0.0\% | 0.0\% | 36.2\% | 9.7\% | 0.0\% | 0.0\% | 0.0\% | 16.5\% |
| 1990 | 2346 | 2.1\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 18.8\% | 2.0\% | 3.4\% | 9.8\% | 0.1\% | 1.5\% | 0.0\% | 9.1\% | 0.0\% | 0.1\% | 29.2\% | 7.4\% | 0.0\% | 0.3\% | 0.0\% | 15.6\% |
| 1991 | 946 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.3\% | 3.2\% | 1.7\% | 9.6\% | 0.1\% | 3.0\% | 0.0\% | 8.9\% | 0.0\% | 0.7\% | 21.6\% | 8.8\% | 0.0\% | 1.5\% | 1.3\% | 26.4\% |
| 1992 | 577 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 11.4\% | 0.9\% | 2.1\% | 12.5\% | 0.0\% | 2.3\% | 0.0\% | 10.2\% | 0.0\% | 0.7\% | 15.6\% | 15.8\% | 0.0\% | 0.0\% | 0.7\% | 27.4\% |
| 1993 | 1041 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.3\% | 12.1\% | 8.5\% | 2.8\% | 16.2\% | 0.2\% | 2.8\% | 0.0\% | 3.9\% | 0.0\% | 0.1\% | 16.5\% | 12.6\% | 0.0\% | 0.0\% | 0.0\% | 23.6\% |
| 1994 | 939 | 0.2\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 12.0\% | 5.4\% | 1.2\% | 12.6\% | 0.0\% | 2.3\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 38.4\% | 3.5\% | 0.0\% | 0.0\% | 0.4\% | 21.2\% |
| 1995 | 685 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.8\% | 3.4\% | 0.0\% | 5.1\% | 0.0\% | 1.0\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 27.2\% | 12.7\% | 0.0\% | 0.0\% | 2.3\% | 38.8\% |
| 1996 | 1110 | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 10.7\% | 0.0\% | 0.4\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 34.0\% | 9.6\% | 0.0\% | 0.0\% | 14.5\% | 28.1\% |
| 1997 | 1317 | 0.5\% | 0.2\% | 0.0\% | 0.3\% | 0.3\% | 2.3\% | 3.6\% | 0.0\% | 8.0\% | 0.7\% | 0.8\% | 0.0\% | 0.9\% | 0.0\% | 0.1\% | 33.8\% | 9.2\% | 0.0\% | 0.0\% | 0.3\% | 39.2\% |
| 1998 | 698 | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 3.2\% | 0.0\% | 10.9\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 43.6\% | 3.4\% | 0.0\% | 0.0\% | 0.6\% | 32.8\% |
| 1999 | 248 | 3.6\% | 0.0\% | 0.0\% | 2.0\% | 3.2\% | 1.6\% | 10.1\% | 0.0\% | 10.9\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 38.3\% | 3.6\% | 0.0\% | 0.0\% | 0.0\% | 25.0\% |
| 2000 | 269 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.3\% | 10.4\% | 0.0\% | 6.3\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 36.8\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 32.3\% |
| 2001 | 1522 | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 4.7\% | 5.2\% | 0.0\% | 7.6\% | 0.0\% | 0.3\% | 0.0\% | 2.4\% | 0.0\% | 0.1\% | 39.4\% | 4.0\% | 0.0\% | 0.5\% | 0.0\% | 35.5\% |
| 2002 | 1532 | 0.8\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 8.7\% | 6.7\% | 0.0\% | 7.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.6\% | 36.4\% | 4.4\% | 0.0\% | 0.3\% | 0.0\% | 31.5\% |
| 2003 | 730 | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.7\% | 2.6\% | 0.0\% | 5.1\% | 0.0\% | 0.3\% | 0.0\% | 6.2\% | 0.0\% | 0.5\% | 38.6\% | 2.2\% | 0.0\% | 0.3\% | 0.0\% | 29.7\% |
| 2004 | 494 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.7\% | 6.3\% | 0.0\% | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 10.5\% | 0.0\% | 0.4\% | 30.0\% | 5.7\% | 0.0\% | 1.8\% | 0.0\% | 32.4\% |
| 2005 | 637 | 0.3\% | 0.2\% | 0.0\% | 0.3\% | 0.0\% | 11.3\% | 7.5\% | 0.0\% | 12.7\% | 0.0\% | 0.0\% | 0.0\% | 7.1\% | 0.0\% | 0.8\% | 33.8\% | 3.8\% | 0.0\% | 0.9\% | 0.0\% | 21.4\% |
| 2006 | 1440 | 0.8\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 8.3\% | 5.3\% | 0.0\% | 5.5\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 0.0\% | 1.2\% | 51.0\% | 6.0\% | 0.0\% | 0.5\% | 0.0\% | 15.0\% |
| 2007 | 1774 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.5\% | 4.5\% | 0.0\% | 5.9\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 0.4\% | 30.9\% | 3.3\% | 0.0\% | 0.5\% | 18.5\% | 23.3\% |
| 2008 | 1589 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 4.7\% | 0.0\% | 5.4\% | 0.0\% | 0.0\% | 0.0\% | 3.8\% | 0.0\% | 0.3\% | 44.0\% | 7.9\% | 0.0\% | 0.3\% | 0.0\% | 27.2\% |
| 1979-2008 | 1084 | 0.7\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 8.4\% | 4.8\% | 0.6\% | 9.1\% | 0.1\% | 0.9\% | 0.0\% | 4.6\% | 0.0\% | 0.3\% | 33.8\% | 6.8\% | 0.0\% | 0.3\% | 1.9\% | 27.1\% |
| 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\% |
| 1985-1995 | 1187 | 0.4\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 11.5\% | 3.6\% | 1.7\% | 11.7\% | 0.1\% | 2.4\% | 0.0\% | 6.5\% | 0.0\% | 0.2\% | 26.4\% | 10.1\% | 0.0\% | 0.3\% | 0.7\% | 24.2\% |
| 1996-1998 | 1042 | 1.3\% | 0.1\% | 0.0\% | 0.1\% | 0.1\% | 1.3\% | 2.5\% | 0.0\% | 9.9\% | 0.2\% | 0.4\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 37.1\% | 7.4\% | 0.0\% | 0.0\% | 5.1\% | 33.4\% |
| 1999-2008 | 1024 | 0.8\% | 0.0\% | 0.0\% | 0.3\% | 0.3\% | 8.4\% | 6.3\% | 0.0\% | 7.1\% | 0.0\% | 0.1\% | 0.0\% | 4.4\% | 0.0\% | 0.4\% | 37.9\% | 4.2\% | 0.0\% | 0.5\% | 1.8\% | 27.3\% |

Appendix C.52. Percent distribution of Samish Fall Fingerling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | 2042 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 9.1\% | 1.8\% | 1.3\% | 17.1\% | 0.2\% | 3.3\% | 0.0\% | 8.0\% | 0.0\% | 0.0\% | 33.3\% | 11.0\% | 0.0\% | 0.0\% | 0.0\% | 14.3\% |
| 1990 | 2548 | 2.2\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 20.2\% | 2.0\% | 3.5\% | 10.2\% | 0.1\% | 1.5\% | 0.0\% | 9.4\% | 0.0\% | 0.1\% | 27.4\% | 8.1\% | 0.0\% | 0.3\% | 0.0\% | 14.4\% |
| 1991 | 1035 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.4\% | 3.2\% | 1.9\% | 10.3\% | 0.1\% | 2.9\% | 0.0\% | 9.4\% | 0.0\% | 0.8\% | 20.3\% | 10.0\% | 0.0\% | 1.4\% | 1.3\% | 24.2\% |
| 1992 | 724 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 11.6\% | 0.8\% | 2.5\% | 12.8\% | 0.0\% | 1.9\% | 0.0\% | 9.9\% | 0.0\% | 0.7\% | 14.2\% | 22.4\% | 0.0\% | 0.0\% | 0.7\% | 21.8\% |
| 1993 | 1222 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.3\% | 13.8\% | 8.0\% | 3.8\% | 17.9\% | 0.2\% | 2.5\% | 0.0\% | 4.1\% | 0.0\% | 0.1\% | 15.3\% | 13.5\% | 0.0\% | 0.0\% | 0.0\% | 20.1\% |
| 1994 | 1034 | 0.5\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 13.2\% | 5.5\% | 1.4\% | 13.7\% | 0.0\% | 2.3\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 36.9\% | 4.2\% | 0.0\% | 0.0\% | 0.4\% | 19.2\% |
| 1995 | 823 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.3\% | 3.3\% | 0.0\% | 5.3\% | 0.0\% | 1.6\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 24.3\% | 20.4\% | 0.0\% | 0.0\% | 2.2\% | 32.3\% |
| 1996 | 1362 | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 1.0\% | 0.7\% | 0.0\% | 11.4\% | 0.0\% | 0.5\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 32.6\% | 14.3\% | 0.0\% | 0.0\% | 14.8\% | 22.9\% |
| 1997 | 1443 | 0.6\% | 0.4\% | 0.0\% | 0.3\% | 0.3\% | 2.8\% | 3.5\% | 0.0\% | 9.1\% | 0.8\% | 1.0\% | 0.0\% | 1.0\% | 0.0\% | 0.1\% | 32.8\% | 11.0\% | 0.0\% | 0.0\% | 0.3\% | 35.8\% |
| 1998 | 735 | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 3.3\% | 0.0\% | 11.8\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 42.6\% | 4.9\% | 0.0\% | 0.0\% | 0.5\% | 31.2\% |
| 1999 | 278 | 4.3\% | 0.0\% | 0.0\% | 2.2\% | 3.6\% | 1.4\% | 10.4\% | 0.0\% | 12.2\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 36.0\% | 5.8\% | 0.0\% | 0.0\% | 0.0\% | 22.3\% |
| 2000 | 341 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.1\% | 10.3\% | 0.0\% | 6.7\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 39.3\% | 6.7\% | 0.0\% | 0.0\% | 0.0\% | 25.5\% |
| 2001 | 1718 | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.1\% | 4.5\% | 5.4\% | 0.0\% | 8.7\% | 0.0\% | 0.6\% | 0.0\% | 2.7\% | 0.0\% | 0.1\% | 37.9\% | 7.8\% | 0.0\% | 0.4\% | 0.0\% | 31.5\% |
| 2002 | 1628 | 0.9\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 8.5\% | 7.3\% | 0.0\% | 7.6\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.6\% | 35.4\% | 6.1\% | 0.0\% | 0.3\% | 0.0\% | 29.7\% |
| 2003 | 768 | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.8\% | 3.1\% | 0.0\% | 5.7\% | 0.0\% | 0.3\% | 0.0\% | 6.6\% | 0.0\% | 0.5\% | 37.4\% | 3.1\% | 0.0\% | 0.3\% | 0.0\% | 28.3\% |
| 2004 | 554 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.4\% | 6.7\% | 0.0\% | 5.4\% | 0.0\% | 0.0\% | 0.0\% | 11.9\% | 0.0\% | 0.4\% | 28.5\% | 8.7\% | 0.0\% | 1.6\% | 0.0\% | 28.9\% |
| 2005 | 740 | 0.4\% | 0.1\% | 0.0\% | 0.4\% | 0.0\% | 10.9\% | 8.0\% | 0.0\% | 14.1\% | 0.0\% | 0.0\% | 0.0\% | 7.6\% | 0.0\% | 0.8\% | 31.4\% | 7.2\% | 0.0\% | 0.8\% | 0.0\% | 18.4\% |
| 2006 | 1598 | 0.9\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 7.9\% | 5.6\% | 0.0\% | 6.3\% | 0.0\% | 0.0\% | 0.0\% | 6.8\% | 0.0\% | 1.2\% | 49.4\% | 7.6\% | 0.0\% | 0.4\% | 0.0\% | 13.5\% |
| 2007 | 2058 | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.3\% | 4.7\% | 0.0\% | 6.4\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.4\% | 29.4\% | 7.8\% | 0.0\% | 0.4\% | 18.1\% | 20.1\% |
| 2008 | 1733 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 4.8\% | 0.0\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 4.3\% | 0.0\% | 0.3\% | 43.3\% | 9.2\% | 0.0\% | 0.3\% | 0.0\% | 24.9\% |
| 1979-2008 | 1219 | 0.8\% | 0.1\% | 0.0\% | 0.3\% | 0.3\% | 8.8\% | 4.9\% | 0.7\% | 10.0\% | 0.1\% | 0.9\% | 0.0\% | 4.9\% | 0.0\% | 0.3\% | 32.4\% | 9.5\% | 0.0\% | 0.3\% | 1.9\% | 24.0\% |
| 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\% |
| 1985-1995 | 1347 | 0.4\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 12.8\% | 3.5\% | 2.0\% | 12.5\% | 0.1\% | 2.3\% | 0.0\% | 6.6\% | 0.0\% | 0.2\% | 24.5\% | 12.8\% | 0.0\% | 0.2\% | 0.6\% | 20.9\% |
| 1996-1998 | 1180 | 1.3\% | 0.2\% | 0.0\% | 0.1\% | 0.1\% | 1.7\% | 2.5\% | 0.0\% | 10.8\% | 0.3\% | 0.5\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 36.0\% | 10.1\% | 0.0\% | 0.0\% | 5.2\% | 29.9\% |
| 1999-2008 | 1142 | 0.9\% | 0.1\% | 0.0\% | 0.3\% | 0.4\% | 8.1\% | 6.6\% | 0.0\% | 8.0\% | 0.0\% | 0.1\% | 0.0\% | 4.8\% | 0.0\% | 0.4\% | 36.8\% | 7.0\% | 0.0\% | 0.5\% | 1.8\% | 24.3\% |

Appendix C.53. Percent distribution of Shuswap River Summer reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | 597 | 11.7\% | 0.0\% | 1.7\% | 25.0\% | 5.0\% | 11.6\% | 0.0\% | 0.5\% | 1.3\% | 14.4\% | 15.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.5\% |
| 1995 | 291 | 17.9\% | 0.0\% | 5.5\% | 13.4\% | 11.7\% | 4.1\% | 0.0\% | 0.0\% | 2.1\% | 1.0\% | 8.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.8\% | 0.0\% | 0.0\% | 0.3\% | 1.0\% | 28.2\% |
| 1996 | 603 | 15.4\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 0.0\% | 1.2\% | 0.0\% | 3.0\% | 0.0\% | 8.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 1.3\% | 66.5\% |
| 1997 | 341 | 17.9\% | 0.9\% | 0.0\% | 12.0\% | 5.9\% | 0.6\% | 0.0\% | 0.0\% | 7.0\% | 1.2\% | 32.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.6\% |
| 1998 | 670 | 20.6\% | 0.1\% | 8.1\% | 8.8\% | 14.2\% | 0.0\% | 0.7\% | 0.0\% | 5.8\% | 0.0\% | 7.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.6\% | 0.7\% | 31.5\% |
| 1999 | 352 | 27.8\% | 0.0\% | 12.8\% | 1.4\% | 13.1\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% | 0.0\% | 10.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 27.6\% |
| 2000 | 649 | 9.4\% | 0.0\% | 6.6\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 0.0\% | 6.9\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 1.4\% | 68.0\% |
| 2001 | 1092 | 5.9\% | 0.6\% | 0.3\% | 0.0\% | 4.0\% | 0.0\% | 0.0\% | 0.1\% | 4.3\% | 0.9\% | 0.7\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.5\% | 5.0\% | 77.3\% |
| 2002 | 1407 | 16.6\% | 0.0\% | 3.1\% | 11.7\% | 5.8\% | 1.6\% | 0.0\% | 0.0\% | 2.6\% | 0.1\% | 8.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.5\% | 48.9\% |
| 2003 | 1528 | 10.2\% | 0.7\% | 2.0\% | 8.2\% | 5.2\% | 0.0\% | 0.3\% | 0.0\% | 5.2\% | 0.8\% | 4.3\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.7\% | 1.8\% | 59.6\% |
| 2004 | 1034 | 16.5\% | 0.0\% | 1.9\% | 8.5\% | 8.3\% | 0.9\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 12.6\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.3\% | 2.1\% | 43.3\% |
| 2005 | 748 | 13.4\% | 0.0\% | 0.8\% | 11.0\% | 15.0\% | 0.4\% | 3.1\% | 0.0\% | 4.0\% | 0.0\% | 7.5\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 40.4\% |
| 2006 | 1224 | 11.7\% | 0.0\% | 2.0\% | 13.0\% | 12.0\% | 0.3\% | 0.9\% | 0.0\% | 6.6\% | 0.0\% | 6.9\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.2\% | 3.0\% | 42.2\% |
| 2007 | 439 | 5.7\% | 0.2\% | 3.0\% | 2.5\% | 5.9\% | 0.0\% | 0.7\% | 0.0\% | 3.2\% | 0.0\% | 10.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 5.5\% | 62.2\% |
| 2008 | 1554 | 6.4\% | 0.0\% | 0.3\% | 6.3\% | 7.7\% | 0.0\% | 1.6\% | 0.0\% | 4.4\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 3.2\% | 68.1\% |
| 1979-2008 | 835 | 13.8\% | 0.2\% | 3.2\% | 8.1\% | 8.1\% | 1.3\% | 0.6\% | 0.0\% | 4.2\% | 1.2\% | 9.6\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.3\% | 2.0\% | 46.0\% |
| 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\% |
| 1985-1995 | 444 | 14.8\% | 0.0\% | 3.6\% | 19.2\% | 8.4\% | 7.8\% | 0.0\% | 0.3\% | 1.7\% | 7.7\% | 12.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.5\% | 0.0\% | 0.0\% | 0.2\% | 0.5\% | 18.4\% |
| 1996-1998 | 538 | 18.0\% | 0.3\% | 2.7\% | 6.9\% | 7.9\% | 0.2\% | 0.6\% | 0.0\% | 5.3\% | 0.4\% | 16.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.3\% | 0.7\% | 38.5\% |
| 1999-2008 | 1003 | 12.4\% | 0.2\% | 3.3\% | 6.3\% | 8.1\% | 0.3\% | 0.7\% | 0.0\% | 4.4\% | 0.2\% | 7.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.4\% | 2.7\% | 53.8\% |

Appendix C.54. Percent distribution of Shuswap River Summer total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | 654 | 14.5\% | 0.0\% | 1.8\% | 24.3\% | 5.4\% | 11.2\% | 0.0\% | 0.5\% | 1.5\% | 13.8\% | 14.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.8\% |
| 1995 | 385 | 22.9\% | 0.0\% | 5.2\% | 15.6\% | 10.9\% | 4.7\% | 0.0\% | 0.0\% | 2.1\% | 1.0\% | 10.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.2\% | 0.0\% | 0.0\% | 0.3\% | 0.8\% | 21.3\% |
| 1996 | 646 | 18.6\% | 0.0\% | 0.0\% | 0.5\% | 3.6\% | 0.3\% | 1.2\% | 0.0\% | 3.4\% | 0.0\% | 8.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 1.4\% | 62.1\% |
| 1997 | 415 | 20.2\% | 1.4\% | 0.0\% | 12.3\% | 6.5\% | 0.7\% | 0.0\% | 0.0\% | 7.2\% | 1.2\% | 31.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.5\% |
| 1998 | 771 | 21.0\% | 0.1\% | 8.7\% | 8.9\% | 16.5\% | 0.0\% | 0.8\% | 0.0\% | 6.1\% | 0.0\% | 8.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.5\% | 0.6\% | 27.4\% |
| 1999 | 410 | 32.2\% | 0.0\% | 13.2\% | 1.5\% | 13.4\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 0.0\% | 9.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 23.7\% |
| 2000 | 728 | 11.0\% | 0.0\% | 9.9\% | 0.0\% | 5.2\% | 0.0\% | 0.0\% | 0.0\% | 3.8\% | 0.0\% | 7.3\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 1.4\% | 60.6\% |
| 2001 | 1190 | 8.0\% | 1.0\% | 0.3\% | 0.0\% | 5.0\% | 0.0\% | 0.0\% | 0.1\% | 5.2\% | 2.4\% | 1.3\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.5\% | 5.0\% | 70.9\% |
| 2002 | 1538 | 18.3\% | 0.0\% | 3.4\% | 12.9\% | 7.0\% | 1.5\% | 0.0\% | 0.0\% | 2.9\% | 0.1\% | 8.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.5\% | 44.7\% |
| 2003 | 1642 | 11.2\% | 1.0\% | 2.3\% | 9.0\% | 6.3\% | 0.0\% | 0.3\% | 0.0\% | 5.8\% | 1.1\% | 4.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.7\% | 1.8\% | 55.5\% |
| 2004 | 1156 | 17.9\% | 0.0\% | 2.3\% | 9.3\% | 11.1\% | 0.8\% | 0.0\% | 0.0\% | 4.4\% | 0.0\% | 11.5\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.3\% | 2.1\% | 38.8\% |
| 2005 | 831 | 14.6\% | 0.0\% | 0.8\% | 12.3\% | 17.0\% | 0.4\% | 3.1\% | 0.0\% | 4.3\% | 0.0\% | 6.9\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 36.3\% |
| 2006 | 1300 | 12.0\% | 0.0\% | 2.1\% | 13.4\% | 13.5\% | 0.3\% | 1.0\% | 0.0\% | 7.0\% | 0.0\% | 6.5\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.2\% | 3.1\% | 39.8\% |
| 2007 | 567 | 6.9\% | 0.2\% | 12.3\% | 2.8\% | 10.9\% | 0.0\% | 0.9\% | 0.0\% | 3.7\% | 0.0\% | 9.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 4.8\% | 48.1\% |
| 2008 | 1717 | 9.0\% | 0.0\% | 0.5\% | 7.7\% | 9.0\% | 0.0\% | 1.7\% | 0.0\% | 5.4\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 3.1\% | 61.7\% |
| 1979-2008 | 930 | 15.9\% | 0.2\% | 4.2\% | 8.7\% | 9.4\% | 1.3\% | 0.6\% | 0.0\% | 4.6\% | 1.3\% | 9.2\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.3\% | 1.9\% | 40.9\% |
| 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\% |
| 1985-1995 | 520 | 18.7\% | 0.0\% | 3.5\% | 19.9\% | 8.1\% | 7.9\% | 0.0\% | 0.2\% | 1.8\% | 7.4\% | 12.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.0\% | 0.0\% | 0.0\% | 0.1\% | 0.4\% | 14.5\% |
| 1996-1998 | 611 | 19.9\% | 0.5\% | 2.9\% | 7.2\% | 8.8\% | 0.3\% | 0.7\% | 0.0\% | 5.6\% | 0.4\% | 16.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.2\% | 0.7\% | 34.6\% |
| 1999-2008 | 1108 | 14.1\% | 0.2\% | 4.7\% | 6.9\% | 9.9\% | 0.3\% | 0.7\% | 0.0\% | 4.8\% | 0.4\% | 6.5\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.3\% | 0.0\% | 0.0\% | 0.3\% | 2.6\% | 48.0\% |

Appendix C.55. Percent distribution of Skagit Spring Fingerling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1997 | 919 | 1.0\% | 0.0\% | 0.0\% | 0.4\% | 0.8\% | 1.5\% | 5.4\% | 0.0\% | 8.6\% | 0.5\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 7.2\% | 0.0\% | 0.5\% | 0.0\% | 71.5\% |
| 1998 | 675 | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 5.0\% | 0.0\% | 9.3\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 2.5\% | 0.0\% | 1.2\% | 0.0\% | 78.2\% |
| 1999 | 1720 | 0.5\% | 0.6\% | 0.0\% | 0.3\% | 0.7\% | 2.0\% | 6.0\% | 0.0\% | 4.6\% | 0.0\% | 0.1\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.5\% | 1.6\% | 0.0\% | 1.0\% | 0.0\% | 81.9\% |
| 2000 | 1109 | 1.5\% | 0.0\% | 0.4\% | 0.0\% | 0.5\% | 6.2\% | 6.9\% | 0.0\% | 9.1\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 2.4\% | 0.0\% | 0.1\% | 0.0\% | 72.8\% |
| 2001 | 1813 | 1.3\% | 0.2\% | 0.3\% | 0.2\% | 0.8\% | 5.6\% | 3.8\% | 0.0\% | 5.4\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 4.3\% | 0.0\% | 0.5\% | 0.0\% | 77.2\% |
| 2002 | 1749 | 2.5\% | 0.0\% | 0.5\% | 0.5\% | 0.7\% | 6.7\% | 4.6\% | 0.0\% | 6.8\% | 0.0\% | 0.1\% | 0.0\% | 0.3\% | 0.0\% | 0.1\% | 0.0\% | 2.5\% | 0.0\% | 0.6\% | 0.0\% | 74.2\% |
| 2003 | 673 | 2.2\% | 0.0\% | 0.9\% | 1.2\% | 0.7\% | 18.3\% | 0.7\% | 0.0\% | 5.3\% | 0.0\% | 0.1\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.1\% | 1.2\% | 0.0\% | 0.7\% | 0.0\% | 67.0\% |
| 2004 | 1101 | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 11.7\% | 2.6\% | 0.0\% | 6.9\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 1.4\% | 0.0\% | 73.0\% |
| 2005 | 1234 | 1.3\% | 0.1\% | 0.0\% | 0.0\% | 1.4\% | 11.0\% | 5.3\% | 0.0\% | 5.4\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.3\% | 3.7\% | 70.7\% |
| 2006 | 1642 | 0.3\% | 0.1\% | 0.2\% | 0.2\% | 0.5\% | 6.6\% | 2.9\% | 0.0\% | 6.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.5\% | 2.6\% | 0.0\% | 1.0\% | 15.3\% | 63.7\% |
| 2007 | 2452 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.1\% | 6.4\% | 0.0\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.3\% | 2.9\% | 0.0\% | 1.3\% | 19.2\% | 53.0\% |
| 2008 | 1232 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 4.4\% | 7.2\% | 0.0\% | 5.4\% | 0.0\% | 0.2\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 1.4\% | 5.5\% | 0.0\% | 15.9\% | 0.0\% | 58.4\% |
| 1979-2008 | 1360 | 1.1\% | 0.1\% | 0.2\% | 0.3\% | 0.6\% | 6.9\% | 4.8\% | 0.0\% | 6.6\% | 0.0\% | 0.3\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.4\% | 2.9\% | 0.0\% | 2.0\% | 3.2\% | 70.1\% |
| 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\% |
| 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\% |
| 1996-1998 | 797 | 1.5\% | 0.0\% | 0.0\% | 0.2\% | 0.8\% | 0.8\% | 5.2\% | 0.0\% | 9.0\% | 0.3\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 4.9\% | 0.0\% | 0.9\% | 0.0\% | 74.9\% |
| 1999-2008 | 1472 | 1.0\% | 0.1\% | 0.2\% | 0.3\% | 0.6\% | 8.2\% | 4.7\% | 0.0\% | 6.2\% | 0.0\% | 0.1\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.3\% | 2.5\% | 0.0\% | 2.3\% | 3.8\% | 69.2\% |

Appendix C.56. Percent distribution of Skagit Spring Fingerling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1997 | 986 | 1.2\% | 0.0\% | 0.0\% | 0.4\% | 0.9\% | 1.9\% | 5.8\% | 0.0\% | 9.7\% | 0.5\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 8.8\% | 0.0\% | 0.5\% | 0.0\% | 66.6\% |
| 1998 | 729 | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 5.5\% | 0.0\% | 10.7\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 6.0\% | 0.0\% | 1.1\% | 0.0\% | 72.4\% |
| 1999 | 1805 | 0.9\% | 1.0\% | 0.0\% | 0.3\% | 0.8\% | 2.0\% | 6.4\% | 0.0\% | 5.7\% | 0.0\% | 0.1\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.5\% | 2.8\% | 0.0\% | 1.0\% | 0.0\% | 78.1\% |
| 2000 | 1210 | 2.0\% | 0.0\% | 0.6\% | 0.0\% | 0.6\% | 6.6\% | 7.4\% | 0.0\% | 10.7\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 5.0\% | 0.0\% | 0.1\% | 0.0\% | 66.7\% |
| 2001 | 1985 | 1.7\% | 0.3\% | 0.4\% | 0.3\% | 0.9\% | 5.4\% | 4.0\% | 0.0\% | 6.2\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 9.5\% | 0.0\% | 0.5\% | 0.0\% | 70.5\% |
| 2002 | 1829 | 2.8\% | 0.0\% | 0.5\% | 0.5\% | 0.9\% | 6.7\% | 5.1\% | 0.0\% | 7.7\% | 0.0\% | 0.1\% | 0.0\% | 0.3\% | 0.0\% | 0.1\% | 0.0\% | 3.7\% | 0.0\% | 0.5\% | 0.0\% | 70.9\% |
| 2003 | 701 | 2.4\% | 0.0\% | 1.0\% | 1.3\% | 0.9\% | 18.8\% | 0.9\% | 0.0\% | 6.1\% | 0.0\% | 0.1\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.1\% | 1.9\% | 0.0\% | 0.7\% | 0.0\% | 64.3\% |
| 2004 | 1159 | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 12.2\% | 3.0\% | 0.0\% | 8.2\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 1.3\% | 0.0\% | 69.4\% |
| 2005 | 1302 | 1.6\% | 0.2\% | 0.0\% | 0.0\% | 1.8\% | 11.3\% | 6.1\% | 0.0\% | 6.5\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.3\% | 4.1\% | 67.0\% |
| 2006 | 1760 | 0.5\% | 0.1\% | 0.3\% | 0.2\% | 0.6\% | 6.8\% | 3.2\% | 0.0\% | 7.1\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.5\% | 4.0\% | 0.0\% | 1.0\% | 16.2\% | 59.4\% |
| 2007 | 2613 | 0.4\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 6.7\% | 0.0\% | 7.5\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.3\% | 3.6\% | 0.0\% | 1.3\% | 20.7\% | 49.8\% |
| 2008 | 1285 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 4.4\% | 7.9\% | 0.0\% | 5.9\% | 0.0\% | 0.3\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 1.3\% | 6.9\% | 0.0\% | 15.6\% | 0.0\% | 56.0\% |
| 1979-2008 | 1447 | 1.3\% | 0.1\% | 0.2\% | 0.3\% | 0.7\% | 7.1\% | 5.2\% | 0.0\% | 7.7\% | 0.0\% | 0.4\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.3\% | 4.6\% | 0.0\% | 2.0\% | 3.4\% | 65.9\% |
| 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\% |
| 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\% |
| 1996-1998 | 858 | 1.6\% | 0.0\% | 0.0\% | 0.2\% | 1.0\% | 1.0\% | 5.6\% | 0.0\% | 10.2\% | 0.3\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 7.4\% | 0.0\% | 0.8\% | 0.0\% | 69.5\% |
| 1999-2008 | 1565 | 1.3\% | 0.2\% | 0.3\% | 0.3\% | 0.7\% | 8.3\% | 5.1\% | 0.0\% | 7.2\% | 0.0\% | 0.1\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.3\% | 4.1\% | 0.0\% | 2.2\% | 4.1\% | 65.2\% |

Appendix C.57. Percent distribution of Skagit Spring Yearling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | 120 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.7\% | 0.0\% | 0.0\% | 29.2\% | 0.0\% | 26.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.0\% | 15.8\% | 0.0\% | 0.0\% | 0.0\% | 11.7\% |
| 1986 | 211 | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 5.7\% | 6.2\% | 35.5\% | 4.3\% | 9.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 7.6\% | 0.0\% | 0.0\% | 0.0\% | 20.4\% |
| 1987 | 108 | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 10.2\% | 0.0\% | 12.0\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 24.1\% | 20.4\% | 0.0\% | 0.0\% | 0.0\% | 23.1\% |
| 1988 | 51 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 9.5\% | 0.4\% | 14.4\% | 0.0\% | 13.4\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 21.4\% | 14.4\% | 0.0\% | 0.0\% | 0.0\% | 23.0\% |
| 1989 | 760 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 1.8\% | 0.0\% | 17.5\% | 0.8\% | 3.4\% | 0.0\% | 4.3\% | 0.0\% | 0.0\% | 12.4\% | 8.4\% | 0.0\% | 18.0\% | 0.0\% | 29.9\% |
| 1990 | 681 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 4.8\% | 8.7\% | 3.1\% | 11.0\% | 0.4\% | 5.9\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 14.1\% | 22.5\% | 0.0\% | 1.9\% | 0.0\% | 23.2\% |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | < 3 Brood | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1997 | 461 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 12.8\% | 0.0\% | 19.1\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 20.4\% | 0.0\% | 1.1\% | 0.0\% | 41.2\% |
| 1998 | 1119 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 1.3\% | 10.2\% | 0.0\% | 8.8\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 16.7\% | 0.0\% | 0.7\% | 0.0\% | 56.4\% |
| 1999 | 2372 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 4.8\% | 4.3\% | 0.0\% | 7.4\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 8.7\% | 0.0\% | 1.2\% | 0.0\% | 72.4\% |
| 2000 | 522 | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 7.1\% | 3.1\% | 0.0\% | 15.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 15.5\% | 0.0\% | 0.6\% | 0.0\% | 56.5\% |
| 2001 | 251 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 2.4\% | 0.0\% | 12.0\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 10.8\% | 0.0\% | 2.0\% | 0.0\% | 66.1\% |
| 2002 | 272 | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 14.7\% | 0.0\% | 14.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 8.5\% | 0.0\% | 0.7\% | 0.0\% | 59.2\% |
| 2003 | 891 | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.3\% | 20.3\% | 3.9\% | 0.0\% | 9.4\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.6\% | 7.5\% | 0.0\% | 0.2\% | 0.0\% | 56.7\% |
| 2004 | 1584 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 13.0\% | 3.7\% | 0.0\% | 5.4\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.2\% | 4.2\% | 0.0\% | 0.8\% | 0.1\% | 71.3\% |
| 2005 | 1156 | 1.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 7.6\% | 5.3\% | 0.0\% | 10.4\% | 0.0\% | 0.3\% | 0.0\% | 0.3\% | 0.0\% | 0.3\% | 0.1\% | 6.4\% | 0.0\% | 1.0\% | 6.5\% | 60.8\% |
| 2006 | 659 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.6\% | 6.4\% | 0.0\% | 11.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.6\% | 3.5\% | 0.0\% | 1.2\% | 27.5\% | 39.0\% |
| 2007 | 746 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 8.2\% | 0.0\% | 4.4\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.3\% | 1.1\% | 14.5\% | 0.0\% | 0.4\% | 23.6\% | 44.4\% |
| 2008 | 547 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 4.6\% | 0.0\% | 7.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 10.1\% | 0.0\% | 15.9\% | 0.0\% | 59.2\% |
| 1979-2008 | 721 | 0.3\% | 0.0\% | 0.0\% | 0.3\% | 0.3\% | 5.7\% | 5.8\% | 0.5\% | 13.5\% | 0.3\% | 4.1\% | 0.0\% | 0.9\% | 0.0\% | 0.1\% | 5.2\% | 12.0\% | 0.0\% | 2.5\% | 3.2\% | 45.2\% |
| 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\% |
| 1985-1995 | 399 | 0.2\% | 0.0\% | 0.0\% | 0.8\% | 0.2\% | 4.4\% | 4.3\% | 1.6\% | 19.6\% | 0.9\% | 11.8\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 14.2\% | 14.8\% | 0.0\% | 3.3\% | 0.0\% | 21.9\% |
| 1996-1998 | 790 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 1.5\% | 11.5\% | 0.0\% | 14.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 18.6\% | 0.0\% | 0.9\% | 0.0\% | 48.8\% |
| 1999-2008 | 900 | 0.4\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 7.2\% | 5.6\% | 0.0\% | 9.7\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.1\% | 0.5\% | 9.0\% | 0.0\% | 2.4\% | 5.8\% | 58.6\% |

Appendix C.58. Percent distribution of Skagit Spring Yearling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | 130 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.9\% | 0.0\% | 0.0\% | 29.2\% | 0.0\% | 25.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.2\% | 18.5\% | 0.0\% | 0.0\% | 0.0\% | 10.8\% |
| 1986 | 225 | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 5.8\% | 6.2\% | 35.6\% | 4.0\% | 9.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 9.3\% | 0.0\% | 0.0\% | 0.0\% | 19.1\% |
| 1987 | 163 | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 7.4\% | 0.0\% | 9.2\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 19.0\% | 39.9\% | 0.0\% | 0.0\% | 0.0\% | 15.3\% |
| 1988 | 585 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 9.2\% | 0.5\% | 16.9\% | 0.0\% | 12.5\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 20.2\% | 16.1\% | 0.0\% | 0.0\% | 0.0\% | 20.2\% |
| 1989 | 844 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.0\% | 1.9\% | 0.0\% | 19.5\% | 0.8\% | 3.4\% | 0.0\% | 4.7\% | 0.0\% | 0.0\% | 11.5\% | 10.4\% | 0.0\% | 16.7\% | 0.0\% | 26.9\% |
| 1990 | 735 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 5.0\% | 8.6\% | 3.3\% | 11.4\% | 0.4\% | 5.7\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 13.5\% | 24.1\% | 0.0\% | 1.8\% | 0.0\% | 21.5\% |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | A | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1997 | 629 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 3.5\% | 11.3\% | 0.0\% | 18.8\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 30.2\% | 0.0\% | 0.8\% | 0.0\% | 30.2\% |
| 1998 | 1233 | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 1.1\% | 10.0\% | 0.0\% | 9.9\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 20.6\% | 0.0\% | 0.6\% | 0.0\% | 51.2\% |
| 1999 | 2508 | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 4.7\% | 4.4\% | 0.0\% | 7.8\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 12.1\% | 0.0\% | 1.2\% | 0.0\% | 68.5\% |
| 2000 | 570 | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 6.7\% | 3.2\% | 0.0\% | 16.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 19.8\% | 0.0\% | 0.5\% | 0.0\% | 51.8\% |
| 2001 | 315 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 2.2\% | 0.0\% | 11.7\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 26.0\% | 0.0\% | 1.6\% | 0.0\% | 52.7\% |
| 2002 | 310 | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 15.5\% | 0.0\% | 16.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 13.2\% | 0.0\% | 0.6\% | 0.0\% | 51.9\% |
| 2003 | 962 | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.4\% | 19.9\% | 4.7\% | 0.0\% | 10.6\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.5\% | 10.2\% | 0.0\% | 0.2\% | 0.0\% | 52.5\% |
| 2004 | 1653 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 13.1\% | 4.1\% | 0.0\% | 6.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.2\% | 5.9\% | 0.0\% | 0.8\% | 0.1\% | 68.3\% |
| 2005 | 1240 | 1.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 7.5\% | 5.7\% | 0.0\% | 11.5\% | 0.0\% | 0.3\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.1\% | 8.7\% | 0.0\% | 0.9\% | 6.9\% | 56.7\% |
| 2006 | 731 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.4\% | 7.0\% | 0.0\% | 12.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.5\% | 5.9\% | 0.0\% | 1.1\% | 27.4\% | 35.2\% |
| 2007 | 816 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 8.2\% | 0.0\% | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.2\% | 1.0\% | 17.4\% | 0.0\% | 0.4\% | 24.4\% | 40.6\% |
| 2008 | 579 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 5.0\% | 0.0\% | 7.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 13.1\% | 0.0\% | 15.2\% | 0.0\% | 56.0\% |
| 1979-2008 | 790 | 0.4\% | 0.0\% | 0.0\% | 0.3\% | 0.4\% | 5.7\% | 5.9\% | 0.6\% | 14.1\% | 0.3\% | 3.9\% | 0.0\% | 0.9\% | 0.0\% | 0.1\% | 4.7\% | 16.7\% | 0.0\% | 2.4\% | 3.3\% | 40.5\% |
| 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\% |
| 1985-1995 | 447 | 0.2\% | 0.0\% | 0.0\% | 0.8\% | 0.2\% | 4.6\% | 4.2\% | 1.7\% | 20.0\% | 0.9\% | 10.9\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 12.7\% | 19.7\% | 0.0\% | 3.1\% | 0.0\% | 19.0\% |
| 1996-1998 | 931 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 2.3\% | 10.6\% | 0.0\% | 14.3\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 25.4\% | 0.0\% | 0.7\% | 0.0\% | 40.7\% |
| 1999-2008 | 968 | 0.4\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 7.0\% | 6.0\% | 0.0\% | 10.5\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.1\% | 0.4\% | 13.2\% | 0.0\% | 2.2\% | 5.9\% | 53.4\% |

Appendix C.59. Percent distribution of Sooes Fall Fingerling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | 158 | 7.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 8.2\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 75.3\% |
| 1990 | 141 | 9.9\% | 2.8\% | 4.3\% | 14.2\% | 0.0\% | 17.7\% | 0.0\% | 0.0\% | 7.1\% | 1.4\% | 2.8\% | 0.0\% | 1.4\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 34.8\% |
| 1991 | 345 | 11.9\% | 0.0\% | 0.0\% | 9.9\% | 0.0\% | 5.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 64.3\% |
| 1992 | 295 | 8.5\% | 0.0\% | 0.0\% | 9.5\% | 0.0\% | 19.3\% | 1.7\% | 0.0\% | 1.0\% | 2.0\% | 3.4\% | 0.0\% | 0.3\% | 0.0\% | 0.7\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 51.9\% |
| 1993 | 237 | 4.6\% | 0.0\% | 0.0\% | 7.6\% | 2.1\% | 16.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 2.1\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 64.1\% |
| 1994 | 200 | 17.0\% | 3.0\% | 4.0\% | 10.5\% | 1.0\% | 8.0\% | 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\% | 55.5\% |
| 1995 | 153 | 8.5\% | 0.0\% | 0.0\% | 4.6\% | 0.0\% | 9.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 73.9\% |
| 1996 | 206 | 8.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 90.3\% |
| 1997 | 289 | 10.4\% | 0.0\% | 5.2\% | 5.2\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 1.4\% | 0.7\% | 0.3\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 20.8\% | 0.0\% | 49.5\% |
| 1998 | 267 | 9.0\% | 0.0\% | 1.5\% | 17.2\% | 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\% | 72.3\% |
| 1999 | 226 | 11.9\% | 0.0\% | 11.9\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 68.6\% |
| 2000 | 84 | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 10.7\% | 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\% | 86.9\% |
| 2001 | 295 | 6.1\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 88.5\% |
| 2002 | 536 | 10.6\% | 0.2\% | 1.3\% | 2.8\% | 3.0\% | 0.7\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 79.7\% |
| 2003 | 753 | 12.1\% | 0.1\% | 0.0\% | 4.8\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.7\% | 0.0\% | 25.2\% | 0.0\% | 53.0\% |
| 2004 | 880 | 17.4\% | 0.5\% | 2.0\% | 14.9\% | 0.0\% | 0.8\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.5\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 61.0\% |
| 2005 | 492 | 26.8\% | 0.0\% | 2.2\% | 25.0\% | 6.9\% | 1.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.7\% |
| 2006 | 215 | 22.8\% | 1.4\% | 2.8\% | 26.5\% | 1.9\% | 1.4\% | 2.8\% | 0.0\% | 5.1\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 1.4\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 31.6\% |
| 2007 | 68 | 11.8\% | 0.0\% | 0.0\% | 17.6\% | 10.3\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 54.4\% |
| 2008 | 102 | 4.9\% | 0.0\% | 0.0\% | 11.8\% | 11.8\% | 0.0\% | 9.8\% | 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\% | 59.8\% |
| 1979-2008 | 297 | 11.0\% | 0.5\% | 2.0\% | 9.4\% | 2.0\% | 4.1\% | 2.0\% | 0.0\% | 1.3\% | 0.4\% | 1.0\% | 0.0\% | 0.3\% | 0.0\% | 0.5\% | 0.2\% | 0.5\% | 0.0\% | 2.4\% | 0.0\% | 62.5\% |
| 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\% |
| 1985-1995 | 218 | 9.6\% | 1.0\% | 1.2\% | 8.0\% | 0.4\% | 11.1\% | 1.4\% | 0.0\% | 1.2\% | 0.9\% | 2.7\% | 0.0\% | 0.3\% | 0.0\% | 0.6\% | 0.0\% | 1.1\% | 0.0\% | 0.4\% | 0.0\% | 60.0\% |
| 1996-1998 | 254 | 9.4\% | 0.0\% | 2.2\% | 7.5\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.5\% | 0.2\% | 0.3\% | 0.0\% | 0.3\% | 0.0\% | 0.2\% | 0.9\% | 0.0\% | 0.0\% | 6.9\% | 0.0\% | 70.7\% |
| 1999-2008 | 365 | 12.4\% | 0.2\% | 2.5\% | 11.0\% | 3.6\% | 0.4\% | 2.7\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.1\% | 0.5\% | 0.1\% | 0.3\% | 0.0\% | 2.5\% | 0.0\% | 61.7\% |

Appendix C.60. Percent distribution of Sooes Fall Fingerling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | 191 | 9.9\% | 4.7\% | 0.5\% | 3.1\% | 0.0\% | 4.7\% | 7.3\% | 0.0\% | 0.0\% | 0.0\% | 5.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 62.3\% |
| 1990 | 170 | 11.8\% | 5.9\% | 4.1\% | 16.5\% | 0.0\% | 17.6\% | 0.0\% | 0.0\% | 6.5\% | 1.8\% | 2.4\% | 0.0\% | 1.8\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.8\% |
| 1991 | 374 | 13.6\% | 0.0\% | 0.3\% | 10.7\% | 0.0\% | 7.2\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 0.0\% | 0.0\% | 0.0\% | 59.4\% |
| 1992 | 326 | 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\% | 0.6\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 46.9\% |
| 1993 | 253 | 7.1\% | 0.4\% | 0.0\% | 7.9\% | 2.0\% | 17.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 2.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 60.1\% |
| 1994 | 226 | 19.5\% | 8.0\% | 3.5\% | 9.7\% | 0.9\% | 7.5\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 49.1\% |
| 1995 | 181 | 14.9\% | 0.0\% | 0.0\% | 6.1\% | 0.0\% | 12.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 62.4\% |
| 1996 | 225 | 15.1\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 82.7\% |
| 1997 | 307 | 12.1\% | 0.0\% | 5.9\% | 5.5\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 1.3\% | 0.7\% | 0.7\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 3.9\% | 0.0\% | 0.0\% | 19.9\% | 0.0\% | 46.6\% |
| 1998 | 280 | 10.4\% | 0.0\% | 1.8\% | 18.9\% | 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\% | 68.9\% |
| 1999 | 236 | 13.1\% | 0.0\% | 13.1\% | 6.8\% | 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\% | 0.0\% | 0.0\% | 65.7\% |
| 2000 | 89 | 0.0\% | 0.0\% | 5.6\% | 0.0\% | 0.0\% | 0.0\% | 12.4\% | 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\% | 82.0\% |
| 2001 | 312 | 9.3\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 83.7\% |
| 2002 | 566 | 13.1\% | 0.2\% | 1.6\% | 3.4\% | 3.7\% | 0.9\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 75.4\% |
| 2003 | 800 | 14.1\% | 0.1\% | 0.0\% | 5.5\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.9\% | 0.0\% | 24.8\% | 0.0\% | 49.9\% |
| 2004 | 938 | 19.3\% | 0.9\% | 2.1\% | 16.2\% | 0.0\% | 0.7\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.4\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 57.2\% |
| 2005 | 523 | 27.2\% | 0.0\% | 2.3\% | 25.4\% | 8.0\% | 1.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.7\% |
| 2006 | 227 | 23.3\% | 1.8\% | 2.6\% | 26.4\% | 2.2\% | 1.3\% | 3.1\% | 0.0\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 1.3\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 30.0\% |
| 2007 | 78 | 12.8\% | 0.0\% | 0.0\% | 17.9\% | 15.4\% | 0.0\% | 0.0\% | 0.0\% | 6.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 47.4\% |
| 2008 | 115 | 8.7\% | 0.0\% | 0.0\% | 13.9\% | 12.2\% | 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\% | 53.0\% |
| 1979-2008 | 321 | 13.3\% | 1.1\% | 2.3\% | 10.3\% | 2.4\% | 4.6\% | 2.0\% | 0.0\% | 1.3\% | 0.4\% | 1.0\% | 0.0\% | 0.4\% | 0.0\% | 0.4\% | 0.3\% | 0.7\% | 0.0\% | 2.3\% | 0.0\% | 57.2\% |
| 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\% |
| 1985-1995 | 246 | 12.5\% | 2.8\% | 1.3\% | 9.3\% | 0.4\% | 12.5\% | 1.3\% | 0.0\% | 1.1\% | 1.0\% | 2.6\% | 0.0\% | 0.4\% | 0.0\% | 0.5\% | 0.1\% | 1.4\% | 0.0\% | 0.3\% | 0.0\% | 52.7\% |
| 1996-1998 | 271 | 12.5\% | 0.0\% | 2.5\% | 8.5\% | 0.0\% | 0.1\% | 0.9\% | 0.0\% | 0.4\% | 0.2\% | 0.4\% | 0.0\% | 0.3\% | 0.0\% | 0.1\% | 1.3\% | 0.0\% | 0.0\% | 6.6\% | 0.0\% | 66.1\% |
| 1999-2008 | 388 | 14.1\% | 0.3\% | 3.0\% | 11.6\% | 4.4\% | 0.4\% | 2.9\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.1\% | 0.5\% | 0.1\% | 0.4\% | 0.0\% | 2.5\% | 0.0\% | 57.6\% |

Appendix C.61. Percent distribution of Spring Creek Tule reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 4503 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 23.7\% | 0.1\% | 0.2\% | 1.2\% | 0.7\% | 2.7\% | 0.0\% | 16.5\% | 0.6\% | 7.5\% | 1.4\% | 5.4\% | 0.0\% | 21.7\% | 0.0\% | 18.4\% |
| 1980 | 5938 | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 26.0\% | 0.1\% | 0.1\% | 2.7\% | 0.5\% | 1.1\% | 0.0\% | 23.4\% | 1.9\% | 5.2\% | 0.7\% | 4.9\% | 0.0\% | 20.9\% | 0.0\% | 12.5\% |
| 1981 | 6522 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 21.2\% | 0.1\% | 0.1\% | 1.4\% | 0.2\% | 2.0\% | 0.0\% | 23.2\% | 0.3\% | 10.8\% | 0.5\% | 1.9\% | 0.0\% | 20.0\% | 0.0\% | 18.4\% |
| 1982 | 4315 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.1\% | 0.0\% | 0.0\% | 1.0\% | 0.5\% | 0.3\% | 0.0\% | 19.6\% | 0.1\% | 7.2\% | 1.1\% | 1.0\% | 0.0\% | 34.4\% | 0.0\% | 12.7\% |
| 1983 | 782 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.9\% | 0.5\% | 0.0\% | 1.2\% | 0.4\% | 0.0\% | 0.0\% | 8.4\% | 0.0\% | 4.0\% | 0.3\% | 5.8\% | 0.0\% | 19.9\% | 0.0\% | 29.7\% |
| 1984 | 1013 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 26.9\% | 0.4\% | 0.0\% | 0.0\% | 2.4\% | 1.3\% | 0.0\% | 5.8\% | 0.0\% | 1.0\% | 0.7\% | 3.8\% | 0.0\% | 26.1\% | 3.0\% | 28.7\% |
| 1985 | 1160 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.5\% | 0.7\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 0.0\% | 14.0\% | 0.0\% | 2.4\% | 0.7\% | 1.4\% | 0.0\% | 26.7\% | 0.3\% | 40.0\% |
| 1986 | 325 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.1\% | 2.5\% | 0.0\% | 1.8\% | 2.8\% | 1.5\% | 0.0\% | 2.5\% | 0.0\% | 2.5\% | 0.9\% | 4.0\% | 0.0\% | 34.2\% | 1.2\% | 23.1\% |
| 1987 | 114 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.0\% | 0.0\% | 8.8\% | 17.5\% | 2.6\% | 0.0\% | 21.1\% | 8.8\% | 19.3\% |
| 1988 | 631 | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 23.5\% | 2.2\% | 0.0\% | 1.0\% | 0.3\% | 2.1\% | 0.0\% | 17.3\% | 0.0\% | 3.3\% | 1.6\% | 2.7\% | 0.0\% | 29.8\% | 4.4\% | 11.4\% |
| 1989 | 2036 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 14.4\% | 3.3\% | 0.0\% | 0.4\% | 0.0\% | 0.4\% | 0.0\% | 24.8\% | 0.0\% | 3.3\% | 0.1\% | 1.6\% | 0.0\% | 34.4\% | 3.3\% | 13.8\% |
| 1990 | 2096 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 17.6\% | 4.5\% | 0.3\% | 0.4\% | 0.3\% | 1.0\% | 0.0\% | 14.3\% | 0.0\% | 7.0\% | 0.3\% | 3.9\% | 0.0\% | 22.7\% | 2.2\% | 25.3\% |
| 1991 | 2577 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.1\% | 1.3\% | 0.0\% | 0.2\% | 0.3\% | 0.5\% | 0.0\% | 16.9\% | 0.0\% | 4.7\% | 0.5\% | 2.4\% | 0.0\% | 33.8\% | 3.9\% | 22.5\% |
| 1992 | 2834 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.9\% | 2.5\% | 0.2\% | 0.4\% | 0.3\% | 0.5\% | 0.0\% | 26.5\% | 0.0\% | 5.2\% | 0.0\% | 3.1\% | 0.0\% | 14.6\% | 3.5\% | 31.3\% |
| 1993 | 1107 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.7\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 17.7\% | 0.2\% | 2.9\% | 0.0\% | 4.3\% | 0.0\% | 21.2\% | 3.2\% | 28.3\% |
| 1994 | 893 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.4\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 30.3\% | 0.0\% | 42.4\% |
| 1995 | 906 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.7\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 37.5\% | 0.0\% | 50.8\% |
| 1996 | 817 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 0.0\% | 1.1\% | 0.0\% | 0.7\% | 0.0\% | 57.8\% | 1.5\% | 29.7\% |
| 1997 | 597 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.1\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.4\% | 0.0\% | 1.3\% | 0.0\% | 2.8\% | 0.0\% | 24.3\% | 6.7\% | 43.9\% |
| 1998 | 786 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 1.7\% | 0.0\% | 0.3\% | 0.0\% | 14.9\% | 10.8\% | 67.9\% |
| 1999 | 1514 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 3.8\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 16.8\% | 0.0\% | 2.6\% | 0.0\% | 0.2\% | 0.0\% | 36.5\% | 6.4\% | 33.0\% |
| 2000 | 788 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.3\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.5\% | 0.0\% | 1.9\% | 0.0\% | 0.4\% | 0.0\% | 22.1\% | 7.1\% | 53.4\% |
| 2001 | 6337 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 0.8\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 13.9\% | 0.0\% | 2.9\% | 0.0\% | 0.3\% | 0.0\% | 22.5\% | 2.1\% | 54.0\% |
| 2002 | 4302 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.1\% | 1.3\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 16.3\% | 0.0\% | 7.8\% | 0.0\% | 0.3\% | 0.0\% | 25.1\% | 2.5\% | 35.3\% |
| 2003 | 6084 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.2\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.5\% | 0.0\% | 3.5\% | 0.0\% | 0.1\% | 0.0\% | 22.1\% | 2.2\% | 48.9\% |
| 2004 | 6137 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.0\% | 0.0\% | 3.1\% | 0.0\% | 0.3\% | 0.0\% | 18.4\% | 1.8\% | 52.4\% |
| 2005 | 2360 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.9\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 27.3\% | 0.9\% | 37.5\% |
| 2006 | 699 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.7\% | 4.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.2\% | 0.0\% | 1.9\% | 0.0\% | 1.1\% | 0.0\% | 37.1\% | 1.0\% | 32.6\% |
| 2007 | 982 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 3.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 3.7\% | 0.0\% | 0.9\% | 0.0\% | 38.9\% | 1.5\% | 43.1\% |
| 2008 | 2144 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 6.2\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 0.0\% | 2.8\% | 0.0\% | 1.6\% | 0.0\% | 41.6\% | 2.6\% | 33.6\% |
| 1979-2008 | 2377 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.1\% | 2.3\% | 0.0\% | 0.4\% | 0.3\% | 0.5\% | 0.0\% | 11.9\% | 0.1\% | 3.7\% | 0.9\% | 2.0\% | 0.0\% | 27.9\% | 2.7\% | 33.1\% |
| 1979-1984 | 3846 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 25.0\% | 0.2\% | 0.1\% | 1.2\% | 0.8\% | 1.2\% | 0.0\% | 16.1\% | 0.5\% | 5.9\% | 0.8\% | 3.8\% | 0.0\% | 23.8\% | 0.5\% | 20.1\% |
| 1985-1995 | 1334 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 15.3\% | 2.5\% | 0.0\% | 0.4\% | 0.4\% | 0.7\% | 0.0\% | 13.9\% | 0.0\% | 3.6\% | 2.0\% | 2.4\% | 0.0\% | 27.9\% | 2.8\% | 28.0\% |
| 1996-1998 | 733 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 0.0\% | 1.4\% | 0.0\% | 1.3\% | 0.0\% | 32.3\% | 6.3\% | 47.2\% |
| 1999-2008 | 3135 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.3\% | 3.3\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 9.3\% | 0.0\% | 3.1\% | 0.0\% | 0.5\% | 0.0\% | 29.2\% | 2.8\% | 42.4\% |


| Appendix C. 62. |  | Percent distribution of Spring Creek Tule total fishing mortalities among fisheries and escapement. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 5388 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 26.9\% | 0.1\% | 0.2\% | 1.1\% | 0.8\% | 2.5\% | 0.0\% | 17.9\% | 0.7\% | 7.3\% | 1.8\% | 6.1\% | 0.0\% | 19.2\% | 0.0\% | 15.4\% |
| 1980 | 7108 | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 28.4\% | 0.1\% | 0.1\% | 2.4\% | 0.6\% | 1.0\% | 0.0\% | 24.5\% | 2.2\% | 5.0\% | 0.8\% | 5.7\% | 0.0\% | 18.6\% | 0.0\% | 10.5\% |
| 1981 | 7410 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 23.0\% | 0.1\% | 0.1\% | 1.3\% | 0.2\% | 1.9\% | 0.0\% | 24.3\% | 0.3\% | 10.8\% | 0.5\% | 2.2\% | 0.0\% | 18.9\% | 0.0\% | 16.2\% |
| 1982 | 4966 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 25.1\% | 0.0\% | 0.0\% | 1.0\% | 0.5\% | 0.2\% | 0.0\% | 21.4\% | 0.1\% | 6.9\% | 1.1\% | 1.0\% | 0.0\% | 31.6\% | 0.0\% | 11.1\% |
| 1983 | 880 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.5\% | 0.5\% | 0.0\% | 1.1\% | 0.5\% | 0.0\% | 0.0\% | 9.1\% | 0.0\% | 4.1\% | 0.3\% | 8.0\% | 0.0\% | 18.6\% | 0.0\% | 26.4\% |
| 1984 | 1159 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 26.8\% | 0.3\% | 0.0\% | 0.0\% | 2.3\% | 1.2\% | 0.0\% | 6.0\% | 0.0\% | 1.0\% | 0.9\% | 9.0\% | 0.0\% | 24.4\% | 2.8\% | 25.1\% |
| 1985 | 1258 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.6\% | 0.6\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 0.0\% | 16.2\% | 0.0\% | 2.5\% | 0.7\% | 1.4\% | 0.0\% | 26.5\% | 0.2\% | 36.9\% |
| 1986 | 351 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 24.5\% | 2.6\% | 0.0\% | 1.7\% | 2.8\% | 1.7\% | 0.0\% | 2.6\% | 0.0\% | 2.6\% | 1.1\% | 4.8\% | 0.0\% | 33.0\% | 1.1\% | 21.4\% |
| 198 | 15 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.2\% | 0.0\% | 7.9\% | 23.2\% | 4.6\% | 0.0\% | 17.2\% | 7.3\% | 14.6\% |
| 1988 | 799 | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 27.2\% | 2.3\% | 0.0\% | 1.0\% | 0.3\% | 1.8\% | 0.0\% | 17.6\% | 0.0\% | 3.1\% | 2.1\% | 5.0\% | 0.0\% | 25.5\% | 4.6\% | 9.0\% |
| 1989 | 2374 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 16.5\% | 3.2\% | 0.0\% | 0.5\% | 0.0\% | 0.4\% | 0.0\% | 26.7\% | 0.0\% | 3.2\% | 0.2\% | 1.9\% | 0.0\% | 31.7\% | 3.7\% | 11.8\% |
| 1990 | 2445 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 20.0\% | 4.5\% | 0.3\% | 0.4\% | 0.4\% | 0.9\% | 0.0\% | 15.5\% | 0.0\% | 7.0\% | 0.4\% | 5.5\% | 0.0\% | 20.7\% | 2.3\% | 21.7\% |
| 1991 | 2963 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.2\% | 1.3\% | 0.0\% | 0.3\% | 0.3\% | 0.5\% | 0.0\% | 18.7\% | 0.0\% | 4.7\% | 0.6\% | 3.2\% | 0.0\% | 31.5\% | 4.3\% | 19.6\% |
| 1992 | 322 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.0\% | 2.4\% | 0.2\% | 0.5\% | 0.3\% | 0.5\% | 0.0\% | 28.7\% | 0.0\% | 5.0\% | 0.0\% | 3.3\% | 0.0\% | 13.8\% | 3.9\% | 7.5\% |
| 1993 | 1252 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.7\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 19.3\% | 0.2\% | 2.9\% | 0.0\% | 5.5\% | 0.0\% | 19.6\% | 3.3\% | 25.0\% |
| 1994 | 971 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.6\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 30.1\% | 0.0\% | 39.0\% |
| 1995 | 976 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 37.3\% | 0.0\% | 47.1\% |
| 1996 | 878 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.0\% | 0.0\% | 1.1\% | 0.0\% | 0.9\% | 0.0\% | 57.9\% | 1.8\% | 27.7\% |
| 1997 | 653 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.9\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.8\% | 0.0\% | 1.2\% | 0.0\% | 3.7\% | 0.0\% | 23.4\% | 7.4\% | 40.1\% |
| 1998 | 846 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 1.9\% | 0.0\% | 1.2\% | 0.0\% | 15.1\% | 13.5\% | 63.1\% |
| 1999 | 1670 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 3.9\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 19.2\% | 0.0\% | 2.6\% | 0.0\% | 0.3\% | 0.0\% | 35.7\% | 7.7\% | 29.9\% |
| 2000 | 86 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 6.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 0.0\% | 2.2\% | 0.0\% | 2.1\% | 0.0\% | 21.7\% | 8.4\% | 48.4\% |
| 2001 | 6843 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 0.8\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 16.1\% | 0.0\% | 3.1\% | 0.0\% | 1.2\% | 0.0\% | 22.5\% | 2.6\% | 50.0\% |
| 2002 | 4712 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.1\% | 1.4\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 18.8\% | 0.0\% | 8.2\% | 0.0\% | 0.6\% | 0.0\% | 24.6\% | 2.9\% | 32.2\% |
| 2003 | 6470 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.5\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.1\% | 0.0\% | 3.7\% | 0.0\% | 0.2\% | 0.0\% | 22.0\% | 2.4\% | 46.0\% |
| 2004 | 6425 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.9\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.4\% | 0.0\% | 3.3\% | 0.0\% | 0.4\% | 0.0\% | 18.7\% | 2.1\% | 50.1\% |
| 2005 | 2455 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 24.3\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.2\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 27.3\% | 1.0\% | 36.0\% |
| 2006 | 745 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.8\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 0.0\% | 1.9\% | 0.0\% | 1.5\% | 0.0\% | 37.2\% | 1.2\% | 30.6\% |
| 2007 | 1113 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 3.3\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 0.0\% | 4.0\% | 0.0\% | 6.3\% | 0.0\% | 37.0\% | 1.7\% | 38.0\% |
| 2008 | 2311 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 6.5\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 7.3\% | 0.0\% | 2.8\% | 0.0\% | 2.0\% | 0.0\% | 41.7\% | 3.2\% | 31.2\% |
| 1979-2008 | 2656 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.5\% | 2.4\% | 0.0\% | 0.4\% | 0.3\% | 0.5\% | 0.0\% | 13.0\% | 0.1\% | 3.7\% | 1.1\% | 3.0\% | 0.0\% | 26.8\% | 3.0\% | 30.0\% |
| 1979-1984 | 4485 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.0\% | 0.2\% | 0.1\% | 1.1\% | 0.8\% | 1.1\% | 0.0\% | 17.2\% | 0.5\% | 5.8\% | 0.9\% | 5.3\% | 0.0\% | 21.9\% | 0.5\% | 17.4\% |
| 1985-1995 | 1524 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 17.6\% | 2.5\% | 0.0\% | 0.4\% | 0.4\% | 0.7\% | 0.0\% | 15.1\% | 0.0\% | 3.5\% | 2.6\% | 3.3\% | 0.0\% | 26.1\% | 2.8\% | 24.9\% |
| 1996-1998 | 792 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.5\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 0.0\% | 1.4\% | 0.0\% | 1.9\% | 0.0\% | 32.1\% | 7.5\% | 43.6\% |
| 1999-2008 | 3361 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.4\% | 3.6\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 10.6\% | 0.0\% | 3.3\% | 0.0\% | 1.4\% | 0.0\% | 28.8\% | 3.3\% | 39.2\% |

Appendix C.63. Percent distribution of So. Puget Sound Fall Fingerling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | 2776 | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 22.4\% | 0.1\% | 2.4\% | 11.5\% | 0.8\% | 2.0\% | 0.0\% | 2.8\% | 0.0\% | 0.1\% | 17.9\% | 21.4\% | 0.0\% | 7.1\% | 0.0\% | 11.0\% |
| 1983 | 3848 | 0.1\% | 0.0\% | 0.0\% | 0.7\% | 0.1\% | 18.2\% | 0.3\% | 0.3\% | 4.1\% | 1.8\% | 3.2\% | 0.0\% | 1.6\% | 0.0\% | 0.1\% | 20.5\% | 28.0\% | 0.0\% | 6.7\% | 0.2\% | 14.2\% |
| 1984 | 3639 | 0.1\% | 0.2\% | 0.0\% | 0.7\% | 0.1\% | 20.8\% | 0.3\% | 1.3\% | 7.3\% | 1.4\% | 1.2\% | 0.0\% | 1.4\% | 0.0\% | 0.1\% | 15.2\% | 22.1\% | 0.0\% | 9.3\% | 0.2\% | 18.4\% |
| 1985 | 1421 | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 18.6\% | 0.8\% | 0.4\% | 5.9\% | 0.3\% | 2.0\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 17.6\% | 18.2\% | 0.0\% | 11.7\% | 0.0\% | 21.6\% |
| 1986 | 480 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.0\% | 0.0\% | 0.0\% | 7.5\% | 0.0\% | 2.9\% | 0.0\% | 4.0\% | 0.0\% | 1.3\% | 9.8\% | 21.0\% | 0.0\% | 0.8\% | 0.0\% | 33.8\% |
| 1987 | 433 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.7\% | 0.0\% | 0.0\% | 12.7\% | 0.0\% | 3.9\% | 0.0\% | 7.2\% | 0.5\% | 0.2\% | 13.4\% | 10.6\% | 0.0\% | 0.0\% | 0.0\% | 38.8\% |
| 1988 | 1709 | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.5\% | 5.4\% | 4.2\% | 0.2\% | 7.3\% | 0.5\% | 4.6\% | 0.0\% | 7.3\% | 0.0\% | 0.6\% | 25.2\% | 14.0\% | 0.0\% | 1.2\% | 0.0\% | 28.6\% |
| 1989 | 5015 | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 7.4\% | 2.5\% | 0.2\% | 4.3\% | 0.3\% | 4.0\% | 0.0\% | 11.0\% | 0.0\% | 0.4\% | 15.3\% | 15.7\% | 0.0\% | 6.1\% | 0.0\% | 32.3\% |
| 1990 | 5452 | 0.0\% | 0.0\% | 0.1\% | 0.3\% | 0.0\% | 22.7\% | 4.3\% | 0.3\% | 3.4\% | 0.3\% | 1.2\% | 0.0\% | 9.0\% | 0.0\% | 0.4\% | 14.0\% | 11.6\% | 0.0\% | 9.7\% | 0.4\% | 22.4\% |
| 1991 | 1751 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.2\% | 2.6\% | 0.1\% | 1.7\% | 0.1\% | 1.0\% | 0.0\% | 11.6\% | 0.0\% | 0.3\% | 11.8\% | 12.6\% | 0.0\% | 14.7\% | 0.2\% | 27.6\% |
| 1992 | 1337 | 0.6\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 17.2\% | 2.2\% | 0.3\% | 3.4\% | 0.9\% | 3.1\% | 0.0\% | 9.1\% | 0.0\% | 0.7\% | 14.1\% | 17.4\% | 0.0\% | 9.6\% | 0.0\% | 21.5\% |
| 1993 | 1403 | 0.2\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 15.6\% | 4.6\% | 0.7\% | 3.1\% | 0.1\% | 2.9\% | 0.0\% | 5.5\% | 0.0\% | 0.2\% | 8.3\% | 20.8\% | 0.0\% | 7.5\% | 0.0\% | 30.4\% |
| 1994 | 1591 | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 9.1\% | 1.3\% | 0.0\% | 3.0\% | 0.0\% | 4.3\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 11.3\% | 9.5\% | 0.0\% | 5.0\% | 0.3\% | 55.1\% |
| 1995 | 3515 | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 3.7\% | 1.1\% | 0.0\% | 1.8\% | 0.0\% | 1.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 4.6\% | 11.7\% | 0.0\% | 1.0\% | 0.0\% | 73.4\% |
| 1996 | 4824 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 1.7\% | 0.0\% | 4.1\% | 0.0\% | 0.4\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 3.8\% | 14.8\% | 0.0\% | 2.6\% | 0.0\% | 69.5\% |
| 1997 | 2579 | 0.5\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 5.4\% | 2.8\% | 0.0\% | 1.7\% | 0.0\% | 0.5\% | 0.0\% | 1.6\% | 0.0\% | 0.1\% | 2.2\% | 12.7\% | 0.0\% | 0.7\% | 0.2\% | 71.3\% |
| 1998 | 1755 | 1.3\% | 0.0\% | 0.0\% | 0.9\% | 0.1\% | 0.5\% | 1.4\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 4.2\% | 5.8\% | 0.0\% | 3.8\% | 0.5\% | 79.0\% |
| 1999 | 2153 | 0.5\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.7\% | 4.0\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 0.0\% | 0.3\% | 4.5\% | 4.8\% | 0.0\% | 4.7\% | 0.0\% | 74.7\% |
| 2000 | 2218 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.0\% | 4.3\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.3\% | 6.2\% | 6.3\% | 0.0\% | 5.8\% | 0.0\% | 64.6\% |
| 2001 | 3737 | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 8.1\% | 3.2\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 0.4\% | 4.2\% | 8.7\% | 0.0\% | 7.2\% | 0.0\% | 60.9\% |
| 2002 | 3429 | 0.7\% | 0.0\% | 0.0\% | 0.7\% | 0.1\% | 12.7\% | 3.1\% | 0.0\% | 4.3\% | 0.0\% | 0.1\% | 0.0\% | 4.0\% | 0.0\% | 0.5\% | 3.6\% | 6.3\% | 0.0\% | 14.4\% | 0.0\% | 49.5\% |
| 2003 | 2167 | 0.6\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 14.2\% | 3.7\% | 0.0\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 0.0\% | 0.4\% | 7.0\% | 9.5\% | 0.0\% | 7.5\% | 0.0\% | 47.6\% |
| 2004 | 1934 | 0.4\% | 0.1\% | 0.0\% | 0.6\% | 0.3\% | 17.7\% | 4.2\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 9.6\% | 0.0\% | 1.4\% | 8.0\% | 9.2\% | 0.0\% | 6.6\% | 0.0\% | 39.2\% |
| 2005 | 2115 | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.5\% | 13.4\% | 4.5\% | 0.0\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 5.6\% | 0.0\% | 1.2\% | 4.1\% | 6.3\% | 0.0\% | 1.8\% | 0.0\% | 58.4\% |
| 2006 | 3279 | 0.3\% | 0.0\% | 0.1\% | 0.5\% | 0.4\% | 12.3\% | 2.6\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 0.0\% | 0.5\% | 6.3\% | 6.6\% | 0.0\% | 7.7\% | 0.0\% | 54.3\% |
| 2007 | 3215 | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 11.8\% | 4.1\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 5.0\% | 0.0\% | 0.2\% | 3.2\% | 10.0\% | 0.0\% | 12.5\% | 0.2\% | 51.3\% |
| 2008 | 2340 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 7.2\% | 3.5\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.4\% | 4.1\% | 9.3\% | 0.0\% | 13.1\% | 0.3\% | 56.8\% |
| 1979-2008 | 2597 | 0.3\% | 0.0\% | 0.0\% | 0.3\% | 0.1\% | 11.9\% | 2.5\% | 0.2\% | 4.2\% | 0.2\% | 1.4\% | 0.0\% | 4.6\% | 0.0\% | 0.4\% | 9.6\% | 12.8\% | 0.0\% | 6.6\% | 0.1\% | 44.7\% |
| 1979-1984 | 3421 | 0.2\% | 0.1\% | 0.0\% | 0.5\% | 0.1\% | 20.5\% | 0.2\% | 1.3\% | 7.6\% | 1.4\% | 2.1\% | 0.0\% | 2.0\% | 0.0\% | 0.1\% | 17.9\% | 23.8\% | 0.0\% | 7.7\% | 0.1\% | 14.5\% |
| 1985-1995 | 2192 | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 13.3\% | 2.1\% | 0.2\% | 4.9\% | 0.2\% | 2.8\% | 0.0\% | 6.2\% | 0.0\% | 0.4\% | 13.2\% | 14.8\% | 0.0\% | 6.1\% | 0.1\% | 35.0\% |
| 1996-1998 | 3053 | 0.6\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 2.0\% | 2.0\% | 0.0\% | 2.5\% | 0.0\% | 0.3\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 3.4\% | 11.1\% | 0.0\% | 2.4\% | 0.2\% | 73.3\% |
| 1999-2008 | 2659 | 0.3\% | 0.0\% | 0.0\% | 0.4\% | 0.1\% | 10.8\% | 3.7\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 0.0\% | 0.6\% | 5.1\% | 7.7\% | 0.0\% | 8.1\% | 0.0\% | 55.7\% |

Appendix C.64. Percent distribution of So. Puget Sound Fall Fingerling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | 3260 | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 24.1\% | 0.1\% | 2.1\% | 10.5\% | 1.0\% | 1.8\% | 0.0\% | 2.8\% | 0.0\% | 0.1\% | 16.9\% | 24.1\% | 0.0\% | 6.4\% | 0.0\% | 9.3\% |
| 1983 | 4908 | 0.1\% | 0.0\% | 0.0\% | 0.7\% | 0.1\% | 17.7\% | 0.2\% | 0.2\% | 3.5\% | 1.8\% | 2.8\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 19.5\% | 34.9\% | 0.0\% | 5.6\% | 0.2\% | 11.1\% |
| 1984 | 3981 | 0.1\% | 0.2\% | 0.0\% | 0.7\% | 0.1\% | 21.1\% | 0.3\% | 1.3\% | 7.1\% | 1.4\% | 1.1\% | 0.0\% | 1.5\% | 0.0\% | 0.1\% | 14.7\% | 24.3\% | 0.0\% | 9.0\% | 0.2\% | 16.8\% |
| 1985 | 1516 | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 18.4\% | 0.9\% | 0.3\% | 5.9\% | 0.3\% | 1.9\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 17.4\% | 20.7\% | 0.0\% | 11.1\% | 0.0\% | 20.3\% |
| 1986 | 551 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.1\% | 0.0\% | 0.0\% | 7.1\% | 0.0\% | 2.9\% | 0.0\% | 4.0\% | 0.0\% | 1.3\% | 9.1\% | 26.5\% | 0.0\% | 0.7\% | 0.0\% | 29.4\% |
| 1987 | 583 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.3\% | 0.0\% | 0.0\% | 10.5\% | 0.0\% | 3.4\% | 0.0\% | 8.9\% | 0.9\% | 0.2\% | 11.0\% | 15.1\% | 0.0\% | 0.0\% | 0.0\% | 28.8\% |
| 1988 | 2540 | 0.4\% | 0.0\% | 0.0\% | 0.2\% | 0.4\% | 10.2\% | 3.3\% | 0.2\% | 9.1\% | 1.0\% | 3.5\% | 0.0\% | 7.8\% | 0.0\% | 0.5\% | 21.2\% | 22.0\% | 0.0\% | 0.9\% | 0.0\% | 19.3\% |
| 1989 | 5597 | 0.1\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 8.8\% | 2.4\% | 0.2\% | 5.0\% | 0.4\% | 3.7\% | 0.0\% | 12.2\% | 0.0\% | 0.4\% | 14.7\% | 17.0\% | 0.0\% | 5.8\% | 0.0\% | 28.9\% |
| 1990 | 5926 | 0.0\% | 0.1\% | 0.1\% | 0.3\% | 0.0\% | 23.9\% | 4.3\% | 0.3\% | 3.5\% | 0.3\% | 1.2\% | 0.0\% | 9.2\% | 0.0\% | 0.4\% | 13.3\% | 13.0\% | 0.0\% | 9.1\% | 0.4\% | 20.6\% |
| 1991 | 1902 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.5\% | 2.6\% | 0.2\% | 1.8\% | 0.1\% | 0.9\% | 0.0\% | 12.3\% | 0.0\% | 0.4\% | 11.3\% | 13.9\% | 0.0\% | 13.9\% | 0.2\% | 25.4\% |
| 1992 | 1601 | 0.6\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 17.5\% | 2.1\% | 0.3\% | 3.5\% | 0.9\% | 2.9\% | 0.0\% | 9.1\% | 0.0\% | 0.6\% | 12.8\% | 23.3\% | 0.0\% | 8.2\% | 0.0\% | 17.9\% |
| 1993 | 1609 | 0.3\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 18.1\% | 4.4\% | 1.0\% | 3.5\% | 0.1\% | 2.6\% | 0.0\% | 5.9\% | 0.0\% | 0.2\% | 7.8\% | 22.6\% | 0.0\% | 6.9\% | 0.0\% | 26.5\% |
| 1994 | 1858 | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 9.6\% | 1.3\% | 0.0\% | 3.3\% | 0.0\% | 5.1\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 11.1\% | 16.6\% | 0.0\% | 4.5\% | 0.3\% | 47.1\% |
| 1995 | 3975 | 0.2\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 5.4\% | 1.2\% | 0.0\% | 2.1\% | 0.0\% | 1.7\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 4.8\% | 17.3\% | 0.0\% | 1.0\% | 0.0\% | 64.9\% |
| 1996 | 5185 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.9\% | 1.8\% | 0.0\% | 4.8\% | 0.0\% | 0.5\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 3.7\% | 18.0\% | 0.0\% | 2.5\% | 0.0\% | 64.7\% |
| 1997 | 2765 | 0.5\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 6.5\% | 2.9\% | 0.0\% | 1.9\% | 0.0\% | 0.8\% | 0.0\% | 1.7\% | 0.0\% | 0.1\% | 2.1\% | 15.8\% | 0.0\% | 0.7\% | 0.1\% | 66.5\% |
| 1998 | 1902 | 1.4\% | 0.0\% | 0.0\% | 0.9\% | 0.1\% | 0.5\% | 1.5\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 4.3\% | 11.4\% | 0.0\% | 3.7\% | 0.5\% | 72.9\% |
| 1999 | 2278 | 0.6\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.7\% | 4.3\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 0.3\% | 4.5\% | 7.4\% | 0.0\% | 4.8\% | 0.0\% | 70.6\% |
| 2000 | 2511 | 0.4\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 9.9\% | 4.6\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.2\% | 6.4\% | 13.6\% | 0.0\% | 5.4\% | 0.0\% | 57.1\% |
| 2001 | 4122 | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 7.8\% | 3.4\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 0.0\% | 0.4\% | 4.1\% | 13.8\% | 0.0\% | 7.0\% | 0.0\% | 55.2\% |
| 2002 | 3689 | 0.9\% | 0.0\% | 0.0\% | 0.8\% | 0.1\% | 12.5\% | 3.4\% | 0.0\% | 4.9\% | 0.0\% | 0.2\% | 0.0\% | 4.3\% | 0.0\% | 0.5\% | 3.5\% | 9.0\% | 0.0\% | 13.9\% | 0.0\% | 46.1\% |
| 2003 | 2351 | 0.7\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 13.8\% | 4.3\% | 0.0\% | 4.3\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 0.4\% | 6.6\% | 12.8\% | 0.0\% | 7.1\% | 0.0\% | 43.9\% |
| 2004 | 2205 | 0.4\% | 0.1\% | 0.0\% | 0.6\% | 0.4\% | 17.1\% | 4.4\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 10.1\% | 0.0\% | 1.4\% | 7.6\% | 14.5\% | 0.0\% | 5.9\% | 0.0\% | 34.4\% |
| 2005 | 2333 | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.6\% | 13.2\% | 4.8\% | 0.0\% | 4.4\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 0.0\% | 1.2\% | 4.1\% | 10.2\% | 0.0\% | 1.7\% | 0.0\% | 53.0\% |
| 2006 | 3549 | 0.3\% | 0.0\% | 0.1\% | 0.5\% | 0.5\% | 12.1\% | 2.8\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 7.0\% | 0.0\% | 0.5\% | 6.2\% | 9.9\% | 0.0\% | 7.5\% | 0.0\% | 50.2\% |
| 2007 | 3665 | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 11.5\% | 4.2\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 5.4\% | 0.0\% | 0.2\% | 3.1\% | 16.9\% | 0.0\% | 11.5\% | 0.2\% | 45.0\% |
| 2008 | 2567 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 7.2\% | 3.8\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 0.4\% | 4.2\% | 13.5\% | 0.0\% | 12.8\% | 0.4\% | 51.7\% |
| 1979-2008 | 2923 | 0.3\% | 0.0\% | 0.0\% | 0.3\% | 0.1\% | 12.8\% | 2.6\% | 0.2\% | 4.3\% | 0.3\% | 1.4\% | 0.0\% | 5.0\% | 0.0\% | 0.4\% | 9.1\% | 17.0\% | 0.0\% | 6.2\% | 0.1\% | 39.9\% |
| 1979-1984 | 4050 | 0.2\% | 0.1\% | 0.0\% | 0.5\% | 0.1\% | 21.0\% | 0.2\% | 1.2\% | 7.0\% | 1.4\% | 1.9\% | 0.0\% | 2.0\% | 0.0\% | 0.1\% | 17.0\% | 27.8\% | 0.0\% | 7.0\% | 0.1\% | 12.4\% |
| 1985-1995 | 2514 | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 15.3\% | 2.0\% | 0.2\% | 5.0\% | 0.3\% | 2.7\% | 0.0\% | 6.7\% | 0.1\% | 0.4\% | 12.2\% | 18.9\% | 0.0\% | 5.6\% | 0.1\% | 29.9\% |
| 1996-1998 | 3284 | 0.7\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 2.6\% | 2.0\% | 0.0\% | 2.8\% | 0.0\% | 0.5\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 3.4\% | 15.1\% | 0.0\% | 2.3\% | 0.2\% | 68.0\% |
| 1999-2008 | 2927 | 0.4\% | 0.0\% | 0.0\% | 0.4\% | 0.2\% | 10.6\% | 4.0\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 5.0\% | 0.0\% | 0.6\% | 5.0\% | 12.2\% | 0.0\% | 7.7\% | 0.1\% | 50.7\% |

Appendix C.65. Percent distribution of So. Puget Sound Fall Yearling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | 283 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 3.2\% | 2.5\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 12.0\% | 66.1\% | 0.0\% | 2.5\% | 1.4\% | 8.5\% |
| 1983 | 395 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.8\% | 0.0\% | 0.0\% | 0.5\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.9\% | 76.2\% | 0.0\% | 0.0\% | 0.0\% | 5.8\% |
| 1984 | 247 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.3\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.8\% | 43.3\% | 0.0\% | 0.8\% | 0.0\% | 14.2\% |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | 1270 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.6\% | 0.0\% | 1.4\% | 0.0\% | 0.1\% | 33.1\% | 52.4\% | 0.0\% | 0.3\% | 0.6\% | 11.0\% |
| 1991 | 1036 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.6\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 12.6\% | 57.2\% | 0.0\% | 0.2\% | 0.4\% | 19.6\% |
| 1992 | 505 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 1.2\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 0.0\% | 0.8\% | 27.1\% | 48.1\% | 0.0\% | 1.0\% | 0.0\% | 11.9\% |
| 1993 | 265 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 10.9\% | 52.5\% | 0.0\% | 0.0\% | 3.0\% | 29.4\% |
| 1994 | 729 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.7\% | 0.0\% | 0.5\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.5\% | 61.3\% | 0.0\% | 0.0\% | 0.0\% | 17.8\% |
| 1995 | 548 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.4\% | 2.0\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 10.0\% | 66.8\% | 0.0\% | 0.4\% | 1.5\% | 10.0\% |
| 1996 | 691 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 2.9\% | 88.7\% | 0.0\% | 0.3\% | 0.6\% | 3.3\% |
| 1997 | 479 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 1.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 2.3\% | 4.0\% | 63.9\% | 0.0\% | 0.0\% | 0.0\% | 25.1\% |
| 1998 | 90 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 2.2\% | 82.2\% | 0.0\% | 3.3\% | 0.0\% | 10.0\% |
| 1999 | 39 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.4\% | 0.0\% | 0.0\% | 0.0\% | 7.7\% | 0.0\% | 0.0\% | 2.6\% | 69.2\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% |
| 2000 | 76 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.6\% | 0.0\% | 0.0\% | 11.8\% | 69.7\% | 0.0\% | 0.0\% | 0.0\% | 6.6\% |
| 2001 | 67 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 74.6\% | 0.0\% | 0.0\% | 0.0\% | 17.9\% |
| 2002 | 12 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 83.3\% | 0.0\% | 0.0\% | 0.0\% | 16.7\% |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | 140 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 9.3\% | 0.0\% | 0.0\% | 0.0\% | 87.9\% |
| 2005 | 255 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 1.2\% | 16.1\% | 53.7\% | 0.0\% | 3.1\% | 0.0\% | 23.9\% |
| 2006 | 267 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.6\% | 4.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 21.3\% | 29.6\% | 0.0\% | 3.0\% | 0.0\% | 30.7\% |
| 2007 | 281 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 1.8\% | 14.2\% | 49.5\% | 0.0\% | 2.5\% | 0.0\% | 26.0\% |
| 2008 | 90 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 5.6\% | 37.8\% | 0.0\% | 11.1\% | 0.0\% | 40.0\% |
| 1979-2008 | 370 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.8\% | 0.0\% | 1.4\% | 0.2\% | 0.1\% | 0.0\% | 2.0\% | 0.0\% | 0.3\% | 11.7\% | 58.8\% | 0.0\% | 1.4\% | 0.4\% | 20.1\% |
| 1979-1984 | 308 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 0.0\% | 1.8\% | 1.4\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 18.2\% | 61.9\% | 0.0\% | 1.1\% | 0.5\% | 9.5\% |
| 1985-1995 | 726 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.6\% | 0.0\% | 1.0\% | 0.0\% | 0.5\% | 0.0\% | 1.9\% | 0.0\% | 0.1\% | 18.4\% | 56.4\% | 0.0\% | 0.3\% | 0.9\% | 16.6\% |
| 1996-1998 | 420 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.8\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.8\% | 3.0\% | 78.3\% | 0.0\% | 1.2\% | 0.2\% | 12.8\% |
| 1999-2008 | 136 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 1.2\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.3\% | 8.0\% | 53.0\% | 0.0\% | 2.2\% | 0.0\% | 28.3\% |

Appendix C.66. Percent distribution of So. Puget Sound Fall Yearling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | 370 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.8\% | 0.0\% | 0.0\% | 2.7\% | 2.2\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 10.8\% | 70.3\% | 0.0\% | 1.9\% | 1.1\% | 6.5\% |
| 1983 | 490 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.5\% | 0.0\% | 0.0\% | 0.4\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 78.8\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% |
| 1984 | 271 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.0\% | 46.5\% | 0.0\% | 0.7\% | 0.0\% | 12.9\% |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | 1423 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.5\% | 0.0\% | 1.6\% | 0.0\% | 0.1\% | 31.3\% | 54.6\% | 0.0\% | 0.3\% | 0.7\% | 9.8\% |
| 1991 | 1232 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.4\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 11.3\% | 62.2\% | 0.0\% | 0.2\% | 0.3\% | 16.5\% |
| 1992 | 588 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 1.2\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 0.0\% | 0.7\% | 25.9\% | 50.7\% | 0.0\% | 0.9\% | 0.0\% | 10.2\% |
| 1993 | 494 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 7.1\% | 71.9\% | 0.0\% | 0.0\% | 1.8\% | 15.8\% |
| 1994 | 876 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.7\% | 0.0\% | 0.7\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.3\% | 65.1\% | 0.0\% | 0.0\% | 0.0\% | 14.8\% |
| 1995 | 793 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 1.6\% | 0.0\% | 2.0\% | 0.0\% | 0.4\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 7.9\% | 73.4\% | 0.0\% | 0.3\% | 1.3\% | 6.9\% |
| 1996 | 809 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 1.1\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 2.6\% | 89.5\% | 0.0\% | 0.2\% | 0.6\% | 2.8\% |
| 1997 | 585 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 1.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 2.1\% | 3.4\% | 69.4\% | 0.0\% | 0.0\% | 0.0\% | 20.5\% |
| 1998 | 115 | 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\% | 0.0\% | 0.0\% | 1.7\% | 86.1\% | 0.0\% | 2.6\% | 0.0\% | 7.8\% |
| 1999 | 102 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 0.0\% | 0.0\% | 1.0\% | 84.3\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% |
| 2000 | 94 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.4\% | 0.0\% | 0.0\% | 9.6\% | 73.4\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% |
| 2001 | 91 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 81.3\% | 0.0\% | 0.0\% | 0.0\% | 13.2\% |
| 2002 | 18 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 88.9\% | 0.0\% | 0.0\% | 0.0\% | 11.1\% |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | 271 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 10.7\% | 40.6\% | 0.0\% | 0.4\% | 0.0\% | 45.4\% |
| 2005 | 314 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 1.3\% | 14.3\% | 60.2\% | 0.0\% | 2.5\% | 0.0\% | 19.4\% |
| 2006 | 419 | 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\% | 15.0\% | 53.2\% | 0.0\% | 1.9\% | 0.0\% | 19.6\% |
| 2007 | 358 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 1.7\% | 12.3\% | 58.4\% | 0.0\% | 2.0\% | 0.0\% | 20.4\% |
| 2008 | 291 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 2.7\% | 78.7\% | 0.0\% | 3.8\% | 0.0\% | 12.4\% |
| 1979-2008 | 476 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.7\% | 0.0\% | 1.0\% | 0.2\% | 0.2\% | 0.0\% | 1.6\% | 0.0\% | 0.3\% | 10.6\% | 68.4\% | 0.0\% | 0.8\% | 0.3\% | 13.2\% |
| 1979-1984 | 377 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.4\% | 0.0\% | 0.0\% | 1.7\% | 1.3\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 16.9\% | 65.2\% | 0.0\% | 0.9\% | 0.4\% | 8.0\% |
| 1985-1995 | 901 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.6\% | 0.0\% | 0.9\% | 0.0\% | 0.5\% | 0.0\% | 1.9\% | 0.0\% | 0.1\% | 16.5\% | 63.0\% | 0.0\% | 0.3\% | 0.7\% | 12.3\% |
| 1996-1998 | 503 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.7\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.7\% | 2.6\% | 81.7\% | 0.0\% | 1.0\% | 0.2\% | 10.4\% |
| 1999-2008 | 218 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 1.1\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 0.3\% | 7.3\% | 68.8\% | 0.0\% | 1.2\% | 0.0\% | 16.5\% |

Appendix C.67. Percent distribution of Squaxin Pens Fall Yearling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | $<3$ Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | 1423 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 0.6\% | 0.0\% | 0.7\% | 0.0\% | 1.3\% | 0.0\% | 4.1\% | 0.0\% | 0.4\% | 33.1\% | 53.1\% | 0.0\% | 0.6\% | 0.0\% | 2.5\% |
| 1991 | 849 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 0.5\% | 1.1\% | 0.0\% | 0.6\% | 0.0\% | 8.8\% | 0.0\% | 0.4\% | 32.9\% | 48.1\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% |
| 1992 | 728 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 2.3\% | 0.8\% | 0.7\% | 2.7\% | 0.0\% | 1.6\% | 0.0\% | 7.1\% | 0.0\% | 0.5\% | 21.3\% | 56.7\% | 0.0\% | 1.1\% | 0.0\% | 4.4\% |
| 1993 | 347 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.2\% | 2.3\% | 0.0\% | 5.5\% | 0.0\% | 2.3\% | 0.0\% | 13.5\% | 0.0\% | 0.6\% | 2.3\% | 49.6\% | 0.0\% | 1.2\% | 0.0\% | 13.5\% |
| 1994 | 162 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.2\% | 4.9\% | 0.0\% | 6.2\% | 0.0\% | 3.7\% | 0.0\% | 6.8\% | 0.0\% | 0.0\% | 23.5\% | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 22.8\% |
| 1995 | 59 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 47.5\% | 30.5\% | 0.0\% | 0.0\% | 0.0\% | 22.0\% |
| 1996 | 362 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 4.4\% | 89.8\% | 0.0\% | 0.3\% | 0.0\% | 2.5\% |
| 1997 | 178 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 7.9\% | 84.3\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% |
| 1998 | 104 | 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\% | 0.0\% | 1.9\% | 91.3\% | 0.0\% | 1.0\% | 0.0\% | 2.9\% |
| 1999 | 16 | 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\% | 62.5\% | 0.0\% | 0.0\% | 0.0\% | 25.0\% |
| 2000 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2001 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2005 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2006 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2007 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2008 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1979-2008 | 423 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 6.3\% | 0.9\% | 0.1\% | 1.8\% | 0.0\% | 1.0\% | 0.0\% | 4.7\% | 0.0\% | 0.2\% | 17.5\% | 57.1\% | 0.0\% | 0.4\% | 0.0\% | 10.0\% |
| 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\% |
| 1985-1995 | 595 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 7.7\% | 1.5\% | 0.2\% | 2.7\% | 0.0\% | 1.6\% | 0.0\% | 6.7\% | 0.0\% | 0.3\% | 26.7\% | 40.5\% | 0.0\% | 0.5\% | 0.0\% | 11.5\% |
| 1996-1998 | 215 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 4.7\% | 88.5\% | 0.0\% | 0.4\% | 0.0\% | 2.0\% |
| 1999-2008 | 16 | 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\% | 62.5\% | 0.0\% | 0.0\% | 0.0\% | 25.0\% |

Appendix C.68. Percent distribution of Squaxin Pens Fall Yearling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | 1742 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 0.6\% | 0.1\% | 0.7\% | 0.0\% | 1.1\% | 0.0\% | 4.2\% | 0.0\% | 0.4\% | 32.0\% | 54.9\% | 0.0\% | 0.5\% | 0.1\% | 2.1\% |
| 1991 | 992 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.3\% | 0.0\% | 0.5\% | 1.1\% | 0.0\% | 0.5\% | 0.0\% | 8.9\% | 0.0\% | 0.3\% | 30.9\% | 50.4\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% |
| 1992 | 964 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 2.0\% | 0.6\% | 0.6\% | 2.4\% | 0.0\% | 1.2\% | 0.0\% | 6.0\% | 0.0\% | 0.4\% | 21.2\% | 60.9\% | 0.0\% | 0.9\% | 0.0\% | 3.3\% |
| 1993 | 392 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.2\% | 2.0\% | 0.0\% | 5.9\% | 0.0\% | 2.0\% | 0.0\% | 13.3\% | 0.0\% | 0.5\% | 2.6\% | 50.5\% | 0.0\% | 1.0\% | 0.0\% | 12.0\% |
| 1994 | 180 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 25.6\% | 5.0\% | 0.0\% | 6.1\% | 0.0\% | 4.4\% | 0.0\% | 6.7\% | 0.0\% | 0.0\% | 21.7\% | 10.0\% | 0.0\% | 0.0\% | 0.0\% | 20.6\% |
| 1995 | 228 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.4\% | 71.1\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% |
| 1996 | 440 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 5.0\% | 90.0\% | 0.0\% | 0.2\% | 0.0\% | 2.0\% |
| 1997 | 236 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 6.4\% | 86.9\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% |
| 1998 | 129 | 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\% | 1.6\% | 93.0\% | 0.0\% | 0.8\% | 0.0\% | 2.3\% |
| 1999 | 196 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.5\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.5\% | 93.4\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% |
| 2000 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2001 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2005 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2006 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2007 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2008 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1979-2008 | 550 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.2\% | 0.9\% | 0.1\% | 1.9\% | 0.0\% | 0.9\% | 0.0\% | 4.5\% | 0.0\% | 0.2\% | 14.4\% | 66.1\% | 0.0\% | 0.3\% | 0.0\% | 5.3\% |
| 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\% |
| 1985-1995 | 750 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 7.6\% | 1.4\% | 0.2\% | 2.8\% | 0.0\% | 1.6\% | 0.0\% | 6.5\% | 0.0\% | 0.3\% | 21.8\% | 49.6\% | 0.0\% | 0.4\% | 0.0\% | 7.8\% |
| 1996-1998 | 268 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 4.3\% | 90.0\% | 0.0\% | 0.3\% | 0.0\% | 1.6\% |
| 1999-2008 | 196 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.5\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.5\% | 93.4\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% |

Appendix C.69. Percent distribution of Salmon River reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | 1163 | 25.7\% | 0.2\% | 0.6\% | 13.0\% | 0.0\% | 9.5\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 1.1\% | 0.0\% | 1.1\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.9\% | 32.4\% |
| 1981 | 1103 | 18.1\% | 0.0\% | 0.4\% | 23.4\% | 0.0\% | 3.5\% | 0.5\% | 0.0\% | 0.0\% | 0.5\% | 2.3\% | 0.0\% | 0.8\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.8\% | 32.1\% |
| 1982 | 904 | 7.6\% | 1.1\% | 0.7\% | 10.4\% | 0.0\% | 5.1\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.6\% | 0.0\% | 1.9\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 25.3\% | 45.8\% |
| 1983 | 660 | 15.0\% | 0.5\% | 0.0\% | 14.7\% | 0.0\% | 7.7\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.7\% | 39.4\% |
| 1984 | 764 | 10.6\% | 0.0\% | 0.0\% | 17.8\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 1.2\% | 0.0\% | 0.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 20.5\% | 42.1\% |
| 1985 | 630 | 12.5\% | 6.8\% | 0.0\% | 16.5\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.2\% | 41.0\% |
| 1986 | 541 | 14.4\% | 0.0\% | 0.0\% | 12.8\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 4.4\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.8\% | 48.4\% |
| 1987 | 728 | 10.3\% | 0.0\% | 0.0\% | 15.1\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.8\% | 44.4\% |
| 1988 | 1184 | 9.5\% | 0.0\% | 0.0\% | 6.4\% | 0.0\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.6\% | 62.7\% |
| 1989 | 1142 | 8.4\% | 0.0\% | 0.0\% | 11.4\% | 0.0\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 3.4\% | 0.0\% | 0.4\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 24.0\% | 46.8\% |
| 1990 | 1473 | 11.9\% | 0.7\% | 0.0\% | 10.7\% | 1.3\% | 7.8\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 1.0\% | 0.0\% | 3.1\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.6\% | 38.1\% |
| 1991 | 2442 | 18.4\% | 0.0\% | 0.5\% | 15.2\% | 0.8\% | 5.8\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.7\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 24.5\% | 33.4\% |
| 1992 | 280 | 2.6\% | 0.6\% | 0.0\% | 6.6\% | 1.8\% | 14.8\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.4\% | 0.0\% | 1.8\% | 0.0\% | 0.5\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 15.3\% | 54.5\% |
| 1993 | 218 | 7.9\% | 0.2\% | 0.2\% | 15.8\% | 1.1\% | 18.8\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.5\% | 0.0\% | 3.3\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.8\% | 31.9\% |
| 1994 | 3958 | 9.0\% | 0.2\% | 1.0\% | 15.3\% | 2.2\% | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 0.0\% | 1.5\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.8\% | 47.3\% |
| 1995 | 3899 | 6.7\% | 0.2\% | 0.3\% | 4.5\% | 0.9\% | 0.8\% | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.8\% | 56.2\% |
| 1996 | 1930 | 11.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 51.7\% | 31.5\% |
| 1997 | 3971 | 27.7\% | 0.0\% | 1.6\% | 3.3\% | 0.4\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.0\% | 46.1\% |
| 1998 | 2877 | 10.3\% | 0.4\% | 0.4\% | 11.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 30.8\% | 44.3\% |
| 1999 | 2053 | 12.0\% | 0.4\% | 0.0\% | 4.4\% | 4.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.6\% | 43.8\% |
| 2000 | 2648 | 12.7\% | 0.0\% | 0.5\% | 2.9\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.6\% | 61.4\% |
| 2001 | 359 | 12.3\% | 0.0\% | 0.7\% | 3.3\% | 1.3\% | 0.4\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 25.2\% | 52.5\% |
| 2002 | 4745 | 17.6\% | 0.0\% | 0.9\% | 7.1\% | 2.1\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.8\% | 36.1\% |
| 2003 | 4643 | 12.9\% | 0.6\% | 0.6\% | 5.9\% | 1.6\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.5\% | 41.4\% |
| 2004 | 4957 | 18.1\% | 0.8\% | 0.8\% | 7.3\% | 3.6\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.9\% | 42.7\% |
| 2005 | 4539 | 19.7\% | 0.0\% | 1.2\% | 8.5\% | 4.8\% | 2.6\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.1\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.3\% | 30.0\% |
| 2006 | 1848 | 24.4\% | 0.0\% | 1.7\% | 12.3\% | 5.4\% | 2.1\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.1\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 26.9\% | 20.8\% |
| 2007 | 1375 | 11.7\% | 0.0\% | 0.8\% | 6.0\% | 3.0\% | 0.1\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.7\% | 44.1\% |
| 2008 | 689 | 8.3\% | 0.0\% | 0.0\% | 4.4\% | 4.5\% | 2.9\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 1.2\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 14.4\% | 59.9\% |
| 1979-2008 | 2257 | 13.4\% | 0.4\% | 0.4\% | 9.9\% | 1.4\% | 3.7\% | 0.2\% | 0.0\% | 0.0\% | 0.5\% | 0.3\% | 0.0\% | 1.3\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 24.3\% | 43.1\% |
| 1979-1984 | 919 | 15.4\% | 0.3\% | 0.3\% | 15.9\% | 0.0\% | 5.8\% | 0.1\% | 0.0\% | 0.0\% | 1.3\% | 1.0\% | 0.0\% | 0.8\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 20.0\% | 38.4\% |
| 1985-1995 | 1908 | 10.2\% | 0.8\% | 0.2\% | 11.8\% | 0.7\% | 6.1\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.5\% | 0.0\% | 1.5\% | 0.0\% | 0.6\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 20.9\% | 45.9\% |
| 1996-1998 | 2926 | 16.4\% | 0.1\% | 0.7\% | 4.8\% | 0.6\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.8\% | 40.6\% |
| 1999-2008 | 3109 | 15.0\% | 0.2\% | 0.7\% | 6.2\% | 3.2\% | 1.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.2\% | 43.3\% |

Appendix C.70. Percent distribution of Salmon River total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | 1279 | 25.7\% | 0.2\% | 0.6\% | 15.5\% | 0.0\% | 10.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 1.1\% | 0.0\% | 1.3\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.5\% | 29.5\% |
| 1981 | 1211 | 19.0\% | 0.0\% | 0.3\% | 24.8\% | 0.0\% | 4.1\% | 0.4\% | 0.0\% | 0.0\% | 0.8\% | 2.2\% | 0.0\% | 0.9\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.5\% | 29.2\% |
| 1982 | 1015 | 10.5\% | 1.1\% | 0.8\% | 11.7\% | 0.0\% | 5.9\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.5\% | 0.0\% | 2.1\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 24.9\% | 40.8\% |
| 1983 | 753 | 20.1\% | 0.5\% | 0.0\% | 15.8\% | 0.0\% | 7.7\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.3\% | 34.5\% |
| 1984 | 838 | 13.4\% | 0.0\% | 0.0\% | 18.4\% | 0.0\% | 3.6\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 1.1\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 21.1\% | 38.4\% |
| 1985 | 763 | 15.3\% | 10.9\% | 0.0\% | 15.7\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.3\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.8\% | 33.8\% |
| 1986 | 647 | 20.1\% | 0.0\% | 0.0\% | 14.2\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 0.5\% | 0.0\% | 0.5\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.5\% | 40.5\% |
| 1987 | 841 | 17.1\% | 0.0\% | 0.0\% | 15.5\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.2\% | 38.4\% |
| 1988 | 1395 | 15.6\% | 0.0\% | 0.0\% | 8.7\% | 0.0\% | 5.2\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.8\% | 53.2\% |
| 1989 | 1510 | 17.2\% | 0.0\% | 0.0\% | 16.2\% | 0.0\% | 4.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 3.3\% | 0.0\% | 0.4\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 21.4\% | 35.4\% |
| 1990 | 1820 | 18.0\% | 1.6\% | 0.0\% | 13.0\% | 1.2\% | 8.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.8\% | 0.0\% | 3.0\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.8\% | 30.8\% |
| 1991 | 2905 | 23.9\% | 0.0\% | 0.6\% | 16.4\% | 0.8\% | 6.1\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.7\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 22.8\% | 28.1\% |
| 1992 | 3301 | 4.5\% | 2.9\% | 0.0\% | 8.4\% | 2.1\% | 16.9\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.3\% | 0.0\% | 2.0\% | 0.0\% | 0.5\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 14.9\% | 46.3\% |
| 1993 | 2665 | 10.9\% | 0.6\% | 0.2\% | 17.9\% | 1.0\% | 20.1\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.5\% | 0.0\% | 3.3\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.2\% | 26.1\% |
| 1994 | 4552 | 15.4\% | 0.4\% | 1.1\% | 15.6\% | 2.2\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 0.0\% | 1.4\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.0\% | 41.1\% |
| 1995 | 4440 | 10.1\% | 0.4\% | 0.4\% | 6.6\% | 1.1\% | 1.2\% | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.2\% | 49.3\% |
| 1996 | 2452 | 19.7\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 47.3\% | 24.8\% |
| 1997 | 4401 | 32.1\% | 0.0\% | 1.7\% | 3.4\% | 0.4\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.7\% | 41.6\% |
| 1998 | 3112 | 11.6\% | 0.7\% | 0.4\% | 11.8\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 31.4\% | 40.9\% |
| 1999 | 2406 | 18.0\% | 0.5\% | 0.0\% | 4.8\% | 5.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.5\% | 37.4\% |
| 2000 | 2969 | 17.3\% | 0.0\% | 0.7\% | 3.4\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.5\% | 54.7\% |
| 2001 | 4041 | 16.6\% | 0.0\% | 1.0\% | 3.8\% | 1.7\% | 0.4\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 25.2\% | 46.7\% |
| 2002 | 5587 | 21.9\% | 0.0\% | 1.1\% | 7.9\% | 2.5\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.4\% | 30.7\% |
| 2003 | 5155 | 15.3\% | 1.0\% | 0.7\% | 6.6\% | 1.9\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.6\% | 37.3\% |
| 2004 | 5514 | 20.6\% | 1.4\% | 0.9\% | 7.8\% | 4.6\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.7\% | 38.4\% |
| 2005 | 4976 | 21.2\% | 0.0\% | 1.3\% | 8.9\% | 5.5\% | 2.5\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.1\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.3\% | 27.4\% |
| 2006 | 2027 | 26.0\% | 0.0\% | 1.7\% | 12.3\% | 5.7\% | 1.9\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.1\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 26.9\% | 18.9\% |
| 2007 | 1550 | 14.3\% | 0.0\% | 1.2\% | 6.7\% | 4.1\% | 0.1\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 34.0\% | 39.1\% |
| 2008 | 868 | 19.0\% | 0.0\% | 0.0\% | 7.1\% | 4.1\% | 2.6\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 1.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 14.1\% | 47.6\% |
| 1979-2008 | 2586 | 17.6\% | 0.8\% | 0.5\% | 11.1\% | 1.7\% | 4.0\% | 0.2\% | 0.0\% | 0.0\% | 0.5\% | 0.3\% | 0.0\% | 1.3\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.7\% | 37.3\% |
| 1979-1984 | 1019 | 17.7\% | 0.4\% | 0.3\% | 17.2\% | 0.0\% | 6.3\% | 0.1\% | 0.0\% | 0.0\% | 1.4\% | 1.0\% | 0.0\% | 0.9\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.7\% | 34.5\% |
| 1985-1995 | 2258 | 15.3\% | 1.5\% | 0.2\% | 13.5\% | 0.8\% | 6.8\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.4\% | 0.0\% | 1.6\% | 0.0\% | 0.6\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 20.1\% | 38.5\% |
| 1996-1998 | 3322 | 21.1\% | 0.2\% | 0.7\% | 6.0\% | 0.8\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.5\% | 35.8\% |
| 1999-2008 | 3509 | 19.0\% | 0.3\% | 0.8\% | 6.9\% | 3.7\% | 1.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.1\% | 37.8\% |

Appendix C.71. Percent distribution of Skagit Summer Fingerling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1997 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1998 | 179 | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 1.7\% | 6.7\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 84.4\% |
| 1999 | 168 | 7.1\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.2\% | 0.0\% | 7.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 61.9\% |
| 2000 | 219 | 5.9\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 7.8\% | 0.0\% | 6.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 5.5\% | 0.0\% | 0.0\% | 0.0\% | 68.5\% |
| 2001 | 771 | 6.9\% | 1.8\% | 0.9\% | 0.0\% | 0.9\% | 9.1\% | 6.2\% | 0.0\% | 8.6\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.3\% | 1.3\% | 0.0\% | 0.5\% | 0.0\% | 63.4\% |
| 2002 | 2151 | 12.7\% | 0.0\% | 0.8\% | 1.4\% | 1.1\% | 6.5\% | 1.7\% | 0.0\% | 3.9\% | 0.0\% | 0.3\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 70.5\% |
| 2003 | 829 | 6.3\% | 0.1\% | 0.0\% | 3.9\% | 2.3\% | 11.0\% | 3.7\% | 0.0\% | 6.0\% | 0.0\% | 0.1\% | 0.0\% | 0.4\% | 0.0\% | 0.4\% | 0.5\% | 0.4\% | 0.0\% | 0.2\% | 0.0\% | 64.8\% |
| 2004 | 798 | 5.0\% | 0.0\% | 0.0\% | 2.4\% | 0.5\% | 10.8\% | 1.3\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 1.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 77.2\% |
| 2005 | 911 | 7.2\% | 0.2\% | 0.5\% | 1.4\% | 4.5\% | 7.0\% | 4.0\% | 0.0\% | 1.8\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.7\% | 0.0\% | 3.7\% | 0.2\% | 68.3\% |
| 2006 | 1349 | 3.1\% | 1.0\% | 0.1\% | 0.6\% | 2.7\% | 4.2\% | 3.0\% | 0.0\% | 2.0\% | 0.0\% | 0.1\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.2\% | 0.5\% | 0.0\% | 3.0\% | 0.0\% | 78.9\% |
| 2007 | 1415 | 5.4\% | 0.4\% | 0.1\% | 0.9\% | 0.9\% | 8.4\% | 3.4\% | 0.0\% | 0.6\% | 0.0\% | 0.1\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.2\% | 0.4\% | 0.0\% | 2.8\% | 0.0\% | 75.5\% |
| 2008 | 1062 | 4.5\% | 0.0\% | 0.0\% | 1.3\% | 1.2\% | 5.1\% | 5.2\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.8\% | 0.0\% | 18.4\% | 0.0\% | 61.6\% |
| 1979-2008 | 896 | 6.1\% | 0.6\% | 0.2\% | 1.1\% | 1.4\% | 6.0\% | 5.7\% | 0.0\% | 3.7\% | 0.0\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.5\% | 1.0\% | 0.0\% | 2.8\% | 0.0\% | 70.5\% |
| 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\% |
| 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\% |
| 1996-1998 | 179 | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 1.7\% | 6.7\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 84.4\% |
| 1999-2008 | 967 | 6.4\% | 0.7\% | 0.3\% | 1.2\% | 1.4\% | 6.4\% | 5.6\% | 0.0\% | 3.9\% | 0.0\% | 0.1\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.5\% | 1.0\% | 0.0\% | 3.1\% | 0.0\% | 69.1\% |

Appendix C.72. Percent distribution of Skagit Summer Fingerling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1997 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1998 | 183 | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 1.6\% | 6.6\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 82.5\% |
| 1999 | 187 | 10.7\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.9\% | 0.0\% | 8.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 55.6\% |
| 2000 | 268 | 10.8\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 7.8\% | 0.0\% | 7.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 11.9\% | 0.0\% | 0.0\% | 0.0\% | 56.0\% |
| 2001 | 857 | 9.5\% | 3.0\% | 1.1\% | 0.0\% | 1.1\% | 8.6\% | 6.5\% | 0.0\% | 9.7\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 2.7\% | 0.0\% | 0.5\% | 0.0\% | 57.1\% |
| 2002 | 2276 | 13.3\% | 0.0\% | 0.9\% | 1.5\% | 1.4\% | 6.4\% | 1.8\% | 0.0\% | 4.2\% | 0.0\% | 2.9\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 66.6\% |
| 2003 | 875 | 7.0\% | 0.2\% | 0.0\% | 4.2\% | 3.0\% | 11.0\% | 4.6\% | 0.0\% | 6.6\% | 0.0\% | 0.2\% | 0.0\% | 0.3\% | 0.0\% | 0.3\% | 0.5\% | 0.5\% | 0.0\% | 0.2\% | 0.0\% | 61.4\% |
| 2004 | 825 | 5.7\% | 0.0\% | 0.0\% | 2.9\% | 0.7\% | 11.3\% | 1.5\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 1.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 74.7\% |
| 2005 | 967 | 8.6\% | 0.3\% | 0.6\% | 1.7\% | 5.7\% | 7.0\% | 4.4\% | 0.0\% | 2.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 1.0\% | 0.0\% | 3.6\% | 0.2\% | 64.3\% |
| 2006 | 1396 | 3.6\% | 1.3\% | 0.2\% | 0.6\% | 3.2\% | 4.3\% | 3.4\% | 0.0\% | 2.4\% | 0.0\% | 0.1\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.2\% | 0.8\% | 0.0\% | 3.0\% | 0.0\% | 76.3\% |
| 2007 | 1474 | 6.6\% | 0.7\% | 0.2\% | 1.0\% | 1.1\% | 8.8\% | 3.7\% | 0.0\% | 0.7\% | 0.0\% | 0.1\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.2\% | 0.6\% | 0.0\% | 2.8\% | 0.0\% | 72.5\% |
| 2008 | 1119 | 5.9\% | 0.0\% | 0.0\% | 1.5\% | 1.4\% | 5.4\% | 5.9\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 1.2\% | 0.0\% | 18.0\% | 0.0\% | 58.4\% |
| 1979-2008 | 948 | 7.8\% | 0.9\% | 0.3\% | 1.2\% | 1.7\% | 6.2\% | 6.1\% | 0.0\% | 4.3\% | 0.0\% | 0.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.4\% | 1.9\% | 0.0\% | 2.7\% | 0.0\% | 65.9\% |
| 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\% |
| 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\% |
| 1996-1998 | 183 | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 1.6\% | 6.6\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 82.5\% |
| 1999-2008 | 1024 | 8.2\% | 0.9\% | 0.3\% | 1.4\% | 1.8\% | 6.6\% | 6.1\% | 0.0\% | 4.4\% | 0.0\% | 0.4\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.5\% | 1.9\% | 0.0\% | 3.0\% | 0.0\% | 64.3\% |

Appendix C.73. Percent distribution of Stillaguamish Fall Fingerling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | 83 | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 3.6\% | 7.2\% | 0.0\% | 0.0\% | 15.7\% | 19.3\% | 26.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 19.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1985 | 97 | 7.2\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 29.9\% | 9.3\% | 0.0\% | 10.3\% | 0.0\% | 15.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.3\% | 13.4\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% |
| 1986 | 89 | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.6\% | 0.0\% | 0.0\% | 20.2\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.9\% | 21.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | 339 | 0.6\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 21.2\% | 6.5\% | 0.6\% | 9.4\% | 8.0\% | 10.9\% | 0.0\% | 5.6\% | 0.0\% | 0.0\% | 7.4\% | 13.6\% | 0.0\% | 2.1\% | 0.0\% | 13.3\% |
| 1991 | 914 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 4.7\% | 2.1\% | 0.0\% | 3.6\% | 0.0\% | 1.0\% | 0.0\% | 4.3\% | 0.0\% | 0.0\% | 3.7\% | 6.5\% | 0.0\% | 1.9\% | 0.0\% | 71.7\% |
| 1992 | 636 | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 18.1\% | 4.2\% | 0.0\% | 5.3\% | 0.0\% | 5.2\% | 0.0\% | 6.0\% | 0.0\% | 0.0\% | 10.2\% | 29.6\% | 0.0\% | 2.4\% | 0.0\% | 18.6\% |
| 1993 | 816 | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 1.3\% | 11.3\% | 9.4\% | 0.2\% | 8.3\% | 0.4\% | 2.3\% | 0.0\% | 5.3\% | 0.0\% | 0.4\% | 0.5\% | 20.2\% | 0.0\% | 1.0\% | 0.0\% | 38.7\% |
| 1994 | 451 | 2.4\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 6.7\% | 5.3\% | 0.0\% | 7.8\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 5.8\% | 0.0\% | 0.2\% | 0.0\% | 66.7\% |
| 1995 | 378 | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 9.8\% | 0.0\% | 4.2\% | 0.0\% | 10.8\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 2.1\% | 14.0\% | 0.0\% | 0.3\% | 0.0\% | 52.9\% |
| 1996 | 67 | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 7.1\% | 0.0\% | 6.0\% | 0.0\% | 7.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.7\% | 0.0\% | 0.3\% | 0.0\% | 58.8\% |
| 1997 | 776 | 8.9\% | 0.4\% | 0.0\% | 0.5\% | 1.0\% | 6.1\% | 7.0\% | 0.0\% | 4.6\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 15.1\% | 0.0\% | 0.5\% | 0.0\% | 53.2\% |
| 1998 | 1040 | 9.3\% | 0.2\% | 0.3\% | 1.0\% | 0.5\% | 1.0\% | 2.2\% | 0.0\% | 1.6\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 1.9\% | 0.0\% | 0.3\% | 0.0\% | 80.2\% |
| 1999 | 658 | 0.6\% | 1.5\% | 0.0\% | 0.0\% | 0.3\% | 2.9\% | 7.3\% | 0.0\% | 5.6\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 2.4\% | 0.0\% | 0.2\% | 0.0\% | 78.4\% |
| 2000 | 955 | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.0\% | 1.3\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.1\% | 0.0\% | 85.7\% |
| 2001 | 286 | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.6\% | 4.2\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 1.0\% | 10.1\% | 0.0\% | 0.3\% | 0.0\% | 71.7\% |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2005 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2006 | 786 | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 11.2\% | 1.0\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 1.7\% | 3.2\% | 0.0\% | 0.6\% | 0.0\% | 76.3\% |
| 2007 | 651 | 0.6\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 15.7\% | 5.8\% | 0.0\% | 8.9\% | 0.0\% | 0.5\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 4.3\% | 4.9\% | 0.0\% | 0.6\% | 0.0\% | 56.5\% |
| 2008 | 1106 | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 5.1\% | 0.0\% | 4.7\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.5\% | 8.6\% | 0.0\% | 3.4\% | 0.0\% | 70.9\% |
| 1979-2008 | 597 | 2.6\% | 0.1\% | 0.0\% | 0.7\% | 0.5\% | 10.4\% | 4.9\% | 0.0\% | 6.9\% | 1.5\% | 4.9\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 3.8\% | 11.7\% | 0.0\% | 0.8\% | 0.0\% | 49.7\% |
| 1979-1984 | 83 | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 3.6\% | 7.2\% | 0.0\% | 0.0\% | 15.7\% | 19.3\% | 26.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 19.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1985-1995 | 465 | 2.2\% | 0.0\% | 0.0\% | 0.8\% | 0.2\% | 15.9\% | 5.8\% | 0.1\% | 8.7\% | 1.0\% | 6.6\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 6.5\% | 15.5\% | 0.0\% | 1.0\% | 0.0\% | 32.9\% |
| 1996-1998 | 832 | 6.4\% | 0.2\% | 0.1\% | 0.5\% | 0.8\% | 2.3\% | 5.4\% | 0.0\% | 4.1\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 11.9\% | 0.0\% | 0.4\% | 0.0\% | 64.1\% |
| 1999-2008 | 740 | 1.8\% | 0.3\% | 0.0\% | 0.0\% | 0.2\% | 7.7\% | 4.1\% | 0.0\% | 4.6\% | 0.0\% | 0.2\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 1.3\% | 5.1\% | 0.0\% | 0.9\% | 0.0\% | 73.3\% |

Appendix C.74. Percent distribution of Stillaguamish Fall Fingerling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | 106 | 0.0\% | 0.0\% | 0.0\% | 3.8\% | 2.8\% | 10.4\% | 0.0\% | 0.0\% | 13.2\% | 17.0\% | 21.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 26.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1985 | 112 | 6.3\% | 0.0\% | 0.0\% | 4.5\% | 0.0\% | 30.4\% | 8.9\% | 0.0\% | 8.9\% | 0.0\% | 13.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.9\% | 17.9\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% |
| 1986 | 96 | 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\% | 15.6\% | 21.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | 411 | 0.7\% | 0.0\% | 0.0\% | 1.0\% | 0.2\% | 21.4\% | 6.1\% | 0.7\% | 9.7\% | 7.8\% | 9.5\% | 0.0\% | 6.6\% | 0.0\% | 0.0\% | 7.1\% | 16.5\% | 0.0\% | 1.7\% | 0.0\% | 10.9\% |
| 1991 | 968 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 5.5\% | 2.3\% | 0.0\% | 4.2\% | 0.0\% | 0.9\% | 0.0\% | 4.9\% | 0.0\% | 0.0\% | 3.7\% | 8.4\% | 0.0\% | 1.9\% | 0.0\% | 67.7\% |
| 1992 | 895 | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 17.9\% | 3.7\% | 0.0\% | 5.3\% | 0.0\% | 4.1\% | 0.0\% | 5.7\% | 0.0\% | 0.0\% | 9.1\% | 38.9\% | 0.0\% | 1.8\% | 0.0\% | 13.2\% |
| 1993 | 927 | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 1.3\% | 13.5\% | 9.1\% | 0.3\% | 9.5\% | 0.5\% | 2.2\% | 0.0\% | 5.8\% | 0.0\% | 0.3\% | 0.4\% | 21.3\% | 0.0\% | 0.9\% | 0.0\% | 34.1\% |
| 1994 | 477 | 2.9\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 7.3\% | 5.7\% | 0.0\% | 8.6\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 7.1\% | 0.0\% | 0.2\% | 0.0\% | 63.1\% |
| 1995 | 500 | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.8\% | 9.0\% | 0.0\% | 4.4\% | 0.0\% | 12.6\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 2.0\% | 24.8\% | 0.0\% | 0.2\% | 0.0\% | 40.0\% |
| 1996 | 81 | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 1.1\% | 6.9\% | 0.0\% | 6.5\% | 0.0\% | 8.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 26.2\% | 0.0\% | 0.2\% | 0.0\% | 48.8\% |
| 1997 | 862 | 9.6\% | 0.7\% | 0.0\% | 0.5\% | 1.3\% | 6.7\% | 6.7\% | 0.0\% | 5.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 18.1\% | 0.0\% | 0.5\% | 0.0\% | 47.9\% |
| 1998 | 1092 | 10.5\% | 0.4\% | 0.4\% | 1.6\% | 0.7\% | 0.9\% | 2.5\% | 0.0\% | 1.8\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 2.9\% | 0.0\% | 0.3\% | 0.0\% | 76.4\% |
| 1999 | 703 | 0.7\% | 4.6\% | 0.0\% | 0.0\% | 0.3\% | 2.8\% | 7.5\% | 0.0\% | 6.3\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 3.6\% | 0.0\% | 0.1\% | 0.0\% | 73.4\% |
| 2000 | 980 | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 1.4\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 0.1\% | 0.0\% | 83.5\% |
| 2001 | 308 | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.2\% | 4.2\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 1.0\% | 15.9\% | 0.0\% | 0.3\% | 0.0\% | 66.6\% |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2005 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2006 | 825 | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 11.6\% | 1.2\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 1.7\% | 5.1\% | 0.0\% | 0.6\% | 0.0\% | 72.7\% |
| 2007 | 777 | 1.2\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 15.6\% | 6.2\% | 0.0\% | 10.3\% | 0.0\% | 0.9\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 4.4\% | 11.1\% | 0.0\% | 0.5\% | 0.0\% | 47.4\% |
| 2008 | 1169 | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 5.4\% | 0.0\% | 5.7\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.5\% | 10.4\% | 0.0\% | 3.4\% | 0.0\% | 67.1\% |
| 1979-2008 | 668 | 2.9\% | 0.4\% | 0.0\% | 0.7\% | 0.5\% | 11.0\% | 4.8\% | 0.1\% | 7.2\% | 1.4\% | 4.6\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 3.6\% | 15.5\% | 0.0\% | 0.7\% | 0.0\% | 45.2\% |
| 1979-1984 | 106 | 0.0\% | 0.0\% | 0.0\% | 3.8\% | 2.8\% | 10.4\% | 0.0\% | 0.0\% | 13.2\% | 17.0\% | 21.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 26.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1985-1995 | 548 | 2.2\% | 0.0\% | 0.0\% | 0.9\% | 0.2\% | 16.5\% | 5.6\% | 0.1\% | 8.9\% | 1.0\% | 6.1\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 6.1\% | 19.6\% | 0.0\% | 0.8\% | 0.0\% | 28.7\% |
| 1996-1998 | 924 | 7.1\% | 0.4\% | 0.1\% | 0.7\% | 1.0\% | 2.9\% | 5.4\% | 0.0\% | 4.4\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 15.7\% | 0.0\% | 0.3\% | 0.0\% | 57.7\% |
| 1999-2008 | 794 | 2.2\% | 0.9\% | 0.0\% | 0.0\% | 0.2\% | 7.7\% | 4.3\% | 0.0\% | 5.3\% | 0.0\% | 0.2\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 1.3\% | 8.1\% | 0.0\% | 0.9\% | 0.0\% | 68.4\% |

Appendix C.75. Percent distribution of Columbia River Summers reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 163 | 11.0\% | 0.0\% | 1.2\% | 6.7\% | 0.0\% | 16.6\% | 0.0\% | 3.1\% | 4.9\% | 2.5\% | 11.7\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 4.3\% | 0.0\% | 33.1\% |
| 1980 | 330 | 33.0\% | 0.0\% | 0.9\% | 8.8\% | 0.0\% | 17.0\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 1.2\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 33.0\% |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | 123 | 13.8\% | 0.0\% | 0.0\% | 5.7\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 4.1\% | 0.0\% | 20.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.4\% | 0.0\% | 32.5\% |
| 1988 | 261 | 1.1\% | 0.8\% | 0.0\% | 7.7\% | 1.9\% | 16.1\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 9.2\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.3\% | 3.1\% | 37.2\% |
| 1989 | 627 | 4.8\% | 0.5\% | 0.6\% | 5.1\% | 0.6\% | 14.8\% | 2.4\% | 0.0\% | 1.4\% | 0.6\% | 2.6\% | 0.0\% | 14.4\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 8.5\% | 0.0\% | 41.1\% |
| 1990 | 843 | 9.7\% | 0.0\% | 0.0\% | 6.6\% | 0.0\% | 19.5\% | 0.0\% | 0.0\% | 0.6\% | 1.1\% | 1.7\% | 0.0\% | 5.7\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 10.8\% | 0.2\% | 41.9\% |
| 1991 | 735 | 3.9\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 5.6\% | 0.7\% | 0.0\% | 0.0\% | 0.5\% | 2.7\% | 0.0\% | 3.3\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 0.4\% | 75.0\% |
| 1992 | 282 | 14.5\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 15.2\% | 0.0\% | 0.0\% | 0.7\% | 2.1\% | 1.1\% | 0.0\% | 6.7\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 1.4\% | 0.0\% | 53.2\% |
| 1993 | 210 | 7.1\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 14.3\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 5.2\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 62.9\% |
| 1994 | 37 | 13.5\% | 0.0\% | 0.0\% | 0.0\% | 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\% | 10.8\% | 0.0\% | 62.2\% |
| 1995 | 159 | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 89.9\% |
| 1996 | 355 | 13.5\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 2.8\% | 0.0\% | 2.8\% | 0.0\% | 0.8\% | 0.0\% | 1.1\% | 0.0\% | 3.9\% | 2.3\% | 70.1\% |
| 1997 | 1292 | 7.7\% | 0.1\% | 3.3\% | 0.2\% | 1.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 1.2\% | 0.5\% | 81.0\% |
| 1998 | 1474 | 8.5\% | 0.1\% | 0.9\% | 0.5\% | 1.8\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.0\% | 0.9\% | 79.9\% |
| 1999 | 810 | 10.2\% | 2.6\% | 1.9\% | 0.6\% | 2.1\% | 0.6\% | 5.1\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 8.6\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 3.0\% | 63.0\% |
| 2000 | 2371 | 21.5\% | 1.3\% | 2.6\% | 0.5\% | 2.2\% | 4.8\% | 5.3\% | 0.0\% | 0.6\% | 0.0\% | 0.4\% | 0.0\% | 3.0\% | 0.0\% | 1.4\% | 0.0\% | 0.2\% | 0.0\% | 1.0\% | 2.3\% | 52.7\% |
| 2001 | 6701 | 13.2\% | 2.6\% | 1.4\% | 0.5\% | 1.4\% | 13.2\% | 2.5\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 16.5\% | 0.0\% | 3.7\% | 0.0\% | 0.6\% | 0.0\% | 0.7\% | 1.6\% | 41.8\% |
| 2002 | 10323 | 21.9\% | 0.0\% | 1.4\% | 12.4\% | 1.7\% | 15.3\% | 1.2\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 8.5\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 2.3\% | 30.6\% |
| 2003 | 7199 | 25.9\% | 0.4\% | 1.0\% | 11.1\% | 2.1\% | 12.3\% | 0.3\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 0.0\% | 1.0\% | 0.0\% | 0.1\% | 0.0\% | 2.9\% | 5.9\% | 30.6\% |
| 2004 | 4586 | 13.0\% | 0.3\% | 1.1\% | 5.0\% | 1.3\% | 12.4\% | 1.3\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 10.2\% | 0.0\% | 1.5\% | 0.0\% | 0.2\% | 0.0\% | 7.8\% | 14.5\% | 31.4\% |
| 2005 | 9604 | 8.3\% | 0.0\% | 0.7\% | 5.6\% | 2.1\% | 10.4\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 7.0\% | 7.6\% | 50.9\% |
| 2006 | 4392 | 9.0\% | 0.0\% | 0.4\% | 2.9\% | 0.9\% | 9.2\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.3\% | 0.1\% | 0.1\% | 0.0\% | 11.1\% | 8.1\% | 54.5\% |
| 2007 | 6147 | 7.1\% | 0.6\% | 0.8\% | 0.9\% | 1.3\% | 4.5\% | 0.8\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 0.3\% | 0.0\% | 0.1\% | 0.0\% | 7.3\% | 8.3\% | 65.1\% |
| 2008 | 1677 | 5.5\% | 0.3\% | 0.4\% | 0.9\% | 0.2\% | 3.9\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 20.5\% | 8.8\% | 54.4\% |
| 1979-2008 | 2529 | 11.7\% | 0.4\% | 0.8\% | 3.7\% | 1.6\% | 8.8\% | 1.3\% | 0.1\% | 0.5\% | 0.7\% | 1.7\% | 0.0\% | 5.7\% | 0.0\% | 1.1\% | 0.1\% | 0.2\% | 0.0\% | 6.0\% | 2.9\% | 52.8\% |
| 1979-1984 | 246 | 22.0\% | 0.0\% | 1.1\% | 7.8\% | 0.0\% | 16.8\% | 0.0\% | 1.5\% | 2.5\% | 3.2\% | 6.4\% | 0.0\% | 0.8\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 33.1\% |
| 1985-1995 | 364 | 7.9\% | 0.1\% | 0.1\% | 3.6\% | 2.1\% | 10.0\% | 1.0\% | 0.0\% | 0.3\% | 1.0\% | 2.6\% | 0.0\% | 6.8\% | 0.0\% | 0.9\% | 0.1\% | 0.2\% | 0.0\% | 7.7\% | 0.4\% | 55.1\% |
| 1996-1998 | 1040 | 9.9\% | 0.2\% | 1.4\% | 0.2\% | 0.9\% | 0.6\% | 0.2\% | 0.0\% | 0.8\% | 0.0\% | 1.0\% | 0.0\% | 2.5\% | 0.0\% | 0.3\% | 0.0\% | 0.4\% | 0.0\% | 3.4\% | 1.2\% | 77.0\% |
| 1999-2008 | 5381 | 13.6\% | 0.8\% | 1.2\% | 4.1\% | 1.5\% | 8.7\% | 2.1\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 6.6\% | 0.0\% | 1.3\% | 0.0\% | 0.1\% | 0.0\% | 6.1\% | 6.2\% | 47.5\% |

Appendix C.76. Percent distribution of Columbia River Summers total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 196 | 13.8\% | 0.0\% | 1.0\% | 8.7\% | 0.0\% | 19.4\% | 0.0\% | 2.6\% | 4.6\% | 4.1\% | 10.2\% | 0.0\% | 0.5\% | 0.0\% | 4.1\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 0.0\% | 27.6\% |
| 1980 | 347 | 32.6\% | 0.0\% | 0.9\% | 9.2\% | 0.0\% | 18.2\% | 0.0\% | 0.0\% | 0.0\% | 4.3\% | 1.2\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 31.4\% |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | 160 | 16.3\% | 0.0\% | 0.0\% | 8.1\% | 2.5\% | 7.5\% | 0.0\% | 0.0\% | 0.0\% | 3.8\% | 4.4\% | 0.0\% | 20.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 11.9\% | 0.0\% | 25.0\% |
| 1988 | 315 | 1.6\% | 1.6\% | 0.0\% | 10.2\% | 1.9\% | 21.3\% | 4.1\% | 0.0\% | 0.0\% | 0.0\% | 8.9\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.3\% | 2.9\% | 30.8\% |
| 1989 | 715 | 6.4\% | 2.4\% | 0.7\% | 5.6\% | 0.6\% | 16.5\% | 2.4\% | 0.0\% | 1.4\% | 0.7\% | 2.2\% | 0.0\% | 15.0\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 7.6\% | 0.0\% | 36.1\% |
| 1990 | 892 | 10.5\% | 0.0\% | 0.0\% | 7.6\% | 0.0\% | 20.3\% | 0.0\% | 0.0\% | 0.6\% | 1.1\% | 1.7\% | 0.0\% | 5.7\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 10.3\% | 0.2\% | 39.6\% |
| 1991 | 748 | 4.1\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 6.1\% | 0.7\% | 0.0\% | 0.0\% | 0.5\% | 2.8\% | 0.0\% | 3.5\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 4.0\% | 0.4\% | 73.7\% |
| 1992 | 306 | 18.3\% | 0.0\% | 0.0\% | 3.6\% | 0.0\% | 15.7\% | 0.0\% | 0.0\% | 0.7\% | 2.0\% | 1.0\% | 0.0\% | 6.9\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 1.3\% | 0.0\% | 49.0\% |
| 1993 | 218 | 7.8\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 15.6\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 5.5\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 60.6\% |
| 1994 | 40 | 17.5\% | 0.0\% | 0.0\% | 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\% | 0.0\% | 0.0\% | 10.0\% | 0.0\% | 57.5\% |
| 1995 | 169 | 3.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 84.6\% |
| 1996 | 428 | 20.8\% | 0.7\% | 0.0\% | 1.9\% | 0.2\% | 2.8\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 3.0\% | 0.0\% | 2.6\% | 0.0\% | 0.7\% | 0.0\% | 1.2\% | 0.0\% | 3.3\% | 2.1\% | 58.2\% |
| 1997 | 1332 | 8.9\% | 0.1\% | 3.7\% | 0.2\% | 1.4\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 1.1\% | 0.5\% | 78.5\% |
| 1998 | 1529 | 10.1\% | 0.3\% | 1.2\% | 0.5\% | 2.4\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 1.0\% | 77.0\% |
| 1999 | 930 | 14.8\% | 3.4\% | 3.2\% | 0.6\% | 2.7\% | 0.5\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 9.4\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 2.9\% | 54.8\% |
| 2000 | 2688 | 25.6\% | 1.8\% | 3.4\% | 0.6\% | 2.8\% | 4.6\% | 5.4\% | 0.0\% | 0.8\% | 0.0\% | 0.5\% | 0.0\% | 3.3\% | 0.0\% | 1.4\% | 0.1\% | 0.3\% | 0.0\% | 0.9\% | 2.2\% | 46.5\% |
| 2001 | 7407 | 15.6\% | 4.1\% | 1.4\% | 0.5\% | 1.7\% | 12.3\% | 2.6\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 16.9\% | 0.0\% | 3.6\% | 0.0\% | 1.1\% | 0.0\% | 0.7\% | 1.6\% | 37.8\% |
| 2002 | 11193 | 23.3\% | 0.0\% | 1.5\% | 12.7\% | 2.0\% | 15.1\% | 1.4\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 0.0\% | 3.6\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 2.3\% | 28.2\% |
| 2003 | 7857 | 27.5\% | 0.7\% | 1.1\% | 11.8\% | 2.4\% | 11.7\% | 0.3\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 6.8\% | 0.0\% | 1.0\% | 0.0\% | 0.1\% | 0.0\% | 2.7\% | 5.8\% | 28.0\% |
| 2004 | 4948 | 14.2\% | 0.4\% | 1.1\% | 5.4\% | 1.7\% | 12.1\% | 1.4\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 10.6\% | 0.0\% | 1.5\% | 0.0\% | 0.3\% | 0.0\% | 7.3\% | 14.7\% | 29.1\% |
| 2005 | 10033 | 9.2\% | 0.0\% | 0.7\% | 6.1\% | 2.6\% | 10.4\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 6.8\% | 7.8\% | 48.7\% |
| 2006 | 4535 | 9.9\% | 0.0\% | 0.4\% | 3.0\% | 1.0\% | 9.2\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 0.4\% | 0.2\% | 0.1\% | 0.0\% | 10.8\% | 8.5\% | 52.8\% |
| 2007 | 6337 | 7.9\% | 0.8\% | 0.9\% | 1.0\% | 1.6\% | 4.5\% | 0.9\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.3\% | 0.0\% | 0.1\% | 0.0\% | 7.1\% | 8.7\% | 63.2\% |
| 2008 | 1735 | 6.6\% | 0.5\% | 0.4\% | 0.9\% | 0.2\% | 3.9\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 20.0\% | 9.3\% | 52.6\% |
| 1979-2008 | 2711 | 13.6\% | 0.7\% | 0.9\% | 4.3\% | 1.8\% | 9.8\% | 1.3\% | 0.1\% | 0.5\% | 0.7\% | 1.7\% | 0.0\% | 5.9\% | 0.0\% | 1.1\% | 0.1\% | 0.2\% | 0.0\% | 5.6\% | 2.9\% | 48.8\% |
| 1979-1984 | 272 | 23.2\% | 0.0\% | 0.9\% | 8.9\% | 0.0\% | 18.8\% | 0.0\% | 1.3\% | 2.3\% | 4.2\% | 5.7\% | 0.0\% | 1.1\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 29.5\% |
| 1985-1995 | 396 | 9.6\% | 0.4\% | 0.1\% | 4.3\% | 2.2\% | 12.2\% | 1.0\% | 0.0\% | 0.3\% | 0.9\% | 2.8\% | 0.0\% | 6.9\% | 0.0\% | 1.0\% | 0.3\% | 0.2\% | 0.0\% | 6.8\% | 0.4\% | 50.8\% |
| 1996-1998 | 1096 | 13.2\% | 0.3\% | 1.6\% | 0.9\% | 1.3\% | 1.6\% | 0.2\% | 0.0\% | 0.9\% | 0.0\% | 1.1\% | 0.0\% | 2.7\% | 0.0\% | 0.2\% | 0.0\% | 0.5\% | 0.0\% | 3.1\% | 1.2\% | 71.2\% |
| 1999-2008 | 5766 | 15.5\% | 1.2\% | 1.4\% | 4.3\% | 1.9\% | 8.4\% | 2.3\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 6.9\% | 0.0\% | 1.3\% | 0.0\% | 0.2\% | 0.0\% | 5.8\% | 6.4\% | 44.2\% |

Appendix C.77. Percent distribution of Taku River reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | 297 | 3.0\% | 3.0\% | 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\% | 0.0\% | 90.6\% |
| 1981 | 446 | 5.2\% | 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\% | 0.0\% | 94.8\% |
| 1982 | 266 | 5.6\% | 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\% | 0.0\% | 0.0\% | 91.7\% |
| 1983 | 166 | 2.4\% | 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\% | 96.4\% |
| 1984 | 354 | 9.6\% | 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\% | 88.4\% |
| 1985 | 344 | 2.9\% | 0.0\% | 8.1\% | 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\% | 88.1\% |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | 376 | 1.9\% | 1.1\% | 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\% | 0.0\% | 95.2\% |
| 1997 | 633 | 0.5\% | 1.9\% | 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\% | 88.9\% |
| 1998 | 389 | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 99.2\% |
| 1999 | 593 | 1.3\% | 2.0\% | 2.4\% | 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\% | 0.0\% | 94.3\% |
| 2000 | 1104 | 1.9\% | 0.7\% | 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\% | 95.4\% |
| 2001 | 981 | 3.4\% | 2.2\% | 3.1\% | 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\% | 91.3\% |
| 2002 | 903 | 2.7\% | 2.1\% | 5.4\% | 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\% | 0.0\% | 89.8\% |
| 2003 | 895 | 1.6\% | 1.5\% | 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\% | 95.9\% |
| 2004 | 2137 | 2.8\% | 4.1\% | 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\% | 0.0\% | 0.0\% | 0.0\% | 90.3\% |
| 2005 | 1210 | 3.6\% | 29.0\% | 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\% | 0.0\% | 64.0\% |
| 2006 | 881 | 3.4\% | 16.2\% | 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\% | 0.0\% | 77.4\% |
| 2007 | 370 | 6.5\% | 5.1\% | 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\% | 87.3\% |
| 2008 | 648 | 4.3\% | 4.0\% | 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\% | 0.0\% | 91.4\% |
| 1979-2008 | 684 | 3.3\% | 4.1\% | 2.5\% | 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\% | 90.0\% |
| 1979-1984 | 306 | 5.2\% | 1.8\% | 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\% | 92.4\% |
| 1985-1995 | 344 | 2.9\% | 0.0\% | 8.1\% | 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\% | 88.1\% |
| 1996-1998 | 466 | 1.0\% | 1.0\% | 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\% | 0.0\% | 94.5\% |
| 1999-2008 | 972 | 3.1\% | 6.7\% | 2.5\% | 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\% | 87.7\% |

Appendix C.78. Percent distribution of Taku River total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | 299 | 3.3\% | 3.0\% | 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\% | 0.0\% | 90.0\% |
| 1981 | 447 | 5.4\% | 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\% | 0.0\% | 0.0\% | 0.0\% | 94.6\% |
| 1982 | 270 | 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\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 90.4\% |
| 1983 | 167 | 3.0\% | 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\% | 95.8\% |
| 1984 | 357 | 10.4\% | 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\% | 87.7\% |
| 1985 | 345 | 2.9\% | 0.0\% | 8.4\% | 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\% | 87.8\% |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Brood | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | A | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | 383 | 1.8\% | 2.1\% | 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\% | 0.0\% | 93.5\% |
| 1997 | 650 | 0.6\% | 2.9\% | 9.8\% | 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\% | 86.6\% |
| 1998 | 39 | 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\% | 0.0\% | 0.0\% | 0.0\% | 98.7\% |
| 1999 | 624 | 1.9\% | 4.6\% | 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\% | 0.0\% | 0.0\% | 0.0\% | 89.6\% |
| 2000 | 1113 | 2.1\% | 1.0\% | 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\% | 0.0\% | 94.6\% |
| 2001 | 998 | 3.8\% | 3.0\% | 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\% | 0.0\% | 89.8\% |
| 2002 | 937 | 3.5\% | 2.8\% | 7.2\% | 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\% | 86.6\% |
| 2003 | 916 | 2.1\% | 2.6\% | 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\% | 0.0\% | 0.0\% | 0.0\% | 93.7\% |
| 2004 | 2237 | 3.1\% | 7.5\% | 3.1\% | 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\% | 86.2\% |
| 2005 | 1292 | 3.6\% | 33.0\% | 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\% | 0.0\% | 60.0\% |
| 2006 | 911 | 3.7\% | 18.0\% | 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\% | 0.0\% | 74.9\% |
| 2007 | 398 | 7.8\% | 9.8\% | 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\% | 0.0\% | 81.2\% |
| 2008 | 651 | 4.5\% | 4.3\% | 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\% | 0.0\% | 90.9\% |
| 1979-2008 | 705 | 3.8\% | 5.3\% | 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\% | 0.0\% | 0.0\% | 0.0\% | 88.0\% |
| 1979-1984 | 308 | 5.7\% | 1.8\% | 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\% | 91.7\% |
| 1985-1995 | 345 | 2.9\% | 0.0\% | 8.4\% | 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\% | 87.8\% |
| 1996-1998 | 475 | 1.2\% | 1.7\% | 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\% | 92.9\% |
| 1999-2008 | 1008 | 3.6\% | 8.7\% | 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\% | 0.0\% | 0.0\% | 84.7\% |

Appendix C.79. Percent distribution of Unuk River reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | 417 | 9.1\% | 0.2\% | 2.9\% | 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\% | 87.1\% |
| 1988 | 438 | 5.9\% | 0.5\% | 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\% | 92.5\% |
| 1989 | 257 | 7.0\% | 0.8\% | 0.0\% | 1.2\% | 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\% | 90.7\% |
| 1990 | 157 | 21.7\% | 0.0\% | 10.2\% | 2.5\% | 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\% | 65.6\% |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1997 | 123 | 9.8\% | 5.7\% | 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\% | 84.6\% |
| 1998 | 338 | 10.4\% | 1.8\% | 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\% | 84.6\% |
| 1999 | 458 | 8.5\% | 0.9\% | 13.5\% | 0.0\% | 1.3\% | 0.0\% | 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\% | 74.7\% |
| 2000 | 613 | 15.0\% | 2.6\% | 13.4\% | 0.0\% | 3.3\% | 0.0\% | 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\% | 64.6\% |
| 2001 | 702 | 14.0\% | 1.0\% | 10.4\% | 0.3\% | 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\% | 73.8\% |
| 2002 | 414 | 16.7\% | 0.7\% | 11.8\% | 2.4\% | 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\% | 68.4\% |
| 2003 | 287 | 24.0\% | 0.3\% | 15.7\% | 3.1\% | 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\% | 56.1\% |
| 2004 | 293 | 13.3\% | 21.2\% | 7.8\% | 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\% | 57.7\% |
| 2005 | 384 | 33.6\% | 3.9\% | 19.0\% | 0.5\% | 3.6\% | 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\% | 39.3\% |
| 2006 | 374 | 21.1\% | 12.6\% | 12.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 52.9\% |
| 2007 | 333 | 31.5\% | 8.7\% | 8.4\% | 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\% | 0.0\% | 0.0\% | 49.5\% |
| 2008 | 178 | 25.8\% | 7.3\% | 1.7\% | 0.0\% | 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\% | 60.7\% |
| 1979-2008 | 360 | 16.7\% | 4.3\% | 8.2\% | 0.8\% | 0.8\% | 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\% | 68.9\% |
| 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\% |
| 1985-1995 | 317 | 10.9\% | 0.4\% | 3.6\% | 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\% | 0.0\% | 0.0\% | 83.9\% |
| 1996-1998 | 230 | 10.1\% | 3.7\% | 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\% | 0.0\% | 0.0\% | 0.0\% | 84.6\% |
| 1999-2008 | 404 | 20.4\% | 5.9\% | 11.4\% | 0.8\% | 1.3\% | 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\% | 59.8\% |

Appendix C.80. Percent distribution of Unuk River total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1983 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1984 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1985 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1986 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1987 | 428 | 11.0\% | 0.5\% | 3.0\% | 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\% | 84.8\% |
| 1988 | 444 | 6.8\% | 0.9\% | 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\% | 91.2\% |
| 1989 | 270 | 9.6\% | 2.2\% | 0.0\% | 1.5\% | 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\% | 86.3\% |
| 1990 | 181 | 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\% | 56.9\% |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1997 | 144 | 13.9\% | 8.3\% | 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\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 72.2\% |
| 1998 | 357 | 12.9\% | 2.8\% | 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\% | 80.1\% |
| 1999 | 517 | 11.8\% | 1.4\% | 17.6\% | 0.0\% | 1.5\% | 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\% | 0.0\% | 0.0\% | 66.2\% |
| 2000 | 670 | 17.3\% | 4.0\% | 14.5\% | 0.0\% | 3.9\% | 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\% | 0.0\% | 0.0\% | 59.1\% |
| 2001 | 732 | 15.4\% | 1.1\% | 11.3\% | 0.3\% | 0.0\% | 0.0\% | 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\% | 70.8\% |
| 2002 | 438 | 18.5\% | 1.4\% | 13.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 64.6\% |
| 2003 | 328 | 28.4\% | 0.3\% | 18.3\% | 3.4\% | 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\% | 49.1\% |
| 2004 | 391 | 13.6\% | 35.3\% | 7.9\% | 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\% | 43.2\% |
| 2005 | 437 | 35.5\% | 4.6\% | 20.6\% | 0.5\% | 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\% | 0.0\% | 0.0\% | 34.6\% |
| 2006 | 418 | 22.5\% | 16.0\% | 12.7\% | 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\% | 0.0\% | 0.0\% | 47.4\% |
| 2007 | 375 | 31.7\% | 13.1\% | 8.5\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 44.0\% |
| 2008 | 184 | 26.6\% | 8.2\% | 1.6\% | 0.0\% | 4.9\% | 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\% | 58.7\% |
| 1979-2008 | 395 | 19.0\% | 6.3\% | 9.5\% | 0.8\% | 0.9\% | 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\% | 63.1\% |
| 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\% |
| 1985-1995 | 331 | 13.9\% | 1.0\% | 3.9\% | 1.1\% | 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\% | 0.0\% | 0.0\% | 79.8\% |
| 1996-1998 | 250 | 13.4\% | 5.6\% | 4.9\% | 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\% | 76.2\% |
| 1999-2008 | 449 | 22.1\% | 8.5\% | 12.6\% | 0.9\% | 1.5\% | 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\% | 53.8\% |

Appendix C.81. Percent distribution of Columbia River Upriver Bright reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 5348 | 17.8\% | 0.3\% | 0.6\% | 7.5\% | 0.1\% | 12.5\% | 0.0\% | 0.4\% | 0.1\% | 4.0\% | 4.4\% | 0.0\% | 1.3\% | 0.1\% | 1.1\% | 0.1\% | 0.2\% | 0.0\% | 22.8\% | 0.5\% | 26.4\% |
| 1980 | 3565 | 19.9\% | 0.6\% | 0.5\% | 6.4\% | 0.1\% | 7.3\% | 0.0\% | 0.4\% | 0.6\% | 1.6\% | 1.9\% | 0.0\% | 1.1\% | 0.0\% | 0.8\% | 0.0\% | 0.4\% | 0.0\% | 6.3\% | 0.7\% | 51.4\% |
| 1981 | 2268 | 16.0\% | 0.0\% | 0.4\% | 5.6\% | 0.0\% | 3.8\% | 0.2\% | 0.2\% | 0.2\% | 1.1\% | 1.8\% | 0.0\% | 0.5\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% | 0.0\% | 3.6\% | 0.0\% | 65.7\% |
| 1982 | 1359 | 6.4\% | 0.4\% | 0.2\% | 3.4\% | 0.1\% | 4.6\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 1.5\% | 0.0\% | 0.6\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 79.2\% |
| 1983 | 844 | 15.6\% | 0.2\% | 0.0\% | 10.2\% | 0.2\% | 3.7\% | 0.0\% | 0.0\% | 0.2\% | 1.8\% | 3.6\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.2\% | 0.0\% | 55.9\% |
| 1984 | 1847 | 14.5\% | 1.1\% | 0.1\% | 8.9\% | 0.2\% | 7.1\% | 0.2\% | 0.0\% | 0.2\% | 2.0\% | 2.2\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 15.5\% | 1.2\% | 46.0\% |
| 1985 | 3519 | 8.7\% | 1.3\% | 0.2\% | 8.2\% | 0.0\% | 7.5\% | 0.1\% | 0.0\% | 0.1\% | 0.7\% | 2.6\% | 0.0\% | 0.4\% | 0.0\% | 0.5\% | 0.1\% | 0.4\% | 0.0\% | 31.5\% | 3.6\% | 34.0\% |
| 1986 | 5262 | 9.7\% | 0.6\% | 0.1\% | 7.8\% | 0.1\% | 7.0\% | 0.1\% | 0.0\% | 0.1\% | 1.7\% | 1.4\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% | 0.0\% | 0.4\% | 0.0\% | 33.8\% | 1.8\% | 34.5\% |
| 1987 | 4160 | 15.0\% | 0.7\% | 0.3\% | 11.8\% | 0.1\% | 7.0\% | 0.4\% | 0.0\% | 0.0\% | 1.7\% | 0.8\% | 0.0\% | 1.2\% | 0.0\% | 0.4\% | 0.0\% | 0.5\% | 0.0\% | 35.8\% | 2.8\% | 21.5\% |
| 1988 | 2804 | 9.9\% | 0.7\% | 0.4\% | 8.1\% | 0.0\% | 10.6\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.6\% | 0.0\% | 1.9\% | 0.0\% | 0.5\% | 0.1\% | 0.1\% | 0.0\% | 45.0\% | 2.3\% | 19.1\% |
| 1989 | 1231 | 11.9\% | 0.0\% | 0.2\% | 14.9\% | 0.6\% | 7.7\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 1.5\% | 0.0\% | 1.2\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 42.5\% | 1.6\% | 17.3\% |
| 1990 | 678 | 13.6\% | 0.0\% | 1.0\% | 9.9\% | 0.0\% | 8.1\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.7\% | 0.0\% | 1.2\% | 0.0\% | 0.4\% | 0.0\% | 0.7\% | 0.0\% | 33.8\% | 1.2\% | 28.6\% |
| 1991 | 268 | 6.3\% | 0.4\% | 2.6\% | 6.0\% | 0.0\% | 9.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.8\% | 4.1\% | 51.1\% |
| 1992 | 302 | 3.0\% | 0.0\% | 0.0\% | 3.0\% | 0.0\% | 10.6\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 17.2\% | 6.0\% | 55.6\% |
| 1993 | 525 | 10.9\% | 0.0\% | 0.0\% | 6.7\% | 0.6\% | 17.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 1.7\% | 0.0\% | 1.3\% | 0.0\% | 0.8\% | 0.0\% | 15.6\% | 4.4\% | 40.2\% |
| 1994 | 939 | 9.3\% | 0.9\% | 0.0\% | 7.6\% | 1.6\% | 6.5\% | 0.6\% | 0.0\% | 0.0\% | 0.2\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.2\% | 3.3\% | 50.1\% |
| 1995 | 694 | 8.1\% | 0.1\% | 1.7\% | 2.0\% | 0.0\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.7\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 9.9\% | 3.6\% | 67.3\% |
| 1996 | 762 | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 22.4\% | 5.1\% | 68.0\% |
| 1997 | 979 | 11.1\% | 0.3\% | 2.6\% | 4.6\% | 0.7\% | 0.6\% | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.8\% | 10.1\% | 47.8\% |
| 1998 | 703 | 8.5\% | 1.6\% | 2.3\% | 2.7\% | 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\% | 14.9\% | 8.7\% | 60.9\% |
| 1999 | 1336 | 10.8\% | 0.0\% | 2.5\% | 7.3\% | 0.7\% | 0.0\% | 0.4\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 13.9\% | 8.1\% | 55.2\% |
| 2000 | 890 | 19.3\% | 0.1\% | 2.2\% | 0.0\% | 0.0\% | 1.3\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 20.7\% | 5.4\% | 47.5\% |
| 2001 | 1704 | 3.9\% | 0.0\% | 0.7\% | 0.0\% | 0.4\% | 0.7\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 13.6\% | 7.7\% | 70.3\% |
| 2002 | 2196 | 14.3\% | 0.0\% | 2.3\% | 1.4\% | 0.6\% | 1.4\% | 0.5\% | 0.0\% | 0.4\% | 0.0\% | 0.1\% | 0.0\% | 1.7\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 18.3\% | 7.4\% | 50.6\% |
| 2003 | 2334 | 13.5\% | 0.9\% | 0.6\% | 4.7\% | 0.9\% | 0.7\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 15.1\% | 6.8\% | 55.2\% |
| 2004 | 2350 | 8.9\% | 1.3\% | 0.7\% | 3.2\% | 1.4\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 1.4\% | 0.0\% | 0.1\% | 0.0\% | 15.9\% | 6.2\% | 57.7\% |
| 2005 | 2502 | 13.8\% | 1.4\% | 0.9\% | 8.9\% | 4.4\% | 3.5\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 13.8\% | 7.0\% | 42.1\% |
| 2006 | 1638 | 12.9\% | 1.6\% | 1.3\% | 6.7\% | 1.7\% | 1.6\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.4\% | 0.0\% | 0.2\% | 0.0\% | 13.4\% | 15.2\% | 41.6\% |
| 2007 | 527 | 11.0\% | 0.2\% | 0.8\% | 5.9\% | 4.9\% | 1.1\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 12.7\% | 14.4\% | 46.7\% |
| 2008 | 786 | 8.7\% | 0.3\% | 0.0\% | 2.3\% | 1.8\% | 1.9\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 20.0\% | 8.4\% | 51.1\% |
| 1979-2008 | 1811 | 11.2\% | 0.5\% | 0.8\% | 5.9\% | 0.7\% | 5.0\% | 0.5\% | 0.0\% | 0.1\% | 0.6\% | 0.9\% | 0.0\% | 0.8\% | 0.0\% | 0.5\% | 0.0\% | 0.2\% | 0.0\% | 19.3\% | 4.9\% | 48.0\% |
| 1979-1984 | 2538 | 15.0\% | 0.5\% | 0.3\% | 7.0\% | 0.1\% | 6.5\% | 0.1\% | 0.2\% | 0.2\% | 1.8\% | 2.6\% | 0.0\% | 0.7\% | 0.0\% | 0.6\% | 0.0\% | 0.2\% | 0.0\% | 9.8\% | 0.4\% | 54.1\% |
| 1985-1995 | 1853 | 9.7\% | 0.4\% | 0.6\% | 7.8\% | 0.3\% | 8.8\% | 0.2\% | 0.0\% | 0.0\% | 0.5\% | 1.1\% | 0.0\% | 0.9\% | 0.0\% | 0.5\% | 0.0\% | 0.3\% | 0.0\% | 27.7\% | 3.1\% | 38.1\% |
| 1996-1998 | 815 | 7.5\% | 0.6\% | 1.6\% | 2.4\% | 0.4\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 19.4\% | 8.0\% | 58.9\% |
| 1999-2008 | 1626 | 11.7\% | 0.6\% | 1.2\% | 4.0\% | 1.7\% | 1.4\% | 1.3\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 15.7\% | 8.7\% | 51.8\% |

Appendix C.82. Percent distribution of Columbia River Upriver Bright total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 5572 | 18.1\% | 0.3\% | 0.6\% | 7.9\% | 0.1\% | 13.2\% | 0.0\% | 0.4\% | 0.1\% | 4.1\% | 4.4\% | 0.0\% | 1.3\% | 0.1\% | 1.2\% | 0.1\% | 0.3\% | 0.0\% | 22.1\% | 0.5\% | 25.3\% |
| 1980 | 3713 | 20.6\% | 0.6\% | 0.6\% | 6.9\% | 0.1\% | 7.9\% | 0.0\% | 0.5\% | 0.6\% | 1.7\% | 1.9\% | 0.0\% | 1.1\% | 0.0\% | 0.8\% | 0.0\% | 0.4\% | 0.0\% | 6.2\% | 0.7\% | 49.4\% |
| 1981 | 2330 | 16.9\% | 0.0\% | 0.4\% | 5.9\% | 0.0\% | 4.1\% | 0.2\% | 0.2\% | 0.2\% | 1.1\% | 1.8\% | 0.0\% | 0.6\% | 0.0\% | 0.9\% | 0.0\% | 0.2\% | 0.0\% | 3.5\% | 0.0\% | 64.0\% |
| 1982 | 1438 | 8.5\% | 0.4\% | 0.3\% | 4.3\% | 0.2\% | 5.6\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 1.6\% | 0.0\% | 0.8\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 74.9\% |
| 1983 | 963 | 21.8\% | 0.3\% | 0.0\% | 11.2\% | 0.2\% | 3.9\% | 0.0\% | 0.0\% | 0.2\% | 2.0\% | 3.4\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.5\% | 0.0\% | 49.0\% |
| 1984 | 2129 | 19.4\% | 1.1\% | 0.2\% | 9.9\% | 0.2\% | 7.9\% | 0.2\% | 0.0\% | 0.2\% | 2.2\% | 2.2\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 14.3\% | 1.2\% | 39.9\% |
| 1985 | 3940 | 12.3\% | 2.3\% | 0.3\% | 8.6\% | 0.0\% | 7.9\% | 0.2\% | 0.0\% | 0.1\% | 0.8\% | 2.5\% | 0.0\% | 0.5\% | 0.0\% | 0.5\% | 0.1\% | 0.5\% | 0.0\% | 29.7\% | 3.6\% | 30.4\% |
| 1986 | 5648 | 11.4\% | 1.4\% | 0.1\% | 8.1\% | 0.1\% | 7.4\% | 0.1\% | 0.0\% | 0.1\% | 1.7\% | 1.4\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% | 0.1\% | 0.5\% | 0.0\% | 32.6\% | 1.8\% | 32.1\% |
| 1987 | 4710 | 19.1\% | 1.3\% | 0.3\% | 12.4\% | 0.1\% | 7.7\% | 0.4\% | 0.0\% | 0.0\% | 1.8\% | 0.7\% | 0.0\% | 1.2\% | 0.1\% | 0.4\% | 0.0\% | 0.5\% | 0.0\% | 32.6\% | 2.6\% | 19.0\% |
| 1988 | 3019 | 11.0\% | 1.5\% | 0.4\% | 8.7\% | 0.0\% | 11.8\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.6\% | 0.0\% | 2.0\% | 0.0\% | 0.6\% | 0.1\% | 0.2\% | 0.0\% | 42.6\% | 2.3\% | 17.7\% |
| 1989 | 1314 | 14.2\% | 0.0\% | 0.2\% | 15.3\% | 0.5\% | 8.1\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 1.4\% | 0.0\% | 1.2\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 40.6\% | 1.7\% | 16.2\% |
| 1990 | 711 | 14.1\% | 0.0\% | 1.1\% | 10.8\% | 0.0\% | 8.7\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.7\% | 0.0\% | 1.3\% | 0.0\% | 0.4\% | 0.0\% | 0.8\% | 0.0\% | 32.6\% | 1.3\% | 27.3\% |
| 1991 | 295 | 8.1\% | 1.0\% | 3.4\% | 6.8\% | 0.0\% | 10.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.6\% | 4.4\% | 46.4\% |
| 1992 | 326 | 3.7\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 12.6\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 16.9\% | 6.7\% | 51.5\% |
| 1993 | 604 | 15.4\% | 0.0\% | 0.0\% | 7.6\% | 0.5\% | 19.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 1.7\% | 0.0\% | 1.2\% | 0.0\% | 0.7\% | 0.0\% | 14.1\% | 4.3\% | 34.9\% |
| 1994 | 995 | 10.8\% | 1.9\% | 0.0\% | 8.0\% | 1.6\% | 6.9\% | 0.6\% | 0.0\% | 0.0\% | 0.2\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.4\% | 3.4\% | 47.2\% |
| 1995 | 750 | 10.0\% | 0.1\% | 2.4\% | 2.7\% | 0.0\% | 7.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.7\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 9.6\% | 3.9\% | 62.3\% |
| 1996 | 811 | 4.4\% | 0.0\% | 0.0\% | 1.4\% | 0.2\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 22.2\% | 5.8\% | 63.9\% |
| 1997 | 1039 | 12.8\% | 0.4\% | 3.3\% | 5.0\% | 1.0\% | 0.7\% | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.0\% | 10.5\% | 45.0\% |
| 1998 | 769 | 10.5\% | 3.4\% | 2.9\% | 3.1\% | 0.4\% | 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\% | 14.4\% | 9.5\% | 55.7\% |
| 1999 | 1434 | 14.2\% | 0.0\% | 2.7\% | 7.7\% | 0.8\% | 0.0\% | 0.3\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 13.3\% | 8.4\% | 51.5\% |
| 2000 | 1014 | 26.0\% | 0.1\% | 3.3\% | 0.0\% | 0.0\% | 1.5\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 18.5\% | 5.1\% | 41.7\% |
| 2001 | 1799 | 5.5\% | 0.0\% | 1.1\% | 0.0\% | 0.5\% | 0.8\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 13.7\% | 8.9\% | 66.6\% |
| 2002 | 2361 | 16.3\% | 0.0\% | 2.5\% | 1.6\% | 0.7\% | 1.4\% | 0.6\% | 0.0\% | 0.5\% | 0.0\% | 1.1\% | 0.0\% | 1.9\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 17.6\% | 7.8\% | 47.1\% |
| 2003 | 2464 | 15.3\% | 1.1\% | 0.6\% | 5.2\% | 1.2\% | 0.7\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 14.6\% | 7.1\% | 52.3\% |
| 2004 | 2542 | 10.8\% | 2.7\% | 0.8\% | 3.7\% | 1.8\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 1.5\% | 0.0\% | 0.2\% | 0.0\% | 15.4\% | 6.7\% | 53.4\% |
| 2005 | 2660 | 14.7\% | 1.8\% | 0.9\% | 9.4\% | 5.3\% | 3.4\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 13.3\% | 7.3\% | 39.6\% |
| 2006 | 1722 | 13.9\% | 1.9\% | 1.4\% | 6.9\% | 1.9\% | 1.5\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.4\% | 0.0\% | 0.3\% | 0.0\% | 13.0\% | 15.9\% | 39.6\% |
| 2007 | 576 | 11.8\% | 0.2\% | 1.4\% | 5.7\% | 6.3\% | 1.2\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 12.2\% | 16.1\% | 42.7\% |
| 2008 | 888 | 13.5\% | 0.5\% | 0.0\% | 2.8\% | 1.8\% | 1.8\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 18.9\% | 9.6\% | 45.3\% |
| 1979-2008 | 1951 | 13.5\% | 0.8\% | 1.0\% | 6.4\% | 0.8\% | 5.5\% | 0.5\% | 0.0\% | 0.1\% | 0.6\% | 1.0\% | 0.0\% | 0.9\% | 0.0\% | 0.5\% | 0.0\% | 0.2\% | 0.0\% | 18.4\% | 5.2\% | 44.4\% |
| 1979-1984 | 2691 | 17.5\% | 0.5\% | 0.3\% | 7.7\% | 0.1\% | 7.1\% | 0.1\% | 0.2\% | 0.2\% | 1.9\% | 2.5\% | 0.0\% | 0.7\% | 0.0\% | 0.6\% | 0.0\% | 0.3\% | 0.0\% | 9.4\% | 0.4\% | 50.4\% |
| 1985-1995 | 2028 | 11.8\% | 0.9\% | 0.7\% | 8.4\% | 0.3\% | 9.8\% | 0.2\% | 0.0\% | 0.0\% | 0.6\% | 1.1\% | 0.0\% | 0.9\% | 0.0\% | 0.4\% | 0.0\% | 0.3\% | 0.0\% | 26.2\% | 3.3\% | 35.0\% |
| 1996-1998 | 873 | 9.3\% | 1.3\% | 2.0\% | 3.2\% | 0.5\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 18.9\% | 8.6\% | 54.9\% |
| 1999-2008 | 1746 | 14.2\% | 0.8\% | 1.5\% | 4.3\% | 2.0\% | 1.4\% | 1.3\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 1.1\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 15.1\% | 9.3\% | 48.0\% |

Appendix C.83. Percent distribution of University Of Washington Accelerated reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 3752 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.0\% | 0.1\% | 1.7\% | 4.4\% | 0.3\% | 4.1\% | 0.0\% | 1.8\% | 0.0\% | 0.5\% | 6.6\% | 38.2\% | 0.0\% | 0.0\% | 0.0\% | 27.4\% |
| 1980 | 4308 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 7.1\% | 0.1\% | 0.3\% | 5.0\% | 0.2\% | 1.4\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 12.8\% | 49.0\% | 0.0\% | 0.0\% | 0.2\% | 22.3\% |
| 1981 | 3460 | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 10.2\% | 0.1\% | 0.6\% | 4.9\% | 0.0\% | 4.0\% | 0.0\% | 2.3\% | 0.0\% | 0.3\% | 11.7\% | 45.5\% | 0.0\% | 0.0\% | 0.0\% | 19.9\% |
| 1982 | 3299 | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 16.0\% | 0.2\% | 0.3\% | 3.8\% | 0.3\% | 0.9\% | 0.0\% | 2.3\% | 0.0\% | 0.4\% | 12.8\% | 29.4\% | 0.0\% | 1.2\% | 0.0\% | 32.3\% |
| 1983 | 2889 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 10.6\% | 0.1\% | 0.7\% | 3.1\% | 1.0\% | 1.7\% | 0.0\% | 1.3\% | 0.0\% | 0.2\% | 19.2\% | 30.4\% | 0.0\% | 4.6\% | 0.0\% | 27.2\% |
| 1984 | 1708 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.2\% | 0.2\% | 0.5\% | 4.4\% | 0.6\% | 1.0\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 19.9\% | 23.9\% | 0.0\% | 3.5\% | 0.0\% | 24.9\% |
| 1985 | 759 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.8\% | 1.3\% | 0.0\% | 5.0\% | 0.0\% | 5.3\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 6.2\% | 23.7\% | 0.0\% | 9.2\% | 0.0\% | 32.3\% |
| 1986 | 771 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.9\% | 0.9\% | 0.0\% | 3.9\% | 0.0\% | 8.2\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 20.4\% | 18.9\% | 0.0\% | 5.6\% | 0.0\% | 21.8\% |
| 1987 | 961 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.8\% | 1.5\% | 1.4\% | 4.7\% | 0.3\% | 0.3\% | 0.0\% | 4.1\% | 0.0\% | 0.2\% | 22.6\% | 13.7\% | 0.0\% | 25.6\% | 0.0\% | 14.6\% |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1997 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1998 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1999 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2000 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2001 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2005 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2006 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2007 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2008 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1979-2008 | 2434 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 13.6\% | 0.5\% | 0.6\% | 4.3\% | 0.3\% | 3.0\% | 0.0\% | 2.1\% | 0.0\% | 0.2\% | 14.7\% | 30.3\% | 0.0\% | 5.5\% | 0.0\% | 24.7\% |
| 1979-1984 | 3236 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 13.0\% | 0.2\% | 0.7\% | 4.3\% | 0.4\% | 2.2\% | 0.0\% | 1.8\% | 0.0\% | 0.2\% | 13.8\% | 36.1\% | 0.0\% | 1.5\% | 0.0\% | 25.7\% |
| 1985-1995 | 830 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.8\% | 1.2\% | 0.5\% | 4.5\% | 0.1\% | 4.6\% | 0.0\% | 2.6\% | 0.0\% | 0.1\% | 16.4\% | 18.8\% | 0.0\% | 13.5\% | 0.0\% | 22.9\% |
| 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\% |
| 1999-2008 | 0 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 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 C.84. Percent distribution of University Of Washington Accelerated total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | 4319 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.3\% | 0.1\% | 1.6\% | 4.1\% | 0.3\% | 3.7\% | 0.0\% | 1.8\% | 0.0\% | 0.5\% | 7.0\% | 41.8\% | 0.0\% | 0.0\% | 0.0\% | 23.8\% |
| 1980 | 5908 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 8.4\% | 0.1\% | 0.3\% | 3.9\% | 0.2\% | 1.2\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 13.0\% | 54.9\% | 0.0\% | 0.0\% | 0.2\% | 16.3\% |
| 1981 | 4320 | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 10.7\% | 0.1\% | 0.5\% | 4.3\% | 0.0\% | 3.5\% | 0.0\% | 2.2\% | 0.0\% | 0.3\% | 11.1\% | 50.8\% | 0.0\% | 0.0\% | 0.0\% | 15.9\% |
| 1982 | 3882 | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 18.9\% | 0.2\% | 0.3\% | 3.5\% | 0.3\% | 0.8\% | 0.0\% | 2.6\% | 0.0\% | 0.4\% | 13.0\% | 31.5\% | 0.0\% | 1.1\% | 0.0\% | 27.4\% |
| 1983 | 3870 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 9.7\% | 0.1\% | 0.6\% | 2.5\% | 0.9\% | 1.3\% | 0.0\% | 1.2\% | 0.0\% | 0.2\% | 20.5\% | 38.8\% | 0.0\% | 3.7\% | 0.0\% | 20.3\% |
| 1984 | 2052 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.2\% | 0.2\% | 0.4\% | 3.9\% | 0.5\% | 1.0\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 19.9\% | 30.4\% | 0.0\% | 3.1\% | 0.0\% | 20.7\% |
| 1985 | 891 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.5\% | 1.2\% | 0.0\% | 4.6\% | 0.0\% | 5.1\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 6.5\% | 30.1\% | 0.0\% | 8.4\% | 0.0\% | 27.5\% |
| 1986 | 951 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.3\% | 0.9\% | 0.0\% | 3.5\% | 0.0\% | 7.4\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 20.4\% | 24.3\% | 0.0\% | 4.9\% | 0.0\% | 17.7\% |
| 1987 | 1034 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.4\% | 1.5\% | 1.4\% | 4.6\% | 0.3\% | 0.3\% | 0.0\% | 4.4\% | 0.0\% | 0.2\% | 22.1\% | 14.9\% | 0.0\% | 25.0\% | 0.0\% | 13.5\% |
| 1988 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1989 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1990 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1991 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1992 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1993 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1994 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1995 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1996 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1997 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1998 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1999 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2000 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2001 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2005 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2006 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2007 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2008 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1979-2008 | 3025 | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 14.0\% | 0.5\% | 0.6\% | 3.9\% | 0.3\% | 2.7\% | 0.0\% | 2.1\% | 0.0\% | 0.2\% | 14.8\% | 35.3\% | 0.0\% | 5.1\% | 0.0\% | 20.4\% |
| 1979-1984 | 4058 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 13.5\% | 0.1\% | 0.6\% | 3.7\% | 0.4\% | 1.9\% | 0.0\% | 1.8\% | 0.0\% | 0.2\% | 14.1\% | 41.4\% | 0.0\% | 1.3\% | 0.0\% | 20.7\% |
| 1985-1995 | 959 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.1\% | 1.2\% | 0.5\% | 4.2\% | 0.1\% | 4.2\% | 0.0\% | 2.7\% | 0.0\% | 0.1\% | 16.3\% | 23.1\% | 0.0\% | 12.8\% | 0.0\% | 19.6\% |
| 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\% |
| 1999-2008 | 0 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 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 C.85. Percent distribution of White River Spring Yearling reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | 82 | 0.0\% | 0.0\% | 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\% | 67.1\% | 23.2\% | 0.0\% | 6.1\% | 0.0\% | 1.2\% |
| 1983 | 186 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 11.3\% | 59.7\% | 0.0\% | 0.0\% | 0.0\% | 21.5\% |
| 1984 | 155 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% | 0.0\% | 5.2\% | 0.0\% | 5.8\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 3.9\% | 25.2\% | 0.0\% | 5.2\% | 0.0\% | 47.7\% |
| 1985 | 312 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.8\% | 50.6\% | 0.0\% | 0.0\% | 0.0\% | 13.5\% |
| 1986 | 844 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 2.4\% | 0.4\% | 2.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 15.3\% | 52.3\% | 0.0\% | 0.0\% | 0.0\% | 26.8\% |
| 1987 | 452 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.4\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 11.3\% | 42.3\% | 0.0\% | 0.0\% | 0.0\% | 41.2\% |
| 1988 | 1606 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.8\% | 0.0\% | 2.5\% | 0.0\% | 0.2\% | 0.0\% | 1.3\% | 0.0\% | 0.2\% | 13.0\% | 48.3\% | 0.0\% | 0.0\% | 0.0\% | 33.6\% |
| 1989 | 895 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 1.0\% | 0.0\% | 6.0\% | 0.0\% | 0.2\% | 13.3\% | 40.9\% | 0.0\% | 0.3\% | 0.0\% | 35.8\% |
| 1990 | 441 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.7\% | 0.0\% | 5.4\% | 0.0\% | 0.0\% | 15.6\% | 42.0\% | 0.0\% | 0.5\% | 0.0\% | 33.3\% |
| 1991 | 388 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 1.3\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 0.0\% | 10.8\% | 38.1\% | 0.0\% | 0.0\% | 0.0\% | 43.6\% |
| 1992 | 778 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.8\% | 0.0\% | 1.9\% | 0.0\% | 2.8\% | 0.0\% | 2.4\% | 0.0\% | 0.5\% | 7.1\% | 45.0\% | 0.0\% | 0.8\% | 0.0\% | 36.2\% |
| 1993 | 279 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 2.9\% | 30.5\% | 0.0\% | 0.7\% | 0.0\% | 62.4\% |
| 1994 | 212 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 43.9\% | 0.0\% | 0.0\% | 0.0\% | 51.9\% |
| 1995 | 388 | 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\% | 0.8\% | 29.4\% | 0.0\% | 0.0\% | 0.0\% | 69.3\% |
| 1996 | 340 | 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\% | 0.0\% | 0.3\% | 42.9\% | 0.0\% | 0.0\% | 0.0\% | 55.9\% |
| 1997 | 26 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 40.4\% | 0.0\% | 0.0\% | 0.0\% | 55.8\% |
| 1998 | 126 | 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\% | 0.0\% | 1.6\% | 27.0\% | 0.0\% | 0.0\% | 0.0\% | 69.8\% |
| 1999 | 82 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.5\% | 0.0\% | 0.0\% | 0.0\% | 64.6\% |
| 2000 | 86 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 37.2\% | 0.0\% | 0.0\% | 0.0\% | 54.7\% |
| 2001 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2005 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2006 | 1011 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 0.1\% | 0.2\% | 8.8\% | 0.0\% | 1.7\% | 0.0\% | 85.2\% |
| 2007 | 849 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.4\% | 0.2\% | 15.9\% | 0.0\% | 2.2\% | 0.0\% | 79.9\% |
| 2008 | 232 | 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\% | 0.0\% | 0.0\% | 0.4\% | 5.6\% | 0.0\% | 5.6\% | 0.0\% | 86.2\% |
| 1979-2008 | 455 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.2\% | 0.2\% | 0.9\% | 0.3\% | 0.6\% | 0.0\% | 1.6\% | 0.0\% | 0.1\% | 9.7\% | 35.4\% | 0.0\% | 1.0\% | 0.0\% | 48.6\% |
| 1979-1984 | 141 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 1.7\% | 0.8\% | 1.9\% | 0.5\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 27.4\% | 36.0\% | 0.0\% | 3.8\% | 0.0\% | 23.5\% |
| 1985-1995 | 600 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.5\% | 0.0\% | 1.3\% | 0.0\% | 1.0\% | 0.0\% | 2.4\% | 0.0\% | 0.1\% | 11.1\% | 42.1\% | 0.0\% | 0.2\% | 0.0\% | 40.7\% |
| 1996-1998 | 244 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 1.9\% | 36.8\% | 0.0\% | 0.0\% | 0.0\% | 60.5\% |
| 1999-2008 | 452 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.1\% | 0.6\% | 19.6\% | 0.0\% | 1.9\% | 0.0\% | 74.1\% |

Appendix C.86. Percent distribution of White River Spring Yearling total fishing mortalities among fisheries and escapement.

| Catch Year | Estimated <br> \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1981 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1982 | 106 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 1.9\% | 0.9\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 55.7\% | 34.0\% | 0.0\% | 4.7\% | 0.0\% | 0.9\% |
| 1983 | 211 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 10.4\% | 63.5\% | 0.0\% | 0.0\% | 0.0\% | 19.0\% |
| 1984 | 228 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 0.0\% | 4.4\% | 0.0\% | 4.8\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 3.5\% | 45.6\% | 0.0\% | 3.5\% | 0.0\% | 32.5\% |
| 1985 | 436 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 25.7\% | 60.3\% | 0.0\% | 0.0\% | 0.0\% | 9.6\% |
| 1986 | 956 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 2.3\% | 0.4\% | 2.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 14.1\% | 56.5\% | 0.0\% | 0.0\% | 0.0\% | 23.6\% |
| 1987 | 717 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.4\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 8.2\% | 61.9\% | 0.0\% | 0.0\% | 0.0\% | 25.9\% |
| 1988 | 1821 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.8\% | 0.0\% | 2.9\% | 0.0\% | 0.2\% | 0.0\% | 1.4\% | 0.0\% | 0.2\% | 12.6\% | 52.1\% | 0.0\% | 0.0\% | 0.0\% | 29.6\% |
| 1989 | 1018 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 1.0\% | 0.0\% | 6.3\% | 0.0\% | 0.2\% | 12.0\% | 46.3\% | 0.0\% | 0.3\% | 0.0\% | 31.4\% |
| 1990 | 514 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.6\% | 0.0\% | 5.8\% | 0.0\% | 0.0\% | 14.0\% | 48.1\% | 0.0\% | 0.4\% | 0.0\% | 28.6\% |
| 1991 | 461 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 1.3\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 0.0\% | 9.8\% | 46.0\% | 0.0\% | 0.0\% | 0.0\% | 36.7\% |
| 1992 | 858 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.7\% | 0.0\% | 2.1\% | 0.0\% | 2.6\% | 0.0\% | 2.7\% | 0.0\% | 0.5\% | 6.8\% | 48.5\% | 0.0\% | 0.7\% | 0.0\% | 32.9\% |
| 1993 | 321 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 2.5\% | 39.3\% | 0.0\% | 0.6\% | 0.0\% | 54.2\% |
| 1994 | 248 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 51.2\% | 0.0\% | 0.0\% | 0.0\% | 44.4\% |
| 1995 | 470 | 0.0\% | 0.0\% | 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\% | 0.9\% | 41.3\% | 0.0\% | 0.0\% | 0.0\% | 57.2\% |
| 1996 | 379 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 48.5\% | 0.0\% | 0.0\% | 0.0\% | 50.1\% |
| 1997 | 317 | 0.0\% | 0.0\% | 0.0\% | 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\% | 49.5\% | 0.0\% | 0.0\% | 0.0\% | 47.0\% |
| 1998 | 139 | 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\% | 1.4\% | 33.8\% | 0.0\% | 0.0\% | 0.0\% | 63.3\% |
| 1999 | 104 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 45.2\% | 0.0\% | 0.0\% | 0.0\% | 51.0\% |
| 2000 | 96 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 43.8\% | 0.0\% | 0.0\% | 0.0\% | 49.0\% |
| 2001 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2002 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2003 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2004 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2005 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2006 | 1109 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 0.1\% | 0.3\% | 16.6\% | 0.0\% | 1.6\% | 0.0\% | 77.6\% |
| 2007 | 892 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.4\% | 0.2\% | 19.7\% | 0.0\% | 2.2\% | 0.0\% | 76.0\% |
| 2008 | 236 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 7.2\% | 0.0\% | 5.5\% | 0.0\% | 84.7\% |
| 1979-2008 | 529 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.2\% | 0.2\% | 0.9\% | 0.3\% | 0.5\% | 0.0\% | 1.6\% | 0.0\% | 0.1\% | 8.5\% | 43.6\% | 0.0\% | 0.9\% | 0.0\% | 42.1\% |
| 1979-1984 | 182 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 1.5\% | 0.6\% | 1.9\% | 0.5\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 23.2\% | 47.7\% | 0.0\% | 2.7\% | 0.0\% | 17.5\% |
| 1985-1995 | 711 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.4\% | 0.0\% | 1.3\% | 0.0\% | 0.9\% | 0.0\% | 2.4\% | 0.0\% | 0.1\% | 9.8\% | 50.1\% | 0.0\% | 0.2\% | 0.0\% | 34.0\% |
| 1996-1998 | 278 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 1.7\% | 44.0\% | 0.0\% | 0.0\% | 0.0\% | 53.5\% |
| 1999-2008 | 487 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.1\% | 0.6\% | 26.5\% | 0.0\% | 1.9\% | 0.0\% | 67.7\% |

Appendix C.87. Percent distribution of Willamette Spring reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | 5769 | 3.4\% | 0.5\% | 0.1\% | 5.8\% | 0.1\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.5\% | 0.0\% | 0.5\% | 0.0\% | 0.7\% | 0.0\% | 0.1\% | 0.0\% | 0.3\% | 8.0\% | 77.2\% |
| 1981 | 8056 | 4.4\% | 0.6\% | 0.1\% | 6.1\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.1\% | 0.0\% | 0.4\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 10.5\% | 74.3\% |
| 1982 | 3699 | 4.0\% | 1.1\% | 0.1\% | 6.5\% | 0.1\% | 4.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.4\% | 0.0\% | 1.1\% | 0.0\% | 1.7\% | 0.1\% | 0.1\% | 0.0\% | 7.0\% | 24.7\% | 48.9\% |
| 1983 | 2478 | 12.5\% | 0.1\% | 0.0\% | 11.6\% | 0.0\% | 1.8\% | 0.0\% | 0.4\% | 0.3\% | 0.3\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.4\% | 0.0\% | 0.4\% | 0.0\% | 6.3\% | 22.4\% | 41.5\% |
| 1984 | 3950 | 4.0\% | 0.3\% | 0.3\% | 2.2\% | 0.1\% | 1.9\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.1\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 6.5\% | 24.5\% | 58.8\% |
| 1985 | 2532 | 5.1\% | 0.1\% | 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\% | 0.2\% | 0.0\% | 0.0\% | 18.2\% | 20.4\% | 54.7\% |
| 1986 | 686 | 3.1\% | 0.4\% | 0.0\% | 6.6\% | 0.0\% | 5.4\% | 0.6\% | 0.0\% | 0.0\% | 0.6\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 9.0\% | 17.5\% | 53.6\% |
| 1987 | 637 | 9.7\% | 0.0\% | 0.6\% | 13.2\% | 0.0\% | 0.9\% | 1.3\% | 0.0\% | 0.0\% | 0.8\% | 1.1\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 6.3\% | 27.2\% | 36.3\% |
| 1988 | 1894 | 8.6\% | 0.2\% | 0.4\% | 6.2\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.1\% | 0.0\% | 2.2\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 6.9\% | 28.6\% | 42.9\% |
| 1989 | 2636 | 4.4\% | 0.0\% | 0.2\% | 1.8\% | 0.0\% | 1.4\% | 0.5\% | 0.0\% | 0.5\% | 0.0\% | 0.3\% | 0.0\% | 1.5\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 12.6\% | 20.0\% | 56.6\% |
| 1990 | 2553 | 6.3\% | 0.3\% | 0.2\% | 1.4\% | 0.2\% | 2.1\% | 0.7\% | 0.0\% | 0.0\% | 0.2\% | 0.6\% | 0.0\% | 1.3\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 17.0\% | 27.6\% | 42.0\% |
| 1991 | 2818 | 3.1\% | 1.2\% | 0.6\% | 1.7\% | 0.0\% | 0.4\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.7\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 6.0\% | 42.6\% | 43.0\% |
| 1992 | 2466 | 3.5\% | 1.3\% | 0.2\% | 1.7\% | 0.2\% | 2.7\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 2.4\% | 0.0\% | 0.4\% | 0.0\% | 0.3\% | 0.0\% | 5.8\% | 30.6\% | 50.4\% |
| 1993 | 4792 | 8.1\% | 0.0\% | 0.0\% | 1.3\% | 0.1\% | 1.4\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 43.0\% | 43.5\% |
| 199 | 4726 | 4.1\% | 0.3\% | 0.9\% | 0.7\% | 0.1\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 5.1\% | 38.6\% | 48.8\% |
| 1995 | 4150 | 2.8\% | 0.1\% | 0.3\% | 1.0\% | 0.0\% | 0.3\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.3\% | 43.6\% | 50.9\% |
| 1996 | 3589 | 1.6\% | 0.0\% | 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\% | 0.0\% | 0.1\% | 0.0\% | 0.8\% | 33.3\% | 64.1\% |
| 1997 | 2224 | 3.6\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 15.8\% | 79.0\% |
| 1998 | 1538 | 4.3\% | 0.1\% | 0.2\% | 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\% | 0.2\% | 0.0\% | 0.4\% | 16.4\% | 78.2\% |
| 1999 | 1710 | 4.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 14.6\% | 79.3\% |
| 2000 | 6269 | 7.8\% | 0.1\% | 0.4\% | 0.1\% | 0.5\% | 0.4\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 29.3\% | 58.0\% |
| 2001 | 33970 | 1.4\% | 0.0\% | 0.1\% | 0.1\% | 0.1\% | 0.5\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 3.5\% | 23.1\% | 70.9\% |
| 2002 | 19455 | 1.8\% | 0.1\% | 0.1\% | 0.9\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 15.7\% | 20.0\% | 59.5\% |
| 2003 | 6751 | 4.8\% | 0.0\% | 0.1\% | 0.4\% | 0.2\% | 2.4\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 15.6\% | 74.6\% |
| 2004 | 6785 | 2.9\% | 0.3\% | 0.1\% | 0.6\% | 0.0\% | 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\% | 6.2\% | 20.2\% | 62.4\% |
| 2005 | 2960 | 2.7\% | 0.0\% | 0.1\% | 0.3\% | 0.2\% | 5.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 5.1\% | 15.5\% | 69.7\% |
| 2006 | 1903 | 3.0\% | 0.0\% | 0.0\% | 0.3\% | 0.6\% | 4.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 7.9\% | 24.5\% | 58.0\% |
| 2007 | 1536 | 3.9\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 17.7\% | 71.6\% |
| 2008 | 2185 | 1.3\% | 0.8\% | 0.0\% | 0.4\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.2\% | 12.1\% | 64.6\% |
| 1979-2008 | 4990 | 4.5\% | 0.3\% | 0.2\% | 2.5\% | 0.1\% | 1.8\% | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 6.2\% | 23.7\% | 59.1\% |
| 1979-1984 | 4790 | 5.7\% | 0.5\% | 0.1\% | 6.4\% | 0.1\% | 2.4\% | 0.0\% | 0.1\% | 0.1\% | 0.2\% | 0.2\% | 0.0\% | 0.9\% | 0.0\% | 0.6\% | 0.0\% | 0.2\% | 0.0\% | 4.3\% | 18.0\% | 60.2\% |
| 1985-1995 | 2717 | 5.4\% | 0.4\% | 0.3\% | 3.3\% | 0.0\% | 1.7\% | 0.3\% | 0.0\% | 0.1\% | 0.2\% | 0.5\% | 0.0\% | 1.1\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 8.0\% | 30.9\% | 47.5\% |
| 1996-1998 | 2450 | 3.1\% | 0.0\% | 0.1\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.7\% | 21.8\% | 73.8\% |
| 1999-2008 | 8352 | 3.4\% | 0.1\% | 0.1\% | 0.3\% | 0.2\% | 2.2\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 6.7\% | 19.3\% | 66.8\% |

Appendix C.88. Percent distribution of Willamette Spring total fishing mortalities among fisheries and escapement.

| Catch <br> Year | Estimated \# of CWTs | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WA/OR coast |  |  | Puget Sound |  | Terminal |  |  |  |
|  |  | Troll | Net | Sport | Troll | Sport | Troll | Sport | Troll | Sport | Troll | Net | Sport | Troll | Net | Sport | Net | Sport | Troll | Net | Sport |  |
| 1979 | < 3 Broods | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1980 | 6143 | 4.6\% | 0.5\% | 0.2\% | 8.0\% | 0.1\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.5\% | 0.0\% | 0.7\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 8.0\% | 2.5\% |
| 1981 | 8469 | 5.4\% | 0.6\% | 0.1\% | 7.8\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.1\% | 0.0\% | 0.4\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 10.8\% | 70.7\% |
| 1982 | 4024 | 5.5\% | 1.1\% | 0.2\% | 8.0\% | 0.1\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.4\% | 0.0\% | 1.3\% | 0.0\% | 1.9\% | 0.1\% | 0.2\% | 0.0\% | 6.7\% | 24.5\% | 45.0\% |
| 1983 | 2864 | 18.3\% | 0.1\% | 0.0\% | 12.9\% | 0.0\% | 2.0\% | 0.0\% | 0.5\% | 0.3\% | 0.3\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 0.5\% | 0.0\% | 0.6\% | 0.0\% | 5.8\% | 20.8\% | 35.9\% |
| 1984 | 4115 | 4.7\% | 0.3\% | 0.4\% | 2.5\% | 0.1\% | 2.1\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.1\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 6.6\% | 25.1\% | 56.5\% |
| 1985 | 2662 | 7.7\% | 0.2\% | 0.0\% | 0.5\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 17.6\% | 20.8\% | 52.0\% |
| 1986 | 738 | 4.3\% | 1.2\% | 0.0\% | 7.5\% | 0.0\% | 6.2\% | 0.7\% | 0.0\% | 0.0\% | 0.7\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 8.7\% | 17.5\% | 49.9\% |
| 1987 | 807 | 17.7\% | 0.0\% | 1.0\% | 15.5\% | 0.0\% | 1.5\% | 1.2\% | 0.0\% | 0.0\% | 1.2\% | 1.0\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 5.3\% | 23.2\% | 28.6\% |
| 1988 | 2214 | 10.0\% | 0.4\% | 0.6\% | 7.9\% | 0.0\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 6.6\% | 30.6\% | 36.7\% |
| 1989 | 2828 | 5.7\% | 0.0\% | 0.2\% | 2.2\% | 0.0\% | 1.6\% | 0.6\% | 0.0\% | 0.6\% | 0.0\% | 0.2\% | 0.0\% | 1.7\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 12.2\% | 21.8\% | 52.8\% |
| 1990 | 2860 | 9.9\% | 0.7\% | 0.3\% | 2.0\% | 0.2\% | 2.7\% | 0.7\% | 0.0\% | 0.0\% | 0.2\% | 0.6\% | 0.0\% | 1.5\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 15.7\% | 28.1\% | 37.5\% |
| 1991 | 3122 | 4.1\% | 2.2\% | 0.7\% | 2.1\% | 0.0\% | 0.4\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.7\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% | 44.4\% | 38.9\% |
| 1992 | 2889 | 7.1\% | 4.7\% | 0.2\% | 2.0\% | 0.2\% | 3.1\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 2.7\% | 0.0\% | 0.4\% | 0.0\% | 0.6\% | 0.0\% | 5.2\% | 30.2\% | 43.1\% |
| 1993 | 5580 | 12.4\% | 0.0\% | 0.0\% | 1.5\% | 0.1\% | 1.5\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 44.3\% | 37.4\% |
| 1994 | 5182 | 5.7\% | 0.8\% | 1.1\% | 0.9\% | 0.1\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 4.8\% | 40.4\% | 44.5\% |
| 1995 | 4653 | 5.3\% | 0.2\% | 0.4\% | 1.5\% | 0.0\% | 0.5\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.3\% | 45.6\% | 45.4\% |
| 1996 | 3812 | 2.3\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.8\% | 36.0\% | 60.3\% |
| 1997 | 2299 | 4.5\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 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\% | 0.8\% | 17.2\% | 76.4\% |
| 1998 | 1619 | 5.7\% | 0.2\% | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.4\% | 18.3\% | 74.3\% |
| 1999 | 1887 | 9.7\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 15.7\% | 71.9\% |
| 2000 | 7358 | 13.9\% | 0.1\% | 1.0\% | 0.2\% | 0.7\% | 0.4\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 31.2\% | 49.4\% |
| 2001 | 36125 | 1.6\% | 0.0\% | 0.1\% | 0.1\% | 0.1\% | 0.5\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 3.7\% | 26.7\% | 66.7\% |
| 2002 | 20307 | 2.2\% | 0.2\% | 0.1\% | 1.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 15.3\% | 22.1\% | 57.0\% |
| 2003 | 7045 | 6.1\% | 0.0\% | 0.1\% | 0.5\% | 0.2\% | 2.5\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 17.0\% | 71.5\% |
| 2004 | 7251 | 3.8\% | 0.7\% | 0.1\% | 0.7\% | 0.0\% | 5.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 22.6\% | 58.4\% |
| 2005 | 3074 | 3.2\% | 0.0\% | 0.1\% | 0.3\% | 0.3\% | 5.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 5.1\% | 17.0\% | 67.1\% |
| 2006 | 2061 | 4.2\% | 0.0\% | 0.0\% | 0.4\% | 0.7\% | 4.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 7.7\% | 27.2\% | 53.6\% |
| 2007 | 1638 | 5.6\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 20.0\% | 67.2\% |
| 2008 | 2312 | 2.0\% | 1.1\% | 0.1\% | 0.5\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 19.4\% | 14.1\% | 61.0\% |
| 1979-2008 | 5377 | 6.7\% | 0.5\% | 0.3\% | 3.0\% | 0.1\% | 2.1\% | 0.2\% | 0.0\% | 0.1\% | 0.2\% | 0.2\% | 0.0\% | 1.0\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 5.9\% | 24.9\% | 54.5\% |
| 1979-1984 | 5123 | 7.7\% | 0.5\% | 0.2\% | 7.8\% | 0.1\% | 2.9\% | 0.0\% | 0.1\% | 0.1\% | 0.3\% | 0.2\% | 0.0\% | 1.1\% | 0.0\% | 0.7\% | 0.0\% | 0.2\% | 0.0\% | 4.2\% | 17.8\% | 56.1\% |
| 1985-1995 | 3049 | 8.2\% | 0.9\% | 0.4\% | 4.0\% | 0.1\% | 2.1\% | 0.4\% | 0.0\% | 0.1\% | 0.3\% | 0.5\% | 0.0\% | 1.3\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 7.5\% | 31.5\% | 42.4\% |
| 1996-1998 | 2577 | 4.2\% | 0.1\% | 0.1\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.7\% | 23.9\% | 70.4\% |
| 1999-2008 | 8906 | 5.2\% | 0.2\% | 0.2\% | 0.4\% | 0.2\% | 2.3\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 6.6\% | 21.4\% | 62.4\% |

# Appendix D. Cohort (CWT) age 2 or 3 survival indices (completed brood years only) and Chinook model (EV) age 2 or 3 survival indices for exploitation rate indicator stocks. CWT indices are brood year survival divided by the long term average brood year survival. EV indices are brood year EV's divided by the long term average EV's using the same years in the average as the CWT index. 

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## GEORGE ADAMS FALL FINGERLING <br> INDEX OF AGE 2 SURVIVAL



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HANFORD WILD BRIGHTS INDEX OF AGE 2 SURVIVAL


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HOKO FALL FINGERLING INDEX OF AGE 2 SURVIVAL


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LEWIS RIVER WILD
INDEX OF AGE 2 SURVIVAL
$r=0.47$


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NISQUALLY FALL FINGERLING INDEX OF AGE 2 SURVIVAL


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NOOKSACK SPRING FINGERLING INDEX OF AGE 2 SURVIVAL
$r=-0.36$


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SKAGIT SPRING YEARLING
INDEX OF AGE 2 SURVIVAL


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SOUTH PUGET SOUND FALL FINGERLING
INDEX OF AGE 2 SURVIVAL
$r=0.47$


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SKAGIT SUMMER FINGERLING INDEX OF AGE 2 SURVIVAL
$r=-0.33$

$\rightarrow-$ EV Indexed Survival $\rightarrow$-CWT Indexed Cohort Survival
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COLUMBIA RIVER SUMMERS
INDEX OF AGE 2 SURVIVAL
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## UNIVERSITY OF WASHINGTON ACCELERATED INDEX OF AGE 2 SURVIVAL



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TAKU RIVER
INDEX OF AGE 3 SURVIVAL


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CHILKAT RIVER INDEX OF AGE 3 SURVIVAL


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Brood Year Ocean Exploitation Rates ALASKA SPRING


Brood Year
$\square$ landed catch $\quad$ incidental mortality
Figure E 1. Alaska Spring (Alaska South SE) ocean exploitation rates by brood year.
Brood Year Total Exploitation Rates BIG QUALICUM


Brood Year
$\square$ landed catch incidental mortality
Figure E 2. Big Qualicum (Lower Strait of Georgia Hatchery and Natural) total exploitation rates by brood year.

Brood Year Total Exploitation Rates CHILLIWACK


Brood Year
$\square$ landed catch $\quad$ incidental mortality

Figure E 3. Chilliwack (Fraser Late) total exploitation rates by brood year.


Figure E 4. Cowichan (Lower Strait of Georgia Natural) total exploitation rates by brood year.

Brood Year Ocean Exploitation Rates COWLITZ FALL TULE


Figure E 5. Cowlitz Fall Tule (Fall Cowlitz Hatchery) ocean exploitation rates by brood year.

Brood Year Total Exploitation Rates
DOME


Brood Year

$$
\square \text { landed catch } \quad \text { incidental mortality }
$$

Figure E 6. Dome (Fraser Early) total exploitation rates by brood year.


Figure E 7. Elk (Oregon Coast) ocean exploitation rates by brood year.
Brood Year Ocean Exploitation Rates
ELWHA


Figure E 8. Elwha ocean exploitation rates by brood year.


Figure E 9. George Adams Fall Fingerling ocean exploitation rates by brood year.
Brood Year Total Exploitation Rates
HANFORD WILD BRIGHTS


Figure E 10. Hanford Wild Brights total exploitation rates by brood year.

Brood Year Ocean Exploitation Rates HOKO FALL FINGERLING


Figure E 11. Hoko Fall Fingerling ocean exploitation rates by brood year.
Brood Year Total Exploitation Rates
KITSUMKALUM


Figure E 12. Kitsumkalum (North/Central BC) total exploitation rates by brood year.

Brood Year Total Exploitation Rates LOWER RIVER HATCHERYTULE


Figure E 13. Lower River Hatchery Tule (Lower Bonneville Hatchery) total exploitation rates by brood year.

Brood Year Total Exploitation Rates
LEWIS RIVER WILD


Brood Year
$\square$ landed catch $\quad$ incidental mortality
Figure E 14. Lewis River Wild (Lewis River Wild) total exploitation rates by brood year.

Brood Year Total Exploitation Rates LYONS FERRY


Figure E 15. Lyons Ferry (Lyons Ferry Hatchery) total exploitation rates by brood year.
Brood Year Total Exploitation Rates
NANAIMO


Figure E 16. Nanaimo (Lower Strait of Georgia Natural) total exploitation rates by brood year.

Brood Year Total Exploitation Rates NICOLA


Figure E 17. Nicola (Fraser Early) total exploitation rates by brood year.
Brood Year Ocean Exploitation Rates
NISQUALLY FALL FINGERLING


Figure E 18. Nisqually Fall Fingerling ocean exploitation rates by brood year.

Brood Year Ocean Exploitation Rates NOOKSACK SPRING YEARLING


Figure E 19. Nooksack Spring Yearling (Nooksack Spring Yearling) ocean exploitation rates by brood year.


Figure E 20. Nooksack Spring Fingerling (Nooksack Spring Yearling) ocean exploitation rates by brood year.

Brood Year Total Exploitation Rates PUNTLEDGE


Brood Year
$\square$ landed catch $\quad$ incidental mortality

Figure E 21. Puntledge (Lower Strait of Georgia Hatchery) total exploitation rates by brood year.

Brood Year Total Exploitation Rates QUEETS


Brood Year
■ landed catch ■incidental mortality
Figure E 22. Queets (Washington Coastal Wild) total exploitation rates by brood year.

Brood Year Total Exploitation Rates QUINSAM


Brood Year
$\square$ landed catch $\quad$ incidental mortality

Figure E 23. Quinsam (Upper Strait of Georgia) total exploitation rates by brood year.
Brood Year Ocean Exploitation Rates ROBERTSON CREEK


Brood Year
$\square$ landed catch $\quad$ incidental mortality
Figure E 24. Robertson Creek (WCVI Hatchery and Natural) ocean exploitation rates by brood year.

Brood Year Ocean Exploitation Rates SAMISH FALL FINGERLING


Figure E 25. Samish Fall Fingerling (Nooksack Fall Fingerling) ocean exploitation rates by brood year.

Brood Year Total Exploitation Rates
LOWER SHUSWAP


Brood Year
$\square$ landed catch incidental mortality
Figure E 26. Lower Shuswap (Fraser Early) total exploitation rates by brood year.

Brood Year Ocean Exploitation Rates SKAGIT SPRING FINGERLING


Figure E 27. Skagit Spring Fingerling ocean exploitation rates by brood year.
Brood Year Ocean Exploitation Rates SKAGIT SPRING YEARLING


Figure E 28. Skagit Spring Yearling ocean exploitation rates by brood year.

Brood Year Ocean Exploitation Rates SKYKOMISH FALL FINGERLING


Figure E 29. Skykomish Fall Fingerling (Snohomish Wild) ocean exploitation rates by brood year.


Figure E 30. Sooes Fall Fingerling (Washington Coastal Wild) ocean exploitation rates by brood year.

Brood Year Total Exploitation Rates SPRING CREEK TULE


Brood Year
$\square$ landed catch $\quad$ incidental mortality
Figure E 31. Spring Creek Tule (Spring Creek Hatchery) total exploitation rates by brood year.

Brood Year Ocean Exploitation Rates SOUTH PUGET SOUND FALL FINGERLING


Brood Year
$\square$ landed catch incidental mortality
Figure E 32. South Puget Sound Fall Fingerling (Puget Sound Hatchery Fingerling) ocean exploitation rates by brood year.


Figure E 33. South Puget Sound Fall Yearling (Puget Sound Hatchery Yearling) ocean exploitation rates by brood year.

Brood Year Ocean Exploitation Rates SQUAXIN PENS


Brood Year
$\square$ landed catch incidental mortality
Figure E 34. Squaxin Pens (Puget Sound Hatchery Yearling) ocean exploitation rates by brood year.

Brood Year Ocean Exploitation Rates SALMON RIVER


Brood Year
$\square$ landed catch $\quad$ incidental mortality

Figure E 35. Salmon River (Oregon Coast) ocean exploitation rates by brood year.
Brood Year Ocean Exploitation Rates SKAGIT SUMMER FINGERLING


Figure E 36. Skagit Summer Fingerling (Skagit Wild) ocean exploitation rates by brood year.

Brood Year Ocean Exploitation Rates STILLAGUAMISH


Figure E 37. Stillaguamish (Stillaguamish Wild) ocean exploitation rates by brood year.
Brood Year Total Exploitation Rates COLUMBIA RIVER SUMMERS


Brood Year
$\square$ landed catch $\quad$ incidental mortality
Figure E 38. Columbia River Summers (Columbia River Summer) total exploitation rates by brood year.


Figure E 39. Columbia River Upriver Bright (Columbia River Upriver Brights) total exploitation rates by brood year.

Brood Year Ocean Exploitation Rates UNIVERSITY OF WASHINGTON ACCELERATED


Brood Year
$\square$ landed catch incidental mortality
Figure E 40. University Of Washington Accelerated ocean exploitation rates by brood year.

Brood Year Ocean Exploitation Rates WHITE RIVER SPRING YEARLING


Brood Year

| $\square$ |
| :---: |
| landed catch $\quad$ incidental mortality |

Figure E 41. White River Spring Yearling (Puget Sound Hatchery Yearling) ocean exploitation rates by brood year.

Brood Year Ocean Exploitation Rates WILLAMETTE SPRING


Brood Year
$\square$ landed catch $\quad$ incidental mortality
Figure E 42. Willamette Spring (Willamette River Hatchery) ocean exploitation rates by brood year.


Figure E 43. Taku River ocean exploitation rates by brood year.
Brood Year Ocean Exploitation Rates CHILKAT RIVER


Figure E 44. Chilkat River ocean exploitation rates by brood year.


Figure E 45. Unuk River ocean exploitation rates by brood year.

## Appendix F. Model estimates of the stock composition of the AABM fisheries for 2009 and the average from 1985 to 2008.

| FISHERY: SE ALASKA ALL GEAR |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model Stock | 2009 Average (1985-2008) |  |  |  | Associated Escapement Indicator Stocks |
|  |  |  |  |  |  |
|  | Percent of Fishery Catch | Percent of Fishery Catch | Percent of Stock Catch | Stock Total Return |  |
| North/Central BC | 17.70\% | 16.89\% | 22.53\% | 10.76\% | Yakoun |
|  |  |  |  |  | Nass |
|  |  |  |  |  | Skeena |
|  |  |  |  |  | Area 6 Index |
|  |  |  |  |  | Area 8 Index |
|  |  |  |  |  | Rivers Inlet |
|  |  |  |  |  | Smith Inlet |
| WCVI Hatchery | 10.96\% | 15.91\% | 48.39\% | 17.24\% |  |
| Columbia Upriver Bright | 22.08\% | 15.22\% | 27.79\% | 13.73\% | Columbia Upriver Bright |
| Oregon Coastal North Migrating | 6.76\% | 15.00\% | 35.64\% | 16.23\% | Oregon Coastal |
| Fraser Early | 6.69\% | 5.62\% | 29.35\% | 7.35\% | Upper Fraser |
|  |  |  |  |  | Middle Fraser |
|  |  |  |  |  | Thompson |
| Mid-Columbia Brights | 8.11\% | 5.26\% | 33.32\% | 13.47\% | Not Represented |
| Upper Georgia Strait | 5.85\% | 4.42\% | 34.75\% | 20.56\% | Upper Georgia Strait |
| Alaska South SE | 4.50\% | 4.07\% | 96.62\% | 37.49\% | King Salmon |
|  |  |  |  |  | Andrew Creek |
|  |  |  |  |  | Blossom |
|  |  |  |  |  | Keta |
|  |  |  |  |  | Unuk |
|  |  |  |  |  | Chickamin |
| Washington Coastal Wild | 3.06\% | 3.45\% | 20.78\% | 11.00\% | Grays Harbor Fall |
|  |  |  |  |  | Quillayute Fall |
|  |  |  |  |  | Hoh Fall |
|  |  |  |  |  | Queets Fall |
| WCVI Wild | 1.36\% | 3.32\% | 49.24\% | 17.34\% | WCVI |
| WA Coastal Hatchery | 2.61\% | 2.70\% | 18.20\% | 10.29\% |  |
| Columbia Upriver Summer | 5.98\% | 2.70\% | 34.10\% | 15.09\% | Columbia Upriver Summer |
| Willamette River Hatchery | 1.63\% | 2.07\% | 11.56\% | 5.15\% |  |
| Fall Cowlitz Hatchery | 0.75\% | 1.06\% | 5.98\% | 2.31\% |  |
| Lewis River Wild | 0.44\% | 0.82\% | 17.69\% | 7.86\% | Lewis River |
| Lower GS Hatchery | 0.53\% | 0.40\% | 3.56\% | 1.91\% |  |
| Lower Georgia Strait | 0.14\% | 0.23\% | 3.99\% | 2.13\% | Lower Georgia Strait |
| Fraser Late | 0.18\% | 0.19\% | 0.42\% | 0.15\% | Harrison |
| PS Hatchery Fingerling | 0.17\% | 0.18\% | 0.48\% | 0.27\% |  |
| Skagit Summer/Fall | 0.05\% | 0.09\% | 4.06\% | 1.14\% | Skagit Summer/Fall |
| Snake River Fall | 0.17\% | 0.09\% | 8.82\% | 5.42\% | Not Represented |
| Spring Cowlitz Hatchery | 0.05\% | 0.08\% | 1.66\% | 0.86\% |  |
| Stillaguamish Summer/Fall | 0.07\% | 0.06\% | 17.55\% | 6.24\% | Stillaguamish |
| PS Yearling | 0.07\% | 0.04\% | 0.52\% | 0.35\% |  |
| Puget Sound Natural | 0.02\% | 0.04\% | 0.55\% | 0.26\% | Green |
| Nooksack Fall | 0.02\% | 0.04\% | 0.16\% | 0.11\% |  |
| Snohomish Summer/Fall | 0.05\% | 0.04\% | 3.84\% | 1.04\% | Snohomish |
| Spring Creek Hatchery | 0.00\% | 0.00\% | 0.00\% | 0.00\% |  |
| Lower Bonneville Hatchery | 0.00\% | 0.00\% | 0.00\% | 0.00\% |  |
| Nooksack Spring | 0.00\% | 0.00\% | 0.00\% | 0.00\% | Not Represented |

FISHERY:
NORTH TROLL AND SPORT

| Model Stock | 2009 Average (1985-2008) |  |  |  | Associated Escapement Indicator Stocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percent of Fishery Catch | Percent of Fishery Catch | Percent of Stock Catch | Percent of Stock Total Return |  |
| North/Central BC | 64.15\% | 52.87\% | 68.44\% | 35.97\% | Yakoun |
|  |  |  |  |  | Nass |
|  |  |  |  |  | Skeena |
|  |  |  |  |  | Area 6 Index |
|  |  |  |  |  | Area 8 Index |
|  |  |  |  |  | Rivers Inlet |
|  |  |  |  |  | Smith Inlet |
| Oregon Coastal North Migrating | 4.62\% | 11.95\% | 27.46\% | 13.62\% | Oregon Coastal |
| Columbia Upriver Bright | 5.18\% | 5.89\% | 11.12\% | 5.76\% | Columbia Upriver Bright |
| WCVI Hatchery | 1.90\% | 5.29\% | 14.98\% | 5.88\% | NA |
| Upper Georgia Strait | 5.46\% | 4.08\% | 35.09\% | 21.08\% | Upper Georgia Strait |
| Fraser Early | 1.95\% | 2.84\% | 16.01\% | 4.59\% | Upper Fraser |
|  |  |  |  |  | Middle Fraser |
|  |  |  |  |  | Thompson |
| Willamette River Hatchery | 2.95\% | 2.78\% | 14.61\% | 7.24\% |  |
| Washington Coastal Wild | 1.66\% | 2.62\% | 15.08\% | 8.70\% | Grays Harbor Fall |
|  |  |  |  |  | Quillayute Fall |
|  |  |  |  |  | Hoh Fall |
|  |  |  |  |  | Queets Fall |
| WA Coastal Hatchery | 1.42\% | 2.02\% | 13.71\% | 8.15\% | NA |
| Mid-Columbia Brights | 1.78\% | 1.79\% | 12.96\% | 5.57\% | Not Represented |
| Columbia Upriver Summer | 4.12\% | 1.72\% | 24.00\% | 11.22\% | Columbia Upriver Summer |
| wCVI Wild | 0.25\% | 1.17\% | 15.12\% | 5.88\% | WCVI |
| Lower GS Hatchery | 0.61\% | 0.94\% | 9.26\% | 4.96\% |  |
| Fall Cowlitz Hatchery | 0.73\% | 0.78\% | 4.42\% | 1.84\% |  |
| Fraser Late | 1.19\% | 0.75\% | 1.54\% | 0.62\% | Harrison |
| Lower Georgia Strait | 0.20\% | 0.46\% | 9.08\% | 4.99\% | Lower Georgia Strait |
| Nooksack Fall | 0.34\% | 0.37\% | 1.87\% | 1.36\% | NA |
| Skagit Summer/Fall | 0.29\% | 0.33\% | 16.32\% | 4.63\% | Skagit Summer/Fall |
| PS Hatchery Fingerling | 0.24\% | 0.29\% | 0.87\% | 0.48\% |  |
| Lewis River Wild | 0.12\% | 0.28\% | 5.50\% | 2.81\% | Lewis River |
| Spring Cowlitz Hatchery | 0.22\% | 0.22\% | 4.47\% | 2.46\% |  |
| Snohomish Summer/Fall | 0.20\% | 0.17\% | 16.49\% | 4.66\% | Snohomish |
| PS Yearling | 0.20\% | 0.15\% | 2.14\% | 1.40\% |  |
| Alaska South SE | 0.08\% | 0.08\% | 2.33\% | 0.90\% | King Salmon |
|  |  |  |  |  | Andrew Creek |
|  |  |  |  |  | Blossom |
|  |  |  |  |  | Keta |
|  |  |  |  |  | Unuk |
|  |  |  |  |  | Chickamin |
| Puget Sound Natural | 0.03\% | 0.06\% | 0.91\% | 0.44\% | Green |
| Snake River Fall | 0.07\% | 0.05\% | 6.15\% | 4.02\% | Not Represented |
| Stillaguamish Summer/Fall | 0.03\% | 0.03\% | 10.97\% | 4.00\% | Stillaguamish |
| Spring Creek Hatchery | 0.02\% | 0.01\% | 0.06\% | 0.04\% | NA |
| Nooksack Spring | 0.00\% | 0.00\% | 1.64\% | 0.52\% | Not Represented |
| Lower Bonneville Hatchery | 0.00\% | 0.00\% | 0.00\% | 0.00\% | NA |

FISHERY:
WCVI TROLL AND OUTSIDE SPORT

| Model Stock | 2009 Average (1985-2008) |  |  |  | Associated Escapement Indicator Stocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percent of Fishery Catch | Percent of Fishery Catch | Percent of Stock Catch | Percent of Stock Total Return |  |
| Fraser Late | 13.60\% | 22.35\% | 22.71\% | 11.04\% | Harrison |
| PS Hatchery Fingerling | 11.93\% | 10.80\% | 15.27\% | 9.45\% |  |
| Columbia Upriver Bright | 14.04\% | 8.91\% | 9.53\% | 5.19\% | Columbia Upriver Bright |
| Fall Cowlitz Hatchery | 8.47\% | 7.08\% | 23.68\% | 11.06\% |  |
| Spring Creek Hatchery | 10.26\% | 7.00\% | 14.60\% | 11.46\% |  |
| Lower Bonneville Hatchery | 2.40\% | 5.91\% | 31.81\% | 15.15\% |  |
| Oregon Coastal North Migrating | 3.61\% | 5.01\% | 7.45\% | 3.69\% | Oregon Coastal |
| WCVI Hatchery | 0.00\% | 4.50\% | 7.11\% | 3.23\% |  |
| Nooksack Fall | 2.56\% | 4.40\% | 10.59\% | 8.16\% |  |
| Mid-Columbia Brights | 5.00\% | 3.54\% | 12.67\% | 5.78\% | Not Represented |
| Columbia Upriver Summer | 7.08\% | 2.86\% | 21.42\% | 10.32\% | Columbia Upriver Summer |
| Puget Sound Natural | 1.60\% | 2.52\% | 16.82\% | 9.52\% | Green |
| Washington Coastal Wild | 3.29\% | 2.41\% | 8.51\% | 4.77\% | Grays Harbor Fall |
|  |  |  |  |  | Quillayute Fall |
|  |  |  |  |  | Hoh Fall |
|  |  |  |  |  | Queets Fall |
| Willamette River Hatchery | 3.25\% | 2.04\% | 6.30\% | 3.16\% |  |
| WA Coastal Hatchery | 2.84\% | 1.95\% | 7.88\% | 4.58\% |  |
| PS Yearling | 2.31\% | 1.44\% | 9.78\% | 7.09\% |  |
| Fraser Early | 1.80\% | 1.37\% | 3.91\% | 1.10\% | Upper Fraser |
|  |  |  |  |  | Middle Fraser |
|  |  |  |  |  | Thompson |
| WCVI Wild | 0.00\% | 1.13\% | 7.09\% | 3.23\% | WCVI |
| Skagit Summer/Fall | 0.98\% | 0.94\% | 20.92\% | 7.04\% | Skagit Summer/Fall |
| Lewis River Wild | 0.65\% | 0.81\% | 10.22\% | 5.13\% | Lewis River |
| Spring Cowlitz Hatchery | 1.22\% | 0.70\% | 7.45\% | 4.80\% |  |
| Lower GS Hatchery | 0.39\% | 0.50\% | 2.38\% | 1.35\% |  |
| North/Central BC | 0.80\% | 0.48\% | 0.39\% | 0.19\% | Yakoun |
|  |  |  |  |  | Nass |
|  |  |  |  |  | Skeena |
|  |  |  |  |  | Area 6 Index |
|  |  |  |  |  | Area 8 Index |
|  |  |  |  |  | Rivers Inlet |
|  |  |  |  |  | Smith Inlet |
| Snohomish Summer/Fall | 0.73\% | 0.47\% | 19.32\% | 7.04\% | Snohomish |
| Snake River Fall | 0.79\% | 0.39\% | 22.63\% | 15.38\% | Not Represented |
| Lower Georgia Strait | 0.15\% | 0.24\% | 2.35\% | 1.38\% | Lower Georgia Strait |
| Upper Georgia Strait | 0.13\% | 0.11\% | 0.52\% | 0.32\% | Upper Georgia Strait |
| Stillaguamish Summer/Fall | 0.09\% | 0.11\% | 16.03\% | 6.69\% | Stillaguamish |
| Nooksack Spring | 0.02\% | 0.02\% | 10.09\% | 3.72\% | Not Represented |
| Alaska South SE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | King Salmon |
|  |  |  |  |  | Andrew Creek |
|  |  |  |  |  | Blossom |
|  |  |  |  |  | Keta |
|  |  |  |  |  | Unuk |
|  |  |  |  |  | Chickamin |

## Appendix G. 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 CLB1007 |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :--- | :--- | :--- | :--- |
| Fishery <br> Number | Fishery | Sublegal <br> Rate | Legal <br> Rate | Dropoff | Sublegal <br> Rate | Legal <br> Rate | Dropoff | Applicable <br> 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 | 0.017 | $1996-2006$ |
| 3 | Centr T | 0.3 | 0.3 | 0 | 0.255 | 0.211 | 0.017 | $1979-1995$ |
| 3 | Centr T |  |  |  | 0.220 | 0.185 | 0.017 | $1996-2006$ |
| 4 | WCVI T | 0.3 | 0.3 | 0 | 0.255 | 0.211 | 0.017 | $1979-1997$ |
| 4 | WCVI T |  |  |  | 0.220 | 0.185 | 0.017 | $1998-2006$ |
| 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 | 0.017 | $1984-2006$ |
| 6 | Geo St T | 0.3 | 0.3 | 0 | 0.255 | 0.211 | 0.017 | $1979-1985,1987$ |
| 6 | Geo St T |  |  |  | 0.220 | 0.185 | 0.017 | $1986,1988-2006$ |
| 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 | JohnSt 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 | Geo St S | 0.3 | 0.3 | 0 | 0.322 | 0.322 | 0.069 | $1979-1981$ |
| 24 | Geo St S |  |  |  | 0.123 | 0.123 | 0.069 | $1982-2006$ |
| 25 | Col R S | 0.3 | 0.3 | 0 | 0.123 | 0.123 | 0.069 | All |

## Appendix H. Time series of abundance indices from 1979 to 2010 for SEAK, NBC, and WCVI AABM fisheries as estimated by CTC Chinook Model calibration CLB1007.

This time series is NOT the first postseason AI and is for trend analysis only(Figures 3.10-3.12). For evaluation of overage and underage, use the first postseason AI in Table 3-3 instead.
(Source 1007PABD).

| Year | SEAK | NBC | WCVI |
| :---: | :---: | :---: | :---: |
| 1979 | 0.97 | 1.03 | 1.10 |
| 1980 | 1.02 | 0.98 | 0.96 |
| 1981 | 0.92 | 0.94 | 0.93 |
| 1982 | 1.09 | 1.05 | 1.01 |
| 1983 | 1.29 | 1.23 | 1.94 |
| 1984 | 1.47 | 1.40 | 0.97 |
| 1985 | 1.34 | 1.32 | 1.03 |
| 1986 | 1.52 | 1.48 | 1.19 |
| 1987 | 1.76 | 1.74 | 1.13 |
| 1988 | 2.14 | 1.86 | 0.99 |
| 1989 | 1.87 | 1.68 | 0.89 |
| 1990 | 1.89 | 1.64 | 0.76 |
| 1991 | 1.80 | 1.52 | 0.78 |
| 1992 | 1.67 | 1.41 | 0.70 |
| 1993 | 1.67 | 1.42 | 0.53 |
| 1994 | 1.58 | 1.25 | 0.41 |
| 1995 | 1.06 | 0.98 | 0.49 |
| 1996 | 0.94 | 0.93 | 0.59 |
| 1997 | 1.24 | 1.12 | 0.56 |
| 1998 | 1.19 | 1.01 | 0.50 |
| 1999 | 1.09 | 0.95 | 0.52 |
| 2000 | 0.97 | 0.94 | 0.80 |
| 2001 | 1.16 | 1.20 | 1.16 |
| 2002 | 1.74 | 1.69 | 1.23 |
| 2003 | 2.19 | 1.91 | 1.02 |
| 2004 | 2.05 | 1.79 | 0.83 |
| 2005 | 1.81 | 1.54 | 0.64 |
| 2006 | 1.52 | 1.24 | 0.52 |
| 2007 | 1.15 | 0.93 | 0.61 |
| 2008 | 0.92 | 0.85 | 0.96 |
| 2009 | 1.20 | 1.07 | 1.17 |
| 2010 | 1.35 |  | 10 |
|  |  | 1 |  |

## Appendix I. Abundance indices in total and by model stock for AABM fisheries, from Calibration 1007.

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Table I.1. Abundance indices (AIs) for the Southeast Alaska troll fishery by model
stock and year (stock groups 1-15), from CLB 1007. Numbers represent the model stock contribution to the total AI: the summation across all 30 stocks and stock groups equals the AI total for each calendar year.

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Table I.2. Abundance indices (AIs) for the Northern BC troll fishery by stock and year (stock groups 1-15), from CLB 1007. Numbers represent the model stock contribution to the total AI: the summation across all 30 stocks and stock groups equals the AI total for each calendar year.238

Table I.3. Abundance indices (AIs) for the WCVI troll fishery by stock and year (stock groups 1-15), from CLB 1007. Numbers 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.

Table I.1. Abundance indices (AIs) for the Southeast Alaska troll fishery by model stock and year (stock groups 1-15), from CLB 1007. Numbers represent the model stock contribution to the total AI: the summation across all 30 stocks and stock groups equals the AI total for each calendar year.

| Year | Alaska South SE | North / Centr | Fraser <br> Early | Fraser <br> Late | WCVI <br> Hatchery | WCVI <br> Natural | Georgia <br> St. Upper | Georgia St. Lwr Nat | Georgia St. 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 | 0.97 |
| 1980 | 0.03 | 0.13 | 0.05 | 0.00 | 0.10 | 0.15 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.02 |
| 1981 | 0.04 | 0.14 | 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 | 0.05 | 0.14 | 0.04 | 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 | 0.30 | 0.14 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.29 |
| 1984 | 0.06 | 0.19 | 0.05 | 0.00 | 0.28 | 0.10 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.47 |
| 1985 | 0.06 | 0.21 | 0.07 | 0.00 | 0.15 | 0.05 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.34 |
| 1986 | 0.07 | 0.22 | 0.07 | 0.00 | 0.12 | 0.04 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.52 |
| 1987 | 0.07 | 0.24 | 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 | 1.76 |
| 1988 | 0.06 | 0.25 | 0.07 | 0.00 | 0.21 | 0.06 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.14 |
| 1989 | 0.04 | 0.26 | 0.07 | 0.00 | 0.32 | 0.07 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.87 |
| 1990 | 0.03 | 0.26 | 0.07 | 0.00 | 0.47 | 0.10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.89 |
| 1991 | 0.03 | 0.27 | 0.06 | 0.00 | 0.59 | 0.13 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.80 |
| 1992 | 0.03 | 0.27 | 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 | 1.67 |
| 1993 | 0.04 | 0.24 | 0.06 | 0.00 | 0.52 | 0.14 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.67 |
| 1994 | 0.03 | 0.22 | 0.07 | 0.00 | 0.42 | 0.11 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.58 |
| 1995 | 0.03 | 0.23 | 0.07 | 0.00 | 0.15 | 0.04 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.06 |
| 1996 | 0.03 | 0.23 | 0.08 | 0.00 | 0.05 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.94 |
| 1997 | 0.03 | 0.24 | 0.09 | 0.00 | 0.18 | 0.05 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.24 |
| 1998 | 0.04 | 0.23 | 0.08 | 0.00 | 0.27 | 0.07 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.19 |
| 1999 | 0.04 | 0.24 | 0.07 | 0.00 | 0.14 | 0.03 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.09 |
| 2000 | 0.05 | 0.25 | 0.07 | 0.00 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.97 |
| 2001 | 0.05 | 0.25 | 0.08 | 0.00 | 0.07 | 0.01 | 0.05 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.16 |
| 2002 | 0.04 | 0.25 | 0.10 | 0.00 | 0.23 | 0.03 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.74 |
| 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 | 2.19 |
| 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 | 2.05 |
| 2005 | 0.05 | 0.24 | 0.09 | 0.00 | 0.26 | 0.02 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.81 |
| 2006 | 0.05 | 0.23 | 0.10 | 0.00 | 0.23 | 0.03 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.52 |
| 2007 | 0.05 | 0.21 | 0.08 | 0.00 | 0.23 | 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 | 0.08 | 0.00 | 0.12 | 0.02 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.92 |
| 2009 | 0.04 | 0.20 | 0.08 | 0.00 | 0.14 | 0.02 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.20 |
| 2010 | 0.06 | 0.23 | 0.08 | 0.00 | 0.11 | 0.02 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.35 |
| Average | 0.04 | 0.22 | 0.07 | 0.00 | 0.23 | 0.07 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.45 |
| -continued- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table I.1. Page 2 of 2 (stock groups 16-30).


Table I.2. Abundance indices (AIs) for the Northern BC troll fishery by stock and year (stock groups 1-15), from CLB 1007. Numbers represent the model stock contribution to the total AI: the summation across all 30 stocks and stock groups equals the AI total for each calendar year.

-continued-

Table I.2. Page 2 of 2 (stock groups 16-30).

| Year | Stillaguamish Wild | Snohomish <br> Wild | WA Coastal Hat | UpRiver <br> Brights | Spring <br> Creek Hat | Lwr <br> Bonneville <br> Hat | Fall <br> Cowlitz <br> Hat | Lewis R <br> Wild | Willamette <br> R Hat | Spr Cowlitz Hat | Col R <br> Summer | Oregon <br> Coast | WA <br> Coastal Wild | Lyons <br> Ferry | Mid Col R Brights | AI Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 | 0.00 | 0.01 | 0.04 | 0.12 | 0.00 | 0.00 | 0.02 | 0.01 | 0.05 | 0.01 | 0.02 | 0.30 | 0.05 | 0.00 | 0.00 | 1.03 |
| 1980 | 0.00 | 0.01 | 0.04 | 0.09 | 0.00 | 0.00 | 0.02 | 0.01 | 0.06 | 0.01 | 0.02 | 0.24 | 0.06 | 0.00 | 0.00 | 0.98 |
| 1981 | 0.00 | 0.00 | 0.04 | 0.07 | 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 | 0.28 | 0.06 | 0.00 | 0.01 | 1.05 |
| 1983 | 0.00 | 0.00 | 0.03 | 0.07 | 0.00 | 0.00 | 0.02 | 0.01 | 0.09 | 0.01 | 0.02 | 0.40 | 0.06 | 0.00 | 0.02 | 1.23 |
| 1984 | 0.00 | 0.00 | 0.03 | 0.14 | 0.00 | 0.00 | 0.02 | 0.01 | 0.08 | 0.01 | 0.02 | 0.51 | 0.06 | 0.00 | 0.01 | 1.40 |
| 1985 | 0.00 | 0.00 | 0.03 | 0.16 | 0.00 | 0.00 | 0.02 | 0.00 | 0.08 | 0.00 | 0.02 | 0.47 | 0.07 | 0.00 | 0.01 | 1.32 |
| 1986 | 0.00 | 0.00 | 0.05 | 0.25 | 0.00 | 0.00 | 0.02 | 0.01 | 0.10 | 0.01 | 0.02 | 0.50 | 0.08 | 0.00 | 0.02 | 1.48 |
| 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 | 0.06 | 1.74 |
| 1988 | 0.00 | 0.00 | 0.09 | 0.33 | 0.00 | 0.00 | 0.08 | 0.02 | 0.14 | 0.01 | 0.02 | 0.47 | 0.12 | 0.00 | 0.09 | 1.86 |
| 1989 | 0.00 | 0.00 | 0.09 | 0.20 | 0.00 | 0.00 | 0.02 | 0.01 | 0.14 | 0.01 | 0.02 | 0.40 | 0.13 | 0.00 | 0.07 | 1.68 |
| 1990 | 0.00 | 0.00 | 0.08 | 0.15 | 0.00 | 0.00 | 0.01 | 0.01 | 0.14 | 0.00 | 0.01 | 0.40 | 0.11 | 0.00 | 0.05 | 1.64 |
| 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 | 1.52 |
| 1992 | 0.00 | 0.00 | 0.09 | 0.07 | 0.00 | 0.00 | 0.01 | 0.01 | 0.07 | 0.01 | 0.01 | 0.33 | 0.09 | 0.00 | 0.03 | 1.41 |
| 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 | 1.42 |
| 1994 | 0.00 | 0.00 | 0.07 | 0.13 | 0.00 | 0.00 | 0.00 | 0.01 | 0.05 | 0.00 | 0.01 | 0.34 | 0.08 | 0.00 | 0.03 | 1.25 |
| 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 | 0.93 |
| 1997 | 0.00 | 0.00 | 0.05 | 0.12 | 0.00 | 0.00 | 0.01 | 0.00 | 0.05 | 0.00 | 0.01 | 0.26 | 0.07 | 0.00 | 0.06 | 1.12 |
| 1998 | 0.00 | 0.00 | 0.03 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.02 | 0.22 | 0.06 | 0.00 | 0.04 | 1.01 |
| 1999 | 0.00 | 0.00 | 0.03 | 0.14 | 0.00 | 0.00 | 0.01 | 0.00 | 0.06 | 0.00 | 0.03 | 0.19 | 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 | 0.05 | 0.00 | 0.05 | 1.20 |
| 2002 | 0.00 | 0.00 | 0.04 | 0.22 | 0.00 | 0.00 | 0.02 | 0.01 | 0.15 | 0.00 | 0.06 | 0.44 | 0.06 | 0.00 | 0.11 | 1.69 |
| 2003 | 0.00 | 0.00 | 0.05 | 0.29 | 0.00 | 0.00 | 0.03 | 0.01 | 0.12 | 0.01 | 0.06 | 0.51 | 0.07 | 0.00 | 0.14 | 1.91 |
| 2004 | 0.00 | 0.00 | 0.06 | 0.24 | 0.00 | 0.00 | 0.01 | 0.01 | 0.10 | 0.01 | 0.06 | 0.49 | 0.07 | 0.00 | 0.10 | 1.79 |
| 2005 | 0.00 | 0.00 | 0.06 | 0.24 | 0.00 | 0.00 | 0.02 | 0.01 | 0.06 | 0.00 | 0.05 | 0.39 | 0.07 | 0.00 | 0.09 | 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 | 0.23 | 0.06 | 0.00 | 0.07 | 1.24 |
| 2007 | 0.00 | 0.00 | 0.05 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.05 | 0.14 | 0.05 | 0.00 | 0.05 | 0.93 |
| 2008 | 0.00 | 0.00 | 0.04 | 0.11 | 0.00 | 0.00 | 0.01 | 0.00 | 0.04 | 0.00 | 0.05 | 0.10 | 0.05 | 0.00 | 0.06 | 0.85 |
| 2009 | 0.00 | 0.00 | 0.05 | 0.19 | 0.00 | 0.00 | 0.01 | 0.00 | 0.07 | 0.00 | 0.06 | 0.14 | 0.06 | 0.00 | 0.07 | 1.07 |
| 2010 | 0.00 | 0.00 | 0.05 | 0.20 | 0.00 | 0.00 | 0.02 | 0.00 | 0.08 | 0.00 | 0.07 | 0.16 | 0.06 | 0.00 | 0.07 | 1.17 |
| Average | 0.00 | 0.00 | 0.05 | 0.15 | 0.00 | 0.00 | 0.02 | 0.01 | 0.08 | 0.00 | 0.03 | 0.33 | 0.07 | 0.00 | 0.05 | 1.29 |

Table I.3. Abundance indices (AIs) for the WCVI troll fishery by stock and year (stock groups 1-15), from CLB 1007. Numbers 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.

-continued-
Calibration and Exploitation Rate

Table I.3. Page 2 of 2 (stock groups 16-30).


## Appendix J. Fishery exploitation rate indices by stock, age and fishery, based on CWT data, 1975-2007.

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Table J.1. Alaska troll Stratified Proportion Fishery Index (SPFI) values as landed catch, based on CWT data.

| YEAR | SPFI | WIN/SPR | JUNE IN | JUNE OUT | JULY IN | JULY OUT | FALL | ER Stock Identifiers: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 | 0.9004 | 1.1771 | 0.6274 | 1.1077 | 0.5205 | 0.8611 | 0.8611 | Alaska Southeast | Age 4 | Age 5 | Age 6 |
| 1980 | 1.1226 | 0.6330 | 1.2063 | 0.8708 | 0.9753 | 1.3543 | 1.3543 | Quinsam | Age 4 | Age 5 |  |
| 1981 | 1.0980 | 1.1791 | 0.6463 | 1.0702 | 1.2455 | 1.1454 | 1.1454 | Robertson Creek | Age 3 | Age 4 | Age 5 |
| 1982 | 0.8791 | 1.0108 | 1.5200 | 0.9514 | 1.2587 | 0.6392 | 0.6392 | Salmon River Hatchery | Age 4 | Age 5 |  |
| 1983 | 0.9610 | 1.0044 | 0.8957 | 0.6834 | 1.1081 | 1.2544 | 1.2544 | Columbia Upriver Brights | Age 4 | Age 5 |  |
| 1984 | 0.6872 | 0.3665 | 1.6032 | 1.0283 | 0.4091 | 0.5264 | 0.5264 | Willamette Spring Hatchery | Age 4 | Age 5 |  |
| 1985 | 0.7625 | 0.4649 | 1.2554 | 0.6673 | 1.0367 | 0.8403 | 0.8403 |  |  |  |  |
| 1986 | 0.5419 | 0.4487 | 0.6138 | 0.1890 | 0.7932 | 1.2978 | 1.2978 |  |  |  |  |
| 1987 | 0.5689 | 0.6161 | 0.8333 | 0.2033 | 1.9112 | 0.7025 | 0.7025 |  |  |  |  |
| 1988 | 0.4729 | 1.4306 | 0.1996 | 0.0016 | 1.6800 | 0.6960 | 0.6960 |  |  |  |  |
| 1989 | 0.5472 | 0.8782 | 0.6609 | 0.1290 | 0.7546 | 0.6089 | 0.6089 |  |  |  |  |
| 1990 | 0.8161 | 0.6947 | 1.3071 | 0.1273 | 1.6060 | 1.2293 | 1.2293 |  |  |  |  |
| 1991 | 0.6621 | 1.5067 | 1.3189 | 0.2331 | 0.6848 | 0.8004 | 0.8004 |  |  |  |  |
| 1992 | 0.4360 | 1.0489 | 0.7518 | 0.0770 | 0.2972 | 0.4040 | 0.4040 |  |  |  |  |
| 1993 | 0.4946 | 0.7714 | 0.4251 | 0.0177 | 0.3542 | 0.9572 | 0.9572 |  |  |  |  |
| 1994 | 0.4655 | 0.7021 | 0.1711 | 0.0416 | 0.2244 | 0.7113 | 0.7113 |  |  |  |  |
| 1995 | 0.5567 | 0.4817 | 0.4661 | 0.0538 | 1.3052 | 0.8373 | 0.8373 |  |  |  |  |
| 1996 | 0.4778 | 0.5530 | 0.9611 | 0.0987 | 0.6909 | 0.5738 | 0.5738 |  |  |  |  |
| 1997 | 0.6846 | 0.6550 | 0.8807 | 0.1598 | 0.1152 | 1.5923 | 1.5923 |  |  |  |  |
| 1998 | 0.4497 | 0.8353 | 0.2238 | 0.0612 | 0.5342 | 1.0162 | 1.0162 |  |  |  |  |
| 1999 | 0.6689 | 0.8168 | 0.3849 | 0.1284 | 0.1592 | 1.0437 | 1.0437 |  |  |  |  |
| 2000 | 0.4810 | 0.9289 | 0.1386 | 0.0894 | 0.0795 | 1.5185 | 1.5185 |  |  |  |  |
| 2001 | 0.4083 | 0.5992 | 0.1750 | 0.0800 | 0.1788 | 0.6797 | 0.6797 |  |  |  |  |
| 2002 | 0.5673 | 0.4411 | 0.1504 | 0.0679 | 0.2112 | 1.2284 | 1.2284 |  |  |  |  |
| 2003 | 0.5396 | 0.7308 | 0.1749 | 0.0765 | 0.4301 | 0.9419 | 0.9419 |  |  |  |  |
| 2004 | 0.4804 | 0.8445 | 0.2642 | 0.0798 | 0.4013 | 0.9928 | 0.9928 |  |  |  |  |
| 2005 | 0.5445 | 0.9614 | 0.3122 | 0.1351 | 0.5860 | 1.3168 | 1.3168 |  |  |  |  |
| 2006 | 0.7193 | 1.5626 | 1.1402 | 0.1389 | 0.1627 | 1.4636 | 1.4636 |  |  |  |  |
| 2007 | 0.6566 | 1.3021 | 1.4281 | 0.1498 | 0.2431 | 1.1352 | 1.1352 |  |  |  |  |
| 2008 | 0.3977 | 0.7753 | 0.9709 | 0.0694 | 0.1059 | 0.5415 | 0.5415 |  |  |  |  |

Calibration and Exploitation Rate

Table J.2. Alaska troll Stratified Proportion Fishery Index (SPFI) values as total mortality, based on CWT data.

| YEAR | SPFI | WIN/SPR | JUNE IN | JUNE OUT | JULY IN | JULY OUT | FALL | ER Stock Identifiers: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 | 0.8829 | 1.1782 | 0.5789 | 1.1007 | 0.5177 | 0.8295 | 0.8295 | Alaska Southeast | Age 4 Age 5 | Age 6 |
| 1980 | 1.0374 | 0.6340 | 1.1299 | 0.8234 | 0.8477 | 1.2001 | 1.2001 | Quinsam | Age 4 Age 5 |  |
| 1981 | 1.0907 | 1.1790 | 0.5963 | 1.1049 | 1.1593 | 1.1550 | 1.1550 | Robertson Creek | Age 3 Age 4 | Age 5 |
| 1982 | 0.9890 | 1.0088 | 1.6949 | 0.9710 | 1.4753 | 0.8155 | 0.8155 | Salmon River Hatchery | Age 4 Age 5 |  |
| 1983 | 1.1087 | 1.0049 | 1.1214 | 0.6991 | 1.0147 | 1.6983 | 1.6983 | Columbia Upriver Brights | Age 4 Age 5 |  |
| 1984 | 0.7404 | 0.3653 | 1.7375 | 1.0321 | 0.6390 | 0.6226 | 0.6226 | Willamette Spring Hatchery | Age 4 Age 5 |  |
| 1985 | 0.8769 | 0.4642 | 1.3061 | 0.6493 | 1.0070 | 1.0991 | 1.0991 |  |  |  |
| 1986 | 0.6141 | 0.4507 | 0.7017 | 0.1851 | 0.9110 | 1.5063 | 1.5063 |  |  |  |
| 1987 | 0.6548 | 0.6171 | 0.8059 | 0.1917 | 2.5076 | 0.8412 | 0.8412 |  |  |  |
| 1988 | 0.4942 | 1.4336 | 0.2438 | 0.0073 | 1.8139 | 0.7097 | 0.7097 |  |  |  |
| 1989 | 0.5985 | 0.8811 | 0.6859 | 0.1274 | 0.8521 | 0.6608 | 0.6608 |  |  |  |
| 1990 | 1.0653 | 0.9235 | 1.6032 | 0.1476 | 1.5787 | 1.6372 | 1.6372 |  |  |  |
| 1991 | 0.7083 | 1.5629 | 1.2875 | 0.2209 | 0.8692 | 0.8483 | 0.8483 |  |  |  |
| 1992 | 0.5073 | 1.0999 | 0.7408 | 0.0730 | 0.3082 | 0.5713 | 0.5713 |  |  |  |
| 1993 | 0.5559 | 0.8110 | 0.4111 | 0.0187 | 0.3550 | 1.1154 | 1.1154 |  |  |  |
| 1994 | 0.5672 | 0.7454 | 0.2522 | 0.0419 | 0.2941 | 0.9171 | 0.9171 |  |  |  |
| 1995 | 0.6852 | 0.5325 | 0.5569 | 0.0561 | 1.3253 | 1.0395 | 1.0395 |  |  |  |
| 1996 | 0.5853 | 0.6061 | 0.9735 | 0.1040 | 0.7270 | 0.7108 | 0.7108 |  |  |  |
| 1997 | 0.6915 | 0.7078 | 0.8419 | 0.1591 | 0.1414 | 1.5323 | 1.5323 |  |  |  |
| 1998 | 0.4393 | 0.8879 | 0.2368 | 0.0609 | 0.4674 | 0.9547 | 0.9547 |  |  |  |
| 1999 | 0.7455 | 0.8842 | 0.3983 | 0.1246 | 0.2152 | 1.1588 | 1.1588 |  |  |  |
| 2000 | 0.5151 | 1.0198 | 0.1598 | 0.0964 | 0.1206 | 1.5749 | 1.5749 |  |  |  |
| 2001 | 0.4356 | 0.6383 | 0.1737 | 0.0769 | 0.2209 | 0.7150 | 0.7150 |  |  |  |
| 2002 | 0.5697 | 0.5090 | 0.1638 | 0.0710 | 0.2342 | 1.1619 | 1.1619 |  |  |  |
| 2003 | 0.5343 | 0.8119 | 0.1801 | 0.0777 | 0.3931 | 0.8852 | 0.8852 |  |  |  |
| 2004 | 0.4815 | 0.9123 | 0.2645 | 0.0810 | 0.3983 | 0.9515 | 0.9515 |  |  |  |
| 2005 | 0.5823 | 1.1390 | 0.5046 | 0.1401 | 0.5443 | 1.2966 | 1.2966 |  |  |  |
| 2006 | 0.7379 | 1.6610 | 1.2365 | 0.1395 | 0.1734 | 1.4482 | 1.4482 |  |  |  |
| 2007 | 0.6721 | 1.3857 | 1.5466 | 0.1452 | 0.2318 | 1.1290 | 1.1290 |  |  |  |
| 2008 | 0.4252 | 0.7821 | 0.9166 | 0.0643 | 0.1470 | 0.5863 | 0.5863 |  |  |  |

Calibration and Exploitation Rate

Table J.3. Landed catch exploitation rate indices by stock and age in the NBC troll fishery, based on CWT data. Base period is
1979-1982.

| Year | AKS Age 4 | $\begin{gathered} \text { QUI } \\ \text { Age } 3 \end{gathered}$ | $\begin{gathered} \text { QUI } \\ \text { Age } 4 \\ \hline \end{gathered}$ | $\begin{gathered} \text { RBT } \\ \text { Age } 3 \end{gathered}$ | $\begin{gathered} \text { RBT } \\ \text { Age } 4 \end{gathered}$ | $\begin{gathered} \text { RBT } \\ \text { Age } 5 \end{gathered}$ | $\begin{gathered} \text { SRH } \\ \text { Age } 3 \\ \hline \end{gathered}$ | $\begin{gathered} \text { SRH } \\ \text { Age } 4 \\ \hline \end{gathered}$ | $\begin{gathered} \text { SRH } \\ \text { Age } 5 \\ \hline \end{gathered}$ | $\begin{gathered} \text { URB } \\ \text { Age } 3 \\ \hline \end{gathered}$ | $\begin{gathered} \text { URB } \\ \text { Age } 4 \\ \hline \end{gathered}$ | $\begin{gathered} \text { URB } \\ \text { Age } 5 \\ \hline \end{gathered}$ | $\begin{gathered} \text { WSH } \\ \text { Age } 4 \\ \hline \end{gathered}$ | Fishery Index |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 | NA | 0.5508 | 0.8691 | 1.2278 | 0.8306 | 0.4805 | NA | NA | NA | 0.4627 | 1.1907 | NA | 0.6487 | 0.78 |
| 1980 | NA | 0.7948 | 0.9847 | 1.1057 | 0.8522 | 0.7876 | 0.9796 | NA | NA | 1.1057 | 0.9886 | 1.2702 | 1.187 | 0.96 |
| 1981 | NA | 1.7733 | 1.4462 | 0.751 | 1.0467 | 1.7319 | 1.5875 | 1.1131 | NA | NA | 1.1524 | 1.3124 | 1.5239 | 1.33 |
| 1982 | 1 | 0.8811 | 0.7001 | 0.9154 | 1.2705 | NA | 0.4328 | 0.8869 | 1 | 1.4316 | 0.6683 | 0.4174 | 0.6404 | 0.84 |
| 1983 | 1.5866 | 1.2612 | 1.4723 | 1.0398 | 0.7065 | 0.5989 | 0.4231 | 0.5327 | 1.232 | 1.7809 | 1.3061 | NA | 1.276 | 0.89 |
| 1984 | 1.1357 | 0.2536 | 0.5066 | 0.3987 | 1.3222 | 2.0094 | NA | 0.6031 | 2.7287 | 1.0371 | 2.1028 | NA | 0.5008 | 1.29 |
| 1985 | 0.7803 | 0.2457 | 0.5818 | 0.9124 | 1.9392 | NA | 0.3061 | NA | 2.2668 | 1.4164 | 1.7111 | 1.6799 | 0.2158 | 1.28 |
| 1986 | 0.7274 | 0.9415 | 0.8476 | NA | 1.0484 | NA | 0.0912 | 0.5314 | NA | 1.0983 | 1.3888 | 1.9838 | NA | 0.87 |
| 1987 | 0.6137 | 0.3535 | 0.6224 | 0.4896 | NA | NA | 0.1627 | 0.3726 | 2.2355 | 1.2267 | 1.7684 | 2.8899 | NA | 1.05 |
| 1988 | 2.0799 | 0.1908 | 0.7015 | 0.3334 | 0.6214 | NA | NA | 0.2992 | 0.7434 | 0.3807 | 1.0805 | 2.3578 | 0.7804 | 0.72 |
| 1989 | 0.948 | 0.4365 | 0.4541 | 0.3594 | 0.8831 | 1.0547 | 0.1072 | 0.2588 | 2.1436 | NA | 1.037 | 4.216 | 0.3639 | 0.99 |
| 1990 | 1.9533 | 0.3629 | 0.959 | 0.3143 | 0.7168 | 0.5617 | 0.14 | 0.2322 | 1.9853 | NA | 1.2462 | 2.3814 | 0.3009 | 0.81 |
| 1991 | 0.6526 | 0.4211 | 0.661 | 0.3864 | 0.7509 | 1.1423 | 0.1152 | 0.3874 | 2.0449 | NA | NA | NA | 0.2724 | 0.77 |
| 1992 | 0.1226 | NA | 1.861 | 0.2934 | 0.5817 | 0.682 | 0.1065 | 0.2603 | 0.9701 | NA | NA | NA | 0.0989 | 0.60 |
| 1993 | 0.2833 | NA | NA | 0.1782 | 0.6173 | 0.8375 | 0.1061 | 0.5732 | 2.7562 | 0 | 1.147 | NA | 0.2048 | 0.86 |
| 1994 | 0.0551 | NA | NA | 0.3327 | 0.7435 | 0.8975 | 0.1734 | 0.5087 | 2.1802 | NA | 0.934 | 2.0129 | 0.1154 | 0.90 |
| 1995 | 0 | NA | NA | NA | 0.4111 | 0.2616 | 0.0989 | 0 | 0.8504 | NA | NA | 0.5641 | 0.1483 | 0.31 |
| 1996 | 0 | NA | NA | 0 | NA | NA | 0 | 0 | 0 | 0 | 0 | NA | 0 | 0.00 |
| 1997 | 0 | 0.3523 | 0.3985 | 0.2112 | 0.3855 | NA | 0.1152 | 0.11 | 0.4425 | NA | 0.6778 | NA | 0.2678 | 0.30 |
| 1998 | 0 | 0 | 0 | NA | 0.568 | NA | 0.0692 | 0.5202 | 1.2512 | 0 | NA | 1.6501 | 0 | 0.56 |
| 1999 | 0 | 0.1651 | 0.1932 | NA | 0.3403 | 0.5549 | 0.0827 | 0.1847 | 0.4126 | NA | 1.1946 | NA | 0 | 0.35 |
| 2000 | 0 | 0 | 0.0623 | NA | NA | NA | 0.0386 | 0.2621 | 0.3369 | NA | 0 | 0 | 0.0135 | 0.14 |
| 2001 | 0 | 0 | 0.0149 | 0 | NA | NA | 0.0379 | 0.1637 | 0.8932 | 0 | 0 | NA | 0.0206 | 0.20 |
| 2002 | 0.4737 | 0 | 0.1416 | 0 | 0.4649 | NA | 0.1493 | 0.2859 | 1.4979 | 0.1036 | 0.1937 | NA | 0.1846 | 0.40 |
| 2003 | 0 | 0 | 0 | 0.0464 | 0.0498 | 0 | 0.0404 | 0.283 | 0.5405 | 0 | 0.7572 | 0.8811 | 0.0525 | 0.23 |
| 2004 | 0.9146 | 0 | 0.0569 | 0.0891 | 0.1915 | 0.3954 | 0.0738 | 0.2429 | 0.9431 | 0 | 0.747 | 1.3495 | 0.1891 | 0.39 |
| 2005 | 0.1814 | 0.0739 | 0.0426 | 0.0338 | 0.3206 | 0.1034 | 0.085 | 0.4358 | 0.9702 | 0.121 | 1.4894 | 1.0618 | 0.0955 | 0.43 |
| 2006 | 0.3846 | 0.0816 | 0.0664 | 0.1026 | 0.2611 | 0.2683 | 0.0268 | 0.4228 | 1.5612 | NA | 1.4044 | 1.511 | 0.0472 | 0.54 |
| 2007 | 0.0838 | NA | 0.4043 | NA | 0.493 | 0.5206 | NA | 0.2293 | 1.2474 | NA | NA | NA | 0 | 0.51 |
| 2008 | 0.052 | 0 | 0.1364 | 0.0409 | 0.604 | 0.194 | 0.0384 | NA | NA | 0.3339 | NA | NA | 0.0376 | 0.21 |

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

Table J. 4.
Total mortality exploitation rate indices by stock and age in the NBC troll fishery, based on CWT data. Base period is 1979-1982.

| Year | $\begin{gathered} \text { AKS } \\ \text { Age } 4 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { QUI } \\ \text { Age } 3 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { QUI } \\ \text { Age } 4 \\ \hline \end{gathered}$ | $\begin{gathered} \text { RBT } \\ \text { Age } 3 \\ \hline \end{gathered}$ | $\begin{gathered} \text { RBT } \\ \text { Age } 4 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { RBT } \\ & \text { Age } 5 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { SRH } \\ \text { Age } 3 \\ \hline \end{gathered}$ | $\begin{gathered} \text { SRH } \\ \text { Age } 4 \\ \hline \end{gathered}$ | $\begin{gathered} \text { SRH } \\ \text { Age } 5 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { URB } \\ \text { Age } 3 \\ \hline \end{gathered}$ | $\begin{gathered} \text { URB } \\ \text { Age } 4 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { URB } \\ & \text { Age } 5 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { WSH } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | Fishery Index |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 | NA | 0.584 | 0.841 | 1.252 | 0.839 | 0.477 | NA | NA | NA | 0.579 | 1.2 | NA | 0.615 | 0.79 |
| 1980 | NA | 0.799 | 0.987 | 1.025 | 0.849 | 0.782 | 0.967 | NA | NA | 1.078 | 0.992 | 1.267 | 1.111 | 0.95 |
| 1981 | NA | 1.747 | 1.459 | 0.755 | 1.042 | 1.741 | 1.513 | 1.11 | NA | NA | 1.158 | 1.324 | 1.53 | 1.32 |
| 1982 | 1 | 0.87 | 0.712 | 0.968 | 1.269 | NA | 0.52 | 0.89 | 1 | 1.343 | 0.65 | 0.409 | 0.743 | 0.85 |
| 1983 | 1.414 | 1.131 | 1.455 | 0.915 | 0.694 | 0.613 | 0.478 | 0.541 | 1.232 | 1.521 | 1.271 | NA | 1.093 | 0.87 |
| 1984 | 0.96 | 0.24 | 0.507 | 0.445 | 1.292 | 2.033 | NA | 0.608 | 2.771 | 0.929 | 2.097 | NA | 0.429 | 1.25 |
| 1985 | 0.682 | 0.244 | 0.572 | 0.96 | 1.9 | NA | 0.306 | NA | 2.302 | 1.199 | 1.695 | 1.647 | 0.18 | 1.20 |
| 1986 | 0.625 | 0.863 | 0.821 | NA | 1.034 | NA | 0.117 | 0.525 | NA | 0.974 | 1.382 | 1.944 | NA | 0.83 |
| 1987 | 0.578 | 0.438 | 0.655 | 0.479 | NA | NA | 0.181 | 0.371 | 2.318 | 1.613 | 1.819 | 2.916 | NA | 1.04 |
| 1988 | 1.922 | 0.279 | 0.717 | 0.335 | 0.626 | NA | NA | 0.307 | 0.743 | 0.844 | 1.131 | 2.389 | 0.781 | 0.74 |
| 1989 | 0.839 | 0.458 | 0.471 | 0.388 | 0.875 | 1.065 | 0.209 | 0.274 | 2.2 | NA | 1.103 | 4.222 | 0.331 | 0.98 |
| 1990 | 2.009 | 0.492 | 0.987 | 0.388 | 0.731 | 0.576 | 0.238 | 0.247 | 2.056 | NA | 1.322 | 2.438 | 0.287 | 0.82 |
| 1991 | 0.636 | 0.527 | 0.669 | 0.468 | 0.755 | 1.162 | 0.236 | 0.399 | 2.105 | NA | NA | NA | 0.27 | 0.77 |
| 1992 | 0.19 | NA | 1.933 | 0.397 | 0.597 | 0.705 | 0.146 | 0.268 | 1.01 | NA | NA | NA | 0.105 | 0.61 |
| 1993 | 0.219 | NA | NA | 0.326 | 0.632 | 0.86 | 0.218 | 0.584 | 2.842 | 0.285 | 1.157 | NA | 0.2 | 0.86 |
| 1994 | 0.107 | NA | NA | 0.517 | 0.757 | 0.917 | 0.293 | 0.516 | 2.24 | NA | 0.962 | 2.072 | 0.112 | 0.90 |
| 1995 | 0.069 | NA | NA | NA | 0.421 | 0.284 | 0.162 | 0.016 | 0.922 | NA | NA | 0.603 | 0.18 | 0.33 |
| 1996 | 0.112 | NA | NA | 0.064 | NA | NA | 0.057 | 0.012 | 0.06 | 0.288 | 0.065 | NA | 0.008 | 0.05 |
| 1997 | 0 | 0.35 | 0.386 | 0.242 | 0.381 | NA | 0.122 | 0.111 | 0.443 | NA | 0.678 | NA | 0.219 | 0.29 |
| 1998 | 0 | 0 | 0 | NA | 0.568 | NA | 0.15 | 0.519 | 1.276 | 0.084 | NA | 1.617 | 0 | 0.54 |
| 1999 | 0 | 0.168 | 0.187 | NA | 0.327 | 0.562 | 0.096 | 0.185 | 0.413 | NA | 1.198 | NA | 0 | 0.34 |
| 2000 | 0 | 0 | 0.06 | NA | NA | NA | 0.051 | 0.258 | 0.337 | NA | 0 | 0 | 0.012 | 0.13 |
| 2001 | 0.044 | 0 | 0.014 | 0 | NA | NA | 0.05 | 0.164 | 0.893 | 0 | 0 | NA | 0.017 | 0.18 |
| 2002 | 0.513 | 0 | 0.137 | 0.029 | 0.467 | NA | 0.171 | 0.287 | 1.538 | 0.138 | 0.198 | NA | 0.183 | 0.39 |
| 2003 | 0.068 | 0 | 0 | 0.042 | 0.051 | 0 | 0.073 | 0.285 | 0.553 | 0.146 | 0.772 | 0.896 | 0.05 | 0.23 |
| 2004 | 0.85 | 0 | 0.055 | 0.121 | 0.2 | 0.413 | 0.121 | 0.253 | 1.002 | 0.133 | 0.755 | 1.402 | 0.179 | 0.39 |
| 2005 | 0.197 | 0.06 | 0.041 | 0.061 | 0.324 | 0.103 | 0.159 | 0.447 | 1.013 | 0.492 | 1.54 | 1.115 | 0.085 | 0.44 |
| 2006 | 0.391 | 0.066 | 0.064 | 0.134 | 0.266 | 0.266 | 0.129 | 0.428 | 1.59 | NA | 1.426 | 1.505 | 0.053 | 0.53 |
| 2007 | 0.091 | NA | 0.427 | NA | 0.488 | 0.517 | NA | 0.23 | 1.271 | NA | NA | NA | 0 | 0.50 |
| 2008 | 0.06 | 0 | 0.132 | 0.068 | 0.614 | 0.193 | 0.099 | NA | NA | 0.346 | NA | NA | 0.037 | 0.21 |

Stock Identifiers:
AKS = ALASKA SPRING QUI = QUINSAM RBT $=$ ROBERTSON CREEK SRH $=$ SALMON RIVER HATCHERY
URB = COLUMBIA UPRIVER BRIGHT WSH = WILLAMETTE SPRING

Table J.5.
Landed catch exploitation rate indices by stock and age in the WCVI troll fishery, based on CWT data. Base period is 1979-1982.

|  | CWF | GAD | GAD | LRH | LRH | LRW | RBT | RBT | RBT | SAM | SAM | SAM | SPR | SPR | SPS | SPS | SRH | SRH | SUM | URB | URB | UWA | UWA | WSH | ry |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Age 4 | Age 3 | Age 4 | Age 3 | Age 4 | Age 4 | Age 3 | Age 4 | Age 5 | Age 3 | Age 4 | Age 5 | Age 3 | Age 4 | Age 3 | Age 4 | Age 3 | Age 4 | Age 4 | Age 3 | Age 4 | Age 3 | Age 4 | Age 4 | Index |
| 1979 | NA | NA | NA | 1.112 | NA | NA | 1.154 | 1.261 | NA | NA | 1.000 | 1.000 | 0.955 | 0.827 | NA | 1.131 | NA | NA | NA | 1.396 | 1.745 | 0.700 | 1.216 | 1.025 | 1.047 |
| 1980 | NA | NA | NA | 0.564 | 0.999 | NA | 1.380 | 1.420 | NA | NA | NA | NA | 1.183 | 1.410 | NA | NA | 1.000 | NA | 0.688 | 1.340 | 0.939 | 1.388 | 0.862 | 1.111 | 1.043 |
| 1981 | 0.794 | 0.715 | NA | 1.159 | 0.757 | 0.848 | 0.701 | 0.584 | 1.000 | NA | NA | NA | 0.952 | 0.637 | 0.718 | NA | NA | 1.000 | 1.312 | 0.200 | 0.893 | 0.846 | 0.886 | 0.627 | 0.861 |
| 1982 | 1.206 | 1.285 | 1.000 | 1.165 | 1.244 | 1.153 | 0.765 | 0.736 | NA | 1.000 | NA | NA | 0.910 | 1.127 | 1.282 | 0.869 | NA | NA | NA | 1.065 | 0.423 | 1.066 | 1.036 | 1.237 | 1.051 |
| 1983 | 1.375 | NA | 1.404 | 1.711 | 1.617 | 0.962 | 0.304 | 0.679 | 2.500 | NA | 0.958 | NA | 1.497 | 0.939 | 1.643 | 0.886 | 0.632 | 0.733 | NA | 0.383 | 0.436 | 0.706 | 1.079 | 0.274 | 1.167 |
| 1984 | 1.304 | 2.090 | NA | 2.198 | 2.762 | NA | 1.237 | 1.044 | 1.683 | NA | NA | 1.087 | 1.348 | 1.371 | 1.633 | 0.966 | NA | 0.814 | NA | 0.878 | 1.265 | 1.754 | 0.731 | 0.689 | 1.445 |
| 1985 | 0.896 | NA | 0.845 | 1.250 | 1.084 | NA | 0.688 | - | NA | NA | NA | NA | 0.543 | 0.953 | 0.824 | 0.657 | NA | NA | NA | 0.761 | 1.025 | 0.841 | 1.050 | 0.438 | 0.869 |
| 1986 | 1.280 | NA | NA | 1.294 | 1.174 | 0.471 | NA | 0.567 | NA | NA | NA | NA | 1.202 | 1.003 | 0.904 | 1.073 | NA | 0.412 | NA | 1.471 | 0.724 | 0.852 | 1.219 | NA | 1.078 |
| 1987 | 0.859 | NA | NA | 0.956 | NA | 1.460 | 0.274 | NA | NA | NA | NA | NA | 0.465 | NA | 0.760 | 0.511 | 0.118 | 0.491 | - | 1.001 | 0.789 | 0.374 | 0.407 | NA | 0.582 |
| 1988 | 0.843 | 0.433 | NA | 1.148 | 1.311 | 1.056 | 0.454 | 0.573 | NA | 0.615 | NA | NA | 1.005 | NA | 0.304 | 0.686 | NA | 1.418 | 1.143 | 0.088 | 1.890 | NA | 0.774 | 0.856 | 0.919 |
| 1989 | 0.527 | 0.255 | 0.490 | 0.291 | 0.542 | 0.566 | 0.168 | 0.341 | - | 0.214 | 0.602 | NA | 0.592 | 0.395 | 0.352 | 0.379 | 0.151 | NA | 0.740 | NA | 0.894 | NA | NA | 0.538 | 0.470 |
| 1990 | 0.714 | 1.104 | 0.940 | 1.182 | 0.400 | 1.213 | 0.675 | 0.558 | 1.535 | 0.414 | 0.860 | NA | 0.939 | 0.724 | 0.749 | 0.816 | 0.317 | 0.956 | 1.311 | NA | 1.614 | NA | NA | 0.826 | 0.865 |
| 1991 | NA | NA | 0.940 | 0.817 | NA | 0.746 | 0.602 | 0.547 | 0.735 | 0.254 | 0.566 | 1.100 | 0.602 | 0.626 | 0.427 | 0.522 | 0.440 | 0.791 | 0.432 | NA | NA | NA | NA | 0.077 | 0.675 |
| 1992 | 1.149 | NA | 0.454 | 0.667 | NA | 0.321 | 1.635 | 2.442 | 5.132 | 1.076 | 0.266 | NA | 0.438 | 0.741 | 0.745 | 0.718 | 0.596 | 6.054 | 0.746 | NA | NA | NA | NA | 0.167 | 0.824 |
| 1993 | NA | NA | NA | 1.119 | 0.649 | NA | 1.179 | 2.267 | 2.447 | 1.143 | 0.423 | NA | 0.547 | 0.999 | 1.056 | 0.518 | 0.538 | 2.659 | NA | 0.621 | 1.937 | NA | NA | 0.430 | 0.867 |
| 1994 | 0.117 | NA | NA | NA | NA | 0.224 | 0.618 | 0.734 | 1.391 | 0.087 | 0.702 | NA | 0.840 | 0.642 | 0.223 | 0.461 | NA | 0.850 | NA | NA | 0.940 | NA | NA | 0.249 | 0.552 |
| 1995 | NA | 0.223 | NA | NA | NA | 0.432 | NA | 0.437 | 0.365 | 0.161 | 0.389 | NA | 0.361 | 0.349 | 0.281 | 0.257 | 0.016 | NA | NA | NA | NA | NA | NA | 0.115 | 0.318 |
| 1996 | - | - | - | - | A | NA |  | NA | NA | - | - | NA | - | NA | - | - |  | - | - | - |  | NA | NA | - | - |
| 1997 | 0.341 | A | 0.211 | 0.762 | A | NA | - | 0.062 | NA | 0.035 | 0.248 | NA | 0.504 | 0.479 | 0.035 | 0.289 |  | 0.080 | 0.075 | NA | 0.110 | NA | NA | - | 0.311 |
| 1998 | NA | NA | NA | NA | A | NA | A | - | NA | NA | 0.077 | NA | 0.046 | - | - | 0.030 |  |  |  | 0.015 | NA | NA | NA | 0.035 | 0.028 |
| 1999 | NA | 0.048 | NA | 0.097 | NA | NA | A | A | - | A | 0.074 | NA | 0.016 | NA | 0.020 | 0.055 |  |  | 0.028 | NA |  | NA | NA | - | 0.046 |
| 2000 | NA | NA | 1.225 | 0.098 | 1.854 | NA | NA | A | A | NA | 1.114 | NA | 0.047 | 0.765 | 0.036 | 0.713 |  |  | 0.219 | 0.119 | 0.510 | NA | NA | 0.076 | 0.730 |
| 2001 | NA | 0.718 | 1.222 | 0.310 | NA | 0.723 |  | NA | A | 0.371 | 0.367 | NA | 0.147 | 0.604 | 0.452 | 0.536 |  | 0.120 | 0.448 | 0.063 | 0.169 | NA | NA | 0.176 | 0.499 |
| 2002 | 0.610 | 0.172 | 0.676 | 0.370 | 0.493 | NA | 0.016 |  | A | 0.279 | 0.416 | NA | 0.300 | 0.756 | 0.443 | 0.557 |  |  | 0.537 | 0.089 | 0.212 | NA | NA | 0.335 | 0.467 |
| 2003 | 0.556 | 0.116 | 0.740 | 0.313 | 0.928 | 0.125 | - | - | NA | NA | 0.602 | NA | 0.305 | 0.596 | 0.381 | 0.566 | - | - | 0.599 | 0.177 | 0.105 | NA | NA | 0.587 | 0.503 |
| 2004 | NA | 0.080 | 1.183 | 0.419 | 1.070 | 0.125 | 0.033 | 0.021 | - | 0.186 | 0.546 | NA | 0.354 | 0.804 | 0.356 | 0.826 | 0.081 | 0.560 | 0.259 | 0.161 | 0.491 | NA | NA | 2.159 | 0.612 |
| 2005 | 0.298 | 0.757 | 0.969 | 0.790 | 1.795 | 0.124 | - | - | NA | 0.119 | 0.801 | NA | 0.888 | 1.188 | 0.580 | 0.764 | 0.070 | 0.513 | 0.442 | 0.130 | 0.460 | NA | NA | 1.242 | 0.794 |
| 2006 | NA | 0.276 | 0.940 | NA | NA | 0.463 | - | - | - | 0.388 | 0.771 | NA | 0.572 | 1.392 | 0.531 | 0.724 | 0.066 | 0.587 | 0.262 | NA | 0.725 | NA | NA | 1.430 | 0.699 |
| 2007 | NA | 0.881 | 0.818 | 0.731 | NA | NA | NA | 0.019 | NA | 1.164 | 0.582 | NA | 0.589 | 0.934 | 0.926 | 0.694 | NA | - | 0.402 | NA | 0.135 | NA | NA | 0.189 | 0.675 |
| 2008 | NA | 0.212 | 0.340 | 0.408 | NA | NA | - | NA | - | 0.378 | 0.322 | NA | 0.186 | NA | 0.299 | 0.300 | 0.077 | NA | 0.033 | 0.179 | NA | NA | NA | 0.130 | 0.261 |

Stock Identifiers
CWF = COWLITZ FALL TULE
GAD = G ADAMS FALL FING LRH = LOWER RIVER TULE LRW = LEWIS RIVER WILD

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SPR = SPRING CREEK TULE
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SRH = SALMON RIVER HATCHERY
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Table J.6. Total mortality exploitation rate indices by stock and age in the WCVI troll fishery, based on CWT data. Base period is 1979-1982.

| 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 | $\begin{gathered} \text { SPS } \\ \text { Age } 3 \\ \hline \end{gathered}$ | SPS Age 4 | $\begin{gathered} \text { SRH } \\ \text { Age } 3 \\ \hline \end{gathered}$ | $\begin{gathered} \text { SRH } \\ \text { Age } 4 \\ \hline \end{gathered}$ | SUM Age 4 | URB <br> Age 3 | URB Age 4 | UWA Age 3 | $\begin{array}{r} \text { UWA } \\ \text { Age } 4 \\ \hline \end{array}$ | $\begin{array}{r} \text { WSH } \\ \text { Age } 4 \\ \hline \end{array}$ | Fishery Index |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 | NA | NA | NA | 1.087 | NA | NA | 1.234 | 1.271 | NA | NA | 1.000 | 1.000 | 0.939 | 0.826 | NA | 1.133 | NA | NA | NA | 1.393 | 1.738 | 0.684 | 1.223 | 0.975 | 1.040 |
| 1980 | A | NA | A | 0.572 | 0.990 | NA | 1.303 | 1.407 | NA | NA | NA | NA | 1.136 | 1.386 | NA | NA | 1.000 | NA | 0.685 | 1.329 | 0.944 | 1.345 | 0.863 | 1.099 | 1.028 |
| 1981 | 0.787 | 0.717 | NA | 1.142 | 0.749 | 0.858 | 0.683 | 0.582 | 1.000 | NA | NA | NA | 0.907 | 0.638 | 0.749 | N | NA | 1.000 | 1.315 | 0.249 | 0.878 | 0.816 | 0.856 | 0.648 | 0.850 |
| 1982 | 1.213 | 1.283 | 1.000 | 1.199 | 1.261 | 1.142 | 0.780 | 0.741 | NA | 1.000 | NA | NA | 1.018 | 1.150 | 1.251 | 0.867 | NA | NA | NA | 1.029 | 0.440 | 1.154 | 1.058 | 1.278 | 1.076 |
| 1983 | 1.358 | NA | 1.414 | 1.557 | 1.554 | 0.964 | 0.303 | 0.667 | 2.561 | NA | 0.959 | NA | 1.317 | 0.898 | 1.543 | 0.895 | 0.626 | 0.707 | NA | 0.352 | 0.412 | 0.668 | 1.064 | 0.279 | 1.128 |
| 1984 | 1.292 | 1.681 | NA | 1.981 | 2.653 | NA | 1.116 | 1.023 | 1.746 | NA | NA | 1.075 | 1.170 | 1.280 | 1.418 | 0.951 | NA | 0.748 | NA | 0.797 | 1.228 | 1.577 | 0.737 | 0.630 | 1.367 |
| 1985 | 0.901 | NA | 0.822 | 1.175 | 1.069 | NA | 0.624 | - | NA | NA | NA | NA | 0.521 | 0.889 | 0.732 | 0.646 | NA | NA | NA | 0.722 | 0.997 | 0.763 | 1.014 | 0.427 | 0.832 |
| 19 | 1.29 | NA | NA | 1.110 | 1.099 | 0.464 | NA | 0.534 | NA | NA | N | N | 1.0 | 0.958 | 0.8 | 1.045 | N | 0.353 | N | 1.335 | 0.712 | 0.795 | 1.194 | NA | 1.018 |
| 19 | 0.87 | N | N | 1. | N | 1. | 0. | N | NA | N | N | N | 0. | N | 0.844 | 0.518 | 0.130 | 0 | - | 1.120 | 0.836 | 0.375 | 0.405 | NA | 0.615 |
| 1988 | 0.907 | 0.475 | NA | 1.299 | 1.394 | 1.086 | 0.446 | 0.573 | N | 0.675 | NA | NA | 0.941 | NA | 0.373 | 0.711 | NA | 1.319 | 1.118 | 0.532 | 1.978 | NA | 0.783 | 0.863 | 0.954 |
| 1989 | 0.544 | 0.353 | 0.492 | 0.313 | 0.563 | 0.579 | 0.170 | 0.331 | - | 0.337 | 0.605 | NA | 0.590 | 0.388 | 0.379 | 0.382 | 0.176 | NA | 0.743 | NA | 0.931 | NA | NA | 0.514 | 0.479 |
| 1990 | 0.749 | 1.047 | 0.935 | 1.132 | 0.436 | 1.213 | 0.654 | 0.563 | 1.594 | 0.456 | 0.854 | NA | 0.881 | 0.718 | 0.893 | 0.833 | 0.361 | 0.894 | 1.291 | NA | 1.628 | NA | NA | 0.819 | 0.866 |
| 1991 | NA | NA | 0.96 | 0.71 | N | 0.755 | 0. | 0.552 | 0.75 | 0.405 | 0.575 | 1.088 | 0.580 | 0.620 | 0.507 | 0.530 | 0.460 | 0.742 | 0.422 | NA | NA | NA | NA | 0.079 | 0.666 |
| 1992 | 1.150 | NA | 0.46 | 0.7 | NA | 0.329 | 1.798 | 2.464 | 5.304 | 0.912 | 0.271 | NA | 0.480 | 0.739 | 0.7 | 0.718 | 0.682 | 5.385 | 0.779 | NA | NA | NA | NA | 0.223 | 0.831 |
| 1993 | NA | NA | NA | 1.171 | 0.700 | NA | 1.408 | 2.292 | 2.564 | 1.093 | 0.438 | NA | 0.569 | 0.987 | 1.053 | 0.522 | 0.694 | 2.473 | NA | 0.877 | 1.946 | NA | NA | 0.419 | 0.897 |
| 1994 | 0.114 | NA | NA | NA | NA | 0.238 | 0.677 | 0.759 | 1.448 | 0.238 | 0.701 | NA | 0.809 | 0.641 | 0.233 | 0.453 | NA | 0.794 | NA | NA | 0.954 | NA | NA | 0.248 | 0.554 |
| 1995 | NA | 0.287 | NA | NA | NA | 0.471 | NA | 0.457 | 0.406 | 0.240 | 0.419 | NA | 0.402 | 0.369 | 0.315 | 0.272 | 0.043 | NA | NA | NA | NA | NA | NA | 0.133 | 0.346 |
| 1996 | 0.033 | 0.066 | 0.02 | - | NA | NA | 0.032 | NA | NA | 0.060 | 0.015 | NA | 0.040 | NA | 0.063 | 0.021 | 0.026 | 0.023 | 0.027 | 0.087 | 0.060 | NA | NA | 0.013 | 0.029 |
| 1997 | 0.330 | NA | 0.21 | 0.853 | NA | NA | 0.005 | 0.058 | NA | 0.096 | 0.256 | NA | 0.549 | 0.500 | 0.130 | 0.299 | 0.008 | 0.069 | 0.077 | NA | 0.104 | NA | NA | - | 0.338 |
| 1998 | NA | NA | NA | NA | NA | NA | NA | - | NA | NA | 0.074 | NA | 0.038 | - |  | 0.029 | - |  | - | 0.013 | NA | NA | NA | 0.029 | 0.025 |
| 1999 | NA | 0.035 | NA | 0.080 | NA | NA | NA | NA | - | NA | 0.070 | NA | 0.013 | NA | 0.016 | 0.052 |  |  | 0.026 | NA | - | NA | NA | - | 0.041 |
| 2000 | NA | NA | 1.195 | 0.081 | 1.784 | NA | NA | NA | NA | NA | 1.064 | NA | 0.046 | 0.714 | 0.027 | 0.694 | - | - | 0.210 | 0.098 | 0.482 | NA | NA | 0.062 | 0.673 |
| 2001 | NA | 0.537 | 1.234 | 0.260 | NA | 0.684 | - | NA | NA | 0.286 | 0.351 | NA | 0.125 | 0.563 | 0.355 | 0.520 | - | 0.103 | 0.430 | 0.061 | 0.160 | NA | NA | 0.148 | 0.456 |
| 2002 | 0.608 | 0.139 | 0.655 | 0.311 | 0.474 | NA | 0.013 | - | NA | 0.208 | 0.403 | NA | 0.254 | 0.716 | 0.351 | 0.541 | - | - | 0.516 | 0.074 | 0.209 | NA | NA | 0.284 | 0.430 |
| 2003 | 0.538 | 0.085 | 0.716 | 0.266 | 0.882 | 0.125 | - | - | NA | NA | 0.574 | NA | 0.258 | 0.565 | 0.297 | 0.550 | - | - | 0.574 | 0.146 | 0.100 | NA | NA | 0.492 | 0.463 |
| 2004 | NA | 0.058 | 1.153 | 0.360 | 1.020 | 0.118 | 0.026 | 0.019 | - | 0.138 | 0.522 | NA | 0.300 | 0.764 | 0.281 | 0.804 | 0.076 | 0.487 | 0.249 | 0.133 | 0.464 | NA | NA | 1.819 | 0.561 |
| 2005 | 0.288 | 0.582 | 0.945 | 0.655 | 1.706 | 0.117 | - | - | NA | 0.088 | 0.777 | NA | 0.751 | 1.126 | 0.453 | 0.740 | 0.061 | 0.453 | 0.425 | 0.108 | 0.435 | NA | NA | 1.046 | 0.728 |
| 2006 | NA | 0.213 | 0.917 | NA | NA | 0.438 | - | - | - | 0.310 | 0.736 | NA | 0.485 | 1.341 | 0.419 | 0.702 | 0.058 | 0.503 | 0.250 | NA | 0.686 | NA | NA | 1.205 | 0.645 |
| 2007 | NA | 0.648 | 0.796 | 0.606 | NA | NA | NA | 0.017 | NA | 0.904 | 0.566 | NA | 0.487 | 0.871 | 0.719 | 0.675 | NA | - | 0.387 | NA | 0.128 | NA | NA | 0.181 | 0.612 |
| 2008 | NA | 0.161 | 0.325 | 0.338 | NA | NA | - | NA | - | 0.288 | 0.307 | NA | 0.156 | NA | 0.232 | 0.292 | 0.067 | NA | 0.031 | 0.158 | NA | NA | NA | 0.107 | 0.233 |

## Stock Identifiers

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## Appendix K. Issues with ERA and model calibration

## Issues with CWT Data

## Columbia River /Ocean fisheries

Catch/sample ratios (calculated from data in catch sample ID records) were audited and suspiciously high or low expansions were compared against agency records to verify data reported in RMPC. Sample reporting for 1984 catch sample ID \#1984130049 was found to be in error. The leading 10,000 place integer had been dropped from the reported sample (e.g. 0,000 reported instead of 10,000 ). Number Sampled was reported as 4641instead of 14641. Therefore an expansion factor of 2.33 was uploaded to CAS as auxiliary data and applied to all CWT recoveries associated with this catch sample ID. Additionally, catch/sample reports for catch sample ID\#1987130075 were found to be in error. An expansion factor of 4.402 was uploaded as auxiliary data to CAS and applied to all CWT recoveries associated with this catch sample ID in CAS. After appropriate corrections were applied, new c-files from the affected stocks regenerated to rectify this error.

- Updated roll-ups in Oregon troll fisheries were noted to affect expanded CWT recovery estimates in 1978. These new CWT recovery data are confirmed to be correctly represented in CAS/RMPC.
- Suspicious catch sample ratios were identified in catches occurring between 1977 and 1990. Unless noted below, all remaining suspect expansion values were confirmed as valid.


## Salmon River Hatchery

- 1988 escapement expansions found to be in error. Corrections uploaded to CAS via "SRH aux 2010.csv".
- 1993 terminal sport expansions found to be in error. Corrections uploaded to CAS via "SRH aux 2010.csv".
- 1997 escapement expansions found to be in error. Corrections to uploaded to CAS via "SRH aux 2010.csv".


## Willamette

- 1984, 1985 \& 1986 terminal sport expansions found to be in error. Corrections to CAS uploaded through "WSH2010aux.csv".


## Changes from Previous Calibration Procedures

## Changes to the Input Data for the Chinook Model calibration.

The following changes were made:

- Washington Coastal Net numbers were changed after discovering that the historical numbers contained some freshwater sport catch.
- Some changes were made to historical CWT data from Oregon and early brood information was added for SRH and AKS.
- FRL maturation rates from 1974-1983 were changed from the 1984-1985 average to the 1984-1989 average. This improved the fit of the age composition of the escapement for FRL for the early years. The change to the FRL maturation rate averages in CLB1007
improved the fit to the age specific FRL escapements in the early years, although it seems to have had a negligible effect on other aspects of the calibration.
- We attempted to estimate the appropriate maturation rate scalars for the URB wild and hatchery mix using several methods that used both CWT data and information from the Columbia River Bigsheets. Three calibrations CLB1008-CLB1010 that utilized these scalars fixed the problem of underestimating the age 5 fish but unfortunately they seemed to shift too many fish to age 5 and resulted in underestimating the age 3 fish. Due to time constraints it was not possible to investigate the age composition for URBs nor to look into other stocks with strange fits to the escapement data such as the Oregon Coastal (ORC) stock. Calibrations CLB1008-CLB1010 overestimate the 2010 AIs and also fail to completely correct the fits to the URB age specific terminal returns. CLB1007 was chosen as the best calibration for 2010, though it still had problems fitting to the age specific escapements for some stocks, FRL has been improved and the other problems have been around for awhile.


[^0]:    For stocks of hatchery origin and subject to terminal fisheries directed at harvesting surplus hatchery production, ocean fisheries do not include terminal net fisheries. Otherwise, total fishery includes terminal net fisheries.
    2 Hatchery stock not used to represent naturally spawning stock.
    3 Only hatchery rack recoveries are included in escapement.
    4 Insufficient escapement data for exploitation rate analysis.

[^1]:    ${ }^{1}$ Separate indices were computed for these stocks prior to 2005. The CTC identified inconsistencies with this method and chose to keep these two stocks aggregated in this analysis.

[^2]:    ${ }^{\mathrm{T}}$ Nomenclature is T for troll, N for net, and S for sport.
    ${ }^{2}$ The lower value resulted from subtracting a disputed terminal exclusion catch for the Stikine River in 2004. Catch accounting has since been defined in the Transboundary Agreement.

[^3]:    ${ }^{1}$ A DIT group consists of at least two tag groups, one with the mass mark (or adipose fin clip) and one without the mark. These two tag groups are treated identically except for the mark and differences in mortality should be due to the MSFs, assuming there is no mark mortality occurring prior to recruitment to the fisheries.

[^4]:    NA $=$ not available

